



UBS Group AG and UBS AG

Annual Report 2016

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Dear shareholders,



Axel A. Weber Chairman of the Board of Directors

2016 was another challenging year for the industry and UBS, marked by macroeconomic uncertainty, geopolitical tensions and divisive politics, which adversely affected client sentiment. Combined with the implementation of stricter prudential standards and the unclear trajectory of the future regulatory landscape, these factors contributed to headwinds for our businesses.

In particular, economic conditions in the world's major economic centers – the US, the eurozone and China – were mixed. The US grew more slowly than expected, and although consumption remained strong and unemployment fell, the Federal Reserve Board delayed raising interest rates until the end of the year. In the eurozone, exceptionally loose monetary policy, continuing negative interest rates, low oil prices and improving credit conditions supported a modest recovery. Emerging market economies were highly divergent, although the slowdown in China proved milder than anticipated. While the Swiss economy rebounded following the sharp appreciation of the Swiss franc in the prior year, negative interest rates continued to provide challenging conditions with unclear medium- to long-term consequences. The results of the US election and the UK's vote to leave the EU produced the year's biggest political surprises, creating additional volatility and concerns.

Despite these many challenges, which had a particularly strong impact on European banks, our results in 2016 were solid and once again demonstrated the benefits of our balanced business mix and geographic diversification. As the world's largest and only truly global wealth manager, we have a significant presence in both mature and high-growth markets. We are the number one bank in Switzerland and have competitive and specialized Investment Bank and Asset Management businesses. 2016 was another example of the power of our business model, as strong results in the US and Switzerland partly offset headwinds in Asia and the rest of Europe.

For the year, Group net profit attributable to shareholders was CHF 3.2 billion, with profit before tax of CHF 4.1 billion, and adjusted¹ profit before tax was CHF 5.3 billion, down 5% year on year. Our return on equity was 5.9% and our adjusted¹ return on tangible equity was 9.0%. We generated CHF 42 billion of net new money in our wealth management businesses, while absorbing substantial cross-border outflows in Wealth Management.



Sergio P. Ermotti Group Chief Executive Officer

Wealth Management's adjusted¹ profit before tax was CHF 2.4 billion, down 15% on the prior year as cost reductions only partly offset lower revenues caused by reduced client activity, the effects of cross-border outflows and shifts into retrocession-free products, and changes in clients' asset allocation. Net new money was CHF 27 billion, despite cross-border outflows of CHF 14 billion. **Wealth Management Americas** delivered a record adjusted¹ profit before tax of USD 1.3 billion, a 43% increase year on year, and net new money of USD 15 billion. **Personal & Corporate Banking's** adjusted¹ profit before tax was CHF 1.8 billion, up 4% year on year, and the best result since 2008. **Asset Management** recorded an adjusted¹ profit before tax of CHF 552 million, down 10% year on year. The **Investment Bank** maintained its disciplined resource utilization and delivered an adjusted¹ profit before tax of CHF 1.5 billion, down 34% compared with a strong prior year. With an adjusted¹ return on attributed equity of 19.6%, it continued to more than cover its cost of capital and added significant value to our wealth management, corporate and institutional client bases.

We made good progress toward achieving our ambitious cost targets, increasing our net cost savings by CHF 0.5 billion to CHF 1.6 billion, measured based on our year-end exit rate, and on course to achieve our CHF 2.1 billion net cost reduction target by the end of 2017. We achieved these savings while maintaining our focus on properly managing risk, serving our clients and selectively investing in our businesses. We also continued to absorb costs related to legacy issues and provisions for litigation, regulatory and similar matters, amounting to CHF 0.8 billion, down from CHF 1.1 billion in 2015.

Our capital position at the end of 2016 remains one of the strongest among large global banks, with a fully applied common equity tier 1 (CET1) capital ratio of 13.8%. We also reached the 2020 minimum CET1 leverage ratio of 3.5% in the fourth quarter of 2016. During the year, we issued CHF 14 billion of loss-absorbing debt, bringing our total loss-absorbing capacity to over CHF 73 billion, well ahead of Swiss and, in particular, international regulatory requirements. Our strong capital position and successful execution of our strategy resulted in rating upgrades from the three leading credit rating agencies, placing us among the top-rated global banks.

¹ Refer to "Group performance" in the "Financial and operating performance" section of this report for more information on adjusted results.

In addition to the progress made on building our capital, we successfully executed a series of measures to improve the resolvability of the Group in response to regulatory requirements in Switzerland and other countries. In 2016, we completed the establishment of UBS Americas Holding LLC as our US intermediate holding company and implemented our Group service company. The measures taken over the last few years have made our bank stronger and more resolvable.

We continue to support effective and reasonable regulation. However, we believe further regulatory tightening would create additional costs for the financial system and the economy at large, with unclear benefits and a negative impact on the international competitive playing field.

Our solid results and leading capital position have allowed us to maintain our ordinary dividend at 2015 levels and reconfirm our dividend policy. We intend to propose a 2016 dividend of CHF 0.60 per share for approval at our next Annual General Meeting (AGM).

In 2016, we further strengthened our reputation for excellence. This was demonstrated by numerous awards and accolades for our businesses. In March, UBS was named the world's number one investment banking house by *Global Finance* in its annual World's Best Investment Banks Survey. UBS dominated the recently announced 2017 Euromoney Private Banking Survey, taking the top spot in over 180 categories, including Best Global Private Bank and in the two "Innovative Technology" categories, Client Experience and Back Office Systems. In October 2016, UBS was named Best Global Private Bank and Best Private Bank in Asia at the *FT's* PWM/The Banker Awards. In July 2016, wealth management researcher Scorpio Partnership confirmed UBS as the world's largest wealth manager.

UBS confirmed its reputation as a global sustainability leader when it was named Diversified Financials Industry Group leader in the Dow Jones Sustainability Indices for the second year running. As of 31 December 2016, sustainable investments by our clients totaled CHF 976 billion, representing over a third of total invested assets. As one of the first signatories of the UN Global Compact with one of the largest portfolios of sustainable investment products and services, UBS is actively engaged in supporting the UN Sustainable Development Goals (SDGs). The UBS Grand Challenge mobilized over 1,200 employees to

develop innovative solutions for five of the SDGs. UBS also announced plans to direct at least USD 5 billion of client assets to support the SDGs over the next five years. UBS's ongoing commitment to sustainable investing found expression in a number of groundbreaking initiatives, most notably the closing of the USD 471 million UBS Oncology Impact Fund. This is the largest amount ever raised for an impact fund dedicated to a single cause.

In 2016, our Community Affairs program benefited over 117,000 young people and entrepreneurs across all of the regions in which we operate. Our local volunteering programs saw over 30% of UBS employees record a total of over 155,000 volunteer hours in community engagement projects.

We would like to take this opportunity to thank both our clients and our shareholders for their continued support and our employees for their dedication and commitment over the year. Our focus remains on the disciplined execution of our strategy, staying close to our clients and delivering sustainable performance, while investing for growth. Our unique business model, successful track record of execution and strategic clarity position us well to deliver for our clients and generate shareholder value in a variety of market conditions.

We look forward to seeing you at this year's AGM.

10 March 2017

Yours sincerely,

UBS



Axel A. Weber
Chairman of the
Board of Directors



Sergio P. Ermotti
Group Chief Executive Officer

UBS Group key figures

CHF million, except where indicated	As of or for the year ended		
	31.12.16	31.12.15	31.12.14
Group results			
Operating income	28,320	30,605	28,027
Operating expenses	24,230	25,116	25,567
Operating profit / (loss) before tax	4,090	5,489	2,461
Net profit / (loss) attributable to shareholders	3,204	6,203	3,466
Diluted earnings per share (CHF) ¹	0.84	1.64	0.91
Key performance indicators²			
Profitability			
Return on tangible equity (%)	6.9	13.7	8.2
Return on assets, gross (%)	3.0	3.1	2.8
Cost / income ratio (%)	85.4	81.8	91.0
Growth			
Net profit growth (%)	(48.3)	79.0	9.3
Net new money growth for combined wealth management businesses (%) ³	2.1	2.2	2.5
Resources			
Common equity tier 1 capital ratio (fully applied, %) ⁴	13.8	14.5	13.4
Going concern leverage ratio (phase-in, %) ⁵	6.4		
Additional information			
Profitability			
Return on equity (RoE) (%)	5.9	11.8	7.0
Return on risk-weighted assets, gross (%) ⁶	13.2	14.4	12.6
Resources			
Total assets	935,016	942,819	1,062,478
Equity attributable to shareholders	53,621	55,313	50,608
Common equity tier 1 capital (fully applied) ⁴	30,693	30,044	28,941
Common equity tier 1 capital (phase-in) ⁴	37,788	40,378	42,863
Risk-weighted assets (fully applied) ⁴	222,677	207,530	216,462
Common equity tier 1 capital ratio (phase-in, %) ⁴	16.8	19.0	19.4
Going concern capital ratio (fully applied, %) ⁵	17.9		
Going concern capital ratio (phase-in, %) ⁵	24.7		
Common equity tier 1 leverage ratio (fully applied, %) ⁷	3.5	3.3	2.9
Going concern leverage ratio (fully applied, %) ⁵	4.6		
Leverage ratio denominator (fully applied) ⁷	870,470	897,607	997,822
Liquidity coverage ratio (%) ⁸	132	124	123
Other			
Invested assets (CHF billion) ⁹	2,821	2,689	2,734
Personnel (full-time equivalents)	59,387	60,099	60,155
Market capitalization ¹⁰	61,420	75,147	63,526
Total book value per share (CHF) ¹⁰	14.44	14.75	13.94
Tangible book value per share (CHF) ¹⁰	12.68	13.00	12.14

1 Refer to "Note 9 Earnings per share (EPS) and shares outstanding" in the "Consolidated financial statements" section of this report for more information. 2 Refer to the "Measurement of performance" section of this report for the definition of our key performance indicators. 3 Based on adjusted net new money, which excludes the negative effect on net new money in 2015 of CHF 9.9 billion from our balance sheet and capital optimization program. 4 Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. 5 Based on the revised Swiss SRB framework that became effective on 1 July 2016. 6 Based on fully applied risk-weighted assets. 7 Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. 8 Figures reported for 31 December 2016 and 31 December 2015 represent a 3-month average. Refer to the "Treasury management" section of this report for more information. The figure reported for 31 December 2014 was calculated on a pro forma basis and represents a period-end number. 9 Includes invested assets for Personal & Corporate Banking. 10 Refer to the "UBS shares" section of this report for more information.

The 2016 results and the balance sheet in this report differ from those presented in the unaudited fourth quarter 2016 report published on 27 January 2017 as a result of an adjusting event after the reporting period. Provisions for litigation, regulatory and similar matters increased reflecting an agreement in principle to resolve an RMBS matter related to the National Credit Union Association. This adjustment reduced 2016 net profit attributable to shareholders by CHF 102 million, and basic and diluted earnings per share by CHF 0.03 and CHF 0.02, respectively.

Connecting value

Annual Review 2016

The Annual Review 2016 will be available from mid-April 2017 as a tablet publication in UBS Newsstand/Annual Review (AppStore or Google Play Store).



Corporate information

UBS Group AG is incorporated and domiciled in Switzerland and operates under the Swiss Code of Obligations as an Aktiengesellschaft, a corporation limited by shares. Its registered office is at Bahnhofstrasse 45, CH-8001 Zurich, Switzerland, phone +41-44-234 11 11, and its corporate identification number is CHE-395.345.924. UBS Group AG was incorporated on 10 June 2014 and was established in 2014 as the holding company of the UBS Group. UBS Group AG shares are listed on the SIX Swiss Exchange and on the New York Stock Exchange (ISIN: CH0244767585; CUSIP: H42097107).

UBS AG is incorporated and domiciled in Switzerland and operates under the Swiss Code of Obligations as an Aktiengesellschaft, a corporation limited by shares. The addresses and telephone numbers of the two registered offices of UBS AG are: Bahnhofstrasse 45, CH-8001 Zurich, Switzerland, phone +41-44-234 11 11; and Aeschenvorstadt 1, CH-4051 Basel, Switzerland, phone +41-61-288 50 50. The corporate identification number is CHE-101.329.561. UBS AG is a bank. The company was formed on 29 June 1998, when Union Bank of Switzerland (founded 1862) and Swiss Bank Corporation (founded 1872) merged to form UBS AG.

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Investor Relations

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Office of the Group Company Secretary

The Group Company Secretary receives inquiries on compensation and related issues addressed to members of the Board of Directors.

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Shareholder Services

UBS's Shareholder Services team, a unit of the Group Company Secretary office, is responsible for the registration of UBS Group AG registered shares.

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+1-201-680-6610

Corporate calendar UBS Group AG

Publication of the first quarter 2017 report:	Friday, 28 April 2017
Annual General Meeting 2017:	Thursday, 4 May 2017
Publication of the second quarter 2017 report:	Friday, 28 July 2017
Publication of the third quarter 2017 report:	Friday, 27 October 2017

Corporate calendar UBS AG

Publication of the first quarter 2017 report: Wednesday, 3 May 2017

Additional publication dates of quarterly and annual reports will be made available as part of the corporate calendar of UBS AG at www.ubs.com/investors.

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Our Board of Directors

as of 31 December 2016



Axel A. Weber Chairman of the Board of Directors/Chairperson of the Corporate Culture and Responsibility Committee/Chairperson of the Governance and Nominating Committee



Beatrice Weder di Mauro Member of the Audit Committee/member of the Risk Committee



David Sidwell Senior Independent Director/Chairperson of the Risk Committee/member of the Governance and Nominating Committee



William G. Parrett Chairperson of the Audit Committee/member of the Compensation Committee/member of the Corporate Culture and Responsibility Committee



Isabelle Romy Member of the Audit Committee/member of the Governance and Nominating Committee



Michel Demaré Independent Vice Chairman/member of the Audit Committee/member of the Compensation Committee/member of the Governance and Nominating Committee



Reto Francioni Member of the Compensation Committee/member of the Corporate Culture and Responsibility Committee/member of the Risk Committee



Ann F. Godbehere Chairperson of the Compensation Committee/member of the Audit Committee



Joseph Yam Member of the Corporate Culture and Responsibility Committee/member of the Risk Committee



Dieter Wemmer Member of the Risk Committee



Robert W. Scully Member of the Risk Committee

The Board of Directors (BoD) of UBS Group AG, under the leadership of the Chairman, consists of six to twelve members as per our Articles of Association. The BoD decides on the strategy of the Group upon recommendation of the Group Chief Executive Officer (Group CEO) and is responsible for the overall direction, supervision and control of the Group and its management as well as for supervising compliance with applicable laws, rules and regulations. The BoD exercises oversight over UBS Group AG and its subsidiaries and is responsible for ensuring the establishment of a clear Group governance framework to ensure effective steering and supervision of the Group, taking into account the material risks to which UBS Group AG and its subsidiaries are exposed. The BoD has ultimate responsibility for the success of the Group and for delivering sustainable shareholder value within a framework of prudent and effective controls, approves all financial statements for issue and appoints and removes all Group Executive Board (GEB) members.

Our Group Executive Board

as of 31 December 2016



Sergio P. Ermotti Group Chief Executive Officer



Martin Blessing President Personal & Corporate Banking and President UBS Switzerland



Tom Naratil President Wealth Management Americas and President UBS Americas



Markus U. Diethelm Group General Counsel



Kathryn Shih President UBS Asia Pacific



Kirt Gardner Group Chief Financial Officer



Jürg Zeltner President Wealth Management



Ulrich Körner President Asset Management and President UBS Europe, Middle East and Africa



Sabine Keller-Busse Group Head Human Resources



Andrea Orsel President Investment Bank



Christian Bluhm Group Chief Risk Officer



Axel P. Lehmann Group Chief Operating Officer

UBS Group AG operates under a strict dual board structure, as mandated by Swiss banking law, and therefore the BoD delegates the management of the business to the GEB. Under the leadership of the Group CEO, the GEB has executive management responsibility for the steering of the Group and its business. It assumes overall responsibility for developing the Group and business division strategies and the implementation of approved strategies.

→ Refer to “Board of Directors” and “Group Executive Board” in the “Corporate governance” section of this report or to www.ubs.com/bod and www.ubs.com/geb for the full biographies of our BoD and GEB members

History

UBS has played a pivotal role in the development and growth of Swiss banking. Since the firm's origins in the mid-19th century, UBS has evolved to become a global financial services firm that houses the world's largest wealth manager, the number one bank in Switzerland, a specialized and successful investment bank and one of the world's largest asset managers.

The scope and international reach of what UBS is today was largely shaped in the second half of the 20th century. In 1998, two of Switzerland's large banks, Union Bank of Switzerland and Swiss Bank Corporation (SBC), merged to form UBS. At the time of the merger, both banks were already well-established and successful in their own right. Union Bank of Switzerland's origins go back to the Bank in Winterthur founded in 1862. SBC's founding forebear, the Basler Bankverein, was established in 1872.

In the early 1990s, SBC and Union Bank of Switzerland were both commercial banks operating mainly out of Switzerland, and both shared the vision of becoming a world leader in wealth management, a successful global investment bank and a top-tier global asset manager, while remaining an important commercial and retail bank in their home market of Switzerland.

Union Bank of Switzerland, the largest Swiss bank of its time, pursued these goals primarily through organic growth. In contrast, SBC, then the third-largest Swiss bank, grew mainly through a combination of strategic partnerships and acquisitions, including O'Connor in 1992, Brinson Partners in 1994, and S.G. Warburg, the historical pillar of UBS's Investment Bank, in 1995.

In 2000, UBS acquired PaineWebber, whose roots went back to 1879, establishing the firm as a significant player in the US. Over the last half century, UBS has largely organically built a strong presence in the Asia Pacific region, where it is the leading wealth manager and a top-tier investment bank.

During the financial crisis from 2007 to 2009, UBS incurred significant losses. In 2011, we initiated a strategic transformation of our firm toward a business model that focused on our core businesses of wealth management and personal and corporate banking in Switzerland.

We sought to revert to our roots, emphasizing a client-centric model that required less risk-taking and capital, and have successfully completed this transformation. The Pillars, Principles and Behaviors, which we launched in 2014, have been a foundation for our new corporate strategy, identity and culture.

We have also adapted our legal entity structure to improve our resolvability and to respond to the new regulatory environment.

Today, we are among the world's best-capitalized large global banks with a balanced business mix and geographic diversification. We remain committed to executing our strategy with discipline and creating sustainable value for our clients and shareholders.

→ **Refer to www.ubs.com/history for more information**

→ **Refer to the "The legal structure of UBS Group" and "Our strategy" sections of this report for more information**

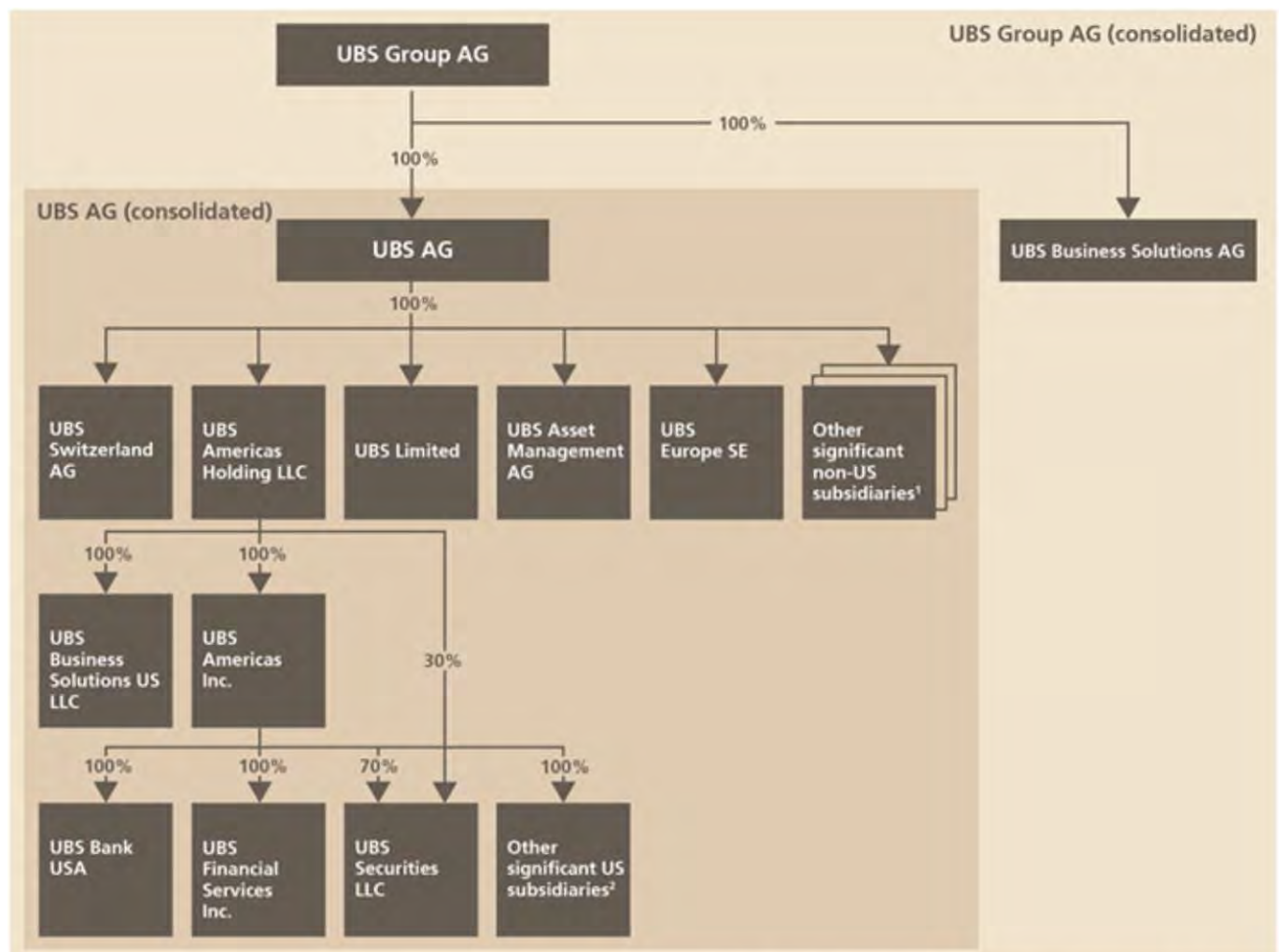
The legal structure of UBS Group

Since 2014, we have undertaken a series of measures to improve the resolvability of the Group in response to too big to fail (TBTF) requirements in Switzerland and other countries in which the Group operates.

In December 2014, UBS Group AG completed an exchange offer for the shares of UBS AG and became the holding company of the Group. During 2015, UBS Group AG completed a court procedure under article 33 of the Swiss Stock Exchange Act (SESTA procedure) resulting in the cancellation of the shares of the remaining minority shareholders of UBS AG. As a result, UBS Group AG owns 100% of the outstanding shares of UBS AG.

In June 2015, we transferred our Personal & Corporate Banking and Wealth Management businesses booked in Switzerland from UBS AG to UBS Switzerland AG.

Also in 2015, we implemented a more self-sufficient business and operating model for UBS Limited and established UBS Business Solutions AG as a direct subsidiary of UBS Group AG to act as the Group service company. The purpose of the service company structure is to improve the resolvability of the Group by enabling us to maintain operational continuity of critical services should a recovery or resolution event occur.



¹ Other significant non-US subsidiaries are generally held either directly by UBS AG or indirectly through UBS Switzerland AG or UBS Asset Management AG. ² Other significant US subsidiaries are generally held either directly by UBS Americas Inc. or indirectly through UBS Financial Services Inc.

In the second half of 2015, we transferred the ownership of the majority of our existing service subsidiaries outside the US to UBS Business Solutions AG, and we expect to transfer shared services functions in Switzerland and the UK from UBS AG to this entity during 2017. As of 1 January 2017, we completed the transfer of the shared service employees in the US to our US service company, UBS Business Solutions US LLC.

As of 1 July 2016, UBS Americas Holding LLC was designated as our intermediate holding company for our US subsidiaries as required under the enhanced prudential standards regulations pursuant to the Dodd-Frank Act. UBS Americas Holding LLC holds all of our US subsidiaries and is subject to US capital requirements, governance requirements and other prudential regulation.

In addition, we transferred the majority of the operating subsidiaries of Asset Management to UBS Asset Management AG during 2016. Furthermore, we merged our Wealth Management subsidiaries in Italy, Luxembourg (including its branches in Austria, Denmark and Sweden), the Netherlands and Spain into UBS Deutschland AG, which was renamed to UBS Europe SE, to establish our new European legal entity which is headquartered in Frankfurt, Germany.

We have established UBS Group Funding (Switzerland) AG, a wholly owned direct subsidiary of UBS Group AG, to issue future loss-absorbing additional tier 1 (AT1) capital instruments and total loss-absorbing capacity- (TLAC-) eligible senior unsecured debt, which will be guaranteed by UBS Group AG. We also intend to substitute the issuer of outstanding TLAC-eligible senior unsecured debt with UBS Group Funding (Switzerland) AG replacing UBS Group Funding (Jersey) Limited as the issuer. Outstanding loss-absorbing AT1 capital instruments issued by UBS Group AG may in the future be transferred to UBS Group Funding (Switzerland) AG, subject to further regulatory review. The Swiss Federal Council has requested the Swiss Federal Tax

Administration to propose amendments to the current Swiss tax law in order to reduce the additional tax burden on debt issuances by bank top holding companies. When such changes become effective, we expect loss-absorbing AT1 capital instruments and TLAC-eligible senior unsecured debt to be issued directly out of UBS Group AG. At that point, we also expect to substitute UBS Group AG as issuer of outstanding capital and debt instruments issued by UBS Group Funding (Switzerland) AG. We expect the substitution of UBS Group Funding (Switzerland) AG as issuer of outstanding TLAC-eligible senior unsecured debt to be completed during the second quarter of 2017. Upon completion of the issuer substitution, outstanding TLAC-eligible senior unsecured debt will continue to be guaranteed by UBS Group AG, and investors' seniority of claim against UBS Group AG will remain unchanged.

Our strategy, our business and the way we serve the vast majority of our clients are not affected by these changes. These plans do not create the need to raise additional common equity capital and are not expected to materially affect the firm's capital-generating capability.

We continue to consider further changes to the Group's legal structure in response to regulatory requirements and other external developments, including the anticipated exit of the UK from the EU. Such changes may include the transfer of operating subsidiaries of UBS AG to become direct subsidiaries of UBS Group AG, further consolidation of operating subsidiaries in the EU and adjustments to the booking entity or location of products and services. These structural changes are being discussed on an ongoing basis with FINMA and other regulatory authorities and remain subject to a number of uncertainties that may affect their feasibility, scope or timing.

→ **Refer to the "Regulatory and legal developments" section of this report for more information**

Terms used in this report, unless the context requires otherwise

"UBS," "UBS Group," "UBS Group AG consolidated," "Group," "the Group," "we," "us" and "our"	UBS Group AG and its consolidated subsidiaries
"UBS AG consolidated"	UBS AG and its consolidated subsidiaries
"UBS Group AG" and "UBS Group AG standalone"	UBS Group AG on a standalone basis
"UBS AG" and "UBS AG standalone"	UBS AG on a standalone basis
"UBS Switzerland AG"	UBS Switzerland AG on a standalone basis
"UBS Limited"	UBS Limited on a standalone basis
"UBS Americas Holding LLC consolidated"	UBS Americas Holding LLC and its consolidated subsidiaries

External reporting

General requirements

Our external reporting requirements and the scope of our external reports are defined by general accounting law and principles, relevant stock and debt listing rules, specific legal and regulatory requirements, as well as by our own financial reporting policies.

We have to prepare and publish consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) on a half-yearly basis, in line with the requirements of SIX Swiss Exchange and New York Stock Exchange, where our shares are listed. However, we also publish our results on a quarterly basis in order to provide shareholders with more frequent disclosures than required by law. Additionally, statutory financial statements for UBS Group AG are prepared annually as the basis for our Swiss tax return, the appropriation of retained earnings and a potential distribution of dividends, subject to shareholder approval at the Annual General Meeting. Management's discussion and analysis (MD&A) complements our annual financial statements.

In preparing these disclosures, we consistently apply our financial disclosure principles, such as transparency and relevance to our stakeholders. We also continuously seek to improve our disclosures by benchmarking them against best practice examples, including those recommended by the Enhanced Disclosure Task Force (EDTF).

→ Refer to "Information policy" in the "Corporate governance" section of this report for more information

Our Annual Report 2016, Form 20-F and additional year-end disclosures

UBS Group AG

The UBS Group AG Annual Report 2016 is available at www.ubs.com/investors and includes:

- the aforementioned MD&A provided on a UBS Group AG consolidated basis, covering our strategy and the environment in which we operate, the financial and operating performance of our business divisions and Corporate Center, our risk, treasury and capital management and our corporate governance, corporate responsibility and compensation frameworks
- audited UBS Group AG consolidated financial statements in accordance with IFRS
- audited UBS Group AG standalone financial statements in accordance with the Swiss Code of Obligations

UBS Group AG and UBS AG

Also available at www.ubs.com/investors is the combined UBS Group AG and UBS AG Annual Report 2016. As financial information for UBS AG (consolidated) does not differ materially from UBS Group AG (consolidated), the MD&A included in the combined Annual Report 2016 is generally provided on a UBS Group AG consolidated basis. In addition, it includes information for UBS AG (consolidated) with respect to risk profile as well as capital and leverage ratios in line with the requirements for Swiss systemically relevant banks. UBS AG consolidated financial statements in accordance with IFRS are also part of the combined UBS Group AG and UBS AG Annual Report 2016.

This document, excluding the standalone financial statements of UBS Group AG and including the supplemental disclosures required under US Securities and Exchange Commission (SEC) regulations for both UBS Group AG (consolidated) and UBS AG (consolidated), form the basis of our Form 20-F filing, which is available under "SEC filings" at www.ubs.com/investors.

Basel III Pillar 3 disclosures for UBS Group AG

UBS Group AG (consolidated) disclosures required under Basel III Pillar 3 regulations are published as a separate report under "Pillar 3 disclosures" at www.ubs.com/investors.

Legal entity disclosures

In accordance with Swiss Financial Market Supervisory Authority (FINMA) Circular 2016/01, Disclosure – banks, which requires disclosures for significant Pillar 3 entities and sub-groups, standalone legal entity financial and regulatory information for UBS AG, UBS Switzerland AG and UBS Limited as well as consolidated financial and regulatory information for UBS Americas Holding LLC is provided under "Disclosure for legal entities" at www.ubs.com/investors. The documents for UBS AG and UBS Switzerland AG include audited standalone financial statements. In addition, audited standalone financial statements for UBS Limited will be made available in April 2017.

Furthermore, legal entity-specific disclosures in accordance with Article 89 of the European Union Capital Requirements Directive IV (CRD IV) are provided under "EU CRD IV disclosures" at www.ubs.com/investors. Information as of 31 December 2016 will be published by the end of 2017.

Operating environment and strategy

Management report

Signposts

Throughout the Annual Report 2016, the **Audited** signpost that is displayed at the beginning of a section, table or chart indicates that those items have been audited. A triangle symbol – ▲ – indicates the end of the signpost.

Current market climate and industry trends

Global economic developments in 2016

Global growth slowed modestly in 2016. Each of the world's major economic areas – the US, the eurozone and China – saw slower growth, primarily due to lower investment spending. Brazil and Russia experienced another year in recession, and Japan's growth remained muted. India delivered very strong growth.

At a global level, economic uncertainty meant investment spending continued to fall short of pre-financial crisis levels, despite record low interest rates across much of the world. In 2016, the trend of slower investment spending was exacerbated by low energy prices, which led to further cutbacks in capital investment, particularly in the US and Russia. Oil prices saw an improvement toward the end of the year, primarily as a result of an OPEC decision to reduce production, but geopolitical and economic uncertainty poses a risk to a broad recovery in investment spending.

Despite these conditions, equity markets delivered generally positive performance. After a challenging start to 2016 on concerns about China and a decline in oil prices, global equity markets rallied to record highs, supported by the economic stimulus in China, and the Bank of England's monetary easing policy in response to the rise in political uncertainty following the outcome of the UK referendum on EU membership.

Fixed income markets performed well through much of the year, although signs of rising US inflation and expectations of fiscal stimulus led to a sharp sell-off toward the year-end. Currency markets saw a recovery in the Brazilian real and the South African rand, while the British pound and Mexican peso declined sharply following the outcomes of the UK referendum on EU membership and the US presidential election, respectively.

US growth was lower than expected, primarily due to stagnation in business investment in the energy sector. Private consumption remained relatively robust, jobs growth was strong, unemployment decreased, and improving wage growth and credit availability proved supportive of consumer confidence. The US Federal Reserve Board raised interest rates just once toward the end of the year. Political and financial market uncertainty led the Federal Reserve Board to proceed with caution in 2016.

In Japan, growth remained positive due to positive net exports, but continued to show little response to the extensive monetary and fiscal stimulus put in place in recent years. Weak wage growth, uncertainty over social security, and a negative wealth effect resulting from an appreciating yen weighed on consumption.

The Bank of Japan introduced a new policy of yield curve control to cap longer-term interest rates, contributing to yen weakness in the latter months of the year.

In Europe, growth slowed a little, but proved resilient following the outcome of the UK referendum on EU membership. Exceptionally loose monetary policy, low oil prices

and improving credit conditions supported growth in the eurozone. Meanwhile, UK growth was aided by the effects of stronger than expected household consumption following the referendum, as well as a weaker British pound and lower interest rates.

The Swiss economy recovered from the sharp appreciation of the Swiss franc in the prior year, with economic growth accelerating in 2016 to almost double the pace of 2015. Continued sound growth in key eurozone trading partners benefited exports, after a slowdown in 2015.

Growth in emerging markets was highly divergent. The slowdown in China proved milder than anticipated, as a rebound in real estate prices and construction stabilized the economy after an uncertain start in 2016. India saw another year of strong growth, driven largely by private consumption, although uncertainty related to the government's action to take high-value banknotes out of circulation acted as a temporary brake on growth toward the end of the year. Brazil saw a second year of deep recession, with private consumption and investment continuing to suffer from high rates of inflation, interest rate hikes, and persistent political uncertainty. Russia's economy contracted again, but less severely than in 2015, as the economy showed signs of adjustment to the drop in oil prices, with consumption recovering well in the latter half of the year.

Economic and market outlook for 2017

We expect a modest acceleration in global growth in 2017, supported by accelerating growth in the US, a beginning of recovering from the recessions in Brazil and Russia, and only modest slowdowns in Europe and China. Central bank policy globally is expected to remain broadly supportive, as the European Central Bank is likely to continue with quantitative easing, even if at a slower pace, even as the Federal Reserve Board continues to increase rates.

US consumption continues to benefit from an improving labor market, while a post-election rally in business sentiment bodes well for investment spending and deregulation could provide additional stimulus. Eurozone growth could slow modestly as political uncertainty weighs on investment spending and the positive effects of monetary easing begin to wane. A recovery in the euro and in oil prices might also slow exports and consumption, respectively. Switzerland is expected to see a continuation of steady growth, although uncertainty over corporate tax reform and the continued Swiss franc strength present headwinds. China is likely to see slower growth as the real estate and construction boom slows, but quasi-fiscal and credit stimuli are likely to keep growth steady. More stable commodity prices and currencies should prove helpful for Brazil and Russia.

Major risks to growth and markets relate to uncertainty regarding the effect of higher US interest rates, the possibility of greater protectionism in response to changes in US trade policy, uncertainty raised by the commencement of the UK's negotiation of its withdrawal agreement with the EU, and the potential for surprises from election outcomes in the Netherlands, France and Germany. China's management of its rising debt levels and economic transition remains an important medium-term factor, as does the possibility of heightened geopolitical tensions in an uncertain global environment.

Industry trends

Wealth accumulation

The wealth management industry offers fundamentally attractive economics with a forecast for robust wealth accumulation around the world. According to the Boston Consulting Group Global Wealth Report 2016, the ultra high net worth segment is expected to expand by about 9.5% annually from 2015 to 2020, and the high net worth segment by about 9.4% annually. Asia Pacific and the emerging markets are expected to be the fastest-growing regions, with an estimated annual market growth rate of 14.0% and 10.4% for the high net worth, and 16.0% and 12.4% for the ultra high net worth segments, respectively. Mature markets, such as Western Europe and North America, are forecast to see wealth accumulation grow within the high net worth and ultra high net worth segments at an annual rate exceeding expected gross domestic product growth. We believe that wealth management is likely to remain a highly fragmented industry with high barriers to entry due to the significant investments needed to meet current and proposed regulatory requirements.

Demographics, wealth transfer and retirement funding

Demographic changes, particularly escalating costs associated with the care of an aging population and the funding challenges faced by public pension systems, will be a key long-term driver for both wealth consumption and wealth transfer. Pressures on public pension schemes will make reform a pressing matter in several countries. Although change in public pension schemes will vary, a general and gradual shift from public to privately funded pension schemes seems inevitable.

These developments are expected to benefit our businesses, as individuals and privately funded pension schemes seek investment advice and tailored service offerings with a relevant product range. We believe that our strong capabilities in asset management, as well as our ability to tailor our service offerings to our clients' financial needs and preferences, put us in a position of strength to address these emerging needs.

Digitalization

Over the last few years, investments in financial technology have increased sharply. The market expects continued digital disruption in the financial industry, driven by consumer preferences and expectations. We strongly believe that core technologies, such as automated investment advice, mobile access to banking services and distributed ledger technology, will become mainstream in the financial services industry. Digital capabilities are likely to play a significant role in transforming how banks interact with clients and how they operate internally.

Further adaptation of operating models

Increases in operational cost pressure, reflecting higher regulatory costs and a subdued revenue environment, will drive financial services firms to seek more efficient operating models. This push for efficiency is forcing banks to reassess their front-to-back processes, focus on identifying potential for standardization, and reconsider the ownership of value chain components. Over the past few years, a diverse network of suppliers and service providers for different parts of the banking industry value chain has emerged, in particular by disrupting the traditional approach to process ownership, service and supply chain.

Consolidation

Increasing investment requirements along with constrained supply, a stronger refocus on core businesses and a subdued macro environment will continue to drive and accelerate efficiency efforts that are likely to span all functions in the banking business. A retrenchment of banks' operations to their core markets is expected to continue, with banks curtailing or even abandoning completely some of their past international expansion efforts. This is expected to foster concentration in certain markets, but also increase competition in certain business lines in order to gain scale and more efficiency.

Considering continuous cost pressures, the industry is likely to seek opportunities to achieve further increased efficiency of non-client-facing logistics and control functions, and the emergence of more utility-like models, for example, centralized providers of banking infrastructure or shared service companies, is increasingly probable. Moreover, we will continue to see banks focusing on their business portfolios, exiting their non-core products and geographies, and further crystallizing and sharpening their core value proposition in order to increase revenues, reduce costs and improve their balance sheets. This could lead to added pressure on profitability.

Banking intermediation developments

Against the backdrop of digitalization and new market participants, the banking sector's role as a facilitator of economic policy and an enabler of domestic growth may come under pressure, as well as be subjected to renewed public discussion and regulatory scrutiny. The combination of enhanced regulatory requirements, reduced risk appetite and subdued macroeconomic prospects continues to curb the lending appetite of banks. While banks are currently still active in more specific or niche areas, such as long-dated assets and high-risk lending, other financial industry players are increasingly stepping into banking intermediation and risk-taking areas. It is expected that this trend will continue with its extent and pace depending on regulatory developments.

Despite these challenges, we believe banks still have the necessary capital and the competitive ability to preserve their core role in the economy and to have continued access to their traditional sources of revenue.

Regulation

There has been continuous regulatory pressure on the financial services industry to become simpler, more transparent and more resilient, and we expect that regulation will remain a major driver of change and costs for the industry.

We believe we have the right business model to comply with new, more demanding regulations without the need to change our strategy. We have one of the highest fully applied CET1 capital ratios among our peer group of large global banks and we have made substantial progress in our efforts to improve resolvability. We are well prepared to meet the requirements of the revised Swiss too big to fail framework by the effective date in 2020, and we intend to use this period to fully implement the new requirements.

→ **Refer to the "Regulatory and legal developments" and "Capital management" sections of this report for more information**

Regulation and supervision

The Swiss Financial Market Supervisory Authority (FINMA) is UBS's home country regulator and consolidated supervisor. As a financial services provider with a global footprint, we are also regulated and supervised by the relevant authorities in each of the jurisdictions in which we conduct business, including the US, the UK and the rest of the EU. Through UBS AG and UBS Switzerland AG, which are licensed as banks in Switzerland, we may engage in a full range of financial services activities in Switzerland and abroad, including personal banking, commercial banking, investment banking and asset management.

As we are a designated global systemically important bank (G-SIB) and considered systemically relevant in Switzerland, we are subject to more rigorous regulatory requirements and supervision than most other Swiss banks. Since the financial crisis of 2007–2009, regulation of financial services firms has been undergoing significant changes both in Switzerland and in the other countries where we operate. These changes, which continue to require significant resources to implement, have a material effect on how we conduct our business and result in increased ongoing costs.

- Refer to the **"The legal structure of UBS Group"** section of this report for more information
- Refer to the **"Regulatory and legal developments"** and **"Risk factors"** sections of this report for more information

Regulation and supervision in Switzerland

Supervision

UBS Group AG and its subsidiaries are subject to consolidated supervision by FINMA under the Swiss Federal Law on Banks and Savings Banks (Swiss Banking Act) and the related ordinances that impose, among other requirements, minimum standards for capital, liquidity, risk concentration and organizational structure. FINMA fulfills its statutory supervisory responsibilities through licensing, regulation, monitoring and enforcement. FINMA is responsible for the prudential supervision and mandates audit firms to perform on its behalf a regulatory audit and certain other supervisory tasks.

Resolution planning and resolvability

The Swiss Banking Act and related ordinances provide FINMA with additional powers to intervene in order to prevent a failure or resolve a failing financial institution, including UBS Group AG, UBS AG and UBS Switzerland AG. These measures may be triggered when certain thresholds are breached and permit the exercise of considerable discretion by FINMA in determining whether, when or in what manner to exercise such powers. In case of a possible insolvency, FINMA may impose more onerous requirements on us, including restrictions on the payment of dividends and interest as well as measures to alter our legal structure (e.g., to separate lines of business into dedicated entities, with limitations on intra-group funding and certain

guarantees) or to reduce business risk in some manner. The Swiss Banking Act provides FINMA with the ability to extinguish or convert to common equity the liabilities of the Group in connection with its resolution.

Furthermore, Swiss too big to fail requirements require Swiss systemically relevant banks, including UBS, to put in place viable emergency plans to preserve the operation of systemically important functions in case of a failure of the institution, to the extent that such activities are not sufficiently separated in advance. In response to these requirements in Switzerland, as well as to similar requirements in other jurisdictions, UBS has developed comprehensive recovery plans that provide the tools to manage a severe loss event. UBS also provides relevant authorities with resolution plans for restructuring or winding down certain businesses in the event the firm could not be stabilized. Alongside these measures, the bank has invested significantly in structural, financial and operational ring-fencing measures to improve the Group's resolvability.

- Refer to the **"Capital management"** section of this report for more information on the Swiss SRB framework and the Swiss too big to fail requirements
- Refer to the **"Treasury management"** section of this report for more information on liquidity coverage ratio requirements

Regulation and supervision outside Switzerland

Regulation and supervision in the US

In the US, UBS is subject to overall regulation and supervision by the Board of Governors of the Federal Reserve (Federal Reserve Board) under a number of laws. Furthermore, our US operations are subject to additional oversight by the Federal Reserve Board's Large Institution Supervision Coordinating Committee, which coordinates supervision of large or complex financial institutions.

UBS AG is a financial holding company under the Bank Holding Company Act and maintains several branches and representative offices in the US, which are authorized and supervised by either the Office of the Comptroller of the Currency or the state banking authority of the state in which the branch is located. UBS AG is currently registered as a swap dealer with the Commodity Futures Trading Commission (CFTC), and we expect to register it as a security-based swap dealer with the Securities and Exchange Commission (SEC) when such registration is required.

UBS Americas Holding LLC, the holding company for our non-branch operations in the US as required under the Dodd-Frank Act, is subject to risk-based capital, liquidity, Comprehensive Capital Analysis and Review, stress test, capital plan and governance requirements established by the Federal Reserve Board.

UBS Bank USA, a Federal Deposit Insurance Corporation-insured depository institution subsidiary, is licensed and regulated by state regulators in Utah.

UBS Financial Services Inc., UBS Securities LLC and several other US subsidiaries are subject to regulation by a number of different government agencies and self-regulatory organizations, including the SEC, the Financial Industry Regulatory Authority, the CFTC, the Municipal Securities Rulemaking Board and national securities exchanges, depending on the nature of their business.

Regulation and supervision in the UK

Our operations in the UK are mainly regulated and supervised by the Prudential Regulation Authority (PRA), an affiliated authority of the Bank of England, and the Financial Conduct Authority (FCA). Some of our subsidiaries and affiliates are also regulated by the London Stock Exchange and other UK securities and commodities exchanges of which they are a member.

UBS Limited is a private limited company incorporated in the UK and is authorized by the PRA and regulated by the PRA and the FCA to conduct a broad range of banking and investment business.

UBS AG maintains a UK-registered branch in London that serves as a global booking center for our Investment Bank.

Financial services regulation in the UK is currently conducted in accordance with EU directives covering, among other topics, compliance with certain capital and liquidity adequacy standards, client protection requirements and business conduct principles. This may be subject to change depending on how the relationship between the UK and the EU evolves.

Regulation and supervision in Germany

UBS Europe SE, headquartered in Frankfurt, Germany, is supervised by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) and subject to EU and German laws and regulations. UBS Europe SE was established in

the fourth quarter of 2016, following the merger of UBS Deutschland AG and our Wealth Management subsidiaries in Germany, Italy, Luxembourg (including its branches in Austria, Denmark and Sweden), the Netherlands and Spain.

Anti-money laundering and anti-corruption

A major focus of government policy relating to financial institutions in recent years has been combating money laundering and terrorist financing. The US Bank Secrecy Act and other laws and regulations applicable to UBS require the maintenance of effective policies, procedures and controls to detect, prevent and report money laundering and terrorist financing, and to verify the identity of our clients. Failure to maintain and implement adequate programs to prevent money laundering and terrorist financing could result in significant legal and reputational risk.

We are subject to laws and regulations in jurisdictions in which we operate, including the US Foreign Corrupt Practices Act and the UK Bribery Act, prohibiting corrupt or illegal payments to government officials and others. We maintain policies, procedures and internal controls intended to comply with these laws and regulations.

Data protection

We are subject to laws and regulations concerning the use and protection of customer, employee, and other personal and confidential information, including provisions under Swiss law, the EU Data Protection Directive and laws of other jurisdictions.

→ **Refer to the "Risk factors" section of this report for more information**

Regulatory and legal developments

Key international developments

Revisions of BCBS capital framework and ongoing consultations

Proposed revisions to the Pillar 1 requirements

The Basel Committee on Banking Supervision (BCBS) is currently finalizing a comprehensive reform package for the Basel III capital framework, the elements of which have been proposed in a series of separate consultation papers. High-level guidance on the revisions issued by the BCBS in November 2016 included: (i) the revised standardized approach to credit risk will be more risk-sensitive and more consistent with banks' internal model-based approaches, which are subject to approval by the home country regulator; (ii) a revised standardized approach for operational risk will replace the existing approaches, including the advanced measurement approach, which is based on banks' internal models and also subject to approval by the home country regulator; and (iii) a leverage ratio surcharge for global systemically important banks (G-SIBs) will be introduced. In addition, an aggregate output floor, in relation to the level of capital required, is expected to be part of the reform package. Final rules, which were expected to be issued in January 2017, have been delayed. We expect that if the proposals are adopted in their current form and implemented in Switzerland, the proposed changes to the capital framework will likely result in a significant increase in our overall RWA without considering the effect of mitigating measures.

Revisions to the Pillar 2 requirements

In April 2016, the BCBS revised its 2004 principles for the management and supervision of interest rate risk. The revised standards include guidance on the development of interest rate shock scenarios, enhanced quantitative disclosure requirements as well as an updated standardized framework, which banks could be mandated to follow. The impact of these revisions can only be determined once its implementation in national prudential regulations becomes clearer.

Revisions to the Pillar 3 requirements

FINMA has revised its Pillar 3 disclosure requirements to reflect changes to the BCBS Pillar 3 standards. Requirements relating to the 2015 BCBS revisions became effective for Swiss banking institutions on 31 December 2016 with additional requirements to be implemented during 2017. Further revisions to the Pillar 3 framework are expected as part of the finalization of the Basel III capital framework.

→ Refer to the "Significant accounting and financial reporting changes" section of this report and the "Basel III Pillar 3 UBS Group AG 2016" report under "Pillar 3, SEC filings & other disclosures" at www.ubs.com/investors for more information

Consultation on regulatory capital treatment of accounting provisions

In October 2016, the BCBS issued a consultative document and a discussion paper on the Basel III regulatory capital treatment of accounting provisions following the publication of IFRS 9, *Financial Instruments*, issued by the International Accounting Standards Board, and the Current Expected Credit Loss (CECL) model, issued by the US Financial Accounting Standards Board. The new rules require the use of expected credit loss models as opposed to the currently applied incurred credit loss impairment approach under IFRS and US GAAP. UBS will adopt the IFRS 9 requirements on 1 January 2018. The BCBS consultative document proposes to retain for an interim period the current regulatory treatment of accounting provisions. This would result in the impact of IFRS 9 on common equity tier 1 capital to be limited to the excess of expected credit losses over the current regulatory expected losses for banks applying the internal ratings-based (IRB) approach. The BCBS also considers the adoption of transitional arrangements to phase in this impact. The BCBS discussion paper sets out longer-term options that include retaining the current regulatory treatment and introducing an expected credit loss component to the standardized regulatory approach. The consultation period ended in January 2017.

→ Refer to the "Significant accounting and financial reporting changes" section of this report for more information

Developments on TLAC and MREL requirements

Following the publication of the Financial Stability Board's (FSB) international total loss-absorbing capacity (TLAC) standard in November 2015, a number of major jurisdictions issued TLAC requirements during 2016.

Switzerland was the first jurisdiction to implement TLAC requirements as part of the revision of the Swiss Capital Adequacy Ordinance that became effective on 1 July 2016. Subject to a limited reduction of the gone concern requirement based on improvements to our resolvability, the TLAC requirements applicable to UBS as of 1 January 2020 are 28.6% of RWA (excluding countercyclical buffer requirements) and 10% of the leverage ratio denominator. The revised Capital Adequacy Ordinance requires that TLAC-eligible instruments be issued out of a holding company, which would increase the overall tax burden for the Group under the current Swiss tax law. The Swiss Federal Council has requested the Federal Tax Administration to propose amendments to the Swiss tax law in order to address this issue.

In November 2016, the Bank of England published the final UK Minimum Requirement for own Funds and Eligible Liabilities (MREL) rules, including minimum standards for domestic systemically important banks (D-SIBs) in the UK, such as UBS Limited. Starting as of 1 January 2020, D-SIBs will have to meet MREL requirements amounting to the greater of (i) a multiple, initially less than two and increasing to two as of 1 January 2022, of the Pillar 1 requirement of 8% and an institution-specific add-on, or (ii) if subject to a leverage ratio requirement, two times the applicable requirement of currently 3%.

Also in November 2016, the European Commission (EC) published a proposal to integrate the FSB TLAC standard into the EU MREL regime. The EC proposes to apply MREL requirements to global systemically important institutions (G-SIIs) calculated at 16% of RWA and 6% of the leverage exposure measure as of 1 January 2019, increasing to 18% and 6.75%, respectively, as of 1 January 2022. The proposal would also introduce internal MREL requirements for material subsidiaries of non-EU G-SIIs.

In December 2016, the Federal Reserve Board issued a final rule that will apply TLAC requirements, minimum long-term debt requirements and clean holding company requirements to all US G-SIBs and to foreign G-SIBs' US intermediate holding companies (covered IHCs), including UBS Americas Holding LLC. The final rule will require covered IHCs to maintain debt to the parent G-SIB qualifying as TLAC (internal TLAC) of at least the greatest of 16% of RWA, 6% of leverage exposure or 9% of average total consolidated assets, plus a buffer, including eligible long-term debt of at least the greatest of 6% of RWA, 2.5% of leverage exposure or 3.5% of average total consolidated assets. The final rule prohibits covered IHCs from having liabilities to unrelated third parties that exceed 5% of its total TLAC (clean holding company requirement) unless all of its TLAC is contractually subordinated to third-party liabilities. It further prohibits a covered IHC from incurring short-term debt, entering into derivatives with unaffiliated parties and issuing certain guarantees. The rule becomes effective as of 1 January 2019.

→ Refer to the "Capital management" section of this report for more information on the revised Swiss SRB framework

Implementation of margin requirements for non-cleared OTC derivatives

The G20 commitments on derivatives call for adoption of mandatory exchange of initial and variation margin for uncleared over-the-counter (OTC) derivative transactions (margin rules).

Margin rules for the largest counterparties (phase 1 counterparties) became effective in the US, Canada and Japan on 1 September 2016 and in the EU, Switzerland and major jurisdictions in Asia in the first quarter of 2017. Margin requirements for the next group of counterparties, including significant numbers of end users, have generally become effective in these jurisdictions on 1 March 2017. In recognition of the low level of industry and end-user readiness for these requirements, regulators in many of these jurisdictions have issued supervisory guidance or other relief intended to allow market participants to continue to transact while proceeding as quickly as practicable to implement the requirements. This relief is generally effective until September 2017. The non-cleared margin requirements will have a significant operational and funding impact on the OTC derivatives activities of UBS and many of our clients. The delays in the completion of rulemaking have affected our ability to complete the execution of required documentation and operational processes with counterparties ahead of relevant compliance dates, which may limit our and other dealers' ability to transact with clients until this is remedied.

Key developments in Switzerland

Implementation of the mass immigration initiative

In December 2016, the Swiss Parliament passed changes to the Foreign Nationals Act to implement the mass immigration initiative of February 2014. The rules aim to make better use of the domestic workforce by giving preferential treatment to the unemployed who are resident in Switzerland. In professions, industries or regions where unemployment is above average, employers will be required to advertise vacant positions to employment agencies and to select suitable agency-registered job seekers for interviews. However, employers will not be required to justify decisions not to hire such candidates. The Swiss Parliament deems the new rules compatible with the Agreement on the Free Movement of Persons between Switzerland and the EU.

The legislation is subject to an optional national referendum vote, for which 50,000 signatures of Swiss citizens would have to be collected by 7 April 2017. If there is no referendum vote, the rules will take effect after this deadline.

Corporate Tax Reform III rejected in referendum vote

In June 2016, the Swiss Parliament approved legislation to reform the Swiss corporate tax code. The reform aimed to align the individual cantonal corporate tax regimes with international standards by eliminating reduced holding company tax rates and other privileges and providing a set of both optional and mandatory measures for the cantons to mitigate the effect on the corporate tax burden.

The reform was rejected by popular referendum on 12 February 2017. The Federal Council announced that a new proposal will be drafted.

Company law reform

In November 2016, the Swiss Federal Council submitted a draft bill to Parliament proposing to reform Swiss company law. The revision is aimed at transferring the provisions of the Ordinance against Excessive Compensation in Listed Companies Limited by Shares into the relevant federal law. Moreover, the Federal Council included new proposals to balance gender representation at senior executive and board level in listed companies and to introduce transparency rules for payments to government authorities by commodity firms.

Under the current proposal, we expect the impact on UBS to concern mainly corporate governance and shareholder rights. However, the exact impact can only be determined once the final law has been passed.

Switzerland begins automatic exchange of information

Automatic exchange of information in tax matters (AEI) between Switzerland and all EU member states and a number of other countries took effect on 1 January 2017. The first exchange of information between Switzerland and tax authorities in these countries will begin in 2018 based on 2017 data. The Swiss Federal Department of Finance has initiated consultations to extend the standard to additional countries.

We have experienced outflows of cross-border client assets as a result of changes in local tax regimes or their enforcement.

FINMA launches consultations on revision of Swiss Banking Insolvency Ordinance

In September 2016, the Swiss Financial Market Supervisory Authority (FINMA) conducted a consultation on revisions to the Banking Insolvency Ordinance, which governs restructuring proceedings and bankruptcy proceedings for Swiss banking institutions. The draft includes provisions on the requirement for banks to include in financial contracts that are subject to foreign laws or foreign places of jurisdiction contractual acknowledgment of FINMA's ability to temporarily postpone exercise of remedies against banks. Such postponement is intended to ensure the continuation of key contractual relationships without interruption in crisis situations. Regulatory authorities in the UK, France, Germany, Japan, Switzerland and the US have adopted or proposed similar requirements to increase legal certainty in cross-border bank resolutions. Implementation of these requirements is likely to require us to amend the terms of a significant number of trading agreements.

FINMA issues final corporate governance guidelines for banks

In November 2016, FINMA issued a circular on corporate governance, risk management and internal controls at banks. The circular sets out the duties and responsibilities of boards of directors and executive board members and defines requirements for the design of the relevant group-wide risk management framework, the internal control framework and the internal audit function. At the same time, FINMA introduced new principles on IT and cyber risks in the circular on operational risk. We do not expect the aforementioned requirements to have a significant impact on us. In addition, FINMA revised the circular on remuneration schemes. The requirements will enter into force on 1 July 2017 and will also apply to UBS.

Switzerland launches consultation on data protection

In an effort to improve data protection and to reflect the new technological and social landscape in existing laws, the Swiss Federal Council launched a consultation on the proposed revision of the data protection law in December 2016. The Federal Council intends to increase the transparency of data processing and strengthen data privacy. To this end, individuals and institutions with access to personal data should be subject to increased transparency and information requirements. The revision would enable Switzerland to meet the requirements of the EU directive on data protection and to ratify the revised Council of Europe Convention on the Protection of Individuals with regard to Automatic Processing of Personal Data, both of which are key to ensuring that the EU continues to recognize Switzerland as having an adequate level of data protection and that cross-border data transmission will remain possible in the future. Implementation of new data protection requirements has required and will require significant investment by the Group.

Parliamentary debate on FinSA and FinIA

The Financial Services Act (FinSA) and Financial Institutions Act (FinIA), which were approved by the Swiss Federal Council in November 2015, have entered parliamentary debate. The two comprehensive acts will have far-reaching consequences for the provision of financial services in Switzerland. The FinSA primarily aims to improve client protection, while the FinIA will introduce a prudential supervision of managers of individual client assets, managers of the assets of occupational benefits schemes and trustees. The upper house of the Swiss Parliament made a number of major adjustments to the proposal by the Federal Council, e.g., by reducing the areas of expanded information, documentation and clarification duties. The lower house of Parliament starts its debate in the first quarter of 2017.

Key developments in the EU

EC proposes implementation rules for Basel III reforms

In November 2016, alongside its proposals to implement the FSB TLAC standard, the European Commission (EC) published proposals to implement the remaining elements of the Basel III reforms in the EU. The proposals would require non-EU G-SIBs with two or more EU entities to establish an EU-domiciled intermediate holding company. In addition, banks would be required to maintain a tier 1 leverage ratio of 3%, with the possibility of a G-SII add-on, and a minimum net stable funding ratio of 100%. The EC would also create a new asset class of non-preferred senior debt, which would rank below other senior debt in insolvency. The precise impact on UBS will depend on the final rules and their implementation at a national level.

UK referendum on EU membership

Following the result of the June 2016 referendum on the UK's membership in the EU, the UK prime minister, Theresa May, has confirmed the UK will invoke Article 50 of the Treaty on European Union by no later than the end of March 2017 subject to passing the necessary legislation required by the Supreme Court judgment on 24 January 2017. This will trigger a two-year period, subject to extension, during which the UK will negotiate its withdrawal agreement with the EU. Barring any changes to this time schedule, it is expected that the UK will formally leave the EU in early 2019. The future of the UK's relationship with the EU remains unclear, although the UK government has stated that the UK will leave the EU single market and will seek a phased period of implementation for the new relationship that could cover the legal and regulatory framework for the financial services industry.

Any future limitations on providing financial services into the EU from our UK operations could require us to make potentially significant changes to our operations in the UK and our legal structure. Potential effects of a UK exit from the EU and potential mitigating actions may vary considerably depending on the timing of withdrawal and the nature of any transition or successor arrangements.

Application of MiFID II/MiFIR package postponed until January 2018

The EU Markets in Financial Instruments Directive II and Regulation package (MiFID II / MiFIR) came into force in July 2014. The bulk of the requirements were intended to become applicable on 3 January 2017, with transitional provisions in several areas. However, taking into account the significant technical implementation challenges faced by regulators and market participants, the application date has been postponed to 3 January 2018. MiFID II / MiFIR will affect many areas of our business in the Investment Bank, Wealth Management, Asset Management and Personal & Corporate Banking. We have a Group-wide implementation program in place for MiFID II / MiFIR.

EU Benchmarks Regulation entered into force

The EU Benchmarks Regulation (EBR), which aims to improve the accuracy and integrity of benchmarks, entered into force on 30 June 2016 and the majority of requirements will take effect as of 1 January 2018. New EU and third-country benchmarks may not be used in the EU after 1 January 2018 unless they comply with EBR. Existing benchmarks (financial indices used as a reference in financial instruments, contracts or investment funds on 1 January 2018) are subject to transitional provisions. The regulation will have a cross-divisional and a cross-regional impact, as it affects UBS at three levels: administrator of UBS benchmarks, contributor to various benchmarks, and as a user of benchmarks. The governance, control and transparency requirements for administrators and contributors will have cost implications. The application of EBR may have a significant effect across the industry as it may result in a reduction in benchmarks available for use in financial instruments and financial contracts or to measure the performance of investment funds.

Key developments in the US

US Department of Labor finalizes fiduciary rule

In April 2016, the US Department of Labor (DOL) adopted a rule that expands the definition of “fiduciary” under the Employee Retirement Income Security Act of 1974 (ERISA). On 1 March 2017, the DOL proposed a 60 day extension of the current 10 April 2017 applicability date of the fiduciary rule and its exemptions. The proposed delay is intended to give the DOL time to commence an examination of the rule called for by a memorandum issued by President Donald Trump on 3 February 2017. That memo directed the DOL to review the fiduciary rule to “determine whether it may adversely affect the ability of Americans to gain access to retirement information and financial advice.” The rule would require all advisors, including broker-dealers, to abide by an ERISA fiduciary standard in dealings with qualified retirement plans and individual retirement accounts. It would also prohibit various customary transactions and fee arrangements in the financial services industry with respect to retirement plan investors, unless certain exemption criteria are fully met. Wealth Management Americas and Asset Management would be required to materially change some of their business processes in response to the rule.

Changes to rules regulating systemic risks

UBS Americas Holding LLC, the intermediate holding company for our US subsidiaries, is subject to US capital requirements, governance requirements and other prudential regulation, including the Comprehensive Capital Analysis and Review (CCAR) process beginning in 2017. In January 2017, the Federal Reserve Board adjusted its capital plan and stress testing rules. Among other changes, the rules will decrease the amount of capital any firm subject to the quantitative requirements of CCAR can distribute to shareholders outside an approved capital plan without seeking prior approval from the Federal Reserve Board from 1% to 0.25%. This change will apply to UBS Americas Holding LLC for the 2017 CCAR cycle. As announced by Federal Reserve Board Governor Daniel Tarullo in September 2016, the Federal Reserve Board may further revise the CCAR process and make various changes to the modeling assumptions used in the CCAR scenarios. The revised CCAR process could, among other things, require firms to hold an additional stress capital buffer determined every year.

Separately, in March 2016, the Federal Reserve Board proposed a rule to impose new limits on significant single-counterparty credit exposures of large banking organizations, including large US bank holding companies and US operations of foreign banking organizations. The proposal would apply single-counterparty credit limits to US-domiciled bank holding companies with total consolidated assets of USD 50 billion or more. The proposed limits are designed to become more stringent as the systemic importance of a firm increases. Under the proposal, the exposure of UBS’s US operations to another systemically important financial firm would be limited to a maximum of 15% of our tier 1 capital, and exposure to any other single counterparty would be restricted to 25% of our tier 1 capital. In addition, the single-counterparty credit limits would apply separately to UBS Americas Holding LLC, based on its capital. If adopted as proposed, these limits may affect how UBS conducts its operations in the US, including the use of other financial firms for payments and securities clearing services and as transactional counterparties.

US incentive compensation regulation

In May 2016, US federal financial regulators, including the Board of Governors of the Federal Reserve (Federal Reserve Board), jointly proposed regulations that would, among other things, (i) prescribe mandatory deferral amounts and periods for incentive compensation based on the size of the financial institution and (ii) require downward adjustment, forfeiture and / or claw-back of incentive compensation in certain circumstances. The proposal would apply to incentive compensation plans of our principal operating entities in the US and would prescribe specific deferral and forfeiture requirements for executive officers, highly compensated employees and significant risk takers as defined in the proposal. If implemented as proposed, these regulations would require changes to our incentive compensation programs.

→ Refer to the “Risk factors” section of this report for more information

Our strategy

Who we are

The world's largest and only truly global wealth manager

Our strategy is centered on our leading wealth management businesses and our premier universal bank in Switzerland, which are enhanced by Asset Management and the Investment Bank. We focus on businesses that have a strong competitive position in their targeted markets, are capital efficient, and have an attractive long-term structural growth or profitability outlook. We are the world's largest and only truly global wealth manager, with a strong presence in the largest and fastest growing markets. Our wealth management businesses benefit from significant scale in an industry with attractive growth prospects, increasingly high barriers to entry, and their leading position across the attractive high net worth and ultra high net worth client segments. We are the preeminent universal bank in Switzerland, the only country where we operate in all business divisions. Our leading position in our home market is central to UBS's global brand and profit stability. The partnership between our wealth management businesses and our other businesses is a key differentiating factor and a source of competitive advantage.

Strong capital position and capital efficient business model

Capital strength is the foundation of our strategy and provides another competitive advantage. Our fully applied common equity tier 1 (CET1) capital ratio is one of the highest among large global banks, and we are well-positioned to meet the revised fully applied Swiss too big to fail provisions as of 1 January 2020. Our capital-accretive and efficient business model helps us adapt to changes in regulatory requirements, while pursuing growth opportunities without the need for significant earnings retention. We believe that our business model can generate an adjusted return on tangible equity of more than 15% in a normalized market environment.

We are committed to an attractive capital returns policy

Our earnings capacity and capital efficiency support our objective to deliver sustainable and growing capital returns to our shareholders. We are committed to a total capital return of at least 50% of net profit attributable to shareholders, provided that we maintain a fully applied CET1 capital ratio of at least 13% and consistent with our objective of maintaining a post-stress fully applied CET1 capital ratio of at least 10%. Total capital returns will consist of an ordinary dividend, which we intend to grow steadily over time, and other forms of capital returns. For the financial year 2016, our Board of Directors intends to propose a dividend payment of CHF 0.60 per share, which is in line with the ordinary dividend paid for 2015, and which represents a payout ratio of 71%.

Our priorities

1. Continue to execute our strategy and deliver on our performance targets

The strategic change we initiated in 2011 was driven by our decision to focus on our strengths and our anticipation of more demanding regulation. Having successfully completed our strategic transformation in 2014, we intend to continue building on our successful track record and to focus on disciplined execution to deliver on our performance targets.

2. Improve effectiveness and efficiency

Our effectiveness and efficiency programs focus on creating the right infrastructure and cost framework for the future, including optimizing our global workforce and footprint. Delivering on our cost savings target is critical to offsetting the escalating costs associated with regulatory change and to achieve our return objectives.

3. Invest for growth

We continue to upgrade and enhance our capabilities in technology and digitalization with a focus on innovation, better serving our clients and further strengthening our competitive position. We are also committed to investing in the development of our employees and attracting the best available talent.

Our performance targets, expectations and ambitions

The tables below show our performance targets, expectations and ambitions for the Group and business divisions. They are calculated on an annual basis, and represent our objectives for sustainable business performance over the cycle. Our performance targets, expectations and ambitions are based on

adjusted results and assume constant foreign currency translation rates.

→ Refer to the “Group performance” section of this report for more information on adjusted results and adjusting items

Group

Adjusted cost/income ratio	60–70%
Adjusted return on tangible equity	>15%
Common equity tier 1 capital ratio (fully applied) ¹	At least 13% ²
Risk-weighted assets (fully applied)	Expectation: around CHF 250 billion short/medium term ³
Leverage ratio denominator (fully applied)	Expectation: around CHF 950 billion short/medium term ³
Net cost reduction ⁴	CHF 2.1 billion by end 2017

¹ Based on the revised Swiss SRB capital framework that became effective on 1 July 2016. Refer to the “Capital management” section of this report for more information. ² Our capital returns policy also includes our objective of maintaining a post-stress fully applied common equity tier 1 (CET1) capital ratio of at least 10%. ³ Based on the currently applicable rules. Refer to the “Capital management” section of this report for more information. Also reflects known FINMA multipliers and methodology changes for risk-weighted assets (RWA), and assumes normalized market conditions for both RWA and leverage ratio denominator (LRD). ⁴ Year-end 2017 exit rate compared with full-year 2013 adjusted operating expenses for Corporate Center and compared with full-year 2015 adjusted operating expenses for business divisions. Cost reductions exclude expenses for provisions for litigation, regulatory and similar matters, foreign currency movements and temporary regulatory program costs. Business division adjusted operating expenses are before allocations and exclude items that are not representative of the underlying net cost reduction performance, mainly related to variable compensation expenses and compensation for financial advisors in Wealth Management Americas.

Business divisions

Wealth Management	Net new money growth rate	3–5%	Expectation: 10–15% annual adjusted pre-tax profit growth for combined businesses over the cycle
	Adjusted cost/income ratio	55–65%	
Wealth Management Americas ¹	Net new money growth rate	2–4%	
	Adjusted cost/income ratio	75–85%	
Personal & Corporate Banking	Net new business volume growth rate	1–4% (personal banking)	
	Net interest margin	140–180 bps	
	Adjusted cost/income ratio	50–60%	
Asset Management	Net new money growth rate	3–5% excluding money market flows	
	Adjusted cost/income ratio	60–70%	
	Adjusted annual pre-tax profit	Ambition: CHF 1 billion in the medium term	
Investment Bank	Adjusted annual pre-tax RoAE	>15% ²	
	Adjusted cost/income ratio	70–80%	
	Risk-weighted assets (fully applied)	Expectation: around CHF 85 billion short/medium term ³	
	Leverage ratio denominator (fully applied)	Expectation: around CHF 325 billion short/medium term ³	

¹ Based on US dollars. ² Under the current capital regime. ³ Based on the currently applicable rules. Refer to the “Capital management” section of this report for more information. Also reflects known FINMA multipliers and methodology changes for RWA, and assumes normalized market conditions for both RWA and LRD. Including RWA and LRD directly associated with activity that Corporate Center – Group Asset and Liability Management manages centrally on the Investment Bank’s behalf.

Measurement of performance

Performance measures

Key performance indicators

The Group and business divisions are managed on the basis of a KPI framework, which identifies profit and growth financial measures, in the context of sound risk and capital management objectives. When determining variable compensation, both Group and business division KPIs are taken into account.

We review the KPI framework on a regular basis, considering our strategy and the market environment in which we operate.

KPIs are disclosed in our quarterly and annual reporting to allow comparison of our performance over the reporting periods. For certain KPIs we have performance targets in place, which are defined in order to measure our performance against our strategy. Our KPIs are designed to be assessed on an over-the-cycle basis and are subject to seasonal patterns.

→ **Refer to the “Our strategy” section of this report for more information on performance targets**

Changes to our key performance indicators in 2017

We have fully aligned our performance targets and our KPI framework as of 1 January 2017, and as a result our “Cost reduction” target will be classified as a KPI for the Group as of 2017. Furthermore, to simplify the KPI framework, “Average value-at-risk (1-day, 95% confidence, 5 years of historical data)” for the Investment Bank will be reported as “Additional information” rather than as a KPI, and “Return on assets, gross (%)” for the Group and the Investment Bank will be removed from the KPI framework, as these will no longer be used as strategic steering metrics. In addition, the going concern leverage ratio will change from a phase-in to a fully applied basis.

2016 Group and business division key performance indicators

Key performance indicators	Definition	Group	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank
Net profit growth (%)	Change in net profit attributable to shareholders from continuing operations between current and comparison periods / net profit attributable to shareholders from continuing operations of comparison period	●					
Pre-tax profit growth (%)	Change in business division operating profit before tax between current and comparison periods / business division operating profit before tax of comparison period		●	●	●	●	●
Cost / income ratio (%)	Operating expenses / operating income before credit loss (expense) or recovery	●	●	●	●	●	●
Return on tangible equity (RoTE) (%)	Net profit attributable to shareholders before amortization and impairment of goodwill and intangible assets (annualized as applicable) / average equity attributable to shareholders less average goodwill and intangible assets	●					
Return on attributed equity (RoAE) (%)	Business division operating profit before tax (annualized as applicable) / average attributed equity						●
Return on assets, gross (%) ¹	Operating income before credit loss (expense) or recovery (annualized as applicable) / average total assets	●					●
Going concern leverage ratio (phase-in, %) ¹	Total going concern capital / leverage ratio denominator	●					
Common equity tier 1 capital ratio (fully applied, %)	Common equity tier 1 capital / risk-weighted assets	●					
Net new money growth (%)	Net new money for the period (annualized as applicable) / invested assets at the beginning of the period. Group net new money growth is reported as net new money growth for combined wealth management businesses. Asset Management net new money excludes money market flows	●	●	●		●	
Gross margin on invested assets (bps)	Operating income before credit loss (expense) or recovery (annualized as applicable) / average invested assets		●	●		●	
Net margin on invested assets (bps)	Business division operating profit before tax (annualized as applicable) / average invested assets		●	●		●	
Net new business volume growth for personal banking (%)	Net new business volume (i.e., total net inflows and outflows of client assets and loans) for the period (annualized as applicable) / business volume (i.e., total of client assets and loans) at the beginning of the period				●		
Net interest margin (%)	Net interest income (annualized as applicable) / average loans				●		
Average VaR (1-day, 95% confidence, 5 years of historical data) ¹	Value-at-risk (VaR) expresses maximum potential loss measured to a 95% confidence level, over a 1-day time horizon and based on five years of historical data						●

¹ Removed from the key performance indicator framework in 2017.

New key performance indicators in 2017

Key performance indicators	Definition	Group	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank
Cost reduction	Net exit rate cost reduction ¹	●					
Going concern leverage ratio (fully applied, %)	Total going concern capital / leverage ratio denominator	●					

¹ Exit rate compared with full-year 2013 adjusted operating expenses for Corporate Center and full-year 2015 adjusted operating expenses for business divisions. Cost reductions exclude expenses for provisions for litigation, regulatory and similar matters, foreign currency movements and temporary regulatory program costs. Business division adjusted operating expenses are before allocations and exclude items that are not representative of the underlying net cost reduction performance, mainly related to variable compensation expenses and compensation for financial advisors in Wealth Management Americas.

Wealth Management

Business

Wealth Management provides comprehensive advice and tailored financial services to wealthy private clients around the world, except those served by Wealth Management Americas. Our clients benefit from the full spectrum of resources that UBS as a global firm can offer, including banking and lending solutions, wealth planning, investment management solutions, and corporate finance advice. Our guided architecture model gives clients access to a wide range of products from the world's leading third-party institutions that complement our own products.

Strategy and clients

We are the preeminent wealth manager for private clients outside the US, particularly in the ultra high net worth, high net worth and affluent segments. We generally define ultra high net worth clients as those with investable assets of more than CHF 50 million, and high net worth clients as those with investable assets of between CHF 2 million and CHF 50 million. Affluent clients are those with investable assets between CHF 250,000 and CHF 2 million.

We believe the wealth management business has attractive long-term growth prospects and expect its growth to outpace that of global gross domestic product. From a client segment perspective, we believe the global ultra high net worth market, including family offices, has the highest growth potential, followed by the high net worth and affluent markets. We seek to capitalize on our market-leading position in the ultra high net worth business and to increase our market share considerably in this segment. We also invest significantly in growing our high net worth and affluent businesses, especially by leveraging and further strengthening our leading competence in investment management, as well as by investing in our digital capabilities.

Investment management and portfolio construction are at the heart of our offering. We aspire to provide our clients a wider selection of discretionary and advisory services, helping them to more effectively achieve their goals. This in turn would further increase our mandate penetration and contribute to higher recurring revenues. Our integrated client service model allows us to bundle capabilities across the Group to identify investment opportunities in varying market conditions and create solutions that suit individual client needs. For example, ultra high net worth clients benefit from tailored institutional coverage and global execution provided by dedicated specialist teams from Wealth Management and the Investment Bank through the Global Family

Office Group. Furthermore, we have enhanced our coverage and offering by establishing a global distribution management function and a dedicated global ultra high net worth organization.

We have unique scale, an industry-leading platform and are active in the most diverse wealth management markets and segments. Our booking centers across the globe give us a strong local presence that allows us to book client assets in multiple locations, in response to client preferences.

In Asia Pacific, we have accelerated our growth and expanded our onshore presence, with a particular focus on Hong Kong, Singapore and China, as well as on other major markets such as Japan and Taiwan, to capture long-term growth opportunities. In emerging markets, we continue to focus on markets such as Mexico, Brazil, Turkey, Russia, Israel and Saudi Arabia. We regularly assess our local presence to ensure proximity to our clients in key markets, as well as to make sure client needs for global diversification and local offerings are met.

In Europe, our long-established local presence in all major markets supports our growth ambition. We have combined our offshore and onshore businesses, creating economies of scale and enabling us to deal efficiently with increased regulatory and fiscal requirements. In December 2016, we established UBS Europe SE, an important step in simplifying our governance structure and in improving operational and capital efficiency across our European operations. UBS Europe SE was formed through the merger of UBS Deutschland AG and our Wealth Management subsidiaries in Germany, Italy, Luxembourg (including branches in other countries), the Netherlands and Spain. Further countries may be included in the future.

In Switzerland, Wealth Management collaborates closely with our colleagues in the personal and corporate banking, asset management and investment banking businesses. This creates opportunities to expand our business through client referrals and generates efficiencies by enabling us to use UBS's extensive branch network, which includes around 100 Wealth Management offices.

We offer extensive training to our client advisors, designed to enable the delivery of superior advice and solutions. All of our client advisors must obtain the Wealth Management Diploma, a program accredited by the Swiss Accreditation Service of the State Secretariat for Economic Affairs, which ensures a high level of knowledge and expertise. For our most senior client advisors, we offer extensive training through the Wealth Management Master program.

We are investing in digitalization and innovation to meet the evolving needs of our clients. The One Wealth Management Platform program is our signature business transformation strategy, through which we aim to deliver advisory, digital and back office capabilities to our clients around the world. We intend to standardize our operating model and deliver operating efficiencies across our global wealth management business. The program has already been rolled out in Switzerland and Germany and is currently being implemented in Hong Kong and Singapore. In addition, we are developing new solutions to deliver our services through digital channels. For example, in 2016, we launched UBS SmartWealth in the UK, which combines digital wealth management with UBS's market-leading expert insight, offering clients tailored investment advice based on their personal goals, and online access to their investments at any time.

We evaluate our performance against key performance indicators and our performance targets.

→ **Refer to the "Our strategy" section of this report for more information on our performance targets**

→ **Refer to the "Measurement of performance" section of this report for information on our key performance indicators**

Products and services

Our approach focuses on gaining an understanding of our clients' financial objectives that enables us to provide proprietary and third-party solutions tailored to their individual needs. Clients benefit from a comprehensive set of capabilities and expertise, including planning, investing, lending, protection, philanthropy, corporate and banking services. Investment management capabilities are a core component of this value proposition.

Our Global Chief Investment Office, which serves both Wealth Management and Wealth Management Americas, synthesizes the research and expertise of UBS's global network of economists, strategists, analysts and investment specialists across all business divisions. These experts closely monitor and assess financial market developments and form a clear, concise and consistent investment view, known as the UBS House View.

The UBS House View identifies and communicates investment opportunities and market risks to help protect and grow our clients' wealth, which we apply to our clients' portfolios and asset allocations, underpinning the investment strategies for our flagship discretionary mandates. The strategic asset allocation is an essential part of our disciplined style of managing our clients' wealth and strives to ensure that our clients remain on course to meet their financial goals over the long term. It is complemented by our tactical asset allocation, which uses our global expertise to help our clients navigate markets and ultimately improve the risk and return trade-off potential of their portfolios.

Our Investment Products and Services unit ensures our solutions are in step with market conditions by aligning our

discretionary and advisory offerings with the UBS House View. Clients can invest in a full range of financial instruments, from single securities, such as equities and bonds, to various investment funds, structured products and alternative investments. Additionally, we offer our clients advice on structured lending and corporate finance.

To help our clients address the challenges of an increasingly complex financial world, we continue to develop innovative products. In 2016, we rolled out expanded investment mandate solutions based on our Chief Investment Office's new asset allocation framework. These innovative investment solutions are designed to meet specific client needs and preferences beyond those addressed in our existing discretionary mandate offering. For example, our UBS Manage Advanced Systematic Asset Allocation mandate is a quantitatively driven investment concept that allows investors to participate fully in upward-trending equity markets and to reduce their exposure to equity risk in downward-trending and volatile equity markets.

By aggregating demand for private investments, we are able to offer our clients access to investment opportunities in the private markets space that are traditionally only available to institutional investors. In 2016, we expanded our private markets offering, most notably through a joint venture with Hamilton Lane, one of the largest independent alternative investment management firms globally.

We have also continued to invest significantly into our discretionary and advisory platform infrastructure, with a focus on customizing these offerings on a large scale and processing them more efficiently.

Organizational structure

We are primarily organized along regional lines, with our business areas being Asia Pacific, Europe and Emerging Markets, Switzerland and Global Ultra High Net Worth.

We are governed by executive, risk and operating committees and operate mainly through UBS Switzerland AG and UBS AG branches. Headquartered in Switzerland, we have a presence in more than 40 countries with approximately 190 offices, of which around 100 are in Switzerland.

Competitors

Our main global competitors include the private banking operations of BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, HSBC, JPMorgan Chase and Julius Baer. In the European domestic markets, we primarily compete with the local private banking operations of large banks such as Deutsche Bank in Germany, RBS in the UK and UniCredit in Italy. In Asia Pacific, the private banking franchises of Citigroup, Credit Suisse and HSBC are our main competitors.

Wealth Management Americas

Business

Wealth Management Americas provides advice-based solutions through financial advisors who deliver a fully integrated set of products and services specifically designed to address the needs of our clients. Our business is primarily domestic US but includes Canada and international business booked in the US. We believe we have attractive growth opportunities and a clear strategy focused on serving our target client segments, particularly the high and ultra high net worth segments.

Strategy and clients

Wealth Management Americas is one of the leading wealth managers in the Americas in terms of financial advisor productivity and invested assets by financial advisor. We offer a fully integrated set of products and services to meet the needs of our high net worth and ultra high net worth client segments, while also serving the needs of core affluent clients. We define high net worth clients as those with investable assets of between USD 1 million and USD 10 million, and ultra high net worth clients as those with investable assets of more than USD 10 million. Core affluent clients are defined as those with investable assets of between USD 250,000 and USD 1 million. The Global Family Office – Americas, a joint venture between Wealth Management Americas and the Investment Bank, provides integrated, comprehensive wealth management and institutional-type services to select Family Office clients. Our Wealth Advice Center serves emerging affluent clients with investable assets of less than USD 250,000. We are committed to providing high-quality advice to our clients across all their financial needs by employing the best professionals in the industry, delivering the highest standard of execution and running a streamlined and efficient business.

We evaluate our performance against key performance indicators and our performance targets.

→ Refer to the “Our strategy” section of this report for more information on our performance targets

→ Refer to the “Measurement of performance” section of this report for information on our key performance indicators

We believe we are uniquely positioned to serve high net worth and ultra high net worth investors in the world’s largest wealth market. With a network of over 7,000 financial advisors and USD 1 trillion in invested assets, we have a distinctive opportunity to “feel small and play big” by combining the agility of a boutique firm with all of the capabilities of a premier, truly global wealth manager. To accomplish that, in 2016 we introduced a new Wealth Management Americas operating model designed to move decision-making closer to clients, better leverage the capabilities that our unrivaled global footprint can offer, invest in next-generation technology and

achieve long-term sustainable organic growth through an increased focus on retaining and developing our financial advisors. We aim to differentiate ourselves from competitors and be a trusted and leading provider of financial advice and solutions to our clients by enabling our financial advisors to leverage the full resources of UBS globally, including access to wealth management research, our global Chief Investment Office, and solutions from our other business divisions. These resources are augmented by our commitment to an open architecture platform and supported by our partnerships with many of the world’s leading third-party institutions. Moreover, our wealth management offering includes banking, mortgage and financing solutions that enable us to provide advice on both the asset and liability sides of our clients’ balance sheets.

We believe the long-term growth prospects of the wealth management business are attractive in the Americas, with high net worth and ultra high net worth expected to be the fastest-growing client segments in terms of invested assets in the region. We plan to grow our business by enabling our financial advisors to focus on delivering holistic advice across the full spectrum of client needs through continued expansion of our cross-business collaboration throughout the firm, and delivering banking and lending services that complement our wealth management solutions. We also plan to continue investing in platforms and technology, while remaining disciplined on cost. We expect these efforts to enable us to achieve higher levels of client satisfaction, strengthen our client relationships and lead to greater productivity across our financial advisors.

Products and services

We offer clients a full array of solutions that focus on meeting their individual financial needs. Our financial advisors work closely with internal specialists to support evolving goals and expectations throughout the client life cycle, including comprehensive wealth planning and portfolio strategy and management. Our offering is designed to meet a wide variety of investment objectives, including wealth accumulation and preservation, income generation, portfolio diversification, legacy planning and philanthropy.

We offer products and solutions including equities, fixed income, retirement services, annuities, alternative investments, managed accounts and structured products. Wealth Management Americas' financial advisors are supported by a dedicated capital markets team collaborating with the Investment Bank and Asset Management in order to leverage the resources of the entire firm, as well as with third-party investment banks and asset management firms. To address the full range of our clients' financial needs, the Wealth Management Americas Banking Group offers competitive lending and cash management services, such as securities-backed lending, resource management accounts, Federal Deposit Insurance Corporation (FDIC)-insured deposits, mortgages and credit cards. Wealth Management Americas clients also benefit from our commitment to close collaboration with our Wealth Management business. Our integrated Wealth Management Research Americas and Global Chief Investment Office Wealth Management organizations together provide market analysis, economic outlooks and research guidance through a global lens and deliver them in our UBS House View to help support investment decisions.

For corporate and institutional clients, we offer a robust suite of solutions, including equity compensation, administration, investment consulting, defined benefit and contribution pension programs, and cash management services. For example, our UBS Equity Plan Advisory Services provides equity compensation plan services and advice to more than 180 US corporations, representing one million participants worldwide.

Organizational structure

Our business is primarily domestic US but includes Canada and international business booked in the US.

In the US and Puerto Rico, we operate primarily through UBS Financial Services Inc. and UBS Financial Services Incorporated of Puerto Rico through 208 branches. Our banking services in the US include those conducted through UBS Bank USA, an FDIC-insured depository institution subsidiary, and branches of UBS AG. Canadian wealth management and banking operations are conducted through UBS Bank (Canada). We are governed by executive, risk and operating committees.

Competitors

We compete with national full-service brokerage firms, domestic and global private banks, regional broker-dealers, independent broker-dealers, registered investment advisors, trust companies and other financial services firms offering wealth management services to US and Canadian private clients, as well as foreign non-resident clients seeking wealth management services within the US. Our main competitors include the wealth management businesses of Bank of America, Morgan Stanley and Wells Fargo.

Personal & Corporate Banking

Business

As the leading personal and corporate banking business in Switzerland, we provide comprehensive financial products and services to private, corporate and institutional clients in Switzerland. We are among the leading players in the private and corporate loan market in Switzerland, with a well-collateralized and conservatively managed lending portfolio.

Our business is a central element of UBS's universal bank delivery model in Switzerland. We work with the Group's wealth management, investment bank and asset management businesses to ensure that our clients receive the best products and solutions for their specific financial needs. We are also an important source of growth for our other business divisions in Switzerland through client referrals. In addition, we manage a substantial part of UBS's Swiss infrastructure and banking products platform, both of which are leveraged across the Group.

Our distribution model is based on a multi-channel strategy. With a steadily rising number of users and client interactions for our expanding electronic and mobile banking offering, we continue to strengthen our position as the leading multi-channel bank in Switzerland.

Strategy and clients

Our strategy focuses on profitable and qualitative growth in Switzerland. We aim to provide stable and substantial profits for the Group and create revenue opportunities for other businesses within the firm.

In the personal banking business, we aspire to be the bank of choice for private clients in Switzerland. We continue to pursue our strategy of moderately and selectively growing our business in high-quality loans and to further leverage the potential of digitalization. Currently, we serve one in three Swiss households through our branch network, customer service centers and digital banking services. We are continuously expanding our multi-channel offering and continue to build on UBS's long tradition as a leader and innovator in digital services to deliver a superior client experience, capture market share and increase efficiency and customer loyalty.

In the corporate and institutional business, we want to be our clients' main bank. We aim to continuously improve our profitability and capital efficiency, striving to expand our market share in Switzerland with a focus on a qualitative growth strategy, centered on cash flow-based lending and our strategic

advisory and trading business. Additionally, we are selectively expanding our international footprint to serve Swiss corporate clients abroad as well as global corporate clients headquartered in Switzerland.

Our clients value their relationship with us and our efforts to provide them with superior service. In 2016, for the sixth consecutive year, the international finance magazine *Euromoney* named UBS "Best Domestic Cash Manager Switzerland" based on a survey of cash managers and chief financial officers. Additionally, UBS was rated best asset servicing provider for asset managers and as the leading custodian bank in Switzerland and Europe, according to The R & M Survey, one of the industry's most important client surveys.

Constant employee development is a crucial element of our divisional strategy, as this is our key to ensuring superior client service. UBS sets the pace in client advisor certification, specifically with the implementation of its state-accredited ISO certification program.

Moreover, we continuously strive to simplify structures and processes in order to improve client experience without compromising our risk standards.

We evaluate our performance against key performance indicators and our performance targets.

→ Refer to the "Our strategy" section of this report for information on our performance targets

→ Refer to the "Measurement of performance" section of this report for information on our key performance indicators

Products and services

Our private clients have access to a comprehensive life cycle based offering and convenient digital banking, targeting the specific needs of day-to-day banking, retirement and investment goals, and real estate transactions. In 2016, new services such as digital account opening and UBS Safe, where clients can securely store electronic files, were introduced.

Our corporate and institutional clients benefit from our financing and investment solutions, notably regarding access to equity and debt capital markets, syndicated and structured credit, private placements, leasing and traditional financing. Our transaction banking offers solutions for payment and cash management services, trade and export finance, receivable finance, as well as global custody solutions to institutional clients.

In 2016, we implemented a number of product and service innovations, such as the launch of UBS Atrium, an innovative platform in the real estate business, where UBS acts as an intermediary in the market, connecting clients and institutional investors. UBS's platform services focus on credit origination and servicing of brokered mortgages, thereby providing an attractive investment opportunity for institutional investors in a low-yield environment. Additionally, we enhanced our digital Asset Wizard, which gives clients comprehensive wealth oversight, including a new functionality that allows clients to create a wide range of reports tailored to their individual needs.

We collaborate closely with the Investment Bank to offer capital market and foreign exchange products, hedging strategies, trading capabilities, as well as corporate finance advice. Working with Asset Management, we also provide state-of-the-art fund and portfolio management solutions.

Organizational structure

Our business is organized into Personal Banking, Wealth Management Switzerland and Corporate & Institutional Clients. The Swiss network includes over 300 branches, covering 10 geographical regions.

We are governed by executive, risk and operating committees and operate mainly through UBS Switzerland AG.

Competitors

In the Swiss retail business, our competitors are Credit Suisse, PostFinance, Raiffeisen, the cantonal banks and other regional and local Swiss banks.

In the Swiss corporate and institutional business, our main competitors are Credit Suisse, the cantonal banks and globally active foreign banks in Switzerland.

Asset Management

Business

Asset Management provides investment management products and services, platform solutions and advisory support to institutions, wholesale intermediaries and wealth management clients around the world, with an onshore presence in 22 countries. We are a leading fund house in Europe, the largest mutual fund manager in Switzerland and one of the largest fund of hedge funds and real estate investment managers in the world. Our global investment capabilities include all major traditional and alternative asset classes.

Strategy and clients

While market conditions and the low-yield environment in 2016 proved to be challenging for the industry, our global, diversified asset management business model continues to provide a solid foundation to capture growth opportunities in the shifting market dynamics.

The long-term outlook for the asset management industry remains positive, with three main drivers: (i) aging populations will lead to higher savings requirements; (ii) tighter government spending budgets will lead to increased private pension funding; and (iii) emerging regulation is creating opportunities for asset managers that have the necessary scale and expertise.

We have defined our current strategy with an overarching goal to deliver holistic investment and platform solutions to our clients, by leveraging our global reach and investment expertise.

Moreover, we are strengthening our institutional business and seeking to accelerate the growth of our wholesale business by building strategic partnerships, platforms and advisory support. This is a key area in which we intend to pursue growth in the coming years. Asset Management also continues to collaborate with the wealth management businesses to provide best-in-class products and services to meet private clients' needs.

We aim to drive profitable and sustainable growth in key markets in Europe, Switzerland, the Americas and Asia Pacific, including China, where we also continue to expand our long-standing onshore presence.

To support our efforts to achieve growth and increase our operational efficiency, we continue to invest in our operating platform and have made significant progress transforming our organization to create a less complex and unified global platform. We completed the sale of our Alternative Fund Services business in 2015, and announced an agreement in 2017 to sell our fund administration servicing units in Luxembourg and Switzerland to Northern Trust. The transaction is expected to close in the second half of the year, subject to relevant approvals and other customary conditions.

We continue to develop our well-established passive capabilities, including indexed strategies and exchange-traded funds (ETFs), where we are building on our strong position in Asia Pacific, Europe and Switzerland. We also continue to expand our world-class fund-of-hedge-fund business.

We evaluate our performance against key performance indicators and our performance targets.

- Refer to the **"Our strategy"** section of this report for more information on our performance targets
- Refer to the **"Measurement of performance"** section of this report for information on our key performance indicators

Products and services

We offer clients a wide range of investment products and services in different asset classes, which can be delivered through segregated, pooled or advisory mandates as well as registered investment funds in various jurisdictions. Our active traditional and alternative capabilities are:

- **Equities** – investment strategies with varying risk and return objectives, including global, regional and thematic strategies, as well as a high alpha and growth and quantitative styles.
- **Multi Asset** – global and regional asset allocation and currency investment strategies across the risk / return spectrum.
- **O'Connor** – a global, relative value-focused, single-manager hedge fund platform providing investors with absolute and risk-adjusted returns.
- **Fixed Income** – global, regional and local market-based single-sector, multi-sector and extended-sector strategies, such as high-yield and emerging market debt, as well as unconstrained and currency strategies.
- **Global Real Estate** – global and regional strategies across the major real estate sectors, mainly focused on core and value added strategies and also including other strategies across the risk / return spectrum.
- **Infrastructure and Private Equity** – direct infrastructure investment in core infrastructure assets globally, and multi-manager infrastructure and private equity strategies in broadly diversified fund-of-funds portfolios.

Our **Solutions** business offers:

- Multi-manager hedge fund solutions and advisory services, providing exposure to hedge fund investments with tailored risk and return profiles.
- Customized multi-asset solutions and advisory services, including risk-managed and structured strategies, manager selection, pension risk management, risk advisory and global tactical asset allocation.

Our passive capabilities include indexed, alternative beta and rules-based strategies across equities, fixed income, commodities, real estate and alternatives with benchmarks ranging from mainstream to highly customized indices and rules-driven solutions. We offer our products in various structures, including ETFs, pooled funds, structured funds and mandates.

Organizational structure

Our business is organized by the products and services we offer, with principal offices located in Chicago, Frankfurt, Hartford, Hong Kong, London, New York, Singapore, Sydney, Tokyo and Zurich. We are governed by executive, risk and operating committees.

As part of UBS's efforts to improve the resolvability of the Group, we have established UBS Asset Management AG, a subsidiary of UBS AG, to which we transferred the majority of Asset Management's operating subsidiaries during 2016, excluding subsidiaries domiciled in the US, which were transferred to UBS Americas Holdings LLC.

→ Refer to the "The legal structure of UBS Group" section of this report for more information

In 2017, we aligned our businesses to enable us to better leverage our best investment processes, tools and systems to generate high alpha, systematic products and solutions for clients. Our Equities, Fixed Income and Solutions capabilities and hedge funds business were integrated within a new area named Investments.

In addition, our Global Real Estate and Infrastructure and Private Equity businesses were also combined to form a new area named Real Estate & Private Markets. We will continue to grow this business by developing integrated and innovative solutions, as well as expanding in key markets, such as Brazil, Canada and Japan.

Competitors

Our main competitors include global firms with wide-ranging capabilities and distribution channels, such as AllianceBernstein Investments, Amundi, BlackRock, Deutsche Bank Asset Management, Goldman Sachs Asset Management, Invesco, JPMorgan Chase Asset Management, Morgan Stanley Investment Management and Schroders.

Investment Bank

Business

The Investment Bank is present in over 35 countries, with principal offices in all major financial centers, providing investment advice, financial solutions and capital markets access. We serve corporate, institutional and wealth management clients across the globe and form a synergetic partnership with our wealth management, personal and corporate banking and asset management businesses.

The business division is organized into Corporate Client Solutions and Investor Client Services, and also includes UBS Securities Research. Our specialist teams work closely together, complementing our global product offering with their regional expertise. This enables us to understand our clients and provide services tailored to their investment and financing needs.

Strategy and clients

We aspire to provide best-in-class services and solutions to our corporate, institutional and wealth management clients, through an integrated, solutions-led approach, driven by our intellectual capital and leveraging our award-winning electronic platforms. With our client-centric business model, we partner with our wealth management, personal and corporate banking and asset management businesses, and we believe we are well positioned to provide our clients with market insight, global coverage of markets and products, and execution services.

Our focus remains on our traditional strengths in advisory, capital markets, equities and foreign exchange businesses, complemented by a rates and credit platform, to deliver attractive and sustainable risk-adjusted returns. Using our powerful research and technology capabilities, we pioneer integrated solutions to support our clients as they adapt to evolving market structures, driven by changes to the regulatory, technological and economic landscape.

We continue to invest in talent and technology and to strengthen our operational risk framework. In 2016, we continued to implement our technology plan, aimed at enhancing the effectiveness of our platform for clients and simplifying our processes.

To support our goal of earning attractive returns on our allocated capital, we operate within a tightly controlled framework of balance sheet, risk-weighted assets and leverage ratio denominator. We evaluate our performance against key performance indicators and our performance targets.

- Refer to the “Our strategy” section of this report for more information on our performance targets and expectations
- Refer to the “Measurement of performance” section of this report for information on our key performance indicators

Products and services

Corporate Client Solutions

In Corporate Client Solutions, we advise our clients on strategic business opportunities and help them raise capital to fund their business activities. Together with Investor Client Services, we offer a full-service solution, which includes the distribution and risk management of capital markets products and financing solutions. Its main business lines are:

- **Advisory** consults clients on matters such as mergers and acquisitions, spin-offs, exchange offers, leveraged buyouts, joint ventures, exclusive sales, restructurings, takeover defense and corporate broking.
- **Equity Capital Markets** offers comprehensive equity capital-raising services, as well as related derivative products. This includes managing initial public offerings and private placements, as well as equity-linked transactions and other strategic equities solutions.
- **Debt Capital Markets** provides financing advice and helps clients raise various types of debt capital, as well as hedge resulting exposures.
- **Financing Solutions** provides customized solutions across asset classes via a wide range of financing capabilities, including structured financing, real estate finance and special situations.
- **Risk Management** includes corporate lending and associated hedging activities.

Investor Client Services

In Investor Client Services, we enable our clients to buy and sell securities on capital markets across the globe and to manage their risk and liquidity. Its businesses are:

Equities

As one of the world's largest equities houses and leading equity market participants in the primary and secondary markets, we distribute, structure, execute, finance and clear equity cash and derivative products. Our main business lines are:

- **Cash** offers trade execution and clearing for single stocks and portfolios through both traditional and electronic channels, along with investment advisory and consultancy services.
- **Derivatives** enables clients to manage risk and meet funding requirements through a wide range of listed and over-the-counter equity derivative instruments. We create and distribute structured products and notes, enabling our clients to optimize their investment returns.
- **Financing Services** provides our hedge fund and institutional clients with a fully integrated platform for financing transactions, which includes prime brokerage. In addition, we execute and clear exchange-traded equity derivatives in more than 45 markets globally.

Foreign Exchange, Rates and Credit

Foreign Exchange, Rates and Credit provides execution services and solutions with an emphasis on electronic trading and maintains high levels of balance sheet velocity. The main business lines are:

- **Foreign Exchange** helps our clients manage their currency exposures and is recognized as one of the leading foreign exchange market-makers as well as the market leader in the precious metals business.
- **Rates and Credit** encompasses sales, trading and market-making in a selected range of rates and credit products. In addition, we work closely with Corporate Client Solutions, providing support to our debt capital markets businesses and tailoring customized financing solutions for our clients.

UBS Securities Research

In UBS Securities Research, we offer clients key insights on securities in major financial markets around the globe. In our flagship Q series reports, experts from across the UBS research team respond to questions from clients, providing a coordinated perspective across regions, sectors and asset classes.

The UBS Evidence Lab is a team of experienced primary research experts and works closely with UBS Securities Research analysts to uncover new evidence that is not yet reflected in market prices.

Organizational structure

Our business is organized along the aforementioned products and services and has a global reach.

We are governed by executive, risk and operating committees and operate through UBS AG branches and other subsidiaries of UBS Group. Securities activities in the US are conducted through UBS Securities LLC, a registered broker-dealer. In the UK, Investment Bank activities are conducted mainly out of UBS AG London branch and UBS Limited.

Competitors

The main competitors are the major global investment banks, including Bank of America Merrill Lynch, Barclays, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, JPMorgan Chase and Morgan Stanley.

Corporate Center

Corporate Center is comprised of the functions that provide services to the Group, which we present from a reporting perspective organized under Services and Group Asset and Liability Management (Group ALM). Corporate Center also includes the Non-core and Legacy Portfolio unit.

Corporate Center – Services

Corporate Center – Services consists of the Group Chief Operating Officer area (Group Corporate Services, Group Operations, Group Sourcing, Group Technology), Group Finance (excluding Group ALM), Group Legal, Group Human Resources, Group Risk Control, Group Communications and Branding, Group Regulatory and Governance, and UBS and Society.

Corporate Center – Services allocates the majority of its operating expenses to the business divisions and other Corporate Center units based on service consumption. Each year, as part of the annual business planning cycle, Corporate Center – Services agrees with the business divisions and other Corporate Center units cost allocations for services at fixed amounts or at variable amounts based on fixed formulas, depending on capital and service consumption levels as well as the nature of the service performed. In 2015 and 2016, where costs incurred were different from those expected, Corporate Center – Services recognized over- and under-recoveries. In 2017, costs will be allocated to the business divisions and other Corporate Center units based on actual costs incurred by Corporate Center – Services.

Operating expenses remaining in Corporate Center – Services after allocations relate mainly to Group governance functions and other corporate activities, certain strategic and regulatory projects and certain retained restructuring expenses.

Corporate Center – Group ALM

Group ALM manages the structural risks of our balance sheet, including interest rate risk in the banking book, currency risk and collateral risk, as well as the risks associated with the Group's liquidity and funding portfolios. Group ALM also seeks to optimize the Group's financial performance by better matching assets and liabilities within the context of the Group's liquidity, funding and capital targets. Group ALM serves all business divisions and other Corporate Center units through three main risk management areas, and its risk management is fully integrated into the Group's risk governance framework.

Business division-aligned risk management activities performed on behalf of business divisions and other Corporate Center units include managing the interest rate risk in the banking book on behalf of Wealth Management and Personal & Corporate Banking and high-quality liquid asset (HQLA) portfolios on behalf of specific business divisions. Beginning in the third quarter of 2016, the area also includes Risk Exposure

Management, which performs risk management over credit, debit and funding valuation adjustments for our over-the-counter derivatives portfolio. Net income generated by these activities is fully allocated to the associated business divisions and Corporate Center units.

Capital investment and issuance activities consist of managing the Group's equity and capital instruments as well as instruments that contribute to our total loss-absorbing capacity (TLAC). Revenues from investing the Group's equity and the incremental expenses of issuing capital and TLAC instruments at the UBS Group AG level (the holding company for the UBS Group) relative to issuing senior debt out of operating subsidiaries are fully allocated to the business divisions and other Corporate Center units based on their attributed portion of the Group's equity.

Group structural risk management activities are performed to meet overall Group-wide risk management objectives. They include managing the Group's HQLA and long-term debt portfolios. The net positive or negative income generated through these activities is allocated to the business divisions and other Corporate Center units based on their consumption of the underlying risks. This consumption is determined by various liquidity and funding models and, to reduce volatility, is allocated using stable, internal benchmark rates rather than actual income earned by Group ALM. Net positive or negative income not arising as a result of business division consumption is retained by Group ALM.

As part of its risk management activities, Group ALM enters into derivative hedges to manage the economic and the interest rate risk of the different portfolios. The results of certain hedging activities, including any non-economic volatility caused by the applicable accounting treatment, are retained by Group ALM.

Corporate Center – Non-core and Legacy Portfolio

Corporate Center – Non-core and Legacy Portfolio is comprised of the positions from businesses that were part of the Investment Bank prior to its restructuring, and is overseen by a committee chaired by the Group Chief Risk Officer.

Non-core and Legacy Portfolio pursues a primarily passive wind-down strategy, focusing on a disciplined reduction of risk-weighted assets, leverage ratio denominator and costs. Positions are managed and exited over time with the objective of maximizing shareholder value. Non-core and Legacy Portfolio also includes positions relating to legal matters arising from businesses that were transferred to it.

→ **Refer to "Note 20 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report for more information**

Roles and responsibilities within Corporate Center – Services

Functional head	Responsibilities
Group Chief Financial Officer¹	<ul style="list-style-type: none"> – Is responsible for ensuring transparency in, and the assessment of, the financial performance of the Group and business divisions, and for the Group's financial accounting, controlling, forecasting, planning and reporting processes – Is responsible for treasury and capital management, including management and control of funding and liquidity risk with independent oversight from the Group Chief Risk Officer, and for UBS's regulatory capital ratios – Ensures asset and liability management by balancing consumption of the firm's financial resources through consolidation and management of the Group's structural risks enabling sustainable earnings generation – Manages and controls the Group's tax affairs – Manages the divisional and Group financial control functions – Makes proposals to the Board of Directors (BoD) regarding the accounting standards adopted by the Group, and defines financial reporting and disclosure standards, after consultation with the Audit Committee of the BoD – Provides external certifications under sections 302 and 404 of the Sarbanes-Oxley Act of 2002 – Coordinates the working relationship with external auditors under the supervision of the Audit Committee of the BoD – Supports the Group Chief Executive Officer (CEO) in strategy development and key strategic topics – Provides advice on financial aspects of strategic projects and transactions – Manages relations with investors and analysts, in coordination with the Group CEO
Group Chief Operating Officer	<ul style="list-style-type: none"> – Provides quality, cost-effective and differentiating Group-wide IT services and tools in line with the needs of the business divisions and Corporate Center functions – Delivers a wide range of operational services across all business divisions and regions – Supplies real estate infrastructure and general administrative services, directs and controls all supply and demand management activities, supports the firm with its third-party sourcing strategies and takes responsibility for the firm's nearshore, offshore, outsourcing and supplier-related processes – Formulates and agrees Group-wide operating strategies, objectives, and financial and execution plans for the Group Chief Operating Officer function in support of each business division and the Group functions – Delivers cross-divisional operational initiatives to enhance the firm's operating platform
Group Chief Risk Officer	<ul style="list-style-type: none"> – Manages the divisional, regional and firm-wide risk control functions and monitors and challenges the firm's risk-taking activities – Develops the Group's risk appetite framework, risk management and control principles, and risk policies – In accordance with the risk appetite framework approved by the BoD, is responsible for: <ul style="list-style-type: none"> (i) implementing appropriate independent control frameworks for the Group's credit, market, treasury, country, compliance and operational risks (ii) developing and implementing the frameworks for risk measurement, aggregation, portfolio controls and, jointly with the Group Chief Financial Officer, for risk reporting (iii) authorizing transactions, positions, exposures, portfolio limits, and credit risk provisions and allowances in accordance with the risk control authorities delegated to this role – Maintains a control framework to ensure that UBS meets relevant regulatory and professional standards in the conduct of its business and coordinates in this respect with the Group General Counsel
Group General Counsel	<ul style="list-style-type: none"> – Is responsible for legal matters, policies and processes and for managing the Group's legal function – Assumes responsibility for legal oversight in respect of the Group's key regulatory interactions and maintains relationships with our key regulators with respect to legal matters – Reports legal risks and material litigation and manages litigation
Group Head Human Resources	<ul style="list-style-type: none"> – Defines and executes a human resources strategy aligned with UBS's objectives and positions the Group as an employer of choice – Ensures cost-efficient operational and advisory services to employees as well as strategic advice to managers and executives, supporting them to attract, engage, develop and retain talent – Maintains relationships with the Group's key regulators with respect to compensation matters
Group Head Communications and Branding	<ul style="list-style-type: none"> – Manages UBS's corporate and brand communication to its stakeholders in alignment with the Group's overall strategy – Develops UBS's communications strategy, content and positioning with the primary purpose to build and protect the firm's reputation and brand – Manages and coordinates Group-wide marketing communications activities, including partnership marketing and sponsorship measures – Provides shared service delivery of Group-wide communication channels
Group Head Regulatory and Governance	<ul style="list-style-type: none"> – Develops governmental policy and regulatory strategy and coordinates key external relationships – Manages the Strategic Regulatory Initiatives portfolio and oversees the planning and execution of relevant initiatives – Establishes global and local resolution planning and develops key resolvability improvement measures – Designs the Group's legal entity structure and further develops coherent corporate governance standards – Governs the Group's investigation portfolio and performs important investigations
Head UBS and Society	<ul style="list-style-type: none"> – Coordinates the Group's corporate responsibility and sustainability strategy activities

¹ Relates to responsibilities for both Corporate Center – Services and Corporate Center – Group ALM.

Priorities and initiatives

Our Corporate Center functions strive to provide best-in-class financial, risk, legal and shared services to the Group based on commercially sound service management principles, including transparency on both qualitative and quantitative components of the services offered. Moreover, we continue to focus on achieving greater effectiveness and efficiency through the strategic levers of workforce and footprint, organization and process optimization, and technology, and we remain fully committed to contributing to the Group's net cost reduction.

As of 31 December 2016, 31% of Corporate Center employees and contractors were in offshore or nearshore locations compared with 18% three years earlier. In addition to lower personnel expenses, this allows us to tap growing talent pools and realize efficiencies by reducing our footprint in high-cost real estate locations.

We seek to increase value by leveraging common capabilities and creating centralized functions. Within Group Technology, we continue to modernize our infrastructure and simplify our portfolio of applications. In 2016, we began the transfer of the majority of shared service functions to our separate Group service companies, which, in addition to meeting regulatory requirements, allows us to further strengthen our approach to service management without losing efficiency in the way we operate.

- **Refer to the "Our strategy" section of this report for more information**
- **Refer to the "The legal structure of UBS Group" section of this report for more information**

Risk factors

Certain risks, including those described below, may affect our ability to execute our strategy or our business activities, financial condition, results of operations and prospects. Because a broad-based international financial services firm such as UBS is inherently exposed to multiple risks many of which become apparent only with the benefit of hindsight, risks of which we are not presently aware or which we currently do not consider to be material could also adversely affect us. The order of presentation of the risk factors below does not indicate the likelihood of their occurrence or the potential magnitude of their consequences.

Continuing low or negative interest rates may have a detrimental effect on our capital strength, liquidity and funding position, and profitability

Low and negative interest rates in Switzerland and the eurozone negatively affected our net interest income in 2016 and a continuing low or negative interest rate environment may further erode interest margins and adversely affect the net interest income generated by our Personal & Corporate Banking and Wealth Management businesses. Our performance is also affected by the cost of maintaining the high-quality liquid assets required to cover regulatory outflow assumptions embedded in the liquidity coverage ratio (LCR). The Swiss National Bank permits Swiss banks to make deposits up to a threshold at zero interest. Any reduction in, or limitations on the use of this exemption from the otherwise applicable negative interest rates could exacerbate the effect of negative interest rates in Switzerland. Low and negative interest rates may also affect customer behavior and hence our overall balance sheet structure. Mitigating actions that we have taken, or may take in the future, such as the introduction of selective deposit fees or minimum lending rates, have resulted and may further result in the loss of customer deposits, a key source of our funding, net new money outflows and / or a declining market share in our domestic lending business.

Our equity and capital are also affected by changes in interest rates. In particular, the calculation of our pension plan net defined benefit assets and liabilities is sensitive to the discount rate applied. Any further reduction in interest rates would lower the discount rates and result in pension plan deficits due to the long duration of corresponding liabilities. This would lead to a corresponding reduction in our equity and fully applied common equity tier 1 (CET1) capital.

Our global presence subjects us to risk from currency fluctuations

We prepare our consolidated financial statements in Swiss francs. However, a substantial portion of our assets, liabilities, invested assets, revenues and expenses, equity of foreign operations and risk-weighted assets (RWA) are denominated in US dollars, euros, British pounds and in other foreign currencies. Accordingly, changes in foreign exchange rates may adversely affect our profits, balance sheet, including deferred tax assets, and capital, leverage and liquidity ratios. In particular, the portion of our operating income denominated in non-Swiss franc currencies is greater than the portion of operating expenses denominated in non-Swiss franc currencies. Therefore, the appreciation of the Swiss franc against other currencies generally has an adverse effect on our profits, in the absence of any mitigating actions. Moreover, in order to hedge our CET1 capital ratio, CET1 capital needs to have foreign currency exposure, leading to currency sensitivity of CET1 capital. As a consequence, it is not possible to simultaneously fully hedge both the amount of capital and the capital ratio. As the proportion of RWA denominated in non-Swiss franc currencies outweighs the capital in these currencies, a significant appreciation of the Swiss franc against these currencies could benefit our capital ratios, while a significant depreciation of the Swiss franc against these currencies could adversely affect our capital ratios.

Swiss counterparties are, in general, highly reliant on the domestic economy and the economies to which they export, in particular the EU and the US. In addition, the EUR / CHF exchange rate is an important risk factor for Swiss corporates. The stronger Swiss franc may have a negative effect on the Swiss economy, particularly on exporters, which could adversely affect some of the counterparties within our domestic lending portfolio and lead to an increase in the level of credit loss expenses in future periods from the low levels recently observed.

Regulatory and legal changes may adversely affect our business and our ability to execute our strategic plans

Fundamental changes in the laws and regulations affecting financial institutions can have a material and adverse effect on our business. In the wake of the 2007–2009 financial crisis and the subsequent instability in global financial markets, regulators and legislators are considering, have proposed or have adopted a wide range of changes to these laws and regulations. These measures are generally designed to address the perceived causes of the crisis and to limit the systemic risks posed by major financial institutions. They include:

- significantly higher regulatory capital requirements, including changes in the definition and calculation of regulatory capital as well as in the calculation of RWA;

- prudential adjustments to the valuation of assets at the discretion of regulators;
- introduction of a more demanding leverage ratio as well as new or significantly enhanced liquidity and stable funding requirements;
- requirements to maintain liquidity and capital in jurisdictions in which activities are conducted and booked, and requirements to adopt risk, corporate and other governance structures at a local jurisdiction or entity level;
- limitations on principal trading and other activities and limitations on risk concentrations and maximum levels of risk;
- new licensing, registration and compliance regimes, and cross-border market access restrictions;
- taxes and government levies that would effectively limit balance sheet growth or reduce the profitability of trading and other activities;
- a variety of measures constraining, taxing or imposing additional requirements relating to compensation;
- requirements to maintain loss-absorbing capital or debt instruments subject to write-down as part of recovery measures or a resolution of the Group or a Group company, including requirements for subsidiaries to maintain such instruments;
- requirements to adopt structural and other changes designed to reduce systemic risk and to make major financial institutions easier to manage, restructure, disassemble or liquidate, including ring-fencing certain activities and operations within separate legal entities, and adoption of new liquidation regimes intended to prioritize the preservation of systemically significant functions.

There remains significant uncertainty regarding a number of the measures referred to above, including whether, or the form in which, they will be adopted, the timing and content of implementing regulations and interpretations, and the dates of their effectiveness. There is also uncertainty as to whether the laws and regulations that have been adopted will be repealed or modified as a result of geopolitical developments, particularly in the US with its recent change in presidential administration.

Notwithstanding attempts by regulators to align their efforts, the measures adopted or proposed differ significantly across the major jurisdictions, making it increasingly difficult to manage a global institution like UBS. Swiss regulatory changes with regard to such matters as capital and liquidity have generally proceeded more quickly than those in other major jurisdictions, and the requirements for Swiss major international banks are among the strictest of the major financial centers. This could put Swiss banks, such as UBS, at a disadvantage when they compete with peer financial institutions subject to more lenient regulation or with unregulated non-bank competitors.

Planned and potential regulatory and legislative developments in Switzerland and in other jurisdictions in which we have operations may have a material adverse effect on our ability to execute our strategic plans, on the profitability or viability of certain business lines globally or in particular locations, and in

some cases, on our ability to compete with other financial institutions, and may require us to increase prices for or cease to offer certain services and products. The developments have been and will likely continue to be costly to implement. They could also have a negative effect on our legal structure or business model, potentially generating capital, liquidity and other resource inefficiencies, all of which may adversely affect our profitability. Finally, the uncertainty related to, or the implementation of, legislative and regulatory changes may have a negative impact on our relationships with clients and our success in attracting client business.

Capital and TBTF regulation: As an internationally active Swiss systemically relevant bank (SRB), we are subject to capital and total loss-absorbing capacity (TLAC) requirements that are among the most stringent in the world. New Swiss SRB capital requirements impose significantly higher requirements based on RWA and a significantly higher leverage ratio requirement. In addition, a TLAC requirement has become applicable.

We may be subject to further increases in capital requirements in the future, from the imposition of further additions in the calculation of RWA or from other changes to other components of minimum capital requirements. The Basel Committee on Banking Supervision (BCBS) and other regulators are considering changes to the Basel III capital framework, including revisions related to the credit risk and operational risk frameworks, as well as the introduction of an output floor. If the proposed changes to the capital framework are adopted in their current form in Switzerland, we expect our overall RWA would significantly increase, absent any mitigating measures. We also expect that we would incur significant costs to implement the proposed changes.

Liquidity and funding: The requirements to maintain an LCR of high-quality liquid assets to estimated stressed short-term net cash outflows and a net stable funding ratio (NSFR), or other similar liquidity and funding requirements we are subject to, oblige us to maintain substantially higher levels of overall liquidity than was previously the case, may limit our efforts to optimize interest income and expense, make certain lines of business less attractive and reduce our overall ability to generate profits. Both the LCR and NSFR requirements are intended to ensure that we are not overly reliant on short-term funding and that we have sufficient long-term funding for illiquid assets, and the relevant calculations make assumptions about the relative likelihood and amount of outflows of funding and available sources of additional funding in a market- or firm-specific stress situation. There can be no assurance that in an actual stress situation our funding outflows would not exceed the assumed amounts. Moreover, many of our subsidiaries must comply with minimum capital, liquidity and similar requirements and as a result UBS Group AG and UBS AG have contributed a significant portion of their capital and provide substantial liquidity to them. These funds are available to meet funding and collateral needs in the relevant jurisdictions, but are generally not readily available for use by the Group as a whole.

Banking structure and activity limitations: We have undertaken and continue to undertake significant changes in our legal and operational structure to meet legal and regulatory requirements and expectations.

Changes to our legal and operational structure, particularly the transfer of operations to subsidiaries, require significant time and resources to implement and create operational, capital, liquidity, funding and tax inefficiencies. In addition, they may increase our aggregate credit exposure to counterparties as they transact with multiple entities within the UBS Group, expose our businesses to local capital, liquidity and funding requirements, and potentially give rise to client and counterparty concerns about the credit quality of individual subsidiaries. Such changes could also negatively affect our funding model, limit our operational flexibility and negatively affect our ability to benefit from synergies between business units.

In the US, we have incurred substantial costs for implementing a compliance and monitoring framework in connection with the Volcker Rule under the Dodd-Frank Act. We have also been required to modify our business activities both inside and outside the US to conform to its activity limitations. The Volcker Rule may also have a substantial impact on market liquidity and the economics of market-making activities. We may incur additional costs in the short term if aspects of the Volcker Rule are repealed or modified. We may become subject to other similar regulations substantively limiting the types of activities in which we may engage or the way we conduct our operations. If adopted as proposed, the rule on single counterparty risk proposed by the US Federal Reserve Board may affect how we conduct our operations in the US, including our use of other financial firms for payments and securities clearing services and as transactional counterparties.

Resolvability and resolution and recovery planning: Under the Swiss TBTF framework, and similar requirements in other jurisdictions, we are required to put in place viable emergency plans to preserve the operation of systemically important functions in the event of a failure, to the extent that such activities are not sufficiently separated in advance. If we adopt measures to reduce resolvability risk beyond what is legally required, we are eligible for a limited rebate on the gone concern requirements. Such actions include changes to the legal structure of a bank group, such as the creation of separate legal entities, in a manner that would insulate parts of the group to exposure from risks arising from other parts of the group, thereby making it easier to dispose of certain parts of the group in a recovery scenario, to liquidate or dispose of certain parts of the group in a resolution scenario or to execute a debt bail-in. Additionally, if a recovery or resolution plan that we are required to produce in a jurisdiction is determined by the relevant authority to be inadequate or not credible, relevant regulation may permit the authority to place limitations on the scope or size of our business in that jurisdiction, oblige us to hold higher amounts of capital or liquidity, or to change our legal structure or business in order to remove the relevant impediments to resolution.

The Swiss Banking Act and implementing ordinances provide FINMA with significant powers to intervene in order to prevent a failure of, or to resolve, a failing financial institution. FINMA has considerable discretion in determining whether, when, or in what manner to exercise such powers. In case of a threatened insolvency, FINMA may impose more onerous requirements on us, including restrictions on the payment of dividends and interest. FINMA could also require us, directly or indirectly, for example, to alter our legal structure, including by separating lines of business into dedicated entities, with limitations on intra-group funding and certain guarantees, or to further reduce business risk levels in some manner. FINMA also has the ability to write down or convert into common equity the capital instruments and other liabilities of UBS Group AG, UBS AG and UBS Switzerland AG in connection with a resolution. Refer to *"If we experience financial difficulties, FINMA has the power to open resolution or liquidation proceedings or impose protective measures in relation to UBS Group AG, UBS AG or UBS Switzerland AG, and such proceedings or measures may have a material adverse effect on our shareholders and creditors"* below.

Market regulation: The implementation by the G20 countries of the commitment to require all standardized OTC derivative contracts to be traded on exchanges or trading facilities and cleared through central counterparties has had and will continue to have a significant effect on our OTC derivatives business, which is conducted primarily in the Investment Bank. These market changes are likely to reduce the revenue potential of certain lines of business for market participants generally, and we may be adversely affected. For example, we expect that, as a rule, the shift of OTC derivatives trading to a central clearing model will tend to reduce profit margins in these products. Also, these laws may have a material impact on the market infrastructure that we use, available platforms, collateral management and the way we interact with clients, and may cause us to incur material implementation costs. Margin requirements for non-cleared OTC derivatives will require significant changes to collateral agreements with counterparties and our clients' operational processes. In some jurisdictions implementation is ongoing, while rule-making and implementation are delayed in others. This may result in market dislocation, disruption of cross-border trading, and concentration of counterparty trading. It also affects our ability to implement the required changes and may limit our ability to transact with clients.

Some of the regulations applicable to UBS AG as a registered swap dealer with the Commodity Futures Trading Commission (CFTC) in the US, and certain regulations that will be applicable when UBS AG registers as a security-based swap dealer with the SEC, apply to UBS AG globally, including those relating to swap data reporting, recordkeeping, compliance and supervision. As a result, in some cases US rules will likely duplicate or conflict with legal requirements applicable to us elsewhere, including in Switzerland, and may place us at a competitive disadvantage to firms that are not required to register in the US with the SEC or CFTC.

In many instances, we provide services on a cross-border basis, and we are therefore sensitive to barriers restricting market access for third-country firms. In particular, efforts in the EU to harmonize the regime for third-country firms to access the European market may have the effect of creating new barriers that adversely affect our ability to conduct business in these jurisdictions from Switzerland. In addition, a number of jurisdictions are increasingly regulating cross-border activities based on determinations of equivalence of home country regulation, substituted compliance or similar principles of comity. A negative determination could limit our access to the market in those jurisdictions and may negatively influence our ability to act as a global firm. In addition, as such determinations are typically applied on a jurisdictional level rather than on an entity level, we will generally need to rely on jurisdictions' willingness to collaborate.

→ Refer to the "Regulation and supervision" and "Regulatory and legal developments" sections of this report for more information

If we are unable to maintain our capital strength, this may adversely affect our ability to execute our strategy, client franchise and competitive position

Maintaining our capital strength is a key component of our strategy. It enables us to support the growth of our businesses as well as to meet potential regulatory changes in capital requirements. It provides comfort to our stakeholders, forms the basis for our capital return policy, and contributes to our credit ratings. Our capital ratios are determined primarily by RWA, eligible capital and leverage ratio denominator (LRD), all of which may fluctuate based on a number of factors, some of which are outside our control.

Our eligible capital may be reduced by losses recognized within net profit or other comprehensive income. Eligible capital may also be reduced for other reasons, including certain reductions in the ratings of securitization exposures, acquisitions and divestments changing the level of goodwill, adverse currency movements affecting the value of equity, prudential adjustments that may be required due to the valuation uncertainty associated with certain types of positions, and changes in the value of certain pension fund assets and liabilities or in the interest rate and other assumptions used to calculate the changes in our net defined benefit obligation recognized in other comprehensive income.

RWA are driven by our business activities, by changes in the risk profile of our exposures, changes in our foreign currency exposures and foreign exchange rates and by regulation. For instance, substantial market volatility, a widening of credit spreads, which is a major driver of our value-at-risk, adverse currency movements, increased counterparty risk, deterioration in the economic environment, or increased operational risk could result in a rise in RWA. We have significantly reduced our market risk and credit risk RWA in recent years. However, increases in operational risk RWA, particularly those arising from litigation, regulatory and similar matters, and regulatory changes in the calculation of RWA and

regulatory add-ons to RWA have offset a substantial portion of this reduction. Changes in the calculation of RWA, or, as discussed above, the imposition of additional supplemental RWA charges or multipliers applied to certain exposures, or the imposition of an RWA floor based on the standardized approach or other methodology changes could substantially increase our RWA. In addition, we may not be successful in our plans to further reduce RWA, either because we are unable to carry out fully the actions we have planned or because other business or regulatory developments or actions counteract the effects of our actions.

We are also subject to significantly higher leverage ratio-based capital and TLAC requirements under the revised Swiss Capital Adequacy Ordinance. The leverage ratio is a simple balance sheet measure and therefore limits balance sheet-intensive activities, such as lending, more than activities that are less balance sheet intensive, and it may constrain our business activities even if we satisfy other risk-based capital requirements. Our leverage ratio denominator is driven by, among other things, the level of client activity, including deposits and loans, foreign exchange rates, interest rates and other market factors. Many of these factors are wholly or partially outside our control.

→ Refer to the "Regulatory and legal developments" section of this report for more information

We may not be successful in the ongoing execution of our strategic plans

In October 2012, we announced a significant acceleration in the implementation of our strategy. The strategy included transforming our Investment Bank to focus it on its traditional strengths, very significantly reducing RWA and further strengthening our capital position, and significantly reducing costs and improving efficiency. We also set targets and expectations for our performance. We have substantially completed the transformation of our business. However, the risk remains that we may not succeed in executing the rest of our plans, or may need to delay them, that market events or other factors may adversely affect their implementation or that their effects may differ from those intended. Macroeconomic conditions, geopolitical uncertainty, the changes to the Swiss TBTF framework and the continuing costs of meeting new regulatory requirements have prompted us to adapt our targets and expectations in the past and we may need to do so again in the future.

We have substantially reduced the RWA and LRD usage of our Corporate Center – Non-core and Legacy Portfolio positions, but there is no assurance that we will continue to be able to exit the remaining positions as quickly as our plans suggest or that we will not incur significant losses in doing so. The continued illiquidity and complexity of many of our legacy risk positions in particular could make it difficult to sell or otherwise exit these positions and reduce the RWA and LRD usage associated with these exposures.

As part of our strategy, we also have a program underway to achieve significant incremental cost reductions, but a number of factors could negatively affect our plans. Higher permanent regulatory costs and business demand than we had originally anticipated have partly offset our gross cost reductions and delayed the achievement of cost reduction targets in the past, and we could continue to be challenged in the execution of our ongoing plans. Moreover, as is often the case with major effectiveness and efficiency programs, cost reduction plans involve significant risks, including that restructuring costs may be higher and may be recognized sooner than projected, that we may not be able to identify feasible cost reduction opportunities that are also consistent with our business goals, and that cost reductions may be realized later or may be less than we anticipate. Changes in our workforce as a result of outsourcing, nearshoring or offshoring or staff reductions may introduce new operational risks that, if not effectively addressed could affect our ability to recognize the desired cost and other benefits from such changes or could result in operational losses. Such changes can also lead to expenses recognized in the income statement well in advance of the cost savings intended to be achieved through such workforce strategy, for example, if provisions for real estate lease contracts need to be recognized or when, in connection with the closure or disposal of non-profitable operations, foreign currency translation losses previously recorded in other comprehensive income are reclassified to the income statement.

As we implement our effectiveness and efficiency programs, we may also experience unintended consequences, such as the loss or degradation of capabilities that we need in order to maintain our competitive position, achieve our targeted returns or meet existing or new regulatory requirements and expectations.

Material legal and regulatory risks arise in the conduct of our business

As a global financial services firm operating in more than 50 countries, we are subject to many different legal, tax and regulatory regimes and we are subject to extensive regulatory oversight and exposed to significant liability risk. We are subject to a large number of claims, disputes, legal proceedings and government investigations, and we expect that our ongoing business activities will continue to give rise to such matters in the future. The extent of our financial exposure to these and other matters is material and could substantially exceed the level of provisions that we have established. We are not able to predict the financial and non-financial consequences these matters may have when resolved. Resolution of regulatory proceedings may require us to obtain waivers of regulatory disqualifications to maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory

authorizations, and may permit financial market utilities to limit, suspend or terminate our participation in such utilities. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material consequences for us.

Our settlements with governmental authorities in connection with foreign exchange, LIBOR and benchmark interest rates starkly illustrate the significantly increased level of financial and reputational risk now associated with regulatory matters in major jurisdictions. In December 2012, we announced settlements totaling approximately CHF 1.4 billion in fines by and disgorgements to US, UK and Swiss authorities. We entered into a non-prosecution agreement (NPA) with the US Department of Justice (DOJ), and UBS Securities Japan Co. Ltd. pleaded guilty to one count of wire fraud relating to the manipulation of certain benchmark interest rates. In May 2015, the DOJ exercised its discretion to terminate the NPA based on its determination that certain UBS employees had committed a US crime related to foreign exchange matters. As a consequence, UBS AG has pleaded guilty to one count of wire fraud for conduct in the LIBOR matter, and paid a USD 203 million fine and is subject to a three-year term of probation. The very large fines and disgorgement amounts were assessed against us, and we were required to enter guilty pleas, despite our full cooperation with the authorities in the investigations, and despite our receipt of conditional leniency or conditional immunity from antitrust authorities in a number of jurisdictions, including the US and Switzerland. We understand that, in determining the consequences for us, the authorities considered the fact that it had in the recent past been determined that we had engaged in serious misconduct in several other matters.

Ever since our material losses arising from the 2007 – 2009 financial crisis, we have been subject to a very high level of regulatory scrutiny and to certain regulatory measures that constrain our strategic flexibility. While we believe that we have remediated the deficiencies that led to those losses as well as to the unauthorized trading incident announced in September 2011, the effects on our reputation and relationships with regulatory authorities of the LIBOR-related settlements of 2012 and settlements with some regulators of matters related to our foreign exchange and precious metals business, have proven to be more difficult to overcome. We are in active dialog with our regulators concerning the actions that we are taking to improve our operational risk management and control framework, but there can be no assurance that our efforts will have the desired effects. As a result of this history, our level of risk with respect to regulatory enforcement may be greater than that of some of our peers.

→ **Refer to “Note 20 Provisions and contingent liabilities” in the “Consolidated financial statements” section of this report for more information**

Operational risks affect our business

Our businesses depend on our ability to process a large number of transactions, many of which are complex, across multiple and diverse markets in different currencies, to comply with requirements of many different legal and regulatory regimes to which we are subject and to prevent, or promptly detect and stop, unauthorized, fictitious or fraudulent transactions. We also rely on access to, and on the functioning of, systems maintained by third parties, including clearing systems, exchanges, information processors and central counterparties. Failure of our or third-party systems could have an adverse effect on us. Our operational risk management and control systems and processes are designed to help ensure that the risks associated with our activities, including those arising from process error, failed execution, misconduct, unauthorized trading, fraud, system failures, financial crime, cyberattacks, breaches of information security and failure of security and physical protection, are appropriately controlled. If our internal controls fail or prove ineffective in identifying and remedying these risks, we could suffer operational failures that might result in material losses, such as the loss from the unauthorized trading incident announced in September 2011.

We and other financial services firms have been subject to breaches of security and to cyber and other forms of attack, some of which are sophisticated and targeted attacks intended to gain access to confidential information or systems, disrupt service or destroy data. It is possible that we may not be able to anticipate, detect or recognize threats to our systems or data or that our preventative measures will not be effective to prevent an attack or a security breach. A successful breach or circumvention of security of our systems or data could have significant negative consequences for us, including disruption of our operations, misappropriation of confidential information concerning us or our customers, damage to our systems, financial losses for us or our customers, violations of data privacy and similar laws, litigation exposure and damage to our reputation.

A major focus of US and other countries' governmental policies relating to financial institutions in recent years has been fighting money laundering and terrorist financing. We are required to maintain effective policies, procedures and controls to detect, prevent and report money laundering and terrorist financing, and to verify the identity of our clients. We are also subject to laws and regulations related to corrupt and illegal payments to government officials by others, such as the US Foreign Corrupt Practices Act and the UK Bribery Act. We have implemented policies, procedures and internal controls that are designed to comply with such laws and regulations. Failure to maintain and implement adequate programs to combat money laundering, terrorist financing or corruption, or any failure of our programs in these areas, could have serious consequences both from legal enforcement action and from damage to our reputation.

As a result of new and changed regulatory requirements and the changes we have made in our legal structure to meet regulatory requirements and improve our resolvability, the volume, frequency and complexity of our regulatory and other reporting has significantly increased. Regulators have also significantly increased expectations for our internal reporting and data aggregation. We have incurred and continue to incur significant costs to implement infrastructure to meet these requirements. Failure to timely and accurately meet external reporting requirements or to meet regulatory expectations for internal reporting could result in enforcement action or other adverse consequences for us.

Certain types of operational control weaknesses and failures could also adversely affect our ability to prepare and publish accurate and timely financial reports. Following the unauthorized trading incident announced in September 2011, management determined that we had a material weakness in our internal control over financial reporting as of the end of 2010 and 2011, although this did not affect the reliability of our financial statements for either year.

In addition, despite the contingency plans we have in place, our ability to conduct business may be adversely affected by a disruption in the infrastructure that supports our businesses and the communities in which we are located. This may include a disruption due to natural disasters, pandemics, civil unrest, war or terrorism and involve electrical, communications, transportation or other services used by us or third parties with whom we conduct business.

Our reputation is critical to the success of our business

Our reputation is critical to the success of our strategic plans, business and prospects. Reputational damage is difficult to reverse, and improvements tend to be slow and difficult to measure. Our very large losses during the financial crisis, the investigations into our cross-border private banking services to US private clients and the settlements entered into with US authorities with respect to this matter, and other events seriously damaged our reputation. Reputational damage was an important factor in our loss of clients and client assets across our asset-gathering businesses, and contributed to our loss of, and difficulty in attracting, staff in 2008 and 2009. These developments had short-term and also more lasting adverse effects on our financial performance, and we recognized that restoring our reputation would be essential to maintaining our relationships with clients, investors, regulators and the general public, as well as with our employees. The unauthorized trading incident announced in September 2011 and our involvement in the LIBOR matter and investigations relating to our foreign exchange and precious metals business have also adversely affected our reputation. Any further reputational damage could have a material adverse effect on our operational results and financial condition and on our ability to achieve our strategic goals and financial targets.

Performance in the financial services industry is affected by market conditions and the macroeconomic climate

Our businesses are materially affected by market and economic conditions. Adverse changes in interest rates, credit spreads, securities' prices, market volatility and liquidity, foreign exchange rates, commodity prices, and other market fluctuations, as well as changes in investor sentiment, can affect our earnings and ultimately our financial and capital positions.

A market downturn and weak macroeconomic conditions can be precipitated by a number of factors, including geopolitical events, changes in monetary or fiscal policy, trade imbalances, natural disasters, pandemics, civil unrest, acts of violence, war or terrorism. Macroeconomic and political developments can have unpredictable and destabilizing effects and, because financial markets are global and highly interconnected, even local and regional events can have widespread impact well beyond the countries in which they occur. We are closely monitoring developments in Europe following the UK referendum on EU membership, with potential adverse consequences for the UK economy and for the recovery of a weak EU economy. Moreover, if individual countries impose restrictions on cross-border payments or other exchange or capital controls, or change their currency (for example, if one or more countries should leave the eurozone), we could suffer losses from enforced default by counterparties, be unable to access our own assets, and / or be impeded in, or prevented from, managing our risks.

We could be materially affected if a crisis develops, regionally or globally, as a result of disruptions in emerging markets or developed markets that are susceptible to macroeconomic and political developments, or as a result of the failure of a major market participant. Our strategic plans depend more heavily on our ability to generate growth and revenue in emerging markets, including China, causing us to be more exposed to the risks associated with such markets. The binding scenario we use in our combined stress test framework reflects these aspects, and assumes a hard landing in China leading to severe contagion of Asian and emerging markets economies and at the same time multiple debt restructurings in Europe, related direct losses for European banks and fear of a eurozone breakup severely affecting developed markets such as Switzerland, the UK and the US.

→ **Refer to the "Risk measurement" section of this report for more information on our stress testing framework**

We have material exposures to a number of markets, and the regional balance of our business mix also exposes us to risk. Our Investment Bank's Equities business, for example, is more heavily weighted to Europe and Asia, and within this business our derivatives business is more heavily weighted to structured products for wealth management clients, in particular with European and Asian underlyings. Turbulence in these markets can therefore affect us more than other financial service providers.

A decrease in business and client activity and market volumes, for example, as a result of significant market volatility, adversely affects transaction fees, commissions and margins, particularly in our wealth management businesses and in the Investment Bank, as we experienced in 2016. A market downturn is likely to reduce the volume and valuations of assets that we manage on behalf of clients, reducing our asset and performance-based fees, and could also cause a decline in the value of assets that we own and account for as investments or trading positions. On the other hand, reduced market liquidity or volatility limit trading opportunities and impede our ability to manage risks, impacting both trading income and performance-based fees.

Credit risk is an integral part of many of our activities, including lending, underwriting and derivatives activities. Worsening economic conditions and adverse market developments could lead to impairments and defaults on credit exposures and on our trading and investment positions. Losses may be exacerbated by declines in the value of collateral we hold. We are exposed to credit risk in activities, such as our prime brokerage, reverse repurchase and Lombard lending, as the value or liquidity of the assets against which we provide financing may decline rapidly. Macroeconomic developments, such as the continuing strength of the Swiss franc and its effect on Swiss exports, the adoption of negative interest rates by the Swiss National Bank or other central banks or any return of crisis conditions within the eurozone or the EU, and the potential implications of the decision in Switzerland to reinstate immigration quotas for EU and European Economic Area citizens, could also adversely affect the Swiss economy, our business in Switzerland in general and, in particular, our Swiss mortgage and corporate loan portfolios.

The aforementioned developments have in the past affected, and could materially affect, the financial performance of business divisions and of UBS as a whole, including through impairment of goodwill and the adjustment of deferred tax asset levels.

UK referendum on EU membership

Following the outcome of the June 2016 referendum on the UK's membership in the EU, the UK government has stated that it intends to invoke Article 50 of the Treaty on European Union by no later than the end of March 2017. This will trigger a two-year period during which the UK will negotiate its withdrawal agreement with the EU. Barring any changes to this time schedule, the UK is expected to leave the EU in early 2019. The nature of the UK's future relationship with the EU remains unclear. Any future limitations on providing financial services into the EU from our UK operations could require us to make potentially significant changes to our operations in the UK and our legal structure. We are evaluating the potential effects of a UK exit from the EU and potential mitigating actions, although the effects and actions may vary considerably depending on the timing of withdrawal and the nature of any transition or successor agreements with the EU.

We may not be successful in implementing changes in our wealth management businesses to meet changing market, regulatory and other conditions

Our wealth and asset management businesses operate in an environment of increasing regulatory scrutiny and changing standards also with respect to fiduciary and other standards of care and the focus on mitigating or eliminating conflicts of interest between a manager or advisor and the client, which require effective implementation across the global systems and processes of investment managers and other industry participants. For example, the US Department of Labor has adopted a rule expanding the definition of “fiduciary” under the Employee Retirement Income Security Act (ERISA), which will require us to comply with fiduciary standards under ERISA when dealing with certain retirement plans. We will likely be required to materially change business processes, policies and the terms on which we interact with these clients in order to comply with these rules if and when they become effective.

We are exposed to possible outflows of client assets in our asset-gathering businesses and to changes affecting the profitability of our wealth management businesses and we may not be successful in implementing the business changes needed to address them.

We experienced substantial net outflows of client assets in our wealth management and asset management businesses in 2008 and 2009. The net outflows resulted from a number of different factors, including our substantial losses, damage to our reputation, the loss of client advisors, difficulty in recruiting qualified client advisors and tax, legal and regulatory developments concerning our cross-border private banking business. Many of these factors have been successfully addressed. However, long-term changes affecting the cross-border private banking business model will continue to affect client flows in the wealth management businesses for an extended period of time.

We have experienced cross-border outflows over a number of years as a result of heightened focus by fiscal authorities on cross-border investment and fiscal amnesty programs, in anticipation of the implementation in Switzerland of the global automatic exchange of tax information, and as a result of the measures we have implemented in response to these changes. Further changes in local tax laws or regulations and their enforcement, the implementation of cross-border tax information exchange regimes, national tax amnesty or enforcement programs or similar actions may affect our clients’ ability or willingness to do business with us and result in additional cross-border outflows.

In recent years, our Wealth Management net new money inflows have come predominantly from clients in Asia Pacific and in the ultra high net worth segment globally. Over time, inflows from these lower-margin segments and markets have been replacing outflows from higher-margin segments and markets, in particular cross-border clients. This dynamic, combined with

changes in client product preferences as a result of which low-margin products account for a larger share of our revenues than in the past, has put downward pressure on our Wealth Management’s margins.

Initiatives that we may implement to overcome the effects of changes in the business environment on our profitability, balance sheet and capital positions give no assurance that we will be able to counteract those effects and may cause net new money outflows and reductions in client deposits, as happened with our balance sheet and capital optimization program in 2015. In addition, we have made changes to our business offerings and pricing practices in line with the Swiss Supreme Court case concerning retrocessions and other industry developments. These changes may adversely affect our margins on these products, and our current offering may be less attractive to clients than the products it replaces. There is no assurance that we will be successful in our efforts to offset the adverse effect of these or similar trends and developments.

We may be unable to identify or capture revenue or competitive opportunities, or retain and attract qualified employees

The financial services industry is characterized by intense competition, continuous innovation, restrictive, detailed, and sometimes fragmented, regulation and ongoing consolidation. We face competition at the level of local markets and individual business lines, and from global financial institutions that are comparable to us in their size and breadth. Barriers to entry in individual markets and pricing levels are being eroded by new technology. We expect these trends to continue and competition to increase. Our competitive strength and market position could be eroded if we are unable to identify market trends and developments, do not respond to them by devising and implementing adequate business strategies, adequately developing or updating our technology, particularly in trading businesses, and our digital channels and tools, or are unable to attract or retain the qualified people needed to carry them out.

The amount and structure of our employee compensation is affected not only by our business results but also by competitive factors and regulatory considerations.

In recent years, in response to the demands of various stakeholders, including regulatory authorities and shareholders, and in order to better align the interests of our staff with those of other stakeholders, we have made changes to the terms of compensation awards. Among other things, we have introduced individual caps on the proportion of fixed to variable pay for the GEB members, as well as certain other employees. We have increased average deferral periods for stock awards, expanded forfeiture provisions, and, to a more limited extent, introduced claw-back provisions for certain awards linked to business performance.

Constraints on the amount or structure of employee compensation, higher levels of deferral, performance conditions and other circumstances triggering the forfeiture of unvested awards may adversely affect our ability to retain and attract key employees. The loss of key staff and the inability to attract qualified replacements, depending on which and how many roles are affected, could seriously compromise our ability to execute our strategy and to successfully improve our operating and control environment and may affect our business performance.

We depend on our risk management and control processes to avoid or limit potential losses in our businesses

Controlled risk-taking is a major part of the business of a financial services firm. Some losses from risk-taking activities are inevitable, but to be successful over time, we must balance the risks we take against the returns we generate. We must, therefore, diligently identify, assess, manage and control our risks, not only in normal market conditions but also as they might develop under more extreme, stressed conditions, when concentrations of exposures can lead to severe losses.

As seen during the financial crisis of 2007–2009, we are not always able to prevent serious losses arising from extreme or sudden market events that are not anticipated by our risk measures and systems. The deterioration of financial markets since the beginning of the crisis was extremely severe by historical standards. Value-at-risk, a statistical measure for market risk, is derived from historical market data, and thus by definition could not have anticipated the losses suffered in the stressed conditions of the crisis. Moreover, stress loss and concentration controls and the dimensions in which we aggregated risk to identify potentially highly correlated exposures proved to be inadequate. As a result, we recorded substantial losses on fixed income trading positions, particularly in 2008 and 2009. Notwithstanding the steps we have taken to strengthen our risk management and control framework, we could suffer further losses in the future if, for example:

- we do not fully identify the risks in our portfolio, in particular risk concentrations and correlated risks;
- our assessment of the risks identified or our response to negative trends proves to be untimely, inadequate, insufficient or incorrect;
- markets move in ways that we do not expect – in terms of their speed, direction, severity or correlation – and our ability to manage risks in the resulting environment is, therefore, affected;
- third parties to whom we have credit exposure or whose securities we hold for our own account are severely affected by events not anticipated by our models, and accordingly we suffer defaults and impairments beyond the level implied by our risk assessment; or
- collateral or other security provided by our counterparties proves inadequate to cover their obligations at the time of their default.

We hold positions related to real estate in various countries, and could suffer losses on these positions. These positions include a substantial Swiss mortgage portfolio. Although management believes that this portfolio is prudently managed, we could nevertheless be exposed to losses if the concerns expressed by the Swiss National Bank and others about unsustainable price escalation in the Swiss real estate market come to fruition. In addition, we continue to hold substantial legacy risk positions, primarily in Corporate Center – Non-core and Legacy Portfolio. They remain illiquid in many cases, and we continue to be exposed to the risk that they may again deteriorate in value.

We also manage risk on behalf of our clients in our asset and wealth management businesses. The performance of assets we hold for our clients in these activities could be adversely affected by the same factors mentioned above. If clients suffer losses or the performance of their assets held with us is not in line with relevant benchmarks against which clients assess investment performance, we may suffer reduced fee income and a decline in assets under management, or withdrawal of mandates.

Investment positions, such as equity investments made as part of strategic initiatives and seed investments made at the inception of funds that we manage, may also be affected by market risk factors. These investments are often not liquid and generally are intended or required to be held beyond a normal trading horizon. They are subject to a distinct control framework. Deteriorations in the fair value of these positions would have a negative effect on our earnings.

Liquidity and funding management are critical to our ongoing performance

The viability of our business depends on the availability of funding sources, and our success depends on our ability to obtain funding at times, in amounts, for tenors and at rates that enable us to efficiently support our asset base in all market conditions. The volume of our funding sources has generally been stable, but could change in the future due to, among other things, general market disruptions or widening credit spreads, which could also influence the cost of funding. A substantial part of our liquidity and funding requirements is met using short-term unsecured funding sources, including retail and wholesale deposits and the regular issuance of money market securities. A change in the availability of short-term funding could occur quickly.

Moreover, more stringent capital and liquidity and funding requirements will likely lead to increased competition for both secured funding and deposits as a stable source of funding, and to higher funding costs. The addition of loss-absorbing debt as a component of capital requirements, the regulatory requirements to maintain minimum TLAC at holding company level and / or at subsidiaries level, as well as the power of resolution authorities to bail in TLAC and other debt obligations, and uncertainty as to how such powers will be exercised, will increase our cost of funding and could potentially increase the total amount of funding required absent other changes in our business.

Reductions in our credit ratings may adversely affect the market value of the securities and other obligations and increase our funding costs, in particular with regard to funding from wholesale unsecured sources, and can affect the availability of certain kinds of funding. In addition, as we experienced in connection with Moody's downgrade of our long-term rating in June 2012, rating downgrades can require us to post additional collateral or make additional cash payments under master trading agreements relating to its derivatives businesses. Our credit ratings, together with our capital strength and reputation, also contribute to maintaining client and counterparty confidence and it is possible that rating changes could influence the performance of some of our businesses.

Our financial results may be negatively affected by changes to assumptions and valuations, as well as changes to accounting standards

We prepare our consolidated financial statements in accordance with IFRS. The application of these accounting standards requires the use of judgment based on estimates and assumptions that may involve significant uncertainty at the time they are made. This is the case, for example, with respect to the measurement of fair value of financial instruments, the recognition of deferred tax assets, or the assessment of the impairment of goodwill. Such judgments, including the underlying estimates and assumptions, which encompass historical experience, expectations of the future and other factors are regularly evaluated to determine their continuing relevance based on current conditions. Using different assumptions could cause the reported results to differ. Changes in assumptions, or failure to make the changes necessary to reflect evolving market conditions, may have a significant effect on the financial statements in the periods when changes occur. Moreover, if the estimates and assumptions in future periods deviate from the current outlook, our financial results may also be negatively affected.

Changes to IFRS or interpretations thereof, may cause our future reported results and financial position to differ from current expectations, or historical results to differ from those previously reported due to the adoption of accounting standards on a retrospective basis. Such changes may also affect our regulatory capital and ratios. Currently, there are a number of issued but not yet effective IFRS changes, as well as potential IFRS changes, some of which could be expected to affect our reported results, financial position and regulatory capital in the future. For example, IFRS 9, when fully adopted, will require us to record loans at inception net of expected losses instead of recording credit losses on an incurred loss basis and is generally expected to result in an increase in recognized credit loss allowances.

→ Refer to the "Critical accounting estimates and judgments" section and "Note 1 Summary of significant accounting policies" in the "Consolidated financial statements" section of this report for more information

The effect of taxes on our financial results is significantly influenced by reassessments of our deferred tax assets

Our effective tax rate is highly sensitive both to our performance and our expectation of future profitability. Based on prior years' tax losses, we have recognized deferred tax assets (DTAs) reflecting the probable recoverable level based on future taxable profit as informed by our business plans. If our performance is expected to produce diminished taxable profit in future years, particularly in the US or the UK, we may be required to write down all or a portion of the currently recognized DTAs through the income statement. This would have the effect of increasing our effective tax rate in the year in which any write-downs are taken. Conversely, if our performance is expected to improve, particularly in the US or the UK, we could potentially recognize additional DTAs as a result of that assessment. The effect of doing so would be to significantly reduce our effective tax rate in years in which additional DTAs are recognized and to increase our effective tax rate in future years. We generally revalue our deferred tax assets in the second half of the financial year based on a reassessment of future profitability taking into account updated business plan forecasts. Our results in recent periods have demonstrated that changes in the recognition of DTAs can have a very significant effect on our reported results.

Our full-year effective tax rate could also change if aggregate tax expenses in respect of profits from branches and subsidiaries without loss coverage differ from what is expected, or in case of changes to the forecast period used for DTA recognition purposes as part of the aforementioned reassessment of future profitability. Moreover, tax laws or the tax authorities in countries where we have undertaken legal structure changes may prevent the transfer of tax losses incurred in one legal entity to newly organized or reorganized subsidiaries or affiliates or may impose limitations on the utilization of tax losses that relate to businesses formerly conducted by the transferor. Were this to occur in situations where there were also limited planning opportunities to utilize the tax losses in the originating entity, the DTAs associated with such tax losses could be written down through the income statement.

Our effective tax rate is also sensitive to any future reductions in statutory tax rates, particularly in the US and Switzerland, which would cause the expected future tax benefit from items such as tax loss carry-forwards in the affected locations to diminish in value. This in turn would cause a write-down of the associated DTAs. For example, for every percentage point reduction in the US federal corporate income tax rate, we would expect a CHF 0.2 billion decrease in the Group's deferred tax assets. In addition, statutory and regulatory changes, as well as changes to the way in which courts and tax authorities interpret tax laws could cause the amount of taxes ultimately paid by us to materially differ from the amount accrued.

Our stated capital returns objective is based, in part, on capital ratios that are subject to regulatory change and may fluctuate significantly

Our capital return policy envisages total capital returns to shareholders of at least 50% of net profit attributable to shareholders, provided that we maintain a fully applied CET1 capital ratio of at least 13% and consistent with our objective of maintaining a post-stress fully applied CET1 capital ratio of at least 10%.

Our ability to maintain a fully applied CET1 capital ratio of at least 13% is subject to numerous risks, including the financial results of our businesses, the effect of changes to capital standards such as those recently introduced in Switzerland, methodologies and interpretation that may adversely affect the calculation of our fully applied CET1 capital ratio, the imposition of risk add-ons or capital buffers, and the application of additional capital, liquidity and similar requirements to subsidiaries. Refer to the discussion of these risks earlier in this section and in particular to *"Continuing low or negative interest rates may have a detrimental effect on our capital strength, liquidity and funding position, and profitability"* above for more information on the effect on capital of changes to pension plan defined benefit obligations.

To calculate our post-stress CET1 capital ratio, we forecast capital one year ahead based on internal projections of earnings, expenses, distributions to shareholders and other factors affecting CET1 capital, including our net defined benefit plan assets and liabilities. We also forecast one-year developments in RWA. We adjust these forecasts based on assumptions as to how they may change as a result of a severe stress event. We then further deduct from capital the stress loss estimated using our combined stress test (CST) framework.

Our CST framework relies on various risk exposure measurement methodologies, which are predominantly proprietary, on our selection and definition of potential stress scenarios and on our assumptions regarding estimates of changes in a wide range of macroeconomic variables and certain idiosyncratic events for each of those scenarios. We periodically review these methodologies. Assumptions are also subject to periodic review and change on a regular basis. Our risk exposure measurement methodologies may change in response to developing market practice and enhancements to our own risk control environment, and input parameters for models may change due to changes in positions, market parameters and other factors.

Our stress scenarios, the events comprising a scenario and the assumed shocks and market and economic consequences applied in each scenario are subject to periodic review and change. Our business plans and forecasts are subject to inherent uncertainty, our choice of stress test scenarios and the market and macroeconomic assumptions used in each scenario are based on judgments and assumptions about possible future events. Our risk exposure measurement methodologies are subject to inherent limitations, rely on numerous assumptions as well as on data which may have inherent limitations. In particular, certain data is not available on a monthly basis and

we may therefore rely on prior-month or prior-quarter data as an estimate. Changes to our results, business plans and forecasts, in the assumptions used to reflect the effect of a stress event on our business forecasts or in the results of our CST, could have a material effect on our stress scenario results and on the calculation of our post-stress fully applied CET1 capital ratio. In assessing whether our post-stress fully applied CET1 capital ratio objective has been met at any time, we may consider both the current ratio and our expectation as to its future developments.

As UBS Group AG is a holding company, its operating results, financial condition and ability to pay dividends and other distributions and / or to pay its obligations in the future depend on funding, dividends and other distributions received directly or indirectly from its subsidiaries, which may be subject to restrictions

UBS Group AG's ability to pay dividends and other distributions and to pay its obligations in the future will depend on the level of funding, dividends and other distributions, if any, received from UBS AG and other subsidiaries. The ability of such subsidiaries to make loans or distributions, directly or indirectly, to UBS Group AG may be restricted as a result of several factors, including restrictions in financing agreements and the requirements of applicable law and regulatory, fiscal or other restrictions. In particular, UBS Group AG's direct and indirect subsidiaries, including UBS AG, UBS Switzerland AG, UBS Limited and UBS Americas Holding LLC, are subject to laws and regulations that restrict dividend payments, authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to UBS Group AG, could impact their ability to repay any loans made to, or other investments in, such subsidiary by UBS Group AG or another member of the Group, or limit or prohibit transactions with affiliates, and could be subject to additional restrictions in the future. Restrictions and regulatory actions of this kind could impede access to funds that UBS Group AG may need to make payments. In addition, UBS Group AG's right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to all prior claims of the subsidiary's creditors.

Our capital instruments may contractually prevent UBS Group AG from proposing the distribution of dividends to shareholders, other than in the form of shares, if we do not pay interest on these instruments.

Furthermore, UBS Group AG may guarantee some of the payment obligations of certain of the Group's subsidiaries from time to time. These guarantees may require UBS Group AG to provide substantial funds or assets to subsidiaries or their creditors or counterparties at a time when UBS Group AG is in need of liquidity to fund its own obligations.

The credit ratings of UBS Group AG or its subsidiaries used for funding purposes could be lower than the ratings of the Group's operating subsidiaries, which may adversely affect the market value of the securities and other obligations of UBS Group AG or those subsidiaries on a standalone basis.

If we experience financial difficulties, FINMA has the power to open resolution or liquidation proceedings or impose protective measures in relation to UBS Group AG, UBS AG or UBS Switzerland AG, and such proceedings or measures may have a material adverse effect on our shareholders and creditors

Under the Swiss Banking Act, FINMA is able to exercise broad statutory powers with respect to Swiss banks and Swiss parent companies of financial groups, such as UBS AG, UBS Group AG and UBS Switzerland AG, if there is justified concern that the entity is over-indebted, has serious liquidity problems or, after the expiration of any relevant deadline, no longer fulfils capital adequacy requirements. Such powers include ordering protective measures, instituting restructuring proceedings (and exercising any Swiss resolution powers in connection therewith), and instituting liquidation proceedings, all of which may have a material adverse effect on our shareholders and creditors or may prevent UBS Group AG, UBS AG or UBS Switzerland AG from paying dividends or making payments on debt obligations.

Protective measures may include, but are not limited to, certain measures that could require or result in a moratorium on, or the deferment of, payments. We would have limited ability to challenge any such protective measures, and creditors would have no right under Swiss law or in Swiss courts to reject them, seek their suspension, or challenge their imposition, including measures that require or result in the deferment of payments.

If restructuring proceedings are opened with respect to UBS Group AG, UBS AG or UBS Switzerland AG, the resolution powers that FINMA may exercise include the power to (i) transfer all or some of the assets, debt and other liabilities, and contracts of the entity subject to proceedings to another entity, (ii) stay for a maximum of two business days the termination of, or the exercise of rights to terminate, netting rights, rights to enforce or dispose of certain types of collateral or rights to transfer claims, liabilities or certain collateral, under contracts to which the entity subject to proceedings is a party, and / or (iii) partially or fully write down the equity capital and, if such equity capital is fully written down, convert into equity or write down the capital and other debt instruments of the entity subject to proceedings. Shareholders and creditors would have no right to reject, or to seek the suspension of, any restructuring plan pursuant to which such resolution powers are exercised. They would have only limited rights to challenge any decision to

exercise resolution powers or to have that decision reviewed by a judicial or administrative process or otherwise.

Upon full or partial write-down of the equity and of the debt of the entity subject to restructuring proceedings, the relevant shareholders and creditors would receive no payment in respect of the equity and debt that is written down, the write-down would be permanent, and the investors would not, at such time or at any time thereafter, receive any shares or other participation rights, or be entitled to any write-up or any other compensation in the event of a potential recovery of the debtor. If FINMA orders the conversion of debt of the entity subject to restructuring proceedings into equity, the securities received by the investors may be worth significantly less than the original debt and may have a significantly different risk profile, and such conversion would also dilute the ownership of existing shareholders. In addition, creditors receiving equity would be effectively subordinated to all creditors in the event of a subsequent winding up, liquidation or dissolution of the entity subject to restructuring proceedings, which would increase the risk that investors would lose all or some of their investment.

FINMA has broad powers and significant discretion in the exercise of its powers in connection with a resolution proceeding. Furthermore, certain categories of debt obligations, such as certain types of deposits, are subject to preferential treatment. As a result, holders of obligations of an entity subject to a Swiss restructuring proceeding may have their obligations written down or converted into equity even though obligations ranking on par with or junior to such obligations are not written down or converted.

Moreover, FINMA has expressed its preference for a “single-point-of-entry” resolution strategy for global systemically important financial groups, led by the bank’s home supervisory and resolution authorities and focused on the top-level group company. This would mean that, if UBS AG or one of UBS Group AG’s other subsidiaries faces substantial losses, FINMA could open restructuring proceedings with respect to UBS Group AG only and order a bail-in of its liabilities if there is a justified concern that in the near future such losses could impact UBS Group AG. In that case, it is possible that the obligations of UBS AG or any other subsidiary of UBS Group AG would remain unaffected and outstanding, while the equity capital and the capital and other debt instruments of UBS Group AG would be written down and / or converted into equity of UBS Group AG in order to recapitalize UBS AG or such other subsidiary.

Financial and operating performance

Management report

Critical accounting estimates and judgments

In preparing our financial statements in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB), we apply judgment and make estimates and assumptions that may involve significant uncertainty at the time they are made. We regularly reassess those estimates and assumptions, which encompass historical experience, expectations of the future and other pertinent factors, to determine their continuing relevance based on current conditions and we update them as necessary. Changes in estimates and assumptions may have a significant impact on the financial statements. Furthermore, actual results may differ significantly from our estimates, which could result in significant losses to the Group, beyond what we anticipated or provided for.

Key areas involving a high degree of judgment and areas where estimates and assumptions are significant to the consolidated and individual financial statements include:

- Consolidation of structured entities
- Fair value of financial instruments
- Allowances and provisions for credit losses
- Pension and other post-employment benefit plans
- Income taxes
- Goodwill
- Provisions and contingent liabilities

We believe that the judgments, estimates and assumptions we have made are appropriate under the circumstances and that our financial statements fairly present, in all material respects, the financial position of UBS as of 31 December 2016 and the results of our operations and cash flows for the year ended on 31 December 2016 in accordance with IFRS.

- **Refer to “Note 1a Significant accounting policies” in the “Consolidated financial statements” section of this report for more information**
- **Refer to the “Risk factors” section of this report for more information**

Significant accounting and financial reporting changes

Significant accounting changes

Own credit

In 2016, we adopted the own credit presentation requirements of IFRS 9, *Financial Instruments* for financial liabilities designated at fair value through profit or loss. From this date onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained earnings*.

Balance sheet classification of newly purchased high-quality liquid debt securities

In 2016, we generally classified newly purchased debt securities held as high-quality liquid assets (HQLA) and managed by Corporate Center – Group Asset and Liability Management (Group ALM) as either financial assets designated at fair value through profit or loss or financial assets held to maturity.

Debt securities acquired prior to 2016 and held for liquidity purposes remain classified as financial assets available for sale.

Interest rate swaps converted to a settlement model

In 2016, we elected to convert our interest rate swaps (IRS) traded with the London Clearing House and Japan Securities Clearing Corporation from the previous collateral model to a settlement model. The IRS are now legally settled on a daily basis, resulting in derecognition of the associated assets and liabilities.

Derecognition of exchange-traded derivative client cash balances from the Group's balance sheet

In 2016, we formally and legally waived certain rights available to us under the rules of the US Commodity Futures Trading Commission that had previously enabled us to invest certain client cash balances in other assets, making them a source of benefit to the Group. As a result, we derecognized related client cash balances.

→ Refer to “Note 1b Changes in accounting policies, comparability and other adjustments” in the “Consolidated financial statements” section of this report for more information

Significant financial reporting changes

Revised regulatory framework for Swiss SRBs and change in equity attribution framework

On 1 July 2016, a revised regulatory framework, reflecting amendments to the too big to fail (TbTF) provisions applicable to Swiss systemically relevant banks (SRBs), became effective.

Effective 1 January 2017, we have revised our equity attribution framework to reflect the revision of these TbTF provisions.

→ Refer to the “Capital management” section of this report for more information

Revised Pillar 3 disclosure requirements

During 2015, the Basel Committee on Banking Supervision (BCBS) issued revised Pillar 3 disclosure requirements that aim to improve comparability and consistency of disclosures by introducing harmonized templates. Moreover, FINMA published its associated Pillar 3 disclosure requirements for Swiss banking institutions in its Circular 2016/01, *Disclosures - banks*. The revised Pillar 3 disclosure requirements relate to information on risk management, the linkage between a bank's financial statements and its regulatory exposures, credit risk, counterparty credit risk, securitization and market risk. In August 2016, BCBS issued additional guidance on the revised Pillar 3 disclosure requirements in a *Frequently asked questions* document. In December 2016, FINMA issued additional disclosure requirements relating to the Swiss too big to fail provisions within its Circular 2016/01, *Disclosures - banks*. The Circular includes additional disclosure requirements effective as of 31 December 2016, as well as certain requirements that will become effective in 2017.

The disclosures in our Basel III Pillar 3 2016 report or in other documents referenced within this report are based on the revised requirements effective in 2016.

→ Refer to the Basel III Pillar 3 UBS Group AG 2016 report under “Pillar 3, SEC filings & other disclosures” at www.ubs.com/investors for more information

A consultative document issued by BCBS in March 2016 proposing further enhancements to the Pillar 3 framework for selective disclosure topics is subject to finalization.

Corporate Center – Group ALM

To further enhance the transparency of Corporate Center – Group ALM, effective 2016, Corporate Center – Group ALM's results are disclosed for its three main risk management activities: (i) business division-aligned risk management, (ii) capital investment and issuance and (iii) Group structural risk management.

Also, in 2016 we transferred the Risk Exposure Management function from Corporate Center – Non-core and Legacy Portfolio to Corporate Center – Group ALM.

- Refer to the “Corporate Center” sections in “Operating environment and strategy” and in “Financial and operating performance” of this report for more information
- Refer to “Note 1b Changes in accounting policies, comparability and other adjustments” in the “Consolidated financial statements” section of this report for more information

Implementation of IFRS 9, *Financial Instruments*

In July 2014, the International Accounting Standards Board (IASB) issued the final International Financial Reporting Standard (IFRS) 9, *Financial Instruments*, which will become mandatory as of 1 January 2018. The standard reflects the classification and measurement, impairment and hedge accounting phases of the IASB’s project to replace the International Accounting Standard IAS 39, *Financial instruments: Recognition and Measurement*.

IFRS 9 requires all financial assets, except equity instruments, to be classified at amortized cost, fair value through other comprehensive income (OCI) or fair value through profit or loss, on the basis of the entity’s business model for managing the financial assets and its contractual cash flow characteristics. If a financial asset meets the criteria to be measured at amortized cost or at fair value through OCI, it can be designated at fair value through profit or loss under the fair value option if doing so would significantly reduce or eliminate an accounting mismatch. Equity instruments that are not held for trading may be accounted for at fair value through OCI, with no subsequent reclassification of realized gains or losses to the income statement, while all other equity instruments will be accounted for at fair value through profit or loss.

IFRS 9 classification and measurement requirements for liabilities are unchanged except that any gain or loss arising on a financial liability designated at fair value through profit or loss that is attributable to changes in the issuer’s own credit risk (own credit) is presented in OCI and not recognized in the income statement. We early adopted the own credit presentation change in 2016, as mentioned on the previous page.

IFRS 9 further introduces a forward-looking expected credit loss (ECL) approach, replacing the incurred-loss impairment approach for financial instruments in IAS 39 and the loss-provisioning approach for financial guarantees and loan commitments in IAS 37, *Provisions, contingent liabilities and contingent assets*.

In November 2015, the Enhanced Disclosure Task Force (EDTF) published disclosure recommendations for IFRS 9 in its report “Impact of Expected Credit Loss Approaches on Bank Risk Disclosures.” Disclosures are recommended before transition and once IFRS 9 is fully adopted, to ensure that changes and effects arising from using an expected loss model are transparent, understandable and consistently applied. We began addressing these recommendations in our Annual Report 2015 and will continue to do so beyond the full adoption of IFRS 9 in 2018. In addition, we have considered and we address further guidance

issued by relevant bodies, including “The implementation of IFRS 9 impairment requirements by banks – Considerations for those charged with governance of systemically important banks” issued in November 2016 by the Global Public Policy Committee (GPPC), which consists of representatives of the six largest accounting networks, and the Basel Committee on Banking Supervision (BCBS) guidelines related to expected credit losses.

IFRS 9 is a key strategic initiative for UBS and is implemented under the joint sponsorship of the Group Chief Risk Officer and the Group Chief Financial Officer. The implementation project structure is defined to address the critical requirements of the standard and to manage the appropriate involvement of key stakeholders, including Risk Control, Finance, Group Technology and the business divisions. The steering committee, operating committee, technical board and individual work streams continue to ensure a streamlined implementation with appropriate controls and governance over all key decisions. The program has identified the primary changes to existing systems, processes, data and models required for the purposes of meeting the IFRS 9 requirements and to allow for a sound front-to-back implementation. We made significant progress in 2016 toward achieving key milestones across all work streams.

We intend to perform a parallel run in 2017 and to disclose the potential financial effects of adopting IFRS 9 no later than in our Annual Report 2017. As permitted under IFRS 9, we do not intend to restate prior periods and will recognize the difference between carrying amounts as of 31 December 2017 and those on adoption of IFRS 9 on 1 January 2018 directly in retained earnings as of 1 January 2018.

Classification and measurement

Based on the revised classification and measurement requirements for financial instruments, we have assessed all material positions and do not expect significant effects on our financial statements. A number of debt instruments, mainly in the Investment Bank and in Corporate Center – Group Asset and Liability Management (Group ALM), no longer qualify for amortized cost accounting due to their cash flow characteristics or the underlying business model within which they are held and will be measured at fair value through profit or loss under IFRS 9. However, a significant change in carrying value is not expected as a majority of the respective instruments are collateralized short-term lending arrangements with no material differences between their amortized cost value and fair value. In addition, our financial assets currently designated at fair value will continue to be measured at fair value, albeit on a mandatory basis under IFRS 9, and we will elect the fair value option for certain liabilities to prevent an accounting mismatch with assets that are newly measured at fair value through profit or loss under IFRS 9.

We are monitoring the IASB's project to amend IFRS 9 to the effect that basic lending arrangements with symmetrical break clauses continue to qualify for amortized cost accounting. These clauses are common features in Personal & Corporate Banking and Wealth Management private mortgage contracts as a consequence of Swiss Law as well as in corporate lending due to market practice and may result in compensation for early termination being paid by either the borrower or UBS. The IASB is expected to issue an exposure draft in April 2017, effective 1 January 2018 in line with IFRS 9's effective date. Based on these anticipated amendments, we expect that we can continue to measure our private mortgages and corporate loans at amortized cost.

Expected credit loss

Under the current incurred-loss impairment approach in IAS 39, a financial asset or group of financial assets held at amortized cost is impaired if there is objective evidence that we will be unable to collect all amounts under the contract. Once such evidence is obtained, we recognize credit losses based on the difference between the carrying value and the present value of estimated future cash flows.

IFRS 9 requires credit losses to be recognized irrespective of whether a loss event has occurred. Entities will be required to recognize a 12-month ECL for financial assets measured at amortized cost, debt instruments measured at fair value through OCI, lease receivables, financial guarantees and loan commitments from initial recognition. This 12-month ECL reflects cash shortfalls from default events expected to occur within 12 months from the reporting date. We refer to assets with a 12-month ECL as assets in stage 1. If there is a significant increase in credit risk (SICR) after the instrument's initial recognition, a lifetime ECL is required to be recognized capturing cash shortfalls related to default events expected to occur over the life of an asset. Lifetime ECLs are always recognized for credit-impaired financial assets. We refer to financial assets with a lifetime ECL due to an SICR as assets in stage 2 and to credit-impaired financial assets as assets in stage 3. Where the period over which UBS is exposed to credit risk is shorter than 12 months, any ECL covers this shorter period.

The ECL must reflect an unbiased and probability-weighted estimate of credit losses, which is determined by evaluating a range of possible outcomes and which incorporates reasonable and supportable information about past events, current conditions, forecasts of future economic conditions and the time value of money.

The method we will use for measuring ECL is mainly based on a combination of the following principal factors: probability of default (PD), loss given default (LGD), exposure at default (EAD) and discounting. The ECL calculation will use point in time (PIT) based parameters, including PIT PD and PIT LGD, leveraging the respective parameters determined under the Basel III through the cycle (TTC) based approach. Adjustments will be made to account for current conditions and to incorporate forward-looking economic information, which will include gross domestic product forecasts, interest and foreign exchange rates, unemployment rates, real estate price indices and other relevant

risk parameters. In addition, the prudential adjustments from Basel III, such as downturn LGD assumptions and floors, will be removed.

For the ECL calculation, we will consider the maximum contractual period over which we are exposed to credit risk, taking into account the counterparties' contractual extension, termination and prepayment options. For certain master credit facilities, business current accounts and credit card facilities without a defined contractual end date, which are callable on demand and where the drawn and undrawn portions are managed as one unit, the period over which UBS is exposed to credit risk exceeds the contractual notice period and will therefore be used instead in the ECL calculation. For portfolios including Lombard loans and security financing transactions the period which is used in the ECL calculation may be shorter, but not longer than the contractual period of a position. This is driven by the fact that those types of portfolios are subject to specific credit risk monitoring processes, such as daily monitoring, margin calls and close-out processes, and therefore the period over which UBS is exposed to credit risk is limited to the period needed to execute any credit risk mitigation actions.

We will determine whether an SICR has occurred at the reporting date by assessing changes in an instrument's risk of default since initial recognition based on the PIT PD, primarily at an individual financial asset level. Additional information will also be considered, including internal indicators of credit risk and external market indicators of credit risk or general economic conditions. Exception management will be applied allowing for individual and collective adjustments on exposures sharing the same credit risk characteristics to take into account specific situations which are not otherwise fully reflected.

In line with BCBS expectations, we do not intend to apply the low-credit-risk exemption practical expedient in determining whether an SICR has occurred. Furthermore, the 30-days-past-due SICR indicator will predominantly be used as a backstop, except for our retail credit portfolio where it will be the primary indicator. The 30-days-past-due presumption is only expected to be rebutted in rare circumstances.

The SICR process will have no effect on certain portfolios, mainly Lombard loans and reverse repurchase agreements, due to the risk management practices adopted, including regular margin calls. ECL on these positions is expected to be low. If margin calls are not satisfied, the position will be closed out immediately with any shortfall generally classified as a stage 3 position.

We progressed throughout 2016 with respect to the development of material models. Existing internal ratings-based (IRB) Pillar 1 models are used as a basis to derive IFRS 9 relevant PDs on a PIT basis and are currently being significantly adjusted for the purposes of IFRS 9 to take into account forward-looking macroeconomic information. In addition, we are working on an appropriate selection of a range of scenarios to capture material non-linearity and asymmetries between different possible forward-looking scenarios and associated credit losses and we determine adequate weights to reflect a likelihood of their occurrence. Although the ECL concept is not a stress loss concept, we leverage our existing stress loss models for this purpose and develop scenarios that reflect a range of probable outcomes. We will align our baseline scenario selection with the baseline used for business planning purposes.

Implementation of the IFRS 9 ECL approach is generally expected to lead to an increase in recognized credit losses compared with the current incurred-loss approach. This is partly due to the 12-month ECL, which will have to be reported for all in-scope instruments, and to the lifetime ECL, which will apply to positions following an SICR and prior to an incurred credit loss event. In addition, we expect income statement volatility to increase, due to the use of uncertain forward-looking assumptions and the application of the SICR approach.

In 2016, we performed an initial ECL impact assessment in a prototype environment using preliminary models and scenarios. The calculations covered key portfolios that are expected to contribute to the loss impact, including mortgage loans and corporate lending in Personal & Corporate Banking and Wealth Management and corporate lending in the Investment Bank. We observed sensitivities to changes in the economic environment through a range of expected credit loss outcomes, which will be further analyzed for continued model development and refinement. The ECL results calculated in the prototype environment indicate an increase in credit losses, which should not have a significant impact on equity on adoption, due to the relatively short contractual maturities, the high quality of our loan book and the current benign credit environment. Actual results as of 1 January 2018 may differ significantly, given the preliminary status of the models and data included in the prototype and the possibility of changes in the macroeconomic environment. We continue to monitor the potential effects of IFRS 9 on our regulatory capital requirements but do not expect a material impact.

→ **Refer to “Key international developments” in the “Regulatory and legal developments” section of this report for more information**

The definition and assessment of what constitutes an SICR, and the incorporation of forward-looking information are inherently subjective and will involve the use of significant judgment. Therefore, we focus on developing effective and

robust governance over the ECL calculation process and on defining a front-to-back control framework in compliance with the Sarbanes-Oxley Act requirements.

Our economists, risk methodology personnel and credit risk officers are involved in developing the forward-looking macroeconomic assumptions to be used in the ECL calculation. Those assumptions will be validated and approved through a new governance process, which will also provide for a consistent use of forward-looking information throughout UBS, including our business planning process. New models will be approved as part of our existing model validation and oversight processes. Governance will also specifically be established around exception handling given the extent of management involvement required. We intend to build a risk simulation engine to test ECL and SICR inputs in a controlled environment.

Significant new complex disclosures will be required, including a reconciliation of any changes in the expected loss allowances and provisions during the reporting period. We will disclose required information at an appropriate level of granularity considering respective transactions and their risk characteristics.

The IFRS 9 determination of whether an asset is credit-impaired follows the same principles as determining impairment under IAS 39. Therefore, we do not expect credit-impaired financial assets under IFRS 9 to differ significantly from impaired assets under IAS 39. However, the ECL for credit-impaired financial assets under IFRS 9 may differ from the impairment loss under IAS 39 due to additional scenario considerations to be made under IFRS 9. We also do not expect the definition of credit-impaired under IFRS 9 to differ from the definition of default used for the purpose of our advanced internal ratings-based approach.

The table below sets out certain key differences between the definitions we apply in determining expected losses under the current Basel III framework and those planned to be used in determining ECL for IFRS 9 purposes.

→ **Refer to “Credit risk models” in the “Risk management and control” section of this report for more information**

Hedging

IFRS 9 includes an optional revised hedge accounting model, which further aligns the accounting treatment with risk management practices. We are currently assessing the changes but do not expect any significant effects, and intend to conclude our adoption decision during the first half of 2017.

Irrespective of the adoption of the revised hedge accounting model, new mandatory hedge accounting disclosures will be adopted on 1 January 2018 as required, providing additional information on the hedging strategies by the hedged risk and hedge type.

	Current Basel III (advanced internal ratings-based approach)	IFRS 9 treatment
Scope	The Basel III advanced internal ratings-based (A-IRB) treatment applies to most credit risk exposures. It includes transactions measured at amortized cost, at fair value through profit or loss and at fair value through other comprehensive income (OCI).	The IFRS 9 expected loss calculation mainly applies to financial assets measured at amortized cost and debt instruments measured at fair value through OCI, as well as loan commitments and financial guarantee contracts not at fair value through profit or loss.
12-month versus lifetime expected loss	The Basel III A-IRB approach takes into account lifetime expected losses resulting from expected default events over a 12-month period.	In the absence of an SICR event, IFRS 9 takes into account lifetime expected losses considering expected default events over a maximum period of 12 months from the reporting date. Once an SICR event has occurred, expected default events over the life of a transaction have to be considered.
Exposure at default (EAD)	EAD is the amount we expect a counterparty to owe us at the time of a possible default. For banking products, the EAD equals the book value as of the reporting date, whereas for traded products, such as securities financing transactions, the EAD is modeled. The EAD is expected to remain constant over the 12-month period. For loan commitments, a credit conversion factor is applied to model expected future drawdowns over the 12-month period.	For IFRS 9 purposes, the EAD is generally calculated on the basis of the cash flows that are expected to be outstanding at the individual points in time during the period over which UBS is exposed to credit risk, discounted to the reporting date using the effective interest rate. For loan commitments, a credit conversion factor is applied to model expected future drawdowns over the period that UBS is exposed to credit risk, which is capped at 12 months, unless an SICR were to occur.
Probability of default (PD)	PD estimates are determined on a TTC basis. They represent historical average PDs, taking into account observed losses over a prolonged historical period, and are therefore less sensitive to movements in the underlying economy.	PD estimates will be determined on a PIT basis, based on current conditions and incorporating forecasts for future economic conditions at the reporting date.
Loss given default (LGD)	LGD includes prudential adjustments, such as downturn LGD assumptions and floors. Similar to PD, LGD is determined on a TTC basis.	LGD should reflect the losses that are reasonably expected and prudential adjustments should therefore not be applied. Similar to PD, LGD is determined on the basis of a PIT approach.
Use of scenarios	N/A	Multiple forward-looking scenarios have to be taken into account to determine a probability-weighted ECL.

Group performance

Income statement

	For the year ended			% change from
CHF million	31.12.16	31.12.15	31.12.14	31.12.15
Net interest income	6,413	6,732	6,555	(5)
Credit loss (expense) / recovery	(37)	(117)	(78)	(68)
Net interest income after credit loss expense	6,376	6,615	6,477	(4)
Net fee and commission income	16,397	17,140	17,076	(4)
Net trading income	4,948	5,742	3,842	(14)
of which: net trading income excluding own credit	4,948	5,190	3,551	(5)
of which: own credit on financial liabilities designated at fair value		553	292	(100)
Other income	599	1,107	632	(46)
Total operating income	28,320	30,605	28,027	(7)
of which: net interest and trading income	11,361	12,474	10,397	(9)
Personnel expenses	15,720	15,981	15,280	(2)
General and administrative expenses	7,434	8,107	9,387	(8)
Depreciation and impairment of property, equipment and software	985	920	817	7
Amortization and impairment of intangible assets	91	107	83	(15)
Total operating expenses	24,230	25,116	25,567	(4)
Operating profit / (loss) before tax	4,090	5,489	2,461	(25)
Tax expense / (benefit)	805	(898)	(1,180)	
Net profit / (loss)	3,286	6,386	3,640	(49)
Net profit / (loss) attributable to preferred noteholders			142	
Net profit / (loss) attributable to non-controlling interests	82	183	32	(55)
Net profit / (loss) attributable to shareholders	3,204	6,203	3,466	(48)

Comprehensive income

Total comprehensive income	2,170	5,781	5,220	(62)
Total comprehensive income attributable to preferred noteholders			221	
Total comprehensive income attributable to non-controlling interests	352	83	79	324
Total comprehensive income attributable to shareholders	1,817	5,698	4,920	(68)

Performance by business division and Corporate Center unit – reported and adjusted^{1, 2}

For the year ended 31.12.16

CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services ³	CC – Group ALM	CC – Non-core and Legacy Portfolio	UBS
Operating income as reported	7,291	7,782	3,984	1,931	7,688	(102)	(219)	(36)	28,320
of which: gains on sale of financial assets available for sale ⁴	21	10	102		78				211
of which: gains on sales of real estate						120			120
of which: gains related to investments in associates			21						21
of which: net foreign currency translation losses ⁵							(122)		(122)
of which: losses on sales of subsidiaries and businesses	(23)								(23)
Operating income (adjusted)	7,293	7,772	3,861	1,931	7,610	(222)	(97)	(36)	28,113
Operating expenses as reported	5,343	6,675	2,224	1,479	6,684	747	(1)	1,078	24,230
of which: personnel-related restructuring expenses ⁶	53	7	4	15	154	518	0	1	751
of which: non-personnel-related restructuring expenses ⁶	55	0	0	15	14	623	0	0	706
of which: restructuring expenses allocated from CC – Services ⁶	339	132	113	70	410	(1,084)	0	21	0
Operating expenses (adjusted)	4,896	6,536	2,107	1,379	6,107	690	(1)	1,057	22,772
of which: expenses for provisions for litigation, regulatory and similar matters	69	96	3	(2)	42	2	0	584	795
Operating profit / (loss) before tax as reported	1,948	1,107	1,760	452	1,004	(849)	(218)	(1,114)	4,090
Operating profit / (loss) before tax (adjusted)	2,397	1,236	1,754	552	1,503	(912)	(96)	(1,093)	5,341

For the year ended 31.12.15

CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services ³	CC – Group ALM	CC – Non-core and Legacy Portfolio	UBS
Operating income as reported	8,155	7,381	3,877	2,057	8,821	241	277	(203)	30,605
of which: own credit on financial liabilities designated at fair value ⁷							553		553
of which: gains on sales of real estate						378			378
of which: gains on sales of subsidiaries and businesses	169			56					225
of which: net foreign currency translation gains ⁵							88		88
of which: gains related to investments in associates	15		66						81
of which: gains on sale of financial assets available for sale ⁴					11				11
of which: net losses related to the buyback of debt							(257)		(257)
Operating income (adjusted)	7,971	7,381	3,811	2,001	8,810	(137)	(107)	(203)	29,526
Operating expenses as reported	5,465	6,663	2,231	1,474	6,929	1,059	(5)	1,301	25,116
of which: personnel-related restructuring expenses ⁶	20	0	2	4	14	406	0	14	460
of which: non-personnel-related restructuring expenses ⁶	38	0	0	11	7	719	0	0	775
of which: restructuring expenses allocated from CC – Services ⁶	265	137	99	68	376	(986)	0	43	0
of which: a gain related to a change to retiree benefit plans in the US		(21)							(21)
of which: impairment of an intangible asset					11				11
Operating expenses (adjusted)	5,142	6,547	2,130	1,392	6,522	919	(5)	1,245	23,891
of which: expenses for provisions for litigation, regulatory and similar matters	104	351	(2)	(3)	2	15	0	620	1,087
Operating profit / (loss) before tax as reported	2,689	718	1,646	584	1,892	(818)	282	(1,503)	5,489
Operating profit / (loss) before tax (adjusted)	2,828	834	1,681	610	2,288	(1,056)	(102)	(1,447)	5,635

Performance by business division and Corporate Center unit – reported and adjusted (continued)^{1, 2}

	For the year ended 31.12.14								
CHF million	Wealth Manage- ment	Wealth Manage- ment Americas	Personal & Corporate Banking	Asset Manage- ment	Investment Bank	CC – Services ³	CC – Group ALM	CC – Non- core and Legacy Portfolio	UBS
Operating income as reported	7,901	6,998	3,741	1,902	8,308	37	2	(862)	28,027
of which: own credit on financial liabilities designated at fair value ⁷							292		292
of which: gains on sales of real estate						44			44
of which: losses on sale of financial assets available for sale ⁴					(5)				(5)
Operating income (adjusted)	7,901	6,998	3,741	1,902	8,313	(7)	(290)	(862)	27,696
Operating expenses as reported	5,574	6,099	2,235	1,435	8,392	688	0	1,144	25,567
of which: personnel-related restructuring expenses ⁶	18	0	4	19	64	221	0	1	327
of which: non-personnel-related restructuring expenses ⁶	49	0	0	2	36	263	0	0	350
of which: restructuring expenses allocated from CC – Services ⁶	119	55	60	30	161	(454)	0	29	0
of which: a gain related to changes to retiree benefit plans in the US	0	(9)	0	(8)	(20)	0	0	(3)	(41)
Operating expenses (adjusted)	5,389	6,053	2,171	1,393	8,151	658	0	1,116	24,931
of which: expenses for provisions for litigation, regulatory and similar matters	394	163	59	55	1,855	(125)	0	193	2,594
Operating profit / (loss) before tax as reported	2,326	900	1,506	467	(84)	(652)	2	(2,005)	2,461
Operating profit / (loss) before tax (adjusted)	2,511	946	1,570	509	162	(666)	(290)	(1,977)	2,766

1 Adjusted results are non-GAAP financial measures as defined by SEC regulations. 2 Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. 3 CC – Services operating expenses presented in this table are after service allocations to business divisions and other Corporate Center units. 4 Includes gains on partial sales of our investment in IHS Markit in 2016, 2015 and 2014 in the Investment Bank, a gain on the sale of our investment in Visa Europe in 2016 in Wealth Management and Personal & Corporate Banking as well as an impairment of an investment in the Investment Bank in 2014. 5 Related to the disposal of foreign subsidiaries and branches. 6 Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for more information. 7 Refer to the "Significant accounting and financial reporting changes" section of this report for more information on own credit.

2016 compared with 2015

Results

We recorded net profit attributable to shareholders of CHF 3,204 million in 2016, which included a net tax expense of CHF 805 million. In 2015, net profit attributable to shareholders was CHF 6,203 million, which included a net tax benefit of CHF 898 million.

Profit before tax was CHF 4,090 million in 2016 compared with CHF 5,489 million in the prior year. Operating income decreased by CHF 2,285 million or 7%, mainly due to CHF 1,113 million lower combined net interest and trading income, primarily in the Investment Bank and Corporate Center – Group Asset and Liability Management (Group ALM), and a decline of CHF 743 million in net fee and commission income, primarily in Wealth Management. Operating expenses decreased by CHF 886 million or 4%, mainly due to CHF 673 million lower general and administrative expenses and a decline of CHF 261 million in personnel expenses.

As of 31 December 2016, the Group achieved CHF 1.6 billion of annualized net cost savings, an improvement from CHF 1.1 billion at year-end 2015. We measure our net cost saving as the difference between our year-end exit cost on an adjusted basis and further excluding temporary regulatory costs and provisions for litigation, regulatory and similar matters compared with full year costs in 2013 for Corporate Center and 2015 for the business divisions.

In addition to reporting our results in accordance with IFRS, we report adjusted results that exclude items that management believes are not representative of the underlying performance of our businesses. Such adjusted results are non-GAAP financial measures as defined by SEC regulations. For the purpose of determining adjusted results for 2016, we excluded gains of CHF 211 million on sale of financial assets available for sale, gains on sales of real estate of CHF 120 million, gains of CHF 21 million related to investments in associates, net foreign currency translation losses of CHF 122 million, losses on sales of subsidiaries and businesses of CHF 23 million and net restructuring expenses of CHF 1,458 million. For 2015, we excluded an own credit gain of CHF 553 million, gains on sales of real estate of CHF 378 million, gains on sales of subsidiaries and businesses of CHF 225 million, net foreign currency translation gains of CHF 88 million, gains of CHF 81 million related to investments in associates, gains of CHF 11 million on sale of financial assets available for sale, net losses related to the buyback of debt in a tender offer of CHF 257 million, net restructuring expenses of CHF 1,235 million, a gain of CHF 21 million related to a change to retiree benefit plans in the US and an impairment of an intangible asset of CHF 11 million.

On this adjusted basis, profit before tax was CHF 5,341 million in 2016 compared with CHF 5,635 million in the prior year, reflecting CHF 1,413 million lower operating income, largely offset by CHF 1,119 million lower operating expenses.

Operating income

Total operating income was CHF 28,320 million compared with CHF 30,605 million. On an adjusted basis, total operating income decreased by CHF 1,413 million or 5% to CHF 28,113 million, mainly reflecting a decrease of CHF 743 million in net fee and commission income and CHF 560 million lower combined net interest and trading income.

Net interest and trading income

Total combined net interest and trading income decreased by CHF 1,113 million to CHF 11,361 million. Excluding the own credit gain of CHF 553 million in 2015, adjusted net interest and trading income decreased by CHF 560 million.

In Wealth Management, net interest and trading income decreased by CHF 36 million to CHF 2,998 million, mainly reflecting reduced client activity.

Wealth Management Americas net interest and trading income increased by CHF 302 million to CHF 1,839 million, primarily due to an increase in net interest income, reflecting higher short-term interest rates as well as growth in loan and deposit balances.

In Personal & Corporate Banking, net interest and trading income declined by CHF 81 million to CHF 2,532 million, mainly due to lower treasury-related income from Corporate Center – Group ALM and lower deposit-related income.

In the Investment Bank, net interest and trading income decreased by CHF 909 million to CHF 4,277 million, primarily due to a CHF 513 million decline in Equities, with lower revenues in Derivatives and Financing Services. In addition, net interest and trading income decreased by CHF 217 million in our Foreign Exchange, Rates and Credit businesses, mainly as 2015 benefited from higher volatility and client activity levels following the Swiss National Bank's actions in January 2015.

Corporate Center – Group ALM net interest and trading income, excluding the effect of own credit, improved by CHF 23 million.

In Corporate Center – Non-core and Legacy Portfolio, net interest and trading income improved by CHF 251 million, primarily as the prior year included higher losses related to unwind and novation activities.

- Refer to the **"Significant accounting and financial reporting changes"** section of this report for more information on own credit
- Refer to **"Note 3 Net interest and trading income"** in the **"Consolidated financial statements"** section of this report for more information

Net interest and trading income

CHF million	For the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Net interest and trading income				
Net interest income	6,413	6,732	6,555	(5)
Net trading income	4,948	5,742	3,842	(14)
Total net interest and trading income	11,361	12,474	10,397	(9)
Wealth Management	2,998	3,034	2,845	(1)
Wealth Management Americas	1,839	1,537	1,352	20
Personal & Corporate Banking	2,532	2,613	2,536	(3)
Asset Management	(29)	(5)	0	480
Investment Bank	4,277	5,186	4,517	(18)
of which: Corporate Client Solutions	822	1,001	1,030	(18)
of which: Investor Client Services	3,455	4,185	3,487	(17)
Corporate Center	(256)	110	(854)	
of which: Services	(89)	(3)	34	
of which: Group ALM	(104)	426	16	
of which: own credit on financial liabilities designated at fair value		553	292	(100)
of which: Non-core and Legacy Portfolio	(62)	(313)	(904)	(80)
Total net interest and trading income	11,361	12,474	10,397	(9)

Credit loss expense / recovery

The net credit loss expense was CHF 37 million compared with CHF 117 million. The Investment Bank recorded a net credit loss expense of CHF 11 million compared with CHF 68 million in the prior year, reflecting lower expenses related to the energy

sector. Net credit loss expense in Personal & Corporate Banking was CHF 6 million compared with CHF 37 million, mainly due to higher net recoveries on existing impaired positions.

→ Refer to the "Risk management and control" section of this report for more information

Credit loss (expense) / recovery

CHF million	For the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Wealth Management	(5)	0	(1)	
Wealth Management Americas	(3)	(4)	15	(25)
Personal & Corporate Banking	(6)	(37)	(95)	(84)
Investment Bank	(11)	(68)	2	(84)
Corporate Center	(13)	(8)	2	63
of which: Non-core and Legacy Portfolio	(13)	(8)	2	63
Total	(37)	(117)	(78)	(68)

Net fee and commission income

Net fee and commission income decreased by CHF 743 million to CHF 16,397 million.

Investment fund fees declined by CHF 412 million to CHF 3,155 million, mainly in Wealth Management, primarily due to the effects of cross-border outflows and shifts into retrocession-free products, as well as changes in clients' asset allocation.

Underwriting fees decreased by CHF 300 million to CHF 946 million due to lower equity underwriting revenues, predominantly in the Investment Bank.

Net brokerage fees declined by CHF 276 million to CHF 2,784 million, mainly in Wealth Management and the Investment Bank, largely driven by reduced client activity.

Portfolio management and advisory fees increased by CHF 177 million to CHF 8,035 million, primarily in Wealth Management Americas, mainly due to increased managed account fees, reflecting higher invested asset levels.

→ Refer to "Note 4 Net fee and commission income" in the "Consolidated financial statements" section of this report for more information

Other income

Other income was CHF 599 million compared with CHF 1,107 million. Excluding certain gains on sales of financial assets available for sale and real estate, gains related to investments in associates, net foreign currency translation gains and losses, and gains and losses on sales of subsidiaries and businesses, adjusted other income decreased by CHF 189 million. This decline was mainly due to lower gains on sale of financial assets available for sale.

→ Refer to "Note 5 Other income" in the "Consolidated financial statements" section of this report for more information

Operating expenses

Total operating expenses decreased by CHF 886 million or 4% to CHF 24,230 million. Net restructuring expenses were CHF 1,458 million compared with CHF 1,235 million, reflecting an increase of CHF 291 million in personnel-related restructuring expenses, mainly related to our transitioning activities to nearshore and offshore locations, partly offset by a decrease of CHF 69 million in non-personnel-related restructuring expenses.

Adjusted total operating expenses decreased by CHF 1,119 million or 5% to CHF 22,772 million. This decrease was mainly due to a decline of CHF 607 million in adjusted general and administrative expenses, of which CHF 292 million related to net expenses for provisions for litigation, regulatory and similar matters, and a decrease of CHF 573 million in adjusted personnel expenses, primarily due to lower expenses for salaries and variable compensation.

→ Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for more information on restructuring expenses

Personnel expenses

Personnel expenses decreased by CHF 261 million to CHF 15,720 million and included net restructuring expenses of CHF 751 million compared with CHF 460 million, largely related to our transitioning activities to nearshore and offshore locations and our cost reduction programs. On an adjusted basis, personnel expenses decreased by CHF 573 million to CHF 14,969 million.

Adjusted expenses for salaries decreased by CHF 175 million to CHF 5,795 million, mainly reflecting our cost reduction programs.

Adjusted expenses for total variable compensation decreased by CHF 331 million, reflecting a decrease of CHF 361 million in expenses for current-year awards.

Adjusted other personnel expenses decreased by CHF 217 million, largely due to CHF 149 million lower pension costs for our Swiss pension plan, reflecting the effect of changes to demographic and financial assumptions, and a decline of CHF 76 million in social security expenses.

Financial advisor compensation in Wealth Management Americas increased by CHF 145 million to CHF 3,697 million, mainly due to currency effects and higher expenses for compensation commitments, reflecting the recruitment of financial advisors.

→ Refer to the "Compensation" section of this report for more information

→ Refer to "Note 6 Personnel expenses," "Note 26 Pension and other post-employment benefit plans" and "Note 27 Equity participation and other compensation plans" in the "Consolidated financial statements" section of this report for more information

General and administrative expenses

General and administrative expenses decreased by CHF 673 million to CHF 7,434 million. Excluding net restructuring expenses of CHF 695 million compared with CHF 761 million, adjusted general and administrative expenses decreased by CHF 607 million, primarily reflecting CHF 292 million lower net expenses for provisions for litigation, regulatory and similar matters, a decrease of CHF 95 million in professional fees and CHF 79 million lower expenses for outsourcing of IT and other services. Also, the net expense for the annual UK bank levy was CHF 123 million compared with CHF 166 million, primarily related to currency effects. This net expense was mainly recorded in the Investment Bank and Corporate Center – Non-core and Legacy Portfolio.

Operating expenses

CHF million	For the year ended		% change from
	31.12.16	31.12.15	31.12.14
Operating expenses as reported			
Personnel expenses	15,720	15,981	15,280
General and administrative expenses	7,434	8,107	9,387
Depreciation and impairment of property, equipment and software	985	920	817
Amortization and impairment of intangible assets	91	107	83
Total operating expenses as reported	24,230	25,116	25,567
Adjusting items			
Personnel expenses	751	439	286
of which: restructuring expenses ¹	751	460	327
of which: a gain related to a change to retiree benefit plans in the US		(21)	(41)
General and administrative expenses ²	695	761	319
Depreciation and impairment of property, equipment and software ²	11	12	29
Amortization and impairment of intangible assets	0	13	2
of which: restructuring expenses ¹	0	2	2
of which: impairment of an intangible asset		11	
Total adjusting items	1,458	1,225	636
Operating expenses (adjusted)³			
Personnel expenses	14,969	15,542	14,994
of which: salaries	5,795	5,970	6,124
of which: total variable compensation	3,079	3,410	3,113
of which: relating to current year ⁴	2,249	2,610	2,338
of which: relating to prior years ⁵	832	799	775
of which: Wealth Management Americas – Financial advisor compensation ⁶	3,697	3,552	3,385
of which: other personnel expenses ⁷	2,396	2,613	2,372
General and administrative expenses	6,739	7,346	9,068
of which: expenses for provisions for litigation, regulatory and similar matters	795	1,087	2,594
of which: other general and administrative expenses	5,944	6,259	6,474
Depreciation and impairment of property, equipment and software	974	908	788
Amortization and impairment of intangible assets	91	94	81
Total operating expenses (adjusted)	22,772	23,891	24,931

¹ Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for more information. ² Consists of restructuring expenses. ³ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ⁴ Includes expenses relating to performance awards and other variable compensation for the respective performance year. ⁵ Consists of amortization of prior years' awards relating to performance awards and other variable compensation. ⁶ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated on the basis of financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. ⁷ Consists of expenses related to contractors, social security, pension and other post-employment benefit plans and other personnel expenses. Refer to "Note 6 Personnel expenses" in the "Consolidated financial statements" section of this report for more information.

At this point in time, we believe that the industry continues to operate in an environment in which expenses associated with litigation, regulatory and similar matters will remain elevated for the foreseeable future and we continue to be exposed to a number of significant claims and regulatory matters. The outcome of many of these matters, the timing of a resolution, and the potential effects of resolutions on our future business, financial results or financial condition, are extremely difficult to predict.

→ Refer to "Note 7 General and administrative expenses" and "Note 20 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report for more information

Depreciation, impairment and amortization

Depreciation and impairment of property, equipment and software increased by CHF 65 million to CHF 985 million, largely driven by higher depreciation expenses related to internally generated capitalized software.

Amortization and impairment of intangible assets was CHF 91 million compared with CHF 107 million. On an adjusted basis, these expenses were broadly unchanged.

- Refer to "Note 1b Changes in accounting policies, comparability and other adjustments" in the "Consolidated financial statements" section of this report for more information on the estimated useful life of certain IT hardware and software
- Refer to "Note 14 Property, equipment and software" and "Note 15 Goodwill and intangible assets" in the "Consolidated financial statements" section of this report for more information

Tax

We recognized a net income tax expense of CHF 805 million for 2016, which included a net Swiss tax expense of CHF 1,094 million and a net non-Swiss tax benefit of CHF 289 million.

The Swiss tax expense included a current tax expense of CHF 459 million related to taxable profits, mainly earned by Swiss subsidiaries, against which no losses were available to offset. In addition, it included a deferred tax expense of CHF 635 million, which reflected a decrease in deferred tax assets previously recognized in relation to tax losses carried forward and temporary differences.

The net non-Swiss tax benefit included a current tax expense of CHF 353 million related to taxable profits earned by non-Swiss subsidiaries and branches, against which no losses were available to offset. This was more than offset by a net deferred tax benefit of CHF 642 million, primarily due to an increase in our US deferred tax assets, reflecting updated profit forecasts.

We recognized a tax expense in 2016 compared with a tax benefit in 2015, mainly due to an upward revaluation of US deferred tax assets in 2015 in relation to the extension of the forecast period for US taxable profits to seven years from six. In 2016, there was no extension of the forecast period.

We consider the performance of our businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of our deferred tax assets, including the remaining tax loss carry-forward period, and our assessment of expected future taxable profits in the forecast period used for recognizing deferred tax assets. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

For 2017, we forecast a full-year tax rate of approximately 25%, excluding the effects of any change in the level of deferred tax assets resulting from their reassessment or any statutory tax rate changes. Consistent with past practice, we expect to revalue our deferred tax assets in the second half of 2017 based on a reassessment of future profitability taking into account updated business plan forecasts. The full-year effective tax rate could change significantly on the basis of this reassessment. It could also change if aggregate tax expenses in respect of profits from branches and subsidiaries without loss coverage differ from what is expected. Furthermore, any change in statutory tax rates could significantly impact the level of our deferred tax assets, when the law change is enacted. For every percentage point reduction in the US federal corporate income tax rate, we would expect a CHF 0.2 billion decrease in the Group's deferred tax assets.

→ Refer to "Note 8 Income taxes" in the "Consolidated financial statements" section of this report for more information

→ Refer to the "Risk factors" section of this report for more information

Total comprehensive income attributable to shareholders

In 2016, total comprehensive income attributable to shareholders was CHF 1,817 million, reflecting net profit of CHF 3,204 million, partly offset by negative OCI of CHF 1,386 million.

Defined benefit plan OCI was negative CHF 824 million compared with positive CHF 298 million. In 2016, we updated and refined certain actuarial assumptions used in calculating our defined benefit obligations (DBOs). This resulted in net OCI gains of CHF 319 million related to the Swiss defined benefit plan and an OCI gain of CHF 63 million related to the UK pension plan.

Total pre-tax OCI related to UK defined benefit plans was negative CHF 615 million, reflecting an OCI loss of CHF 928 million due to a net increase in the DBO, mainly due to a decrease in the applicable discount rate, partly offset by the aforementioned gain of CHF 63 million from changes in assumptions. The OCI loss related to the net increase in the DBO was partly offset by OCI gains of CHF 312 million from an increase in the fair value of the underlying plan assets.

Total pre-tax OCI related to the Swiss defined benefit plan was a loss of CHF 105 million. This reflected an OCI loss of CHF 477 million related to a net DBO increase and a loss of CHF 452 million representing an increase in the excess of the pension surplus over the estimated future economic benefit, largely offset by an OCI gain of CHF 824 million due to an increase in the fair value of the underlying plan assets. The OCI loss of CHF 477 million related to the net DBO increase was mainly due to an experience loss of CHF 438 million, reflecting the effects of differences between the previous actuarial assumptions and what actually occurred, and a loss of CHF 433 million from a decline in the applicable discount rate, partly offset by the aforementioned net gain of CHF 319 million from changes in assumptions.

OCI related to cash flow hedges was negative CHF 666 million, which primarily reflected a decrease in unrealized gains on hedging derivatives due to an increase in US dollar long-term interest rates. In 2015, OCI related to cash flow hedges was negative CHF 509 million.

OCI related to own credit on financial liabilities designated at fair value was negative CHF 115 million in 2016, mainly reflecting a downward shift in LIBOR curves.

OCI associated with financial assets available for sale was negative CHF 73 million compared with negative CHF 63 million and primarily reflected the reclassification of net gains from OCI to the income statement upon sale of assets, partly offset by net unrealized gains following decreases in the respective long-term interest rates.

Foreign currency translation OCI was CHF 292 million, mainly resulting from the strengthening of the US dollar against the Swiss franc, partly offset by the significant weakening of the British pound against the Swiss franc. In addition, net losses totaling CHF 126 million were reclassified to the income statement following the disposal of foreign subsidiaries and branches.

- Refer to the **"Significant accounting and financial reporting changes"** section of this report for more information on own credit
- Refer to the **"Statement of comprehensive income"** in the **"Consolidated financial statements"** section of this report for more information
- Refer to **"Note 26 Pension and other post-employment benefit plans"** in the **"Consolidated financial statements"** section of this report for more information on defined benefit plans

Sensitivity to interest rate movements

As of 31 December 2016, we estimate that a parallel shift in yield curves by +100 basis points could lead to a combined increase in annual net interest income of approximately CHF 0.7 billion in Wealth Management, Wealth Management Americas and Personal & Corporate Banking. Of this increase, approximately CHF 0.4 billion would result from changes in US dollar interest rates. Including the estimated impact related to pension fund assets and liabilities, the immediate effect of such a shift on shareholders' equity would be a decrease of approximately CHF 1.6 billion recognized in OCI, of which approximately CHF 1.3 billion would result from changes in US dollar interest rates. Since the majority of this negative OCI impact on shareholders' equity is related to cash flow hedges, which is not recognized for the purposes of calculating regulatory capital, the immediate impact on regulatory capital would be an increase of approximately CHF 0.3 billion. The aforementioned estimates are based on an immediate increase in interest rates, equal across all currencies and relative to implied forward rates applied to our banking book and available-for-sale portfolios.

We estimate that if interest rates implied by forward rates at the end of 2016 were to materialize over the next three years, our net interest income in Wealth Management, Wealth Management Americas and Personal & Corporate Banking would increase compared with 2016 levels by around CHF 0.2 billion in 2017 and by around CHF 1.1 billion cumulatively for 2017 to 2019. This increase would primarily be driven by Wealth Management and Wealth Management Americas, which would benefit most from an increase in US dollar interest rates, and would more than offset a decline in Personal & Corporate Banking, whose net interest income is mostly generated in Swiss francs and where forward rates imply continued negative interest rates.

Should interest rates remain constant at the levels prevailing at the end of 2016, the corresponding cumulative increase in net interest income for 2017 to 2019 compared with 2016 levels would be around CHF 0.2 billion.

The above estimates further assume no change to balance sheet size and structure, constant foreign exchange rates and no management action.

Net profit attributable to non-controlling interests

Net profit attributable to non-controlling interests was CHF 82 million in 2016 compared with CHF 183 million in the prior year. This mainly related to dividends of CHF 79 million that were paid to preferred noteholders, for which no accrual was required in a prior period.

For 2017, we currently expect to attribute approximately CHF 70 million of net profit to non-controlling interests, of which CHF 45 million in the first quarter and CHF 25 million in the fourth quarter. From 2018, we expect to attribute less than CHF 10 million per year.

Key figures

Cost / income ratio

The cost / income ratio was 85.4% compared with 81.8%. On an adjusted basis, the cost / income ratio was 80.9% compared with 80.6% and was above our target range of 60–70%.

Return on tangible equity

The return on tangible equity (RoTE) was 6.9% compared with 13.7%. On an adjusted basis, the RoTE was 9.0% compared with 13.7% and was below our target of more than 15% in a normalized market environment.

Common equity tier 1 capital ratio / risk-weighted assets

Our fully applied CET1 capital ratio decreased 0.7 percentage points to 13.8% as of 31 December 2016, exceeding our target ratio of 13.0%. The decrease primarily reflected a CHF 15 billion increase in risk-weighted assets (RWA), partly offset by a CHF 0.7 billion increase in CET1 capital.

Our RWA increased by CHF 15 billion to CHF 223 billion on a fully applied basis as of 31 December 2016. Credit risk RWA increased by CHF 8 billion, primarily driven by methodology and policy changes. Market risk RWA and operational risk RWA both increased by CHF 3 billion.

- Refer to the **"Investment Bank," "Corporate Center"** and **"Capital management"** sections of this report for more information

Leverage ratio / leverage ratio denominator

As of 31 December 2016, our fully applied going concern leverage ratio was 4.6%, of which the common equity tier 1 leverage ratio was 3.5%.

Our fully applied LRD decreased by CHF 27 billion to CHF 870 billion as of 31 December 2016, mainly reflecting incremental netting and collateral mitigation.

→ Refer to the "Investment Bank," "Corporate Center" and "Capital management" sections of this report for more information

Net new money and invested assets

Management's discussion and analysis on net new money and invested assets is provided in the "Wealth Management," "Wealth Management Americas" and "Asset Management" sections of this report.

Seasonal characteristics

Our main businesses may show seasonal patterns. The Investment Bank's revenues have been affected in some years by the seasonal characteristics of general financial market activity and deal flows in investment banking. Other business divisions may also be impacted by seasonal components, such as lower client activity levels related to the summer and end-of-year holiday seasons, annual income tax payments (which are concentrated in the second quarter in the US) and asset withdrawals that tend to occur in the fourth quarter.

Return on equity

CHF million, except where indicated	As of or for the year ended		
	31.12.16	31.12.15	31.12.14
Net profit			
Net profit attributable to shareholders	3,204	6,203	3,466
Amortization and impairment of intangible assets	91	107	83
Pre-tax adjusting items ¹ . ²	1,251	135	305
Tax effect on adjusting items ³	(275)	(140)	(125)
Adjusted net profit attributable to shareholders	4,271	6,305	3,729
Equity			
Equity attributable to shareholders	53,621	55,313	50,608
Less: goodwill and intangible assets ⁴	6,556	6,568	6,564
Tangible equity attributable to shareholders	47,065	48,745	44,044
Return on equity			
Return on equity (%)	5.9	11.8	7.0
Return on tangible equity (%)	6.9	13.7	8.2
Adjusted return on tangible equity (%) ¹	9.0	13.7	8.6

¹ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ² Refer to the "Performance by business division and Corporate Center unit – reported and adjusted" table in this section for more information. ³ Generally reflects an indicative tax rate of 22% on pre-tax adjusting items. 2015 and 2014 included own credit on financial liabilities designated at fair value as an adjusting item with an indicative tax rate of 2%. ⁴ Goodwill and intangible assets used in the calculation of tangible equity attributable to shareholders as of 31 December 2014 have been adjusted to reflect the non-controlling interests in UBS AG.

Net new money¹

	For the year ended		
CHF billion	31.12.16	31.12.15	31.12.14
Wealth Management	26.8	12.9	34.4
Wealth Management (adjusted)²	26.8	22.8	34.4
Wealth Management Americas	15.4	21.3	9.6
Asset Management	(15.5)	(5.4)	15.9
<i>of which: excluding money market flows</i>	<i>(22.5)</i>	<i>(0.7)</i>	<i>22.6</i>
<i>of which: money market flows</i>	<i>7.0</i>	<i>(4.7)</i>	<i>(6.7)</i>

¹ Net new money excludes interest and dividend income. ² Adjusted net new money excludes the negative effect on net new money of CHF 9.9 billion in 2015 from our balance sheet and capital optimization program.

Invested assets

	As of	% change from	
CHF billion	31.12.16	31.12.15	31.12.14
Wealth Management	977	947	987
Wealth Management Americas	1,131	1,035	1,027
Asset Management	656	650	664
<i>of which: excluding money market funds</i>	<i>591</i>	<i>592</i>	<i>600</i>
<i>of which: money market funds</i>	<i>66</i>	<i>58</i>	<i>64</i>

2015 compared with 2014

Results

We recorded a profit before tax of CHF 5,489 million compared with CHF 2,461 million, largely reflecting an increase of CHF 2,578 million in operating income, mainly due to increased net interest and trading income in the Investment Bank and our wealth management businesses, as well as reduced losses in Corporate Center – Non-core and Legacy Portfolio. Operating expenses decreased by CHF 451 million, mainly driven by CHF 1,507 million lower net expenses for provisions for litigation, regulatory and similar matters, partly offset by higher restructuring expenses and increased personnel expenses.

In addition to reporting our results in accordance with IFRS, we report adjusted results that exclude items that management believes are not representative of the underlying performance of our businesses. Such adjusted results are non-GAAP financial measures as defined by SEC regulations. For the purpose of determining adjusted results for 2015, we excluded an own credit gain of CHF 553 million, gains on sales of real estate of CHF 378 million, gains on sales of subsidiaries and businesses of CHF 225 million, net foreign currency translation gains of CHF 88 million, gains of CHF 81 million related to investments in associates, gains of CHF 11 million on sale of financial assets available for sale, net losses related to the buyback of debt in a tender offer of CHF 257 million, net restructuring expenses of CHF 1,235 million, a gain of CHF 21 million related to a change to retiree benefit plans in the US and an impairment of an intangible asset of CHF 11 million. For 2014, we excluded an own credit gain of CHF 292 million, gains on sales of real estate of CHF 44 million, losses of CHF 5 million on sale of financial assets available for sale, net restructuring expenses of CHF 677 million and a gain of CHF 41 million related to changes to retiree benefit plans in the US.

On this adjusted basis, profit before tax was CHF 5,635 million compared with CHF 2,766 million in the prior year.

Adjusted operating income increased by CHF 1,830 million to CHF 29,526 million, largely due to an increase of CHF 1,816 million in adjusted net interest and trading income, reflecting increases in the Investment Bank and our wealth management businesses, as well as reduced losses in Corporate Center – Non-core and Legacy Portfolio.

Adjusted operating expenses decreased by CHF 1,040 million to CHF 23,891 million, mainly due to CHF 1,507 million lower net expenses for provisions for litigation, regulatory and similar matters, partly offset by CHF 548 million higher personnel expenses.

Operating income

Total operating income was CHF 30,605 million compared with CHF 28,027 million. On an adjusted basis, total operating income increased by CHF 1,830 million to CHF 29,526 million. Adjusted net interest and trading income increased by CHF 1,816 million, reflecting increases in the Investment Bank and our wealth management businesses, as well as reduced losses in Corporate Center – Non-core and Legacy Portfolio. Net fee and commission income increased by CHF 64 million, mainly in Wealth Management Americas and Asset Management.

Net interest and trading income

Net interest and trading income increased by CHF 2,077 million to CHF 12,474 million. 2015 included an own credit gain on financial liabilities designated at fair value of CHF 553 million compared with a gain of CHF 292 million. In 2015, we made further enhancements to our valuation methodology for the own credit component of fair value of financial liabilities designated at fair value. This change in accounting estimate resulted in a gain of CHF 260 million. Excluding the effect of own credit in both years, net interest and trading income increased by CHF 1,816 million to CHF 11,921 million, reflecting increases in the Investment Bank and our wealth management businesses, as well as reduced losses in Corporate Center – Non-core and Legacy Portfolio.

Credit loss expense / recovery

Net credit loss expense was CHF 117 million compared with CHF 78 million. The Investment Bank recorded a net credit loss expense of CHF 68 million, mainly related to the energy sector, compared with a net recovery of CHF 2 million. Net credit loss expense in Personal & Corporate Banking was CHF 37 million compared with CHF 95 million, predominantly due to lower expenses for newly impaired positions.

Net fee and commission income

Net fee and commission income increased by CHF 64 million to CHF 17,140 million.

Portfolio management and advisory fees increased by CHF 515 million to CHF 7,858 million, primarily in Wealth Management Americas, largely due to an increase in managed account fees, reflecting higher invested asset levels. Portfolio management and advisory fees also increased in Wealth Management and Asset Management.

Underwriting fees decreased by CHF 224 million, reflecting lower equity and debt underwriting fees, largely in the Investment Bank.

Investment fund fees declined by CHF 150 million, primarily reflecting a decrease in mutual fund-related fees in Wealth Management Americas and lower transaction-based income in Wealth Management. This was partly offset by an increase in Asset Management.

Other income

Other income was CHF 1,107 million compared with CHF 632 million. On an adjusted basis, other income decreased by CHF 12 million. Adjusted income related to associates and subsidiaries decreased by CHF 124 million, mainly as 2014 included a gain of CHF 65 million on an investment in an associate which was reclassified to a financial asset available for sale following its initial public offering, as well as a gain of CHF 58 million related to the release of a provision for litigation, regulatory and similar matters that was recorded as other income. This was partly offset by CHF 92 million higher adjusted income from financial assets available for sale, primarily related to net gains on sales of equity investments in 2015, mainly within the Investment Bank.

Operating expenses

Total operating expenses decreased by CHF 451 million to CHF 25,116 million. Restructuring expenses were CHF 1,235 million compared with CHF 677 million, largely related to our transitioning activities to nearshore and offshore locations. Personnel-related restructuring expenses increased by CHF 133 million to CHF 460 million, while non-personnel-related restructuring expenses increased by CHF 425 million to CHF 775 million.

On an adjusted basis, excluding restructuring expenses and gains related to changes to retiree benefit plans in the US in both years and an impairment of an intangible asset in 2015, total operating expenses decreased by CHF 1,040 million to CHF 23,891 million. This decrease was mainly due to CHF 1,507 million lower net expenses for provisions for litigation, regulatory and similar matters, partly offset by CHF 548 million higher adjusted personnel expenses, primarily reflecting an increase in expenses for variable compensation.

Personnel expenses

Personnel expenses increased by CHF 701 million to CHF 15,981 million and included restructuring expenses of CHF 460 million compared with CHF 327 million, largely related to our transitioning activities to nearshore and offshore locations. On an adjusted basis, excluding restructuring expenses and gains related to changes to retiree benefit plans in the US, personnel expenses increased by CHF 548 million to CHF 15,542 million.

Expenses for salaries, excluding restructuring expenses, decreased by CHF 154 million to CHF 5,970 million, primarily reflecting a reduction in staff levels.

Excluding restructuring expenses, total variable compensation expenses increased by CHF 297 million. Expenses for current-year awards increased by CHF 272 million, reflecting improved business performance. Expenses relating to the amortization of prior years' awards increased by CHF 24 million.

Financial advisor compensation in Wealth Management Americas increased by CHF 167 million to CHF 3,552 million, primarily due to unfavorable foreign currency translation effects.

Other personnel expenses, excluding restructuring expenses and the aforementioned gains related to changes to retiree benefit plans in the US, increased by CHF 241 million to CHF 2,613 million, mainly due to an increase of CHF 113 million in costs for pension and other post-employment benefits plans and CHF 113 million higher expenses for contractors.

General and administrative expenses

General and administrative expenses decreased by CHF 1,280 million to CHF 8,107 million. Net restructuring expenses increased to CHF 761 million from CHF 319 million, largely related to our transitioning activities to nearshore and offshore locations. On an adjusted basis, excluding net restructuring expenses, general and administrative expenses decreased by CHF 1,722 million, mainly due to CHF 1,507 million lower net expenses for provisions for litigation, regulatory and similar matters.

Excluding restructuring expenses, other general and administrative expenses decreased by CHF 215 million, primarily as 2014 included net expenses of CHF 120 million related to certain disputed receivables. Furthermore, occupancy costs and expenses for outsourcing of IT and other services decreased.

General and administrative expenses also included a net expense of CHF 166 million for the annual UK bank levy compared with CHF 123 million.

Tax

We recognized a net income tax benefit of CHF 898 million for 2015, which included a net Swiss tax expense of CHF 569 million and a net non-Swiss tax benefit of CHF 1,467 million, primarily relating to the upward revaluation of US deferred tax assets.

The Swiss tax expense included a current tax expense of CHF 239 million related to taxable profits, mainly earned by Swiss subsidiaries, against which no losses were available to offset. In addition, it included a net deferred tax expense of CHF 330 million, which mainly reflected a net decrease in deferred tax assets previously recognized in relation to tax losses carried forward, partly offset by an increase in recognized deferred tax assets in relation to temporary differences.

The net non-Swiss tax benefit included a current tax expense of CHF 476 million in respect of taxable profits earned by non-Swiss subsidiaries and branches, against which no losses were available to offset. This was more than offset by a net deferred tax benefit of CHF 1,943 million, primarily due to an increase in our US deferred tax assets, reflecting updated profit forecasts and an extension of the relevant taxable profit forecast period used in valuing our deferred tax assets.

Total comprehensive income attributable to shareholders

Total comprehensive income attributable to shareholders was CHF 5,698 million, reflecting net profit of CHF 6,203 million, partly offset by negative OCI of CHF 506 million.

In 2015, OCI related to cash flow hedges was negative CHF 509 million compared with positive CHF 689 million in 2014, primarily reflecting lower unrealized gains on hedging derivatives from decreases in long-term interest rates.

Foreign currency translation OCI was negative CHF 231 million, primarily resulting from the significant weakening of the euro and British pound against the Swiss franc, combined with the reclassification of net gains totaling CHF 90 million to the income statement.

OCI associated with financial assets available for sale was negative CHF 63 million, mainly as previously unrealized net gains were reclassified from OCI to the income statement upon sale of investments, partly offset by net unrealized gains following decreases in long-term interest rates.

Defined benefit plan OCI was CHF 298 million. In 2015, we carried out a methodology review of the actuarial assumptions used in calculating our DBOs. This resulted in an OCI gain of CHF 2,002 million related to the Swiss pension plan and an OCI gain of CHF 188 million related to the UK pension plan. Total pre-tax OCI related to UK defined benefit plans was CHF 321 million, reflecting a net reduction in the DBO of CHF 444 million, primarily resulting from the aforementioned changes in assumptions and an increase in the applicable discount rate, partly offset by a decrease of CHF 123 million in the fair value of the underlying plan assets. In addition, we recorded total net pre-tax OCI gains of CHF 53 million on our Swiss pension plan. This reflected an OCI gain of CHF 1,212 million related to a net DBO reduction, primarily due to the aforementioned changes in assumptions, partly offset by a market-driven decline in the applicable discount rate, as well as an OCI gain of CHF 105 million due to an increase in the fair value of the underlying plan assets. These OCI gains were almost entirely offset by an OCI decrease of CHF 1,265 million representing the excess of the pension surplus over the estimated future economic benefit.

Net profit attributable to preferred noteholders and non-controlling interests

Net profit attributable to preferred noteholders was zero in 2015 compared with CHF 142 million in the prior year. Subsequent to the exchange offer in the fourth quarter of 2014, the preferred notes issued by UBS AG were reclassified in 2015 to equity attributable to non-controlling interests in the UBS Group AG consolidated financial statements.

Net profit attributable to non-controlling interests was CHF 183 million in 2015 compared with CHF 32 million in the prior year. This mainly related to net profit attributable to non-controlling interests in UBS AG which was CHF 103 million in 2015. As a result of the completion of the SESTA procedure in the third quarter of 2015, UBS Group AG owns 100% of the issued shares of UBS AG. Since then, profits of UBS AG have been fully attributable to UBS Group AG shareholders.

Furthermore, dividends of CHF 76 million were paid to preferred noteholders, for which no accrual was required in a prior period.

Wealth Management

Wealth Management¹

	As of or for the year ended			% change from
CHF million, except where indicated	31.12.16	31.12.15	31.12.14	31.12.15

Results

Net interest income	2,331	2,326	2,165	0
Recurring net fee income ²	3,548	3,820	3,783	(7)
Transaction-based income ³	1,397	1,778	1,928	(21)
Other income	20	231	25	(91)
Income	7,296	8,155	7,902	(11)
Credit loss (expense) / recovery	(5)	0	(1)	
Total operating income	7,291	8,155	7,901	(11)
Personnel expenses	2,349	2,532	2,467	(7)
General and administrative expenses	640	637	918	0
Services (to) / from Corporate Center and other business divisions	2,348	2,289	2,180	3
of which: services from CC – Services	2,256	2,209	2,122	2
Depreciation and impairment of property, equipment and software	2	5	4	(60)
Amortization and impairment of intangible assets	4	3	5	33
Total operating expenses⁴	5,343	5,465	5,574	(2)
Business division operating profit / (loss) before tax	1,948	2,689	2,326	(28)

Adjusted results⁵

Total operating income as reported	7,291	8,155	7,901	(11)
of which: gains / (losses) on sales of subsidiaries and businesses	(23)	169		
of which: gains related to investments in associates		15		
of which: gains on sale of financial assets available for sale ⁶	21			
Total operating income (adjusted)	7,293	7,971	7,901	(9)
Total operating expenses as reported	5,343	5,465	5,574	(2)
of which: personnel-related restructuring expenses	53	20	18	
of which: non-personnel-related restructuring expenses	55	38	49	
of which: restructuring expenses allocated from CC – Services	339	265	119	
Total operating expenses (adjusted)	4,896	5,142	5,389	(5)
Business division operating profit / (loss) before tax as reported	1,948	2,689	2,326	(28)
Business division operating profit / (loss) before tax (adjusted)	2,397	2,828	2,511	(15)

Key performance indicators⁷

Pre-tax profit growth (%)	(27.6)	15.6	3.5	
Cost / income ratio (%)	73.2	67.0	70.5	
Net new money growth (%)	2.8	1.3	3.9	
Gross margin on invested assets (bps)	77	86	85	(10)
Net margin on invested assets (bps)	21	28	25	(25)

Adjusted key performance indicators^{8,7}

Pre-tax profit growth (%)	(15.2)	12.6	3.5	
Cost / income ratio (%)	67.1	64.5	68.2	
Net new money growth (%)	2.8	2.3	3.9	
Gross margin on invested assets (bps)	77	84	85	(8)
Net margin on invested assets (bps)	25	30	27	(17)

Wealth Management (continued)¹

	As of or for the year ended			% change from
CHF million, except where indicated	31.12.16	31.12.15	31.12.14	31.12.15
Additional information				
Recurring income ⁸	5,880	6,146	5,949	(4)
Recurring income as a percentage of income (%)	80.6	75.4	75.3	
Average attributed equity (CHF billion) ⁹	3.5	3.5	3.4	0
Return on attributed equity (%)	56.1	77.4	67.9	
Risk-weighted assets (fully applied, CHF billion) ¹⁰	25.8	25.3	25.4	2
Return on risk-weighted assets, gross (%) ¹¹	28.1	31.7	34.5	
Leverage ratio denominator (fully applied, CHF billion) ¹²	115.5	119.0	138.3	(3)
Goodwill and intangible assets (CHF billion)	1.3	1.3	1.4	0
Net new money (CHF billion)	26.8	12.9	34.4	
Net new money adjusted (CHF billion) ¹³	26.8	22.8	34.4	
Invested assets (CHF billion)	977	947	987	3
Client assets (CHF billion)	1,157	1,122	1,160	3
Loans, gross (CHF billion)	101.9	105.2	112.7	(3)
Due to customers (CHF billion)	192.3	172.3	191.3	12
Personnel (full-time equivalents)	9,721	10,239	10,337	(5)
Client advisors (full-time equivalents)	3,859	4,019	4,250	(4)

¹ Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. ² Recurring net fee income consists of fees for services provided on an ongoing basis such as portfolio management fees, asset-based investment fund fees, custody fees and account-keeping fees, which are generated on client assets. ³ Transaction-based income consists of the non-recurring portion of net fee and commission income, mainly consisting of brokerage and transaction-based investment fund fees as well as credit card fees and fees for payment transactions, together with net trading income. ⁴ Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for information on restructuring expenses. ⁵ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ⁶ Reflects a gain on the sale of our investment in Visa Europe. ⁷ Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. ⁸ Recurring income consists of net interest income and recurring net fee income. ⁹ Refer to the "Capital management" section of this report for more information. ¹⁰ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ¹¹ Based on fully applied RWA. ¹² Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. ¹³ Adjusted net new money excludes the negative effect on net new money in 2015 of CHF 9.9 billion from our balance sheet and capital optimization program.

Regional breakdown of key figures^{1, 2}

As of or for the year ended 31.12.16	Europe	Asia Pacific	Switzerland	Emerging markets	of which: ultra high net worth	of which: Global Family Office ³
Net new money (CHF billion)	8.1	20.8	5.0	(6.2)	27.3	11.2
Net new money growth (%)	2.4	7.6	2.9	(4.0)	5.4	14.7
Invested assets (CHF billion)	353	292	180	149	552	94
Gross margin on invested assets (bps)	69	72	86	96	52	47 ⁴
Client advisors (full-time equivalents)	1,317	1,016	744	681	805 ⁵	

¹ Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. ² Based on the Wealth Management business area structure and excluding minor functions with 101 client advisors, CHF 3 billion of invested assets, and CHF 0.9 billion of net new money outflows in 2016. ³ Joint venture between Wealth Management and the Investment Bank. Global Family Office is reported as a sub-segment of ultra high net worth and is included in the ultra high net worth figures. ⁴ Gross margin includes income booked in the Investment Bank. Gross margin only based on income booked in Wealth Management is 28 basis points. ⁵ Represents client advisors who exclusively serve ultra high net worth clients. In addition to these, other client advisors may also serve certain ultra high net worth clients, but not exclusively.

2016 compared with 2015

Results

Profit before tax decreased by CHF 741 million or 28% to CHF 1,948 million and adjusted profit before tax decreased by CHF 431 million or 15% to CHF 2,397 million, reflecting lower operating income, partly offset by decreased operating expenses.

Operating income

Total operating income decreased by CHF 864 million or 11% to CHF 7,291 million. 2016 included a loss on the sale of subsidiaries and businesses of CHF 23 million and a gain of CHF 21 million on the sale of our investment in Visa Europe. 2015 included net gains of CHF 169 million on the sale of subsidiaries and businesses and a CHF 15 million gain related to our investment in the SIX Group. Excluding these items, adjusted operating income decreased by CHF 678 million or 9% to CHF 7,293 million, mainly due to lower transaction-based income and recurring net fee income.

Net interest income increased by CHF 5 million to CHF 2,331 million, mainly due to higher deposit revenues, partly offset by lower treasury-related income from Corporate Center – Group Asset and Liability Management (Group ALM).

Recurring net fee income decreased by CHF 272 million to CHF 3,548 million due to the effects of cross-border outflows and shifts into retrocession-free products, changes in clients' asset allocation and the effect of our exit from the Australian and Belgian domestic businesses. This was partly offset by the effects of increases in discretionary and advisory mandate penetration and pricing measures.

Transaction-based income decreased by CHF 381 million to CHF 1,397 million across all regions and most products, mainly due to reduced client activity, most notably in Asia Pacific and emerging markets. Additionally, 2015 included a fee of CHF 45 million received from Personal & Corporate Banking for the shift of clients, as a result of a detailed client segmentation review.

Other income decreased by CHF 211 million to CHF 20 million, mainly related to the aforementioned net gains on the sale of subsidiaries and businesses in 2015.

Operating expenses

Total operating expenses decreased by CHF 122 million or 2% to CHF 5,343 million and adjusted operating expenses decreased by CHF 246 million or 5% to CHF 4,896 million.

Personnel expenses decreased by CHF 183 million to CHF 2,349 million and adjusted personnel expenses decreased by CHF 216 million to CHF 2,296 million, driven by a decrease in staff levels and lower variable compensation expenses, as well as lower pension costs for our Swiss pension plan, reflecting the effect of changes to demographic and financial assumptions.

General and administrative expenses increased by CHF 3 million to CHF 640 million, and adjusted general and administrative expenses decreased by CHF 14 million to CHF 585 million. This was driven by a CHF 35 million decrease in net

expenses for provisions for litigation, regulatory and similar matters, partly offset by higher professional fees.

Net expenses for services from Corporate Center and other business divisions increased by CHF 59 million to CHF 2,348 million and adjusted net expenses for services decreased by CHF 15 million to CHF 2,009 million, mainly reflecting lower expenses from Group Operations partly offset by higher occupancy expenses from Group Corporate Services.

Net new money

Net new money was CHF 26.8 billion compared with adjusted net new money of CHF 22.8 billion in the prior year, which excluded the negative effect of CHF 9.9 billion from our balance sheet and capital optimization program. The net new money growth rate was 2.8% compared with an adjusted growth rate of 2.3%, and was below our target range of 3% to 5%. Net new money was driven predominantly by inflows in Asia Pacific, but also Europe and Switzerland, partly offset by outflows in emerging markets, mainly due to cross-border outflows. Total cross-border outflows were CHF 14 billion compared with CHF 8 billion, mainly driven by outflows in emerging markets. On a global basis, net new money from ultra high net worth clients was CHF 27.3 billion compared with adjusted net new money of CHF 23.4 billion.

Invested assets

Invested assets increased by CHF 30 billion to CHF 977 billion, primarily reflecting net new money of CHF 27 billion and positive market performance of CHF 19 billion, partly offset by a CHF 13 billion decrease due to the sale of subsidiaries and businesses that did not affect net new money, and negative foreign currency translation effects of CHF 1 billion. Discretionary and advisory mandate penetration increased to 26.9% from 26.4%.

Cost / income ratio

The cost / income ratio increased to 73.2% from 67.0%. On an adjusted basis, the ratio increased to 67.1% from 64.5% and was above our target range of 55% to 65%.

Personnel

Wealth Management employed 9,721 personnel compared with 10,239. The number of client advisors decreased by 160 to 3,859 and the number of non-client facing staff decreased by 358 to 5,862, both driven by our cost reduction programs and our exit from the Australian domestic business. Of the aforementioned decrease in client advisors, 82 were related to our exit from the Australian domestic business.

2015 compared with 2014

Results

Profit before tax increased by CHF 363 million or 16% to CHF 2,689 million and adjusted profit before tax increased by CHF 317 million or 13% to CHF 2,828 million, reflecting lower operating expenses and higher operating income.

Operating income

Total operating income increased by CHF 254 million or 3% to CHF 8,155 million. Excluding net gains of CHF 169 million on the sale of subsidiaries and businesses and a CHF 15 million gain related to our investment in the SIX Group, adjusted operating income increased by CHF 70 million or 1% to CHF 7,971 million, mainly due to higher net interest income and recurring net fee income, partly offset by lower transaction-based income.

Net interest income increased by CHF 161 million to CHF 2,326 million, mainly due to higher lending revenues and an increase in allocated revenues from Corporate Center – Group Asset and Liability Management (Group ALM).

Recurring net fee income increased by CHF 37 million to CHF 3,820 million, reflecting the positive effects of a continued increase in discretionary and advisory mandate penetration and pricing measures, partly offset by lower income due to the ongoing effects of cross-border outflows.

Transaction-based income decreased by CHF 150 million to CHF 1,778 million across all regions, mainly due to reduced client activity, most notably in Europe and emerging markets. The overall decrease was mainly related to investment funds, fixed income cash products and structured products, partly offset by higher foreign exchange trading and mandate revenues. Transaction-based revenues allocated from Group ALM also decreased. These decreases were partly offset by a fee of CHF 45 million received from Personal & Corporate Banking for the shift of clients as a result of a detailed client segmentation review.

Other income increased by CHF 206 million to CHF 231 million, mainly related to the aforementioned net gains.

Operating expenses

Total operating expenses decreased by CHF 109 million or 2% to CHF 5,465 million and adjusted operating expenses decreased by CHF 247 million or 5% to CHF 5,142 million, mainly as net expenses for provisions for litigation, regulatory and similar matters declined to CHF 104 million from CHF 394 million.

Personnel expenses increased by CHF 65 million to CHF 2,532 million and adjusted personnel expenses increased by CHF 63 million to CHF 2,512 million, mainly due to higher pension-related costs and increased expenses for variable compensation, as well as salary increases, partly offset by favorable foreign currency translation effects and the effect of personnel reductions.

General and administrative expenses decreased by CHF 281 million to CHF 637 million, and adjusted general and administrative expenses decreased by CHF 271 million to CHF

599 million, mainly due to the aforementioned decreased net expenses for provisions for litigation, regulatory and similar matters.

Net expenses for services from other business divisions and Corporate Center increased by CHF 109 million to CHF 2,289 million and adjusted net expenses for services decreased by CHF 37 million to CHF 2,024 million, mainly due to lower expenses from Group Operations and Group Corporate Services, partly offset by higher expenses from Group ALM.

Net new money

Adjusted net new money, which excludes net outflows of CHF 9.9 billion from our balance sheet and capital optimization program, was CHF 22.8 billion and was driven by inflows in Asia Pacific, Switzerland and Europe, partly offset by outflows in emerging markets. This resulted in an adjusted net new money growth rate of 2.3% compared with 3.9%, below our target range of 3% to 5%. Adjusted net new money was negatively affected by client deleveraging and cross-border outflows. On a global basis, adjusted net new money from ultra high net worth clients was CHF 23.4 billion compared with CHF 29.8 billion. On a reported basis, total net new money was CHF 12.9 billion from CHF 34.4 billion.

Invested assets

Invested assets decreased by CHF 40 billion to CHF 947 billion due to foreign currency translation effects of CHF 25 billion, a CHF 16 billion reduction due to the aforementioned sale of subsidiaries and businesses that did not affect net new money and negative market performance of CHF 9 billion, partly offset by net new money inflows of CHF 13 billion, which included net outflows of CHF 10 billion from our balance sheet and capital optimization program. Discretionary and advisory mandate penetration increased to 26.4% compared with 24.4%.

Cost / income ratio

The cost / income ratio was 67.0% compared with 70.5%. On an adjusted basis, the cost / income ratio was 64.5% compared with 68.2% and was within our target range of 55% to 65%.

Personnel

Wealth Management employed 10,239 personnel as of 31 December 2015 compared with 10,337 as of 31 December 2014.

The number of client advisors decreased by 231 to 4,019 with reductions in Europe, Asia Pacific and emerging markets, mainly due to a reduction in the number of lower-producing advisors and the reclassification of certain staff from client advisors to non-client facing staff.

The number of non-client facing staff increased by 133 to 6,220, mainly due to hiring for our strategic and regulatory priorities, the shift of a team of real estate financing experts from Personal & Corporate Banking to Wealth Management, and the aforementioned reclassification, partly offset by the effect of the sale of subsidiaries and businesses in 2015.

Wealth Management Americas

Wealth Management Americas – in US dollars¹

USD million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Results				
Net interest income	1,484	1,215	1,067	22
Recurring net fee income ²	4,880	4,795	4,666	2
Transaction-based income ³	1,474	1,614	1,825	(9)
Other income	35	32	33	9
Income	7,873	7,657	7,590	3
Credit loss (expense) / recovery	(3)	(4)	16	(25)
Total operating income	7,871	7,653	7,606	3
Personnel expenses	4,874	4,746	4,741	3
Financial advisor compensation ⁴	2,931	2,921	2,944	0
Compensation commitments with recruited financial advisors ⁵	808	761	733	6
Salaries and other personnel costs	1,135	1,064	1,063	7
General and administrative expenses	576	845	597	(32)
Services (to) / from Corporate Center and other business divisions	1,250	1,252	1,234	0
<i>of which: services from CC – Services</i>	<i>1,236</i>	<i>1,236</i>	<i>1,217</i>	<i>0</i>
Depreciation and impairment of property, equipment and software	2	3	0	(33)
Amortization and impairment of intangible assets	50	53	52	(6)
Total operating expenses⁶	6,752	6,899	6,625	(2)
Business division operating profit / (loss) before tax	1,118	754	981	48
Adjusted results⁷				
Total operating income as reported	7,871	7,653	7,606	3
<i>of which: gains on sale of financial assets available for sale</i>	<i>10</i>			
Total operating income (adjusted)	7,861	7,653	7,606	3
Total operating expenses as reported	6,752	6,899	6,625	(2)
<i>of which: personnel-related restructuring expenses</i>	<i>7</i>	<i>0</i>	<i>0</i>	
<i>of which: non-personnel-related restructuring expenses</i>	<i>0</i>	<i>0</i>	<i>0</i>	
<i>of which: restructuring expenses allocated from CC – Services</i>	<i>134</i>	<i>141</i>	<i>59</i>	
<i>of which: a gain related to a change to retiree benefit plans in the US</i>		<i>(21)</i>	<i>(10)</i>	
Total operating expenses (adjusted)	6,610	6,779	6,576	(2)
Business division operating profit / (loss) before tax as reported	1,118	754	981	48
Business division operating profit / (loss) before tax (adjusted)	1,250	874	1,030	43
Key performance indicators⁸				
Pre-tax profit growth (%)	48.3	(23.1)	5.8	
Cost / income ratio (%)	85.8	90.1	87.3	
Net new money growth (%)	1.5	2.1	1.0	
Gross margin on invested assets (bps)	73	74	76	(1)
Net margin on invested assets (bps)	10	7	10	43
Adjusted key performance indicators^{7, 8}				
Pre-tax profit growth (%)	43.0	(15.1)	3.9	
Cost / income ratio (%)	84.1	88.5	86.6	
Net new money growth (%)	1.5	2.1	1.0	
Gross margin on invested assets (bps)	73	74	76	(1)
Net margin on invested assets (bps)	12	8	10	50

Wealth Management Americas – in US dollars (continued)¹

USD million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Additional information				
Recurring income ⁹	6,364	6,010	5,733	6
Recurring income as a percentage of income (%)	80.8	78.5	75.5	
Average attributed equity (USD billion) ¹⁰	2.6	2.6	2.9	0
Return on attributed equity (%)	43.0	29.3	33.8	
Risk-weighted assets (fully applied, USD billion) ¹¹	23.4	21.9	21.8	7
Return on risk-weighted assets, gross (%) ¹²	33.9	34.0	29.4	
Leverage ratio denominator (fully applied, USD billion) ¹³	66.9	62.8	63.7	7
Goodwill and intangible assets (USD billion)	3.7	3.7	3.8	0
Net new money (USD billion)	15.4	21.4	10.0	
Net new money including interest and dividend income (USD billion) ¹⁴	40.8	47.8	37.2	
Invested assets (USD billion)	1,111	1,033	1,032	8
Client assets (USD billion)	1,160	1,084	1,087	7
Loans, gross (USD billion)	51.6	48.7	44.6	6
Due to customers (USD billion)	89.2	83.1	73.5	7
Recruitment loans to financial advisors	3,033	3,179	2,925	(5)
Other loans to financial advisors	462	418	374	11
Personnel (full-time equivalents)	13,526	13,611	13,322	(1)
Financial advisors (full-time equivalents)	7,025	7,140	6,997	(2)

¹ Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. ² Recurring net fee income consists of fees for services provided on an ongoing basis such as portfolio management fees, asset-based investment fund fees, custody fees and account-keeping fees, which are generated on client assets. ³ Transaction-based income consists of the non-recurring portion of net fee and commission income, mainly consisting of brokerage and transaction-based investment fund fees as well as credit card fees and fees for payment transactions, together with net trading income. ⁴ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated on the basis of financial advisor productivity, firm tenure, assets and other variables. ⁵ Compensation commitments with recruited financial advisors represents expenses related to compensation commitments granted to financial advisors at the time of recruitment that are subject to vesting requirements. ⁶ Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for information on restructuring expenses. ⁷ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ⁸ Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. ⁹ Recurring income consists of net interest income and recurring net fee income. ¹⁰ Refer to the "Capital management" section of this report for more information. ¹¹ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ¹² Based on fully applied RWA. ¹³ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. ¹⁴ Presented in line with historical reporting practice in the US market.

2016 compared with 2015

Results

Profit before tax increased by USD 364 million or 48% to USD 1,118 million, and adjusted profit before tax increased by USD 376 million or 43% to USD 1,250 million due to higher operating income and lower operating expenses.

Operating income

Total operating income increased by USD 218 million or 3% to USD 7,871 million. Adjusted operating income increased by USD 208 million or 3% to USD 7,861 million, due to higher net interest income and recurring net fee income, partly offset by lower transaction-based income.

Net interest income increased by USD 269 million to USD 1,484 million, due to higher short-term interest rates and growth in loan and deposit balances. The average mortgage portfolio balance increased 12% and the average securities-backed lending portfolio balance increased 6%.

Recurring net fee income increased by USD 85 million to USD 4,880 million, mainly due to increased managed account fees, reflecting higher invested asset levels.

Transaction-based income decreased by USD 140 million to USD 1,474 million, primarily due to lower client activity levels.

Operating expenses

Operating expenses decreased by USD 147 million or 2% to USD 6,752 million and adjusted operating expenses decreased by USD 169 million or 2% to USD 6,610 million, due to USD 260 million lower net expenses for provisions for litigation, regulatory and similar matters, partly offset by higher adjusted personnel expenses.

Personnel expenses increased by USD 128 million to USD 4,874 million and adjusted personnel expenses increased by USD 101 million to USD 4,867 million, mainly due to higher salary costs and

other personnel costs due to an increase in support staff, as well as higher expenses for compensation commitments, reflecting the recruitment of financial advisors.

General and administrative expenses decreased by USD 269 million to USD 576 million, mainly due to the aforementioned reduction in net expenses for provisions for litigation, regulatory and similar matters.

Cost / income ratio

The cost / income ratio was 85.8% compared with 90.1%. On an adjusted basis, the cost / income ratio was 84.1% compared with 88.5% and was within our target range of 75% to 85%.

Net new money

Net new money was USD 15.4 billion compared with USD 21.4 billion, reflecting lower inflows from financial advisors employed with UBS for more than one year. The net new money growth rate was 1.5% compared with 2.1%, and was below our target range of 2% to 4%.

Invested assets

Invested assets increased by USD 78 billion to USD 1,111 billion, reflecting positive market performance of USD 62 billion and net new money inflows of USD 15 billion. Managed account assets increased by USD 35 billion to USD 386 billion and comprised 34.7% of invested assets compared with 34.0%.

Personnel

As of 31 December 2016, Wealth Management Americas employed 13,526 personnel, a decrease of 85 from 31 December 2015. Financial advisor headcount decreased by 115 to 7,025, due to attrition. Non-financial advisor headcount increased by 30 to 6,501.

2015 compared with 2014

Results

Profit before tax was USD 754 million compared with USD 981 million, mainly reflecting higher net expenses for provisions for litigation, regulatory and similar matters. Adjusted profit before tax decreased to USD 874 million from USD 1,030 million.

Operating income

Total operating income increased by USD 47 million to USD 7,653 million due to higher net interest income and continued growth in managed account fees, partly offset by lower transaction-based income and a net credit loss expense in 2015 compared with a net credit loss recovery in 2014.

Net interest income increased by USD 148 million to USD 1,215 million, reflecting continued growth in loan and deposit balances. The average mortgage portfolio balance increased 16% and the average securities-backed lending portfolio balance increased 12%.

Recurring net fee income increased by USD 129 million to USD 4,795 million, mainly due to increased managed account fees, reflecting higher invested asset levels.

Transaction-based income decreased by USD 211 million to USD 1,614 million, primarily due to lower client activity.

We incurred a net credit loss expense of USD 4 million compared with a net recovery of USD 16 million. The 2014 net recovery included the full release of a loan loss allowance for a single client as well as releases of loan loss allowances on securities-backed lending facilities collateralized by Puerto Rico municipal securities and related funds.

Operating expenses

Operating expenses increased by USD 274 million or 4% to USD 6,899 million. Adjusted operating expenses increased by USD 203 million or 3% to USD 6,779 million, primarily due to USD 178 million higher net expenses for provisions for litigation, regulatory and similar matters, and an increase in other provisions and legal fees, partly offset by lower expenses from Corporate Center – Services.

Personnel expenses increased by USD 5 million to USD 4,746 million and adjusted personnel expenses increased by USD 18 million to USD 4,766 million, mainly due to higher compensation commitments for recruited financial advisors, partly offset by lower

financial advisor compensation, reflecting lower compensable revenues.

General and administrative expenses increased by USD 248 million to USD 845 million, mainly as the net expenses for provisions for litigation, regulatory and similar matters increased to USD 356 million from USD 178 million. Furthermore, we recorded higher expenses for other provisions and increased legal fees.

Net expenses for services from Corporate Center and other business divisions increased by USD 18 million to USD 1,252 million and adjusted net expenses for services decreased by USD 64 million to USD 1,113 million, reflecting lower expenses from Corporate Center – Services.

Cost / income ratio

The cost / income ratio was 90.1% compared with 87.3%. On an adjusted basis, the cost / income ratio was 88.5% compared with 86.6% and was above our target range of 75% to 85%.

Net new money

Net new money was USD 21.4 billion, reflecting strong inflows from advisors who have been with the firm for more than one year, as well as net inflows from newly recruited advisors. Net new money growth was 2.1% compared with 1.0%, within our target range of 2% to 4%.

Invested assets

Invested assets increased by USD 1 billion to USD 1,033 billion, reflecting strong net new money inflows of USD 21 billion, mostly offset by negative market performance of USD 20 billion. Managed account assets increased by USD 5 billion to USD 351 billion and comprised 34% of invested assets, unchanged from 31 December 2014.

Personnel

As of 31 December 2015, Wealth Management Americas employed 13,611 personnel, an increase of 289 from 31 December 2014. Financial advisor headcount increased by 143 to 7,140, reflecting the hiring of experienced financial advisors and continued low financial advisor attrition. Non-financial advisor headcount increased by 146 to 6,471, due to an increase in financial advisor support staff.

Wealth Management Americas – in Swiss francs¹

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Results				
Net interest income	1,467	1,174	983	25
Recurring net fee income ²	4,825	4,623	4,294	4
Transaction-based income ³	1,458	1,555	1,678	(6)
Other income	35	31	30	13
Income	7,785	7,384	6,984	5
Credit loss (expense) / recovery	(3)	(4)	15	(25)
Total operating income	7,782	7,381	6,998	5
Personnel expenses	4,819	4,579	4,363	5
Financial advisor compensation ⁴	2,898	2,817	2,710	3
Compensation commitments with recruited financial advisors ⁵	799	735	675	9
Salaries and other personnel costs	1,122	1,027	979	9
General and administrative expenses	570	822	550	(31)
Services (to) / from Corporate Center and other business divisions	1,235	1,209	1,137	2
of which: services from CC – Services	1,221	1,193	1,121	2
Depreciation and impairment of property, equipment and software	2	3	0	(33)
Amortization and impairment of intangible assets	50	51	48	(2)
Total operating expenses⁶	6,675	6,663	6,099	0
Business division operating profit / (loss) before tax	1,107	718	900	54
Adjusted results⁷				
Total operating income as reported	7,782	7,381	6,998	5
of which: gains on sale of financial assets available for sale	10			
Total operating income (adjusted)	7,772	7,381	6,998	5
Total operating expenses as reported	6,675	6,663	6,099	0
of which: personnel-related restructuring expenses	7	0	0	
of which: non-personnel-related restructuring expenses	0	0	0	
of which: restructuring expenses allocated from CC – Services	132	137	55	
of which: a gain related to a change to retiree benefit plans in the US		(21)	(9)	
Total operating expenses (adjusted)	6,536	6,547	6,053	0
Business division operating profit / (loss) before tax as reported	1,107	718	900	54
Business division operating profit / (loss) before tax (adjusted)	1,236	834	946	48
Key performance indicators⁸				
Pre-tax profit growth (%)	54.2	(20.2)	4.9	
Cost / income ratio (%)	85.7	90.2	87.3	
Net new money growth (%)	1.5	2.1	1.1	
Gross margin on invested assets (bps)	74	74	76	0
Net margin on invested assets (bps)	10	7	10	43
Adjusted key performance indicators^{7, 8}				
Pre-tax profit growth (%)	48.2	(11.8)	3.2	
Cost / income ratio (%)	84.1	88.7	86.7	
Net new money growth (%)	1.5	2.1	1.1	
Gross margin on invested assets (bps)	74	74	76	0
Net margin on invested assets (bps)	12	8	10	50

Wealth Management Americas – in Swiss francs (continued)¹

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Additional information				
Recurring income ⁹	6,292	5,798	5,276	9
Recurring income as a percentage of income (%)	80.8	78.5	75.5	
Average attributed equity (CHF billion) ¹⁰	2.6	2.5	2.7	4
Return on attributed equity (%)	43.4	29.0	33.6	
Risk-weighted assets (fully applied, CHF billion) ¹¹	23.8	21.9	21.7	9
Return on risk-weighted assets, gross (%) ¹²	34.3	33.8	29.7	
Leverage ratio denominator (fully applied, CHF billion) ¹³	68.1	62.9	63.3	8
Goodwill and intangible assets (CHF billion)	3.7	3.7	3.7	0
Net new money (CHF billion)	15.4	21.3	9.6	
Net new money including interest and dividend income (CHF billion) ¹⁴	40.5	46.9	35.0	
Invested assets (CHF billion)	1,131	1,035	1,027	9
Client assets (CHF billion)	1,181	1,085	1,081	9
Loans, gross (CHF billion)	52.5	48.8	44.4	8
Due to customers (CHF billion)	90.8	83.2	73.1	9
Recruitment loans to financial advisors	3,087	3,184	2,909	(3)
Other loans to financial advisors	471	418	372	13
Personnel (full-time equivalents)	13,526	13,611	13,322	(1)
Financial advisors (full-time equivalents)	7,025	7,140	6,997	(2)

1 Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. 2 Recurring net fee income consists of fees for services provided on an ongoing basis such as portfolio management fees, asset-based investment fund fees, custody fees and account-keeping fees, which are generated on client assets. 3 Transaction-based income consists of the non-recurring portion of net fee and commission income, mainly consisting of brokerage and transaction-based investment fund fees as well as credit card fees and fees for payment transactions, together with net trading income. 4 Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated on the basis of financial advisor productivity, firm tenure, assets and other variables. 5 Compensation commitments with recruited financial advisors represents expenses related to compensation commitments granted to financial advisors at the time of recruitment that are subject to vesting requirements. 6 Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for information on restructuring expenses. 7 Adjusted results are non-GAAP financial measures as defined by SEC regulations. 8 Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. 9 Recurring income consists of net interest income and recurring net fee income. 10 Refer to the "Capital management" section of this report for more information. 11 Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. 12 Based on fully applied RWA. 13 Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. 14 Presented in line with historical reporting practice in the US market.

Personal & Corporate Banking

Personal & Corporate Banking¹

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Results				
Net interest income	2,199	2,270	2,184	(3)
Recurring net fee income ²	553	544	556	2
Transaction-based income ³	1,028	959	1,022	7
Other income	211	140	75	51
Income	3,990	3,913	3,836	2
Credit loss (expense) / recovery	(6)	(37)	(95)	(84)
Total operating income	3,984	3,877	3,741	3
Personnel expenses	845	873	850	(3)
General and administrative expenses	285	264	293	8
Services (to) / from Corporate Center and other business divisions	1,080	1,077	1,074	0
<i>of which: services from CC – Services</i>	<i>1,186</i>	<i>1,180</i>	<i>1,196</i>	<i>1</i>
Depreciation and impairment of property, equipment and software	15	17	17	(12)
Amortization and impairment of intangible assets	0	0	0	
Total operating expenses⁴	2,224	2,231	2,235	0
Business division operating profit / (loss) before tax	1,760	1,646	1,506	7
Adjusted results⁵				
Total operating income as reported	3,984	3,877	3,741	3
<i>of which: gains related to investments in associates</i>	<i>21</i>	<i>66</i>		
<i>of which: gains on sale of financial assets available for sale⁶</i>	<i>102</i>			
Total operating income (adjusted)	3,861	3,811	3,741	1
Total operating expenses as reported	2,224	2,231	2,235	0
<i>of which: personnel-related restructuring expenses</i>	<i>4</i>	<i>2</i>	<i>4</i>	
<i>of which: non-personnel-related restructuring expenses</i>	<i>0</i>	<i>0</i>	<i>0</i>	
<i>of which: restructuring expenses allocated from CC – Services</i>	<i>113</i>	<i>99</i>	<i>60</i>	
Total operating expenses (adjusted)	2,107	2,130	2,171	(1)
Business division operating profit / (loss) before tax as reported	1,760	1,646	1,506	7
Business division operating profit / (loss) before tax (adjusted)	1,754	1,681	1,570	4
Key performance indicators⁷				
Pre-tax profit growth (%)	6.9	9.3	3.3	
Cost / income ratio (%)	55.7	57.0	58.3	
Net interest margin (bps)	163	167	159	(2)
Net new business volume growth for personal banking (%)	3.1	2.4	2.3	
Adjusted key performance indicators^{8,7}				
Pre-tax profit growth (%)	4.3	7.1	3.8	
Cost / income ratio (%)	54.5	55.4	56.6	
Net interest margin (bps)	163	167	159	(2)
Net new business volume growth for personal banking (%)	3.1	2.4	2.3	

Personal & Corporate Banking (continued)¹

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Additional information				
Average attributed equity (CHF billion) ⁸	4.1	3.9	4.1	5
Return on attributed equity (%)	43.2	41.9	36.7	
Risk-weighted assets (fully applied, CHF billion) ⁹	41.6	34.6	33.1	20
Return on risk-weighted assets, gross (%) ¹⁰	10.4	11.3	11.8	
Leverage ratio denominator (fully applied, CHF billion) ¹¹	152.2	153.8	165.9	(1)
Goodwill and intangible assets (CHF billion)	0.0	0.0	0.0	
Business volume for personal banking (CHF billion)	149	148	143	1
Net new business volume for personal banking (CHF billion)	4.6	3.4	3.2	
Client assets (CHF billion)	466	444	434	5
Due to customers (CHF billion)	135.9	132.4	137.3	3
Loans, gross (CHF billion)	133.9	135.6	137.4	(1)
Secured loan portfolio as a percentage of total loan portfolio, gross (%)	92.9	93.9	93.1	
Impaired loan portfolio as a percentage of total loan portfolio, gross (%) ¹²	0.6	0.6	0.8	
Personnel (full-time equivalents)	5,143	5,058	5,206	2

¹ Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. ² Recurring net fee income consists of fees for services provided on an ongoing basis such as portfolio management fees, asset-based investment fund fees, custody fees and account-keeping fees, which are generated on client assets. ³ Transaction-based income consists of the non-recurring portion of net fee and commission income, mainly consisting of brokerage and transaction-based investment fund fees as well as credit card fees and fees for payment transactions, together with net trading income. ⁴ Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for information on restructuring expenses. ⁵ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ⁶ Reflects a gain on the sale of our investment in Visa Europe. ⁷ Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. ⁸ Refer to the "Capital management" section of this report for more information. ⁹ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ¹⁰ Based on fully applied RWA. ¹¹ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. ¹² Refer to the "Risk management and control" section of this report for more information on impaired loan exposures.

2016 compared with 2015

Results

Profit before tax increased by CHF 114 million or 7% to CHF 1,760 million. Adjusted profit before tax increased by CHF 73 million or 4% to CHF 1,754 million, due to higher operating income and lower operating expenses.

Operating income

Total operating income increased by CHF 107 million or 3% to CHF 3,984 million. 2016 included a gain on the sale of our investment in Visa Europe of CHF 102 million, as well as gains related to investments in associates of CHF 21 million, compared with CHF 66 million. Excluding these items, adjusted operating income increased by CHF 50 million to CHF 3,861 million, mainly reflecting higher transaction-based income and a lower net credit loss expense, partly offset by decreased net interest income.

Net interest income decreased by CHF 71 million to CHF 2,199 million, mainly due to lower treasury-related income from Corporate Center – Group Asset and Liability Management (Group ALM) and lower deposit-related income driven by the adverse effect of persistently low interest rates on our replication portfolios. This was partly offset by higher loan-related income.

→ Refer to the “Corporate Center – Group Asset and Liability Management” section in “Financial and operating performance” of this report for more information

Recurring net fee income increased by CHF 9 million to CHF 553 million, mainly reflecting higher account-keeping fees partly offset by lower fee income allocated from Group ALM for the provision of collateral in relation to issued covered bonds.

Transaction-based income increased by CHF 69 million to CHF 1,028 million, mainly as 2015 included a fee of CHF 45 million paid to Wealth Management for the shift of clients as a result of a detailed client segmentation review. Additionally, 2016 included higher fees from corporate finance activity.

Other income increased by CHF 71 million to CHF 211 million, mainly due to the aforementioned gains on the sale of our investment in Visa Europe and investments in associates.

We recorded a net credit loss expense of CHF 6 million compared with CHF 37 million, mainly due to higher net recoveries on existing impaired positions.

→ Refer to the “Risk management and control” section of this report for more information

Operating expenses

Operating expenses decreased by CHF 7 million to CHF 2,224 million and adjusted operating expenses decreased by CHF 23 million to CHF 2,107 million.

Personnel expenses decreased by CHF 28 million to CHF 845 million, mainly due to lower pension costs for our Swiss pension plan, reflecting the effect of changes to demographic and financial assumptions, as well as lower variable compensation expenses. This was partly offset by higher expenses due to a shift of staff from Wealth Management to Personal & Corporate Banking.

General and administrative expenses increased by CHF 21 million to CHF 285 million, mainly reflecting higher capital-related levies in Switzerland.

Net expenses for services from Corporate Center and other business divisions increased by CHF 3 million to CHF 1,080 million. Adjusted net expenses decreased by CHF 11 million to CHF 967 million, mainly reflecting lower allocations from Group Operations and Group Technology.

Cost / income ratio

The cost / income ratio decreased to 55.7% from 57.0%. On an adjusted basis, the ratio decreased to 54.5% compared with 55.4% and remained within our target range of 50% to 60%.

Net interest margin

The net interest margin decreased 4 basis points to 163 basis points on both a reported and adjusted basis, and remained within our target range of 140 to 180 basis points.

Net new business volume growth for personal banking

The net new business volume growth rate for our personal banking business was 3.1% compared with 2.4% and remained within our target range of 1% to 4%. Net new client assets and, to a lesser extent, net new loans were positive.

Personnel

Personal & Corporate Banking employed 5,143 personnel as of 31 December 2016, an increase of 85 compared with 5,058 personnel as of 31 December 2015, mainly reflecting a shift of staff from Wealth Management to Personal & Corporate Banking.

2015 compared with 2014

Results

Profit before tax increased by CHF 140 million or 9% to CHF 1,646 million. Adjusted profit before tax increased by CHF 111 million or 7% to CHF 1,681 million, reflecting higher operating income and lower operating expenses.

Operating income

Total operating income increased by CHF 136 million to CHF 3,877 million and included a gain of CHF 66 million related to our investment in the SIX Group. Excluding this gain, adjusted operating income increased by CHF 70 million to CHF 3,811 million, reflecting higher net interest income and a lower net credit loss expense, partly offset by decreased transaction-based and recurring net fee income.

Net interest income increased by CHF 86 million to CHF 2,270 million, primarily due to higher income from loans and deposits, reflecting our pricing measures.

Recurring net fee income decreased by CHF 12 million to CHF 544 million, mainly reflecting lower treasury-related income from Group ALM for the provision of collateral in relation to issued covered bonds, as well as decreased revenues from non-asset-based products. This was partly offset by increased revenues for account keeping, banking packages and custody services.

Transaction-based income decreased by CHF 63 million to CHF 959 million, mainly driven by a fee of CHF 45 million paid to Wealth Management for the shift of clients as a result of a detailed client segmentation review, as well as lower credit card fees.

Other income increased by CHF 65 million to CHF 140 million, mainly due to the aforementioned gain related to our investment in the SIX Group.

We recorded a net credit loss expense of CHF 37 million compared with CHF 95 million, predominantly due to lower expenses for newly impaired positions.

Operating expenses

Operating expenses decreased by CHF 4 million to CHF 2,231 million and adjusted operating expenses decreased by CHF 41 million or 2% to CHF 2,130 million.

Personnel expenses increased by CHF 23 million to CHF 873 million, mainly reflecting increased expenses for variable compensation and higher pension-related costs.

General and administrative expenses decreased by CHF 29 million to CHF 264 million, mainly reflecting a net release of CHF 2 million of provisions for litigation, regulatory and similar matters compared with net expenses of CHF 59 million in the prior year. This was partly offset by higher marketing expenses, which included a one-time reversal of an accrual in 2014.

Net expenses for services from Corporate Center and other business divisions increased by CHF 3 million to CHF 1,077 million. Adjusted net expenses for services decreased by CHF 36 million to CHF 978 million, reflecting lower expenses from Group Operations and Group Corporate Services, partly offset by higher expenses from Group Technology.

Cost / income ratio

The cost / income ratio was 57.0% compared with 58.3%. On an adjusted basis, the cost / income ratio was 55.4% compared with 56.6% and remained within our target range of 50% to 60%.

Net interest margin

The net interest margin increased 8 basis points to 167 basis points and remained within our target range of 140 to 180 basis points.

Net new business volume growth for personal banking

The net new business volume growth rate for our personal banking business was 2.4% compared with 2.3% and remained within our target range of 1% to 4%. Net new client assets were positive while net new loans were slightly negative.

Personnel

Personal & Corporate Banking employed 5,058 personnel as of 31 December 2015, a decrease of 148 compared with 5,206 personnel as of 31 December 2014, reflecting the shift of a team of real estate financing experts from Personal & Corporate Banking to Wealth Management, as well as staff reductions, including those related to our ongoing cost reduction programs.

Asset Management

Asset Management¹

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15

Results

Net management fees ²	1,810	1,903	1,756	(5)
Performance fees	122	154	146	(21)
Total operating income	1,931	2,057	1,902	(6)
Personnel expenses	727	729	643	0
General and administrative expenses	241	232	305	4
Services (to) / from Corporate Center and other business divisions	506	502	478	1
<i>of which: services from CC – Services</i>	<i>530</i>	<i>523</i>	<i>495</i>	<i>1</i>
Depreciation and impairment of property, equipment and software	1	2	2	(50)
Amortization and impairment of intangible assets	4	8	9	(50)
Total operating expenses³	1,479	1,474	1,435	0
Business division operating profit / (loss) before tax	452	584	467	(23)

Adjusted results⁴

Total operating income as reported	1,931	2,057	1,902	(6)
<i>of which: gains / (losses) on sales of subsidiaries and businesses</i>		<i>56</i>		
Total operating income (adjusted)	1,931	2,001	1,902	(3)
Total operating expenses as reported	1,479	1,474	1,435	0
<i>of which: personnel-related restructuring expenses</i>	<i>15</i>	<i>4</i>	<i>19</i>	
<i>of which: non-personnel-related restructuring expenses</i>	<i>15</i>	<i>11</i>	<i>2</i>	
<i>of which: restructuring expenses allocated from CC – Services</i>	<i>70</i>	<i>68</i>	<i>30</i>	
<i>of which: a gain related to a change to retiree benefit plans in the US</i>			<i>(8)</i>	
Total operating expenses (adjusted)	1,379	1,392	1,393	(1)
Business division operating profit / (loss) before tax as reported	452	584	467	(23)
Business division operating profit / (loss) before tax (adjusted)	552	610	509	(10)

Key performance indicators⁵

Pre-tax profit growth (%)	(22.6)	25.1	(18.9)	
Cost / income ratio (%)	76.6	71.7	75.4	
Net new money growth excluding money market flows (%)	(3.8)	(0.1)	4.4	
Gross margin on invested assets (bps)	30	32	31	(6)
Net margin on invested assets (bps)	7	9	8	(22)

Adjusted key performance indicators^{4, 5}

Pre-tax profit growth (%)	(9.5)	19.8	(13.0)	
Cost / income ratio (%)	71.4	69.6	73.2	
Net new money growth excluding money market flows (%)	(3.8)	(0.1)	4.4	
Gross margin on invested assets (bps)	30	31	31	(3)
Net margin on invested assets (bps)	9	9	8	0

Information by business line

Operating income				
Equities, Multi Asset & O'Connor	888	921	862	(4)
Fixed Income	297	292	332	2
Global Real Estate	444	403	353	10
Infrastructure and Private Equity	66	57	42	16
Solutions	109	128	135	(15)
Fund Services	127	257	178	(51)
Total operating income	1,931	2,057	1,902	(6)

Asset Management (continued)¹

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Gross margin on invested assets (bps)				
Equities, Multi Asset & O'Connor	28	28	27	0
Fixed Income	14	14	16	0
Global Real Estate	82	84	84	(2)
Infrastructure and Private Equity	72	62	49	16
Solutions	21	26	30	(19)
Total gross margin	30	32	31	(6)
Net new money (CHF billion)				
Equities, Multi Asset & O'Connor	(13.7)	(11.9)	14.5	
Fixed Income	(3.1)	(3.2)	(2.1)	
Global Real Estate	2.4	3.4	2.3	
Infrastructure and Private Equity	(0.6)	(0.2)	(0.5)	
Solutions	(0.5)	6.4	1.7	
Total net new money	(15.5)	(5.4)	15.9	
Net new money excluding money market flows	(22.5)	(0.7)	22.6	
of which: from third parties	(12.5)	(7.7)	11.3	
of which: from UBS's wealth management businesses	(10.0)	7.0	11.3	
Money market flows	7.0	(4.7)	(6.7)	
of which: from third parties	3.4	(3.4)	0.0	
of which: from UBS's wealth management businesses	3.5	(1.3)	(6.7)	
Invested assets (CHF billion)				
Equities, Multi Asset & O'Connor	326	327	343	0
Fixed Income	210	208	218	1
Global Real Estate	57	52	46	10
Infrastructure and Private Equity	9	10	9	(10)
Solutions	54	53	48	2
Total invested assets	656	650	664	1
of which: excluding money market funds	591	592	600	0
of which: money market funds	66	58	64	14
Assets under administration by Fund Services				
Assets under administration (CHF billion) ⁶	420	407	520	3
Net new assets under administration (CHF billion) ⁷	0.3	24.0	43.9	
Gross margin on assets under administration (bps)	3	5	4	(40)
Additional information				
Average attributed equity (CHF billion) ⁸	1.4	1.6	1.7	(13)
Return on attributed equity (%)	32.3	36.5	27.5	
Risk-weighted assets (fully applied, CHF billion) ⁹	3.9	2.6	3.8	50
Return on risk-weighted assets, gross (%) ¹⁰	65.7	62.3	52.3	
Leverage ratio denominator (fully applied, CHF billion) ¹¹	2.7	2.7	14.9	0
Goodwill and intangible assets (CHF billion)	1.4	1.4	1.5	0
Personnel (full-time equivalents)	2,308	2,277	2,323	1

¹ Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. ² Net management fees include transaction fees, fund administration revenues (including net interest and trading income from lending activities and foreign exchange hedging as part of the fund services offering), gains or losses from seed money and co-investments, funding costs, gains and losses on the sale of subsidiaries and businesses and other items that are not performance fees. ³ Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for information on restructuring expenses. ⁴ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ⁵ Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. ⁶ Includes UBS and third-party fund assets, for which the fund services unit provides professional services, including fund setup, accounting and reporting for traditional investment funds and alternative funds. ⁷ Inflows of assets under administration from new and existing funds less outflows from existing funds or fund exits. ⁸ Refer to the "Capital management" section of this report for more information. ⁹ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ¹⁰ Based on fully applied RWA. ¹¹ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable.

2016 compared with 2015

Results

Profit before tax decreased by CHF 132 million or 23% to CHF 452 million, partly as 2015 included a gain of CHF 56 million on the sale of our Alternative Fund Services (AFS) business. Adjusted profit before tax decreased by CHF 58 million or 10% to CHF 552 million, primarily reflecting lower operating income.

Operating income

Total operating income decreased by CHF 126 million or 6% to CHF 1,931 million. Excluding the aforementioned gain on sale of our AFS business, adjusted operating income decreased by CHF 70 million or 3%. Adjusted net management fees decreased by CHF 37 million to CHF 1,810 million, mainly in Fund Services, reflecting the reduced size of our Fund Services business following the sale of AFS. This was partly offset by an increase in Global Real Estate. Performance fees decreased by CHF 32 million to CHF 122 million, primarily in Equities, Multi Asset & O'Connor.

As of 31 December 2016, approximately 43% of performance fee-eligible assets within our hedge fund businesses exceeded high-water marks compared with 26%. These assets are reported within Equities, Multi Asset & O'Connor and Solutions.

Operating expenses

Total operating expenses increased by CHF 5 million to CHF 1,479 million and adjusted operating expenses decreased by CHF 13 million or 1% to CHF 1,379 million.

Personnel expenses decreased by CHF 2 million to CHF 727 million and adjusted personnel expenses decreased by CHF 13 million to CHF 712 million. The decrease in adjusted personnel expenses was mainly driven by lower variable compensation expenses and lower salary costs as a result of the aforementioned sale of our AFS business, partly offset by higher average staffing levels, primarily in distribution and investments areas.

General and administrative expenses increased by CHF 9 million to CHF 241 million. Adjusted general and administrative expenses increased by CHF 3 million to CHF 226 million, mainly driven by higher professional fees and increased costs for market data services, partly offset by lower travel and entertainment expenses.

Cost / income ratio

The cost / income ratio was 76.6% compared with 71.7%. On an adjusted basis, the cost / income ratio was 71.4% compared with 69.6%, and was above our target range of 60% to 70%.

Net new money

Excluding money market flows, net new money outflows were CHF 22.5 billion compared with CHF 0.7 billion, which resulted in a negative net new money growth rate of 3.8% compared with negative 0.1%, below our target range of 3% to 5%. By client segment, net outflows from third parties were CHF 12.5 billion, which included a CHF 7.2 billion pricing-related outflow from one client and asset allocation changes, compared with CHF 7.7 billion. Net outflows were mainly from clients serviced from Asia Pacific, the Americas and Europe, partly offset by inflows in Switzerland. Net new money outflows from clients of UBS's wealth management businesses were CHF 10.0 billion compared with inflows of CHF 7.0 billion, largely driven by changes in asset allocation in the fourth quarter of 2016.

Invested assets

Invested assets increased to CHF 656 billion from CHF 650 billion, reflecting positive market performance of CHF 22 billion, partly offset by net new money outflows of CHF 16 billion.

As of 31 December 2016, CHF 385 billion or 59% of invested assets were managed in active, non-money market strategies and CHF 206 billion, or 31%, of invested assets were managed in passive strategies. The remaining CHF 66 billion, or 10%, were managed in money market assets. On a regional basis, 34% of invested assets related to clients serviced from Switzerland, 24% from the Americas, 22% from Europe, Middle East and Africa, and 20% from Asia Pacific.

Assets under administration

Total assets under administration increased to CHF 420 billion from CHF 407 billion, primarily reflecting positive market performance of CHF 13 billion.

Personnel

Asset Management employed 2,308 personnel as of 31 December 2016 compared with 2,277 personnel as of 31 December 2015.

Investment performance

Investment performance was mixed across our equity funds, with underperformance in growth and concentrated alpha strategies, while Asia and emerging markets performed well. UK value and income funds generally also performed well.

The majority of our fixed income strategies performed solidly in 2016, with an overall moderate active risk exposure across many portfolios. Our multi-sector and investment grade credit strategies delivered particularly strong results, and our high-yield strategies performed relatively well compared with key peers, although some lagged behind indices.

Our multi-asset strategies overall had a challenging year versus benchmark, but they showed a strong performance compared with peers. A cautious stance on equities over the summer reduced performance, while increasing our exposure to emerging market assets as well as inflation-protected bonds in the US, contributed positively in the latter half of the year.

Although Global Real Estate's US composite (including farm-land) and the Swiss direct real estate businesses produced positive absolute returns in 2016, on a relative basis, the US composite underperformed its benchmark due to its lower leverage compared with its index. The Swiss composite also underperformed its benchmark, given its sizeable weighting in the index.

Our O'Connor multi-strategy fund had a positive absolute performance net of fees, but underperformed against the broader hedge fund average. Credit and merger arbitrage strategies produced solid returns for the year, but market-neutral and equity long / short strategies underperformed. Hedge Fund Solutions had a positive absolute performance in 2016, unlike many competitors, although equity-hedged allocations had mixed results in what was a difficult year for this sub-strategy and fundamental stock picking in general.

Passive strategies and alternative index, or smart beta, products tracked indices closely.

Investment performance as of 31 December 2016

	Annualized		
	1 year	3 years	5 years
Active funds versus benchmark			
<i>Percentage of fund assets equaling or exceeding benchmark</i>			
Equities ¹	34	63	62
Fixed income ¹	77	79	88
Multi-asset ¹	20	63	88
Total traditional investments	44	69	82
Real estate ²	23	21	37

Active funds versus peers

<i>Percentage of fund assets ranking in first or second quartile / equaling or exceeding peer index</i>			
Equities ¹	43	70	79
Fixed income ¹	70	63	72
Multi-asset ¹	72	65	78
Total traditional investments	62	66	76
Real estate ²	18	18	11
Hedge funds ³	30	31	27

Passive funds tracking accuracy

<i>Percentage of passive fund assets within applicable tracking tolerance</i>			
All asset classes ⁴	85	89	92

¹ Percentage of active fund assets above benchmark (gross of fees) / peer median. Based on the universe of European domiciled active wholesale funds available to UBS's wealth management businesses and other wholesale intermediaries as of 31 December 2016. Source of comparison versus peers: ThomsonReuters LIM (Lipper Investment Management). Source of comparison versus benchmark: UBS. Universe represents approximately 69% of all active fund assets and 17% of all actively managed assets (including segregated accounts) in these asset classes globally as of 31 December 2016. ² Percentage of real estate fund assets above benchmark (gross of fees) / peer median. Universe (versus benchmark) includes all fully discretionary real estate funds with a benchmark representing approximately 70% of real estate gross invested assets as of 31 December 2016. Source: IPD, NFI-ODCE, S&P Real Estate Funds TR. Universe (versus peers) includes all real estate funds with externally verifiable peer groups representing approximately 22% of real estate gross invested assets as of 31 December 2016. Source: ThomsonReuters LIM (Lipper Investment Management). ³ Percentage of fund assets above appropriate HFRI peer indices. Universe of key hedge funds and fund-of-fund products managed on a fully discretionary basis representing approximately 32% of total O'Connor and Hedge Fund Solutions invested assets. ⁴ Percentage of passive fund assets within applicable tracking tolerance on a gross of fees basis. Performance information represents a universe of European domiciled institutional and wholesale funds representing approximately 49% of total passive invested assets as of 31 December 2016. Source: UBS.

2015 compared with 2014

Results

Profit before tax increased by 25% to CHF 584 million. Adjusted profit before tax increased by 20% to CHF 610 million, primarily reflecting higher management fees.

Operating income

Total operating income increased by CHF 155 million or 8% to CHF 2,057 million. Excluding a gain of CHF 56 million on the sale of our AFS business, adjusted operating income increased by CHF 99 million or 5% to CHF 2,001 million. Adjusted net management fees increased by CHF 91 million to CHF 1,847 million, primarily in Global Real Estate and Fund Services. Performance fees increased by CHF 8 million to CHF 154 million, mainly in Equities and Global Real Estate, partly offset by lower revenues in O'Connor and Hedge Fund Solutions.

As of December 2015, approximately 25% of performance fee-eligible assets within our hedge fund businesses exceeded high-water marks compared with 65%. These assets are reported within Equities, Multi Asset & O'Connor and Solutions.

Operating expenses

Total operating expenses increased by CHF 39 million or 3% to CHF 1,474 million, and adjusted operating expenses were CHF 1,392 million, broadly unchanged from 2014.

Personnel expenses were CHF 729 million compared with CHF 643 million. Adjusted personnel expenses increased by CHF 97 million to CHF 725 million, mainly driven by higher salary-related costs as a result of increased staffing levels, excluding the effect of the aforementioned sale of AFS, as well as higher expenses for variable compensation.

General and administrative expenses were CHF 232 million compared with CHF 305 million. Adjusted general and administrative expenses decreased by CHF 81 million to CHF 223 million, mainly due to net expenses for litigation, regulatory and similar matters of CHF 55 million in 2014, as well as an expense of CHF 14 million in 2014 for a provision for a settlement related to a fund liquidation.

Net expenses for services from other business divisions and Corporate Center were CHF 502 million compared with CHF 478 million. Adjusted net expenses for services from other business divisions and Corporate Center decreased by CHF 18 million to CHF 434 million as lower expenses from Group Operations were partly offset by higher expenses from Group Technology.

Cost / income ratio

The cost / income ratio was 71.7% compared with 75.4%. On an adjusted basis, the cost / income ratio was 69.6% compared with 73.2% and was within our target range of 60% to 70%.

Net new money

Excluding money market flows, net new money outflows were CHF 0.7 billion compared with net inflows of CHF 22.6 billion, which resulted in a negative net new money growth rate of 0.1% compared with a positive growth rate of 4.4%, below our target range of 3% to 5%. By client segment, net outflows from third parties were CHF 7.7 billion compared with net inflows of CHF 11.3 billion. 2015 included CHF 33 billion of outflows driven by client liquidity needs, largely from lower-margin passive products. Net outflows were mainly from clients serviced from Europe. Net new money inflows from clients of UBS's wealth management businesses were CHF 7.0 billion compared with CHF 11.3 billion, mainly from clients serviced from Asia Pacific and Switzerland.

Money market net outflows were CHF 4.7 billion compared with CHF 6.7 billion.

Invested assets

Invested assets were CHF 650 billion compared with CHF 664 billion, reflecting negative foreign currency translation effects of CHF 11 billion and net new money outflows of CHF 5 billion, partly offset by favorable market performance of CHF 4 billion.

As of 31 December 2015, CHF 397 billion, or 61%, of invested assets was managed in active, non-money market strategies, CHF 195 billion, or 30%, of invested assets was managed in passive strategies, and the remaining CHF 58 billion, or 9%, was money market assets. On a regional basis, 34% of invested assets related to clients serviced from Switzerland, 23% from the Americas, 22% from Europe, Middle East and Africa, and 21% from Asia Pacific.

Assets under administration

Total assets under administration decreased to CHF 407 billion as of 31 December 2015 from CHF 520 billion as of 31 December 2014. This was due to a decrease of CHF 132 billion related to the sale of our AFS business and negative foreign currency translation effects of CHF 5 billion, partly offset by net new assets under administration inflows of CHF 24 billion.

Personnel

Asset Management employed 2,277 personnel as of 31 December 2015 compared with 2,323 personnel as of 31 December 2014, mainly reflecting the aforementioned sale of our AFS business, partly offset by higher staffing levels in distribution and investments areas.

Investment Bank

Investment Bank¹

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Results				
Corporate Client Solutions	2,382	2,960	3,189	(20)
Advisory	691	709	708	(3)
Equity Capital Markets	674	1,047	1,021	(36)
Debt Capital Markets	740	691	1,005	7
Financing Solutions	360	441	497	(18)
Risk Management	(84)	73	(42)	
Investor Client Services	5,318	5,929	5,118	(10)
Equities	3,486	3,962	3,659	(12)
Foreign Exchange, Rates and Credit	1,831	1,967	1,459	(7)
Income	7,699	8,889	8,306	(13)
Credit loss (expense) / recovery	(11)	(68)	2	(84)
Total operating income	7,688	8,821	8,308	(13)
Personnel expenses	3,082	3,220	2,964	(4)
General and administrative expenses	805	841	2,671	(4)
Services (to) / from Corporate Center and other business divisions	2,765	2,817	2,711	(2)
of which: services from CC – Services	2,675	2,731	2,658	(2)
Depreciation and impairment of property, equipment and software	21	26	32	(19)
Amortization and impairment of intangible assets	12	24	15	(50)
Total operating expenses²	6,684	6,929	8,392	(4)
Business division operating profit / (loss) before tax	1,004	1,892	(84)	(47)
Adjusted results³				
Total operating income as reported	7,688	8,821	8,308	(13)
of which: gains / (losses) on sale of financial assets available for sale ⁴	78	11	(5)	
Total operating income (adjusted)	7,610	8,810	8,313	(14)
Total operating expenses as reported	6,684	6,929	8,392	(4)
of which: personnel-related restructuring expenses	154	14	64	
of which: non-personnel-related restructuring expenses	14	7	36	
of which: restructuring expenses allocated from CC – Services	410	376	161	
of which: a gain related to a change to retiree benefit plans in the US			(20)	
of which: impairment of an intangible asset		11		
Total operating expenses (adjusted)	6,107	6,522	8,151	(6)
Business division operating profit / (loss) before tax as reported	1,004	1,892	(84)	(47)
Business division operating profit / (loss) before tax (adjusted)	1,503	2,288	162	(34)

Investment Bank (continued)¹

	As of or for the year ended			% change from
CHF million, except where indicated	31.12.16	31.12.15	31.12.14	31.12.15

Key performance indicators⁵

Pre-tax profit growth (%)	(46.9)			
Cost / income ratio (%)	86.8	78.0	101.0	
Return on attributed equity (%) ⁶	13.1	25.9	(1.1)	
Return on assets, gross (%)	3.0	3.2	3.2	
Average VaR (1-day, 95% confidence, 5 years of historical data)	9	12	12	

Adjusted key performance indicators^{3, 5}

Pre-tax profit growth (%)	(34.3)		(92.9)	
Cost / income ratio (%)	80.1	73.5	98.1	
Return on attributed equity (%) ⁶	19.6	31.3	2.1	
Return on assets, gross (%)	3.0	3.2	3.2	
Average VaR (1-day, 95% confidence, 5 years of historical data)	9	12	12	

Additional information

Total assets (CHF billion) ⁷	242.3	253.5	292.3	(4)
Average attributed equity (CHF billion) ⁶	7.7	7.3	7.6	5
Risk-weighted assets (fully applied, CHF billion) ⁸	70.4	62.9	66.7	12
Return on risk-weighted assets, gross (%) ⁹	11.9	13.7	12.9	
Leverage ratio denominator (fully applied, CHF billion) ¹⁰	231.2	268.0	288.3	(14)
Goodwill and intangible assets (CHF billion)	0.1	0.1	0.1	0
Compensation ratio (%)	40.0	36.2	35.7	
Impaired loan portfolio as a percentage of total loan portfolio, gross (%) ¹¹	0.9	1.5	0.3	
Personnel (full-time equivalents)	4,734	5,243	5,194	(10)

¹ Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. ² Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for information on restructuring expenses. ³ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ⁴ Includes gains on partial sales of our investment in IHS Markit in 2016, 2015 and 2014 as well as an impairment of an investment in 2014. ⁵ Refer to the "Measurement of performance" section of this report for the definitions of our key performance indicators. ⁶ Refer to the "Capital management" section of this report for more information. ⁷ Based on third-party view, i.e., without intercompany balances. ⁸ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ⁹ Based on fully applied RWA. ¹⁰ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. ¹¹ Refer to the "Risk management and control" section of this report for more information on impaired loan exposures.

2016 compared with 2015

Results

Profit before tax decreased by CHF 888 million or 47% to CHF 1,004 million, and adjusted profit before tax decreased by CHF 785 million or 34% to CHF 1,503 million, primarily due to lower operating income, partly offset by lower operating expenses.

Operating income

Total operating income decreased by CHF 1,133 million or 13% to CHF 7,688 million. On an adjusted basis, excluding gains related to partial sales of our investment in IHS Markit of CHF 78 million in 2016 and CHF 11 million in 2015, total operating income decreased by CHF 1,200 million or 14% to CHF 7,610 million from CHF 8,810 million, as revenues in Investor Client Services decreased by CHF 678 million, and revenues in Corporate Client Solutions decreased by CHF 578 million. Net credit loss expense was CHF 11 million compared with CHF 68 million, reflecting lower expenses related to the energy sector. In US dollar terms, adjusted operating income decreased 16%.

→ Refer to the "Risk management and control" section of this report for more information on credit loss expenses

Operating income by business unit:

Corporate Client Solutions

Corporate Client Solutions revenues decreased by CHF 578 million or 20% to CHF 2,382 million, largely due to lower revenues in Equity Capital Markets, Risk Management and Financing Solutions. In US dollar terms, revenues decreased 22%.

Advisory revenues decreased by CHF 18 million to CHF 691 million, reflecting lower revenues from private transactions, partly offset by increased revenues from merger and acquisition transactions against a broadly unchanged global fee pool.

Equity Capital Markets revenues decreased by CHF 373 million to CHF 674 million, mainly due to lower revenues from public offerings as the global fee pool declined 25%, as well as lower revenues from private transactions.

Debt Capital Markets revenues increased by CHF 49 million to CHF 740 million, largely due to higher revenues from leveraged finance against a global fee pool decline of 2%. This increase was partly offset by lower investment grade revenues.

Financing Solutions revenues decreased by CHF 81 million to CHF 360 million, mainly reflecting lower structured finance revenues.

Risk Management revenues were negative CHF 84 million compared with positive CHF 73 million, mainly due to losses on portfolio macro hedges largely reflecting tightening credit spreads.

Investor Client Services

Investor Client Services revenues decreased by CHF 611 million or 10% to CHF 5,318 million. Excluding the aforementioned gains of CHF 78 million in 2016 and CHF 11 million in 2015, adjusted revenues decreased by CHF 678 million or 11% to CHF 5,240 million due to lower revenues in both the Equities and Foreign Exchange, Rates and Credit businesses. In US dollar terms, adjusted revenues decreased 14%.

Equities

Equities revenues decreased by CHF 476 million to CHF 3,486 million.

Cash revenues decreased by CHF 146 million to CHF 1,225 million, mainly due to lower trading revenues.

Derivatives revenues decreased by CHF 324 million to CHF 722 million, reflecting lower client activity levels and weaker trading revenues.

Financing Services revenues decreased by CHF 52 million to CHF 1,529 million, due to weaker trading revenues in Equity Financing from a strong 2015.

Foreign Exchange, Rates and Credit

Foreign Exchange, Rates and Credit revenues decreased by CHF 136 million to CHF 1,831 million. Excluding the aforementioned gain of CHF 78 million compared with CHF 11 million, adjusted revenues decreased to CHF 1,753 million from CHF 1,956 million, mainly as the first quarter of 2015 benefited from higher volatility and client activity levels following the Swiss National Bank's actions in January 2015.

Operating expenses

Total operating expenses decreased by CHF 245 million or 4% to CHF 6,684 million, and adjusted operating expenses decreased by CHF 415 million or 6% to CHF 6,107 million. In US dollar terms, adjusted operating expenses decreased 9%.

Personnel expenses decreased to CHF 3,082 million from CHF 3,220 million, and adjusted personnel expenses decreased to CHF 2,928 million from CHF 3,206 million, mainly due to lower variable compensation expenses and lower salary expenses as a result of our cost reduction programs.

General and administrative expenses decreased to CHF 805 million from CHF 841 million and on an adjusted basis decreased to CHF 791 million from CHF 834 million, mainly due to reduced professional fees and travel and entertainment expenses, partly offset by CHF 44 million higher expenses for provisions for litigation, regulatory and similar matters. The expense for the annual UK bank levy was CHF 80 million compared with CHF 98 million.

Net expenses for services from other business divisions and Corporate Center decreased to CHF 2,765 million from CHF 2,817 million and on an adjusted basis decreased to CHF 2,355 million from CHF 2,441 million.

Cost / income ratio

The cost / income ratio increased to 86.8% from 78.0%. On an adjusted basis, the cost / income ratio increased to 80.1% from 73.5% and was slightly above our target range of 70% to 80%.

Return on attributed equity

Return on attributed equity (RoAE) for 2016 was 13.1%, and 19.6% on an adjusted basis, above our target of over 15%.

→ **Refer to “Equity attribution framework” in the “Capital management” section of this report for more information**

Risk-weighted assets

Fully applied risk-weighted assets (RWA) increased by CHF 7.5 billion to CHF 70.4 billion as of 31 December 2016, below our short- to medium-term expectation of around CHF 85 billion. The increase was driven by an increase of CHF 3.5 billion in market risk RWA as well as increases of CHF 2.7 billion in operational risk RWA and CHF 1.5 billion in credit risk RWA.

→ **Refer to the “Capital management” section of this report for more information**

Leverage ratio denominator

The fully applied leverage ratio denominator decreased by CHF 37 billion to CHF 231 billion as of 31 December 2016 and remained below our short- to medium-term expectation of around CHF 325 billion. The reduction during 2016 was mainly due to effective resource management.

→ **Refer to the “Capital Management” section of this report for more information**

Personnel

The Investment Bank employed 4,734 personnel as of 31 December 2016, a decrease of 509 compared with 5,243 as of 31 December 2015, largely reflecting our cost reduction programs.

2015 compared with 2014

Results

The Investment Bank recorded a profit before tax of CHF 1,892 million compared with a loss before tax of CHF 84 million and on an adjusted basis recorded a profit before tax of CHF 2,288 million compared with CHF 162 million, mainly due to CHF 1,853 million lower net expenses for provisions for litigation, regulatory and similar matters, as well as increased revenues in Investor Client Services, partly offset by lower revenues in Corporate Client Solutions.

Operating income

Total operating income increased by CHF 513 million or 6% to CHF 8,821 million, as revenues in Investor Client Services increased by CHF 811 million, partly offset by CHF 229 million lower revenues in Corporate Client Solutions. On an adjusted basis, excluding gains of CHF 11 million in 2015 and CHF 43 million in 2014 related to partial sales of our investment in IHS Markit, as well as an impairment loss of CHF 48 million on a financial investment in 2014, total operating income increased by CHF 497 million or 6% to CHF 8,810 million from CHF 8,313 million. Net credit loss expense was CHF 68 million, mainly related to the energy sector, compared with a recovery of CHF 2 million in the prior year. In US dollar terms, adjusted operating income increased 1%.

Operating income by business unit:

Corporate Client Solutions

Corporate Client Solutions revenues decreased by CHF 229 million or 7% to CHF 2,960 million, largely due to lower revenues in Debt Capital Markets and Financing Solutions. In US dollar terms, revenues decreased 12%.

Advisory and Equity Capital Markets revenues were both broadly in line with 2014 at CHF 709 million and CHF 1,047 million, respectively.

Debt Capital Markets revenues decreased by CHF 314 million to CHF 691 million, mainly due to lower revenues from leveraged finance following a global fee pool decline of 23%. Investment grade revenues were broadly in line with 2014.

Financing Solutions revenues decreased by CHF 56 million to CHF 441 million, reflecting lower volumes and margin compression in 2015.

Risk Management revenues improved to positive CHF 73 million from negative CHF 42 million, mainly due to gains on portfolio macro hedges and lower risk management costs associated with corporate lending.

Investor Client Services

Investor Client Services revenues increased by CHF 811 million or 16% to CHF 5,929 million and on an adjusted basis by 795 million to 5,918 million due to higher revenues in both the Equities and Foreign Exchange, Rates and Credit businesses. In US dollar terms, adjusted revenues increased 11%.

Equities

Equities revenues increased by CHF 303 million to CHF 3,962 million. Excluding the aforementioned gains and impairment loss on financial investments in 2014, adjusted revenues increased by CHF 259 million to CHF 3,962 million due to higher revenues in Financing Services and, to a lesser extent, in Cash, partly offset by lower revenues in Derivatives.

Cash revenues increased by CHF 19 million to CHF 1,371 million. Excluding a gain related to a financial investment of CHF 4 million in 2014, adjusted revenues increased by CHF 23 million to CHF 1,371 million, mainly due to higher commission income as client activity levels increased.

Derivatives revenues decreased by CHF 43 million to CHF 1,046 million, driven by weaker performance in Europe, Middle East and Africa, partly offset by increased revenues in the Americas and Asia Pacific.

Financing Services revenues increased by CHF 292 million to CHF 1,581 million, driven primarily by increased client activity in Prime Brokerage and Equity Financing.

Foreign Exchange, Rates and Credit

Foreign Exchange, Rates and Credit revenues increased by CHF 508 million to CHF 1,967 million. Excluding gains related to financial investments of CHF 11 million compared with CHF 39 million, adjusted revenues increased by CHF 536 million to CHF 1,956 million, mainly due to higher revenues in our Foreign Exchange and Rates businesses, reflecting elevated client activity and higher volatility, particularly heightened following the Swiss National Bank's actions of 15 January 2015.

Operating expenses

Total operating expenses decreased by CHF 1,463 million or 17% to CHF 6,929 million. Excluding restructuring expenses of CHF 396 million compared with CHF 261 million, an impairment loss of CHF 11 million on an intangible asset in 2015 and gains of CHF 20 million related to changes to retiree benefit plans in the US in 2014, total adjusted operating expenses decreased by CHF 1,629 million or 20% to CHF 6,522 million, mainly as the net expenses for provisions for litigation, regulatory and similar matters decreased to CHF 2 million from CHF 1,855 million, partly offset by higher expenses for variable compensation, in line with improved business performance. In US dollar terms, adjusted operating expenses decreased 23%.

Personnel expenses increased to CHF 3,220 million from CHF 2,964 million. Excluding restructuring expenses of CHF 14 million compared with CHF 64 million, as well as an CHF 11 million gain related to changes to retiree benefit plans in the US in 2014, personnel expenses increased to CHF 3,206 million from CHF 2,911 million, mainly due to higher variable compensation expenses.

General and administrative expenses decreased to CHF 841 million from CHF 2,671 million. Excluding restructuring expenses of CHF 7 million in 2015 compared with CHF 30 million, general and administrative expenses decreased to CHF 834 million from CHF 2,641 million, mainly due to the aforementioned reduction in the net expenses for provisions for litigation, regulatory and similar matters. The expense for the annual UK bank levy was CHF 98 million compared with CHF 64 million.

Net expenses for services from other business divisions and Corporate Center increased to CHF 2,817 million from CHF 2,711 million. Excluding restructuring costs of CHF 376 million in 2015, and CHF 161 million as well as a gain of CHF 9 million related to changes to retiree benefit plans in the US in 2014, adjusted net expenses for services from other business divisions and Corporate Center decreased to CHF 2,441 million from CHF 2,559 million.

Cost / income ratio

The cost / income ratio decreased to 78.0% from 101.0%. On an adjusted basis, the cost / income ratio decreased to 73.5% from 98.1% and was within our target range of 70% to 80%.

Return on attributed equity

Return on attributed equity (RoAE) for 2015 was 25.9%, and 31.3% on an adjusted basis, above our target of over 15%.

Risk-weighted assets

Fully applied risk-weighted assets (RWA) decreased by CHF 4 billion to CHF 63 billion as of 31 December 2015, below our limit of CHF 70 billion for 2015 and our short- to medium-term expectation of CHF 85 billion. The decrease was mainly due to CHF 3 billion lower market risk RWA, primarily related to a reduction in stressed value-at-risk and risks-not-in-VaR.

Leverage ratio denominator

The fully applied Swiss systemically relevant bank (SRB) leverage ratio denominator (LRD) was CHF 268 billion as of 31 December 2015, below our short- to medium-term expectation of CHF 325 billion. From 31 December 2015 onward, the Swiss SRB LRD calculation is fully aligned with the Basel III rules. Prior-period figures are calculated in accordance with the former Swiss SRB rules and are therefore not fully comparable.

Personnel

The Investment Bank employed 5,243 personnel as of 31 December 2015, slightly up from 5,194 as of 31 December 2014.

Corporate Center

Corporate Center¹

	As of or for the year ended			% change from
CHF million, except where indicated	31.12.16	31.12.15	31.12.14	31.12.15
Results				
Total operating income	(357)	315	(823)	
Personnel expenses	3,899	4,049	3,993	(4)
General and administrative expenses	4,893	5,311	4,650	(8)
Services (to) / from business divisions	(7,933)	(7,894)	(7,580)	0
Depreciation and impairment of property, equipment and software	944	868	762	9
Amortization and impairment of intangible assets	21	21	6	0
Total operating expenses²	1,824	2,354	1,832	(23)
Operating profit / (loss) before tax	(2,181)	(2,040)	(2,655)	7
Adjusted results³				
Total operating income as reported	(357)	315	(823)	
of which: own credit on financial liabilities designated at fair value		553	292	
of which: gains on sales of real estate	120	378	44	
of which: net gains / (losses) related to the buyback of debt		(257)		
of which: net foreign currency translation gains / (losses) ⁴	(122)	88		
Total operating income (adjusted)	(355)	(447)	(1,159)	(21)
Total operating expenses as reported	1,824	2,354	1,832	(23)
of which: personnel-related restructuring expenses	519	420	223	
of which: non-personnel-related restructuring expenses	623	719	264	
of which: restructuring expenses allocated from CC – Services	(1,064)	(943)	(425)	
of which: a gain related to a change to retiree benefit plans in the US			(3)	
Total operating expenses (adjusted)	1,746	2,158	1,774	(19)
Operating profit / (loss) before tax as reported	(2,181)	(2,040)	(2,655)	7
Operating profit / (loss) before tax (adjusted)	(2,101)	(2,606)	(2,933)	(19)
Additional information				
Average attributed equity (CHF billion) ⁵	29.1	25.8	20.5	13
Total assets (CHF billion) ⁶	359.4	354.5	427.6	1
Risk-weighted assets (fully applied, CHF billion) ⁷	57.1	60.2	65.8	(5)
Leverage ratio denominator (fully applied, CHF billion) ⁸	300.7	291.2	327.2	3
Personnel (full-time equivalents)	23,955	23,671	23,773	1

¹ Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. ² Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for information on restructuring expenses. ³ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ⁴ Related to the disposal of foreign subsidiaries and branches. ⁵ Refer to the "Capital management" section of this report for more information. ⁶ Based on third-party view, i.e., without intercompany balances. ⁷ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ⁸ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable.

Corporate Center – Services

Corporate Center – Services¹

	As of or for the year ended			% change from
CHF million, except where indicated	31.12.16	31.12.15	31.12.14	31.12.15
Results				
Total operating income	(102)	241	37	
Personnel expenses	3,801	3,903	3,843	(3)
General and administrative expenses	4,145	4,483	4,123	(8)
Depreciation and impairment of property, equipment and software	944	868	762	9
Amortization and impairment of intangible assets	21	21	6	0
Total operating expenses before allocations to BDs and other CC units	8,911	9,274	8,734	(4)
Services (to) / from business divisions and other CC units	(8,164)	(8,215)	(8,046)	(1)
<i>of which: services to Wealth Management</i>	<i>(2,256)</i>	<i>(2,209)</i>	<i>(2,122)</i>	2
<i>of which: services to Wealth Management Americas</i>	<i>(1,221)</i>	<i>(1,193)</i>	<i>(1,121)</i>	2
<i>of which: services to Personal & Corporate Banking</i>	<i>(1,186)</i>	<i>(1,180)</i>	<i>(1,196)</i>	1
<i>of which: services to Asset Management</i>	<i>(530)</i>	<i>(523)</i>	<i>(495)</i>	1
<i>of which: services to Investment Bank</i>	<i>(2,675)</i>	<i>(2,731)</i>	<i>(2,658)</i>	(2)
<i>of which: services to CC – Group ALM</i>	<i>(110)</i>	<i>(96)</i>	<i>(88)</i>	15
<i>of which: services to CC – Non-core and Legacy Portfolio</i>	<i>(225)</i>	<i>(313)</i>	<i>(404)</i>	(28)
Total operating expenses²	747	1,059	688	(29)
Operating profit / (loss) before tax	(849)	(818)	(652)	4
Adjusted results³				
Total operating income as reported	(102)	241	37	
<i>of which: gains on sales of real estate</i>	<i>120</i>	378	44	
Total operating income (adjusted)	(222)	(137)	(7)	62
Total operating expenses as reported before allocations	8,911	9,274	8,734	(4)
<i>of which: personnel-related restructuring expenses</i>	<i>518</i>	406	221	
<i>of which: non-personnel-related restructuring expenses</i>	<i>623</i>	719	263	
Total operating expenses (adjusted) before allocations	7,770	8,151	8,266	(5)
Services (to) / from BDs and other CC units	(8,164)	(8,215)	(8,046)	(1)
<i>of which: restructuring expenses allocated to BDs and other CC units</i>	<i>(1,084)</i>	<i>(986)</i>	<i>(454)</i>	
Total operating expenses as reported after allocations	747	1,059	688	(29)
Total operating expenses (adjusted) after allocations	690	919	658	(25)
Operating profit / (loss) before tax as reported	(849)	(818)	(652)	4
Operating profit / (loss) before tax (adjusted)	(912)	(1,056)	(666)	(14)
Additional information				
Average attributed equity (CHF billion) ⁴	22.8	19.6	12.3	16
Total assets (CHF billion) ⁵	23.7	22.6	19.9	5
Risk-weighted assets (fully applied, CHF billion) ⁶	27.6	23.6	23.0	17
Leverage ratio denominator (fully applied, CHF billion) ⁷	5.8	4.8	(2.6)	21
Personnel (full-time equivalents)	23,750	23,470	23,517	

¹ Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. ² Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for information on restructuring expenses. ³ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ⁴ Refer to the "Capital management" section of this report for more information. ⁵ Based on third-party view, i.e., without intercompany balances. ⁶ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ⁷ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable.

2016 compared with 2015

Corporate Center – Services recorded a loss before tax of CHF 849 million compared with CHF 818 million, and CHF 912 million on an adjusted basis compared with CHF 1,056 million.

Operating income

Operating income was negative CHF 102 million compared with positive CHF 241 million, mainly as gains on sales of real estate decreased to CHF 120 million from CHF 378 million. On an adjusted basis, operating income was negative CHF 222 million compared with negative CHF 137 million, mainly due to lower income from the investment of the Group's equity allocated from Corporate Center – Group Asset and Liability Management (Group ALM).

Operating expenses

Operating expenses before service allocations to business divisions and other Corporate Center units

Before service allocations to business divisions and other Corporate Center units, total operating expenses decreased by CHF 363 million or 4% to CHF 8,911 million. Restructuring expenses were CHF 1,141 million compared with CHF 1,125 million and mainly related to our transitioning activities to nearshore and offshore locations, as well as outsourcing of IT and other services. Adjusted operating expenses before allocations decreased by CHF 381 million or 5% to CHF 7,770 million.

Personnel expenses decreased by CHF 102 million to CHF 3,801 million and by CHF 216 million to CHF 3,283 million on an adjusted basis. The decrease in adjusted personnel expenses was mainly a result of nearshoring and offshoring initiatives as well as lower pension costs for our Swiss pension plan, reflecting the effect of changes to demographic and financial assumptions.

General and administrative expenses decreased by CHF 338 million to CHF 4,145 million and adjusted general and administrative expenses decreased by CHF 242 million, mainly due to lower expenses for outsourcing and decreased professional fees.

Depreciation and impairment of property, equipment and software increased to CHF 944 million from CHF 868 million, reflecting increased depreciation expenses related to internally generated capitalized software.

Services to / from business divisions and other Corporate Center units

Corporate Center – Services allocated expenses of CHF 8,164 million to the business divisions and other Corporate Center units compared with CHF 8,215 million. Adjusted net allocated expenses for services to business divisions and other Corporate Center units were CHF 7,080 million compared with CHF 7,231 million.

Operating expenses after service allocations to / from business divisions and other Corporate Center units

Corporate Center – Services retains costs related to Group governance functions and other corporate activities, certain strategic and regulatory projects and certain restructuring expenses. Total operating expenses remaining in Corporate Center – Services after allocations decreased to CHF 747 million from CHF 1,059 million and to CHF 690 million from CHF 919 million on an adjusted basis, mainly reflecting lower retained expenses for regulatory projects, a reduction of CHF 13 million in expenses for provisions for litigation, regulatory and similar matters, and lower pension costs for our Swiss pension plan, reflecting the effect of changes to demographic and financial assumptions.

2015 compared with 2014

Corporate Center – Services recorded a loss before tax of CHF 818 million in 2015 compared with CHF 652 million, and CHF 1,056 million on an adjusted basis compared with CHF 666 million.

Operating income

Total operating income was CHF 241 million compared with CHF 37 million, mainly as gains on sales of real estate increased to CHF 378 million from CHF 44 million, primarily due to the sale of a property in Geneva, Switzerland. This was partly offset by lower income from the investment of the Group's equity allocated from Group ALM. Furthermore, 2014 included a gain of CHF 58 million related to the release of a provision for litigation, regulatory and similar matters, which was recorded within other income.

Operating expenses

Operating expenses before service allocations to business divisions and other Corporate Center units

Before service allocations to the business divisions and other Corporate Center units, total operating expenses increased by CHF 540 million or 6% to CHF 9,274 million. Restructuring expenses were CHF 1,125 million compared with CHF 484 million and mainly related to our transitioning activities to nearshore and offshore locations. Adjusted operating expenses before service allocations were CHF 8,151 million compared with CHF 8,266 million. This decrease of CHF 115 million was mainly due to CHF 139 million lower personnel expenses as well as decreased occupancy costs and professional fees. These decreases were partly offset by net expenses for provisions for litigation, regulatory and similar matters of CHF 15 million compared with a net release of provisions of CHF 125 million. Moreover, 2015 included higher depreciation expenses related to internally generated capitalized software.

Personnel expenses increased by CHF 60 million to CHF 3,903 million and included restructuring expenses of CHF 406 million compared with CHF 221 million. On an adjusted basis, personnel expenses were CHF 3,499 million compared with CHF 3,638 million, mainly as a result of outsourcing, nearshoring and offshoring initiatives.

General and administrative expenses increased by CHF 360 million to CHF 4,483 million. On an adjusted basis, excluding net restructuring expenses of CHF 707 million compared with CHF 240 million, general and administrative expenses decreased by CHF 107 million, mainly due to lower occupancy costs and professional fees. These decreases were partly offset by the aforementioned net expenses for provisions for litigation, regulatory and similar matters compared with a net release.

Depreciation and impairment of property, equipment and software increased to CHF 868 million from CHF 762 million, reflecting increased depreciation expenses related to internally generated capitalized software.

Services to / from business divisions and other Corporate Center units

Net expenses for services to business divisions and other Corporate Center units were CHF 8,215 million compared with CHF 8,046 million. Adjusted net allocated expenses for services were CHF 7,231 million compared with CHF 7,608 million and mainly related to lower personnel expenses and occupancy costs, partly offset by increased depreciation expenses.

Operating expenses after service allocations to / from business divisions and other Corporate Center units

Operating expenses remaining in Corporate Center – Services after allocations relate mainly to Group governance functions and other corporate activities, as well as to certain strategic and regulatory projects and certain restructuring expenses.

Total operating expenses remaining in Corporate Center – Services after allocations increased to CHF 1,059 million compared with CHF 688 million. This increase of CHF 371 million was mainly due to the aforementioned net expenses for provisions for litigation, regulatory and similar matters compared with a net release, as well as restructuring expenses of CHF 140 million compared with CHF 30 million. Furthermore, the full-year costs incurred by Corporate Center – Services exceeded the cost allocations to the business divisions and Non-core and Legacy Portfolio that were agreed as part of the annual business planning cycle.

Corporate Center – Group Asset and Liability Management

Corporate Center – Group ALM¹

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Results				
Business division-aligned risk management net income	847	878	564	(4)
Capital investment and issuance net income	45	272	566	(83)
Group structural risk management net income	(547)	(647)	(824)	(15)
Total risk management net income before allocations	345	503	307	(31)
Allocations to business divisions and other CC units	(512)	(832)	(831)	(38)
of which: Wealth Management	(389)	(471)	(481)	(17)
of which: Wealth Management Americas	(118)	(104)	(116)	13
of which: Personal & Corporate Banking	(332)	(421)	(461)	(21)
of which: Asset Management	(7)	(15)	(27)	(53)
of which: Investment Bank	260	211	100	23
of which: CC – Services	(36)	(145)	(217)	(75)
of which: CC – Non-core and Legacy Portfolio	110	114	371	(4)
Total risk management net income after allocations	(167)	(329)	(524)	(49)
Accounting asymmetries related to economic hedges	27	(66)	(16)	
Hedge accounting ineffectiveness ²	7	156	89	(96)
Net foreign currency translation gains / (losses) ³	(122)	88		
Net gains / (losses) related to the buyback of debt		(257)		
Own credit on financial liabilities designated at fair value		553	292	
Other	37	133	162	(72)
Total operating income as reported	(219)	277	2	
Total operating income (adjusted)^{4, 5}	(97)	(107)	(290)	(9)
Personnel expenses	31	30	26	3
General and administrative expenses	17	22	22	(23)
Depreciation and impairment of property, equipment and software	0	0	0	
Amortization and impairment of intangible assets	0	0	0	
Services (to) / from business divisions and other CC units	(49)	(57)	(48)	(14)
Total operating expenses⁶	(1)	(5)	0	(80)
Operating profit / (loss) before tax as reported	(218)	282	2	
Operating profit / (loss) before tax (adjusted)⁴	(96)	(102)	(290)	(6)
Additional information				
Average attributed equity (CHF billion) ⁷	4.3	3.3	3.2	30
Total assets (CHF billion) ⁸	267.2	237.5	237.9	13
Risk-weighted assets (fully applied, CHF billion) ⁹	10.6	6.0	7.1	77
Leverage ratio denominator (fully applied, CHF billion) ¹⁰	272.4	247.9	236.3	10
Personnel (full-time equivalents)	142	125	120	14

¹ Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. ² Does not include ineffectiveness of hedges of net investments in foreign operations. ³ Related to the disposal of foreign subsidiaries and branches. ⁴ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ⁵ Adjusted total operating income excludes foreign currency translation gains or losses, net gains or losses related to the buyback of debt and own credit on financial liabilities designated at fair value. ⁶ Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for information on restructuring expenses. ⁷ Refer to the "Capital management" section of this report for more information. ⁸ Based on third-party view, i.e., without intercompany balances. ⁹ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ¹⁰ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable.

2016 compared with 2015

Corporate Center – Group Asset and Liability Management (Group ALM) recorded a loss before tax of CHF 218 million compared with a profit before tax of CHF 282 million. On an adjusted basis, the loss before tax was CHF 96 million compared with a loss of CHF 102 million, driven by lower negative net income after allocations, largely offset by lower gains on hedge accounting ineffectiveness.

Transfer of Risk Exposure Management function

Consistent with changes in the manner in which operating segment performance is assessed, we transferred in 2016 the Risk Exposure Management (REM) function from Corporate Center – Non-core and Legacy Portfolio to Corporate Center – Group ALM to further harmonize REM risk management responsibility with the reporting structure and align it more closely with other activities performed by Group ALM. REM primarily performs risk management over credit, debit and funding valuation adjustments for our over-the-counter (OTC) derivatives portfolio.

Prior-period profit and loss information has been restated to reflect this transfer. Net income from REM before allocations is now presented within the line “Business division-aligned risk management net income” and is fully allocated to the business divisions and other Corporate Center units. There was no effect on operating profit before tax for any segment for any period from this restatement.

Prior-period information for balance sheet assets and risk-weighted assets has not been restated as the effect would not have been material.

The leverage ratio denominator (LRD) of Group ALM has been restated for 31 December 2015 and as a result increased by CHF 7.7 billion, with an equal and opposite decrease in Corporate Center – Non-core and Legacy Portfolio.

Operating income

Total operating income was negative CHF 219 million compared with positive CHF 277 million. Adjusted total operating income retained by Group ALM was negative CHF 97 million compared with negative CHF 107 million.

Business division-aligned risk management net income

Net income from business division-aligned risk management activities was CHF 847 million compared with CHF 878 million, mainly reflecting reduced interest rate risk management revenues in the banking book for Wealth Management and Personal & Corporate Banking. This decrease was mainly due to lower penalty fees received from clients from the early termination of loans and lower interest income from managing euro-denominated deposits in the current negative interest rate environment.

Capital investment and issuance net income

Net income from capital investment and issuance activities was CHF 45 million compared with CHF 272 million. This decrease was due to CHF 168 million in higher net interest expenses as a result of an increase in total outstanding long-term debt that is eligible for total loss-absorbing capital, fees paid related to the issuance of additional tier 1 capital and senior unsecured debt during the year, and CHF 58 million lower interest income from the investment of the Group’s equity due to maturing positions being replaced at lower long-term interest rates.

Group structural risk management net income

Net income from Group structural risk management activities was negative CHF 547 million compared with negative CHF 647 million. An increase in income of CHF 481 million from the management of the Group’s high-quality liquid assets (HQLA), mainly due to wider spreads between certain HQLA and internal funding liabilities, was largely offset by an increase in net interest expense of CHF 382 million due to issuances of long-term debt during 2016.

Allocations to business divisions and other Corporate Center units

Combined allocations from risk management activities to business divisions and other Corporate Center units were CHF 512 million compared with CHF 832 million. This decrease primarily reflects the aforementioned lower net income from capital investment and issuance activities, which is fully allocated to the business divisions and other Corporate Center units in proportion to their attributed equity. In addition, cost allocations from Group structural risk management activities increased by CHF 62 million. This allocation is based on consumption of funding and liquidity risk by the business divisions and other Corporate Center units.

Total risk management net income after allocations

Group ALM retained negative CHF 167 million from its risk management activities after allocations compared with negative CHF 329 million.

Retained income from risk management activities is entirely related to Group structural risk management and is mainly the net result of costs from buffers that are maintained by Group ALM at levels above the total consumption of the business divisions and the revenues generated by Group ALM from the management of the Group’s HQLA portfolio relative to the benchmark rates used to allocate the costs.

Accounting asymmetries related to economic hedges

Net income retained by Group ALM due to accounting asymmetries related to economic hedges was CHF 27 million compared with negative CHF 66 million, primarily due to a fair value gain of CHF 174 million on certain internal funding transactions due to the tightening of own credit funding spreads compared with a loss of CHF 19 million. This was partly offset by a loss of CHF 43 million related to HQLA classified as available for sale compared with a gain of CHF 102 million. The lower magnitude of this asymmetrical result reflects the change applied since the first quarter of 2016 to classify the majority of newly purchased HQLA debt securities as financial assets designated at fair value through profit or loss, instead of classifying them as financial assets available for sale.

→ **Refer to the “Significant accounting and financial reporting changes” section of this report for more information on the balance sheet classification of newly purchased high-quality liquid debt securities**

Hedge accounting ineffectiveness

Net income related to hedge accounting ineffectiveness was CHF 7 million compared with CHF 156 million. The higher revenue in the prior year mainly related to our cash flow hedges following the Swiss National Bank's actions in January 2015. This ineffectiveness primarily arises from changes in the spread between LIBOR and the overnight index swap rate due to differences in the way these impact the valuation of the hedged items and hedging instruments through either the benchmark rate determining cash flows or the discount rate.

Other

Other net income was CHF 37 million compared with CHF 133 million, reflecting negative income related to own-bond market-making activity in the Investment Bank and lower interest income retained by Group ALM on behalf of non-controlling interests. Additionally, 2016 included a loss of CHF 12 million from the Group ALM-managed monthly conversion of non-Swiss franc profits compared with a gain of CHF 56 million in 2015.

Balance sheet assets

Balance sheet assets increased by CHF 30 billion to CHF 267 billion, mainly due to a CHF 23 billion net increase in financial assets designated at fair value, available for sale and held to maturity, as well as an CHF 18 billion increase in cash and balances with central banks that primarily occurred toward the end of the year. These increases mainly reflected liquidity requirements applicable to our US intermediate holding company and UBS Europe SE and also resulted from an increase in net funds transferred to Group ALM by the business divisions.

Group ALM is responsible for investing any funding generated that is surplus to the requirements of the business divisions. As a result, Group ALM's balance sheet is mainly driven by the volume of liabilities created across the Group rather than centrally managed asset requirements.

→ **Refer to the “Treasury management” section of this report for more information**

Risk-weighted assets

Fully applied risk-weighted assets (RWA) increased by CHF 5 billion to CHF 11 billion as of 31 December 2016, largely as a result of a revised methodology for the allocation of operational risk RWA to business divisions and Corporate Center units and an increase in credit risk in Group ALM's HQLA portfolios.

→ **Refer to the “Capital management” section of this report for more information**

Leverage ratio denominator

The LRD increased to CHF 272 billion from CHF 248 billion, consistent with the increase in balance sheet assets.

→ **Refer to the “Capital management” section of this report for more information**

2015 compared with 2014

Corporate Center – Group Asset and Liability Management (Group ALM) recorded a profit before tax of CHF 282 million compared with CHF 2 million, and an adjusted loss before tax of CHF 102 million compared with CHF 290 million, driven by lower negative net income after allocations.

Operating income

Total operating income was CHF 277 million compared with CHF 2 million. Adjusted total operating income retained by Group ALM was negative CHF 107 million compared with negative CHF 290 million.

Business division-aligned risk management net income

Net income from business division-aligned risk management activities was CHF 878 million compared with CHF 564 million, mainly reflecting a loss in REM of CHF 43 million compared with CHF 290 million following the incorporation of funding valuation adjustments (FVA) into the valuation estimates for certain OTC derivatives in 2014.

Capital investment and issuance net income

Net income from capital investment and issuance activities was CHF 272 million compared with CHF 566 million. This decrease was due to CHF 201 million higher net interest expenses as a result of an increase in total outstanding long-term debt that is eligible for total loss-absorbing capital and CHF 93 million lower interest income from the investment of the Group's equity due to maturing positions being replaced at lower long-term interest rates.

Group structural risk management net income

Net income from Group structural risk management activities was negative CHF 647 million compared with negative CHF 824 million, mainly due to lower net interest expenses on the long-term debt portfolio as debt matured.

Allocations to business divisions and other Corporate Center units

Combined allocations from risk management activities to business divisions and other Corporate Center units were largely unchanged at CHF 832 million compared with CHF 831 million. The aforementioned lower net income from capital investment

and issuance activities, which is fully allocated to the business divisions and other Corporate Center units, was largely offset by the aforementioned higher net income from business division-aligned risk management activities, reflecting the incorporation of FVA for certain OTC derivatives in the prior year, which was allocated to Corporate Center – Non-core and Legacy Portfolio.

Total risk management net income after allocations

Group ALM retained negative CHF 329 million from its risk management activities after allocations compared with negative CHF 524 million. Retained income from risk management activities is entirely related to Group structural risk management.

Accounting asymmetries related to economic hedges

Net income retained by Group ALM due to accounting asymmetries related to economic hedges was negative CHF 66 million compared with negative CHF 16 million, primarily due to a fair value loss of CHF 19 million on certain internal funding transactions due to the tightening of own credit funding spreads compared with a gain of CHF 82 million.

Hedge accounting ineffectiveness

Net income related to hedge accounting ineffectiveness was CHF 156 million compared with CHF 89 million. The higher revenue in 2015 mainly related to our cash flow hedges following the Swiss National Bank's actions in January 2015.

Other

Other net income was CHF 133 million compared with CHF 162 million, mainly due to lower interest income retained by Group ALM on behalf of non-controlling interests.

Balance sheet assets

Balance sheet assets were stable at CHF 238 billion as of 31 December 2015.

Risk-weighted assets

RWA decreased by CHF 1 billion to CHF 6 billion as of 31 December 2015.

Leverage ratio denominator

Adjusted for the aforementioned REM transfer, the LRD was CHF 248 billion as of 31 December 2015.

Corporate Center – Non-core and Legacy Portfolio

Corporate Center – Non-core and Legacy Portfolio¹

CHF million, except where indicated	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Results				
Income	(23)	(195)	(863)	(88)
Credit loss (expense) / recovery	(13)	(8)	2	63
Total operating income	(36)	(203)	(862)	(82)
Personnel expenses	66	116	124	(43)
General and administrative expenses	732	806	505	(9)
Services (to) / from business divisions and other CC units	280	379	514	(26)
<i>of which: services from CC – Services</i>	<i>225</i>	<i>313</i>	<i>404</i>	<i>(28)</i>
Depreciation and impairment of property, equipment and software	0	0	0	
Amortization and impairment of intangible assets	0	0	0	
Total operating expenses²	1,078	1,301	1,144	(17)
Operating profit / (loss) before tax	(1,114)	(1,503)	(2,005)	(26)
Adjusted results³				
Total operating income as reported	(36)	(203)	(862)	(82)
Total operating income (adjusted)	(36)	(203)	(862)	(82)
Total operating expenses as reported	1,078	1,301	1,144	(17)
<i>of which: personnel-related restructuring expenses</i>	<i>1</i>	<i>14</i>	<i>1</i>	
<i>of which: non-personnel-related restructuring expenses</i>	<i>0</i>	<i>0</i>	<i>0</i>	
<i>of which: restructuring expenses allocated from CC – Services</i>	<i>21</i>	<i>43</i>	<i>29</i>	
<i>of which: a gain related to a change to retiree benefit plans in the US</i>			<i>(3)</i>	
Total operating expenses (adjusted)	1,057	1,245	1,116	(15)
Operating profit / (loss) before tax as reported	(1,114)	(1,503)	(2,005)	(26)
Operating profit / (loss) before tax (adjusted)	(1,093)	(1,447)	(1,977)	(24)
Additional information				
Average attributed equity (CHF billion) ⁴	2.1	2.9	4.9	(28)
Total assets (CHF billion) ⁵	68.5	94.4	169.8	(27)
Risk-weighted assets (fully applied, CHF billion) ⁶	18.9	30.7	35.7	(38)
Leverage ratio denominator (fully applied, CHF billion) ⁷	22.4	38.5	93.4	(42)
Personnel (full-time equivalents)	63	77	137	(18)

¹ Comparative figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. ² Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for information on restructuring expenses. ³ Adjusted results are non-GAAP financial measures as defined by SEC regulations. ⁴ Refer to the "Capital management" section of this report for more information. ⁵ Based on third-party view, i.e., without intercompany balances. ⁶ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ⁷ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable.

2016 compared with 2015

Corporate Center – Non-core and Legacy Portfolio recorded a loss before tax of CHF 1,114 million compared with CHF 1,503 million.

Operating income

Operating income was negative CHF 36 million compared with negative CHF 203 million. The improved result was mainly due to lower losses from novation and unwind activities. Furthermore, 2016 included a gain related to the settlement of a litigation claim and valuation gains on financial assets designated at fair value compared with valuation losses in 2015.

→ **Refer to the “Risk management and control” section of this report for more information**

Operating expenses

Total operating expenses decreased by CHF 223 million or 17% to CHF 1,078 million. Net expenses for services from business divisions and other Corporate Center units decreased by CHF 99 million as a result of reduced consumption of shared services. Personnel expenses decreased by CHF 50 million, driven by a decrease in staff levels. Net expenses for provisions for litigation, regulatory and similar matters declined by CHF 36 million to CHF 584 million. Moreover, 2016 included an expense of CHF 33 million for the annual UK bank levy compared with CHF 50 million in 2015.

Balance sheet assets

During 2016, balance sheet assets decreased to CHF 68 billion from CHF 94 billion. Positive replacement values (PRVs) decreased by CHF 22 billion, primarily reflecting ongoing reduction activity including negotiated bilateral settlements, third-party novations, including transfers to central clearing houses, and agreements to net down trades with other dealer counterparties, partly offset by fair value increases resulting from increases in interest rates. Total assets excluding PRVs decreased by CHF 4 billion to CHF 12 billion, mainly due to a reduction in cash collateral receivables on derivative instruments.

Assets classified as Level 3 in the fair value hierarchy totaled CHF 2.0 billion as of 31 December 2016.

Risk-weighted assets

Fully applied risk-weighted assets (RWA) decreased by CHF 12 billion to CHF 19 billion, largely as a result of a revised methodology for the allocation of operational risk RWA to business divisions and Corporate Center units.

→ **Refer to the “Capital management” section of this report for more information**

Leverage ratio denominator

The fully applied leverage ratio denominator (LRD) decreased to CHF 22 billion from CHF 38 billion, consistent with the reduction in balance sheet assets.

→ **Refer to the “Capital management” and “Treasury management” sections of this report for more information**
→ **Refer to “Corporate Center – Group Asset and Liability Management” in this section for more information on the transfer of the Risk Exposure Management function**

Composition of Non-core and Legacy Portfolio

An overview of the composition of Non-core and Legacy Portfolio is presented in the table below.

The groupings of positions by category and the order in which these are listed are not necessarily representative of the

magnitude of the risks associated with them, nor do the metrics shown in the table necessarily represent the risk measures used to manage and control these positions.

CHF billion

Exposure category	Description	RWA		Total assets ¹		LRD ²	
		31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Rates (linear)	Consists of linear OTC products (primarily vanilla interest rate, inflation, basis and cross-currency swaps for all major currencies and some emerging markets) and non-linear OTC products (vanilla and structured options). More than 95% of gross PRVs are collateralized. Uncollateralized exposures are well diversified across counterparties, of which the majority is rated investment grade. Approximately 40% of gross PRVs are due to mature by end-2021.	2.5	3.6	42.6	55.9	9.4	17.8
Rates (non-linear)		0.8	0.7	14.5	22.3	2.0	2.8
Credit	Consists primarily of a residual structured credit book that is largely hedged against market risk. The remaining counterparty risk is fully collateralized and diversified across multiple names. The residual structured credit book is expected to materially run off by end-2018. Also includes corporate lending and residual distressed credit positions, with a similar expected run-off profile.	0.5	0.5	1.0	2.0	2.2	7.0
Securitizations	Consists primarily of a portfolio of CDS positions referencing ABS assets with related cash and synthetic hedges to mitigate the impact of directional movements. The majority of the remaining positions are expected to run off by end-2018.	2.4	1.5	1.4	1.8	1.4	1.9
Auction preferred stock (APS) and auction rate securities (ARSs)	Portfolio of long-dated APS and municipal ARSs. All APS were rated A or above and all ARS exposures were rated Ba1 or above as of 31 December 2016.	0.7	0.9	2.5	2.8	2.5	2.8
Muni swaps and options	Swaps and options with US state and local governments. More than 95% of the PRVs are with counterparties that were rated investment grade as of 31 December 2016.	0.4	0.5	2.3	3.4	1.7	2.5
Other	Diverse portfolio of smaller positions.	1.5	1.8	4.2	6.3	3.2	3.5 ³
Operational risk	Operational risk RWA allocated to Non-core and Legacy Portfolio.	10.1	21.1	–	–	–	–
Total		18.9	30.7	68.5	94.4	22.4	38.5

1 Total assets of CHF 68.5 billion as of 31 December 2016 (CHF 94.4 billion as of 31 December 2015) include positive replacement values (gross exposure excluding the impact of any counterparty netting) of CHF 56.5 billion (CHF 78.5 billion as of 31 December 2015). 2 Swiss SRB leverage ratio denominator. 3 Comparative figure as of 31 December 2015 has been restated to reflect the transfer of the Risk Exposure Management (REM) function from Corporate Center – Non-core and Legacy Portfolio to Corporate Center – Group ALM in 2016. Refer to the “Corporate Center – Group Asset and Liability Management” section of this report for more information.

2015 compared with 2014

Corporate Center – Non-core and Legacy Portfolio recorded a loss before tax of CHF 1,503 million compared with CHF 2,005 million.

Operating income

Operating income was negative CHF 203 million in 2015 and mainly related to losses from novation and unwind activities, and to valuation losses on financial assets designated at fair value.

In the prior year, revenues were negative CHF 862 million, mainly due to a net loss of CHF 345 million related to funding and debit valuation adjustments (FVA / DVA) on derivatives, of which CHF 252 million was recorded upon the implementation of FVA. In addition, 2014 included negative revenues of CHF 197 million due to novation and unwind activity in Rates, a loss of CHF 108 million resulting from the termination of certain credit default swap contracts and a loss of CHF 97 million in structured credit as a result of exiting the majority of the correlation trading portfolio.

Operating expenses

Total operating expenses increased by CHF 157 million or 14% to CHF 1,301 million, largely as net expenses for provisions for litigation, regulatory and similar matters increased by CHF 427 million to CHF 620 million. This increase was partly offset by CHF 135 million lower net expenses for services from business divisions and other Corporate Center units as a result of reduced consumption of shared services. Moreover, 2014 included CHF 120 million in net expenses related to certain disputed receivables. 2015 included an expense of CHF 50 million for the annual UK bank levy compared with CHF 52 million in 2014.

Balance sheet assets

During 2015, balance sheet assets decreased to CHF 94 billion from CHF 170 billion, mainly reflecting CHF 62 billion lower PRVs. Within our rates portfolio, PRVs decreased by CHF 57 billion, driven by fair value decreases following interest rate movements, as well as by our ongoing reduction activity including negotiated bilateral settlements (unwinds), third-party novations, including transfers to central clearing houses (trade migrations), and agreements to net down trades with other dealer counterparties (trade compressions). Collateral delivered against over-the-counter (OTC) derivatives decreased by CHF 9 billion.

Assets classified as Level 3 in the fair value hierarchy totaled CHF 2.2 billion as of 31 December 2015.

Risk-weighted assets

Fully applied RWA decreased by CHF 5 billion to CHF 31 billion, mainly as a result of reductions of outstanding OTC derivative transactions, reflecting negotiated bilateral settlements with specific counterparties, third-party novations and trade compressions.

Leverage ratio denominator

Adjusted for the REM transfer, the LRD was CHF 38 billion as of 31 December 2015.

Risk, treasury and capital management

Management report

Audited information according to IFRS 7 and IAS 1

Risk and capital disclosures provided in line with the requirements of International Financial Reporting Standard 7 (IFRS 7) *Financial Instruments: Disclosures*, and International Accounting Standard 1 (IAS 1) *Financial Statements: Presentation* form part of the financial statements included in the "Consolidated financial statements" section of this report and audited by the independent registered public accounting firm, Ernst & Young Ltd, Basel. This information is marked as "Audited" within this section of the report. Audited information provided in this section applies to both UBS Group AG (consolidated) and UBS AG (consolidated). Differences between these two scopes of consolidation are provided where applicable.

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Risk management and control

Overview of risks arising from our business activities

The scale of our business activities is dependent on the capital we have available to cover the risks in our business, the size of our on- and off-balance sheet assets through their contribution to our capital, leverage and liquidity ratios, and our risk appetite.

The table on the next page shows risk-weighted assets (RWA), the leverage ratio denominator (LRD) and risk-based-capital (RBC), as well as attributed tangible equity, total assets and operating profit before tax on both a reported and adjusted basis for our business divisions and Corporate Center units. This illustrates how the activities in our business divisions and Corporate Center units are captured in the risk measures mentioned above, and it illustrates their financial performance in the context of these measures.

- Refer to the “Capital management” section of this report for more information on risk-weighted assets, leverage ratio denominator and our current and revised equity attribution framework
- Refer to “Statistical measures” in this section for more information on risk-based capital
- Refer to the “Performance by business division and Corporate Center unit – reported and adjusted” table in the “Group performance” section of this report for more information

Key risks, risk measures and performance by business division and Corporate Center unit

Business divisions and Corporate Center units	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio
Key risks arising from business activities	Credit risk from lending against securities collateral and mortgages, and a small amount of derivatives trading activity. Minimal contribution to market risk	Credit risk from lending against securities collateral and mortgages Market risk from municipal securities and taxable fixed income securities	Credit risk from retail business, mortgages, secured and unsecured corporate lending, and a small amount of derivatives trading activity. Minimal contribution to market risk	Small amounts of credit and market risk	Credit risk from lending, derivatives trading and securities financing Market risk from primary underwriting activities and secondary trading	No material risk exposures	Credit and market risks arising from management of the Group's balance sheet, capital, profit or loss and liquidity portfolios Central management of liquidity, funding, counterparty credit and structural FX risk	Credit risk from remaining lending and derivatives exposures Market risk is materially hedged
Operational risk is an inevitable consequence of being in business, as losses can result from inadequate or failed internal processes, people and systems, or from external events. It can arise as a result of our past and current business activities across all business divisions and Corporate Center units.								

Risk measures and performance

	31.12.16							
	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio
<i>CHF billion, as of or for the year ended</i>								
Risk-weighted assets (fully applied) ¹	25.8	23.8	41.6	3.9	70.4	27.6	10.6	18.9
of which: credit risk	12.5	9.1	37.7	1.6	37.0	1.4	7.3	6.2
of which: market risk	0.0	1.4	0.0	0.0	14.0	(3.2) ²	0.7	2.6
of which: operational risk	13.2	13.2	3.9	2.3	19.5	13.1	2.5	10.1
Leverage ratio denominator (fully applied) ³	115.5	68.1	152.2	2.7	231.2	5.8	272.4	22.4
Risk-based capital ⁴	1.5	1.3	2.7	0.3	7.8	12.7	5.2	2.4
Average attributed tangible equity ⁵	2.8	1.9	4.1	0.2	7.6	19.2	4.3	2.1
Total assets	115.5	65.9	139.9	12.0	242.3	23.7	267.2	68.5
Operating profit / (loss) before tax (as reported)	1.9	1.1	1.8	0.5	1.0	(0.8)	(0.2)	(1.1)
Operating profit / (loss) before tax (adjusted) ⁶	2.4	1.2	1.8	0.6	1.5	(0.9)	(0.1)	(1.1)

	31.12.15							
	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM ⁷	CC – Non-core and Legacy Portfolio ⁷
<i>CHF billion, as of or for the year ended</i>								
Risk-weighted assets (fully applied) ¹	25.3	21.9	34.6	2.6	62.9	23.6	6.0	30.7
of which: credit risk	12.6	8.5	32.9	1.7	35.5	1.3	5.0	6.9
of which: market risk	0.0	1.0	0.0	0.0	10.5	(2.9) ²	0.9	2.6
of which: operational risk	12.6	12.4	1.6	0.9	16.8	9.5	0.1	21.1
Leverage ratio denominator (fully applied) ³	119.0	62.9	153.8	2.7	268.0	4.8	240.2	46.2
Risk-based capital ⁴	1.0	1.3	2.9	0.3	6.1	12.6	3.6	2.7
Average attributed tangible equity ⁵	2.8	1.9	3.9	0.4	7.2	15.9	3.2	2.9
Total assets	119.9	61.0	141.2	12.9	253.5	22.6	237.5	94.4
Operating profit / (loss) before tax (as reported)	2.7	0.7	1.6	0.6	1.9	(0.8)	0.3	(1.5)
Operating profit / (loss) before tax (adjusted) ⁶	2.8	0.8	1.7	0.6	2.3	(1.1)	(0.1)	(1.4)

¹ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ² Corporate Center – Services market risk RWA were negative, as they included the effect of portfolio diversification across businesses. ³ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. ⁴ Refer to "Statistical measures" in this section for more information on risk-based capital. ⁵ Refer to the "Capital management" section of this report for more information on our equity attribution framework. ⁶ Adjusted results are non-GAAP financial measures as defined by SEC regulations. Refer to the "Performance by business division and Corporate Center unit – reported and adjusted" table in the "Group performance" section of this report for more information. ⁷ Comparative figures as of 31 December 2015 in this table have been restated to reflect the transfer of the Risk Exposure Management (REM) function from Corporate Center – Non-core and Legacy Portfolio to Corporate Center – Group ALM in 2016. Refer to "Corporate Center – Group Asset and Liability Management" in the "Corporate Center" sections in "Operating environment and strategy" and "Financial and operating performance" of this report for more information.

Risk categories

We categorize the risk exposures of our business divisions and Corporate Center units as outlined in the table below.

Risk definitions

	Risk managed by	Independent oversight by	Captured in our risk appetite framework
Primary risks: the risks that our businesses may take to generate a return			
Audited Credit risk: the risk of loss resulting from the failure of a client or counterparty to meet its contractual obligations toward UBS. This includes settlement risk and loan underwriting risk: <i>Settlement risk:</i> the risk of loss resulting from transactions that involve exchange of value (e.g., security versus cash) where we must deliver without first being able to determine with certainty that we will receive the countervalue <i>Loan underwriting risk:</i> the risk of loss arising during the holding period of financing transactions which are intended for further distribution ▲	Business management	Risk Control	●
Audited Market risk (traded and non-traded): the risk of loss resulting from adverse movements in market variables. Market variables include observable variables such as interest rates, foreign exchange rates, equity prices, credit spreads and commodity (including precious metal) prices, and variables which may be unobservable or only indirectly observable, such as volatilities and correlations. Market risk includes issuer risk and investment risk: <i>Issuer risk:</i> the risk of loss from changes in fair value resulting from credit-related events affecting an issuer to which we are exposed through tradable securities or derivatives referencing the issuer <i>Investment risk:</i> issuer risk associated with positions held as financial investments ▲	Business management	Risk Control	●
Country risk: the risk of losses resulting from country-specific events. It includes transfer risk, whereby a country's authorities prevent or restrict the payment of an obligation, as well as systemic risk events arising from country-specific political or macroeconomic developments	Business management	Risk Control	●
Consequential risks: the risks to which our businesses are exposed as a consequence of being in business			
Audited Liquidity risk: the risk of being unable to generate sufficient funds from assets to meet payment obligations when they fall due, including in times of stress ▲	Group ALM	Risk Control	●
Audited Funding risk: the risk of higher-than-expected funding costs due to wider-than-expected UBS credit spreads when existing funding positions mature and need to be rolled over or replaced by other, more expensive funding sources. If a shortage of available funding sources is expected in a stress event, funding risk also covers potential additional losses from forced asset sales ▲			
Structural foreign exchange risk: the risk of decreases in our capital due to changes in foreign exchange rates with an adverse translation effect on capital held in currencies other than Swiss francs	Group ALM	Risk Control	●
Operational risk: the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events, including cyber risk. Operational risk includes, among other things, legal risk, conduct risk and compliance risk: <i>Legal risk:</i> (i) the financial risk resulting from the non-enforceability of a contract or the failure to assert non-contractual rights, or (ii) the financial or reputational risk resulting from UBS being held liable for a contractual or legal claim, or otherwise being subject to a penalty or liability in a legal action, based on a contractual or other legal claim, violation of law, or regulation, or infringement of intellectual property rights, or failing to manage litigation or other actions appropriately or effectively <i>Conduct risk:</i> the risk that the conduct of the firm or its individuals unfairly impacts clients or counterparties, undermines the integrity of the financial system or impairs effective competition to the detriment of consumers. <i>Compliance risk:</i> the financial or reputational risk incurred by us by not adhering to the applicable laws, rules and regulations, local and international best practice (including ethical standards) and our own internal standards <i>Cyber risk:</i> the risk of a material impact from an external or internal attack on our information systems with the purpose of data theft, fraud or denial of service. Cyberattacks are manifestations of a cyber threat into an act of aggression or criminal activity causing financial, regulatory or reputational harm or loss <i>Money laundering risk:</i> the risk that UBS fails to detect money laundering activities to prevent the financing of illegal activities (including terrorism) and fails to report suspicious activities or respond to anti-money laundering requests from relevant authorities	Business management	Risk Control	●
		Legal	
		Risk Control	
		Risk Control	
Pension risk: the risk of a negative impact on our capital as a result of deteriorating funded status from decreases in the fair value of assets held in the defined benefit pension funds and/or changes in the value of defined benefit pension obligations due to changes in actuarial assumptions (e.g., discount rate, life expectancy, rate of pension increase) and/or changes to plan designs	Human Resources	Risk Control and Finance	●
Environmental and social risk: the possibility of us suffering reputational or financial harm from transactions, products, services or activities that involve a party associated with environmentally or socially sensitive activities. → Refer to the "UBS and Society" section of this report for more information	Business management	Risk Control	
Business risks: the risks arising from the commercial, strategic and economic environment in which our businesses operate			
Business risks: the potential negative impact on earnings from lower-than-expected business volumes and/or margins, to the extent they are not offset by a decrease in expenses	Business management	Finance	●
Reputational risks			
Reputational risk: the risk of a decline in our reputation from the point of view of our stakeholders, such as clients, shareholders, staff and the general public	All businesses and functions	All control functions	

Top and emerging risks

The top and emerging risks disclosed below reflect those that we currently think have the potential to materialize within one year and which could significantly affect the Group. Investors should also carefully consider all information set out in the "Risk factors" section of this report, where we discuss these and other material risks we currently consider could impact our ability to execute our strategy and may affect our business activities, financial condition, results of operations and prospects.

- We continue to be exposed to a number of regulatory and legislative changes which could have a material adverse effect on our business, as discussed in the "Regulatory and legal developments" section of this report, and "Regulatory and legal changes may adversely affect our business and our ability to execute our strategic plans" in the "Risk factors" section of this report.
- We are subject to various claims, disputes, legal proceedings and government investigations and we anticipate that our ongoing business activities will continue to give rise to such matters in the future, as noted under the item "Material legal and regulatory risks arise in the conduct of our business" in the "Risk factors" section of this report. Information on litigation, regulatory and similar matters we currently consider significant is disclosed in "Note 20 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report.
- We are exposed to a number of macroeconomic issues as well as general market conditions. As noted under the items "Continuing low or negative interest rates may have a detrimental effect on our capital strength, liquidity and funding position, and profitability," "Our global presence subjects us to risk from currency fluctuations," and

"Performance in the financial services industry is affected by market conditions and the macroeconomic climate" in the "Risk factors" section of this report, these external pressures may have a significant adverse effect on our business activities and related financial results, primarily through reduced margins and revenues, asset impairments and other valuation adjustments. Accordingly, these macroeconomic factors are considered in the development of stress testing scenarios for our ongoing risk management activities.

- Our reputation is critical to achieving our strategic goals and financial targets, and damage to it can have fundamental negative effects on our business and prospects, as described in "Our reputation is critical to the success of our business" in the "Risk factors" section of this report.
- Due to the operational complexity of all our businesses, we are continually exposed to operational risks such as process error, failed execution, system failures and fraud. Conduct risks are inherent in our businesses. Moreover, financial crime, including money laundering, terrorist financing, sanctions violation, fraud, bribery and corruption, continues to present risks, as emerging technologies and changing geopolitical risks increase complexity, and continued heightened regulatory attention and expectations result in increased overall risk. In addition, one of the most critical risks facing the broader industry is the threat of cyberattacks, which continue to evolve and become more powerful. Along with the rest of the industry we face ongoing threats, such as data theft, disruption of service and cyber fraud, all of which have the potential to significantly impact our business. Refer to "Operational risk" in this section and "Operational risks affect our business" in the "Risk factors" section of this report for more information.

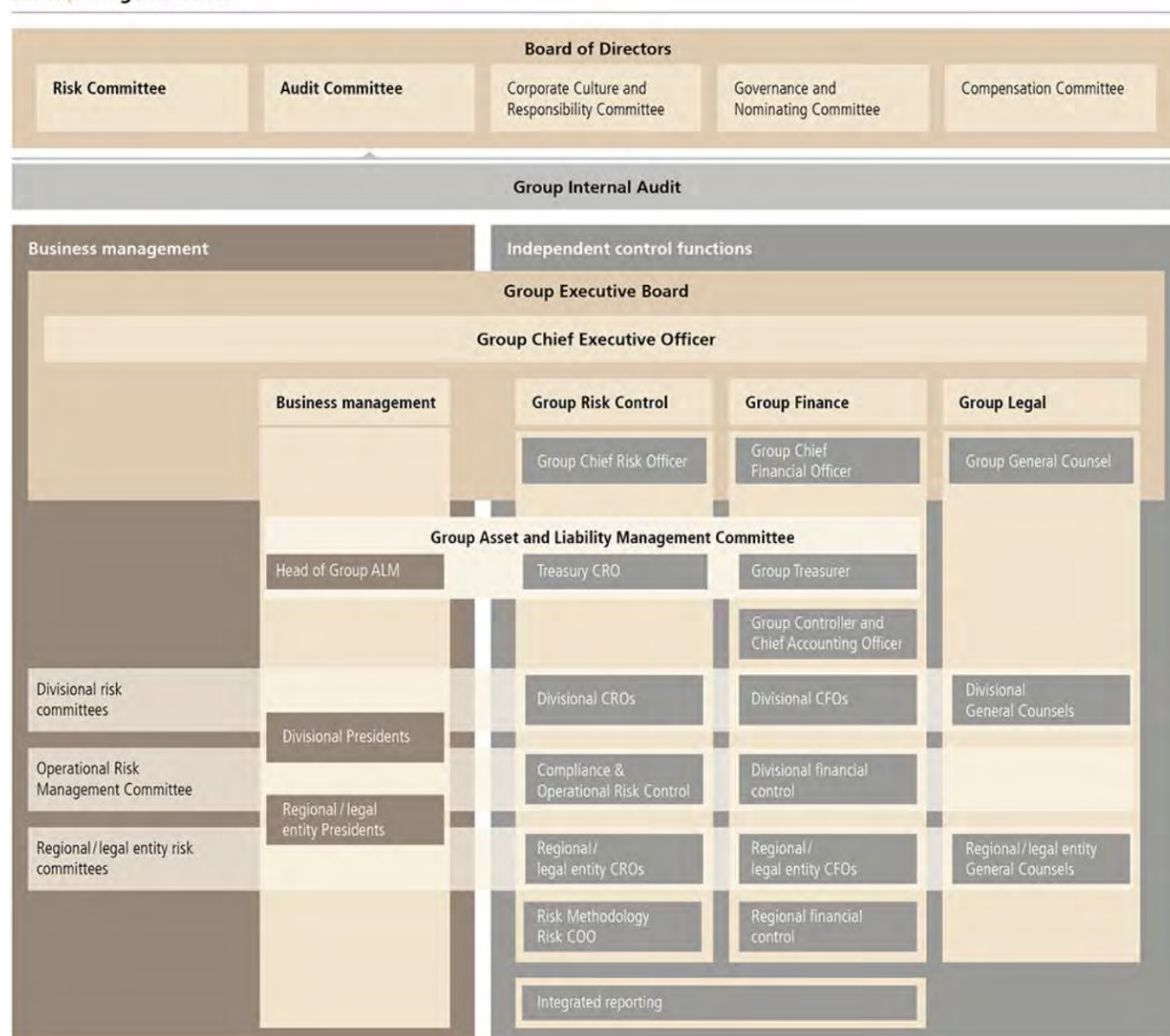
Risk governance

Our risk governance framework operates along three lines of defense. Our first line of defense, business management, owns its risk exposures and is required to maintain effective processes and systems to manage its risks, including robust and comprehensive internal controls and documented procedures. Business management has appropriate supervisory controls and review processes in place designed to identify control weaknesses and inadequate processes. Our second line of defense, the control functions, are independent from the business and report directly into the Group CEO. Control

functions provide independent oversight of risks, including setting risk limits and protecting against non-compliance with applicable laws and regulations. Our third line of defense, Group Internal Audit (GIA), reports to the Audit Committee of the Board of Directors and evaluates the overall effectiveness of governance, risk management and the control environment, including the assessment of how the first and second lines of defense meet their objectives.

These key roles and responsibilities for risk management and control are illustrated in the following chart and described on the next pages.

Audited | Risk governance



Audited | The *Board of Directors* (BoD) is responsible for determining the risk principles, risk appetite and major portfolio limits of the Group, including their allocation to the business divisions and Corporate Center units. The BoD is supported by the BoD Risk Committee, which monitors and oversees the Group's risk profile and the implementation of the risk framework as approved by the BoD, as well as assessing the Group's key risk measurement methodologies. The Corporate Culture and Responsibility Committee supports the BoD in fulfilling its duty to safeguard and advance the Group's reputation for responsible and sustainable conduct. It reviews and assesses stakeholder concerns and expectations pertaining to UBS's societal performance and corporate culture and recommends appropriate actions to the BoD.

The *Group Executive Board* (GEB) implements the risk framework, controls the Group's risk profile and approves key risk policies.

The *Group Chief Executive Officer* (Group CEO) is responsible for the Group's results, has risk authority over transactions, positions and exposures, and allocates portfolio limits approved by the BoD within the business divisions and Corporate Center units.

The *business division Presidents* are accountable for the results of their business divisions. This includes actively managing their risk exposures, and ensuring profit potential, risk, balance sheet and capital usage are balanced. The *regional Presidents* coordinate and implement UBS's strategy in their regions in conjunction with the business division Presidents and heads of the control and support functions. They have a veto power over decisions with respect to all business activities that may have a negative regulatory or reputational effect in their respective regions.

The *Group Chief Risk Officer* (Group CRO) is responsible for Risk Control. Risk Control independently oversees all primary risks and most consequential risks as outlined in the "Risk categories" section above. This includes establishing methodologies to measure and assess risk, setting risk limits, and developing and operating an appropriate risk control infrastructure. Risk Control is also the central function for model risk management, which includes the validation of models used in the firm. The risk control process is supported by a framework of policies and authorities. *Business division and regional Chief Risk Officers* have delegated authority for their respective divisions and, regions. Moreover, authorities are delegated to risk officers according to their expertise, experience and responsibilities.

The *Group Chief Financial Officer* (Group CFO) is responsible for assessing and ensuring transparency in the financial performance of the Group and business divisions, and for ensuring that disclosure of our financial performance meets regulatory requirements and corporate governance standards. The Group CFO manages the Group's and divisional financial control functions, including financial accounting, controlling, forecasting, planning and reporting processes. The Group CFO also provides external certifications under sections 302 and 404 of the Sarbanes-Oxley Act of 2002. Further responsibilities

include managing UBS's tax affairs, as well as treasury and capital management, including the management of funding and liquidity risk and UBS's regulatory capital ratios.

The *Group General Counsel* (Group GC) is responsible for implementing the Group's risk management and control principles for legal matters, and for managing our legal function.

Group Internal Audit (GIA) independently assesses the adherence to our strategy, the effectiveness of governance, risk management and control processes at Group, business division and regional levels, including compliance with legal, regulatory and statutory requirements, as well as with internal policies and contracts. GIA has a functional reporting line to the Audit Committee.

The above roles and responsibilities are replicated for certain significant legal entities of the Group through the appointment of entity level Presidents, Chief Risk Officers, Chief Financial Officers and General Counsels. ▲

Risk appetite framework

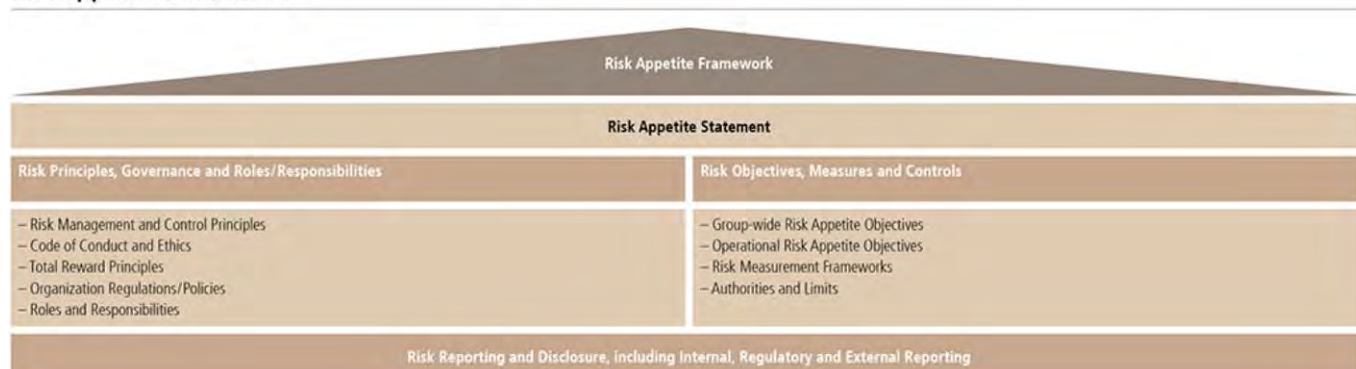
Our risk appetite is defined at the aggregate level and reflects the types of risk that we are willing to accept or intend to avoid. It is established via a complementary set of qualitative and quantitative risk appetite statements defined on a Group-wide level and is embedded throughout our business divisions and legal entities through Group, business division and legal entity policies, limits and authorities. These statements are a critical foundation to maintaining a robust risk culture throughout our organization. The "Risk appetite framework" chart on the next page shows the key elements of this framework, which are described in more detail below.

Qualitative statements aim to ensure we maintain the desired risk culture. Quantitative risk appetite objectives are designed to enhance the Group's resilience against the impact of potential severe adverse economic or geopolitical events. These objectives cover areas such as the Group's capital buffer, solvency, earnings, leverage, liquidity and funding, and are subject to periodic review, including as part of the annual business planning process.

These objectives are complemented by operational risk appetite objectives, which are established for each of our operational risk categories, such as market conduct, theft, fraud, data confidentiality and technology risks. Operational risk events that exceed predetermined risk tolerances, expressed as percentages of the Group's operating income, must be escalated to the respective business division President or higher, as appropriate.

The quantitative risk appetite objectives are supported by a comprehensive suite of risk limits set at the portfolio level. These may apply across the Group, within a business division or business unit, at legal entity level, or to an asset class. These additional quantitative controls are typically bottom-up and are designed to monitor specific portfolios and to identify potential risk concentrations.

Risk appetite framework



Risk reports aggregating measures of risk across products and businesses provide insight into the amounts, types, and sensitivities of the various risks in our portfolios and ensure compliance with defined limits. Risk officers, senior management and the BoD use this information to understand our risk profile and the performance of the portfolios.

The status of risk appetite objectives is evaluated each month and reported to the BoD and the GEB. Our risk appetite may change over time. Therefore, portfolio limits and associated approval authorities are subject to periodic reviews and changes, particularly in the context of our annual business planning process.

In addition, recovery risk indicators embedded in the firm's recovery plan are drawn from the set of risk limits that management monitors on a routine basis.

Our risk appetite framework is encompassed in a single overarching policy and conforms to the Financial Stability Board's "Principles for An Effective Risk Appetite Framework" published in 2013.

Risk principles and risk culture

A strong risk culture is a prerequisite for success in today's highly complex operating environment. We are focused on further strengthening our culture as a source of sustainable competitive advantage. By placing prudent and disciplined risk-taking at the

center of every decision, we want to achieve our goals of delivering unrivaled client satisfaction, creating long-term value for stakeholders, and making UBS one of the most attractive companies to work for in the world.

Our risk appetite framework combines all the important elements of our risk culture, expressed in our Pillars, Principles and Behaviors, our Risk Management and Control Principles, our Code of Conduct and Ethics, and our Total Reward Principles. Together, these aim to align the decisions we make with the Group's strategy, principles and risk appetite. They help provide a solid foundation for promoting risk awareness, leading to appropriate risk-taking and the establishment of robust risk management and control processes. These principles are supported by a range of initiatives covering employees at all levels. This includes the UBS House View on Leadership, which is a set of explicit expectations for leaders that establishes consistent leadership standards across UBS. These initiatives also include our principles of good supervision, which establish clear expectations of managers and employees with respect to supervisory responsibilities, specifically: to take responsibility, to organize their business, to know their employees and what they do, to know their business, to create a good compliance culture and to respond to and resolve issues.

Risk management and control principles

Protection of financial strength	Protection of reputation	Business management accountability	Independent controls	Risk disclosure
Protecting UBS's financial strength by controlling our risk exposure and avoiding potential risk concentrations at individual exposure levels, at specific portfolio levels and at an aggregate firm-wide level across all risk types	Protecting our reputation through a sound risk culture characterized by a holistic and integrated view of risk, performance and reward, and through full compliance with our standards and principles, particularly our Code of Conduct and Ethics	Ensuring management accountability, whereby business management, as opposed to Risk Control, owns all risks assumed throughout the Group and is responsible for the continuous and active management of all risk exposures to ensure that risk and return are balanced	Independent control functions that monitor the effectiveness of the businesses' risk management and oversee risk-taking activities	Disclosure of risks to senior management, the BoD, investors, regulators, credit rating agencies and other stakeholders with an appropriate level of comprehensiveness and transparency

To maintain an environment where staff are comfortable raising concerns, we have whistle-blowing policies and procedures in place. These offer multiple channels through which individuals may, either openly or anonymously, escalate suspected breaches of laws, regulations, rules and other legal requirements, our Code of Conduct and Ethics, policies, or relevant professional standards. Our program is designed to ensure that whistle-blowing concerns are investigated and that appropriate and consistent action is taken. We are committed to ongoing awareness training and communication to all staff.

We also have a mandatory training program in place for all employees. The program covers a range of compliance and risk-related topics, including anti-money laundering and operational risk. In addition, specialized training is provided for employees depending on their specific roles and responsibilities, such as credit risk and market risk training for those working in trading areas. Failure to satisfactorily complete mandatory training sessions within the given deadline results in consequences, including disciplinary action.

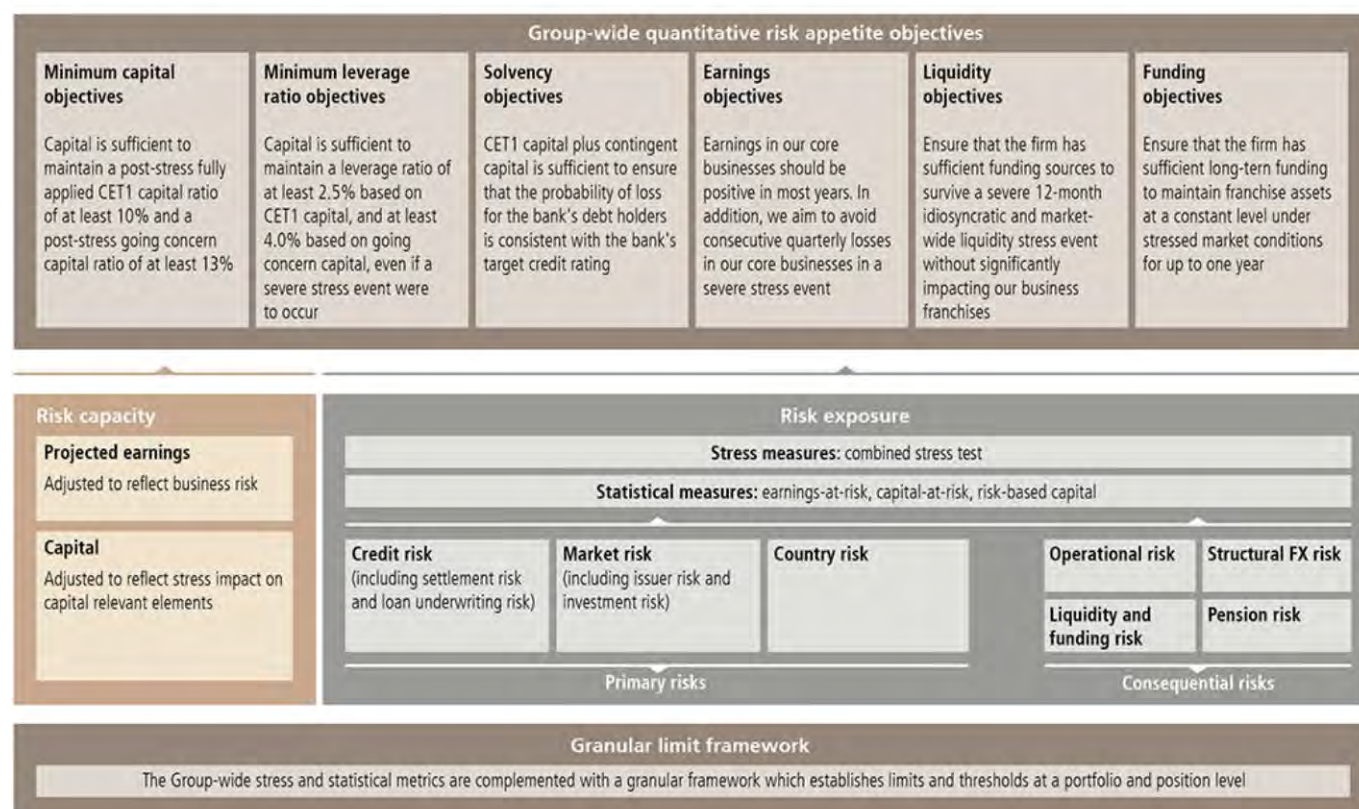
Quantitative risk appetite objectives

Through a set of quantitative risk appetite objectives, we aim to ensure that our aggregate risk exposure remains within our desired risk capacity, based on our capital and business plans. The specific definition of risk capacity for each objective seeks to ensure that we have sufficient capital, earnings, funding and liquidity to protect our business franchises and exceed minimum regulatory requirements under a severe stress event. The risk appetite objectives are evaluated as part of the annual business planning process, and are approved by the BoD. The comparison of risk exposure with risk capacity is a key consideration in management decisions on potential adjustments to the business strategy and the risk profile of the Group.

We make use of both scenario-based stress tests and statistical risk measurement techniques to assess the impact of a severe stress event at a Group-wide level. These complementary frameworks capture exposures to all material primary and consequential risks across our business divisions and Corporate Center units.

→ Refer to “Risk measurement” in this section for more information on our stress testing and statistical frameworks

2016 quantitative risk appetite objectives



In determining our risk capacity, we adjust projected earnings from the strategic plan for business risk to reflect lower expected earnings and lower expenses, such as the reversal of variable compensation accruals in a severe stress event. We also adjust our capital to take into account the impact of stress on deferred tax assets, pension plan assets and liabilities, and accruals for capital returns to shareholders.

The chart on the previous page provides an overview of our quantitative risk appetite objectives during 2016. For 2016, we adjusted the minimum leverage ratio objectives to align with the new capital rules for systemically relevant banks in Switzerland, updating the post-stress minimum ratio from 2.4% to 2.5% for the CET1 leverage ratio and from 3.12% total leverage ratio to 4.0% going-concern leverage ratio.

Risk appetite objectives at the business division level are derived from the Group-wide objectives. They may also comprise objectives specific to the division, related to the specific activities and risks in that division. Risk appetite objectives are also set for certain legal entities. These must be consistent with the Group-wide Risk Appetite Framework and approved in accordance with the regulations of the legal entity and the Group's regulations. Differences may exist that reflect the specific nature, size, complexity and regulations applicable to the relevant legal entity.

Internal risk reporting

Comprehensive and transparent reporting of risks is central to the control and oversight responsibilities set out in our risk governance framework and is a requirement of our Risk Management and Control Principles. Accordingly, risks are reported at a frequency and to a level of detail commensurate with the extent and variability of the risk and the needs of the various governance bodies, regulators and risk authority holders.

On a monthly basis, the Group Risk Report provides a detailed qualitative and quantitative overview of developments in primary and consequential risks for the business divisions and Corporate Center units, along with aggregate views of risks at the Group-wide level, including the status of our risk appetite objectives and results of Group-wide stress testing. The Group Risk Report is distributed internally to the BoD Risk Committee and GEB, and to senior members of Group Risk Control, Group Internal Audit, Finance and Legal. Key extracts from the Group Risk Report, along with extracts from the monthly Group Finance Report and Group Treasury Report, are included in the Monthly Performance Update provided to the GEB and BoD. Granular divisional risk reports are provided to the respective business division Chief Risk Officers and the business division Presidents. This monthly reporting is supplemented with a suite of daily and weekly reports at various levels of granularity, covering market and credit risks for the business divisions and Corporate Center units, to enable risk officers and senior management to monitor and control the Group's risk profile.

Our internal risk reporting, which covers primary and consequential risks, is supported by risk data and measurement systems, which are also used for external disclosure and regulatory reporting. Dedicated units within Risk Control assume responsibility for measurement, analysis and reporting of risk

and for overseeing the quality and integrity of risk-related data. Our risk data and measurement systems are subject to periodic review by Group Internal Audit following a risk-based audit approach.

Risk measurement

Audited I We apply a variety of methodologies and measurements to quantify the risks of our portfolios and potential risk concentrations. Risks that are not fully reflected within standard measures are subject to additional controls, which may include preapproval of specific transactions and the application of specific restrictions. Models to quantify risk are generally developed by dedicated units within control functions and are subject to independent verification. ▲

Models and methodologies must be approved and are regularly reviewed in accordance with regulatory requirements as well as internal policies to test that models perform as expected, produce results comparable with actual events and values, and reflect best-in-practice approaches and recent academic developments. Our reviews assess whether models are performing satisfactorily, whether additional analysis is required, and whether models need to be recalibrated or redeveloped. Results and conclusions are presented to the relevant governance body and, as required, to regulators.

The ongoing process of assessing model quality and performance in the production environment comprises two components: model verification, in which Model Risk Management & Control (MRMC) independently assesses a model's conceptual soundness, and model confirmation, the regular process of confirming the accuracy and appropriateness of the model output and its application, carried out by the model developers and reviewed by MRMC.

→ Refer to "Credit risk," "Market risk" and "Operational risk" in this section for more information on model confirmation procedures

Stress testing

We perform stress testing to estimate the loss that could result from extreme, yet plausible macroeconomic and geopolitical stress events. This enables us to identify, better understand and manage our potential vulnerabilities and risk concentrations. Stress testing plays a key role in our limits framework at Group-wide, business division, legal entity and portfolio levels. Stress test results are regularly reported to the BoD, the Risk Committee and the GEB. We also provide detailed stress loss analyses to FINMA and regulators of our legal entities in accordance with their requirements. As described in the "Risk appetite framework" section above, stress testing, along with statistical loss measures, plays a central role in our risk appetite and business planning processes.

Our stress testing framework incorporates three pillars: (i) combined stress tests, (ii) a comprehensive range of portfolio and risk-type-specific stress tests and (iii) reverse stress testing.

Our *combined stress test (CST)* framework is scenario based and aims to quantify overall Group-wide losses which could result from a number of potential global systemic events. The framework captures all material primary and consequential risks, as well as business risks, as indicated in the “Risk categories” section above. Scenarios are forward looking and encompass macroeconomic and geopolitical stress events calibrated to different levels of potential severity. We implement each scenario through the expected evolution of market indicators and economic variables under that scenario. We then assess the resulting effect on our primary, consequential and business risks to estimate the overall loss and capital implications were the scenario to occur. At least once a year, the Risk Committee approves the most relevant scenario, known as the binding scenario, to be used as the main scenario for regular CST reporting and for monitoring risk exposure against our minimum capital, earnings and leverage ratio objectives in our risk appetite framework. Results are reported to the Risk Committee, GEB, BoD and FINMA on a monthly basis.

The Enterprise-wide Stress Committee (ESC) is responsible for ensuring the consistency and adequacy of the assumptions and scenarios used for our Group-wide stress measures. As part of these responsibilities, the ESC ensures that the suite of stress scenarios adequately reflects current and potential developments in the macroeconomic and geopolitical environment, our current and planned business activities, and actual or potential risk concentrations and vulnerabilities in our portfolios. The ESC meets at least quarterly and is comprised of Group, business division and legal entity representatives of Risk Control. In executing its responsibilities, the ESC considers input from the Think Tank, a panel of senior representatives from the business divisions, Risk Control and economic research, which meets quarterly to review the current and possible future market environment in order to identify potential stress scenarios that could materially affect the Group’s profitability. This results in a range of internal stress scenarios that are developed and evolve over time, separate from the scenarios mandated by FINMA.

Each scenario captures a wide range of macroeconomic variables. These include gross domestic product (GDP), equity prices, interest rates, foreign exchange rates, commodity prices, property prices and unemployment. We use assumed changes in these macroeconomic and market variables in each scenario to stress the key risk drivers of our portfolios. For example, lower GDP growth and rising interest rates may reduce the income of clients to whom we have lent money, which leads to changes in the credit risk parameters for probability of default, loss given default and exposure at default, and results in higher predicted credit losses within the stress scenario. We also capture the

business risk resulting from lower fee, interest and trading income, and lower expenses. These effects are measured across all material risk types and all businesses to calculate the aggregate estimated effect of the scenario on profit or loss, other comprehensive income, RWA, LRD and, ultimately, our capital and leverage ratios. The assumed changes in macroeconomic variables are updated periodically to take account of changes in the current and possible future market environment.

Through 2016, the binding scenario for CST was the internal *Global Recession scenario*, which combines elements of the Eurozone Crisis scenario, the binding scenario during 2015, and the China Hard Landing scenario. The Global Recession scenario assumes that a hard landing in China would lead to severe contagion of Asian and emerging markets economies, while multiple debt restructurings in Europe, related direct losses for European banks and fear of a eurozone breakup would severely affect developed markets such as Switzerland, the UK and the US. The Eurozone Crisis and China Hard Landing scenarios were discontinued as stand-alone CST scenarios.

The CST risk exposure was broadly stable over the year with most of the month-on-month variability arising from temporary loan underwriting exposure in the Investment Bank.

As part of the CST framework, we routinely monitored four additional stress scenarios throughout 2016.

- *Failure of a Major Financial Institution scenario* represents renewed financial market turmoil due to the failure of a major global financial institution, leading to prolonged financial deleveraging and dramatically plunging activity around the globe.
- *US Monetary Crisis scenario* represents a loss of confidence in the US, which leads to international portfolio repositioning out of US dollar-denominated assets, sparking an abrupt and substantial US dollar sell-off. The US is pushed back into recession, other industrialized countries replicate this pattern and inflationary concerns lead to an overall higher interest rate level.
- *Global Depression scenario* represents a severe and prolonged eurozone crisis in which several peripheral countries default and exit the eurozone, and advanced economies are pulled into a prolonged period of economic stagnation.
- *Global Deflation scenario* is a variation of the Global Recession scenario in which central banks in major developed economies reduce interest rates further into negative territory in an attempt to stimulate growth and restore market confidence.

As a result of the growing perception that negative interest rates may become a conventional policy tool, the *Global Deflation scenario* was adopted as the binding scenario at the end of 2016, with the aim of capturing potential effects of significant interest rates cuts further into negative territory in the calculation of our post-stress earnings, capital and leverage ratios.

Portfolio-specific stress tests are measures that are tailored to the risks of specific portfolios. Our portfolio stress loss measures are derived from data on past events, but also include forward-looking elements. For example, we derive the expected market movements within our liquidity-adjusted stress metric using a combination of historical market behavior, based on an analysis of historical events, and forward-looking analysis including consideration of defined scenarios that have never occurred in the past. Results of portfolio-specific stress tests may be subject to limits to explicitly control risk-taking, or may be monitored without limits to identify vulnerabilities.

Reverse stress testing starts from a defined stress outcome (e.g., a specified loss amount, reputational damage, a liquidity shortfall or a breach of regulatory capital ratios) and works backward to identify the economic or financial scenarios that could result in such an outcome. As such, reverse stress testing is intended to complement scenario-based stress tests by assuming “what if” outcomes that could extend beyond the range normally considered, and thereby potentially challenge assumptions regarding severity and plausibility. The results of reverse stress testing are reported to relevant governance bodies according to the materiality and scope of the exercise.

Additionally, we routinely analyze the effect of increases or decreases in interest rates and changes in the structure of yield curves.

Moreover, Group Treasury performs stress testing to determine the optimum asset and liability structure that allows us to maintain an appropriately balanced liquidity and funding position under various scenarios. These scenarios differ from those outlined above, because they are focused on specific situations which could generate liquidity and funding stress, as opposed to the scenarios used in the CST framework, which focus on the impact on profit or loss and capital.

- **Refer to “Credit risk,” and “Market risk” in this section for more information on stress loss measures**
- **Refer to the “Treasury management” section for more information on stress testing**
- **Refer to “Our stated capital returns objective is based, in part, on capital ratios that are subject to regulatory change and may fluctuate significantly” in the “Risk factors” section of this report for more information**

Statistical measures

In addition to our scenario-based CST measure, we employ a statistical stress framework that allows us to calculate and aggregate risks using statistical techniques to derive stress events at chosen confidence levels.

We use this framework to derive a distribution of potential earnings based on historically observed market changes in combination with the firm’s actual risk exposures, considering effects on both income and expenses. From this, we determine earnings-at-risk (EaR), which measures the potential shortfall in earnings (i.e., the deviation from forecasted earnings) at a 95% confidence level and is evaluated over a one-year horizon. EaR is used for the assessment of the earnings objectives in our risk appetite framework.

We extend the EaR measure by incorporating the effects of gains and losses recognized through other comprehensive income, to derive a distribution of potential effects of stress events on CET1 capital. From this distribution, we derive our capital-at-risk (CaR) buffer measure at a 95% confidence level for the assessment of our capital and leverage ratio risk appetite objectives, and we derive our CaR solvency measure at a 99.9% confidence level for the assessment of our solvency risk appetite objective.

We also use the CaR solvency measure as the basis to derive the contributions of business divisions and Corporate Center units to risk-based capital (RBC), which is a component of our equity attribution framework. RBC measures the potential capital impairment from an extreme stress event at a 99.9% confidence level to estimate the capital required to absorb unexpected loss while remaining able to fully repay creditors. We revised several elements of the RBC model during 2016. The net effect of these model changes was a moderate increase in the overall level of RBC.

- **Refer to the “Capital management” section of this report for more information on the equity attribution framework**

Portfolio and position limits

The Group-wide stress and statistical metrics are complemented by more granular portfolio and position limits, triggers and targets. The combination of these measures provides a comprehensive, granular control framework which is applied to our business divisions and Corporate Center units, as well as the significant legal entities, as relevant to the key risks arising from their business models.

We apply limits to a variety of exposures at the portfolio level, using statistical and stress-based measures, such as value-at-risk, liquidity adjusted stress, notional loan underwriting limits, economic value sensitivity and portfolio default simulations for our loan books. These are complemented with a set of controls for net interest income sensitivity, mark-to-market losses on available-for-sale portfolios, and the effect of foreign exchange movements on capital and capital ratios.

Portfolio measures are supplemented with position-level controls. Risk measures for position controls are based on market risk sensitivities and counterparty-level credit risk exposures. Market risk sensitivities include sensitivities to changes in general market risk factors, such as equity indices, foreign exchange rates and interest rates, and sensitivities to issuer-specific factors, such as changes in an issuer's credit spread or default risk. We monitor a significant number of market risk controls for the Investment Bank and Corporate Center – Group Asset and Liability Management and Corporate Center – Non-core and Legacy Portfolio on a daily basis. Counterparty measures capture the current and potential future exposure to an individual counterparty, taking into account collateral and legally enforceable netting agreements.

→ **Refer to “Credit risk” in this section for more information on counterparty limits**

Risk concentrations

Audited | A risk concentration exists where (i) a position is affected by changes in a group of correlated factors, or a group of positions are affected by changes in the same risk factor or a group of correlated factors, and (ii) the exposure could, in the event of large but plausible adverse developments, result in significant losses. The categories in which risk concentrations may occur include counterparties, industries, legal entities, countries or geographical regions, products and businesses.

The identification of risk concentrations requires judgment, as potential future developments cannot be accurately predicted and may vary from period to period. In determining whether we have a risk concentration, we consider a number of elements, both individually and collectively. These elements include the shared characteristics of the positions and our counterparties, the size of the position or group of positions, the sensitivity of the position or group of positions to changes in risk factors and the volatility and correlations of those factors. Also important in our assessment is the liquidity of the markets where the positions are traded, and the availability and effectiveness of hedges or other potential risk-mitigating factors. The value of a hedging instrument may not always move in line with the position being hedged, and this mismatch is referred to as basis risk.

Risk concentrations are subject to increased oversight by Risk Control and are assessed to determine whether they should be reduced or mitigated, depending on the available means to do so. It is possible that material losses could occur on asset classes, positions and hedges, particularly if the correlations that emerge in a stressed environment differ markedly from those envisaged by our risk models. ▲

- **Refer to “Credit risk” and “Market risk” in this section for more information on the compositions of our portfolios**
- **Refer to the “Risk factors” section of this report for more information**

Credit risk

Key developments

Overall credit risk exposures were broadly stable over the year with a gross loan portfolio of slightly more than CHF 300 billion.

Our Swiss lending portfolios, which account for approximately half of our loan exposure, continued to perform well, although we remain watchful for any signs of deterioration in the Swiss economy that could impact some of our counterparties and lead to an increase in credit loss expenses from the low levels recently observed.

There were some distinct periods of increased market volatility during 2016, notably in the first quarter, reflecting uncertainties with regard to macroeconomic developments in China and emerging markets more broadly, and weak commodity prices, and in the second quarter following the outcome of the UK referendum on EU membership. At times, this led to increases in the level of margin calls within our security-backed lending businesses, but margin calls were largely resolved within the normal process and did not result in any material losses.

Oil prices dropped to very low levels at the start of 2016 and recovered relatively slowly thereafter, leading several counterparties in the oil and gas sector to file for bankruptcy during the year. Prices eventually stabilized at around USD 50, offering some relief to oil producers through improved cash flows toward the end of the year. Our total net banking products exposure to the oil and gas sector, predominantly recorded within the Investment Bank, was CHF 6.1 billion at the start of the year, and reduced to CHF 5.1 billion at the end of 2016. We recognized CHF 16 million of credit loss expense against these exposures during the year, and as of 31 December 2016, total specific and collective allowances and provisions against these oil and gas exposures were CHF 24 million.

Exposures for certain large loan underwriting transactions committed during 2015 were reduced during the first half of 2016, while new activity was muted. Market conditions and activity picked up toward the end of the year, and total temporary underwriting exposure was slightly lower at the end of 2016 than at the previous year-end. Overall, distribution of the temporary portfolio remained satisfactory from a credit risk perspective, although delayed regulatory approvals for some investment grade merger and acquisition transactions continued to delay distribution of the associated financings beyond original targeted dates. While these delays result in a longer risk period than originally anticipated, we remain comfortable with our exposures, considering the investment grade quality.

Audited | Main sources of credit risk

- A substantial portion of our lending exposure arises from our Swiss domestic business, which offers corporate loans and mortgage loans secured against residential properties and income-producing real estate, and therefore depends on the performance of the Swiss economy.
- Within the Investment Bank, our credit exposure is predominantly investment grade. Loan underwriting activity can be lower rated and gives rise to concentrated exposure of a temporary nature.
- Our wealth management businesses conduct securities-based lending and mortgage lending.
- Credit risk within Non-core and Legacy Portfolio relates to derivatives transactions, predominantly carried out on a cash-collateralized basis, and securitized positions. ▲

Audited | Overview of measurement, monitoring and management techniques

- Credit risk arising from transactions with individual counterparties is measured according to our estimates of probability of default, exposure at default and loss given default. Limits are established for individual counterparties and groups of related counterparties covering banking and traded products as well as settlement amounts. Risk control authorities are approved by the Board of Directors and are delegated to the Group Chief Executive Officer, Group Chief Risk Officer and divisional Chief Risk Officers based on risk exposure amounts and internal credit rating.
- Limits apply not only to the current outstanding amount, but also to contingent commitments and the potential future exposure of traded products.
- For the Investment Bank, our monitoring, measurement and limit framework distinguishes between exposures intended to be held to maturity (take-and-hold exposures) and those which are intended to be held for a short term, pending distribution or risk transfer (temporary exposures).
- We also use models to derive portfolio credit risk measures of expected loss, statistical loss and stress loss at the Group-wide and business division levels and establish portfolio level limits at these levels.
- Credit risk concentrations can arise if clients are engaged in similar activities, are located in the same geographical region or have comparable economic characteristics, for example, if their ability to meet contractual obligations would be similarly affected by changes in economic, political or other conditions. To avoid credit risk concentrations, we establish limits and / or operational controls that constrain risk concentrations at portfolio and sub-portfolio levels with regard to sector exposure, country risk and specific product exposures. ▲

Credit risk profile of the Group

The exposures detailed in this section are based on our internal management view of credit risk which differs in certain respects from the measurement requirements of IFRS.

Internally, we categorize credit risk exposures into two broad categories: banking products and traded products. Banking products comprise drawn loans, undrawn guarantees and loan commitments, amounts due from banks and balances with central banks. Traded products comprise over-the-counter (OTC) derivatives, exchange-traded derivatives (ETD) and securities financing transactions (SFTs), comprised of securities borrowing and lending and repurchase and reverse repurchase agreements.

Banking products

The breakdowns of our banking product exposures are shown before and after allowances and provisions for credit losses and related single-name credit hedges. The effect of portfolio hedges, such as index credit default swaps (CDSs), is not reflected. Guarantees and loan commitments are shown on a notional basis, without applying credit conversion factors.

Total gross banking products exposure increased to CHF 497 billion as of 31 December 2016 compared with CHF 485 billion at the end of 2015, mainly due to increases in balances with central banks in Corporate Center – Group Asset and Liability Management (Group ALM), partly offset by lower lending balances in the Investment Bank and Wealth Management.

Banking and traded products exposure by business division and Corporate Center unit

31.12.16									
CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Group
Balances with central banks	901	0	0	0	37	0	106,162	0	107,100
Due from banks	915	2,635	2,156	544	9,662	455	2,176	0	18,543
Loans ¹	101,876	52,486	133,861	1	12,022	43	5,962	129	306,379
Guarantees	2,187	558	9,023	0	5,336	111	1	4	17,220
Loan commitments	1,730	375	8,861	0	36,496	0	0	481	47,943
Banking products exposure²	107,608	56,054	153,900	545	63,553	610	114,301	614	497,186³
Banking products exposure, net⁴	107,546	56,025	153,414	545	57,682	610	114,301	418	490,541
Over-the-counter derivatives ⁵	5,359	35	1,420	0		17,540			24,353
Securities financing transactions ⁵	0	255	0	0		17,414			17,669
Exchange-traded derivatives ⁵	926	1,371	125	0		7,031			9,454
Traded products exposure⁵	6,285	1,661	1,544	0		41,985			51,476
Traded products exposure, net⁵	6,285	1,661	1,544	0		40,833			50,324
Credit exposure⁵	113,894	57,716	155,445	545		221,063			548,662
Credit exposure, net⁵	113,832	57,686	154,958	545		213,843			540,865

31.12.15									
CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Group
Balances with central banks	1,344	0	0	0	345	0	88,087	0	89,776
Due from banks	1,107	1,899	1,493	433	9,544	576	2,210	35	17,297
Loans ¹	105,167	48,754	135,616	11	15,464	36	6,788	100	311,937
Guarantees	2,267	747	7,900	0	5,607	11	0	84	16,616
Loan commitments	1,270	279	8,463	0	37,867	0	0	1,472	49,352
Banking products exposure²	111,155	51,678	153,473	443	68,828	623	97,086	1,692	484,978³
Banking products exposure, net⁴	111,065	51,650	152,943	443	61,207	623	97,086	1,180	476,196
Over-the-counter derivatives ⁵	5,224	14	1,421	0		15,821			22,480
Securities financing transactions ⁵	0	208	0	0		13,689			13,897
Exchange-traded derivatives ⁵	801	1,123	118	0		6,099			8,141
Traded products exposure⁵	6,025	1,345	1,539	0		35,610			44,518
Traded products exposure, net⁵	6,025	1,345	1,539	0		34,063			42,971
Credit exposure⁵	117,179	53,023	155,012	443		203,838			529,495
Credit exposure, net⁵	117,089	52,995	154,482	443		194,158			519,168

¹ Does not include reclassified securities and similar acquired securities in our CC – Non-core and Legacy Portfolio. ² Does not include loans designated at fair value. ³ As of 31 December 2016, total banking products exposure of UBS AG (consolidated) was CHF 0.6 billion higher than the exposure of UBS Group AG (consolidated), related to receivables of UBS AG and UBS Switzerland AG against UBS Group AG (31 December 2015: CHF 0.7 billion). ⁴ Net of allowances, provisions, and hedges. ⁵ As counterparty risk for traded products is managed at counterparty level, no further split between exposures in the Investment Bank, CC – Non-core and Legacy Portfolio and CC – Group ALM is provided.

Wealth Management

Gross banking products exposure within Wealth Management decreased to CHF 108 billion compared with CHF 111 billion as a result of client deleveraging. Our Wealth Management loan portfolio is mainly secured by securities and residential property. Most of the loans secured by securities (Lombard loans) were of high quality, with 96% rated investment grade based on our internal ratings compared with 95%, and are typically short term in nature with an average duration of three to six months. Moreover, Lombard loans can be canceled immediately if the collateral quality deteriorates or margin calls are not met.

The portfolio of mortgage loans secured by properties outside Switzerland decreased to CHF 5.5 billion from CHF 6.0 billion, driven by the depreciation of the British pound versus the Swiss franc. The overall quality of this portfolio remained high, with an average loan-to-value (LTV) ratio of 55% in Europe and 42% in Asia Pacific.

Wealth Management Americas

Gross banking products exposure within Wealth Management Americas increased to CHF 56 billion from CHF 52 billion, driven by increased loan origination. This exposure largely relates to loans secured by securities and residential mortgage loans. Out of the loans secured by securities, 96% were rated investment grade based on our internal ratings, unchanged year on year.

The mortgage loan portfolio consists primarily of residential mortgages offered in the US. Gross exposure increased to CHF 10.2 billion from CHF 8.4 billion. The overall quality of this portfolio remained high with an average LTV of 58%, unchanged from 2015, and we have experienced negligible credit losses since the inception of the mortgage program in 2009. The five largest geographic concentrations in the portfolio were in California (31%), New York (15%), Florida (10%), Texas (5%) and New Jersey (4%).

The amount of impaired loans decreased to CHF 27 million from CHF 29 million, with most of the impairment relating to securities-backed loan facilities collateralized by Puerto Rico municipal securities and related funds.

Wealth Management, Wealth Management Americas and Personal & Corporate Banking loan portfolios, gross¹

	Wealth Management		Wealth Management Americas		Personal & Corporate Banking	
CHF million	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Secured by residential property	32,208	34,004	10,239	8,378	95,966	100,181
Secured by commercial / industrial property	1,974	1,998	0	0	17,819	19,641
Secured by cash	14,436	11,859	1,042	1,020	1,884	242
Secured by securities	46,194	50,123	40,182	37,092	1,990	693
Secured by guarantees and other collateral	6,697	6,851	716	1,959	6,707	6,607
Unsecured loans	366	333	307	305	9,496	8,252
Total loans, gross	101,876	105,167	52,486	48,754	133,861	135,616
Total loans, net of allowances	101,814	105,078	52,455	48,726	133,419	135,120

¹ Collateral arrangements generally incorporate a range of collateral, including cash, securities, property and other collateral. In 2016, we aligned our collateral allocation processes across business divisions with a risk-based approach which prioritizes collateral mainly according to its liquidity profile. This resulted in increases in loans secured by cash of CHF 3.3 billion (Wealth Management CHF 1.7 billion, Personal & Corporate Banking CHF 1.7 billion) and increases in loans secured by securities of CHF 3.1 billion (Wealth Management CHF 0.8 billion, Wealth Management Americas CHF 1.2 billion and Personal & Corporate Banking CHF 1.0 billion), while loans secured by residential property decreased by CHF 4.9 billion (Wealth Management CHF 2.4 billion and Personal & Corporate Banking CHF 2.6 billion), loans secured by guarantees decreased by CHF 1.2 billion (all related to Wealth Management Americas) and loans secured by commercial / industrial property decreased by CHF 0.3 billion (Wealth Management CHF 0.2 billion, Personal & Corporate Banking CHF 0.1 billion).

Personal & Corporate Banking

Gross banking products exposure within Personal & Corporate Banking was broadly unchanged at CHF 154 billion. Net banking products exposure was CHF 153 billion, of which approximately 61% was classified as investment grade compared with 64% in the prior year. More than 80% of the exposure is categorized in the lowest loss given default (LGD) bucket of 0% to 25%.

The size of Personal & Corporate Banking's gross loan portfolio decreased by CHF 2 billion to CHF 134 billion. As of 31 December 2016, 93% of this portfolio was secured by collateral, mainly residential and commercial property. Of the total unsecured amount, 73% related to cash flow-based lending to corporate counterparties and 13% related to lending to public authorities. Based on our internal ratings, 50% of the unsecured loan portfolio was rated investment grade compared with 52% in 2015.

Our Swiss corporate banking products portfolio, which totaled CHF 25.5 billion compared with CHF 24.4 billion, consists of loans, guarantees and loan commitments to multinational and domestic counterparties. Although this portfolio is well diversified across industries, these Swiss counterparties are, in general, highly reliant on the domestic economy and the economies to which they export, in particular the EU and the US. In addition, the EUR / CHF exchange rate is an important risk factor for Swiss corporates. While credit loss expense for this portfolio remained low in 2016, given the reliance of the Swiss economy on exports, the continuing strength of the Swiss franc may have a negative effect on the Swiss economy, which could affect some of the counterparties within our domestic lending portfolio and lead to an increase in the level of credit loss expenses from the low levels recently observed.

The delinquency ratio, being the ratio of past due but not impaired loans to total loans, was 0.7% for the corporate loan portfolio, unchanged year on year.

→ Refer to "Credit risk models" in this section for more information on loss given default, rating grades and rating agency mappings

Our Swiss mortgage loan portfolio secured by residential and commercial real estate in Switzerland continues to be our largest loan portfolio. These mortgage loans, which were broadly unchanged at CHF 137 billion as of 31 December 2016, mainly originate from Personal & Corporate Banking, but also from Wealth Management. Of these mortgage loans, CHF 124 billion related to residential properties that the borrower was either occupying or renting out, and where there was full recourse to the borrower. Of this CHF 124 billion, approximately CHF 89 billion related to properties occupied by the borrower, with an average LTV ratio of 53% compared with 51% as of 31 December 2015. The average LTV for newly originated loans for this portion was 62%, unchanged year on year. The remaining CHF 35 billion of the Swiss residential mortgage loan portfolio relates to properties rented out by the borrower and the average LTV of this portfolio was 56% as of 31 December 2016, unchanged from 31 December 2015. The average LTV for newly originated Swiss residential mortgage loans for properties rented out by the borrower was 54% in 2016 compared with 57% in 2015.

As illustrated in the "Swiss mortgages: distribution of net exposure at default (EAD) across exposure segments and loan-to-value (LTV) buckets," table on the next page, over 99% of the aggregate amount of Swiss residential mortgage loans would continue to be covered by the real estate collateral even if the value assigned to that collateral were to decrease by 20%, and more than 98% would remain covered by the real estate collateral even if the value assigned to that collateral were to decrease by 30%. In this table, the amount of each mortgage loan is allocated across the LTV buckets to indicate the portion at risk at the various value levels shown. For example, a loan of 75 with an LTV ratio of 75% (collateral value of 100) would result in allocations of 30 in the less-than-30% LTV bucket, 20 in the 31–50% bucket, 10 in the 51–60% bucket, 10 in the 61–70% bucket and 5 in the 71–80% bucket.

Personal & Corporate Banking: distribution of banking products exposure across internal UBS ratings and loss given default (LGD) buckets

CHF million, except where indicated

	31.12.16						31.12.15	
	LGD buckets					Weighted average LGD (%)	Exposure	Weighted average LGD (%)
Internal UBS rating ¹	Exposure	0–25%	26–50%	51–75%	76–100%			
Investment grade	94,083	76,343	16,145	1,585	10	17	98,283	16
Sub-investment grade	59,817	47,618	10,548	1,629	22	18	55,190	18
of which: 6–9	52,878	42,983	8,461	1,413	22	18	48,543	17
of which: 10–12	5,053	4,480	522	50	0	14	4,628	14
of which: 13 and defaulted	1,886	155	1,565	166		38	2,019	38
Total exposure before deduction of allowances and provisions	153,900	123,960	26,693	3,214	33	17	153,473	17
Less: allowances and provisions	(486)						(530)	
Net banking products exposure	153,414						152,943	

¹ The ratings of the major credit rating agencies, and their mapping to our internal rating scale, are shown in the “Internal UBS rating scale and mapping of external ratings” table in the “Credit risk models” section of this report.

Personal & Corporate Banking: unsecured loans by industry sector

CHF million

	31.12.16		31.12.15	
	CHF million	%	CHF million	%
Construction	140	1.5	113	1.4
Financial institutions	1,675	17.6	1,203	14.6
Hotels and restaurants	96	1.0	69	0.8
Manufacturing	1,188	12.5	1,204	14.6
Private households	1,334	14.0	1,313	15.9
Public authorities	1,221	12.9	1,461	17.7
Real estate and rentals	143	1.5	120	1.5
Retail and wholesale	1,694	17.8	1,181	14.3
Services	1,748	18.4	1,405	17.0
Other	258	2.7	183	2.2
Net exposure	9,496	100.0	8,252	100.0

Swiss mortgages: distribution of net exposure at default (EAD) across exposure segments and loan-to-value (LTV) buckets

CHF billion, except where indicated

		31.12.16							31.12.15	
		LTV buckets							Total	Total
Exposure segment		≤30%	31–50%	51–60%	61–70%	71–80%	81–100%	>100%		
Residential mortgages	Net EAD	69.4	31.1	8.5	4.2	1.4	0.2	0.0	114.6	113.8
	as a % of row total	61	27	7	4	1	0	0	100	
Income-producing real estate (IPRE)	Net EAD	11.4	5.2	1.5	0.7	0.2	0.1	0.0	19.1	19.0
	as a % of row total	60	27	8	4	1	0	0	100	
Corporates	Net EAD	5.2	2.3	0.6	0.3	0.1	0.1	0.1	8.7	7.9
	as a % of row total	60	26	7	4	2	1	1	100	
Other segments	Net EAD	0.7	0.2	0.1	0.0	0.0	0.0	0.0	1.0	1.0
	as a % of row total	66	23	6	4	1	0	0	100	
Mortgage-covered exposure	Net EAD	86.7	38.8	10.7	5.3	1.7	0.3	0.1	143.5	141.6
	as a % of total	60	27	7	4	1	0	0	100	
Mortgage-covered exposure 31.12.15	Net EAD	86.8	37.9	10.1	4.8	1.6	0.3	0.1	141.6	
	as a % of total	61	27	7	3	1	0	0	100	

Asset Management

Gross banking products exposure within Asset Management was less than CHF 1 billion as of 31 December 2016 and 31 December 2015.

Investment Bank

The Investment Bank's lending activities are largely associated with corporate and non-bank financial institutions. The business is broadly diversified across industry sectors, but concentrated in North America.

During 2016, the gross banking products exposure of the Investment Bank decreased to CHF 64 billion from CHF 69 billion. The decrease was due to lower corporate lending exposure, which also includes temporary loan underwriting activity. Within the loan underwriting business, exposures for some large transactions committed during 2015 were reduced during the first half of 2016. Leveraged loan markets remained cautious at the start of the year, but market conditions and fundamentals improved alongside a recovery in the energy markets, and total temporary underwriting exposure ended 2016 slightly lower than the previous year. Overall, distribution of the temporary portfolio remained satisfactory from a credit risk perspective, although delayed regulatory approvals for some investment grade merger and acquisition transactions continued to delay distribution of the associated financings beyond original targeted dates. While these delays result in a longer risk period than originally anticipated, we remain comfortable with our exposures, considering the investment grade quality. Loan underwriting exposures are classified as held for trading, with fair values reflecting market conditions at the end of 2016.

The Investment Bank actively manages the credit risk of this portfolio and, as of 31 December 2016, held CHF 5.8 billion of single-name CDSs hedges against its exposures to corporates and other non-banks, a decrease of CHF 1.7 billion year on year.

Net banking products exposure, excluding balances with central banks and the vast majority of amounts due from banks, and after allowances, provisions and hedges, decreased to CHF 49.9 billion from CHF 53.0 billion, driven by the aforementioned lower level of corporate lending at the end of 2016. Based on our internal ratings, 63% of the Investment Bank's net banking products exposure was classified as investment grade as of 31 December 2016, unchanged from the end of the prior year. The majority of the Investment Bank's net banking products exposure had an estimated LGD of between 0% and 50%.

The low price environment in commodities began improving during the second half of 2016, which provided some relief to the energy sector. However we remain cautious with respect to the oil and gas sector as borrowers emerge from the period of significant stress. Our total net banking products exposure to the oil and gas sector, which is mainly in North America and within the Investment Bank, was CHF 5.1 billion, including both funded and unfunded exposures, compared with CHF 5.9 billion the previous year. Total specific and collective allowances for these energy-related exposures totaled CHF 24 million compared with CHF 40 million.

→ **Refer to "Credit risk models" in this section for more information on loss given default, rating grades and rating agency mappings**

Investment Bank: banking products¹

<i>CHF million</i>	31.12.16	31.12.15
Total exposure, before deduction of allowances, provisions and hedges	55,709	60,628
Less: allowances, provisions	(41)	(59)
Less: credit protection bought (credit default swaps, notional) ²	(5,810)	(7,555)
Net exposure after allowances, provisions and hedges	49,859	53,014

¹ Internal risk view, excludes balances with central banks, internal risk adjustments and the vast majority of due from banks exposures. ² The effects of portfolio hedges, such as index credit default swaps (CDSs), and of loss protection from the subordinated tranches of structured credit protection are not reflected in this table.

Investment Bank: distribution of net banking products exposure, across internal UBS ratings and loss given default (LGD) buckets

CHF million, except where indicated		31.12.16					31.12.15	
Internal UBS rating ¹	Exposure	LGD buckets				Weighted average LGD (%)	Exposure	Weighted average LGD (%)
		0–25%	26–50%	51–75%	76–100%			
Investment grade	31,398	7,033	14,215	5,667	4,483	50	33,465	49
Sub-investment grade	18,461	11,684	4,676	1,599	501	23	19,548	22
of which: 6–9	12,444	8,940	1,885	1,594	25	21	13,365	20
of which: 10–12	5,391	2,181	2,734	5	471	29	5,949	27
of which: 13 and defaulted	625	564	57	0	5	11	234	14
Net banking products exposure, after application of credit hedges	49,859	18,717	18,891	7,266	4,984	40	53,014	39

¹ The ratings of the major credit rating agencies, and their mapping to our internal rating scale, are shown in the "Internal UBS rating scale and mapping of external ratings" table in the "Credit risk models" section of this report.

Investment Bank: net banking products exposure by geographical region

	31.12.16		31.12.15	
	CHF million	%	CHF million	%
Asia Pacific	1,978	4.0	2,168	4.1
Latin America	212	0.4	132	0.2
Middle East and Africa	32	0.1	27	0.1
North America	37,691	75.6	44,419	83.8
Switzerland	3,128	6.3	163	0.3
Rest of Europe	6,818	13.7	6,103	11.5
Net exposure	49,859	100.0	53,014	100.0

Investment Bank: net banking products exposure by industry sector

	31.12.16		31.12.15	
	CHF million	%	CHF million	%
Banks	3,101	6.2	2,468	4.7
Chemicals	4,112	8.2	636	1.2
Electricity, gas, water supply	2,515	5.0	3,173	6.0
Financial institutions, excluding banks	19,990	40.1	19,990	37.7
Manufacturing ¹	4,195	8.4	6,794	12.8
Mining ¹	2,838	5.7	3,331	6.3
Public authorities	1,573	3.2	2,451	4.6
Real estate and construction	3,588	7.2	4,487	8.5
Retail and wholesale	870	1.7	681	1.3
Technology and communications	3,153	6.3	3,847	7.3
Transport and storage ¹	3,166	6.3	4,005	7.6
Other	756	1.5	1,150	2.2
Net exposure¹	49,859	100.0	53,014	100.0
of which: oil and gas ¹	5,069	10.2	5,930	11.2

¹ As of 31 December 2016, the CHF 5.1 billion Investment Bank net banking product exposure to the oil and gas sector comprised CHF 2.2 billion related to mining, CHF 2.0 billion related to transport and storage and CHF 0.9 billion related to manufacturing. As of 31 December 2015, the CHF 5.9 billion Investment Bank net banking products exposure to the oil and gas sector comprised CHF 2.6 billion related to mining, CHF 2.5 billion related to transport and storage and CHF 0.8 billion related to manufacturing.

Corporate Center – Group Asset and Liability Management

Gross banking products exposure within Corporate Center – Group Asset and Liability Management (Group ALM), which arises primarily in connection with treasury activities, increased by CHF 17 billion to CHF 114 billion. This was driven by an increase in balances with central banks of CHF 18 billion, mainly reflecting an increase in net funds transferred to Group ALM by the business divisions.

→ Refer to the “Balance sheet” section of this report for more information

Corporate Center – Non-core and Legacy Portfolio

→ Refer to the “Corporate Center – Non-core and Legacy Portfolio” section under “Financial and operating performance” of this report for more information

Traded products

Traded products include OTC derivatives exposures, as well as SFT and ETD exposures. Credit risk arising from traded products, after the effects of master netting agreements but excluding credit valuation adjustments and hedges, increased by CHF 7 billion to CHF 51 billion as of 31 December 2016. OTC derivatives accounted for CHF 24 billion, exposures from SFTs

were CHF 18 billion, and ETD exposures amounted to CHF 9 billion. OTC derivatives exposures are generally measured as net positive replacement values after the application of legally enforceable netting agreements and the deduction of cash and marketable securities held as collateral. SFT exposures are reported taking into account collateral received, and ETD exposures take into account collateral margin calls.

The majority of the traded products exposures were within the Investment Bank, Non-core and Legacy Portfolio and Group ALM, totaling CHF 42 billion as of 31 December 2016. As counterparty risk for traded products is managed at counterparty level, no further split between exposures in the Investment Bank and those in Non-core and Legacy Portfolio and Group ALM is provided. The traded products exposure includes OTC derivative exposures of CHF 18 billion in the Investment Bank and Non-core and Legacy Portfolio, an increase of CHF 2 billion from the prior year. During 2016, SFT exposures increased by CHF 4 billion to CHF 17 billion and ETD exposures increased by CHF 1 billion to CHF 7 billion. The tables below and on the following pages provide more information on the OTC derivatives, SFT and ETD exposures of the Investment Bank, Non-core and Legacy Portfolio and Group ALM.

Investment Bank, Non-core and Legacy Portfolio and Group ALM: traded products exposure

CHF million	OTC derivatives	SFTs	ETD	Total	Total
		31.12.16			31.12.15
Total exposure, before deduction of credit valuation adjustments and hedges	17,528	17,381	7,031	41,941	35,258
Less: credit valuation adjustments and allowances	(376)			(376)	(470)
Less: credit protection bought (credit default swaps, notional)	(757)			(757)	(1,076)
Net exposure after credit valuation adjustments, allowances and hedges	16,395	17,381	7,031	40,808	33,712

Investment Bank, Non-core and Legacy Portfolio, and Group ALM: distribution of net OTC derivatives and SFT exposure across internal UBS ratings and loss given default (LGD) buckets

CHF million, except where indicated	31.12.16						31.12.15	
	LGD buckets					Weighted average LGD (%)	Exposure	Weighted average LGD (%)
Internal UBS rating ¹	Exposure	0–25%	26–50%	51–75%	76–100%	(%)		
Net OTC derivatives exposure								
Investment grade	15,672	4,885	10,041	281	466	30	13,176	30
Sub-investment grade	723	415	237	6	65	34	779	36
of which: 6–9	294	79	144	6	65	46	343	48
of which: 10–12	85	2	84	0		34	92	30
of which: 13 and defaulted	344	334	9	0	1	24	344	26
Total net OTC exposure, after credit valuation adjustments and hedges	16,395	5,299	10,277	287	531	30	13,955	31
Net SFT exposure								
Investment grade	16,877	7,375	8,782	218	503	28	13,531	27
Sub-investment grade	504	135	155	32	182	58	126	89
Total net SFT exposure	17,381	7,510	8,937	250	684	28	13,657	28

¹ The ratings of the major credit rating agencies, and their mapping to our internal rating scale, are shown in the “Internal UBS rating scale and mapping of external ratings” table in the “Credit risk models” section of this report.

Investment Bank, Non-core and Legacy Portfolio, and Group ALM: net OTC derivatives and SFT exposure by geographical region

	Net OTC derivatives				Net SFTs			
	31.12.16		31.12.15		31.12.16		31.12.15	
	CHF million	%	CHF million	%	CHF million	%	CHF million	%
Asia Pacific	2,904	17.7	1,194	8.6	3,410	19.6	1,661	12.2
Latin America	83	0.5	51	0.4	114	0.7	117	0.9
Middle East and Africa	149	0.9	132	0.9	1,126	6.5	740	5.4
North America	4,931	30.1	4,878	35.0	4,548	26.2	2,929	21.5
Switzerland	453	2.8	512	3.7	825	4.7	1,275	9.3
Rest of Europe	7,876	48.0	7,189	51.5	7,358	42.3	6,935	50.8
Net exposure	16,395	100.0	13,955	100.0	17,381	100.0	13,657	100.0

Investment Bank, Non-core and Legacy Portfolio, and Group ALM: net OTC derivatives and SFT exposure by industry

	Net OTC derivatives				Net SFTs			
	31.12.16		31.12.15		31.12.16		31.12.15	
	CHF million	%	CHF million	%	CHF million	%	CHF million	%
Banks	6,242	38.1	4,621	33.1	4,095	23.6	4,995	36.6
Chemicals	17	0.1	28	0.2				
Electricity, gas, water supply	231	1.4	306	2.2				
Financial institutions, excluding banks	6,778	41.3	5,336	38.2	11,932	68.6	8,151	59.7
Manufacturing	428	2.6	564	4.0				
Mining	108	0.7	178	1.3				
Public authorities	1,834	11.2	2,085	14.9	1,350	7.8	509	3.7
Retail and wholesale	19	0.1	15	0.1	2	0.0		
Transport, storage and communication	265	1.6	285	2.0			2	0.0
Other	473	2.9	537	3.8	2	0.0	1	0.0
Net exposure	16,395	100.0	13,955	100.0	17,381	100.0	13,657	100.0

Credit risk mitigation

Audited | We actively manage the credit risk in our portfolios by taking collateral against exposures and by utilizing credit hedging. ▲

Lending secured by real estate

Audited | We use a scoring model as part of a standardized front-to-back process to support credit decisions for the origination or modification of Swiss mortgage loans. The two key factors within this model are an affordability calculation relative to gross income and the loan-to-value (LTV) ratio. ▲

The calculation of affordability takes into account interest payments, minimum amortization requirements, potential property maintenance costs and, in the case of properties expected to be rented out, the level of rental income. Interest payments are estimated using a predefined framework, which takes into account the potential for significant increases in interest rates during the lifetime of the loan.

For properties occupied by the borrower, the maximum LTV allowed within the standard approval process is 80%. This is reduced to 60% in the case of vacation properties and luxury real estate. For properties rented out by the borrower, the maximum LTV allowed within the standard approval process ranges from 60% to 80%, depending on the type of property,

the age of the property and the amount of any renovation work required.

Audited | The value assigned by UBS to each property is based on the lowest value determined from internally calculated valuations, the purchase price and, in some cases, an additional external valuation. ▲

We use two separate models provided by a market-leading external vendor to derive property valuations for owner-occupied residential properties (ORP) and income-producing real estate. For ORP, we estimate the current value of properties by using a regression model (hedonic model) to compare detailed characteristics for each property against a database of property transactions. In addition to the model-derived values, valuations for ORP are updated quarterly throughout the lifetime of the loan by using region-specific real estate price indices. The price indices are sourced from an external vendor and are subject to internal validation and benchmarking against two other external vendors. On a quarterly basis, we use these valuations to compute indexed LTV for all ORP and consider these together with other risk measures (e.g., rating migration and behavioral information) to identify higher-risk loans, which are then reviewed individually by client advisors and credit officers, with actions taken where they are considered necessary.

For income-producing real estate, a capitalization model is used to determine the property valuation by discounting estimated sustainable future income using a capitalization rate based on various attributes. These attributes consider regional as well as specific property characteristics such as market and location data (e.g., vacancy rates), benchmarks (e.g., for running costs) and certain other standardized input parameters (e.g., property condition). Rental income from properties is reviewed at a minimum once every three years, but indications of significant changes in the amount of rental income or in the vacancy rate can trigger an interim reappraisal.

To take market developments into account for these models, the external vendor regularly updates the parameters and / or refines the architecture for each model. Model changes and parameter updates are subject to the same validation procedures as for our internally developed models.

Audited I We similarly apply underwriting guidelines for our Wealth Management Americas mortgage loan portfolio to ensure affordability of the loans and sufficiency of collateral. The maximum LTV within the standard approval process for any type of mortgage is 80%. A stratification of LTVs exists for the various mortgage types, such as residential mortgage or investment property, based on associated risk factors such as property types, loan size and loan purpose. Maximum LTVs go as low as 45%. Additionally, other credit risk metrics are applied, based upon property and borrower characteristics, such as debt-to-income ratios, FICO credit scores and required client reserves.

A risk limit framework is applied to the Wealth Management Americas mortgage portfolio. Limits have been established to govern exposures within LTV categories, geographic concentrations, portfolio growth, and high-risk mortgage segments such as interest-only loans. These limits are monitored by a specialized credit risk monitoring team and reported to senior management. Supplementing this limit framework is a robust real estate lending policy and procedures framework, established to govern the real estate lending activities. Quality assurance and quality control programs are in place to ensure compliance with mortgage underwriting and documentation requirements. ▲

→ **Refer to “Personal & Corporate Banking” in “Banking products” in this section for more information on loan-to-value in our Swiss mortgage portfolio**

→ **Refer to “Wealth Management Americas” in “Banking products” in this section for more information on loan-to-value in our Wealth Management Americas mortgage portfolio**

Lombard lending

Audited I Lombard loans are secured by a pledge of marketable securities, guarantees and other forms of collateral. Eligible financial securities primarily include transferable securities (such as bonds and equities), which are liquid and actively traded, and other transferable securities such as approved structured products for which regular prices are available and for which the issuer of the security provides a market. To a lesser degree, less liquid collateral is also financed.

We apply discounts (haircuts) to reflect the collateral's risk and to derive the lending value. Haircuts for marketable securities are calculated to cover the possible change in the market value over a given close-out period and confidence level; the haircut applied will vary depending on the view of the counterparty's creditworthiness. Less liquid or more volatile collateral will typically attract larger haircuts. For less liquid instruments such as structured products, some bonds, and products with long redemption periods, the close-out period may be much longer than that for highly liquid instruments, or an assessment is made as to the expected recovery on the asset in the event of the counterparty's default, resulting in a larger haircut. For cash, life insurance policies, guarantees and letters of credit, haircuts are determined on a product- or client-specific basis.

We also consider concentration and correlation risks across collateral posted on a counterparty level as well as at a divisional level across counterparties. Additionally, we perform targeted Group-wide reviews of concentrations. A concentration of collateral in single securities, issuers or issuer groups, industry sectors, countries, regions or currencies may result in higher risk and reduced liquidity. In such cases, the lending value of the collateral, margin call and close-out levels are adjusted accordingly. ▲

Exposures and collateral values are monitored on a daily basis to ensure that the credit exposure continues to be within the established risk appetite. A shortfall occurs when the lending value drops below the exposure. If a shortfall exceeds a defined trigger level, a margin call is initiated, requiring the client to provide additional collateral, reduce the exposure or take other action to bring the exposure in line with the agreed lending value of the collateral. If the shortfall increases, or is not corrected within the required period, a close-out is initiated, through which collateral is liquidated, open derivative positions are closed and guarantees or letters of credit are called.

We also conduct stress testing of collateralized exposures to simulate market events which increase the risk of collateral shortfalls and unsecured exposures by significantly reducing the value of the collateral, increasing the exposure of traded products, or both. For certain classes of counterparties limits on such calculated stress exposures are applied and controlled on a counterparty level. In addition, there are portfolio limits applied across certain businesses or collateral types.

→ **Refer to “Stress loss” in “Credit risk models” in this section for more information on our stress testing**

Counterparty credit risk

Audited | Counterparty credit risk arising from traded products, which includes OTC derivatives and SFTs originating in the Investment Bank, Non-core and Legacy Portfolio and Group ALM, is generally managed on a close-out basis, which takes into account the effect of market movements on the exposure and any associated collateral over the potential time it would take to close out our positions. In the Investment Bank, limits are applied to the potential future exposure per counterparty, with the size of the limit driven by the view of the creditworthiness of the counterparty as determined by Credit Risk Control. Limit frameworks are also applied to control overall exposure to specific classes or categories of collateral on a portfolio level. Such portfolio limits are monitored and reported to senior management.

Trading in OTC derivatives is conducted through central counterparties (CCPs) where practicable. Where CCPs are not used, we have clearly defined policies and processes for trading on a bilateral basis. Trading is generally conducted under bilateral International Swaps and Derivatives Association (ISDA) or ISDA-equivalent master netting agreements, which allow for the close-out and netting of transactions in the event of default. For most major market participant counterparties, we may additionally use two-way collateral agreements under which either party can be required to provide collateral in the form of cash or marketable securities, typically limited to well-rated government debt, when the exposure exceeds specified levels. For certain counterparty types "initial margin" is taken to cover some or all of the calculated close-out exposure for the derivative product. This is in addition to the "variation margin" taken to cover changes in the market value of the transaction. ▲

- Refer to "Note 12 Derivative instruments and hedge accounting" in the "Consolidated financial statements" section of this report for more information on our over-the-counter derivatives settled through central counterparties
- Refer to "Note 24 Offsetting financial assets and financial liabilities" in the "Consolidated financial statements" section of this report for more information on the effect of netting and collateral arrangements on our derivative exposures

Credit hedging

Audited | We utilize single-name CDSs, credit index CDSs, bespoke protection, and other instruments to actively manage credit risk in the Investment Bank and Non-core and Legacy Portfolio. This is aimed at reducing concentrations of risk from specific counterparties, sectors or portfolios and, in the case of counterparty credit risk, the profit or loss impact arising from changes in credit valuation adjustments (CVA).

We maintain strict guidelines for taking credit hedges into account for credit risk mitigation purposes. For example, when monitoring exposures against counterparty limits, we do not usually recognize credit risk mitigants such as proxy hedges (credit protection on a correlated but different name) or credit index CDSs. Buying credit protection also creates credit exposure against the protection provider. We monitor and limit our exposures to credit protection providers and the effectiveness of credit hedges as part of our overall credit exposures to the relevant counterparties. Trading with such counterparties is typically collateralized. For credit protection purchased to hedge the lending portfolio, this includes monitoring mismatches between the maturity of the credit protection purchased and the maturity of the associated loan. Such mismatches result in basis risk and may reduce the effectiveness of the credit protection. Mismatches are routinely reported to credit officers and mitigating actions are taken when deemed necessary. ▲

- Refer to "Note 12 Derivative instruments and hedge accounting" in the "Consolidated financial statements" section of this report for more information

Mitigation of settlement risk

To mitigate settlement risk, we reduce our actual settlement volumes through the use of multilateral and bilateral agreements with counterparties, including payment netting.

Our most significant source of settlement risk is foreign exchange transactions. We are a member of Continuous Linked Settlement (CLS), an industry utility that provides a multilateral framework to settle transactions on a delivery-versus-payment basis, thereby significantly reducing foreign exchange-related settlement risk relative to the volume of business. However, the mitigation of settlement risk through CLS and other means does not fully eliminate our credit risk in foreign exchange transactions resulting from changes in exchange rates prior to settlement, which is managed as part of our overall credit risk management of OTC derivatives.

Credit risk models

Audited I We have developed tools and models in order to estimate future credit losses that may be implicit in our current portfolio.

Exposures to individual counterparties are measured on the basis of three generally accepted parameters: probability of default (PD), loss given default (LGD) and exposure at default (EAD). For a given credit facility, the product of these three parameters results in the expected loss. These parameters are the basis for the majority of our internal measures of credit risk, and are key inputs for the regulatory capital calculation under the advanced internal ratings-based approach of the Basel III

framework governing international convergence of capital. We also use models to derive the portfolio credit risk measures of expected loss, statistical loss and stress loss. ▲

The “Key features of our main credit risk models” table below summarizes the key features of the models that we use to derive PD, LGD and EAD for our main portfolios and is followed by more detailed explanations of these parameters.

→ Refer to the “Basel III Pillar 3 UBS Group AG 2016” report under “Pillar 3, SEC filings & other disclosures” at www.ubs.com/investors for more information on the regulatory capital calculation under the advanced internal ratings-based approach

Key features of our main credit risk models

	Portfolio in scope	Model approach	Main drivers	Number of years loss data
Probability of default	Swiss owner-occupied mortgages	Score card	Behavioral data, affordability relative to income, property type, loan-to-value	22
	Income-producing real estate mortgages	Transaction rating	Loan-to-value, debt-service-coverage	22
	Lombard lending	Merton type	Loan-to-value, portfolio volatility	10–15
	Personal & Corporate Banking – Corporates	Score card	Financial data including balance sheet ratios and profit or loss, and behavioral data	22
	Investment Bank – Banks	Score card	Financial data including balance sheet ratios and profit or loss	5–10
	Investment Bank – Corporates	Score card / market data	Financial data including balance sheet ratios and profit or loss, and market data	5–10
Loss given default	Swiss owner-occupied mortgages	Actuarial model	Historical observed loss rates, loan-to-value, property type	22
	Income-producing real estate mortgages	Actuarial model	Historical observed loss rates	22
	Lombard lending	Actuarial model	Historical observed loss rates	10–15
	Personal & Corporate Banking – Corporates	Actuarial model	Historical observed loss rates	18
	Investment Bank – all counterparties	Actuarial model	Counterparty- and facility-specific, including industry segment, collateral, seniority, legal environment and bankruptcy procedures	5–10
Exposure at default	Banking products	Statistical model	Exposure type (committed credit lines, revocable credit lines, contingent products)	>10
	Traded products	Statistical model	Product-specific market drivers, e.g., interest rates	n/a

Audited I

Internal UBS rating scale and mapping of external ratings

Internal UBS rating	1-year PD range in %	Description	Moody's Investors Service mapping	Standard & Poor's mapping	Fitch mapping
0 and 1	0.00–0.02	Investment grade	Aaa	AAA	AAA
2	0.02–0.05		Aa1 to Aa3	AA+ to AA–	AA+ to AA–
3	0.05–0.12		A1 to A3	A+ to A–	A+ to A–
4	0.12–0.25		Baa1 to Baa2	BBB+ to BBB	BBB+ to BBB
5	0.25–0.50		Baa3	BBB–	BBB–
6	0.50–0.80	Sub-investment grade	Ba1	BB+	BB+
7	0.80–1.30		Ba2	BB	BB
8	1.30–2.10		Ba3	BB–	BB–
9	2.10–3.50		B1	B+	B+
10	3.50–6.00		B2	B	B
11	6.00–10.00		B3	B–	B–
12	10.00–17.00		Caa	CCC	CCC
13	>17		Ca to C	CC to C	CC to C
Counterparty is in default	Default	Defaulted		D	D

Probability of default

The probability of default (PD) is an estimate of the likelihood of a counterparty defaulting on its contractual obligations over the next 12 months. PD ratings are used for credit risk measurement and are an important input for determining credit risk approval authorities. For the calculation of RWA, a 3 basis points PD floor is applied to Banks, Corporates and Retail exposures as required under the Basel III Framework.

PD is assessed using rating tools tailored to the various categories of counterparties. Statistically developed score cards, based on key attributes of the obligor, are used to determine PD for many of our corporate clients and for loans secured by real estate. Where available, market data may also be used to derive the PD for large corporate counterparties. For low default portfolios, where available, we take into account relevant external default data in the rating tool development. For Lombard loans, Merton-type model simulations taking into account potential changes in the value of securities collateral are used in our rating approach. These categories are also calibrated to our internal credit rating scale (masterscale), which is designed to ensure a consistent assessment of default probabilities across counterparties. Our masterscale expresses one-year default probabilities that we determine through our various rating tools by means of distinct classes, whereby each class incorporates a range of default probabilities. Counterparties migrate between rating classes as our assessment of their PD changes.

The ratings of the major credit rating agencies, and their mapping to our internal rating masterscale and internal PD bands, are shown in the "Internal UBS rating scale and mapping of external ratings" table on the previous page. The mapping is based on the long-term average of one-year default rates available from the rating agencies. For each external rating category, the average default rate is compared with our internal PD bands to derive a mapping to our internal rating scale. Our internal rating of a counterparty may therefore diverge from one or more of the correlated external ratings shown in the table. Observed defaults by rating agencies may vary through economic cycles, and we do not necessarily expect the actual number of defaults in our equivalent rating band to equal the rating agencies' average in any given period. We periodically assess the long-term average default rates of credit rating agencies' grades, and we adjust their mapping to our masterscale as necessary to reflect any material changes.

Loss given default

Loss given default (LGD) is the magnitude of the likely loss if there is a default. Our LGD estimates, which consider downturn conditions, include loss of principal, interest and other amounts (such as work-out costs, including the cost of carrying an impaired position during the work-out process) less recovered amounts. We determine LGD based on the likely recovery rate of claims against defaulted counterparties, which depends on the type of counterparty and any credit mitigation by way of collateral or

guarantees. Our estimates are supported by our internal loss data and external information where available. Where we hold collateral, such as marketable securities or a mortgage on a property, loan-to-value ratios are a key parameter in determining LGD. For low default portfolios, where available, we take into account relevant external default data in the rating tool development.

Exposure at default

Exposure at default (EAD) represents the amount we expect to be owed by a counterparty at the time of a possible default. We derive EAD from our current exposure to the counterparty and the possible future development of that exposure.

The EAD of a loan is the drawn or face value of the loan. For loan commitments and guarantees, the EAD includes the amount drawn as well as potential future amounts that may be drawn, which are estimated using credit conversion factors based on historical observations.

For traded products, we derive the EAD by modeling the range of possible exposure outcomes at various points in time using scenario and statistical techniques. We assess the net amount that may be owed to us or that we may owe to others, taking into account the effect of market moves over the potential time it would take to close out our positions. For exchange-traded derivatives, our calculation of EAD takes into account collateral margin calls. When measuring individual counterparty exposure against credit limits, we consider the maximum likely exposure measured to a high level of confidence. However, when aggregating exposures to different counterparties for portfolio risk measurement purposes, we use the expected exposure to each counterparty at a given time period (usually one year) generated by the same model.

We assess our exposures where there is a material correlation between the factors driving the credit quality of the counterparty and those driving the potential future value of our traded product exposure (wrong-way risk), and we have established specific controls to mitigate these risks.

Expected loss

Credit losses are an inherent cost of doing business and the occurrence and amount of credit losses can be erratic. In order to quantify future credit losses that may be implicit in our current portfolio, we use the concept of expected loss.

Expected loss is a statistical measure used to estimate the average annual costs we expect to experience from positions that become impaired. The expected loss for a given credit facility is a product of the three components described above: PD, EAD and LGD. We aggregate the expected loss for individual counterparties to derive our expected portfolio credit losses.

Expected loss is the basis for quantifying credit risk in all our portfolios. It is also the starting point for the measurement of our portfolio statistical loss and stress loss.

We use a statistical modeling approach to estimate the loss profile of each of our credit portfolios over a one-year period to a specified level of confidence. The mean value of this loss distribution is the expected loss. The loss estimates deviate from the mean value due to statistical uncertainty on the defaulting counterparties and to systematic default relationships among counterparties within and between segments. The statistical measure is sensitive to concentration risks on individual counterparties and groups of counterparties. The outcome provides an indication of the level of risk in our portfolio and the way it may develop over time.

→ Refer to “Implementation of IFRS 9, *Financial Instruments*” in the “Significant accounting and financial reporting changes” section for more information on future requirements of the expected credit loss methodology under IFRS 9

Stress loss

We complement our statistical modeling approach with scenario-based stress loss measures. Stress tests are run on a regular basis to monitor the potential impact of extreme, but nevertheless plausible, events on our portfolios, under which key credit risk parameters are assumed to deteriorate substantially. Where we consider it appropriate, we apply limits on this basis.

Stress scenarios and methodologies are tailored to the nature of the portfolios, ranging from regionally focused to global systemic events, and varying in time horizon. For example, for our loan underwriting portfolio, we apply a global market event under which, simultaneously, the market for loan syndication freezes, market conditions significantly worsen, and credit

quality deteriorates. Similarly, for Lombard lending, we apply a range of scenarios representing instantaneous market shocks to all collateral and exposure positions, taking into consideration their liquidity and potential concentrations. The portfolio-specific stress test for our mortgage lending business in Switzerland reflects a multi-year event, and the overarching stress test for global wholesale and counterparty credit risk to corporates uses a one-year global stress event and takes into account exposure concentrations to single counterparties.

→ Refer to “Stress testing” in this section for more information on our stress testing framework

Credit risk model confirmation

Our approach to model confirmation involves both quantitative methods, including monitoring compositional changes in the portfolios and the results of backtesting, and qualitative assessments, including feedback from users on the model output as a practical indicator of the performance and reliability of the model.

Material changes in a portfolio composition may invalidate the conceptual soundness of the model. We therefore perform regular analysis of the evolution of portfolios to identify such changes in the structure and credit quality of portfolios. This includes analysis of changes in key attributes, changes in portfolio concentration measures, as well as changes in RWA.

→ Refer to “Risk measurement” in this section for more information on our approach to model confirmation procedures

Main credit models backtesting by regulatory exposure segment

	Length of time series used for the calibration (in years)	Actual rates in %			Estimated average rates at the start of 2016 in %
		Average of last 5 years ¹	Min. of last 5 years ²	Max. of last 5 years ²	
Probability of default					
Sovereigns	>10	0.00	0.00	0.00	0.20
Banks ³	>10	0.05	0.00	0.13	0.62
Corporates ⁴	>10	0.22	0.19	0.28	0.55
Retail					
<i>Residential mortgages</i>	>20	0.15	0.12	0.19	0.51
<i>Lombard lending</i>	>10	0.01	0.00	0.02	0.14
<i>Other retail</i>	>10	0.24	0.16	0.29	1.03
Loss given default					
Sovereigns	>10				41.80
Banks ³	>10	10.99	10.99	10.99	37.74
Corporates	>10	22.56	9.81	28.88	20.07
Retail					
<i>Residential mortgages</i>	>20	1.73	0.00	2.76	6.60
<i>Lombard lending</i>	>10	16.08	8.48	65.26	13.23
<i>Other retail</i>	>10	7.50	0.11	21.32	44.54
Credit conversion factor					
Corporates	>10	20.26	6.87	44.32	22.88

¹ Average of all observations over the last five years. ² Minimum / maximum annual average of observations in any single year from the last five years. Yearly averages are only calculated where five or more observations occurred during that year. ³ Includes central counterparties. ⁴ Includes managed funds, which have relatively low default rates.

Backtesting

We monitor the performance of our models by backtesting and benchmarking them, whereby model outcomes are compared with actual results, based on our internal experience as well as externally observed results. To assess the predictive power of our credit exposure models for traded products such as OTC derivatives and ETD products, we statistically compare the predicted future exposure distributions at different forecast horizons with the realized values.

For PD, we use statistical modeling to derive a predicted distribution of the number of defaults. The observed number of defaults is then compared with this distribution, allowing us to derive a statistical level of confidence in the model conservativeness. In addition, we derive a lower and upper bound for the average default rate. If the portfolio average PD lies outside the derived interval, the rating tool is, as a general rule, recalibrated.

For LGD, the backtesting statistically tests whether the mean difference between the observed and predicted LGD is zero. If the test fails, then there is evidence that our predicted LGD is too low. In such cases, models are recalibrated where these differences are outside expectations.

Credit conversion factors (CCFs), used for the calculation of EAD for undrawn facilities with corporate counterparties, are dependent on several contractual dimensions of the credit facility. We compare the predicted amount drawn with observed historical utilization of such facilities for defaulted counterparties. If any statistically significant deviation is observed, the relevant CCFs are redefined.

The "Main credit models backtesting by regulatory exposure segment" table on the previous page compares the current model calibration for PD, LGD and CCFs with historical observed values over the last five years.

Changes to models and model parameters during the period

As part of our continuous efforts to enhance models to reflect market developments and new available data, in the course of 2016 we modified models in the Investment Bank, Personal & Corporate Banking and Wealth Management by incorporating revised credit conversion factors for off-balance sheet exposures.

Where required, changes to models and model parameters were approved by the Swiss Financial Market Supervisory Authority (FINMA) prior to implementation.

Policies for past due, non-performing and impaired claims

The diagram "Exposure categorization" illustrates how we categorize banking products and SFTs as performing, non-performing and / or impaired.

Audited I For products accounted for on a fair value basis, such as OTC derivatives, credit deterioration is recognized through a credit valuation adjustment (CVA), and these products are therefore not subject to the impairment framework.

We consider a claim held at amortized cost (loans and SFTs) and certain off-balance-sheet commitments to be past due when a contractual payment has not been received by its contractual due date, or in case of account overdrafts, i.e., where the credit

limit is exceeded. Past due claims are not considered impaired where we otherwise expect to collect all amounts due under the contractual terms of the claims.

A past due claim is considered non-performing when the payment of interest, principal or fees is overdue by more than 90 days, or more than 180 days for certain specified retail portfolios. Claims are also classified as non-performing when bankruptcy, insolvency proceedings or enforced liquidation have commenced, or obligations have been restructured on preferential terms, such as preferential interest rates, extension of maturity or subordination.

Individual claims are classified as impaired if following an individual impairment assessment, an allowance or provision for credit losses is established. Accordingly, both performing and non-performing loans may be classified as impaired. ▲

Restructured claims

Audited I We do not operate a general policy for restructuring claims in order to avoid counterparty default. Where restructuring does take place, we assess each case individually. Typical features of terms and conditions granted through restructuring to avoid default may include concessions of special interest rates, postponement of interest or principal payments, debt / equity swaps, modification of the schedule of repayments, subordination or amendment of loan maturity.

If a loan is restructured with preferential conditions (i.e., new terms and conditions are agreed upon which do not meet the normal current market criteria for the quality of the obligor and the type of loan), the claim is still classified as non-performing. It will remain so until the loan is collected, written off or non-preferential conditions are granted that supersede the preferential conditions, and will be assessed for impairment on an individual basis.

Concessions granted where there is no evidence of financial difficulty, or where any changes to terms and conditions are within our usual risk appetite, are not considered restructured. ▲

Individual and collective impairment assessments

Audited I Claims are assessed individually for impairment where there are indicators that an impairment may exist. Otherwise, portfolios of claims with similar credit risk characteristics are included in a collective impairment assessment. ▲

Individual impairment assessment

Audited I Non-performing status is considered an indicator that a loan may be impaired and therefore non-performing claims are assessed individually for impairment. However, an impairment analysis would be carried out irrespective of non-performing status if other objective evidence indicates that a loan may be impaired. Any event that impacts current and future cash flows may be an indication of impairment and trigger an assessment by the risk officer. Such events may be (i) significant collateral shortfalls due to a fall in lending values (securities and real estate), (ii) increase in loan exposure, (iii) significant financial difficulties of a client and (iv) high probability of the client's bankruptcy, debt moratorium or financial reorganization.

Individual claims are assessed for impairment based on the borrower's overall financial condition, resources and payment record, the prospects of support from contractual guarantors and, where applicable, the realizable value of any collateral. The recoverable amount is determined from all relevant cash flows and, where this is lower than the carrying amount of the claim, the claim is considered impaired.

We have established processes to determine the carrying values of impaired claims in compliance with IFRS requirements. Our credit controls applied to valuation processes and workout agreements are the same for credit products measured at amortized cost and fair value. Our workout strategy and estimation of recoverable amounts are independently approved in accordance with our credit authorities. ▲

Collective impairment assessment

Audited I We assess our portfolios of claims carried at amortized cost with similar credit risk characteristics for collective impairment in order to consider if these portfolios contain impaired claims that cannot yet be individually identified. To cover the time lag between the occurrence of an impairment event and its identification based on the policies above, we establish collective loan loss allowances based on the estimated loss for the portfolio over the average period between trigger events and the identification of any individual impairment. These portfolios are not considered impaired loans in the tables shown

in this section.

Additionally, for all of our portfolios we assess whether there have been any developments which might result in event-driven impairments that are not immediately observable. These events could be stress situations, such as a natural disaster or a country crisis, or they could result from significant changes in the legal or regulatory environment. To determine whether a collective impairment exists, we regularly use a set of global economic drivers to assess the most vulnerable countries and review the impact of any potential impairment event. ▲

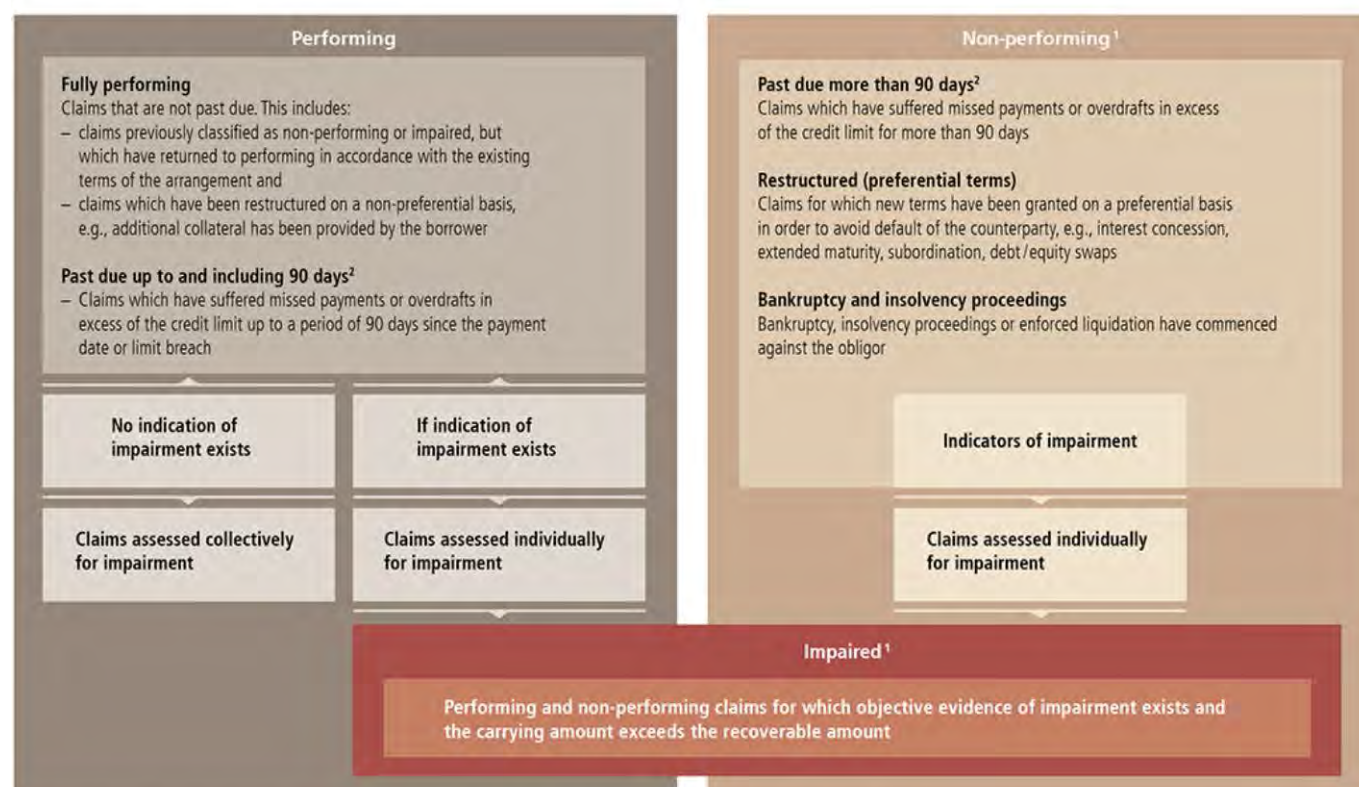
Recognition of impairment

Audited I The recognition of impairment in our financial statements depends on the accounting treatment of the claim. For claims carried at amortized cost, impairment is recognized through the creation of an allowance, or in the case of off-balance sheet items such as financial guarantees and certain loan commitments through a provision, both charged to the income statement as a credit loss expense.

For claims measured at fair value, a deterioration of the credit quality is recognized as a CVA in the income statement in *Net trading income*. ▲

→ Refer to "Note 1 Summary of significant accounting policies," "Note 11 Allowances and provisions for credit losses" and "Note 22d Valuation adjustments" in the "Consolidated financial statements" section of this report for more information

Exposure categorization



¹ Claims rated as in default. All such claims are excluded from collective impairment assessment. ² 180 days for certain specified retail portfolios.

Impaired financial instruments

Audited I The following tables show impaired financial instruments, comprising loans, guarantees and loan commitments, and SFTs. As of 31 December 2016, gross impaired financial instruments stood at CHF 1.2 billion compared with CHF 1.5 billion as of 31 December 2015. After deducting the estimated liquidation proceeds of collateral and specific allowances and provisions, net impaired financial instruments were CHF 0.4 billion compared with CHF 0.6 billion. ▲

- Refer to the “Investment Bank, Non-core and Legacy Portfolio, and Group ALM: distribution of net OTC derivatives and SFT exposure across internal UBS ratings and loss given default (LGD) buckets” table in this section for OTC derivative exposures in the Investment Bank and Corporate Center – Non-core and Legacy Portfolio that are rated at level 13 or in default according to our internal rating scale
- Refer to “Note 11 Allowances and provisions for credit losses” in the “Consolidated financial statements” section of this report for more information on movements in allowances and provisions

Impaired loans

During 2016, gross impaired loans (including amounts due from banks) decreased to CHF 975 million from CHF 1,226 million. The majority of this exposure relates to loans in our Swiss domestic business. The ratio of impaired loans to total loans

decreased slightly to 0.3%.

Audited I Collateral held against our impaired loan exposure mainly consisted of real estate and securities. It is our policy to dispose of foreclosed real estate as soon as practicable. The carrying amount of foreclosed property recorded in our balance sheet at the end of 2016 and 2015 amounted to CHF 51 million and CHF 44 million, respectively. We seek to liquidate collateral held in the form of financial assets expeditiously and at prices considered fair. This may require us to purchase assets for our own account, where permitted by law, pending orderly liquidation. ▲

Specific and collective allowances and provisions for credit losses decreased by CHF 74 million to CHF 653 million as of 31 December 2016. This includes collective loan loss allowances of CHF 12 million, which increased by CHF 6 million in 2016, mainly due to collective loan loss allowances established against oil and gas exposures.

The “Loss history statistics” table below provides a five-year history of our credit loss experience for loans (including due from banks) relative to our impaired and non-performing loans.

- Refer to “Policies for past due, non-performing and impaired claims” in this section, and to “Note 10 Due from banks and loans (held at amortized cost)” and “Note 11 Allowances and provisions for credit losses” in the “Consolidated financial statements” section of this report for more information

Audited I

Impaired financial instruments by type

CHF million	Gross impaired financial instruments		Allowances and provisions ¹		Estimated liquidation proceeds of collateral ²		Net impaired financial instruments	
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Loans (including amounts due from banks)	975	1,226	(599)	(692)	(161)	(163)	215	371
Guarantees and loan commitments	260	292	(54)	(35)	(10)	(4)	195	252
Defaulted securities financing transactions								
Total impaired financial instruments	1,235	1,518	(653)	(727)	(171)	(168)	411	623

¹ Includes CHF 12 million in collective loan loss allowances (31 December 2015: CHF 6 million). ² Does not include oil and gas reserves related to reserve-based lending.

Loss history statistics

CHF million, except where indicated	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Due from banks and loans (gross)	320,080	324,594	329,800	301,601	301,849
Impaired loans (including due from banks)	975	1,226	1,204	1,241	1,606
Non-performing loans (including due from banks)	2,399	1,630	1,602	1,582	1,516
Allowances and provisions for credit losses ^{1,2}	653	727	735	750	794
of which: allowances for due from banks and loans ¹	599	692	708	686	728
Net write-offs ³	123	116	124	83	250
of which: net write-offs for due from banks and loans	123	116	124	83	250
Credit loss (expense) / recovery ⁴	(37)	(117)	(78)	(50)	(118)
of which: credit loss (expense) / recovery for due from banks and loans	(37)	(117)	(78)	(50)	(134)
Ratios					
Impaired loans as a percentage of due from banks and loans (gross)	0.3	0.4	0.4	0.4	0.5
Non-performing loans as a percentage of due from banks and loans (gross)	0.7	0.5	0.5	0.5	0.5
Allowances as a percentage of due from banks and loans (gross)	0.2	0.2	0.2	0.2	0.2
Net write-offs as a percentage of average due from banks and loans (gross) outstanding during the period	0.0	0.0	0.0	0.0	0.1

¹ Includes collective loan loss allowances. ² Includes provisions for loan commitments and allowances for securities financing transactions. ³ Includes net write-offs for loan commitments and securities financing transactions. ⁴ Includes credit loss (expense) / recovery for loan commitments and securities financing transactions.

Allowances and provisions for credit losses

CHF million, except where indicated	IFRS exposure, gross ¹		Impaired exposure, gross		Estimated liquidation proceeds of collateral ²		Allowances and provisions for credit losses ³		Impairment ratio (%)	
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Group										
Balances with central banks	107,100	89,776								
Due from banks	13,159	11,951	3	1			3	3	0.0	0.0
Loans	306,921	312,643	972	1,225	161	163	596	689	0.3	0.4
Guarantees	16,711	16,019	202	256	7	4	8	32	1.2	1.6
Loan commitments	54,430	56,067	58	36	3		47	3	0.1	0.1
Total	498,322⁴	486,456	1,235	1,518	171	168	653	727	0.2	0.3
Wealth Management										
Balances with central banks	901	1,344								
Due from banks	915	1,107								
Loans	101,876	105,167	77	109	13	19	61	89	0.1	0.1
Guarantees	2,187	2,267					1	1		
Loan commitments	1,730	1,270								
Total	107,608	111,155	77	109	13	19	62	90	0.1	0.1
Wealth Management Americas										
Balances with central banks	0	0								
Due from banks	2,635	1,899								
Loans	52,486	48,754	27	29			29	28	0.1	0.1
Guarantees	558	747								
Loan commitments	375	279								
Total	56,054	51,678	27	29	0	0	29	28	0.0	0.1
Personal & Corporate Banking										
Balances with central banks	0	0								
Due from banks	2,156	1,493	3	1			3	3	0.1	0.1
Loans	133,861	135,616	756	870	121	144	443	496	0.6	0.6
Guarantees	9,023	7,900	202	255	7	4	7	31	2.2	3.2
Loan commitments	8,861	8,463	35	20	3		34		0.4	0.2
Total	153,900	153,473	995	1,146	131	149	486	530	0.6	0.7
Asset Management										
Total	545	443	0	0	0	0	0	0	0.0	0.0
Investment Bank										
Balances with central banks	37	345								
Due from banks	4,234	4,177								
Loans	10,086	13,088	95	202	27		48	62	0.9	1.5
Guarantees	4,790	4,958	0	1					0.0	0.0
Loan commitments	42,937	44,648	23	15			13	3	0.1	0.0
Total	62,085	67,217	118	219	27	0	61	65	0.2	0.3
CC – Services										
Total	610	623	0	0	0	0	0	0	0.0	0.0
CC – Group ALM										
Balances with central banks	106,162	88,087								
Due from banks	2,176	2,210								
Loans	5,962	6,788								
Guarantees	1	0								
Loan commitments	0	0								
Total	114,301	97,086	0	0	0	0	0	0	0.0	0.0
CC – Non-core and Legacy Portfolio										
Balances with central banks	0	0								
Due from banks	43	56								
Loans	2,606	3,183	17	15			15	14	0.6	0.5
Guarantees	41	137								
Loan commitments	527	1,406								
Total	3,218	4,782	17	15	0	0	15	14	0.5	0.3

¹ The measurement requirements of IFRS differ in certain respects from our internal management view of credit risk. ² Does not include oil and gas reserves related to reserve-based lending. ³ Includes CHF 12 million (31 December 2015: CHF 6 million) in collective loan loss allowances for credit losses. ⁴ As of 31 December 2016, total IFRS exposure of UBS AG (consolidated) was CHF 0.6 billion higher than the exposure of UBS Group AG (consolidated), related to receivables of UBS AG and UBS Switzerland AG against UBS Group AG (31 December 2015: CHF 0.7 billion).

Development of individually impaired loans (including due from banks)

	For the year ended	
CHF million	31.12.16	31.12.15
Balance at the beginning of the year	1,226	1,204
New impaired loans	356	465
Increase in existing impaired loans	140	71
Repayments / sales / upgrades	(605)	(354)
Write-offs	(143) ¹	(162)
Foreign currency translations effects	1	2
Balance at the end of the year	975	1,226

¹ Does not include CHF 2 million in write-offs charged directly to collective loan loss allowances.

Past due but not impaired loans

The table below shows a breakdown of total loan balances where payments have been missed, but which we do not consider impaired because we otherwise expect to collect all amounts due under the contractual terms of the loans or the equivalent value from liquidation of collateral. The loan balances in the table arise predominantly within Personal & Corporate Banking and, to a lesser extent, Wealth Management.

The amount of past due but not impaired mortgage loans was not significant compared with the overall size of the mortgage portfolio.

→ Refer to “Note 1 Summary of significant accounting policies” in the “Consolidated financial statements” section of this report for more information on our impairment policies

Audited I

Past due but not impaired loans

CHF million	31.12.16	31.12.15
1–10 days	54	141
11–30 days	113	69
31–60 days	68	37
61–90 days	10	16
>90 days	641	663
of which: mortgage loans	542 ¹	529 ¹
Total	887	927

¹ Total mortgage loans IFRS carrying value was CHF 153,006 million (31 December 2015: CHF 153,044 million).

Market risk

Key developments

We continued to manage market risk to low levels during 2016. Average 1-day, 95% confidence level, management value-at-risk (VaR) reduced to CHF 11 million from CHF 15 million. Maximum VaR peaked at CHF 18 million during 2016 compared with CHF 25 million in the prior year. With VaR at such low levels, we continue to see some volatility in the measure driven by positions arising from client facilitation as well as option expiries. The low absolute levels of VaR have also contributed to a higher number of backtesting exceptions, with the number of exceptions within a 250-business-day window increasing to nine during the year before reducing to seven at the end of the year. Accordingly, the FINMA VaR multiplier used to compute regulatory and stressed VaR RWA increased to 3.85 in the second quarter of 2016 before reducing to 3.65 at year-end.

Audited | Main sources of market risk

- Market risks arise from both our trading and non-trading business activities.
- Trading market risks arise mainly in connection with primary debt and equity underwriting, securities and derivatives trading for market-making and client facilitation within our Investment Bank, as well as the remaining positions within Non-core and Legacy Portfolio and our municipal securities trading business within Wealth Management Americas.
- Non-trading market risk arises predominantly in the form of interest rate and foreign exchange risks in connection with personal banking and lending in our wealth management businesses, our personal and corporate banking business in Switzerland and the Investment Bank's lending business, in addition to treasury activities.
- Corporate Center – Asset and Liability Management (Group ALM) assumes market risks in the process of managing interest rate risk, structural foreign exchange risk and the liquidity and funding profile of the Group.
- Equity and debt investments can also give rise to market risks, as can some aspects of our employee benefits, such as defined benefit pension schemes. ▲

Audited | Overview of measurement, monitoring and management techniques

- Market risk limits are set for the Group, the business divisions and Corporate Center units and at granular levels within the various business lines, reflecting the nature and magnitude of the market risks.
- Our primary portfolio measures of market risk are liquidity-adjusted stress (LAS) loss and value-at-risk (VaR). Both are common to all our business divisions and subject to limits that are approved by the Board of Directors (BoD).

- These measures are complemented by concentration and granular limits for general and specific market risk factors. Our trading businesses are subject to multiple market risk limits. These limits take into account the extent of market liquidity and volatility, available operational capacity, valuation uncertainty and, for our single-name exposures, the credit quality of issuers.
- Trading market risks are managed on an integrated basis at a portfolio level. As risk factor sensitivities change due to new transactions, transaction expiries or changes in market levels, risk factors are dynamically rehedge to remain within limits. Accordingly, in the trading portfolio, we do not generally seek to distinguish between specific positions and associated hedges.
- Issuer risk is controlled by limits applied at the business division level based on jump-to-zero measures, which estimate our maximum default exposure (the loss in the case of a default event assuming zero recovery).
- Non-trading foreign exchange risks are managed under market risk limits, with the exception of Corporate Center – Group ALM's management of consolidated capital activity.

Our Treasury Risk Control function applies a holistic risk framework, which sets the appetite for treasury-related risk-taking activities across the Group. A key element of the framework is an overarching economic value sensitivity limit, set by the BoD. This limit is linked to the level of Basel III common equity tier 1 (CET1) capital and takes into account risks arising from interest rates, foreign exchange and credit spreads. In addition, the sensitivity of net interest income to changes in interest rates is monitored against targets set by the Group Chief Executive Officer, in order to analyze the outlook and volatility of net interest income based on market-expected interest rates. Limits are also set by the BoD to balance the impact of foreign exchange movements on our CET1 capital and CET1 capital ratio. Non-trading interest rate and foreign exchange risks are included in our Group-wide statistical and stress testing metrics, which flow into our risk appetite framework.

Equity and debt investments are subject to a range of risk controls, including preapproval of new investments by business management and Risk Control and regular monitoring and reporting. They are also included in our Group-wide statistical and stress testing metrics, which flow into our risk appetite framework. ▲

- Refer to the "Treasury management" section of this report for more information on Corporate Center – Group ALM's management of foreign exchange risks
- Refer to the "Capital management" section of this report for more information on the sensitivity of our CET1 capital and CET1 capital ratio to currency movements

Market risk stress loss

In addition to VaR, which is discussed below, we measure and manage our market risks through a comprehensive framework of non-statistical measures and related limits. This includes an extensive series of stress tests and scenario analyses, which we continuously evaluate in order to ensure that any losses resulting from an extreme, yet plausible event do not exceed our risk appetite.

Liquidity-adjusted stress

Our primary measure of stress loss for Group-wide market risk is liquidity-adjusted stress (LAS). The LAS framework is designed to capture the economic losses that could arise under specified stress scenarios. This is in part achieved by replacing the standard one-day and 10-day holding period assumptions used for management and regulatory VaR with liquidity-adjusted holding periods, as explained below. Shocks are then applied to positions based on the expected market movements over the liquidity-adjusted holding periods resulting from the specified scenario.

The holding periods used in LAS are calibrated to reflect the amount of time it would take to reduce or hedge the risk of positions in each major risk factor in a stressed environment, assuming maximum utilization of the relevant position limits. We also apply minimum holding periods, regardless of observed liquidity levels, reflecting the fact that identification of and reaction to a crisis may not always be immediate.

The expected market movements are derived using a combination of historical market behavior, based on an analysis of historical events, and forward-looking analysis that include consideration of defined scenarios that have not occurred historically.

LAS-based limits are applied at a number of levels: Group, business division and Corporate Center unit, business area and sub-portfolio. In addition, LAS forms the core market risk component of our combined stress test framework and is therefore integral to our overall risk appetite framework.

→ Refer to “Risk appetite framework” in this section for more information

→ Refer to “Stress testing” in this section for more information on our stress testing framework

Value-at-risk

VaR definition

Audited | VaR is a statistical measure of market risk, representing the market risk losses that could potentially be realized over a set time horizon (holding period) at an established level of confidence. The measure assumes no change in the Group’s trading positions over the set time horizon.

We calculate VaR on a daily basis. The profit or loss

distribution from which VaR is derived is constructed by our internally developed VaR model. The VaR model simulates returns over the holding period of those risk factors to which our trading positions are sensitive, and subsequently quantifies the profit or loss impact of these risk factor returns on the trading positions. Risk factor returns associated with the risk factor classes of general interest rates, foreign exchange and commodities are based on a pure historical simulation approach, taking into account a five-year look-back window. Risk factor returns for selected issuer based risk factors, such as equity price and credit spreads, are decomposed into systematic and residual, issuer-specific components using a factor model approach. Systematic returns are based on historical simulation, and residual returns are based on a Monte Carlo simulation. The VaR model profit or loss distribution is derived from the sum of the systematic and the residual returns in such a way that we consistently capture systematic and residual risk. Correlations among risk factors are implicitly captured via the historical simulation approach. In modeling the risk factor returns, we consider the stationarity properties of the historical time series of risk factor changes. Depending on the stationarity properties of the risk factors within a given risk factor class, we choose to model the risk factor returns using absolute returns or logarithmic returns. The risk factor return distributions are updated on a monthly basis.

Although our VaR model does not have full revaluation capability, we source full revaluation grids and sensitivities from our front-office systems, enabling us to capture material non-linear profit or loss effects.

We use a single VaR model for both internal management purposes and determining market risk regulatory capital requirements, although we consider different confidence levels and time horizons. For internal management purposes, we establish risk limits and measure exposures using VaR at the 95% confidence level with a one-day holding period, aligned to the way we consider the risks associated with our trading activities. The regulatory measure of market risk used to underpin the market risk capital requirement under Basel III requires a measure equivalent to a 99% confidence level using a 10-day holding period. In the calculation of a 10-day holding period VaR, we employ 10-day risk factor returns, whereby all observations are equally weighted.

Additionally, the population of the portfolio within management and regulatory VaR is slightly different. The population within regulatory VaR meets minimum regulatory requirements for inclusion in regulatory VaR. Management VaR includes a broader population of positions. For example, regulatory VaR excludes the credit spread risks from the securitization portfolio, which are treated instead under the securitization approach for regulatory purposes.

We also use stressed VaR (SVaR) for the calculation of regulatory capital. SVaR adopts broadly the same methodology as regulatory VaR and is calculated using the same population, holding period (10-day) and confidence level (99%). However, unlike regulatory VaR, the historical data set for SVaR is not limited to five years, but spans the time period from 1 January 2007 to the present. In deriving SVaR, we search for the largest 10-day holding period VaR for the current portfolio of the Group across all one-year look-back windows that fall into the interval from 1 January 2007 to the present. SVaR is computed weekly. ▲

→ Refer to the “Basel III Pillar 3 UBS Group AG 2016” report under “Pillar 3, SEC filings & other disclosures” at www.ubs.com/investors for more information on the regulatory capital calculation under the advanced internal ratings-based approach

Management VaR for the period

The tables below show minimum, maximum, average and period-end management VaR by business division and Corporate Center unit, and by general market risk type. We continued to manage management VaR at low levels with average VaR decreasing versus the prior year.

Audited I

Management value-at-risk (1-day, 95% confidence, 5 years of historical data) by business division and Corporate Center unit and general market risk type¹

For the year ended 31.12.16									
CHF million					Equity	Interest rates	Credit spreads	Foreign exchange	Commodities
	Min.	Max.	Average	31.12.16	1	9	3	1	0
					15	15	6	5	2
					5	11	4	3	1
					4	11	5	2	1
Total management VaR, Group	8	18	11	11	<i>Average (per business division and risk type)</i>				
Wealth Management	0	0	0	0	0	0	0	0	0
Wealth Management Americas	0	1	0	1	0	1	1	0	0
Personal & Corporate Banking	0	0	0	0	0	0	0	0	0
Asset Management	0	0	0	0	0	0	0	0	0
Investment Bank	5	18	9	8	5	8	3	3	1
CC – Services	0	0	0	0	0	0	0	0	0
CC – Group ALM	5	9	7	6	0	7	1	1	0
CC – Non-core and Legacy Portfolio	3	5	4	4	0	4	2	1	0
Diversification effect ^{2, 3}			(10)	(8)	0	(9)	(3)	(1)	0

For the year ended 31.12.15									
CHF million					Equity	Interest rates	Credit spreads	Foreign exchange	Commodities
	Min.	Max.	Average	31.12.15	5	7	4	1	0
					23	18	9	11	5
					9	11	6	4	2
					7	9	4	3	1
Total management VaR, Group	10	25	15	13	<i>Average (per business division and risk type)</i>				
Wealth Management	0	0	0	0	0	0	0	0	0
Wealth Management Americas	0	1	0	0	0	1	1	0	0
Personal & Corporate Banking	0	0	0	0	0	0	0	0	0
Asset Management	0	0	0	0	0	0	0	0	0
Investment Bank	7	22	12	10	9	6	3	4	2
CC – Services	0	0	0	0	0	0	0	0	0
CC – Group ALM	4	16	8	6	0	8	0	1	0
CC – Non-core and Legacy Portfolio	5	9	6	5	0	4	5	1	0
Diversification effect ^{2, 3}			(12)	(9)	0	(9)	(4)	(1)	0

¹ Statistics at individual levels may not be summed to deduce the corresponding aggregate figures. The minima and maxima for each level may well occur on different days, and likewise, the VaR for each business line or risk type, being driven by the extreme loss tail of the corresponding distribution of simulated profits and losses for that business line or risk type, may well be driven by different days in the historical time series, rendering invalid the simple summation of figures to arrive at the aggregate total. ² Difference between the sum of the standalone VaR for the business divisions and Corporate Center units and the VaR for the Group as a whole. ³ As the minimum and maximum occur on different days for different business divisions and Corporate Center, it is not meaningful to calculate a portfolio diversification effect.

VaR limitations

Audited I Actual realized market risk losses may differ from those implied by our VaR for a variety of reasons.

- The VaR measure is calibrated to a specified level of confidence and may not indicate potential losses beyond this confidence level.
- The one-day time horizon used for VaR for internal management purposes, or 10-day in the case of the regulatory VaR measure, may not fully capture the market risk of positions that cannot be closed out or hedged within the specified period.
- In certain cases, VaR calculations approximate the impact of changes in risk factors on the values of positions and portfolios. This may happen because the number of risk factors included in the VaR model is necessarily limited.
- The effect of extreme market movements is subject to estimation errors, which may result from non-linear risk sensitivities, as well as the potential for actual volatility and correlation levels to differ from assumptions implicit in the VaR calculations.
- The use of a five-year window means that sudden increases in market volatility will tend not to increase VaR as quickly as the use of shorter historical observation periods, but the increase will affect our VaR for a longer period of time. Similarly, following a period of increased volatility, as markets stabilize, VaR predictions will remain more conservative for a period of time influenced by the length of the historical observation period.

SVaR is subject to the same limitations as noted for VaR above, but the use of one-year data sets avoids the smoothing effect of the five-year data set used for VaR, and the absence of the five-year window provides for a longer history of potential loss events. Therefore, although the significant period of stress

during the financial crisis of 2007–2009 is no longer contained in the historical five-year period used for management and regulatory VaR, SVaR will continue to use this data. This approach is intended to reduce the procyclicality of the regulatory capital requirements for market risks.

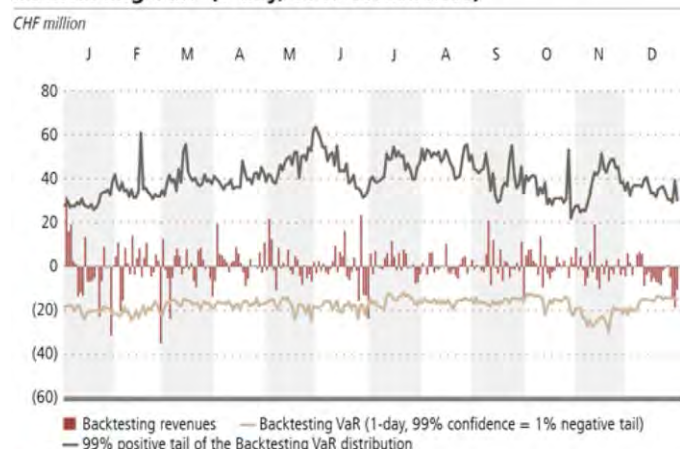
We recognize that no single measure may encompass the entirety of risks associated with a position or portfolio. Consequently, we employ a suite of various metrics with both overlapping and complementary characteristics in order to create a holistic framework that ensures material completeness of risk identification and measurement. As a statistical aggregate risk measure, VaR supplements our liquidity-adjusted stress and comprehensive stress testing frameworks.

We have an established framework to identify and quantify potential risk factors that are not fully captured by our VaR model. We refer to these risk factors as risks-not-in-VaR (RniV). This framework is used to underpin these potential risk factors with regulatory capital, calculated as a multiple of regulatory VaR and stressed VaR.▲

Backtesting of VaR

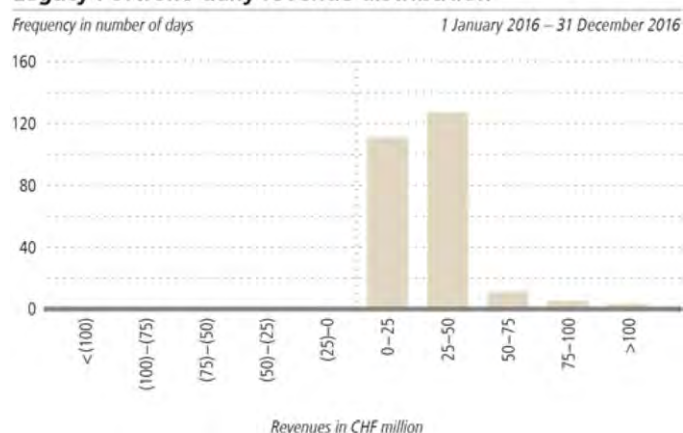
For backtesting purposes, we compute backtesting VaR using a 99% confidence level and one-day holding period for the population included within regulatory VaR. The backtesting process compares backtesting VaR calculated on positions at the close of each business day with the revenues generated by those positions on the following business day. Backtesting revenues exclude non-trading revenues, such as fees and commissions and revenues from intraday trading, to ensure a like-for-like comparison. A backtesting exception occurs when backtesting revenues are negative and the absolute value of those revenues is greater than the previous day's backtesting VaR.

Group: development of backtesting revenues¹ against backtesting VaR² (1-day, 99% confidence)



¹ Excludes non-trading revenues, such as commissions and fees, and revenues from intraday trading.
² Based on Basel III regulatory VaR, excludes CVA positions and their eligible hedges which are subject to the new standalone CVA charge.

Investment Bank and Corporate Center – Non-core and Legacy Portfolio daily revenue distribution¹



¹ In addition to backtesting revenues, includes revenues such as commissions and fees, revenues for intraday trading, reserves and own credit.

Statistically, given the confidence level of 99%, two or three backtesting exceptions per year can be expected. More exceptions than this could indicate that the VaR model is not performing appropriately, as could too few exceptions over a prolonged period of time. However, as noted in the VaR limitations above, a sudden increase or decrease in market volatility relative to the five-year window could lead to a higher or lower number of exceptions, respectively. Accordingly, Group-level backtesting exceptions are investigated, as are exceptional positive backtesting revenues, with results being reported to senior business management, the Group Chief Risk Officer and the divisional Chief Risk Officers. Backtesting exceptions are also reported to internal and external auditors and to the relevant regulators.

The “Group: development of backtesting revenues against backtesting VaR” chart on the previous page shows the 12-month development of backtesting VaR against the Group’s backtesting revenues for 2016. The chart shows both the negative and positive tails of the backtesting VaR distribution at 99% confidence intervals representing, respectively, the losses and gains that could potentially be realized over a one-day period at that level of confidence. The asymmetry between the negative and positive tails is due to the long gamma risk profile that has been run historically in the Investment Bank. This long gamma position profits from increases in volatility, which therefore benefits the positive tail of the VaR simulated profit or loss distribution.

The histogram “Investment Bank and Corporate Center – Non-core and Legacy Portfolio daily revenue distribution” shows the daily revenue distribution for the Investment Bank and Non-core and Legacy Portfolio for 2016. This includes, in addition to backtesting revenues, revenues such as commissions and fees, revenues for intraday trading, reserves and own credit.

There were seven regulatory Group VaR negative backtesting exceptions during 2016, primarily in the first six months of the year. This brought the total number of negative exceptions within the 250-business-day window to seven, as the four downside exceptions that occurred in the previous year moved out of this time window. Correspondingly, the FINMA VaR multiplier for the market risk RWA calculation increased from 3.0 at the end of 2015 to 3.65 as of 31 December 2016. We have investigated the cause for each of the backtesting exceptions and identified several factors that contributed to the increase. In particular, with market risk being managed at such low levels of VaR, the impact of these factors on the backtesting results became relatively more significant, contributing to the higher frequency of exceptions.

- Periods of increased market volatility relative to the volatility in the historical five-year time series led to daily profit or loss exceeding that predicted by the VaR model. Significant market volatility occurred in the first quarter of 2016, arising from uncertainties with regard to macroeconomic developments in China and emerging markets more broadly and to weakening commodity prices, particularly oil, as well as in the second quarter of 2016 following the outcome of

the UK referendum on EU membership. In addition, the markets saw large movements coming into year-end, particularly in euro and Swiss franc interest rate curves.

- Adjustments to trading revenues arising from non-daily marking or valuation processes can result in the recognition of profits and losses disconnected from the previous day’s backtesting VaR. We have initiatives to reduce such adjustments.
- Profit or loss on risks accounted for in the capital underpinning of RniV is captured in the backtesting revenue, even though the risks are not covered by the VaR model. We continue to focus on extending the VaR model to better capture these risks.

Given the factors outlined above, the statistical expectation of two or three exceptions per year, and combined with a review of the VaR model to confirm that it is performing consistent with its design and expectations considering the current risk profile and the market behavior, we do not believe that the increase in the number of regulatory negative backtesting exceptions during the year indicates a deficiency in our VaR model.

VaR model confirmation

In addition to model backtesting performed for regulatory purposes as described above, we also conduct extended backtesting for our internal model confirmation purposes. This includes observing model performance across the entire profit or loss distribution, not just the tails, and at multiple levels within the business division and Corporate Center unit hierarchies.

→ **Refer to “Risk measurement” in this section for more information on our approach to model confirmation procedures**

VaR model developments in 2016

Audited | In the first quarter of 2016, we made a structural change to our VaR model to consistently capture residual risk of equity- and credit-related risk factors by adopting a hybrid approach of simulating risk factor returns using historical simulation and Monte Carlo simulation. This primarily impacted portfolios that contain non-linear equity derivatives. While the effect on management VaR was minimal, it led to an overall reduction in the regulatory VaR and stressed VaR measures. To offset this reduction for the purpose of calculating RWA, FINMA temporarily introduced a model multiplier of 1.3, pending other improvements to the VaR model which are expected to increase VaR. The improvement also contained changes to fully align the stressed VaR model with the VaR model.

In the fourth quarter of 2016, we enhanced the modeling of credit default swaps and bond spread risk factor returns on the basis of a statistical factor model. There was no significant change in our VaR measures as a result of this enhancement.

We also improved the VaR model by integrating selected RniV items. ▲

Interest rate risk in the banking book

Sources of interest rate risk in the banking book

Audited I Interest rate risk in the banking book arises from balance sheet positions such as *Loans*, *Due from customers* and *Debt issued*, *Financial assets available for sale*, *Financial assets held to maturity*, certain *Financial assets* and *liabilities designated at fair value*, derivatives measured at fair value, including derivatives used for cash flow hedge accounting purposes, as well as related funding transactions. These positions may impact *Other comprehensive income* (OCI) or the income statement, depending on their accounting treatment.

Our largest banking book interest rate exposures arise from client deposits and lending products in our wealth management businesses and Personal & Corporate Banking. For Wealth Management and Personal & Corporate Banking, the inherent interest rate risks are transferred either by means of back-to-back transactions or, in the case of products with no contractual maturity date or direct market-linked rate, by replicating portfolios from the originating business into Corporate Center – Group ALM, which manages the risks on an integrated basis, allowing for netting interest rate risks across different sources. Any residual interest rate risks in our wealth management businesses and Personal & Corporate Banking that are not transferred to Corporate Center – Group ALM are managed locally and are subject to independent monitoring and control by local risk control units as well as centrally by Market Risk Control. To manage the interest rate risk centrally, Corporate Center – Group ALM uses derivative instruments, most of which are in designated hedge accounting relationships. A significant amount of interest rate risk also arises from Corporate Center –

Group ALM financing and investing activities, such as the investment and refinancing of non-monetary corporate balance sheet items with indefinite maturities, including equity, goodwill and real estate. For these items, senior management has defined specific target durations as a basis for our funding and investment activities, as applicable. These targets are defined by replication portfolios, which establish rolling benchmarks to execute against. Corporate Center – Group ALM also maintains a portfolio of debt investments to meet the Group's liquidity needs. As of 31 December 2016, the target replication portfolios for equity, goodwill and real estate were defined as follows: in Swiss francs with an average duration of approximately two years and fair value sensitivity of CHF 4 million per basis point; in US dollars with an average duration of approximately five years and a sensitivity of CHF 11 million per basis point.

Interest rate risk within Wealth Management Americas arises from the business division's portfolio of available-for-sale assets, in addition to its lending and deposit products offered to clients. This interest rate risk is closely measured, monitored and managed within approved risk limits and controls, taking into account Wealth Management Americas' balance sheet items that mutually offset interest rate risk.

Banking book interest rate exposure in the Investment Bank arises predominantly from the business of Corporate Client Solutions, where transactions are subject to approval on a case-by-case basis.

Corporate Center – Non-core and Legacy Portfolio assets that were reclassified to loans and receivables from *Held for trading* in the fourth quarter of 2008 and the first quarter of 2009, and certain other debt securities held as loans and receivables, also give rise to non-trading interest rate risk. ▲

Effect of interest rate changes on shareholders' equity and CET1 capital

The "Accounting and capital effect of changes in interest rates" table below illustrates the accounting and CET1 capital treatment of gains and losses resulting from changes in interest rates. For instruments held at fair value, a change in interest rates results in an immediate fair value gain or loss recognized either in the income statement or through OCI. For assets and liabilities held at amortized cost, including financial assets held to maturity, a change in interest rates does not result in a change in the carrying amount of the instruments, but could affect the amount of interest income or expense recognized over time in the income statement.

Typically, increases in interest rates would lead to an immediate reduction in the value of our longer-term assets held at fair value, but we would expect this to be offset over time through higher net interest income (NII) on our core banking products.

In addition to the differing accounting treatments, our banking book positions have different sensitivities to different points on yield curves. For example, our portfolios of debt securities, whether accounted for as instruments designated at fair value, as assets held to maturity or available for sale, and interest rate swaps designated as cash flow hedges, on the whole, are more sensitive to changes in longer-duration interest rates, whereas our deposits and a significant portion of our loans contributing to net interest income are more sensitive to short-term rates. These factors are important as yield curves may

not shift on a parallel basis and could, for example, exhibit an initial steepening, followed by a flattening over time.

By virtue of the accounting treatment and yield curve sensitivities outlined above, in a steepening yield curve scenario we would expect to recognize an initial decrease in shareholders' equity as a result of fair value losses recognized in OCI. This would be compensated over time by increased NII once increases in interest rates affect the shorter end of the yield curve in particular. The effect on CET1 capital would be similar, albeit less pronounced, as gains and losses on interest rate swaps designated as cash flow hedges are not recognized for regulatory capital purposes.

We subject the interest rate-sensitive banking book exposures to a suite of interest rate scenarios in order to assess the effect on expected NII over both a one-year and a three-year time horizon assuming constant business volumes. We also consider the effect of the interest rate movements in each scenario on the fair value recognized in OCI of financial assets available for sale and cash flow hedges managed by Corporate Center – Group ALM. The scenario assessment also includes the estimated effect through OCI on shareholders' equity and CET1 capital from pension fund assets and liabilities. While certain standard scenarios, such as a parallel rise in all yield curves of 100 basis points, are retained and regularly used, other scenarios are adopted as a function of changing market conditions.

Accounting and capital effect of changes in interest rates¹

	Recognition		Shareholders' equity		CET1 capital	
	Timing	Income statement / OCI	Gains	Losses	Gains	Losses
Financial assets available for sale	Immediate	OCI	●	●		●
Economic hedges classified as held for trading	Immediate	Income statement	●	●	●	●
Designated cash flow hedges	Immediate	OCI ²	●	●		
Loans and deposits at amortized costs	Gradual	Income statement	●	●	●	●
Financial assets designated at fair value	Immediate	Income statement	●	●	●	●
Financial assets held to maturity	Gradual	Income statement	●	●	●	●

¹ Refer to the "Reconciliation IFRS equity to Swiss SRB common equity tier 1 capital" table in the "Capital management" section of this report for more information on the differences between shareholders' equity and CET1 capital. ² Excluding hedge ineffectiveness that is recognized in the income statement in accordance with IFRS.

At the end of 2016, the following scenarios were analyzed in detail:

- Negative IR (NIR) then Recovery: Euro and Swiss franc yield curves drop 50 basis points in parallel during the first three months with no zero-floor applied and therefore become negative, or more negative. Yield curves in US dollars and other currencies, on the other hand, drop 25 basis points in parallel but remain floored at zero. Thereafter, all rates recover according to market-implied forward rates.
- NIR then Constant: Same assumptions as the NIR then Recovery scenario, but after the first three months, rates do not recover but remain at the then-prevailing levels until the end of the simulated time horizon.
- Eurozone Deflation and Fed Tapering: US dollar yield curve rises and steepens; euro and Swiss franc yield curves develop as in the NIR then Recovery scenario.
- Parallel +100 basis points: All yield curves rise 100 basis points in parallel.
- 2016 CCAR Adverse: Federal Reserve Board Comprehensive Capital Analysis and Review (CCAR) – Adverse scenario (interest rate component only).
- 2016 CCAR Severely Adverse: Federal Reserve Board CCAR – Severely adverse scenario (interest rate component only).
- Quantitative Easing then Recovery: Central banks keep markets flooded with liquidity, pinning down short-end rates (zero or negative interest rate policy). Bond markets / investors subsequently take fright over inflation fears, resulting in long-end rates spiking up sharply (resulting in 5-year forward rates reaching pre-2008 levels); short-end rates eventually follow suit.
- Inverted Steepener: Yield curves across all currencies undergo a sharp rise for short tenors, with only a modest rise in the long end of the yield curve: +200 basis points for tenors up to 1 year, +100 basis points for 5 years and +20 basis points for 8-year to 10-year tenors.
- Constant Rates: All rates stay at current levels.

The results are compared to a baseline NII, which is calculated assuming that interest rates in all currencies develop according to their market-implied forward rates and under the assumption of constant business volumes. The calculated effects on baseline NII range between a deterioration of 10% and 18% over a one-year and three-year horizon, respectively, and an improvement of approximately 18% and 17% over a one-year and a three-year horizon, respectively. The most adverse scenario is the CCAR Severely Adverse over both a one-year horizon and three-year horizon. The most beneficial scenario over both time horizons is the Inverted Steepener.

In addition to the above scenario analysis, we also monitor the sensitivity of the NII to immediate parallel shocks of –200

and +200 basis points compared with baseline NII, under the assumption of a constant balance sheet volume and structure. Any resulting reduction in first-year NII relative to the baseline NII is subject to predefined threshold levels to monitor the extent to which the NII is exposed to an adverse movement in market rates. As of 31 December 2016, the baseline NII would have been approximately 14% less under a parallel shock of –200 basis points, whereas under a parallel +200-basis-point shock, the baseline NII would have been approximately 28% higher.

To shelter the level of our NII from the persistently low and negative interest rate environment in Swiss francs in particular, we rely on self-funding of our lending businesses through our deposit base in Wealth Management and Personal & Corporate Banking, along with appropriate additional adjustments to our interest rate-linked product pricing. Should we lose this equilibrium on the balance sheet, for example, due to unattractive pricing relative to our peers for either our mortgages or deposits, this could lead to a decrease in our NII in a persistently low and negative interest rate environment. As we assume constant business volumes, these risks do not appear in the aforementioned interest rate scenarios.

Moreover, should the low and negative interest rate environment persist or worsen, this could lead to additional pressure on our NII and we could face additional costs for holding our Swiss franc high-quality liquid asset portfolio. A reduction of the Swiss National Bank's deposit exemption threshold for banks would also lead to increased costs that we might not be able to offset, for example, by passing on some of the costs to our depositors. Should euro interest rates also decline significantly further into negative territory, this could likewise increase our liquidity costs and put our NII generated from euro-denominated loans and deposits at risk of volume imbalances. Depending on the overall economic and market environment, sustained and significant negative rates could also lead to our Wealth Management and Personal & Corporate Banking clients paying down their loans together with reducing any excess cash they hold with us as deposits. This would reduce the underlying business volume and lower our NII accordingly.

A net decrease in deposits would require replacement funding at a potential relative cost increase that would depend on various factors, including the term and nature of the replacement funding, whether such funding is raised in the wholesale markets or from swapping with available funding denominated in another currency. On the other hand, imbalances leading to an excess deposit position could require investments at negative yields, which we might not be able to compensate for sufficiently as a result of our excess deposit balance charging mechanisms.

Interest rate risk sensitivity to parallel shifts in yield curves

Audited I Interest rate risk in the banking book is not underpinned for capital purposes, but is subject to a regulatory threshold. As of 31 December 2016, the economic-value effect of an adverse parallel shift in interest rates of ± 200 basis points on our banking book interest rate risk exposures is significantly below the threshold of 20% of eligible capital recommended by regulators.

The interest rate risk sensitivity figures presented in the "Interest rate sensitivity – banking book" table on the next page represent the effect of +1, ± 100 and ± 200 -basis-point parallel moves in yield curves on present values of future cash flows, irrespective of accounting treatment. For some portfolios, the +1-basis-point sensitivity has been estimated by dividing the +100-basis-point sensitivity by 100. In the prevailing negative interest rate environment for the Swiss franc in particular, and to a lesser extent for the euro and the Japanese yen, interest rates for Wealth Management and Personal & Corporate Banking client transactions are generally being floored at non-negative levels. Accordingly, for the purposes of this disclosure table, downward moves of 100 / 200 basis points are floored to ensure that the resulting shocked interest rates do not turn negative. The flooring results in non-linear sensitivity behavior.

The sensitivity of the banking book to rising rates decreased to negative CHF 3.1 million per basis point from negative CHF 4.1 million per basis point. This was mainly due to a decreased negative sensitivity in Wealth Management Americas and was mainly driven by a revised client rate model for the non-maturity deposits in Wealth Management Americas, which was enhanced to represent more accurately the relationship between historical market rates and the client rates. The change in Swiss franc interest rate sensitivity, from negative CHF 0.2 million per basis point to positive CHF 0.5 million per basis point, is

predominantly attributable to the residual adjustment of the banking book exposure by Corporate Center – Group ALM to the new target duration of our Swiss franc-denominated equity, which we had shortened during 2015, primarily in response to the prevailing negative interest-rate environment in Swiss francs.

The sensitivity of the banking book to rising rates includes the interest rate sensitivities arising from debt investments classified as *Financial assets available for sale* and their associated hedges. The sensitivity of these positions (excluding hedges and excluding investments in funds accounted for as available for sale) to a 1-basis-point parallel increase in the yields of the respective instruments is approximately negative CHF 3 million, which would be recorded in OCI if such a change occurred. This sensitivity is around CHF 6 million per basis point less than as of 31 December 2015, mainly due to a reduction in available-for-sale debt securities held in Corporate Center – Group ALM with an associated buildup of debt securities designated at fair value.

The sensitivity of the banking book to rising interest rates also includes interest rate sensitivities arising from interest rate swaps designated in cash flow hedges. Fair value gains or losses associated with the effective portion of these hedges are recognized initially in *Equity*. When the hedged forecast cash flows affect profit or loss, the associated gains or losses on the hedging derivatives are reclassified from *Equity* to profit or loss. These swaps are predominantly denominated in US dollars, euros, Swiss francs and British pounds. A 1-basis-point increase of underlying LIBOR curves would have decreased equity by approximately CHF 20 million, excluding adjustments for tax. ▲

- Refer to "Note 13 Financial assets available for sale and held to maturity" in the "Consolidated financial statements" section of this report for more information
- Refer to the "Group performance" section of this report for more information on sensitivity to interest rate movements

Interest rate sensitivity – banking book¹

CHF million	31.12.16				
	–200 bps	–100 bps	+1 bp	+100 bps	+200 bps
CHF	(13.0)	(13.0)	0.5	44.8	89.3
EUR	(109.0)	(91.9)	0.0	(2.5)	(2.6)
GBP	(184.5)	(103.0)	(0.1)	(9.9)	(27.7)
USD	823.2	358.9	(3.4)	(347.2)	(704.3)
Other	0.5	(1.7)	0.0	(3.3)	(6.3)
Total effect on fair value of interest rate-sensitive banking book positions	517.1	149.4	(3.1)	(318.1)	(651.6)
<i>of which: Wealth Management Americas</i>	<i>730.5</i>	<i>325.8</i>	<i>(2.9)</i>	<i>(286.4)</i>	<i>(583.8)</i>
<i>of which: Investment Bank</i>	<i>26.3</i>	<i>14.3</i>	<i>(0.1)</i>	<i>(12.7)</i>	<i>(25.9)</i>
<i>of which: CC – Group ALM</i>	<i>(238.8)</i>	<i>(192.3)</i>	<i>0.0</i>	<i>(10.6)</i>	<i>(24.2)</i>
<i>of which: CC – Non-core and Legacy Portfolio</i>	<i>(1.2)</i>	<i>1.2</i>	<i>(0.1)</i>	<i>(7.3)</i>	<i>(15.6)</i>

CHF million	31.12.15				
	–200 bps	–100 bps	+1 bp	+100 bps	+200 bps
CHF	(33.9)	(33.9)	(0.2)	(15.5)	(29.1)
EUR	27.0	26.2	(0.3)	(29.7)	(55.5)
GBP	(165.5)	(42.4)	0.1	(0.8)	(15.6)
USD	838.7	438.8	(3.8)	(380.4)	(763.4)
Other	(1.2)	(2.1)	0.1	8.2	16.5
Total effect on fair value of interest rate-sensitive banking book positions	665.0	386.5	(4.1)	(418.3)	(847.0)
<i>of which: Wealth Management Americas</i>	<i>806.5</i>	<i>440.1</i>	<i>(3.7)</i>	<i>(365.3)</i>	<i>(732.5)</i>
<i>of which: Investment Bank</i>	<i>28.9</i>	<i>18.0</i>	<i>(0.2)</i>	<i>(18.9)</i>	<i>(39.7)</i>
<i>of which: CC – Group ALM</i>	<i>(168.6)</i>	<i>(73.6)</i>	<i>(0.2)</i>	<i>(19.2)</i>	<i>(43.7)</i>
<i>of which: CC – Non-core and Legacy Portfolio</i>	<i>(2.8)</i>	<i>1.2</i>	<i>(0.1)</i>	<i>(9.6)</i>	<i>(20.5)</i>

¹ Does not include interest rate sensitivities for credit valuation adjustments on monoline credit protection, US and non-US reference-linked notes.

Other market risk exposures

Own credit

We are exposed to changes in UBS's own credit that are reflected in the valuation of financial liabilities designated at fair value when UBS's own credit risk would be considered by market participants. We also estimate debit valuation adjustments (DVA) to incorporate own credit in the valuation of derivatives.

We adopted the own credit presentation requirements of International Financial Reporting Standard (IFRS) 9 on 1 January 2016. From this date onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in OCI.

→ Refer to "Note 22 Fair value measurement" in the "Consolidated financial statements" section of this report for more information on own credit

Structural foreign exchange risk

On consolidation, assets and liabilities held in foreign operations are translated into Swiss francs at the closing foreign exchange rate on the balance sheet date. Foreign exchange differences of non-Swiss franc assets or liabilities against the Swiss franc are recognized in OCI and therefore affect shareholders' equity and CET1 capital.

Corporate Center – Group ALM employs strategies to manage this foreign currency exposure, including matched funding of assets and liabilities and net investment hedging.

→ Refer to the "Treasury management" section of this report for more information on our exposure to and management of structural foreign exchange risk

→ Refer to "Note 12 Derivative instruments and hedge accounting" in the "Consolidated financial statements" section of this report for more information on our hedges of net investments in foreign operations

Equity investments

Audited I Under IFRS, equity investments not in the trading book may be classified as *Financial assets available for sale*, *Financial assets designated at fair value* or *Investments in associates*.

We make direct investments in a variety of entities and buy equity holdings in both listed and unlisted companies for a variety of purposes. This includes investments such as exchange and clearing house memberships held to support our business activities. We may also make investments in funds that we manage in order to fund or seed them at inception or to demonstrate that our interests concur with those of investors. We also buy, and are sometimes required by agreement to buy, securities and units from funds that we have sold to clients.

The fair value of equity investments tends to be influenced by factors specific to the individual investments. Equity investments are generally intended to be held for the medium or long term and may be subject to lockup agreements. For these reasons, we generally do not control these exposures by using the market risk measures applied to trading activities. However, such equity investments are subject to a different range of controls, including preapproval of new investments by business management and Risk Control, portfolio and concentration limits, and regular monitoring and reporting to senior management. They are also included in our Group-wide statistical and stress testing metrics which flow into our risk appetite framework.

As of 31 December 2016, we held equity investments totaling CHF 1.6 billion, of which CHF 0.6 billion were classified as *Financial assets available for sale* and CHF 1.0 billion as *Investments in associates*. This was broadly unchanged from the prior year. ▲

→ Refer to “**Note 13 Financial assets available for sale and held to maturity**” and “**Note 28 Interests in subsidiaries and other entities**” in the “**Consolidated financial statements**” section of this report for more information

Debt investments

Audited I Debt investments classified as *Financial assets available for sale* are measured at fair value with changes in fair value recorded through *Equity*, and can broadly be categorized as money market instruments and debt securities primarily held for statutory, regulatory or liquidity reasons.

The risk control framework applied to debt instruments classified as *Financial assets available for sale* depends on the nature of the instruments and the purpose for which we hold them. Our exposures may be included in market risk limits or be subject to specific monitoring and interest rate sensitivity analysis. They are also included in our Group-wide statistical and stress testing metrics, which flow into our risk appetite framework.

Debt instruments classified as *Financial assets available for sale* had a fair value of CHF 15.0 billion as of 31 December 2016 compared with CHF 61.9 billion as of 31 December 2015. The decrease during 2016 was largely attributable to a shift in on-

balance sheet securities held as high-quality liquid assets from *Financial assets available for sale* to *Financial assets designated at fair value* and *Financial assets held to maturity*. ▲

- Refer to “**Note 13 Financial assets available for sale and held to maturity**” in the “**Consolidated financial statements**” section of this report for more information
- Refer to “**Interest rate risk sensitivity to parallel shifts in yield curves**” in this section for more information
- Refer to the “**Treasury management**” section of this report for more information

Pension risk

We provide a number of pension plans for past and current employees, some of which are classified as defined benefit pension plans under IFRS. These defined benefit plans can have a material effect on our IFRS equity and CET1 capital.

In order to meet the expected future benefit payments, the plans invest employee and employer contributions in various asset classes. The funded status of the plan is the difference between the fair value of these assets and the present value of the expected future benefit payments to plan members, i.e., the defined benefit obligation.

Pension risk is the risk that the funded status of defined benefit plans might decrease, negatively affecting our IFRS equity and / or our CET1 capital. This can arise either from a fall in the plan assets’ value or in the investment returns, an increase in defined benefit obligations, or a combination of these.

Important risk factors affecting the fair value of the plan assets are, among other things, equity market returns, interest rates, bond yields and real estate prices. Important risk factors affecting the present value of the expected future benefit payments include high-grade bonds yields, interest rates, inflation rates and life expectancy.

Pension risk is included in our Group-wide statistical and stress testing metrics that flow into our risk appetite framework. The potential effects are thus captured in the calculation of our post-stress fully applied CET1 capital ratio.

- Refer to “**Note 1a item 7 Pension and other post-employment benefit plans**” and “**Note 26 Pension and other post-employment benefit plans**” in the “**Consolidated financial statements**” section of this report for more information on defined benefit plans

UBS own share exposure

Group Treasury holds UBS Group AG shares exclusively to hedge future share delivery obligations related to employee share-based compensation awards. In addition, the Investment Bank holds a very limited number of UBS Group AG shares, primarily in its capacity as a market-maker in UBS Group AG shares and related derivatives and to hedge certain issued structured debt instruments.

- Refer to the “**UBS shares**” section of this report for more information

Country risk

Country risk framework

Country risk includes all country-specific events that occur within a sovereign's jurisdiction and may lead to an impairment of UBS's exposures. Country risk may take the form of sovereign risk, which refers to the ability and willingness of a government to honor its financial commitments; transfer risk, which would arise if an issuer or counterparty could not acquire foreign currencies following a moratorium of a central bank on foreign exchange transfers; or "other" country risk. "Other" country risk may manifest itself through increased and multiple counterparty and issuer default risk (systemic risk) on the one hand, and on the other hand by events that may affect the standing of a country, such as political stability, institutional and legal framework. We maintain a well-established risk control framework, through which we assess the risk profile of all countries where we have exposure.

We attribute to each foreign country a sovereign rating, which expresses the probability of the sovereign defaulting on its own financial obligations in foreign currency. Our ratings are expressed by statistically derived default probabilities as described in the "Probability of default" section. Based on this internal analysis we also define the probability of a transfer event occurring and establish rules as to how the aspects of "other" country risk should be incorporated into the analysis of the counterparty rating of entities that are domiciled in the respective country.

Our risk exposure to foreign countries considers the credit ratings assigned to those countries. A country risk ceiling (i.e., maximum aggregate exposure) applies to our exposures to counterparties or issuers of securities and financial investments in the respective foreign country. We may limit the extension of credit, transactions in traded products or positions in securities based on a country ceiling, even if our exposure to a counterparty is otherwise acceptable.

For internal measurement and control of country risk, we also consider the financial impact of market disruptions arising prior to, during and after a country crisis. These may take the form of a severe deterioration in a country's debt, equity or other asset markets, or a sharp depreciation of the currency. We use stress testing to assess the potential financial impact of a severe country or sovereign crisis. This involves the development of plausible stress scenarios for combined stress testing and the

identification of countries that may potentially be subject to a crisis event, determining potential losses and making assumptions about recovery rates depending on the types of credit transactions involved and their economic importance to the affected countries.

Our exposures to market risks are also subject to regular stress tests that cover major global scenarios, which are used for combined stress testing as well, whereby we apply market shock factors to equity indices, interest and currency rates in all relevant countries and consider the potential liquidity of the instruments.

Country risk exposure

Country risk exposure measure

The presentation of country risk follows our internal risk view, whereby the basis for measurement of exposures depends on the product category into which we have classified our exposures. In addition to the classification of exposures into banking products and traded products as defined in the "Credit risk profile of the Group" section, within trading inventory we classify issuer risk on securities such as bonds and equities, as well as the risk relating to the underlying reference assets for derivative positions, including those linked to credit protection we buy or sell, loan or security underwriting commitments pending distribution and single-stock margin loans for syndication.

As we manage the trading inventory on a net basis, we net the value of long positions against short positions with the same underlying issuer. Net exposures are, however, floored at zero per issuer in the figures presented in the following tables. We therefore do not recognize the potentially offsetting benefit of certain hedges and short positions across issuers.

We do not recognize any expected recovery values when reporting country exposures as Exposure before hedges, except for the risk-reducing effects of master netting agreements and collateral held in the form of either cash or portfolios of diversified marketable securities, which we deduct from the basic positive exposure values. Within banking products and traded products, the risk-reducing effect of any credit protection is taken into account on a notional basis when determining the Net of hedges exposures.

Country risk exposure allocation

In general, exposures are shown against the country of domicile of the contractual counterparty or the issuer of the security. For some counterparties whose economic substance in terms of assets or source of revenues is primarily located in a different country, the exposure is allocated to the risk domicile of that issuer.

This is the case, for example, with legal entities incorporated in financial offshore centers, which have their main assets and revenue streams outside the country of domicile. The same principle applies to exposures for which we hold third-party guarantees or collateral, where we report the exposure against the country of domicile of either the guarantor or the issuer of the underlying security, or against the country where pledged physical assets are located.

We apply a specific approach for banking products exposures to branches of financial institutions that are located in a country other than the legal entity's domicile. In such cases, exposures are recorded in full against the country of domicile of the counterparty and additionally in full against the country in which the branch is located.

In the case of derivatives, we show the counterparty risk associated with the positive replacement value against the country of domicile of the counterparty (presented within traded products). In addition, the risk associated with the instantaneous fall in value of the underlying reference asset to zero (assuming no recovery) is shown against the country of domicile of the issuer of the reference asset (presented within trading inventory). This approach ensures that we capture both the counterparty and, where applicable, issuer elements of risk arising from derivatives and applies comprehensively for all derivatives, including single-name credit default swaps (CDSs) and other credit derivatives.

As a basic example: if CDS protection for a notional value of 100 bought from a counterparty domiciled in country X referencing debt of an issuer domiciled in country Y has a positive replacement value of 20, we record (i) the fair value of the CDS (20) against country X (within traded products) and (ii) the hedge benefit (notional minus fair value) of the CDS ($100 - 20 = 80$) against country Y (within trading inventory). In the example of protection bought, the 80 hedge benefit would offset any exposure arising from securities held and issued by the same entity as the reference asset, floored at zero per issuer. In the case of protection sold, this would be reflected as a risk exposure of 80 in addition to any exposure arising from securities held and issued by the same entity as the reference asset. In the case of derivatives referencing a basket of assets, the issuer risk against each reference entity is calculated as the

expected change in fair value of the derivative given an instantaneous fall in value to zero of the corresponding reference asset (or assets) issued by that entity. Exposures are then aggregated by country across issuers, floored at zero per issuer.

Exposures to selected eurozone countries

Our exposure to peripheral European countries remains limited, but we nevertheless remain watchful regarding the potential broader implications of adverse developments in the eurozone. As noted in the "Stress testing" section, a eurozone crisis remains a core part of the new binding Global Deflation scenario for combined stress test purposes, making it central to the regular monitoring of risk exposure against the minimum capital, earnings and leverage ratio objectives in our risk appetite framework.

The "Exposures to eurozone countries rated lower than AAA / Aaa by at least one major rating agency" table on the next page provides an overview of our exposures to eurozone countries rated lower than AAA / Aaa by at least one of the major rating agencies as of 31 December 2016. The table shows an internal risk view of gross and net exposures split by sovereign, agencies and central banks, local governments, banks and other counterparties (including corporates, insurance companies and funds). Exposures to Andorra, Cyprus, Estonia, Latvia, Lithuania, Malta, Monaco, Montenegro, San Marino, Slovakia and Slovenia are grouped in Other.

CDSs are primarily bought and sold in relation to our trading businesses, but are also used to hedge parts of our risk exposure, including that related to certain eurozone countries. As of 31 December 2016, and not taking into account the risk-reducing effect of master netting agreements, we had purchased approximately CHF 14 billion gross notional of single name CDS protection on issuers domiciled in Greece, Italy, Ireland, Portugal or Spain (GIIPS) and had sold CHF 13 billion gross notional of single-name CDS protection for these same countries. On a net basis, taking into account the risk-reducing effect of master netting agreements, this equates to approximately CHF 4 billion notional purchased and CHF 3 billion notional sold. More than 99% of gross protection purchased was from investment grade counterparties (based on our internal ratings) and on a collateralized basis. The vast majority of this was from financial institutions domiciled outside the eurozone. Approximately CHF 0.1 billion of the gross protection purchased was from counterparties domiciled in a GIIPS country with only CHF 19 million from counterparties domiciled in the same country as the reference entity.

Exposures to eurozone countries rated lower than AAA / Aaa by at least one major rating agency

Exposures to eurozone countries rated lower than AA- / Aaa by at least one major rating agency						Traded products (counterparty risk from derivatives and securities financing) after master netting agreements and net of collateral	Trading inventory (securities and potential benefits / remaining exposure from derivatives)	
CHF million	Total		Banking products (loans, guarantees, loan commitments)					
		Net of hedges ¹	Exposure before hedges	Net of hedges ¹	of which: unfunded	Exposure before hedges	Net of hedges	Net long per issuer
31.12.16								
Austria	1,796	1,694	28	28	11	189	87	1,579
Sovereign, agencies and central bank	1,714	1,612	3	3		155	53	1,555
Local governments								
Banks	62	62	14	14		26	26	22
Other ²	21	21	11	11		7	7	2
Belgium	149	149	84	84	8	54	54	11
Sovereign, agencies and central bank	2	2				2	2	
Local governments								
Banks	85	85	71	71		8	8	5
Other ²	62	62	13	13		43	43	6
Finland	887	854	74	42	3	23	23	790
Sovereign, agencies and central bank	530	530						530
Local governments								
Banks	232	232	5	5		5	5	221
Other ²	124	92	68	36		18	18	38
France	6,620	6,320	1,533	1,364	597	1,377	1,245	3,711
Sovereign, agencies and central bank	3,773	3,641	4	4		180	49	3,588
Local governments	1	1				1	1	0
Banks	960	960	450	450		493	493	17
Other ²	1,887	1,718	1,079	910		702	702	106
Greece	18	18	16	16	2	0	0	1
Sovereign, agencies and central bank	0	0						0
Local governments								
Banks	3	3	3	3		0	0	
Other ²	15	15	14	14				1
Ireland³	1,120	1,120	89	89	27	977	977	53
Sovereign, agencies and central bank	1	1						1
Local governments								
Banks	55	55	33	33		21	21	1
Other ²	1,064	1,064	55	55		957	957	52
Italy	3,104	2,589	1,242	821	641	435	342	1,426
Sovereign, agencies and central bank	180	87	56	56		124	31	
Local governments	80	80				79	79	2
Banks	1,733	1,733	338	338		48	48	1,347
Other ²	1,110	689	848	427		185	184	78
Portugal	39	39	14	14	13	18	18	6
Sovereign, agencies and central bank								
Local governments	1	1						1
Banks	18	18	14	14		4	4	0
Other ²	20	20	0	0		14	14	5
Spain	1,069	820	694	444	354	86	86	289
Sovereign, agencies and central bank	118	118	21	21				97
Local governments								
Banks	197	197	104	104		51	51	42
Other ²	755	505	569	319		36	36	150
Other⁴	454	454	441	441	13	2	2	11

¹ Not deducted from the "Net of hedges" exposures are total allowances and provisions for credit losses of CHF 50 million (of which: Malta CHF 37 million, Ireland CHF 6 million and France CHF 5 million). ² Includes corporates, insurance companies and funds. ³ The majority of the Ireland exposure relates to funds and foreign bank subsidiaries. ⁴ Represents aggregate exposures to Andorra, Cyprus, Estonia, Latvia, Lithuania, Malta, Monaco, Montenegro, San Marino, Slovakia and Slovenia.

Exposure from single-name credit default swaps referencing Greece, Italy, Ireland, Portugal or Spain (GIIPS)

CHF million	Protection bought				Protection sold				Net position (after application of counterparty master netting agreements)			
	of which: counterparty domiciled in GIIPS country		of which: counterparty domicile is the same as the reference entity domicile						Buy notional	Sell notional	PRV	NRV
31.12.16	Notional	RV	Notional	RV	Notional	RV	Notional	RV				
Greece	39	(1)	0	0	0	0	(83)	2	0	(44)	1	0
Italy	10,765	232	30	0	19	0	(10,265)	(320)	1,999	(1,499)	76	(164)
Ireland	777	(14)	11	0	0	0	(790)	18	382	(395)	7	(3)
Portugal	579	2	0	0	0	0	(553)	(3)	203	(177)	8	(9)
Spain	1,980	(40)	51	(1)	0	0	(1,553)	37	952	(525)	16	(19)
Total	14,140	180	92	(1)	19	0	(13,243)	(266)	3,536	(2,640)	109	(195)

Holding CDSs for credit default protection does not necessarily protect the buyer of protection against losses, as the contracts will only pay out under certain scenarios. The effectiveness of our CDS protection as a hedge of default risk is influenced by a number of factors, including the contractual terms under which the CDS was written. Generally, only the occurrence of a credit event as defined by the CDS terms (which may include, among other events, failure to pay, restructuring or bankruptcy) results in a payment under the purchased credit protection contracts. For CDS contracts on sovereign obligations, repudiation can also be deemed as a default event. The determination as to whether a credit event has occurred is made by the relevant International Swaps and Derivatives Association (ISDA) determination committees (comprised of various ISDA member firms) based on the terms of the CDS and the facts and circumstances surrounding the event.

Exposure to emerging market countries

The "Emerging markets net exposure by major geographical region and product type" table on the following page shows the five largest emerging market country exposures in each major geographical area by product type as of 31 December 2016 compared with 31 December 2015. Based on the sovereign rating categories, as of 31 December 2016, 83% of our emerging market country exposure was rated investment grade, unchanged from 31 December 2015.

Our direct net exposure to China was CHF 5.1 billion, down CHF 1.5 billion from the prior year due mainly to reduced trading inventory associated with our Qualified Foreign Institutional Investor business. Trading inventory, which is measured at fair value, continues to account for the majority of our exposure to China.

Emerging markets net exposure¹ by internal UBS country rating category

CHF million	31.12.16	31.12.15
Investment grade	13,833	14,274
Sub-investment grade	2,787	2,906
Total	16,620	17,180

¹ Net of credit hedges (for banking products and for traded products); net long per issuer (for trading inventory). Total allowances and provisions of CHF 79 million are not deducted (31 December 2015: CHF 91 million).

Emerging market net exposures by major geographical region and product type

CHF million	Total		Banking products (loans, guarantees, loan commitments)		Traded products (counterparty risk from derivatives and securities financing) after master netting agreements and net of collateral		Trading inventory (securities and potential benefits / remaining exposure from derivatives)	
	Net of hedges ¹		Net of hedges ¹		Net of hedges		Net long per issuer	
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Emerging America	1,426	1,304	493	437	321	396	612	472
Brazil	968	953	199	213	263	363	506	377
Mexico	247	168	147	111	49	21	52	35
Colombia	62	59	49	46	4	9	9	3
El Salvador	31		31				0	
Panama	30	8	20	3	0	1	10	4
Other	88	117	48	63	5	2	35	52
Emerging Asia	10,799	12,023	3,838	4,202	1,676	1,134	5,285	6,687
China	5,141	6,603	868	1,020	394	160	3,880	5,423
Hong Kong	1,715	1,224	1,113	864	282	163	320	196
South Korea	1,058	1,223	348	554	469	405	241	264
India	1,047	1,223	661	988	251	180	135	56
Taiwan	726	712	215	184	244	199	267	330
Other	1,111	1,038	632	593	37	27	443	418
Emerging Europe	1,467	1,611	1,007	962	106	64	353	585
Russia	532	697	181	217	41	29	311	451
Turkey	467	472	438	409	25	15	4	48
Azerbaijan	145	135	117	122	28	13		
Croatia	77	66	67	66			9	0
Poland	61	36	50	28	7	2	4	6
Other	185	205	154	120	5	6	25	80
Middle East and Africa	2,929	2,242	1,029	861	1,373	914	527	467
South Africa	681	678	34	79	239	240	408	359
Saudi Arabia	577	399	124	169	453	231		
United Arab Emirates	556	243	391	176	163	61	2	5
Kuwait	490	382	31	16	459	365		
Israel	225	172	61	87	49	5	115	80
Other	401	369	388	334	10	11	3	24
Total	16,620	17,180	6,367	6,461	3,475	2,508	6,778	8,211

¹ Not deducted are total allowances and provisions for credit losses of CHF 79 million (31 December 2015: CHF 91 million).

Operational risk

Key developments

We and the industry are experiencing elevated levels of operational risk in a number of areas, most notably operational resilience, conduct, cyber security and financial crime.

Operational resilience remains critical, especially in cyber security, as threats continue to evolve and attacks become more powerful. In 2016, the industry observed an increase in fraudulent payments by means of business e-mail compromise scams, attacks targeting the global SWIFT payments infrastructure and more powerful denial-of-service attacks. We therefore continue to focus on preventive measures and on improving our ability to recover quickly should a successful attack occur. We implemented cyber recovery playbooks for the most serious cyberattacks, as well as conducted regular cyber crisis exercises up to Group Executive Board and Board of Directors level. We also continued to extend our third-party vendor controls and develop our overall business continuity framework, including vendor dependencies.

Achieving fair outcomes for our clients, safeguarding market integrity and maintaining the highest standards of employee conduct are of critical importance to the firm. Management of conduct risks is an integral part of our operational risk framework. Conduct-related management information is reviewed at business and regional governance level, providing metrics on employee conduct, clients and markets, with employee conduct being a central consideration in the annual compensation process.

Suitability risk, product selection, cross-divisional service offerings, quality of advice and price transparency also remain areas of heightened focus for UBS and for the industry as a whole, as low interest rates and major legislative change programs, such as the Markets in Financial Instruments Directive II (MiFID II) in the EU, continue. Our suitability, product and conflicts of interest control frameworks are continuously monitored to ensure adherence to applicable laws and regulatory expectations.

Financial crime, including money laundering, terrorist financing, sanctions violations, fraud, bribery and corruption, continues to present risks, as technological innovation and geopolitical developments increase complexity and heightened regulatory attention persists. An effective financial crime prevention program remains essential for the firm. Money laundering and financial fraud techniques are becoming increasingly sophisticated, while geopolitical volatility makes the sanctions landscape more complex. We continue to invest heavily in our detection capabilities and core systems as part of our financial crime prevention program. Cross-border risk remains an area of regulatory attention for global financial institutions, with a strong focus on fiscal transparency and increased legislation, such as the automatic exchange of information and, potentially, MiFID II in the EU. We continue to adapt our cross-border control framework to adhere to the regulatory expectations and facilitate compliant client-driven cross-border business.

We have completed the program of remediation work to strengthen our front-office processes and controls within the FX business. This is designed to meet the specific commitments made to the US, UK and Swiss authorities and regulators, as part of the resolution of the FX matter. As the overall regulatory environment continues to undergo major change with the introduction of new regulation, international collaboration among regulators, and increased focus on individual liability and industry operating models, it is important that we maintain strong relationships with our industry's regulatory bodies and demonstrate observable progress in achieving and sustaining corrective actions.

- **Refer to the “Risk factors” section of this report for more information**
- **Refer to “Note 20 Provisions and contingent liabilities” in the “Consolidated financial statements” section of this report for more information on litigation, regulatory and similar matters**

Operational risk framework

Operational risk is an inherent part of our business. Losses can result from inadequate or flawed internal processes, decisions and systems, or from external events. We provide a Group-wide framework that supports identifying, assessing and mitigating material operational risks and their potential concentrations, to achieve a suitable balance between risk and return. The divisional Presidents and the Corporate Center function heads are ultimately accountable for the effectiveness of operational risk management and for implementing the operational risk framework. Management in all functions is responsible for ensuring a robust operational risk management environment, including establishing and maintaining robust internal controls, effective supervision and a strong risk culture. In 2016, we initiated work to simplify our operational risk framework, reduce the administrative burden and better embed it as a key tool used by the business to manage its risks day-to-day. Through these efforts, we are making a greater use of operating limits to confirm that risks remain within the appetite.

Compliance and Operational Risk Control (C&ORC) provides an independent and objective view of the adequacy of operational risk management across the Group, and is responsible for ensuring that all our operational risks, including compliance and conduct risk, are understood, owned and managed to the firm's risk appetite. C&ORC is governed by the C&ORC Management Committee, which is chaired by the Global Head of Compliance & Operational Risk Control, who reports to the Group Chief Risk Officer and is a member of the Risk Executive Committee.

The operational risk framework establishes general requirements for managing and controlling operational risks, including compliance and conduct risk at UBS. It is built on the following pillars:

- classifying inherent risks through the operational risk taxonomy
- assessing the design and operating effectiveness of controls through the internal control assessment process
- assessing residual risk through the operational and business risk assessment processes with remediation to address identified deficiencies that are outside accepted levels of residual risk
- identifying excessive levels of operational risk through the operational risk appetite framework, with actions initiated to return to accepted levels of risk

The operational risk taxonomy provides a clear and logical classification of our inherent operational risks, across all divisions. Throughout the organizational hierarchy, a level of risk tolerance must be agreed for each of the taxonomy categories, together with a minimum set of internal controls and associated performance thresholds considered necessary to keep risk exposure within acceptable levels.

All functions within our firm are required to periodically assess internal controls whereby they evaluate and evidence the design and operating effectiveness of their key controls. This also forms the basis for the assessment and testing of the controls which oversee financial reporting as required by the Sarbanes-Oxley Act, section 404 (SOX 404). The framework facilitates the identification of SOX 404-relevant controls for independent testing, functional assessments, management affirmation and, where necessary, remediation tracking. We employ a consistent global framework to assess the aggregated impact of control deficiencies and the adequacy of remediation efforts.

The UBS risk assessment approach covers all business activities and internal as well as external factors posing a threat to UBS Group. Aggregated with any weaknesses in the control environment, the risk assessment articulates the current operational risk exposure against agreed risk tolerance levels.

Significant control deficiencies that surface during the internal control and risk assessment processes must be reported in the operational risk inventory, and sustainable remediation must be defined and executed. All significant issues are assigned to owners at the senior management level and must be reflected in the respective manager's annual performance measurement and management objectives. To assist with prioritizing all known operational risk issues, irrespective of origin, a common rating methodology is adopted by all internal control functions and both internal and external audit. Group Internal Audit conducts an issue assurance process after a risk issue has been closed to maintain rigorous management discipline in the sustainable mitigation and control of operational risk issues.

Operational risk appetite is measured against agreed appetite statements so that the firm knows whether it is operating within acceptable levels of operational risk exposure.

Responsibility for the front-to-back control environment and risk management is held by the Chief Operating Officers and supported by our transparent reporting. Risk and behaviors remain embedded in our performance and compensation considerations, and as a firm we continue to deliver behavioral initiatives such as the "Principles of Good Supervision," and mandatory compliance and risk training.

Advanced measurement approach model

The operational risk framework detailed above is aligned with and underpins the calculation of regulatory capital, which in turn allows us to quantify operational risk and to define effective management incentives.

We measure operational risk exposure and calculate operational risk regulatory capital by using the advanced measurement approach (AMA) in accordance with FINMA requirements.

For regulated subsidiaries, the basic indicator or standardized approaches are adopted in agreement with local regulators. For certain UBS entities, the Group AMA methodology is leveraged to meet local regulatory requirements. An entity-specific AMA model has been implemented for UBS Switzerland AG, while the Group AMA model is leveraged for UBS Limited, supporting the local Internal Capital Adequacy Assessment Process, and for UBS Bank USA's Dodd-Frank Act stress tests submissions. In 2015, we significantly redeveloped the Group AMA model design, methodology and calibration. The revised AMA has been used for operational risk regulatory capital reporting starting in the first quarter of 2016. AMA changes covered the overall model design, establishing a robust data-driven (i.e., base) model calibration, the use and structuring of qualitative information, and the inclusion of hypothetical stress litigation assessments as a direct feed into the model.

Currently, the model includes 15 AMA Units of Measures (UoMs), all aligned with our operational risk taxonomy. For each of the model's UoMs, a frequency and severity parameter is calibrated. The modeled distribution functions for both frequency and severity are then leveraged to generate the annual loss distribution. The resulting 99.9% quantile of the overall annual operational risk loss distribution across all UoMs determines the required regulatory capital. Currently, we do not reflect mitigation through insurance or any other risk transfer mechanism in our AMA model.

A key assumption when calibrating the base or data-driven frequency and severity distributions is that historical loss patterns and exposures form a reasonable proxy for future events.

However, it is important to note that our approach not only models historical internal losses, but also includes external industry losses. A statistical mechanism, introduced as part of the revised AMA model, ensures that only those industry losses which are fairly consistent with the internal UBS loss profile are leveraged for the modeling to obtain plausible model-driven estimates.

To account for fast changing external developments encompassing new regulations, geopolitical change, volatile market and economic conditions, as well as internal factors like our evolving business strategy and internal control framework enhancements, the modeling of historical internal and external losses, the base calibration, is further enriched to more effectively forecast potential future losses. To refine the loss forecast, qualitative information on both the external business environment and the internal control framework, is summarized and an overall rating is determined to structure and facilitate the Subject Matter Expert (SME) inputs. The purpose of the SME reviews is to account for important qualitative elements in calibrating the AMA model, but also to consider expert knowledge and insights which the SMEs can provide into the calibration process.

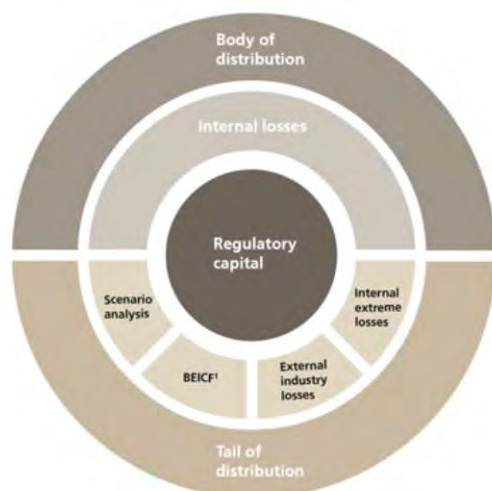
To ensure risk-sensitivity, our model has to be regularly recalibrated. Therefore, the SME reviews are annual processes occurring in the third and fourth quarter of each year, and encompass all UoMs. Change recommendations are presented to FINMA for approval and implemented for the first quarter disclosures of the subsequent year. In addition, a high-level semiannual review accounts for any material developments between annual calibrations to be reflected in the model outputs. Following regulatory approval, these changes become effective for the third quarter disclosures.

In the third quarter of 2016, we revised our methodology for the operational risk RWA allocation to business divisions and Corporate Center units. In addition to considering historical operational risk loss contributions, the revised methodology takes into account the relative size of the business divisions and Corporate Center units and other operational risk indicators.

AMA model confirmation

The Group AMA model is subject to an annual quantitative and qualitative review so that model parameters are plausible and reflect the developing operational risk profile of the firm. This review is independently verified by Model Risk Management and Control and supplemented with additional sensitivity and benchmarking analysis.

AMA model components and inputs



¹ Business environment and internal control factors.

AMA future developments

In March 2016, the Basel Committee on Banking Supervision issued a consultation document that proposed replacing the AMA with a standardized measurement approach. UBS participated in the respective consultation process and continues to closely monitor the developments.

- Refer to the **“Capital management”** section of this report for more information on the development of risk-weighted assets for operational risk
- Refer to **“Risk measurement”** in this section for more information on our approach to model confirmation procedures
- Refer to the **“Regulatory and legal developments”** and **“Risk factors”** sections of this report for more information

Treasury management

Balance sheet, liquidity and funding management

Strategy, objectives and governance

Audited I We manage our balance sheet, liquidity and funding positions with the overall objective of optimizing the value of our business franchise across a broad range of market conditions and in consideration of current and future regulatory constraints. We employ a number of measures to monitor these positions under normal and stressed conditions. In particular, we use stress scenarios to apply behavioral adjustments to our balance sheet and calibrate the results from these internal stress models with external measures, primarily the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR). Our liquidity and funding strategy is proposed by Group Treasury, approved by the Group Asset and Liability Management Committee (Group ALCO), which is a committee of the Group Executive Board, and is overseen by the Risk Committee of the Board of Directors (BoD). ▲

This section provides more detailed information on regulatory requirements, our governance structure, our balance sheet, liquidity and funding management, including our sources of liquidity and funding, and our contingency planning and stress testing. The balances disclosed in this section represent year-end positions, unless indicated otherwise. Intra-period balances fluctuate in the ordinary course of business and may differ from year-end positions.

Group Treasury monitors and oversees the implementation and execution of our liquidity and funding strategy and is responsible for adherence to policies, limits and targets. Group Treasury reports on the Group's overall liquidity and funding position, including funding status and concentration risks, at least monthly to the Group ALCO and the Risk Committee of the BoD. This enables close control of both our cash and collateral,

including our high-quality liquid assets (HQLA), and centralizes the Group's general access to wholesale cash markets in Corporate Center – Group Asset and Liability Management (Group ALM). In addition, should a crisis require contingency funding measures to be invoked, Group Treasury is responsible for coordinating liquidity generation with representatives of the relevant business areas.

Audited I Liquidity and funding limits and targets are set at a Group and business division level, and are reviewed and reconfirmed at least once a year by the BoD, the Group ALCO, the Group Chief Financial Officer, the Group Treasurer and the business divisions, taking into consideration current and projected business strategy and risk tolerance. The principles underlying our limit and target framework are designed to maximize and sustain the value of our business franchise and maintain an appropriate balance in the asset and liability structure. Structural limits and targets focus on the structure and composition of the balance sheet, while supplementary limits and targets are designed to drive the utilization, diversification and allocation of funding resources. To complement and support this framework, Group Treasury monitors the markets with a dashboard of early warning indicators reflecting the current liquidity situation. The liquidity status indicators are used at Group level to assess both the overall global and regional situations for potential threats. Treasury Risk Control provides independent oversight over liquidity and funding risks. ▲

- **Refer to the “Corporate governance” section of this report for more information**
- **Refer to the “Risk management and control” section of this report for more information**

Assets and liquidity management

Audited I Our liquidity risk management aims to maintain a sound liquidity position to meet all our liabilities when due and to provide adequate time and financial flexibility to respond to a firm-specific liquidity crisis in a generally stressed market environment, without incurring unacceptable losses or risking sustained damage to our various businesses. ▲

Balance sheet assets – Group

As of 31 December 2016, balance sheet assets totaled CHF 935 billion, a decrease of CHF 8 billion from 31 December 2015, mainly due to reductions in trading portfolio and collateral trading assets, mostly offset by a net increase in financial assets designated at fair value, available for sale and held to maturity and an increase in cash and balances with central banks. Total assets excluding positive replacement values (PRVs) totaled CHF 777 billion as of 31 December 2016, an increase of CHF 6 billion when excluding currency effects.

Trading portfolio assets decreased by CHF 27 billion, primarily in our Equities business within the Investment Bank, mainly reflecting effective resource management and a reduction in client activity. In addition, CHF 5 billion of trading portfolio assets were reclassified to other assets upon agreement to sell a certain business in Wealth Management. This sale is currently expected to close in the first half of 2017. Collateral trading assets decreased by CHF 12 billion, primarily in Group ALM.

PRVs decreased by CHF 9 billion, primarily resulting from a CHF 22 billion decrease in Corporate Center – Non-core and Legacy Portfolio, mainly in interest rate contracts, partly offset by a CHF 13 billion increase in the Investment Bank, largely reflecting fair value changes resulting from currency movements.

Lending assets decreased by CHF 4 billion, mainly reflecting lower Lombard lending balances in Wealth Management.

These decreases were offset by a CHF 22 billion increase in financial assets designated at fair value, available for sale and held to maturity and a CHF 16 billion increase in cash and balances with central banks, largely in Group ALM. Other assets increased by CHF 7 billion, mainly due to the aforementioned reclassification of trading portfolio assets.

→ Refer to the “Consolidated financial statements” section of this report for more information

Balance sheet assets – Investment Bank

Investment Bank total assets decreased by CHF 11 billion to CHF 242 billion, and total assets excluding PRVs decreased by CHF 24 billion, primarily due to a CHF 17 billion reduction in trading portfolio assets, primarily in our Equities business, reflecting effective resource management and a reduction in client activity.

Balance sheet assets – Non-core and Legacy Portfolio

Non-core and Legacy Portfolio total assets decreased by CHF 26 billion to CHF 68 billion, mainly due to a CHF 22 billion reduction in PRVs, primarily reflecting ongoing reduction activity including negotiated bilateral settlements, third-party novations, including transfers to central clearing houses, and agreements to net down trades with other dealer counterparties, partly offset by fair value increases resulting from increases in interest rates.

Total assets excluding PRVs decreased by CHF 4 billion to CHF 12 billion, mainly due to a reduction in cash collateral receivables on derivative instruments.

IFRS balance sheet assets

	As of		% change from
CHF billion	31.12.16	31.12.15	31.12.15
Cash and balances with central banks	107.8	91.3	18
Lending ¹	319.5	323.9	(1)
Collateral trading ²	81.4	93.5	(13)
Trading portfolio	96.6	124.0	(22)
Positive replacement values	158.4	167.4	(5)
Financial assets at FV / AFS / HTM ³	90.3	68.7	31
Other assets ⁴	81.1	74.0	10
Total IFRS assets	935.0	942.8	(1)

¹ Consists of amounts due from banks and loans. ² Consists of reverse repurchase agreements and cash collateral on securities borrowed. ³ Consists of financial assets designated at fair value, financial assets available for sale and financial assets held to maturity. ⁴ Includes cash collateral receivables on derivative instruments and prime brokerage receivables.

Balance sheet assets – Group ALM

Group ALM total assets increased by CHF 30 billion to CHF 267 billion, reflecting a CHF 23 billion net increase in financial assets designated at fair value, available for sale and held to maturity, as well as an CHF 18 billion increase in cash and balances with central banks that primarily occurred toward the end of the year. These increases mainly reflected liquidity requirements applicable to our US intermediate holding company and UBS Europe SE and also resulted from an increase in net funds transferred to Group ALM by the business divisions.

Balance sheet assets – Other business divisions

Wealth Management and Personal & Corporate Banking total assets decreased by CHF 4 billion and CHF 1 billion to CHF 116 billion and CHF 140 billion, respectively, mainly reflecting lower lending balances. Wealth Management Americas total assets increased by CHF 5 billion to CHF 66 billion, primarily due to increased lending balances and currency effects. Asset Management balance sheets were broadly unchanged at CHF 12 billion. Corporate Center – Services total assets were broadly unchanged at CHF 24 billion.

High-quality liquid assets

HQLA are low-risk unencumbered assets under the control of Group Treasury, that are easily and immediately convertible into cash at little or no loss of value in order to meet liquidity needs in a thirty-calendar-day liquidity stress scenario. Our HQLA primarily consist of assets that qualify as Level 1 in the LCR framework, including cash, central bank reserves and government bonds. Group HQLA are held by UBS AG and its subsidiaries and may include amounts that are available to meet funding and collateral needs in certain jurisdictions, but are not readily available for use by the Group as a whole. These limitations are typically the result of local regulatory requirements, including local LCR and large exposure requirements. Funds that are effectively restricted are excluded from the calculation of Group HQLA to the extent they exceed the outflow assumptions for the subsidiary that holds the relevant HQLA. On this basis, CHF 29 billion of assets were excluded from our 3-month average Group HQLA for the fourth quarter of 2016. Amounts held in excess of local liquidity requirements which are not subject to other restrictions are generally available for transfer within the Group.

→ Refer to the “Capital management” section of this report for more information on regulatory capital and capital ratios of our significant regulated subsidiaries

The total weighted liquidity value of HQLA decreased by CHF 12 billion to CHF 196 billion. This decline was primarily due to additional liquidity requirements applicable to our US intermediate holding company and, to a lesser extent, UBS Europe SE, which resulted in an increase in assets that are not freely available to other entities within the Group and are

therefore not fully HQLA-eligible at a Group level, as well as due to a reduction in off-balance sheet securities. These reductions were partly offset by the aforementioned on-balance sheet increases in financial assets designated at fair value, available for sale and held to maturity, and higher cash and balances with central banks toward the end of the year.

Liquidity coverage ratio

The LCR measures the short-term resilience of a bank's liquidity profile by comparing whether sufficient HQLA are available to survive expected net cash outflows from a significant liquidity stress scenario, as defined by the relevant regulator.

The Basel Committee on Banking Supervision (BCBS) standards require an LCR of at least 100% by 2019, with a phase-in period that started in 2015. UBS is required to maintain a minimum total Group LCR of 110% as communicated by the Swiss Financial Market Supervisory Authority (FINMA), as well as a Swiss franc LCR of 100%. In addition, both UBS AG and UBS Switzerland AG are subject to minimum LCR requirements on a standalone basis. In a period of financial stress, FINMA may allow banks to use their HQLA and let their LCR temporarily fall below the minimum threshold.

We monitor the LCR in Swiss francs and in all other significant currencies in order to manage any currency mismatches between HQLA and the net expected cash outflows in times of stress.

Our 3-month average LCR for the fourth quarter of 2016 was 132% compared with 124% in the fourth quarter of 2015, mainly due to a CHF 19 billion reduction in net cash outflows, partly offset by the aforementioned reduction in HQLA. During 2016, we aligned the presentation of securities financing transactions across our business areas and we also enhanced the presentation of cash flows related to derivative transactions. On a gross basis, these changes increased cash outflows from secured wholesale funding and cash inflows from secured lending, and reduced other cash outflows and other cash inflows. These changes did not affect net cash outflows or the LCR.

The aforementioned CHF 19 billion reduction in net cash outflows was primarily driven by reduced net outflows related to prime brokerage activity, reflecting effective resource management, as well as decreased net outflows related to securities financing transactions and committed credit and liquidity facilities.

→ Refer to the Basel III Pillar 3 UBS Group AG 2016 report under “Pillar 3, SEC filings & other disclosures” at www.ubs.com/investors for more information on the liquidity coverage ratio

→ Refer to “Disclosure for legal entities” at www.ubs.com/investors for more information on the LCR of UBS AG and UBS Switzerland AG

Liquidity coverage ratio

CHF billion, except where indicated

	Average 4Q16	Average 4Q15
High-quality liquid assets¹		
Cash balances ²	102	117
Securities	94	91
of which: on-balance sheet ³	76	55
of which: off-balance sheet	18	36
Total high-quality liquid assets⁴	196	208
Cash outflows⁵		
Retail deposits and deposits from small business customers	26	24
Unsecured wholesale funding	109	124
Secured wholesale funding	73	39
Other cash outflows	58	88
Total cash outflows	266	275
Cash inflows⁵		
Secured lending	71	53
Inflows from fully performing exposures	32	31
Other cash inflows	15	23
Total cash inflows	117	107
Liquidity coverage ratio		
High-quality liquid assets	196	208
Net cash outflows	148	167
Liquidity coverage ratio (%)	132	124

¹ Calculated after the application of haircuts. ² Includes cash and balances with central banks and other eligible balances as prescribed by FINMA. ³ Includes financial assets designated at fair value, available for sale and held to maturity and trading portfolio assets. ⁴ Calculated in accordance with FINMA requirements. ⁵ Calculated after the application of inflow and outflow rates.

Asset encumbrance

The table on the next page provides a breakdown of on- and off-balance sheet assets between encumbered assets, unencumbered assets and assets that cannot be pledged as collateral.

Assets are presented as *Encumbered* if they have been pledged as collateral against an existing liability or if they are otherwise not available for the purpose of securing additional funding. Included within the latter category are assets protected under client asset segregation rules, assets held by the Group's insurance entities to back related liabilities to policy holders, assets held in certain jurisdictions to comply with explicit minimum local asset maintenance requirements and assets held in consolidated bankruptcy remote entities, such as certain investment funds and other structured entities.

→ Refer to "Note 23 Restricted and transferred financial assets" in the "Consolidated financial statements" section of this report for more information

Assets that cannot be pledged as collateral represent those assets that are not encumbered, but by their nature, are not considered available to secure funding or to meet collateral needs. These mainly include collateral trading assets, positive replacement values, cash collateral receivables on derivative instruments, deferred tax assets, goodwill and intangible assets and other assets.

All other assets are presented as *Unencumbered*. Assets that are considered to be readily available to secure funding on a Group and / or legal entity level are shown separately and consist of cash and securities readily realizable in the normal course of business. These include our HQLA and unencumbered positions in our trading portfolio. Unencumbered assets that are considered to be available to secure funding on a legal entity level may be subject to restrictions that limit the total amount of assets that is available to the Group as a whole. Other unencumbered assets, which are not considered readily available to secure funding on a Group and / or legal entity level primarily consist of loans and amounts due from banks.

Asset encumbrance

CHF million	Encumbered		Unencumbered			Total Group assets (IFRS)
	Assets pledged as collateral	Assets otherwise restricted and not available to secure funding	Cash and securities available to secure funding on a Group and/or legal entity level	Other realizable assets	Assets that cannot be pledged as collateral	
On-balance sheet assets						
Cash and balances with central banks			107,765		2	107,767
Due from banks		2,625		10,530	1	13,156
Financial assets designated at fair value	776	328	59,978	3,349	921	65,353
Loans	19,887	958		279,733	5,747	306,325
of which: mortgage loans	19,887			142,051		161,938
Lending	20,663	3,912	59,978	293,612	6,669	384,833
Cash collateral on securities borrowed					15,111	15,111
Reverse repurchase agreements		658			65,588	66,246
Collateral trading		658			80,700	81,358
Trading portfolio assets excluding financial assets for unit-linked investment contracts	36,549 ¹	3,006	45,859	2,037		87,452
of which: government bills / bonds	3,965	804	7,051			11,820
of which: corporate and municipal bonds	906	860	5,521			7,287
of which: loans				2,037		2,037
of which: investment fund units	3,191	1,343	5,164			9,698
of which: asset-backed securities	128		557			685
of which: mortgage-backed securities	6		255			261
of which: equity instruments	28,360		23,016			51,375
of which: precious metals and other physical commodities			4,550			4,550
Financial assets for unit-linked investment contracts		9,123				9,123
Positive replacement values					158,411	158,411
Financial assets available for sale		247	15,430			15,676
Financial assets held to maturity			9,289			9,289
Cash collateral receivables on derivative instruments		4,329			22,335	26,664
Investments in associates				963		963
Property, equipment and software				8,331		8,331
Goodwill and intangible assets					6,556	6,556
Deferred tax assets					13,155	13,155
Other assets		5,195			20,241	25,436
Other		9,525		9,295	62,287	81,107
Total on-balance sheet assets as of 31 December 2016	57,213	26,470	238,321	304,944	308,069	935,016
Total on-balance sheet assets as of 31 December 2015	82,635	37,196	192,755	303,216	327,017	942,819

CHF million	Encumbered		Unencumbered			Total assets received which can be sold or repledged
	Assets that have been sold or repledged as collateral	Assets otherwise restricted and not available to secure funding	Assets available to secure funding on a Group and/or legal entity level	Other realizable assets	Assets that cannot be pledged as collateral	
Off-balance sheet assets						
Total off-balance sheet assets as of 31 December 2016	316,323	12,632	96,833	3,540		429,327
Total off-balance sheet assets as of 31 December 2015	286,757	10,432	99,300	5,022		401,511
Total on- and off-balance sheet assets as of 31 December 2016	373,536	39,102	335,153	308,484	308,069	
of which: high-quality liquid assets			200,226			

¹ Includes CHF 30,260 million of assets pledged as collateral that may be sold or repledged by counterparties.

Assets available to secure funding on a Group and/or legal entity level by currency

CHF million	31.12.16	31.12.15
Swiss franc	71,915	53,458
US dollar	132,379	122,488
Euro	54,867	42,743
Other	75,993	73,367
Total	335,153	292,056

Stress testing

Audited I We perform stress testing to determine the optimal asset and liability structure that allows us to maintain an appropriately balanced liquidity and funding position under various scenarios. Liquidity crisis scenario analysis and contingency funding planning support the liquidity management process and ensure that immediate corrective measures to absorb potential sudden liquidity shortfalls can be put into effect. ▲

We model our liquidity exposures under two main potential scenarios that encompass stressed and acute market conditions, including considering the possible impact on our access to markets from stress events affecting all parts of our business. These models and their assumptions are reviewed regularly to incorporate the latest business and market developments. We continuously refine the assumptions used to maintain a robust, actionable and tested contingency plan.

→ Refer to “Risk measurement” in the “Risk management and control” section of this report for more information on stress testing

Stressed scenario

As a liquidity crisis could have a myriad of causes, the stressed scenario encompasses potential stress effects across all markets, currencies and products but it is typically not firm-specific. In addition to the loss of the ability to replace maturing wholesale funding, it assumes a gradual decline of otherwise stable client deposits and liquidity outflows corresponding to a two-notch downgrade in our long-term credit rating and a corresponding downgrade in our short-term rating.

We use a cash capital model that incorporates the stress scenario and measures the amount of long-term funding available to fund illiquid assets. The illiquid portion of an asset is the difference, i.e., the haircut, between the carrying value of the asset and its effective cash value when used as collateral in a secured funding transaction. Long-term funding used as cash capital to support illiquid assets is comprised of unsecured funding with a remaining time to maturity of at least one year, shareholders’ equity and core deposits, which are the portion of

our customer deposits that are deemed to have a behavioral maturity of at least one year.

Acute scenario

The acute scenario represents an extreme stress event that combines a firm-specific crisis with market disruption. This scenario assumes substantial outflows on otherwise stable client deposits, mainly due on demand, inability to renew or replace maturing unsecured wholesale funding, unusually large drawdowns on loan commitments, reduced capacity to generate liquidity from trading assets, liquidity outflows corresponding to a three-notch downgrade in our long-term credit rating and a corresponding downgrade in our short-term rating, triggering contractual obligations to unwind derivative positions or to deliver additional collateral, and additional collateral requirements due to adverse movements in the market values of derivatives. It is run both daily and monthly, with the former used to project potential cash outflows over a one-month time horizon for day-to-day risk management, while the latter involves a more detailed assessment of asset and liability cash flows.

Contingency funding

Audited I Our Group contingency funding plan is an integral part of our global crisis management concept, which covers various types of crisis events. This contingency funding plan contains an assessment of contingent funding sources in a stressed environment, liquidity status indicators and metrics, and contingency procedures. Our funding diversification and global scope help protect our liquidity position in the event of a crisis. We regularly assess and test all material, known and expected cash flows, as well as the level and availability of high-grade collateral that could be used to raise additional funding if required. Our contingent funding sources include our HQLA portfolio, available and unutilized liquidity facilities at several major central banks, and contingent reductions of liquid trading portfolio assets. ▲

Liabilities and funding management

Audited I Group Treasury regularly monitors our funding status, including concentration risks, to ensure we maintain a well-balanced and diversified liability structure. Our funding risk management aims for the optimal asset and liability structure to finance our businesses reliably and cost-efficiently, and our funding activities are planned by analyzing the overall liquidity and funding profile of our balance sheet, taking into account the amount of stable funding that would be needed to support ongoing business activities through periods of difficult market conditions. ▲

Our business activities generate asset and liability portfolios that are highly diversified with respect to market, product, tenor and currency. This reduces our exposure to individual funding sources, provides a broad range of investment opportunities and reduces liquidity risk.

Our wealth management businesses and Personal & Corporate Banking provide significant, cost-efficient and reliable sources of funding. These include core deposits and our portfolio of Swiss residential mortgages, a portion of which is pledged as collateral to generate long-term funding through Swiss Pfandbriefe. In addition, we have several short-, medium- and long-term funding programs under which we issue senior

unsecured debt and structured notes, as well as short-term secured debt. These programs allow institutional and private investors in Europe, the US and Asia Pacific to customize their investments in UBS's debt. Collectively, these broad product offerings and funding sources, together with the global scope of our business activities, support our funding stability.

Balance sheet liabilities

Total liabilities decreased by CHF 5 billion to CHF 881 billion as of 31 December 2016. Other liabilities decreased by CHF 16 billion, mainly due to a reduction in prime brokerage payables in our Equities business within the Investment Bank. Negative replacement values decreased by CHF 9 billion, in line with the aforementioned decreases in PRVs. Collateral trading and trading portfolio liabilities decreased by CHF 8 billion and CHF 6 billion, respectively, primarily reflecting client-driven decreases in our Equities business.

Customer deposits increased by CHF 33 billion, primarily in our wealth management businesses. As of 31 December 2016, customer deposits represented 63% of our funding sources and our ratio of customer deposits to outstanding loan balances was 138% (31 December 2015: 125%). Short-term borrowings, which represented 5% of our funding sources, increased by CHF 4 billion, mainly reflecting net issuances of certificates of deposit.

IFRS balance sheet liabilities and equity

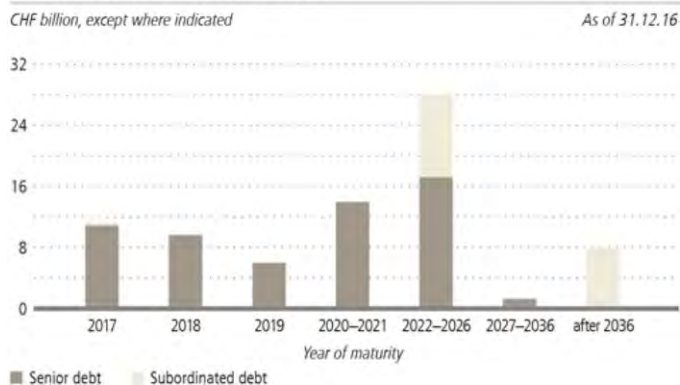
	As of		% change from
CHF billion	31.12.16	31.12.15	31.12.15
Short-term borrowings ¹	36.8	33.1	11
Collateral trading ²	9.4	17.7	(47)
Trading portfolio	22.8	29.1	(22)
Negative replacement values	153.8	162.4	(5)
Due to customers	423.7	390.2	9
Long-term debt issued ³	132.5	134.9	(2)
Other liabilities ⁴	101.7	118.1	(14)
Total IFRS liabilities	880.7	885.5	(1)
Share capital	0.4	0.4	0
Share premium	28.3	31.2	(9)
Treasury shares	(2.2)	(1.7)	33
Retained earnings	31.7	29.5	8
Other comprehensive income ⁵	(4.5)	(4.0)	11
Total IFRS equity attributable to shareholders	53.6	55.3	(3)
IFRS equity attributable to non-controlling interests	0.7	2.0	(66)
Total IFRS equity	54.3	57.3	(5)
Total IFRS liabilities and equity	935.0	942.8	(1)

¹ Consists of short-term debt issued and amounts due to banks. ² Consists of repurchase agreements and cash collateral on securities lent. ³ Consists of long-term debt issued held at amortized cost and financial liabilities designated at fair value. The classification of debt issued into short-term and long-term does not consider any early redemption features. ⁴ Includes cash collateral payables on derivative instruments and prime brokerage payables. ⁵ Excludes defined benefit plans and own credit that are recorded directly in Retained earnings.

Long-term debt issued, which represented 20% of our funding sources as of 31 December 2016, decreased by CHF 2 billion, mainly due to an CHF 8 billion reduction in financial liabilities designated at fair value, primarily reflecting trade terminations and maturities in our Foreign Exchange, Rates and Credit businesses within the Investment Bank. Long-term debt held at amortized cost increased by CHF 6 billion, mainly driven by the issuance of CHF 12 billion equivalent of US dollar-, euro- and Swiss franc-denominated senior unsecured debt that contributes to our total loss-absorbing capacity (TLAC) and CHF 3 billion equivalent of high-trigger loss-absorbing additional tier 1 capital instruments, partly offset by the maturity or early redemption of senior unsecured debt, subordinated debt instruments and covered bonds totaling CHF 7 billion.

- Refer to the document “UBS Group AG (consolidated) capital instruments and TLAC-eligible senior unsecured debt” under “Bondholder information” at www.ubs.com/investors for more information
- Refer to the “Consolidated financial statements” section of this report for more information

Contractual maturity profile of outstanding long-term debt held at amortized cost



Funding by product and currency

	CHF billion		As a percentage of total funding sources (%)									
	All currencies		All currencies		CHF		EUR		USD		Other	
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Short-term borrowings	36.8	33.1	5.5	5.0	0.6	0.5	0.9	0.5	2.9	3.1	1.1	0.8
of which: due to banks	10.6	11.8	1.6	1.8	0.5	0.4	0.1	0.1	0.7	0.7	0.3	0.5
of which: short-term debt issued ¹	26.2	21.2	3.9	3.2	0.1	0.1	0.8	0.4	2.2	2.4	0.8	0.4
Collateral trading	9.4	17.7	1.4	2.7	0.0	0.0	0.3	0.8	1.0	1.4	0.1	0.4
of which: securities lending	2.8	8.0	0.4	1.2	0.0	0.0	0.0	0.2	0.4	0.7	0.0	0.2
of which: repurchase agreements	6.6	9.7	1.0	1.5	0.0	0.0	0.3	0.6	0.6	0.7	0.1	0.2
Cash collateral payables on derivative instruments	35.5	38.3	5.3	5.8	0.2	0.2	1.8	2.1	2.3	2.7	1.0	0.8
Due to customers	423.7	390.2	63.2	59.2	24.4	23.5	7.7	6.2	25.7	24.0	5.4	5.5
of which: demand deposits	194.0	172.8	29.0	26.2	8.9	7.8	6.6	5.2	9.6	9.7	3.9	3.5
of which: retail savings / deposits	170.7	161.8	25.5	24.5	14.1	13.8	0.8	0.8	10.6	9.9	0.0	0.0
of which: time deposits	52.7	49.4	7.9	7.5	1.4	1.8	0.2	0.1	4.9	3.8	1.4	1.8
of which: fiduciary deposits	6.2	6.1	0.9	0.9	0.1	0.1	0.1	0.1	0.6	0.6	0.1	0.1
Long-term debt issued ²	132.5	134.9	19.8	20.5	1.9	2.3	4.9	5.7	11.6	10.8	1.3	1.7
Prime brokerage payables	32.0	45.3	4.8	6.9	0.1	0.1	0.6	1.0	2.8	4.4	1.3	1.3
Total	669.9	659.4	100.0	100.0	27.2	26.6	16.2	16.3	46.2	46.5	10.3	10.6

¹ Short-term debt issued is comprised of certificates of deposit, commercial paper, acceptances and promissory notes, and other money market paper. ² Long-term debt issued also includes debt with a remaining time to maturity of less than one year. The classification of debt issued into short-term and long-term does not consider any early redemption features.

Asset funding

CHF billion, except where indicated

As of 31.12.16

121	Cash, balances with central banks and due from banks		Short-term borrowings	37	
90	Financial assets designated at fair value, available for sale and held to maturity		Collateral trading	9	
81	Collateral trading	CHF 72 billion collateral surplus	Trading portfolio liabilities	23	
97	Trading portfolio		Demand deposits	194	424
306	Loans	138% coverage CHF 117 billion surplus	Retail savings/deposits	171	
			Time deposits	53	
86	Other (including net replacement values)		Fiduciary deposits	6	
			Financial liabilities designated at fair value ¹	55	132
			Held at amortized cost	77	
			Other	102	
			Total equity	54	
Assets			Liabilities and equity		

¹ Long-term debt issued also includes debt with a remaining time to maturity of less than one year. ² Including over-the-counter debt instruments.

Equity

Equity attributable to shareholders decreased by CHF 1,692 million to CHF 53,621 million as of 31 December 2016.

Total comprehensive income attributable to shareholders was CHF 1,817 million, reflecting net profit of CHF 3,204 million and negative other comprehensive income (OCI) of CHF 1,386 million. Negative OCI included net losses on defined benefit plans of CHF 824 million, net losses on cash flow hedges of CHF 666 million, own credit losses of CHF 115 million and negative OCI related to financial assets available for sale of CHF 73 million, partly offset by foreign currency translation gains of CHF 292 million.

Share premium decreased by CHF 2,910 million, primarily due to the distribution of CHF 3,164 million out of the capital contribution reserve and a negative effect of CHF 682 million from the delivery of treasury shares under share-based compensation plans, partly offset by an increase of CHF 861 million due to the amortization of deferred equity compensation awards in the income statement.

Net treasury share activity decreased equity attributable to shareholders by CHF 556 million, mainly reflecting the net acquisition of treasury shares related to employee share-based compensation awards.

→ Refer to the "Group performance" and "Consolidated financial statements" sections of this report for more information

Net stable funding ratio

The NSFR framework is intended to limit over-reliance on short-term wholesale funding, to encourage a better assessment of funding risk across all on- and off-balance sheet items and to promote funding stability. The NSFR consists of two components: available stable funding (ASF) and required stable funding (RSF). ASF is the portion of capital and liabilities expected to be available over the period of one year. RSF is a measure of the stable funding requirement of an asset based on its maturity, encumbrance and other characteristics, as well as the potential for contingent calls on funding liquidity from off-balance sheet exposures. The BCBS NSFR regulatory framework requires a ratio of at least 100% from 2018.

We report our estimated pro forma NSFR based on current guidance from FINMA and will adjust our NSFR reporting according to the final implementation of the BCBS NSFR disclosure standards in Switzerland. The reported NSFR does not consider the consultation of NSFR regulation in Switzerland that started in January 2017 and is open for comment until April 2017.

As of 31 December 2016, our estimated pro forma NSFR was 116%, an increase of 11 percentage points from 31 December 2015, primarily reflecting a CHF 16 billion increase in available stable funding, mainly driven by an increase in unsecured funding, and a CHF 22 billion reduction in required stable funding, primarily resulting from decreases in the trading portfolio. The calculation of our pro forma NSFR includes interpretation and estimates of the effect of the rules, and will be refined as regulatory interpretations evolve and as new models and associated systems are enhanced.

Pro forma net stable funding ratio

CHF billion, except where indicated

	31.12.16	31.12.15
Available stable funding	442	426
Required stable funding	381	403
Pro forma net stable funding ratio (%)	116	105

Internal funding and funds transfer pricing

We employ an integrated liquidity and funding framework to govern the liquidity management of all our branches and subsidiaries, and our major sources of liquidity are channeled through entities that are fully consolidated. Group ALM meets internal demands for funding by channeling funds from entities generating surplus cash to those in need of financing.

Funding costs and benefits are allocated to our business divisions and Non-core and Legacy Portfolio according to our liquidity and funding risk management framework. Our internal funds transfer pricing system, which is governed by Group Treasury, is designed to provide the proper liability structure to support the assets and planned activities of each business division while minimizing cross-divisional subsidies. The funds transfer pricing mechanism aims to allocate funding and liquidity costs to the activities generating the liquidity and funding risks, and deals with the movement of funds from those businesses in surplus to those that have a shortfall. Funding is internally transferred or allocated among businesses at rates and tenors that reflect each business's asset composition, liquidity and reliable external funding. We regularly review our internal funds transfer pricing mechanisms, and make enhancements where appropriate to help better accomplish our liquidity and funding management objectives.

Credit ratings

Credit ratings can affect the cost and availability of funding, especially funding from wholesale unsecured sources. Our credit ratings can also influence the performance of some of our businesses and the levels of client and counterparty confidence. Rating agencies take into account a range of factors when assessing creditworthiness and setting credit ratings. These include the company's strategy, its business position and franchise value, stability and quality of earnings, capital adequacy, risk profile and management, liquidity management, diversification of funding sources, asset quality and corporate governance. Credit ratings reflect the opinions of the rating agencies and can change at any time.

In evaluating our liquidity and funding requirements, we consider the potential impact of a reduction in UBS's long-term credit ratings and a corresponding reduction in short-term ratings.

If our credit ratings were to be downgraded, rating trigger clauses could result in an immediate cash settlement or the need to deliver additional collateral to counterparties from contractual obligations related to covered bonds, over-the-counter (OTC) derivative positions and other obligations. Based on our credit ratings as of 31 December 2016, CHF 1.8 billion, CHF 2.2 billion and CHF 3.0 billion would have been required for such contractual obligations in the event of a one-notch, two-notch and three-notch reduction in long-term credit ratings, respectively. Of these, the portion related to additional collateral is CHF 1.8 billion, CHF 2.0 billion and CHF 2.7 billion, respectively.

There were a number of rating actions on UBS AG's and UBS Group AG's solicited credit ratings in 2016.

On 11 January 2016, Moody's Investors Service (Moody's) upgraded UBS AG's long-term senior debt rating to A1 (stable outlook) from A2. Moody's rates the TLAC-eligible senior unsecured debt guaranteed by UBS Group AG on an unsolicited basis (issuance out of UBS Group Funding (Jersey) Limited). Moody's upgraded its rating for this debt to Baa2 (stable outlook) from Baa3 on 11 January 2016, and to Baa1 (stable outlook) from Baa2 on 13 December 2016.

On 6 June 2016, Standard & Poor's upgraded the long-term counterparty credit rating of UBS AG to A+ (stable outlook) from A and of UBS Group AG to A- (stable outlook) from BBB+.

On 14 June 2016, Fitch Ratings upgraded UBS AG's long-term issuer default rating to A+ (stable outlook) from A, maintaining its A rating (positive outlook) on UBS Group AG.

On 1 June 2016, Scope Ratings AG upgraded UBS AG's issuer credit strength rating to A+ (stable outlook) from A, maintaining UBS Group AG's rating at A (stable outlook). On 20 June 2016, both entities' ratings were revised to a positive outlook.

→ Refer to **"Liquidity and funding management are critical to our ongoing performance"** in the **"Risk factors"** section of this report for more information

Maturity analysis of assets and liabilities

The table on the following page provides an analysis of on- and off-balance sheet assets and liabilities by residual contractual maturity as of the balance sheet date. The contractual maturity of liabilities is based on carrying amounts and the earliest date on which we could be required to pay. The contractual maturity of assets is based on carrying amounts and the latest date the asset will mature. This basis of presentation differs from "Note 25d Maturity analysis of financial liabilities" in the "Consolidated financial statements" section of this report, which is presented on an undiscounted basis, as required by IFRS.

Derivative replacement values and trading portfolio assets and liabilities are assigned to the column *Due within 1 month*, although the respective contractual maturities may extend over significantly longer periods.

Other financial assets and liabilities with no contractual maturity, such as equity securities, are included in the *Perpetual / Not applicable* time bucket. Undated or perpetual instruments are classified based on the contractual notice period that the counterparty of the instrument is entitled to give. Where there is no contractual notice period, undated or perpetual contracts are included in the *Perpetual / Not applicable* time bucket.

Non-financial assets and liabilities with no contractual maturity are generally included in the *Perpetual / Not applicable* time bucket.

Loan commitments are classified on the basis of the earliest date they can be drawn down.

Maturity analysis of assets and liabilities

CHF billion	Due within 1 month	Due between 1 and 3 months	Due between 3 and 6 months	Due between 6 and 9 months	Due between 9 and 12 months	Due between 1 and 2 years	Due between 2 and 5 years	Due over 5 years	Perpetual / Not applicable	Total
Assets										
Cash and balances with central banks	107.8									107.8
Due from banks	11.5	0.9	0.3	0.2	0.1	0.0	0.0	0.0		13.2
Cash collateral on securities borrowed	15.1	0.0								15.1
Reverse repurchase agreements	36.8	18.0	5.3	3.2	2.3	0.7				66.2
Trading portfolio assets	96.6									96.6
Positive replacement values	158.4									158.4
Cash collateral receivables on derivative instruments	26.7									26.7
Loans	109.4	42.6	12.5	6.6	8.9	22.1	54.2	50.0		306.3
<i>of which: residential mortgages</i>	<i>12.0</i>	<i>25.3</i>	<i>5.6</i>	<i>3.2</i>	<i>3.8</i>	<i>13.8</i>	<i>36.1</i>	<i>42.4</i>		<i>142.2</i>
<i>of which: commercial mortgages</i>	<i>2.9</i>	<i>6.9</i>	<i>1.2</i>	<i>0.4</i>	<i>0.4</i>	<i>1.6</i>	<i>3.8</i>	<i>2.5</i>		<i>19.7</i>
<i>of which: Lombard loans</i>	<i>83.0</i>	<i>8.5</i>	<i>4.1</i>	<i>2.3</i>	<i>2.7</i>	<i>2.2</i>	<i>2.0</i>	<i>0.2</i>		<i>105.0</i>
<i>of which: other loans</i>	<i>11.6</i>	<i>1.9</i>	<i>1.6</i>	<i>0.6</i>	<i>2.0</i>	<i>4.5</i>	<i>12.3</i>	<i>2.4</i>		<i>36.9</i>
<i>of which: securities</i>						<i>0.0</i>	<i>0.0</i>	<i>2.4</i>		<i>2.5</i>
Financial assets designated at fair value	7.8	10.2	3.6	6.4	7.8	14.7	13.2	1.2	0.5	65.4
Financial assets available for sale	0.8	1.2	0.7	0.9	1.4	3.3	3.0	3.5	0.8	15.7
Financial assets held to maturity	0.0	0.4	0.1	0.9	0.2	1.9	2.6	3.1		9.3
Investments in associates									1.0	1.0
Property, equipment and software									8.3	8.3
Goodwill and intangible assets									6.6	6.6
Deferred tax assets									13.2	13.2
Other assets	20.7	0.0	0.0	0.0	0.1	0.4	2.3	1.9		25.4
Total assets as of 31 December 2016	591.6	73.4	22.5	18.2	20.8	43.2	75.4	59.7	30.3	935.0
Total assets as of 31 December 2015	614.3	72.4	25.4	23.5	15.4	31.8	75.8	54.9	29.4	942.8
Liabilities										
Due to banks	7.4	1.3	1.0	0.5	0.3	0.0	0.0	0.0		10.6
Cash collateral on securities lent	2.2	0.6								2.8
Repurchase agreements	4.7	1.0	0.6	0.1	0.0	0.1				6.6
Trading portfolio liabilities	22.8									22.8
Negative replacement values	153.8									153.8
Cash collateral payables on derivative instruments	35.5									35.5
Due to customers	406.8	13.3	2.3	0.3	0.3	0.1	0.6	0.1		423.7
Financial liabilities designated at fair value	17.0	14.6	4.6	3.4	2.7	2.4	5.0	5.2		55.0
Debt issued	7.7	7.3	11.0	8.6	2.7	9.5	19.7	29.4	7.8	103.6
Provisions	4.2									4.2
Other liabilities	58.0	2.2				0.5	0.5	0.1	0.7	62.0
Total liabilities as of 31 December 2016	720.2	40.4	19.5	12.9	6.0	12.6	25.7	34.8	8.5	880.7
Total liabilities as of 31 December 2015	720.4	46.0	22.6	8.6	3.6	17.7	28.8	32.3	5.4	885.5
Guarantees, commitments and forward starting transactions										
Loan commitments	54.0	0.2	0.1	0.0	0.0	0.0				54.4
Guarantees	16.7									16.7
Reverse repurchase agreements	10.2									10.2
Securities borrowing agreements	0.0									0.0
Total as of 31 December 2016	81.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0		81.4
Total as of 31 December 2015	78.1	0.2	0.2	0.0	0.0	0.1	0.1	0.0		78.7

Off-balance sheet

Off-balance sheet arrangements

In the normal course of business, we enter into transactions that may not be recognized in whole or in part on our balance sheet in accordance with International Financial Reporting Standards (IFRS). These transactions include derivative instruments, guarantees and similar arrangements, as well as some purchased and retained interests in non-consolidated structured entities (SEs), which are transacted for a number of reasons, including hedging and market-making activities, to meet specific needs of our clients or to offer investment opportunities to clients through entities that are not controlled by us.

When we incur an obligation or become entitled to an asset through these arrangements, we recognize them on the balance sheet. It should be noted that in certain instances the amount recognized on the balance sheet does not represent the full gain or loss potential inherent in such arrangements.

→ Refer to “**Note 1a Significant accounting policies, items 1, 3a and 3d**” and “**Note 28 Interests in subsidiaries and other entities**” in the “**Consolidated financial statements**” section of this report for more information

The following paragraphs provide more information on several distinct off-balance sheet arrangements. Additional off-balance sheet information is primarily provided in Notes 12, 20, 23, 28 and 31 in the “Consolidated financial statements” section of this report, as well as in the Basel III Pillar 3 UBS Group AG 2016 report under “Pillar 3, SEC filings & other disclosures” at www.ubs.com/investors.

Risk disclosures, including our involvement with off-balance sheet vehicles

Refer to the “Risk management and control” section of this report for comprehensive credit, market and liquidity risk information related to our exposures, which includes exposures to off-balance sheet vehicles.

Support provided to non-consolidated investment funds

In 2016, the Group did not provide material support, financial or otherwise, to unconsolidated investment funds when the Group was not contractually obligated to do so, nor does the Group have an intention to do so.

Guarantees and similar arrangements

In the normal course of business, we issue various forms of guarantees, commitments to extend credit, standby and other letters of credit to support our clients, commitments to enter into forward starting transactions, note issuance facilities and revolving underwriting facilities. With the exception of related premiums, generally these guarantees and similar obligations are kept as off-balance sheet items unless a provision to cover probable losses is required.

As of 31 December 2016, the net exposure (gross values less sub-participations) from guarantees and similar instruments was CHF 13.8 billion compared with CHF 13.3 billion as of 31 December 2015. Fee income from issuing guarantees was not significant to total revenues in 2016 and 2015.

Guarantees represent irrevocable assurances that, subject to the satisfaction of certain conditions, we will make payments in the event that our clients fail to fulfill their obligations to third parties. We also enter into commitments to extend credit in the form of credit lines that are available to secure the liquidity needs of our clients. The majority of these unutilized credit lines range in maturity from one month to five years. If customers fail to meet their obligations, our maximum exposure to credit risk is the contractual amount of these instruments. The risk is similar to the risk involved in extending loan facilities and is subject to the same risk management and control framework. In 2016, we recognized a net credit loss expense of CHF 9 million related to loan commitments and guarantees compared with CHF 2 million in 2015. Provisions recognized for guarantees and loan commitments were CHF 54 million as of 31 December 2016 and CHF 35 million as of 31 December 2015.

→ Refer to “**Note 11 Allowances and provisions for credit losses**” in the “**Consolidated financial statements**” section of this report for more information on provisions for loan commitments and guarantees

For certain obligations, we enter into partial sub-participations to mitigate various risks from guarantees and loan commitments. A sub-participation is an agreement by another party to take a share of the loss in the event that the obligation is not fulfilled by the obligor and, where applicable, to fund a part of the credit facility. We retain the contractual relationship with the obligor, and the sub-participant has only an indirect relationship. We only enter into sub-participation agreements with banks to which we ascribe a credit rating equal to or better than that of the obligor.

Furthermore, we provide representations, warranties and indemnifications to third parties in the normal course of business.

Guarantees, commitments and forward starting transactions

The table below shows the maximum irrevocable amount of guarantees, commitments and forward starting transactions.

CHF million	31.12.16			31.12.15		
	Gross	Sub-participations	Net	Gross	Sub-participations	Net
Guarantees						
Credit guarantees and similar instruments	6,447	(424)	6,023	6,708	(315)	6,393
Performance guarantees and similar instruments	3,190	(696)	2,494	3,035	(699)	2,336
Documentary credits	7,074	(1,761)	5,313	6,276	(1,707)	4,569
Total guarantees	16,711	(2,881)	13,830	16,019	(2,721)	13,298
Loan commitments	54,430	(1,513)	52,917	56,067	(1,559)	54,508
Forward starting transactions¹						
Reverse repurchase agreements	10,178			6,577		
Securities borrowing agreements	36			6		
Repurchase agreements	5,984			6,323		

¹ Cash to be paid in the future by either UBS or the counterparty.

Clearing house and exchange memberships

We are a member of numerous securities and derivative exchanges and clearing houses. In connection with some of those memberships, we may be required to pay a share of the financial obligations of another member who defaults or we may be otherwise exposed to additional financial obligations. While the membership rules vary, obligations generally would arise only if the exchange or clearing house had exhausted its resources. We consider the probability of a material loss due to such obligations to be remote.

Swiss deposit insurance

Swiss banking law and the deposit insurance system require Swiss banks and securities dealers to jointly guarantee an amount of up to CHF 6 billion for privileged client deposits in the event that a Swiss bank or securities dealer becomes insolvent. FINMA estimates our share in the deposit insurance system to be CHF 0.9 billion. The deposit insurance is a contingent payment obligation and exposes us to additional risk. This is not reflected in the table above due to its unique characteristics. As of 31 December 2016, we considered the probability of a material loss from our obligation to be remote.

Contractual obligations

The table below summarizes payments due by period under contractual obligations as of 31 December 2016.

All contractual obligations included in this table, with the exception of purchase obligations (i.e., those in which we are

committed to purchasing determined volumes of goods and services), are either recognized as liabilities on our balance sheet or, in the case of operating leases, disclosed in "Note 31 Operating leases and finance leases" in the "Consolidated financial statements" section of this report.

Contractual obligations

CHF million	Payment due by period				Total
	Within 1 year	1–3 years	3–5 years	Over 5 years	
Long-term debt obligations	56,401	24,854	20,879	45,906	148,040
Finance lease obligations	15	6	2	0	23
Operating lease obligations	715	1,123	837	2,360	5,034
Purchase obligations	2,005	1,160	302	28	3,495
Total as of 31 December 2016	59,136	27,143	22,020	48,293	156,592

Long-term debt obligations as of 31 December 2016 were CHF 148 billion. They consisted of financial liabilities designated at fair value (CHF 57 billion) and long-term debt issued (CHF 91 billion) and represent estimated future interest and principal payments on an undiscounted basis.

→ Refer to "Note 25d Maturity analysis of financial liabilities" in the "Consolidated financial statements" section of this report for more information

Approximately half of total long-term debt obligations had a variable rate of interest. Amounts due on interest rate swaps used to hedge interest rate risk inherent in fixed-rate debt issued, and designated in fair value hedge accounting relationships, are not included in the table above. The notional amount of these interest rate swaps was CHF 57 billion as of 31 December 2016. Financial liabilities designated at fair value mostly consist of structured notes and are generally economically

hedged, but it would not be practicable to estimate the amount and / or timing of the payments on interest swaps used to hedge these instruments as interest rate risk inherent in respective liabilities is generally risk managed on a portfolio level.

Within purchase obligations, the obligation to employees under mandatory notice periods is excluded (i.e., the period in which we must pay contractually agreed salaries to employees leaving the firm).

Our liabilities recognized on the balance sheet as *Due to banks, Cash collateral on securities lent, Repurchase agreements, Trading portfolio liabilities, Negative replacement values, Cash collateral payables on derivative instruments, Due to customers, Provisions and Other liabilities* are excluded from the table above.

→ Refer to the respective Notes in the "Consolidated financial statements" section of this report for more information

Currency management

Strategy, objectives and governance

Our Group currency management activities are designed to reduce adverse currency effects on our reported financial results in Swiss francs, within limits set by the BoD. Group ALM focuses on three principal areas of currency risk management: (i) currency-matched funding of investments in non-Swiss franc assets and liabilities, (ii) sell-down of non-Swiss franc profits and losses and (iii) selective hedging of anticipated non-Swiss franc profits and losses. Non-trading foreign exchange risks are managed under market risk limits, with the exception of consolidated capital activity managed by Group ALM.

Currency-matched funding and investment of non-Swiss franc assets and liabilities

For monetary balance sheet items and non-core investments, as far as it is practical and efficient, we follow the principle of matching the currencies of our assets and liabilities for funding purposes. This avoids profits and losses arising from the translation of non-Swiss franc assets and liabilities.

Net investment hedge accounting is applied to non-Swiss franc core investments to balance the effect of foreign exchange movements on both common equity tier 1 (CET1) capital and the CET1 capital ratio on a fully applied basis.

→ **Refer to “Note 1a Significant accounting policies” and “Note 12 Derivative instruments and hedge accounting” in the “Consolidated financial statements” section of this report for more information**

Sell-down of non-Swiss franc reported profits and losses

Income statement items of foreign subsidiaries and branches with a functional currency other than the Swiss franc are translated into Swiss francs on a monthly basis using the relevant month-end rate. To reduce earnings volatility on the translation of previously recognized earnings in foreign currencies, Group ALM centralizes the profits and losses arising in UBS AG and its branches and sells or buys the profit or loss for Swiss francs. Our foreign subsidiaries follow a similar monthly sell-down process into their own reporting currencies. Retained earnings in foreign subsidiaries with a reporting currency other than the Swiss franc are integrated and managed as part of net investment hedge accounting program.

Hedging of anticipated non-Swiss franc profits and losses

The Group ALCO may at any time instruct Group ALM to execute hedges to protect anticipated future profits and losses in foreign currencies against possible adverse trends of foreign exchange rates. Although intended to hedge future earnings, these transactions are accounted for as open currency positions and are subject to internal market risk limits for value-at-risk and stress loss limits.

→ **Refer to the “Capital management” section of this report for more information on our active management of sensitivity to currency movements and its effect on our key ratios**

Cash flows

As a global financial institution, our cash flows are complex and often may bear little relation to our net earnings and net assets. Consequently, we believe that a traditional cash flow analysis is less meaningful in evaluating our liquidity position than the liquidity, funding and capital management frameworks and measures described elsewhere in the "Risk, treasury and capital management" section of this report.

Cash and cash equivalents

As of 31 December 2016, cash and cash equivalents totaled CHF 121.1 billion, an increase of CHF 18.1 billion from 31 December 2015, driven by net cash inflows from investing activities, partly offset by net cash outflows from operating activities.

Operating activities

In 2016, net cash outflows from operating activities were CHF 16.5 billion. Net operating cash flow, before changes in operating assets and liabilities and income taxes paid, was an inflow of CHF 12.5 billion. Changes in operating assets and liabilities mainly reflected an increase of financial assets designated at fair value of CHF 60.7 billion, substantially due to cash proceeds from reductions of debt securities classified as financial assets available for sale, which triggered cash inflows from investing activities. These proceeds were used for purchases of similar debt instruments classified under the fair value option, which are presented in operating activities. This effect was partly offset by inflows related to an increase in customer deposits of CHF 33.6 billion.

In 2015, net cash inflows from operating activities were CHF 3.1 billion, mainly reflecting net profit of CHF 6.4 billion, partly offset by net cash outflows of CHF 3.4 billion resulting from net changes in operating assets and liabilities.

Investing activities

Investing activities resulted in a net cash inflow of CHF 36.3 billion in 2016, primarily related to a gross cash inflow of CHF 54.1 billion from disposals and redemptions of financial assets available for sale, partly offset by gross cash outflows of CHF 7.3 billion and CHF 9.0 billion related to the purchase of financial assets available for sale and financial assets held to maturity, respectively.

In 2015, investing activities generated a net outflow of CHF 8.4 billion as purchases of financial assets available for sale exceeded disposals and redemptions.

Financing activities

Financing activities resulted in a net cash outflow of CHF 1.0 billion in 2016, due to the dividend distribution to shareholders of CHF 3.2 billion, payments of CHF 1.4 billion made to holders of preferred notes and net cash of CHF 1.2 billion used to acquire treasury shares, largely offset by the net issuance of short-term debt of CHF 5.4 billion.

In 2015, net cash flow from financing activities was an outflow of CHF 6.6 billion, primarily consisting of dividend distributions of CHF 2.8 billion and net redemption of debt including financial liabilities designated at fair value of CHF 2.8 billion.

Statement of cash flows (condensed)

	For the year ended	
CHF million	31.12.16	31.12.15
Net cash flow from / (used in) operating activities	(16,457)	3,109
Net cash flow from / (used in) investing activities	36,328	(8,441)
Net cash flow from / (used in) financing activities	(972)	(6,595)
Effects of exchange rate differences on cash and cash equivalents	(806)	(1,742)
Net increase / (decrease) in cash and cash equivalents	18,094	(13,670)
Cash and cash equivalents at the end of the year	121,138	103,044

Capital management

Capital management objectives

Audited I An adequate level of capital in accordance with both our internal assessment and regulatory requirements is a prerequisite to conducting our business activities. ▲ We are therefore committed to maintaining a strong capital position and sound capital ratios at all times in order to meet regulatory capital requirements and target capital ratios, and to support the growth of our businesses.

We expect to meet known future increases in capital requirements mainly through a combination of retaining earnings and issuing high-trigger loss-absorbing additional tier 1 (AT1) capital instruments, including Deferred Contingent Capital Plan (DCCP) awards, as well as issuing senior unsecured debt which contributes to our total loss-absorbing capacity (TLAC).

As of 31 December 2016, our fully applied common equity tier 1 capital ratio was 13.8%, above our target of at least 13% and above the requirements for Swiss SRBs, which are stricter than the Bank for International Settlements requirements. We believe that our capital strength is a source of confidence for our stakeholders, contributes to our strong credit ratings and is the foundation of our success.

- Refer to “Our strategy” section of this report for more information on our performance targets and expectations
- Refer to the “Our stated capital returns objective is based, in part, on capital ratios that are subject to regulatory change and may fluctuate significantly” in the “Risk factors” section of this report for more information on the risks related to our capital ratios

Capital planning

Audited I We manage our balance sheet, risk-weighted assets (RWA), leverage ratio denominator (LRD) and capital ratio levels within our internal limits and targets and on the basis of our regulatory capital requirements. Our strategic focus is set on achieving an optimal attribution and use of financial resources between our business divisions and Corporate Center, as well as between our legal entities, while remaining within the limits defined for the Group and allocated to the business divisions by the Board of Directors (BoD). These resource allocations in turn affect business plans and earnings projections, which are reflected in our capital plans.

The annual strategic planning process includes a capital planning component that is key in defining medium- and longer-term capital targets. It is based on an attribution of Group RWA and LRD internal limits to the business divisions.

Limits and targets are established at both Group and business division levels, and submitted to the BoD for approval at least annually. In the target-setting process, we take into account the current and potential future capital requirements, our aggregate risk exposure in terms of capital-at-risk, the assessment by rating agencies, comparisons with peers and the effect of expected accounting policy changes.▲ Our monitoring is based on these internal limits and targets and provides indications if changes are required. Any breach of the limits in place triggers the imposition of a series of required remedial actions.

Group Treasury plans for, and monitors, consolidated capital information on an ongoing basis, also considering developments in capital regulations. In addition, capital planning and monitoring are done at the legal entity level for our significant subsidiaries subject to prudential supervision, in order to ensure that capital and other supervisory requirements applicable to these entities are met.

- Refer to the “Equity attribution framework” in this section for more information on how equity is attributed to our business divisions
- Refer to “Capital and capital ratios of our significant regulated subsidiaries” in this section for more information

Capital management activities

Audited I In 2016, we focused on meeting the revised Swiss SRB fully applied capital requirements. To meet these new requirements, we executed a series of transactions, including:

- the issuance of TLAC-eligible senior unsecured notes in the equivalent of CHF 11.4 billion;
- the issuance of high-trigger loss-absorbing AT1 capital instruments in the equivalent of CHF 2.5 billion; and
- an increase of CHF 0.4 billion in high-trigger loss-absorbing AT1 capital instruments related to DCCP awards granted for the performance year 2016. ▲

These transactions contributed to our fully applied TLAC ratio amounting to 31.1% as of 31 December 2016, exceeding the minimum requirement of 28.6%, excluding countercyclical buffer requirements and without considering any rebate due to improved resolvability, applicable as of 1 January 2020.

Swiss SRB capital framework

UBS is considered a systemically relevant bank (SRB) under Swiss banking law and both UBS Group and UBS AG are, on a consolidated basis, required to comply with regulations based on the Basel III framework. Disclosures in this section focus on information in accordance with the Basel III framework as applicable to Swiss SRBs.

Information in accordance with the Bank for International Settlements framework, including requirements for global systemically important banks, is provided in the Basel III Pillar 3 UBS Group AG 2016 report provided under "Pillar 3, SEC filings & other disclosures" at www.ubs.com/investors.

UBS AG (consolidated) capital and leverage ratio information is provided in the UBS Group AG and UBS AG Annual Report 2016 under "Annual reporting" at www.ubs.com/investors. Standalone legal entity financial and regulatory information for UBS AG, UBS Switzerland AG and UBS Limited, and consolidated financial and regulatory information for UBS Americas Holding LLC, is provided under "Disclosure for legal entities" at www.ubs.com/investors.

Regulatory framework

The Basel III framework came into effect in Switzerland on 1 January 2013.

In May 2016, the Swiss Federal Council adopted amendments to the too big to fail (TBTF) provisions, based on the cornerstones announced by the Swiss Federal Council in October 2015. The revised Capital Adequacy Ordinance forms the basis of the revised Swiss SRB framework, which became effective on 1 July 2016 and will be transitioned in until 1 January 2020.

The Basel Committee on Banking Supervision and other financial regulators are considering changes to the Basel III capital framework. If the proposed changes to the capital framework are adopted in their current form in Switzerland, we expect our overall risk-weighted assets (RWA) to significantly increase without considering the effect of mitigating measures.

Going and gone concern requirements

The revised Swiss SRB framework amends the capital requirements introduced under the former Swiss SRB framework and establishes additional gone concern requirements, which, together with the going concern requirements, represent the total loss-absorbing capacity (TLAC) requirement of the Group. TLAC encompasses regulatory capital, such as common equity tier 1 (CET1), loss-absorbing additional tier 1 (AT1) and tier 2 capital instruments, as well as liabilities that can be written down or converted into equity in case of resolution or for the purpose of recovery measures.

Eligible capital

The Basel III framework includes prudential filters for the calculation of capital. These prudential filters consist mainly of

capital deductions for deferred tax assets (DTAs) recognized for tax loss carry-forwards, DTAs on temporary differences that exceed a certain threshold and effects related to defined benefit plans. As these filters are being phased in between 2014 and 2018, their effects are gradually factored into our calculations of capital, RWA and capital ratios on a phase-in basis and are entirely reflected in our capital, RWA and capital ratios on a fully applied basis.

In 2016, we deducted from our phase-in CET1 capital 60% (in 2015: 40%) of: (i) DTAs recognized for tax loss carry-forwards, (ii) DTAs on temporary differences that exceed the threshold of 10% of CET1 capital before deductions for DTAs on temporary differences and (iii) net defined benefit pension plan assets. In addition, since 1 July 2016 we are no longer using non-Basel III-compliant tier 1 capital as an offset for goodwill deductions. As of 31 December 2016, we deducted 60% (in 2015: 40%) of our goodwill from phase-in CET1 capital and 40% (in 2015: 60%) of our goodwill from loss-absorbing AT1 capital.

Eligible capital and other instruments contributing to our loss-absorbing capacity

In addition to CET1 capital, the following instruments contribute to our loss-absorbing capacity:

- Loss-absorbing AT1 capital instruments (high- and low-trigger)
- Loss-absorbing tier 2 capital instruments (high- and low-trigger)
- Non-Basel III-compliant tier 1 capital instruments
- Non-Basel III-compliant tier 2 capital instruments
- TLAC-eligible senior unsecured debt

Under the revised Swiss SRB rules, going concern capital includes CET1 and high-trigger loss-absorbing AT1 capital instruments. Under the transitional rules for the revised Swiss SRB framework, existing low-trigger loss-absorbing AT1 capital instruments will remain available to meet the going concern capital requirements until their first call date, even if the first call date is after 31 December 2019. From their first call date, existing low-trigger loss-absorbing AT1 capital instruments may only be used to meet the gone concern requirements.

Outstanding low- and high-trigger tier 2 capital instruments will remain available to meet the going concern capital requirements until the earlier of (i) their maturity or first call date or (ii) 31 December 2019. From 1 January 2020 onward, these instruments may be used to meet the gone concern requirements until one year prior to maturity, with a haircut of 50% applied in the last year of eligibility.

Non-Basel III-compliant tier 1 and tier 2 capital instruments are no longer subject to phase-out under the revised Swiss SRB framework. Together with TLAC-eligible senior unsecured debt they are eligible to meet the gone concern requirements until one year prior to maturity, with a haircut of 50% applied in the last year of eligibility.

The eligibility of our capital instruments and TLAC-eligible senior unsecured debt to meet the requirements under the revised Swiss SRB framework, both with and without transitional arrangements, is illustrated in the table on the next page.

→ Refer to “Bondholder information” at www.ubs.com/investors for more information on the eligibility of capital and senior debt instruments and on key features, and terms and conditions of capital instruments

Revised capital and leverage ratio requirements

Once the revised Swiss SRB requirements are fully implemented by 1 January 2020, total going concern minimum requirements for all Swiss SRBs consist of a capital ratio requirement of 12.86% of RWA and a leverage ratio requirement of 4.5%. In addition to these minimum requirements, an add-on reflecting the degree of systemic importance is applied based on market share and the LRD. The add-on for UBS is expected to be 1.44% of RWA and 0.5% of our LRD, resulting in total going concern capital requirements applicable starting as of 1 January 2020 of 14.3% of RWA (excluding countercyclical buffer requirements) and 5.0% of LRD. Furthermore, of the total going concern capital requirement of 14.3% of RWA, at least 10% must be met with CET1 capital, while a maximum of 4.3% can be met with high-trigger loss-absorbing AT1 capital instruments. Similarly, of the total going concern leverage ratio requirement of 5.0%, 3.5% must be met with CET1 capital, while a maximum of 1.5% can be met with high-trigger loss-absorbing AT1 capital instruments.

National authorities can put in place a countercyclical buffer requirement of up to 2.5% of RWA for credit exposures in their jurisdictions. These requirements must also be met with CET1 capital. The Swiss Federal Council has activated a countercyclical buffer requirement of 2% of RWA for mortgage loans on residential property in Switzerland, applicable since 30 June 2014. Furthermore, since 1 July 2016, we are required to apply additional countercyclical buffer requirements implemented in other Basel Committee member jurisdictions. The requirements

will be phased in by and become fully effective on 1 January 2019. The effect as of 31 December 2016 was immaterial.

As an internationally active Swiss SRB, UBS is also subject to gone concern loss-absorbing capacity requirements, which are 14.3% of RWA and 5.0% of LRD, resulting in TLAC requirements of 28.6% of RWA and 10.0% of LRD as of 1 January 2020. The gone concern requirements also include add-ons for market share and the LRD, and may be met with senior unsecured debt that is TLAC-eligible. However, in the event that low-trigger loss-absorbing AT1 or tier 2 capital instruments are used to meet the gone concern requirements, such requirements may be reduced by up to 2.86% for the RWA-based requirement and up to 1% for the LRD-based requirement. In this report, we refer to the RWA-based gone concern requirements as gone concern loss-absorbing capacity requirements, and the RWA-based gone concern ratio is referred to as the gone concern loss-absorbing capacity ratio.

Under the revised Swiss SRB framework, banks are eligible for a rebate of up to 2% on the gone concern requirement if they take actions that facilitate recovery and resolvability beyond the minimum requirements to ensure the integrity of systemically important functions in the case of an impending insolvency. FINMA has determined that the measures we have completed support a rebate on the gone concern requirement. As we complete additional measures to improve the resolvability of the Group we expect to qualify for a larger rebate and therefore aim to operate with a gone concern ratio of less than 4% of LRD when the revised Swiss SRB framework becomes fully effective as of 1 January 2020. The amount of the rebate will be assessed annually by FINMA based on its assessment of completed measures to improve resolvability. The combined reduction applied for resolvability measures and the aforementioned gone concern requirement reduction for use of low-trigger loss-absorbing AT1 and tier 2 capital instruments may not exceed 5.7% for the RWA-based requirement and 2% for the LRD-based requirement.

Swiss SRB going and gone concern requirements – time series¹

	Risk-weighted assets (%)					Leverage ratio (%)				
	Requirements ²					Requirements ²				
	31.12.16	1.1.17	1.1.18	1.1.19	1.1.20	31.12.16	1.1.17	1.1.18	1.1.19	1.1.20
Going concern										
Minimum capital	8.00	8.00	8.00	8.00	8.00	3.00	3.00	3.00	3.00	3.00
Buffer capital including applicable add-ons ³	2.94	4.00	4.86	5.58	6.30	0.00	0.50	1.00	1.50	2.00
Total going concern	10.94	12.00	12.86	13.58	14.30	3.00	3.50	4.00	4.50	5.00
of which: common equity tier 1 capital ³	8.31	9.00	9.46	9.68	10.00	2.30	2.60	2.90	3.20	3.50
of which: max. high-trigger additional tier 1 capital	2.63	3.00	3.40	3.90	4.30	0.70	0.90	1.10	1.30	1.50
Gone concern										
Base requirement including applicable add-ons	3.50	6.20	8.90	11.60	14.30	1.00	2.00	3.00	4.00	5.00
Total gone concern	3.50	6.20	8.90	11.60	14.30	1.00	2.00	3.00	4.00	5.00
Total loss-absorbing capacity	14.44	18.20	21.76	25.18	28.60	4.00	5.50	7.00	8.50	10.00

¹ This table does not include the effect of any potential gone concern requirement rebate. ² Prior to the implementation of the Swiss SRB framework, FINMA also defined a total capital ratio target of 14.4% and a total leverage ratio target of 3.5% for the UBS Group, which will be effective until they are exceeded by the Swiss SRB phase-in requirements. The Swiss SRB requirements effective since 1 July 2016 exceed the defined FINMA targets. ³ Going concern capital ratio requirements as of 31 December 2016 include a countercyclical buffer requirement of 0.19%. Requirements for subsequent periods exclude the effect of the countercyclical buffer requirement, as potential future countercyclical buffer requirements are not yet known.

Swiss SRB going and gone concern requirements and information¹

As of 31.12.16 CHF million, except where indicated	Swiss SRB including transitional arrangements (phase-in)							
	Risk-weighted assets				Leverage ratio denominator			
	Requirement (%)	Actual (%)	Requirement	Eligible	Requirement (%)	Actual (%)	Requirement	Eligible
Common equity tier 1 capital	8.31	16.76	18,732	37,788	2.30	4.32	20,123	37,788
Maximum high-trigger loss-absorbing additional tier 1 capital ^{2, 3}	2.63	7.90	5,917	17,805	0.70	2.04	6,124	17,805
of which: high-trigger loss-absorbing additional tier 1 capital		2.89		6,512		0.74		6,512
of which: high-trigger loss-absorbing tier 2 capital		0.40		891		0.10		891
of which: low-trigger loss-absorbing tier 2 capital		4.61		10,402		1.19		10,402
Total going concern	10.94⁴	24.66	24,649	55,593	3.00⁵	6.35	26,248	55,593
Base gone concern requirement	3.50	8.09	7,889	18,229	1.00	2.08	8,749	18,229
Total gone concern	3.50	8.09	7,889	18,229	1.00	2.08	8,749	18,229
Total loss-absorbing capacity	14.44	32.75	32,539	73,822	4.00	8.44	34,997	73,822

As of 31.12.16 CHF million, except where indicated	Swiss SRB as of 1.1.20 (fully applied)							
	Risk-weighted assets				Leverage ratio denominator			
	Requirement (%)	Actual (%)	Requirement	Eligible	Requirement (%)	Actual (%)	Requirement	Eligible
Common equity tier 1 capital	10.19	13.78	22,680	30,693	3.50	3.53	30,466	30,693
Maximum high-trigger loss-absorbing additional tier 1 capital ²	4.30	4.11	9,575	9,151	1.50	1.05	13,057	9,151
of which: high-trigger loss-absorbing additional tier 1 capital		3.06		6,809		0.78		6,809
of which: low-trigger loss-absorbing additional tier 1 capital		1.05		2,342		0.27		2,342
Total going concern	14.49⁶	17.89	32,255	39,844	5.00⁷	4.58	43,523	39,844
Base gone concern requirement including applicable add-ons	14.30	13.16	31,843	29,311	5.00	3.37	43,523	29,311
Total gone concern	14.30	13.16	31,843	29,311	5.00	3.37	43,523	29,311
Total loss-absorbing capacity	28.79	31.06	64,098	69,154	10.00	7.94	87,047	69,154

¹ This table does not include the effect of any potential gone concern requirement rebate. ² Includes outstanding low-trigger loss-absorbing additional tier 1 capital instruments, which under the transitional rules of the Swiss SRB framework will remain available to meet the going concern requirements until their first call date, even if the first call date is after 31 December 2019. From their first call date, they may be used to meet the gone concern requirements. Low-trigger loss-absorbing additional tier 1 capital was fully offset by required deductions for goodwill on a phase-in basis. ³ Includes outstanding high- and low-trigger loss-absorbing tier 2 capital instruments, which under the transitional rules of the Swiss SRB framework will remain available to meet the going concern requirements until the earlier of (i) their maturity or first call date or (ii) 31 December 2019. From 1 January 2020, these instruments may be used to meet the gone concern requirements until one year before maturity, with a haircut of 50% applied in the last year of eligibility. ⁴ Consists of a minimum capital requirement of 8% and a buffer capital requirement of 2.94%, including the effect of countercyclical buffers of 0.19%. ⁵ Consists only of a minimum leverage ratio requirement. ⁶ Consists of a minimum capital requirement of 8% and a buffer capital requirement of 6.49%, including the effect of countercyclical buffers of 0.19% and applicable add-ons of 1.44%. ⁷ Consists of a minimum leverage ratio requirement of 3% and a buffer leverage ratio requirement of 2%, including applicable add-ons of 0.5%.

Swiss SRB loss-absorbing capacity

As of 31 December 2016, our total loss-absorbing capacity ratio was 31.1% on a fully applied basis. On a phase-in basis, the total loss-absorbing capacity ratio stood at 32.7%. Our total loss-absorbing capacity was CHF 69.2 billion on a fully applied basis and CHF 73.8 billion on a phase-in basis.

Current and former Swiss SRB going and gone concern information¹

	Swiss SRB including transitional arrangements (phase-in)	Swiss SRB as of 1.1.20 (fully applied)	Former Swiss SRB (phase-in)	Former Swiss SRB (fully applied)
<i>CHF million, except where indicated</i>	31.12.16	31.12.16	31.12.15	31.12.15
Going concern capital				
Common equity tier 1 capital	37,788	30,693	40,378	30,044
High-trigger loss-absorbing additional tier 1 capital	6,512 ²	6,809	3,828	3,828
Low-trigger loss-absorbing additional tier 1 capital	0 ³	2,342	353 ³	2,326
Total loss-absorbing additional tier 1 capital	6,512	9,151	4,181 ⁴	6,154
Total tier 1 capital	44,299	39,844	44,559	36,198
High-trigger loss-absorbing tier 2 capital	891		912	912
Low-trigger loss-absorbing tier 2 capital	10,402		10,325	10,325
Non-Basel III-compliant tier 2 capital			996	
Total tier 2 capital	11,293		12,233	11,237
Total going concern capital	55,593	39,844		
Total capital			56,792	47,435
Gone concern loss-absorbing capacity				
Non-Basel III-compliant tier 1 capital ⁵	642	642		
Total tier 1 capital	642	642		
High-trigger loss-absorbing tier 2 capital		679		
Low-trigger loss-absorbing tier 2 capital		10,402		
Non-Basel III-compliant tier 2 capital ⁵	698	698		
Total tier 2 capital	698	11,779		
TLAC-eligible senior unsecured debt	16,890	16,890		
Total gone concern loss-absorbing capacity	18,229	29,311		
Total loss-absorbing capacity				
Total loss-absorbing capacity	73,822	69,154		
Risk-weighted assets / leverage ratio denominator				
Risk-weighted assets	225,412	222,677	212,302	207,530
Leverage ratio denominator	874,925	870,470	904,014	897,607

Capital and loss-absorbing capacity ratios (%)

Tier 1 capital ratio			21.0	17.4
Total capital ratio			26.8	22.9
Going concern capital ratio	24.7	17.9		
of which: common equity tier 1 capital ratio	16.8	13.8	19.0	14.5
Gone concern loss-absorbing capacity ratio	8.1	13.2		
Total loss-absorbing capacity ratio	32.7	31.1		

Leverage ratios (%)

Leverage ratio			6.2 ⁶	5.3
Going concern leverage ratio	6.4	4.6		
of which: common equity tier 1 leverage ratio	4.3	3.5	4.5	3.3
Gone concern leverage ratio	2.1	3.4		
Total loss-absorbing capacity leverage ratio	8.4	7.9		

¹ The terms "Going concern capital" and "Gone concern loss-absorbing capacity" are used in this table in reference to the information presented under the current Swiss SRB framework only and do not apply to the information presented under the former Swiss SRB framework. ² High-trigger loss-absorbing additional tier 1 (AT1) capital of CHF 6,809 million and low-trigger loss-absorbing AT1 capital of CHF 2,342 million were partly offset by required deductions for goodwill of CHF 2,639 million. ³ Consists of low-trigger loss-absorbing additional tier 1 capital of CHF 2,326 million, partly offset by required deductions for goodwill of CHF 1,973 million. ⁴ Includes non-Basel III-compliant tier 1 capital of CHF 1,954 million, offset by required deductions for goodwill. ⁵ Non-Basel III-compliant tier 1 and tier 2 capital instruments qualify as gone concern instruments. Under the Swiss SRB rules, these instruments are no longer subject to phase-out. Instruments with a maturity date are eligible to meet the gone concern requirements until one year prior to maturity, with a haircut of 50% applied in the last year of eligibility. ⁶ For the purpose of the former Swiss SRB leverage ratio calculation on a phase-in basis, only common equity tier 1 capital and loss-absorbing capital are included in the numerator.

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Reconciliation IFRS equity to Swiss SRB common equity tier 1 capital

CHF million	Swiss SRB including transitional arrangements (phase-in)		Swiss SRB as of 1.1.20 (fully applied)	
	31.12.16	31.12.15	31.12.16	31.12.15
Total IFRS equity	54,302	57,308	54,302	57,308
Equity attributable to non-controlling interests	(682)	(1,995)	(682)	(1,995)
Defined benefit plans ¹	0	(20)	0	(50)
Deferred tax assets recognized for tax loss carry-forwards ¹	(5,042)	(2,988)	(8,403)	(7,468)
Deferred tax assets on temporary differences, excess over threshold	(741)	(702)	(1,835)	(2,598)
Goodwill, net of tax ^{1, 2}	(3,959)	(2,618)	(6,599)	(6,545)
Intangible assets, net of tax	(241)	(323)	(241)	(323)
Unrealized (gains) / losses from cash flow hedges, net of tax	(972)	(1,638)	(972)	(1,638)
Compensation- and own shares-related components ³	(1,589)	(2,152)	(1,589)	(2,152)
Unrealized own credit related to financial liabilities designated at fair value, net of tax, and replacement values	(294)	(442)	(294)	(442)
Unrealized gains related to financial assets available for sale, net of tax	(262)	(402)	(262)	(402)
Prudential valuation adjustments	(68)	(83)	(68)	(83)
Consolidation scope	(129)	(130)	(129)	(130)
Accruals for proposed dividends to shareholders	(2,250)	(3,188)	(2,250)	(3,188)
Other	(286)	(249)	(286)	(249)
Total common equity tier 1 capital	37,788	40,378	30,693	30,044

¹ As of 31 December 2016, the phase-in deduction applied was 60%; as of 31 December 2015, the phase-in deduction applied was 40%. ² Includes goodwill related to significant investments in financial institutions of CHF 342 million (31 December 2015: CHF 360 million). ³ Includes net expenses for compensation-related increases in high-trigger loss-absorbing capital for additional tier 1 and tier 2 capital.

Capital and leverage ratios

CET1 capital ratio

Our fully applied CET1 capital ratio decreased 0.7 percentage points to 13.8% as of 31 December 2016, resulting from a CHF 15.2 billion increase in RWA, partly offset by the CHF 0.7 billion increase in CET1 capital. On a phase-in basis, our CET1 capital ratio decreased 2.2 percentage points to 16.8%, driven by the decrease of CHF 2.6 billion in CET1 capital and an increase in RWA of CHF 13.1 billion.

Going concern capital and gone concern loss-absorbing capacity ratios

Our fully applied going concern capital ratio stood at 17.9% as of 31 December 2016, and at 24.7% on a phase-in basis. Our fully applied gone concern loss-absorbing capacity ratio stood at 13.2% as of 31 December 2016 and at 8.1% on a phase-in basis. The difference between phase-in and fully applied ratios primarily relates to high- and low-trigger loss-absorbing tier 2 capital instruments that are only eligible as gone concern capital and no longer as going concern capital under the revised Swiss SRB framework as of 1 January 2020.

Post-stress CET1 capital ratio

We are committed to total capital returns to shareholders of at least 50% of net profit attributable to shareholders, provided that we maintain a fully applied CET1 capital ratio of at least 13% and consistent with our objective of maintaining a post-stress fully applied CET1 capital ratio of at least 10%. Our post-stress CET1 capital ratio exceeded the 10% objective as of 31 December 2016.

- Refer to the “Risk management and control” section of this report for more information on our binding stress scenario
- Refer to “Our stated capital returns objective is based, in part, on capital ratios that are subject to regulatory change and may fluctuate significantly” in the “Risk factors” section of this report for more information on the risks related to our capital ratios

Going and gone concern leverage ratios

As of 31 December 2016, our fully applied going concern leverage ratio was 4.6%, while our phase-in going concern leverage ratio stood at 6.4%.

Our fully applied gone concern leverage ratio was 3.4% as of 31 December 2016, while our phase-in gone concern leverage ratio stood at 2.1%.

Regulatory capital and movement

Going concern capital and movement

Our going concern capital consists of CET1 capital and loss-absorbing AT1 capital.

Audited | Our CET1 capital mainly consists of share capital, share premium, which consists primarily of additional paid-in capital related to shares issued, and retained earnings. A detailed reconciliation of IFRS equity to CET1 capital is provided in the "Reconciliation IFRS equity to Swiss SRB common equity tier 1 capital" table.

Our fully applied CET1 capital increased by CHF 0.7 billion to CHF 30.7 billion as of 31 December 2016, mainly reflecting our operating profit before tax of CHF 4.1 billion, partly offset by CHF 2.3 billion of accruals for proposed dividends to shareholders, CHF 0.8 billion current tax expenses and CHF 0.7 billion related to defined benefit plans. Our phase-in CET1 capital decreased by CHF 2.6 billion to CHF 37.8 billion, as the aforementioned factors that explained an increase in fully applied CET1 capital were more than offset by negative phase-in effects of CHF 1.5 billion related to deferred tax assets recognized for tax loss carry-forwards and of CHF 1.4 billion related to goodwill.

Our fully applied loss-absorbing AT1 capital increased by

CHF 3.0 billion to CHF 9.2 billion as of 31 December 2016, resulting from the issuance of the equivalent of CHF 2.5 billion of high-trigger loss-absorbing AT1 capital instruments and CHF 0.4 billion due to Deferred Contingent Capital Plan (DCCP) awards granted for the performance year 2016. On a phase-in basis, loss-absorbing AT1 capital increased by CHF 2.3 billion, driven by the aforementioned issuance of CHF 2.9 billion high-trigger loss-absorbing AT1 capital instruments and a CHF 1.4 billion phase-in effect related to goodwill, partly offset by the call of CHF 1.3 billion non-Basel III-compliant tier 1 capital instruments and by a CHF 0.6 billion reduction due to the application of the revised Swiss SRB rules as of 1 July 2016, where we are no longer using the remaining instrument as an offset for goodwill deductions. The non-Basel III-compliant tier 1 capital instrument remains eligible to meet the gone concern requirement. ▲

→ **Refer to the "Group performance" section of this report for more information on other comprehensive income attributable to shareholders related to defined benefit plans**

Gone concern loss-absorbing capacity

Audited | As of 31 December 2016, our gone concern loss-absorbing capacity was CHF 29.3 billion on a fully applied basis and CHF 18.2 billion on a phase-in basis and included CHF 16.9 billion of TLAC-eligible senior unsecured debt. ▲

Swiss SRB total loss-absorbing capacity movement¹

CHF million	Swiss SRB including transitional arrangements (phase-in)	Swiss SRB as of 1.1.20 (fully applied)
Going concern capital		
Common equity tier 1 capital as of 31.12.15 (former Swiss SRB)	40,378	30,044
Operating profit before tax	4,090	4,090
Net (profit) / loss attributable to non-controlling interests	(82)	(82)
Current tax (expense) / benefit	(811)	(811)
Deferred tax assets recognized for tax loss carry-forwards, additional phase-in effect	(1,494)	
Deferred tax assets recognized for temporary differences, additional phase-in effect	(351)	
Goodwill, additional phase-in effect	(1,399)	
Defined benefit plans	(779)	(749)
Compensation- and own shares-related capital components (including share premium)	285	285
Foreign currency translation effects	202	96
Accruals for proposed dividends to shareholders	(2,250)	(2,250)
Other	(1)	69
Common equity tier 1 capital as of 31.12.16 (revised Swiss SRB)	37,788	30,693
Loss-absorbing additional tier 1 capital as of 31.12.15 (former Swiss SRB)	4,181	6,154
Goodwill, additional phase-in effect	1,399	
Issuance of high-trigger loss-absorbing additional tier 1 capital instruments	2,892	2,892
Call of non-Basel III-compliant tier 1 capital	(1,261)	
Application of revised Swiss SRB rules as of 1.7.16 ²	(649)	
Foreign currency translation and other effects	(50)	105
Loss-absorbing additional tier 1 capital as of 31.12.16 (revised Swiss SRB)	6,512	9,151
Tier 2 capital as of 31.12.15 (former Swiss SRB)	12,233	11,237
Call of non-Basel III-compliant tier 2 capital	(156)	
Application of revised Swiss SRB rules as of 1.7.16 ²	(741)	(11,331)
Foreign currency translation and other effects	(43)	94
Tier 2 capital as of 31.12.16 (revised Swiss SRB)	11,293	0
Total capital as of 31.12.15 (former Swiss SRB)	56,792	47,435
Total going concern capital as of 31.12.16 (revised Swiss SRB)	55,593	39,844
Gone concern loss-absorbing capacity		
Tier 1 capital as of 31.12.15 (former Swiss SRB)	0	0
Application of revised Swiss SRB rules as of 1.7.16 ²	649	649
Foreign currency translation and other effects	(7)	(7)
Tier 1 capital as of 31.12.16 (revised Swiss SRB)	642	642
Tier 2 capital as of 31.12.15 (former Swiss SRB)	0	0
Application of revised Swiss SRB rules as of 1.7.16 ²	797	11,916
Decrease in eligibility due to shortening residual tenor	(97)	(97)
Foreign currency translation and other effects	(2)	(40)
Tier 2 capital as of 31.12.16 (revised Swiss SRB)	698	11,779
TLAC-eligible senior unsecured debt as of 31.12.15 (former Swiss SRB)	0	0
Inclusion of senior unsecured debt issued before 1.7.16 that became TLAC-eligible under revised Swiss SRB ³	11,920	11,920
Issuance of TLAC-eligible senior unsecured debt instruments after 1.7.16	5,115	5,115
Foreign currency translation and other effects	(145)	(145)
TLAC-eligible senior unsecured debt as of 31.12.16 (revised Swiss SRB)	16,890	16,890
Total gone concern loss-absorbing capacity as of 31.12.15 (former Swiss SRB)	0	0
Total gone concern loss-absorbing capacity as of 31.12.16 (revised Swiss SRB)	18,229	29,311
Total loss-absorbing capacity		
Total capital as of 31.12.15 (former Swiss SRB)	56,792	47,435
Total loss-absorbing capacity as of 31.12.16 (revised Swiss SRB)	73,822	69,154

¹ The terms "Going concern capital" and "Gone concern loss-absorbing capacity" are used in this table in reference to the information presented under the revised Swiss SRB framework only and do not apply to the information presented under the former Swiss SRB framework. ² Includes changes to the eligibility and amortization of instruments, as well as the new treatment applied to non-Basel III-compliant tier 1 capital, which is no longer used as an offset for goodwill deductions. ³ Includes CHF 6,287 million of TLAC instruments issued in the first half year of 2016.

Additional information

Active management of sensitivity to currency movements

Corporate Center – Group Asset and Liability Management (Group ALM) is mandated to minimize adverse effects from changes in currency rates on our fully applied CET1 capital and CET1 capital ratio. A significant portion of our capital and RWA is denominated in US dollars, euros, British pounds and other foreign currencies. In order to hedge the CET1 capital ratio, CET1 capital needs to have foreign currency exposure, leading to currency sensitivity of CET1 capital. As a consequence, it is not possible to simultaneously fully hedge the capital and the capital ratio. As the proportion of RWA denominated in foreign currencies outweighs the capital in these currencies, a significant appreciation of the Swiss franc against these currencies could benefit our capital ratios, while a significant depreciation of the Swiss franc against these currencies could adversely affect our capital ratios. The Group Asset and Liability Management Committee, a committee of the Group Executive Board, can adjust the currency mix in capital, within limits set by the Board of Directors, to balance the effect of foreign exchange movements on the fully applied CET1 capital and capital ratio. Limits are in place for the sensitivity of both CET1 capital and the capital ratio to an appreciation or depreciation of 10% in the value of the Swiss franc against other currencies.

We estimate that a 10% depreciation of the Swiss franc against other currencies would have increased our fully applied RWA by CHF 10 billion and our fully applied CET1 capital by CHF 1.2 billion as of 31 December 2016 (31 December 2015: CHF 9 billion and CHF 0.9 billion, respectively) and reduced our fully applied CET1 capital ratio by 7 basis points (31 December 2015: 17 basis points). Conversely, we estimate that a 10% appreciation of the Swiss franc against other currencies would have reduced our fully applied RWA by CHF 9 billion and our fully applied CET1 capital by CHF 1.1 billion (31 December 2015: CHF 8 billion and CHF 0.8 billion, respectively) and increased our fully applied CET1 capital ratio by 7 basis points (31 December 2015: 17 basis points).

Our leverage ratio is also sensitive to foreign exchange movements due to the currency mix of our capital and LRD. When adjusting the currency mix in capital, potential effects on the leverage ratios are taken into account and the sensitivity of the leverage ratio to an appreciation or depreciation of 10% in the value of the Swiss franc against other currencies is actively monitored.

We estimate that a 10% depreciation of the Swiss franc against other currencies would have increased our fully applied leverage ratio denominator (LRD) by CHF 64 billion (31 December 2015: CHF 70 billion) and reduced our fully

applied Swiss SRB leverage ratio by 9 basis points (31 December 2015: 11 basis points). Conversely, we estimate that a 10% appreciation of the Swiss franc against other currencies would have reduced our fully applied LRD by CHF 58 billion (31 December 2015: CHF 63 billion) and increased our fully applied Swiss SRB leverage ratio by 10 basis points (31 December 2015: 12 basis points).

These sensitivities do not consider foreign currency translation effects related to defined benefit plans other than those related to the currency translation of the net equity of foreign operations.

Estimated effect on capital from litigation, regulatory and similar matters subject to provisions and contingent liabilities

We have estimated the loss in capital that we could incur as a result of the risks associated with the matters described in "Note 20 Provisions and contingent liabilities" to our consolidated financial statements. This is an estimated amount and is not related to and should not be considered in addition to these provisions and contingent liabilities. We have used for this purpose the advanced measurement approach (AMA) methodology that we use when determining the capital requirements associated with operational risks, based on a 99.9% confidence level over a 12-month horizon. The methodology takes into consideration UBS and industry experience for the AMA operational risk categories to which those matters correspond, as well as the external environment affecting risks of these types, in isolation from other areas. On this standalone basis, we estimate the loss in capital that we could incur over a 12-month period as a result of our risks associated with these operational risk categories at CHF 4.8 billion as of 31 December 2016 (31 December 2015: CHF 3.7 billion). This estimate does not take into account any provisions recognized for any of these matters and does not constitute a subjective assessment of our actual exposure in any of these matters.

The increase in the estimated loss of capital of CHF 1.1 billion compared with the calculation as of 31 December 2015 was primarily due to the implementation of a revised AMA model, which was approved by FINMA in the first quarter of 2016. Concurrently, FINMA agreed to remove the incremental operational risk charge to our AMA-based operational risk-related RWA in relation to known or unknown litigation, compliance and other operational risk matters, which were not an element of our previous AMA model.

- Refer to "Operational risk" in the "Risk management and control" section of this report for more information
- Refer to "Note 20 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report for more information

Capital and capital ratios of our significant regulated subsidiaries

UBS Group AG is a holding company and conducts substantially all of its operations through UBS AG and its subsidiaries. UBS Group AG and UBS AG have contributed a significant portion of their respective capital and provide substantial liquidity to subsidiaries. Many of these subsidiaries are subject to regulations requiring compliance with minimum capital, liquidity and similar requirements. The following table summarizes the regulatory capital components and capital ratios of our significant regulated subsidiaries determined under the regulatory framework of each subsidiary's home jurisdiction. Supervisory authorities generally have discretion to impose higher requirements or to otherwise limit the activities of subsidiaries.

Supervisory authorities also may require entities to measure capital and leverage ratios on a stressed basis and may limit the ability of the entity to engage in new activities or take capital actions based on the results of those tests.

Standalone legal entity financial and regulatory information for UBS AG, UBS Switzerland AG and UBS Limited as well as consolidated financial and regulatory information for UBS Americas Holding LLC is provided under "Disclosure for legal entities" at www.ubs.com/investors.

Regulatory capital components and capital ratios of our significant regulated subsidiaries¹

	31.12.16			
	UBS AG (standalone)	UBS Switzerland AG (standalone)	UBS Limited (standalone) ²	UBS Americas Holding LLC (consolidated)
<i>CHF million, except where indicated</i>				
Capital				
Common equity tier 1 capital	33,983	10,416	2,952	11,846
Additional tier 1 capital	0	1,235 ³	295	0
Tier 1 capital	33,983	11,651	3,247	11,846
Total going concern capital		11,651		
Tier 2 capital	0		862	734
Total gone concern capital		3,265 ³		
Total capital	33,983		4,109	12,580
Total loss-absorbing capacity		14,916		
Risk-weighted assets and leverage ratio denominator				
Risk-weighted assets	232,422	93,281	13,907	52,318
Leverage ratio denominator	561,979	306,586	44,921	142,557
Capital and leverage ratios (%)				
Common equity tier 1 capital ratio	14.6	11.2	21.2	22.6
Tier 1 capital ratio	14.6		23.3	22.6
Going concern capital ratio		12.5		
Total capital ratio	14.6		29.5	24.0
Total loss-absorbing capacity ratio		16.0		
Leverage ratio ⁴	6.0		7.2	8.3
Total loss-absorbing capacity leverage ratio		4.9		

¹ For UBS AG and UBS Switzerland AG, based on the applicable phase-in rules for Swiss systemically relevant banks (SRBs). For UBS Limited, based on Directive 2013/36/EU and Regulation 575/2013 (together known as "CRD IV") and their related technical standards, as implemented within the UK by the Prudential Regulation Authority (PRA). For UBS Americas Holding LLC, based on applicable US Basel III rules. While UBS AG is considered a systemically relevant bank (SRB) under Swiss banking law, it is, on a standalone basis, not subject to the revised too big to fail provisions of the Swiss SRB framework. ² UBS Limited capital information disclosed in this table excludes 2016 net profit carried forward, which will become eligible for inclusion only after completion of the statutory audit. ³ Going concern capital includes CET1 and high-trigger additional tier 1 capital. Outstanding low-trigger tier 2 capital instruments will also remain available to meet the going concern capital requirements until the earlier of (i) their maturity or first call date or (ii) 31 December 2019. However, as of 31 December 2016, CHF 765 million of high-trigger loss-absorbing additional tier 1 capital as well as the total low-trigger loss-absorbing tier 2 capital of CHF 2,500 million were used to meet the gone concern requirement. ⁴ On the basis of total capital for UBS AG (standalone). On the basis of tier 1 capital for UBS Limited and UBS Americas Holding LLC.

Joint liability of UBS AG and UBS Switzerland AG

In June 2015, upon the transfer of the Personal & Corporate Banking and Wealth Management businesses booked in Switzerland from UBS AG to UBS Switzerland AG, UBS AG and UBS Switzerland AG assumed joint liability for obligations transferred to UBS Switzerland AG and existing at UBS AG, respectively. Under certain circumstances, the Swiss Banking Act and FINMA's Banking Insolvency Ordinance authorize FINMA to modify, extinguish or convert to common equity liabilities of a

bank in connection with a resolution or insolvency of such bank. Both joint liability amounts have declined as obligations matured, terminated or were novated following the transfer date.

→ **Refer to UBS AG standalone financial statements and UBS Switzerland AG standalone financial statements as of 31 December 2016 under "Disclosure for legal entities" at www.ubs.com/investors for more information**

Risk-weighted assets

Our risk-weighted assets (RWA) on a fully applied basis are the same as on a phase-in basis, except for differences related to defined benefit plans and deferred tax assets (DTAs) on temporary differences.

On a fully applied basis, any net defined benefit pension asset recognized in accordance with IAS 19 is fully deducted from common equity tier 1 (CET1) capital. On a phase-in basis, the deduction of net defined benefit pension assets from capital is phased in, and the portion of the net defined benefit pension asset that is not yet deducted from CET1 capital is risk weighted at 100%.

On a fully applied basis, DTAs on temporary differences below a deduction threshold are risk weighted at 250%. On a phase-in basis, the amount that is risk weighted at 250% is higher due to a higher deduction threshold.

As a result of these differences, our phase-in RWA were CHF 2.7 billion higher than our fully applied RWA as of 31 December 2016 (31 December 2015: CHF 4.8 billion higher), entirely attributable to non-counterparty-related risk RWA.

As of 31 December 2016, fully applied RWA increased by CHF 15.2 billion to CHF 222.7 billion, driven by CHF 8.4 billion in credit risk, CHF 3.4 billion in market risk and CHF 2.7 billion in operational risk.

On a phase-in basis, RWA increased by CHF 13.1 billion to CHF 225.4 billion as of 31 December 2016.

→ Refer to the Basel III Pillar 3 UBS Group AG 2016 report under "Pillar 3, SEC filings & other disclosures" at www.ubs.com/investors for more information

Movement in fully applied risk-weighted assets by key driver¹

CHF billion	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Group
Total RWA as of 31.12.15	25.3	21.9	34.6	2.6	62.9	23.6	6.0	30.7	207.5
<i>Credit risk RWA movement during 2016:</i>	<i>(0.1)</i>	<i>0.6</i>	<i>4.8</i>	<i>(0.1)</i>	<i>1.5</i>	<i>0.1</i>	<i>2.3</i>	<i>(0.7)</i>	<i>8.4</i>
Methodology and policy changes	0.5	0.0	4.5	0.0	2.8	0.0	0.0	0.0	7.9
Model updates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acquisitions and disposals of business operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Credit quality	0.0	0.0	0.0	0.0	0.4	0.0	0.0	(0.2)	0.1
Asset size	(0.4)	0.4	0.2	(0.1)	(1.7)	0.1	2.3	(0.4)	0.6
Foreign exchange movements	(0.2)	0.2	0.1	0.0	0.0	0.0	0.0	(0.1)	(0.2)
<i>Non-counterparty-related risk RWA movement during 2016:</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>(0.1)</i>	<i>0.6</i>	<i>0.0</i>	<i>0.0</i>	<i>0.7</i>
Exposure movements	0.0	0.0	0.0	0.0	(0.1)	0.6	0.0	0.0	0.7
Foreign exchange movements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Market risk RWA movement during 2016:</i>	<i>0.0</i>	<i>0.4</i>	<i>0.0</i>	<i>0.0</i>	<i>3.5</i>	<i>(0.3)²</i>	<i>(0.2)</i>	<i>0.0</i>	<i>3.4</i>
Methodology changes	0.0	0.0	0.0	0.0	(1.2)	(0.1)	0.0	(0.2)	(1.5)
Model updates	0.0	0.0	0.0	0.0	(0.4)	0.0	0.0	0.0	(0.4)
Regulatory add-ons	0.0	0.1	0.0	0.0	0.2	(0.5)	0.1	0.0	0.0
Movement in risk levels	0.0	0.3	0.0	0.0	4.9	0.3	(0.3)	0.2	5.3
<i>Operational risk RWA movement during 2016:</i>	<i>0.6</i>	<i>0.8</i>	<i>2.3</i>	<i>1.4</i>	<i>2.7</i>	<i>3.6</i>	<i>2.4</i>	<i>(11.0)</i>	<i>2.7</i>
Model updates and other changes	0.6	0.8	2.3	1.4	2.7	3.6	2.4	(11.0)	2.7
Total movement	0.5	1.9	7.0	1.3	7.5	4.0	4.6	(11.8)	15.2
Total RWA as of 31.12.16	25.8	23.8	41.6	3.9	70.4	27.6	10.6	18.9	222.7

¹ Refer to the "Definitions of RWA movement key drivers" table on the next page. ² Includes the effect of portfolio diversification across businesses.

Definitions of RWA movement key drivers

We employ a range of analyses in our RWA monitoring framework to identify the key drivers of movements in the positions. This includes a top-down identification approach for several sub-components of the RWA movement, leveraging information available from our monthly detailed calculation, substantiation and control processes.

Key driver	Key driver description
Credit risk RWA	
Methodology and policy changes	Movements due to methodological changes in calculations driven by regulatory policy changes, including revisions to existing regulations, new regulations and add-ons mandated by the regulator. The effect of methodology and policy changes on RWA is estimated based on the portfolio at the time of the implementation of the change.
Model updates	Movements arising from the implementation of new models and from parameter changes to existing models. The RWA effect of model updates is estimated based on the portfolio at the time of the implementation of the change.
Acquisitions and disposals of business operations	Movements as a result of the disposal or acquisition of business operations, quantified based on the credit risk exposures as at the end of the month preceding a disposal or following an acquisition. Purchases and sales of exposures in the ordinary course of business are reflected under asset size.
Credit quality	Movements resulting from changes in the underlying credit quality of counterparties. These are caused by changes to risk parameters, such as counterparty ratings, loss given default estimates or credit hedges.
Asset size	All movements that are not attributable to the other key drivers. This includes movements arising in the ordinary course of business, such as new transactions, sales and write-offs. The amounts reported for each business division and Corporate Center unit may also include the effect of transfers and reallocations of exposures between business divisions and Corporate Center units.
Foreign exchange movements	Movements as a result of changes in exchange rates of the transaction currencies versus the Swiss franc.
Non-counterparty-related risk RWA	
Exposure movements	Movements arising from changes in deferred tax assets on temporary differences as well as from the purchase or sale of property, equipment, software and other non-counterparty-related exposures.
Foreign exchange movements	Movements as a result of changes in exchange rates of the transaction currencies versus the Swiss franc.
Market risk RWA	
Methodology changes	Movements due to methodological changes in calculations driven by regulatory and internal policy decisions. In some cases, the effects of methodology changes are assessed at the time of implementation and may not reflect the effects for the entire year. Methodology changes may also, on occasion, be implemented at the same time as parameter updates and changes in regulatory add-ons, the effects of which cannot be fully disaggregated.
Model updates	Routine updates to model parameters, such as the roll-forward of the five-year historical data used for value-at-risk (VaR). The effect of each parameter update, assessed at the point of implementation, has been used to approximate the combined effect over the year.
Regulatory add-ons	"Risks-not-in-VaR" add-on described in the "Risk management and control" section of this report. The effects of recalibrations are calculated by applying the previous and new multiplication factors to the quarter-ends VaR- and SVaR-based RWA.
Movement in risk levels	All movements that are not attributable to the other key drivers. This includes changes in positions, effects of market movements on risk levels and foreign currency translation effects. The amounts reported for each business division and Corporate Center unit may also include the effect of transfers and reallocations of exposures between business divisions and Corporate Center units.
Operational risk RWA	
Model updates and other	Movements arising from changes to the advanced measurement approach model from the semiannual parameter update, as well as from changes to the allocation methodology.

RWA development in 2016

Credit risk

During 2016, credit risk RWA increased by CHF 8.4 billion to CHF 112.8 billion as of 31 December 2016. This increase was primarily driven by the effect of methodology and policy changes of CHF 7.9 billion.

Methodology and policy changes

The increase in credit risk RWA from methodology and policy changes of CHF 7.9 billion was primarily driven by an increase of CHF 5.9 billion related to multipliers. This included a CHF 3.0 billion increase from changes to the internal ratings-based multiplier on Investment Bank exposures to corporates, and a CHF 2.9 billion increase in Wealth Management and Personal & Corporate Banking, mainly resulting from an increase in the multipliers on Swiss residential mortgages and income-producing real estate, with an effect of CHF 1.8 billion and CHF 0.9 billion, respectively.

The multipliers that FINMA requires banks that use the IRB approach to apply will continue to increase over time until implementation is complete by the end of the first quarter of 2019. We expect that this will add approximately CHF 6 billion to our RWA in 2017, CHF 5 billion in 2018 and less than CHF 2 billion in 2019. This excludes the effect of any methodology changes.

Additional changes to credit risk RWA were mainly driven by the implementation of revised credit conversion factors for off-balance sheet exposures as agreed with FINMA. As a result, RWA for the Group increased by CHF 0.9 billion, with a decrease of CHF 1.2 billion in the Investment Bank and a CHF 2.0 billion increase in Personal & Corporate Banking. A further increase of CHF 1.0 billion relates to a change to the margin period of risk applied to our derivatives and securities financing transactions.

Asset size

The increase in credit risk RWA due to asset size and other movements of CHF 0.6 billion was due to an increase of CHF 2.3 billion in Corporate Center – Group ALM, partly offset by a decrease in the Investment Bank of CHF 1.7 billion.

The increase of CHF 2.3 billion in Corporate Center – Group ALM was primarily driven by an increase in high-quality liquid assets-eligible securities. The decrease of CHF 1.7 billion in the Investment Bank was due to a CHF 2.4 billion reduction in derivatives RWA, largely driven by an update of the stress period used for the exposure-at-default calculation, implying lower equity volatility for the stress period to be applied. This decrease was partly offset by an increase in derivative exposures and securities financing transactions.

Market risk

Market risk RWA increased by CHF 3.4 billion to CHF 15.5 billion as of 31 December 2016, driven by a CHF 5.3 billion increase from changes in risk levels, partly offset by a CHF 1.5 billion decrease related to methodology changes and other reductions of CHF 0.4 billion.

The CHF 5.3 billion increase in RWA from changes in risk levels was mainly due to higher average stressed and regulatory value-at-risk (VaR) levels in the fourth quarter of 2016, resulting in CHF 4.9 billion higher RWA in the Investment Bank. This increase in VaR levels was driven by various factors across our Equities and Foreign Exchange, Rates and Credit businesses, including option expiries and stronger client flows.

The decrease of CHF 1.5 billion related to methodology changes was primarily due to a structural change made to the VaR model resulting in a reduction in the VaR and stressed VaR measures in the Investment Bank amounting to CHF 1.2 billion.

→ Refer to the “Risk management and control” section of this report and the Basel III Pillar 3 UBS Group AG 2016 report under “Pillar 3, SEC filings & other disclosures” at www.ubs.com/investors for more information on market risk developments

Operational risk

Operational risk RWA increased by CHF 2.7 billion to CHF 77.8 billion as of 31 December 2016. An increase of CHF 1.4 billion was driven by changes to the advanced measurement approach (AMA) model used for the calculation of operational risk capital that were approved by FINMA in the first quarter of 2016. Concurrently, FINMA agreed to the removal of the incremental operational risk RWA, such that all operational risk-related regulatory capital requirements are now calculated in the model.

An additional increase of CHF 1.3 billion occurred as a result of the semiannual review and update of inputs to our AMA model in the third quarter of 2016. This review also included revisions to the methodology for the allocation of operational risk RWA to business divisions and Corporate Center units. In addition to considering historical operational risk loss contributions, the revised methodology takes into account the relative size of the business divisions and Corporate Center units and other operational risk indicators. As a result of these changes, operational risk RWA in Corporate Center – Non-core and Legacy Portfolio decreased by CHF 11.4 billion, while operational risk RWA in all business divisions and other Corporate Center units increased.

We expect to complete the semiannual calibration of our AMA model in the first quarter of 2017 and anticipate that our operational risk RWA may increase as a result.

→ Refer to “Operational risk” in the “Risk management and control” section of this report for more information on the AMA model

Risk-weighted assets by business division and Corporate Center unit

CHF billion	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Total RWA	Total capital requirement ¹
	31.12.16									
Credit risk	12.5	9.1	37.7	1.6	37.0	1.4	7.3	6.2	112.8	16.3
Advanced IRB approach ²	9.0	3.7	36.1	0.9	33.7	0.2	4.8	5.0	93.4	13.5
Standardized approach ³	3.5	5.4	1.6	0.6	3.3	1.2	2.6	1.2	19.4	2.8
Non-counterparty-related risk ⁴	0.1	0.0	0.1	0.0	0.0	19.1	0.0	0.0	19.3	2.8
Market risk	0.0	1.4	0.0	0.0	14.0	(3.2) ⁵	0.7	2.6	15.5	2.2
Operational risk	13.2	13.2	3.9	2.3	19.5	13.1	2.5	10.1	77.8	11.2
Total RWA, phase-in	25.8	23.8	41.6	3.9	70.4	30.3	10.6	18.9	225.4	32.5
Phase-out items ⁶	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	2.7	
Total RWA, fully applied	25.8	23.8	41.6	3.9	70.4	27.6	10.6	18.9	222.7	
	31.12.15									
Credit risk	12.6	8.5	32.9	1.7	35.5	1.3	5.0	6.9	104.4	13.2
Advanced IRB approach ²	8.5	3.4	31.2	1.0	32.0	0.2	3.9	5.0	85.2	10.8
Standardized approach ³	4.1	5.1	1.7	0.7	3.6	1.1	1.0	2.0	19.2	2.4
Non-counterparty-related risk ⁴	0.1	0.0	0.1	0.0	0.1	20.5	0.0	0.0	20.7	2.6
Market risk	0.0	1.0	0.0	0.0	10.5	(2.9) ⁵	0.9	2.6	12.1	1.5
Operational risk	12.6	12.4	1.6	0.9	16.8	9.5	0.1	21.1	75.1	9.5
Total RWA, phase-in	25.3	21.9	34.6	2.6	62.9	28.3	6.0	30.7	212.3	26.8
Phase-out items ⁶	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0	4.8	
Total RWA, fully applied	25.3	21.9	34.6	2.6	62.9	23.6	6.0	30.7	207.5	
	31.12.16 vs 31.12.15									
Credit risk	(0.1)	0.6	4.8	(0.1)	1.5	0.1	2.3	(0.7)	8.4	
Advanced IRB approach ²	0.5	0.3	4.9	(0.1)	1.7	0.0	0.9	0.0	8.2	
Standardized approach ³	(0.6)	0.3	(0.1)	(0.1)	(0.3)	0.1	1.6	(0.8)	0.2	
Non-counterparty-related risk ⁴	0.0	0.0	0.0	0.0	(0.1)	(1.4)	0.0	0.0	(1.4)	
Market risk	0.0	0.4	0.0	0.0	3.5	(0.3)	(0.2)	0.0	3.4	
Operational risk	0.6	0.8	2.3	1.4	2.7	3.6	2.4	(11.0)	2.7	
Total RWA, phase-in	0.5	1.9	7.0	1.3	7.5	2.0	4.6	(11.8)	13.1	
Phase-out items ⁶	0.0	0.0	0.0	0.0	0.0	(2.0)	0.0	0.0	(2.1)	
Total RWA, fully applied	0.5	1.9	7.0	1.3	7.5	4.0	4.6	(11.8)	15.2	

¹ Calculated on the basis of our Swiss SRB total going and gone concern capital requirement of 14.4% of RWA on a phase-in basis (31 December 2015: 12.6%, based on the former Swiss SRB requirement on a phase-in basis). ² Includes equity exposures in the banking book according to the simple risk weight method. ³ Includes settlement risk and business transfers. ⁴ Non-counterparty-related risk RWA are comprised of RWA for deferred tax assets recognized for temporary differences (31 December 2016: CHF 10.9 billion, 31 December 2015: CHF 12.9 billion), property, equipment and software (31 December 2016: CHF 8.3 billion, 31 December 2015: CHF 7.6 billion) and other items (31 December 2016: CHF 0.2 billion, 31 December 2015: CHF 0.2 billion). ⁵ Corporate Center – Services market risk RWA were negative, as they included the effect of portfolio diversification across businesses. ⁶ Phase-out items are entirely related to non-counterparty-related risk RWA.

Leverage ratio denominator

During 2016, the fully applied leverage ratio denominator (LRD) decreased by CHF 27 billion to CHF 870 billion as of 31 December 2016 due to incremental netting and collateral mitigation of CHF 19 billion, mainly in derivative exposures and

securities financing transactions, currency effects of CHF 4 billion, asset size and other reductions of CHF 2 billion and other methodology changes of CHF 2 billion.

Movement in fully applied leverage ratio denominator by key driver

CHF billion	LRD as of 31.12.15	Currency effects	Incremental netting and collateral mitigation	Other methodology changes	Asset size and other	LRD as of 31.12.16
On-balance sheet exposures (excluding derivative exposures and SFTs) ¹	625.2	(2.8)	(1.0)	0.0	16.7	638.1
Derivative exposures	128.9	(1.8)	(11.9)	(1.8)	(5.8)	107.6
Securities financing transactions	120.1	0.4	(6.3)	0.0	(9.5)	104.7
Off-balance sheet items	41.1	0.2	0.0	0.0	(3.6)	37.7
Deduction items	(17.7)	(0.2)	0.0	0.0	0.2	(17.7)
Total	897.6	(4.2)	(19.2)	(1.8)	(1.9)	870.5

¹ Excludes positive replacement values, cash collateral receivables on derivative instruments, cash collateral on securities borrowed, reverse repurchase agreements, margin loans and prime brokerage receivables related to securities financing transactions, which are presented separately under Derivative exposures and Securities financing transactions in this table.

The LRD movements described below exclude currency effects.

On-balance sheet exposures, excluding derivative exposures and securities financing transactions, increased by CHF 16 billion driven by an increase of CHF 37 billion in Corporate Center – Group Asset and Liability Management (Group ALM), mainly related to increased cash and balances with central banks and a net increase in financial assets designated at fair value, available for sale and held to maturity of CHF 41 billion on a combined basis, of which CHF 3 billion was related to a transfer of high-quality liquid assets from Wealth Management to Corporate Center – Group ALM. The increase in on-balance sheet exposure in Corporate Center – Group ALM mainly reflected liquidity requirements applicable to our US intermediate holding company and UBS Europe SE and also resulted from an increase in net funds transferred to Corporate Center – Group ALM by the business divisions. The increase in Corporate Center – Group ALM was partly offset by a CHF 16 billion reduction in trading portfolio assets in the Investment Bank, primarily in our Equities business, mainly reflecting effective resource management and a reduction in client activity.

Derivative exposures decreased by CHF 20 billion, primarily related to incremental netting and collateral mitigation benefits in Corporate Center – Non-core and Legacy Portfolio of CHF 6 billion, mainly reflecting improved netting of long and short written credit derivative positions and a reduction of CHF 6 billion in the Investment Bank due to increased netting of

eligible cash variation margin. In addition, a reduction of CHF 6 billion in the Investment Bank and Corporate Center – Non-core and Legacy Portfolio due to asset size and other movements resulted from the application of the daily settlement option to our interest rate swap transactions primarily with the London Clearing House, which shortened the maturities relevant for calculating the current exposure method add-on.

Securities financing transactions decreased by CHF 10 billion, due to asset size and other movements, primarily in Corporate Center – Group ALM. Furthermore a reduction of CHF 6 billion, mainly in the Investment Bank, resulted from incremental netting and collateral mitigation.

Off-balance sheet items decreased by CHF 4 billion, primarily due to terminations of committed credit facilities in the Investment Bank.

- Refer to “Balance sheet, liquidity and funding management” in the “Treasury management” section of this report for more information on balance sheet movements
- Refer to “Note 1b Changes in accounting policies, comparability and other adjustments” in the “Consolidated financial statements” section of this report for more information on the application of the daily settlements option
- Refer to the “The legal structure of UBS Group” section of this report for more information on our US intermediate holding company and UBS Europe SE

Leverage ratio denominator by business division and Corporate Center unit

CHF billion	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM ³	CC – Non-core and Legacy Portfolio ³	Total
31.12.16									
Total IFRS assets	115.5	65.9	139.9	12.0	242.3	23.7	267.2	68.5	935.0
Difference in scope of consolidation ¹	(5.1)	(0.2)	0.0	(9.3)	(0.7)	(0.2)	0.2	0.0	(15.5)
Less: derivative exposures and SFTs ²	(2.0)	(2.0)	(2.2)	0.0	(151.4)	0.0	(60.6)	(63.3)	(281.4)
On-balance sheet exposures (excluding derivative exposures and SFTs)	108.4	63.7	137.7	2.7	90.2	23.4	206.7	5.2	638.1
Derivative exposures	3.5	2.5	2.7	0.0	77.5	0.0	6.3	15.2	107.6
Securities financing transactions	0.0	1.0	0.0	0.0	42.9	0.0	59.1	1.8	104.7
Off-balance sheet items	3.6	0.9	11.9	0.0	20.6	0.1	0.3	0.3	37.7
Items deducted from Swiss SRB tier 1 capital						(13.2)			(13.2)
Total exposures (leverage ratio denominator), phase-in	115.5	68.1	152.2	2.7	231.2	10.3	272.4	22.4	874.9
Additional items deducted from Swiss SRB tier 1 capital						(4.5)			(4.5)
Total exposures (leverage ratio denominator), fully applied	115.5	68.1	152.2	2.7	231.2	5.8	272.4	22.4	870.5
31.12.15									
Total IFRS assets	119.9	61.0	141.2	12.9	253.5	22.6	239.3	92.5	942.8
Difference in scope of consolidation ¹	(6.0)	(0.2)	0.0	(10.2)	(0.7)	0.0	0.3	0.0	(16.8)
Less: derivative exposures and SFTs ²	(2.0)	(1.8)	(2.7)	0.0	(139.4)	0.0	(68.5)	(86.4)	(300.8)
On-balance sheet exposures (excluding derivative exposures and SFTs)	111.8	59.0	138.5	2.7	113.5	22.5	171.1	6.2	625.2
Derivative exposures	4.0	1.7	3.5	0.0	81.8	0.0	8.9	28.9	128.9
Securities financing transactions	0.0	1.1	0.0	0.0	48.6	0.0	67.8	2.5	120.1
Off-balance sheet items	3.2	1.0	11.9	0.0	24.1	0.0	0.0	0.8	41.1
Items deducted from Swiss SRB tier 1 capital						(11.3)			(11.3)
Total exposures (leverage ratio denominator), phase-in	119.0	62.9	153.8	2.7	268.0	11.3	247.9	38.5	904.0
Additional items deducted from Swiss SRB tier 1 capital						(6.4)			(6.4)
Total exposures (leverage ratio denominator), fully applied	119.0	62.9	153.8	2.7	268.0	4.8	247.9	38.5	897.6
31.12.16 vs 31.12.15									
Total IFRS assets	(4.4)	4.9	(1.3)	(0.9)	(11.2)	1.1	27.9	(24.0)	(7.8)
Difference in scope of consolidation ¹	0.9	0.0	0.0	0.9	0.0	(0.2)	(0.1)	0.0	1.3
Less: derivative exposures and SFTs ²	0.0	(0.2)	0.5	0.0	(12.0)	0.0	7.9	23.1	19.4
On-balance sheet exposures (excluding derivative exposures and SFTs)	(3.4)	4.7	(0.8)	0.0	(23.3)	0.9	35.6	(1.0)	12.9
Derivative exposures	(0.5)	0.8	(0.8)	0.0	(4.3)	0.0	(2.6)	(13.7)	(21.3)
Securities financing transactions	0.0	(0.1)	0.0	0.0	(5.7)	0.0	(8.7)	(0.7)	(15.4)
Off-balance sheet items	0.4	(0.1)	0.0	0.0	(3.5)	0.1	0.3	(0.5)	(3.4)
Items deducted from Swiss SRB tier 1 capital						(1.9)			(1.9)
Total exposures (leverage ratio denominator), phase-in	(3.5)	5.2	(1.6)	0.0	(36.8)	(1.0)	24.5	(16.1)	(29.1)
Additional items deducted from Swiss SRB tier 1 capital						1.9			1.9
Total exposures (leverage ratio denominator), fully applied	(3.5)	5.2	(1.6)	0.0	(36.8)	1.0	24.5	(16.1)	(27.1)

¹ Represents the difference between the IFRS and the regulatory scope of consolidation, which is the applicable scope for the LRD calculation. ² Consists of positive replacement values, cash collateral receivables on derivative instruments, cash collateral on securities borrowed, reverse repurchase agreements, margin loans and prime brokerage receivables related to securities financing transactions in accordance with the regulatory scope of consolidation, which are presented separately under Derivative exposures and Securities financing transactions. ³ Comparative figures as of 31 December 2015 in this table have been restated to reflect the transfer of the Risk Exposure Management (REM) function from Corporate Center – Non-core and Legacy Portfolio to Corporate Center – Group ALM in 2016. Refer to "Corporate Center – Group Asset and Liability Management" in the "Corporate Center" sections in "Operating environment and strategy" and "Financial and operating performance" of this report for more information.

UBS AG (consolidated) capital and leverage ratio information

Going and gone concern requirements and information

UBS AG (consolidated) is a systemically relevant bank (SRB) under Swiss banking law and is subject to capital regulations on a consolidated basis. In May 2016, the Swiss Federal Council adopted amendments to the too big to fail (TBTF) provisions, based on the cornerstones announced by the Swiss Federal Council in October 2015. The revised Capital Adequacy Ordinance forms the basis of a revised Swiss SRB framework,

which became effective on 1 July 2016 and will be transitioned in until 1 January 2020.

As of 31 December 2016, the phase-in going concern capital and leverage ratio requirements for UBS AG (consolidated) were 10.94% and 3.0%, respectively. The gone concern requirements on a phase-in basis were 3.5% for the RWA-based requirement and 1.0% for the LRD-based requirement.

Swiss SRB going and gone concern requirements and information^{1, 2}

As of 31.12.16	Swiss SRB including transitional arrangements (phase-in)				Swiss SRB as of 1.1.20 (fully applied)			
CHF million, except where indicated	Risk-weighted assets		Leverage ratio denominator		Risk-weighted assets		Leverage ratio denominator	
Required loss-absorbing capacity	in %		in %		in %		in %	
Common equity tier 1 capital	8.31	18,760	2.30	20,132	10.19	22,737	3.50	30,483
of which: minimum capital	6.18	13,940	2.30	20,132	4.50	10,045	1.50	13,064
of which: buffer capital	1.95	4,402			5.50	12,278	2.00	17,419
of which: countercyclical buffer ³	0.19	418			0.19	414		
Maximum additional tier 1 capital	2.63	5,926	0.70	6,127	4.30	9,599	1.50	13,064
of which: high-trigger loss-absorbing additional tier 1 minimum capital	1.83	4,120	0.70	6,127	3.50	7,813	1.50	13,064
of which: high-trigger loss-absorbing additional tier 1 buffer capital	0.80	1,806			0.80	1,786		
Total going concern capital	10.94	24,686	3.00	26,260	14.49 ⁴	32,336	5.00 ⁴	43,547
Base gone concern requirement	3.50	7,901	1.00	8,753	14.30 ⁴	31,922	5.00 ⁴	43,547
Total gone concern loss-absorbing capacity	3.50	7,901	1.00	8,753	14.30	31,922	5.00	43,547
Total loss-absorbing capacity	14.44	32,587	4.00	35,013	28.79	64,258	10.00	87,094
Eligible loss-absorbing capacity								
Common equity tier 1 capital	17.49	39,474	4.51	39,474	14.53	32,447	3.73	32,447
High-trigger loss-absorbing additional tier 1 capital⁵	5.14	11,610	1.33	11,610	1.72	3,848	0.44	3,848
of which: high-trigger loss-absorbing additional tier 1 capital	0.54	1,208	0.14	1,208	1.72	3,848	0.44	3,848
of which: low-trigger loss-absorbing tier 2 capital	4.61	10,402	1.19	10,402				
Total going concern capital	22.63	51,084	5.84	51,084	16.26	36,294	4.17	36,294
Gone concern loss-absorbing capacity	8.58	19,372	2.21	19,372	13.34	29,774	3.42	29,774
of which: TLAC-eligible senior unsecured debt ⁶	7.51	16,960	1.94	16,960	7.60	16,960	1.95	16,960
Total gone concern loss-absorbing capacity	8.58	19,372	2.21	19,372	13.34	29,774	3.42	29,774
Total loss-absorbing capacity	31.21	70,456	8.05	70,456	29.60	66,068	7.59	66,068

¹ This table does not include the effect of any potential gone concern requirement rebate. ² Subsequent to the publication of the fourth quarter 2016 report, the Annual General Meeting of shareholders of UBS AG approved the distribution of a CHF 2,250 million dividend from UBS AG to UBS Group AG, which was higher than the previously estimated amount. This, in combination with the event occurred after the reporting period described in "Note 35 Events after the reporting period" in the "Consolidated financial statements" section of this report, resulted in a reduction of CET1 capital (CHF 607 million on a fully applied basis and CHF 585 million on a phase-in basis), a reduction in the leverage ratio denominator (CHF 45 million on a fully applied basis and CHF 27 million on a phase-in basis) and respective capital ratios of UBS AG (consolidated) as of 31 December 2016. ³ Going concern capital ratio requirements as of 31 December 2016 include countercyclical buffer requirements of 0.19% for the phase-in and fully applied requirement. ⁴ Includes applicable add-ons of 1.44% for RWA and 0.5% for LRD. ⁵ High-trigger loss-absorbing additional tier 1 capital was partly offset by required deductions for goodwill under Swiss SRB including transitional arrangements (phase-in). Includes outstanding low-trigger loss-absorbing tier 2 capital instruments, which under the transitional rules of the Swiss SRB framework will remain available to meet the going concern requirements until the earlier of (i) their maturity or first call date or (ii) 31 December 2019. From 1 January 2020, these instruments may be used to meet the gone concern requirements until one year before maturity, with a haircut of 50% applied in the last year of eligibility. ⁶ Represents internal loans from UBS Funding (Jersey) Limited made from proceeds of external TLAC-eligible senior unsecured debt instruments. Requirements for TLAC eligibility for internal loans/debt have not yet been adopted in Switzerland.

Current and former Swiss SRB going and gone concern information^{1, 2}

	Swiss SRB including transitional arrangements (phase-in)	Swiss SRB as of 1.1.20 (fully applied)	Former Swiss SRB (phase-in)	Former Swiss SRB (fully applied)
<i>CHF million, except where indicated</i>	<i>31.12.16</i>	<i>31.12.16</i>	<i>31.12.15</i>	<i>31.12.15</i>
Going concern capital				
Common equity tier 1 capital	39,474	32,447	41,516	32,042
High-trigger loss-absorbing additional tier 1 capital	1,208 ³	3,848	0 ⁴	1,252
Total loss-absorbing additional tier 1 capital	1,208	3,848	0⁵	1,252
Total tier 1 capital	40,682	36,294	41,516	33,294
Low-trigger loss-absorbing tier 2 capital	10,402		10,325	10,325
Non-Basel III-compliant tier 2 capital			996	
Total tier 2 capital	10,402		11,321	10,325
Total going concern capital	51,084	36,294		
Total capital			52,837	43,619
Gone concern loss-absorbing capacity				
Low-trigger loss-absorbing tier 1 capital ⁶	1,071	1,071		
Non-Basel III-compliant tier 1 capital ⁷	642	642		
Total tier 1 capital	1,713	1,713		
Low-trigger loss-absorbing tier 2 capital		10,402		
Non-Basel III-compliant tier 2 capital ⁷	698	698		
Total tier 2 capital	698	11,100		
TLAC-eligible senior unsecured debt⁸	16,960	16,960		
Total gone concern loss-absorbing capacity	19,372	29,774		
Total loss-absorbing capacity	70,456	66,068		
Risk-weighted assets / leverage ratio denominator				
Risk-weighted assets	225,743	223,232	212,609	208,186
Leverage ratio denominator	875,325	870,942	904,518	898,251
Capital and loss-absorbing capacity ratios (%)				
Tier 1 capital ratio			19.5	16.0
Total capital ratio			24.9	21.0
Going concern capital ratio	22.6	16.3		
of which: common equity tier 1 capital ratio	17.5	14.5	19.5	15.4
Gone concern loss-absorbing capacity ratio	8.6	13.3		
Total loss-absorbing capacity ratio	31.2	29.6		
Leverage ratios (%)				
Leverage ratio			5.7 ⁹	4.9
Going concern leverage ratio	5.8	4.2		
of which: common equity tier 1 leverage ratio	4.5	3.7	4.6	3.6
Gone concern leverage ratio	2.2	3.4		
Total loss-absorbing capacity leverage ratio	8.0	7.6		

¹ Subsequent to the publication of the fourth quarter 2016 report, the Annual General Meeting of shareholders of UBS AG approved the distribution of a CHF 2,250 million dividend from UBS AG to UBS Group AG, which was higher than the previously estimated amount. This, in combination with the event occurred after the reporting period described in "Note 35 Events after the reporting period" in the "Consolidated financial statements" section of this report, resulted in a reduction of CET1 capital (CHF 607 million on a fully applied basis and CHF 585 million on a phase-in basis), a reduction in the leverage ratio denominator (CHF 45 million on a fully applied basis and CHF 27 million on a phase-in basis) and respective capital ratios of UBS AG (consolidated) as of 31 December 2016. ² The terms "Going concern capital" and "Gone concern loss-absorbing capacity" are used in this table in reference to the information presented under the current Swiss SRB framework only and do not apply to the information presented under the former Swiss SRB framework. ³ High-trigger loss-absorbing additional tier 1 (AT1) capital of CHF 3,848 million was partly offset by required deductions for goodwill of CHF 2,639 million. ⁴ High-trigger loss-absorbing AT1 capital of CHF 1,252 million was entirely offset by required deductions for goodwill. ⁵ Includes non-Basel III-compliant tier 1 capital of CHF 1,954 million, offset by required deductions for goodwill. ⁶ The low-trigger loss-absorbing AT1 instrument of CHF 1,071 million was issued after the new Swiss SRB framework has been implemented and therefore qualifies as gone concern loss-absorbing capacity. ⁷ Non-Basel III-compliant tier 1 and tier 2 capital instruments qualify as gone concern instruments. Under the Swiss SRB rules, these instruments are no longer subject to phase-out. Instruments with a maturity date are eligible to meet the gone concern requirements until one year prior to maturity, with a haircut of 50% applied in the last year of eligibility. ⁸ Represents internal loans from UBS Funding (Jersey) Limited made from proceeds of external TLAC-eligible senior unsecured debt instruments. Requirements for TLAC eligibility for internal loans/debt have not yet been adopted in Switzerland. ⁹ For the purpose of the former Swiss SRB leverage ratio calculation on a phase-in basis, only common equity tier 1 capital and loss-absorbing capital are included in the numerator.

UBS Group AG vs UBS AG consolidated loss-absorbing capacity and leverage ratio information

As of 31 December 2016, fully applied going concern capital of UBS AG (consolidated) was CHF 3.6 billion lower than for UBS Group AG (consolidated), reflecting CHF 5.3 billion lower loss-absorbing additional tier 1 (AT1) capital, partly offset by CHF 1.8 billion higher common equity tier 1 (CET1) capital. The fully applied going concern loss-absorbing capacity was CHF 0.5 billion higher, due to CHF 1.1 billion higher low-trigger loss-absorbing AT1 capital, partly offset by CHF 0.7 billion lower high-trigger loss-absorbing tier 2 capital.

The difference of CHF 1.8 billion in fully applied CET1 capital was primarily due to compensation- and own shares-related capital components, related regulatory capital accruals, liabilities and capital instruments that are reflected at the UBS Group AG level.

The difference of CHF 5.3 billion in going concern loss-absorbing AT1 capital on a fully applied basis relates to loss-absorbing AT1 capital instruments issued at the UBS Group AG level, as well as CHF 1.4 billion of high-trigger loss-absorbing Deferred Contingent Capital Plan (DCCP) awards granted to

eligible employees for the performance years 2014, 2015 and 2016.

The difference of CHF 0.7 billion in fully applied tier 2 capital relates to high-trigger loss-absorbing capital instruments, in the form of 2012 and 2013 DCCP awards, held at UBS Group AG level.

Differences in capital between UBS Group AG (consolidated) and UBS AG (consolidated) related to employee compensation plans will reverse to the extent underlying services are performed by employees of, and are consequently charged to, UBS AG and its subsidiaries. Such reversal generally occurs over the service period of the employee compensation plans.

The leverage ratio framework for UBS AG (consolidated) is consistent with that of UBS Group AG (consolidated). As of 31 December 2016, the going concern leverage ratio of UBS AG (consolidated) was 0.4 percentage points lower than that of UBS Group AG (consolidated) on a fully applied basis, mainly as the going concern capital of UBS AG (consolidated) was CHF 3.6 billion lower.

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Reconciliation IFRS equity to Swiss SRB common equity tier 1 capital (UBS Group AG vs UBS AG consolidated)

As of 31.12.16	Swiss SRB including transitional arrangements (phase-in)			Swiss SRB as of 1.1.20 (fully applied)		
	UBS Group AG (consolidated)	UBS AG (consolidated) ¹	Differences	UBS Group AG (consolidated)	UBS AG (consolidated) ¹	Differences
<i>CHF million</i>						
Total IFRS equity	54,302	54,343	(41)	54,302	54,343	(41)
Equity attributable to preferred noteholders and non-controlling interests	(682)	(682)	0	(682)	(682)	0
Defined benefit plans	0	0	0	0	0	0
Deferred tax assets recognized for tax loss carry-forwards	(5,042)	(5,042)	0	(8,403)	(8,403)	0
Deferred tax assets on temporary differences, excess over threshold	(741)	(639)	(102)	(1,835)	(1,666)	(169)
Goodwill, net of tax	(3,959)	(3,959)	0	(6,599)	(6,599)	0
Intangible assets, net of tax	(241)	(241)	0	(241)	(241)	0
Unrealized (gains) / losses from cash flow hedges, net of tax	(972)	(972)	0	(972)	(972)	0
Compensation- and own shares-related capital components	(1,589)		(1,589)	(1,589)		(1,589)
Unrealized own credit related to financial liabilities designated at fair value, net of tax, and replacement values	(294)	(294)	0	(294)	(294)	0
Unrealized gains related to financial assets available for sale, net of tax	(262)	(262)	0	(262)	(262)	0
Prudential valuation adjustments	(68)	(68)	0	(68)	(68)	0
Consolidation scope	(129)	(129)	0	(129)	(129)	0
Accruals for proposed dividends to shareholders	(2,250)	(2,250)	0	(2,250)	(2,250)	0
Other	(286)	(331)	45	(286)	(331)	45
Total common equity tier 1 capital	37,788	39,474	(1,686)	30,693	32,447	(1,754)

¹ Subsequent to the publication of the fourth quarter 2016 report, the Annual General Meeting of shareholders of UBS AG approved the distribution of a CHF 2,250 million dividend from UBS AG to UBS Group AG, which was higher than the previously estimated amount. This, in combination with the event occurred after the reporting period described in "Note 35 Events after the reporting period" in the "Consolidated financial statements" section of this report, resulted in a reduction of CET1 capital (CHF 607 million on a fully applied basis and CHF 585 million on a phase-in basis), a reduction in the leverage ratio denominator (CHF 45 million on a fully applied basis and CHF 27 million on a phase-in basis) and respective capital ratios of UBS AG (consolidated) as of 31 December 2016.

Swiss SRB going and gone concern information (UBS Group AG vs UBS AG consolidated)

As of 31.12.16	Swiss SRB including transitional arrangements (phase-in)			Swiss SRB as of 1.1.20 (fully applied)		
	UBS Group AG (consolidated)	UBS AG (consolidated) ¹	Differences	UBS Group AG (consolidated)	UBS AG (consolidated) ¹	Differences
<i>CHF million, except where indicated</i>						
Going concern capital						
Common equity tier 1 capital	37,788	39,474	(1,686)	30,693	32,447	(1,754)
High-trigger loss-absorbing additional tier 1 capital	6,512 ²	1,208 ³	5,304	6,809	3,848	2,961
Low-trigger loss-absorbing additional tier 1 capital	0 ²		0	2,342		2,342
Total loss-absorbing additional tier 1 capital	6,512	1,208	5,304	9,151	3,848	5,303
Total tier 1 capital	44,299	40,682	3,617	39,844	36,294	3,550
High-trigger loss-absorbing tier 2 capital	891		891			
Low-trigger loss-absorbing tier 2 capital	10,402	10,402	0			
Total tier 2 capital	11,293	10,402	891			
Total going concern capital	55,593	51,084	4,509	39,844	36,294	3,550
Gone concern loss-absorbing capacity						
Low-trigger loss-absorbing additional tier 1 capital		1,071 ⁴	(1,071)		1,071 ⁴	(1,071)
Non-Basel III-compliant tier 1 capital	642	642	0	642	642	0
Total tier 1 capital	642	1,713	(1,071)	642	1,713	(1,071)
High-trigger loss-absorbing tier 2 capital				679		679
Low-trigger loss-absorbing tier 2 capital				10,402	10,402	0
Non-Basel III-compliant tier 2 capital	698	698	0	698	698	0
Total tier 2 capital	698	698	0	11,779	11,100	679
TLAC-eligible senior unsecured debt	16,890	16,960 ⁵	(70)	16,890	16,960 ⁵	(70)
Total gone concern loss-absorbing capacity	18,229	19,372	(1,143)	29,311	29,774	(463)
Total loss-absorbing capacity						
Total loss-absorbing capacity	73,822	70,456	3,366	69,154	66,068	3,086
Risk-weighted assets / leverage ratio denominator						
Risk-weighted assets	225,412	225,743	(331)	222,677	223,232	(555)
Leverage ratio denominator	874,925	875,325	(400)	870,470	870,942	(472)
Capital and loss-absorbing capacity ratios (%)						
Going concern capital ratio	24.7	22.6	2.1	17.9	16.3	1.6
<i>of which: common equity tier 1 capital ratio</i>	<i>16.8</i>	<i>17.5</i>	<i>(0.7)</i>	<i>13.8</i>	<i>14.5</i>	<i>(0.7)</i>
Gone concern loss-absorbing capacity ratio	8.1	8.6	(0.5)	13.2	13.3	(0.1)
Total loss-absorbing capacity ratio	32.7	31.2	1.5	31.1	29.6	1.5
Leverage ratios (%)						
Going concern leverage ratio	6.4	5.8	0.6	4.6	4.2	0.4
<i>of which: common equity tier 1 leverage ratio</i>	<i>4.3</i>	<i>4.5</i>	<i>(0.2)</i>	<i>3.5</i>	<i>3.7</i>	<i>(0.2)</i>
Gone concern leverage ratio	2.1	2.2	(0.1)	3.4	3.4	0.0
Total loss-absorbing capacity leverage ratio	8.4	8.0	0.4	7.9	7.6	0.3

¹ Subsequent to the publication of the fourth quarter 2016 report, the Annual General Meeting of shareholders of UBS AG approved the distribution of a CHF 2,250 million dividend from UBS AG to UBS Group AG, which was higher than the previously estimated amount. This, in combination with the event occurred after the reporting period described in "Note 35 Events after the reporting period" in the "Consolidated financial statements" section of this report, resulted in a reduction of CET1 capital (CHF 607 million on a fully applied basis and CHF 585 million on a phase-in basis), a reduction in the leverage ratio denominator (CHF 45 million on a fully applied basis and CHF 27 million on a phase-in basis) and respective capital ratios of UBS AG (consolidated) as of 31 December 2016. ² High-trigger loss-absorbing additional tier 1 (AT1) capital of CHF 6,809 million and low-trigger loss-absorbing AT1 capital of CHF 2,342 million were partly offset by required deductions for goodwill of CHF 2,639 million. ³ High-trigger loss-absorbing AT1 capital of CHF 3,848 million was partly offset by required deductions for goodwill of CHF 2,639 million. ⁴ The low-trigger loss-absorbing AT1 capital instrument of CHF 1,071 million was issued after the new Swiss SRB framework had been implemented and therefore qualifies as gone concern loss-absorbing capacity. ⁵ Represents internal loans from UBS Funding (Jersey) Limited made from proceeds of external TLAC-eligible senior unsecured debt instruments. Requirements for TLAC eligibility for internal loans/debt have not yet been adopted in Switzerland.

Equity attribution framework

The equity attribution framework reflects our objectives of maintaining a strong capital base and managing performance by guiding each business toward activities that appropriately balance profit potential, risk and capital usage. This framework, which includes some forward-looking elements, enables us to integrate Group-wide capital management activities with those at a business division level and to calculate and assess return on attributed equity (RoAE) for each of our business divisions.

Equity attribution framework in 2016

During 2016, tangible equity was attributed to our business divisions by applying a weighted-driver approach. Average fully applied risk-weighted assets (RWA), average fully applied leverage ratio denominator (LRD) and risk-based capital (RBC) were converted to their CET1 equivalents using capital ratios of 11% for RWA, 3.75% for LRD, and for RBC a conversion factor, reflecting the share of exposure covered by CET1 capital. These CET1 equivalents are then given a weighting of one-third each.

In addition to tangible equity, we allocated equity to support goodwill and intangible assets. Group items within Corporate Center – Services represented equity not allocated to the business divisions. This included equity related to certain Basel III capital deduction items, mainly deferred tax assets, equity required to align total attributed equity with Group capital targets, equity for centrally held RBC items, as well as attributed equity for goodwill and intangible assets resulting from the acquisition of PaineWebber.

→ Refer to the “Risk management and control” section of this report for more information on risk-based capital

Average total equity attributed to business divisions and Corporate Center increased to CHF 48.2 billion in 2016 compared with CHF 44.6 billion in 2015.

Average equity attributable to shareholders increased to CHF 53.9 billion in 2016 from CHF 52.4 billion in 2015. The difference between average equity attributable to shareholders and average equity attributed to business divisions and Corporate Center decreased to CHF 5.7 billion in 2016 compared with CHF 7.8 billion in 2015.

Revised equity attribution framework

In the first quarter of 2017, we revised our equity attribution framework to reflect the revision of the too big to fail provisions applicable to Swiss systemically relevant banks.

Effective 1 January 2017, the weighting used for the attribution of tangible equity has been changed from an equal driver weighting of one-third each for average fully applied RWA, average fully applied LRD and RBC to 50% each for RWA and LRD. Average fully applied RWA and LRD continue to be converted to their CET1 capital equivalents based on capital ratios of 11% and 3.75%, respectively, which are above future regulatory requirements. If the tangible attributed equity calculated under the weighted-driver approach is less than the CET1 capital equivalent of RBC for any business division, the CET1 capital equivalent of RBC will be used as a floor for that business division.

In addition to tangible equity, we continue to allocate equity to our businesses to support goodwill and intangible assets. However, we now also attribute to the business divisions equity for goodwill and intangible assets resulting from the acquisition of PaineWebber that was held centrally in Group items within Corporate Center – Services under the previous framework. Also, we now attribute all Basel III capital deduction items to Group items. These deduction items include deferred tax assets, which constitute the largest component of Group items, unrealized gains from cash flow hedges and compensation- and own share-related components. Previously, Group items only included an amount of attributed equity for certain capital deduction items. In addition, the total amount of attributed equity equals average shareholders' equity with any residual difference reported within Group items, whereas such difference was previously reported separately.

Under the revised framework, Corporate Center – Group Asset and Liability Management (Group ALM) attributes to the business divisions and other Corporate Center units equity pertaining to LRD and RWA directly associated with activity that Group ALM manages centrally on their behalf. This attribution is primarily based on the level of high-quality liquid assets that is needed to meet the Group's minimum liquidity coverage ratio requirement of 110%. Group ALM continues to retain attributed equity related to liquidity and funding surpluses, i.e., at levels above regulatory requirements, together with that related to its own activities.

Average attributed equity

CHF billion	For the year ended		
	31.12.16	31.12.15	31.12.14
Wealth Management	3.5	3.5	3.4
Wealth Management Americas	2.6	2.5	2.7
Personal & Corporate Banking	4.1	3.9	4.1
Asset Management	1.4	1.6	1.7
Investment Bank	7.7	7.3	7.6
Corporate Center	29.1	25.8	20.5
of which: Services	22.8	19.6	12.3
of which: Group items	21.4	18.2	11.3
of which: Group ALM	4.3	3.3	3.2
of which: Non-core and Legacy Portfolio	2.1	2.9	4.9
Average equity attributed to business divisions and Corporate Center	48.2	44.6	39.9
Difference	5.7	7.8	9.8
Average equity attributable to shareholders	53.9	52.4	49.7

Return on attributed equity and return on equity¹

In %	For the year ended		
	31.12.16	31.12.15	31.12.14
Wealth Management	56.1	77.4	67.9
Wealth Management Americas	43.4	29.0	33.6
Personal & Corporate Banking	43.2	41.9	36.7
Asset Management	32.3	36.5	27.5
Investment Bank	13.1	25.9	(1.1)
UBS Group	5.9	11.8	7.0

¹ Return on attributed equity shown for the business divisions and return on equity attributable to shareholders shown for the UBS Group. Return on attributed equity for Corporate Center is not shown, as it is not meaningful.

Return on attributed equity (adjusted)¹, ²

In %	For the year ended		
	31.12.16	31.12.15	31.12.14
Wealth Management	69.0	81.4	73.3
Wealth Management Americas	48.5	33.7	35.4
Personal & Corporate Banking	43.0	42.8	38.3
Asset Management	39.4	38.1	29.9
Investment Bank	19.6	31.3	2.1

¹ Return on attributed equity for Corporate Center is not shown, as it is not meaningful. ² Adjusted results are non-GAAP financial measures as defined by SEC regulations. Refer to the "Group performance" section of this report for more information on adjusted results.

UBS shares

UBS Group AG shares

Audited | As of 31 December 2016, IFRS equity attributable to shareholders amounted to CHF 53,621 million, represented by 3,850,766,389 shares issued. Shares issued increased by 1,034,854 shares in 2016 due the issuance of shares out of conditional share capital upon exercise of employee share options.

Each share has a par value of CHF 0.10 and entitles the holder to one vote at the UBS Group AG shareholders' meeting, if entered into the share register as having the right to vote, and also a proportionate share of distributed dividends. As the Articles of Association of UBS Group AG indicate, there are no other classes of shares and no preferential rights for shareholders. ▲

→ Refer to the "Corporate governance" section of this report for more information on UBS shares

UBS Group share information

	As of or for the year ended		% change from
	31.12.16	31.12.15	31.12.15
Shares issued	3,850,766,389	3,849,731,535	0
Treasury shares	138,441,772	98,706,275	40
Shares outstanding	3,712,324,617	3,751,025,260	(1)
Basic earnings per share (CHF) ¹	0.86	1.68	(49)
Diluted earnings per share (CHF) ¹	0.84	1.64	(49)
Equity attributable to shareholders (CHF million)	53,621	55,313	(3)
Less: goodwill and intangible assets (CHF million)	6,556	6,568	0
Tangible equity attributable to shareholders (CHF million)	47,065	48,745	(3)
Total book value per share (CHF)	14.44	14.75	(2)
Tangible book value per share (CHF)	12.68	13.00	(2)
Share price (CHF)	15.95	19.52	(18)
Market capitalization (CHF million) ²	61,420	75,147	(18)

¹ Refer to "Note 9 Earnings per share (EPS) and shares outstanding" in the "Consolidated financial statements" section of this report for more information. ² Market capitalization is calculated based on the total shares issued multiplied by the share price at period end.

Holding of UBS Group AG shares

Group Treasury holds UBS Group AG shares exclusively to hedge future share delivery obligations related to employee share-based compensation awards. In addition, the Investment Bank holds a very limited number of UBS Group AG shares, primarily in its capacity as a market-maker in UBS Group AG shares and related derivatives and to hedge certain issued structured debt instruments. As of 31 December 2016, we held a total of 138,441,772 treasury shares (31 December 2015: 98,706,275), or 3.6% (31 December 2015: 2.6%) of shares issued.

Share delivery obligations related to employee share-based compensation awards increased to 166 million shares as of 31 December 2016 compared with 138 million shares as of 31

December 2015. Share delivery obligations are calculated on the basis of unvested notional share awards, options and stock appreciation rights, taking applicable performance conditions into account. Treasury shares held are delivered to employees at exercise or vesting. However, share delivery obligations related to certain options and stock appreciation rights can also be satisfied by shares issued out of conditional capital. As of 31 December 2016, the number of UBS Group AG shares that could have been issued out of conditional capital for this purpose was 130 million (31 December 2015: 131 million).

The table below outlines the market purchases of UBS Group AG shares by Group Treasury. It does not include the activities of the Investment Bank.

Treasury share purchases¹

Month of purchase	Treasury shares purchased		Total number of shares	
	Number of shares	Average price in CHF	Number of shares (cumulative)	Average price in CHF
January 2016				
February 2016	14,500,000	14.44	14,500,000	14.44
March 2016	40,500,000	16.20	55,000,000	15.74
April 2016			55,000,000	15.74
May 2016			55,000,000	15.74
June 2016	15,000,000	14.28	70,000,000	15.43
July 2016			70,000,000	15.43
August 2016			70,000,000	15.43
September 2016			70,000,000	15.43
October 2016			70,000,000	15.43
November 2016			70,000,000	15.43
December 2016			70,000,000	15.43

¹ This table excludes purchases for the purpose of hedging derivatives linked to UBS Group AG shares and for market-making in UBS Group AG shares. The table also excludes UBS Group AG shares purchased by pension and retirement benefit funds for UBS employees, which are managed by a board of UBS management and employee representatives in accordance with Swiss law guidelines. UBS's pension and other post-employment benefit funds purchased 2,427,400 UBS Group AG shares during the year and held 18,362,533 UBS Group AG shares as of 31 December 2016.

Trading volumes

1,000 shares	For the year ended		
	31.12.16	31.12.15	31.12.14 ¹
SIX Swiss Exchange total	3,761,294	2,870,766	2,839,304
SIX Swiss Exchange daily average	14,808	11,437	11,403
NYSE total	160,887	102,069	88,792
NYSE daily average	638	405	354

Source: Reuters

¹ 2014 data reflects UBS AG trading volumes up to 27 November 2014 and UBS Group AG trading volumes from 28 November 2014 onward.

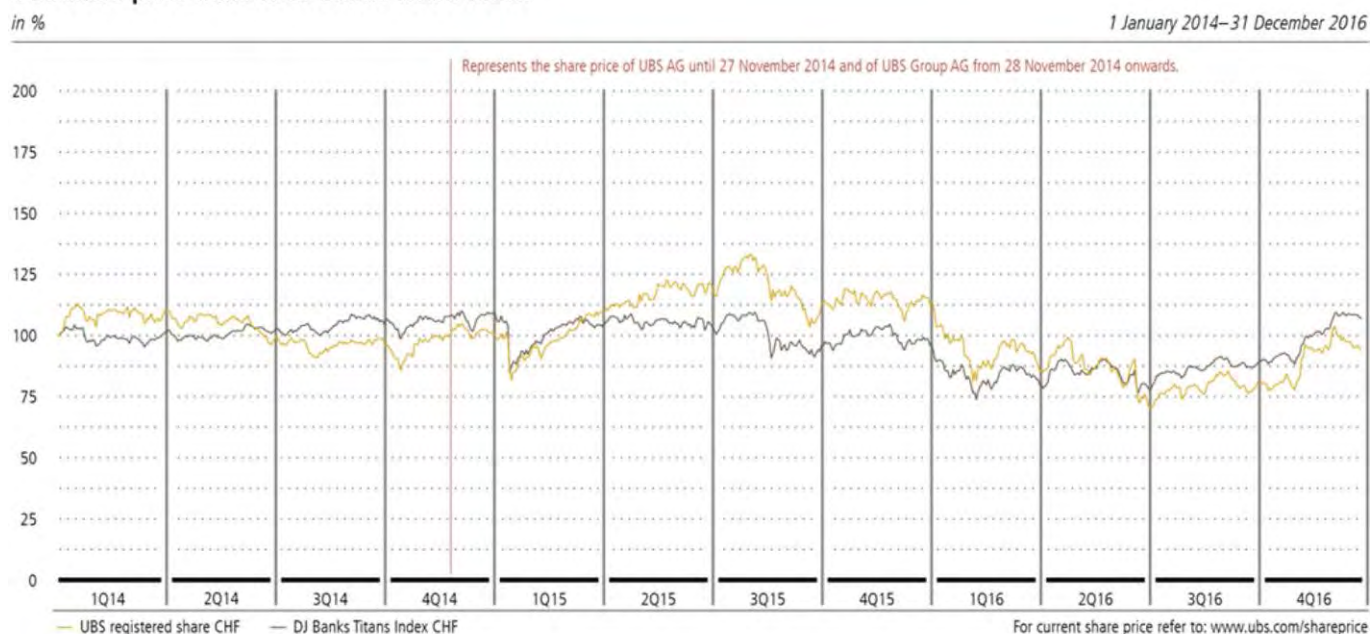
Listing of UBS Group AG shares

UBS Group AG shares are listed on the SIX Swiss Exchange (SIX). They are also listed on the New York Stock Exchange (NYSE) as global registered shares. As such, they can be traded and transferred across applicable borders without the need for conversion, with identical shares traded on different stock exchanges in different currencies.

During 2016, the average daily trading volume of UBS Group AG shares was 14.8 million shares on the SIX and 0.6 million shares on the NYSE. The SIX is expected to remain the main venue for determining the movement in our share price due to the high volume traded on this exchange.

During the hours in which both the SIX and the NYSE are simultaneously open for trading (generally 3:30 p.m. to 5:30 p.m. Central European Time), price differences between these exchanges are likely to be arbitrated away by professional market-makers. Accordingly, the share price will typically be similar between the two exchanges when considering the prevailing US dollar / Swiss franc exchange rate. When the SIX is closed for trading, globally traded volumes will typically be lower. However, the specialist firm making a market in UBS Group AG shares on the NYSE is required to facilitate sufficient liquidity and maintain an orderly market in UBS Group AG shares throughout normal NYSE trading hours.

UBS share price chart vs DJ Banks Titans Index



Ticker symbols UBS Group AG

Trading exchange	SIX/NYSE	Bloomberg	Reuters
SIX Swiss Exchange	UBSG	UBSG VX	UBSG.S
New York Stock Exchange	UBS	UBS UN	UBS.N

Security identification codes

ISIN	CH0244767585
Valoren	24 476 758
CUSIP	CINS H42097 10 7

Stock exchange prices¹

	SIX Swiss Exchange			New York Stock Exchange		
	High (CHF)	Low (CHF)	Period end (CHF)	High (USD)	Low (USD)	Period end (USD)
2016						
Fourth quarter 2016	17.73	12.97	15.95	17.44	13.22	15.67
December	17.73	15.65	15.95	17.44	15.48	15.67
November	16.33	12.97	16.17	16.37	13.39	15.85
October	14.36	13.06	14.00	14.47	13.22	14.07
Third quarter 2016	14.53	11.58	13.23	14.88	11.94	13.62
September	14.53	12.44	13.23	14.88	12.87	13.62
August	14.33	12.44	14.22	14.55	12.93	14.45
July	13.78	11.58	13.35	13.99	11.94	13.78
Second quarter 2016	16.85	12.24	12.57	17.37	12.46	12.96
June	15.41	12.24	12.57	16.10	12.46	12.96
May	16.60	14.01	15.36	17.36	14.34	15.39
April	16.85	14.25	16.60	17.37	14.89	17.27
First quarter 2016	19.32	13.51	15.49	19.14	14.01	16.02
March	16.80	15.21	15.49	16.99	15.49	16.02
February	17.00	13.51	15.34	16.55	14.01	15.22
January	19.32	16.01	16.83	19.14	16.07	16.64
2015	22.57	13.58	19.52	23.19	16.02	19.37
Fourth quarter 2015	20.27	17.87	19.52	20.69	18.19	19.37
Third quarter 2015	22.57	17.41	18.01	23.19	17.97	18.52
Second quarter 2015	20.78	18.22	19.83	22.16	19.01	21.20
First quarter 2015	18.59	13.58	18.32	19.29	16.02	18.77
2014	19.10	13.95	17.09	21.50	15.04	17.05
Fourth quarter 2014	17.84	13.95	17.09	18.22	15.04	17.05
Third quarter 2014	16.93	15.20	16.66	18.95	16.78	17.37
Second quarter 2014	18.74	16.21	16.27	21.15	18.22	18.32
First quarter 2014	19.10	16.76	18.26	21.50	18.49	20.72
2013	19.60	14.09	16.92	21.61	15.09	19.25
Fourth quarter 2013	19.30	16.12	16.92	21.61	17.94	19.25
Third quarter 2013	19.60	15.62	18.50	21.48	16.54	20.52
Second quarter 2013	18.02	14.09	16.08	18.70	15.09	16.95
First quarter 2013	16.39	14.23	14.55	17.65	15.11	15.39
2012	15.62	9.69	14.27	16.99	9.78	15.74
Fourth quarter 2012	15.62	11.39	14.27	16.99	12.32	15.74
Third quarter 2012	12.60	9.69	11.45	13.57	9.78	12.18
Second quarter 2012	12.79	10.55	11.05	14.15	10.96	11.71
First quarter 2012	13.60	10.64	12.65	14.77	11.17	14.02
2011	19.13	9.34	11.18	20.08	10.42	11.83
Fourth quarter 2011	12.23	9.80	11.18	14.21	10.47	11.83
Third quarter 2011	15.75	9.34	10.54	18.63	10.42	11.43
Second quarter 2011	17.60	14.37	15.33	20.03	17.20	18.26
First quarter 2011	19.13	15.43	16.48	20.08	16.11	18.05

¹ Based on the share price of UBS AG until 27 November 2014 and of UBS Group AG from 28 November 2014 onward.

Corporate governance, responsibility and compensation

Management report

Audited information according to the Swiss law and applicable regulatory requirements and guidance

Disclosures provided are in line with the requirements of article 663c para. 1 and 3 of the Swiss Code of Obligations (supplementary disclosures for companies whose shares are listed on a stock exchange: shareholdings) and the Ordinance against Excessive Compensation in Listed Stock Corporations (tables containing such information are marked as “Audited” throughout this section), as well as other applicable regulations and guidance.

Information assured according to the Global Reporting Initiative (GRI)

Content of the sections “UBS and Society” and “Our employees” has been reviewed by Ernst & Young Ltd (EY) against the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines. This content has been prepared in accordance with the comprehensive option of GRI G4 as evidenced in the EY assurance report at www.ubs.com/gri. The assurance by EY also covered other relevant text and data on the website of UBS which is referenced in the GRI Content Index.

Corporate governance

UBS Group AG is subject to, and compliant with, all relevant Swiss legal and regulatory requirements regarding corporate governance, including the SIX Swiss Exchange's Directive on Information Relating to Corporate Governance, as well as the standards established in the Swiss Code of Best Practice for Corporate Governance, including the appendix on executive compensation.

In addition, as a foreign company with shares listed on the New York Stock Exchange (NYSE), UBS Group AG complies with all relevant corporate governance standards applicable to foreign private issuers.

The Organization Regulations of UBS Group AG, adopted by the Board of Directors (BoD) based on article 716b of the Swiss Code of Obligations and articles 25 and 27 of the Articles of Association of UBS Group AG (AoA), constitute our primary corporate governance guidelines. To reflect the evolution of the firm's legal structure in its constitutional documents, we have separated the combined Organization Regulations of UBS Group AG and UBS AG. The Organization Regulations of the two entities (Organization Regulations) are standalone documents valid as of 1 January 2017.

To the extent practicable, the governance structures of UBS Group AG and UBS AG are aligned. UBS AG complies with all relevant Swiss legal and regulatory corporate governance requirements, as well as with the NYSE standards as a foreign company with debt securities listed on the NYSE. The discussion in this section refers to both UBS Group AG and UBS AG, unless specifically noted otherwise, or unless the information discussed is relevant only to companies with listed shares and therefore only applicable to UBS Group AG. This is in line with US Securities and Exchange Commission regulations and NYSE listing standards.

→ **Refer to the Articles of Association of UBS Group AG and of UBS AG, and the Organization Regulations of UBS Group AG at www.ubs.com/governance for more information**

Differences from corporate governance standards relevant to US-listed companies

According to the NYSE listing standards on corporate governance, foreign private issuers are required to disclose any significant ways in which their corporate governance practices differ from those that have to be followed by domestic companies. These differences are discussed in the following paragraphs.

Performance evaluation of the BoD committees

All BoD committees perform a self-assessment of their activities and report back to the full BoD.

Responsibility of the Audit Committee with regard to independent auditors

The Audit Committee is responsible for the compensation, retention and oversight of the independent auditors. It assesses the performance and qualification of the external auditors and submits its proposal for appointment, reappointment or removal of the independent auditors to the full BoD. In line with the Swiss Code of Obligations, the BoD in turn brings its proposal to the shareholders for their vote at the Annual General Meeting (AGM).

Discussion of risk assessment and risk management policies by the Risk Committee

In accordance with our Organization Regulations, the Risk Committee, on behalf of the BoD, oversees our risk principles and risk capacity. The Risk Committee is responsible for monitoring our adherence to those risk principles and for monitoring whether business divisions and control units maintain appropriate systems of risk management and control.

Supervision of the internal audit function

The Chairman of the BoD (Chairman) and the Audit Committee share the supervisory responsibility and authority with respect to the internal audit function.

Responsibility of the Compensation Committee for performance evaluations of senior management of UBS Group AG

The Compensation Committee, together with the BoD, proposes for shareholder approval at the AGM the maximum aggregate amount of compensation for the BoD, the maximum aggregate amount of fixed compensation for the Group Executive Board (GEB) and the aggregate amount of variable compensation for the GEB. In line with Swiss law, the shareholders elect the members of the Compensation Committee at the AGM.

Responsibility of the Governance and Nominating Committee for the evaluation of the Board of Directors of UBS Group AG

The BoD has direct responsibility and authority to evaluate its own performance, based on a pre-evaluation by the Governance and Nominating Committee.

Proxy statement reports of the Audit Committee and the Compensation Committee

NYSE listing standards would require the aforementioned committees to submit their reports directly to shareholders.

However, under Swiss law, all our reports addressed to shareholders, including those from the aforementioned committees, are provided and approved by the BoD, which has ultimate responsibility vis-à-vis the shareholders.

Shareholders' votes on equity compensation plans

Swiss law authorizes the BoD to approve compensation plans. Though Swiss law does not allocate such authority to shareholders, it requires that Swiss companies determine the nature and components of capital in their articles of association, and each increase in capital has to be submitted for shareholder approval. This means that shareholder approval is mandatory if equity-based compensation plans require an increase in capital. No shareholder approval is required if shares for such plans are purchased in the market.

→ **Refer to "Board of Directors" in this section for more information on the Board of Directors' committees**

→ **Refer to "Capital structure" in this section for more information on UBS Group AG's capital**

Group structure and shareholders

UBS Group legal entity structure

UBS Group AG is organized as an Aktiengesellschaft (AG), a corporation limited by shares, pursuant to article 620ff. of the Swiss Code of Obligations. UBS Group AG is the ultimate parent company of the UBS Group (Group). As the holding company of the Group, UBS Group AG is a non-operating, financial holding company that has issued or guaranteed debt and provides capital to its subsidiaries as required.

Since 2014, we have taken a series of measures to improve the resolvability of the Group in response to too big to fail requirements in Switzerland and other countries in which the Group operates.

In December 2014, UBS Group AG was established as the holding company of the Group. UBS Group AG is the sole shareholder of UBS AG. In 2015, we transferred our Personal & Corporate Banking and Wealth Management business booked in Switzerland from UBS AG to UBS Switzerland AG. We also completed the implementation of a more self-sufficient business and operating model for UBS Limited, our investment banking subsidiary in the UK. In 2016, we transferred the ownership of the majority of our existing service subsidiaries to UBS Business Solutions AG, a direct subsidiary of UBS Group AG, established to act as the Group service company. UBS Americas Holding LLC was designated as our intermediate holding company for our US subsidiaries as of 1 July 2016.

We continue to consider further changes to the Group's legal structure in response to regulatory requirements and other external developments.

→ **Refer to the "The legal structure of UBS Group" section of this report for more information**

Operational Group structure

As of 31 December 2016, the operational structure of the Group comprised Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management, and the Investment Bank, as well as Corporate Center with its units Corporate Center – Services, Corporate Center – Group Asset and Liability Management and Corporate Center – Non-core and Legacy Portfolio.

→ **Refer to the sections under "Financial and operating performance" and to "Note 2 Segment reporting" in the "Consolidated financial statements" section of this report for more information**

Listed and non-listed companies belonging to the Group

The Group includes a number of consolidated entities, of which only UBS Group AG has its shares listed on stock exchanges.

- Refer to the “Corporate information” section of this report for UBS Group AG and UBS AG’s corporate details
- Refer to “Note 28 Interests in subsidiaries and other entities” in the “Consolidated financial statements” section of this report for more information on the significant subsidiaries of the Group

Significant shareholders

Under the Swiss Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading of 19 June 2015 (FMIA), anyone holding shares in a company listed in Switzerland, or holding derivative rights related to shares of such a company, must notify the company and the SIX Swiss Exchange (SIX) if the holding reaches, falls below or exceeds one of the following thresholds: 3, 5, 10, 15, 20, 25, 33⅓, 50, or 66⅔% of voting rights, regardless of whether or not such rights may be exercised. The detailed disclosure requirements and the methodology for calculating the thresholds are defined in the Swiss Financial Market Supervisory Authority Ordinance on Financial Market Infrastructure (FMIO-FINMA). In particular, the FMIO-FINMA sets forth that nominee companies that cannot autonomously decide how voting rights are exercised are not obligated to notify the company and SIX if they reach, exceed or fall below the threshold percentages.

In addition, pursuant to the Swiss Code of Obligations, we must disclose in the notes to our financial statements the identity of any shareholder with a holding of more than 5% of the total share capital of UBS Group AG.

According to disclosure notifications filed with UBS Group AG and the SIX under the applicable Swiss rules, GIC Private Limited disclosed on 10 December 2014 a holding of 7.07% of the total share capital of UBS Group AG. The beneficial owner of this holding is the Government of Singapore. On 10 December 2014, Norges Bank, Oslo, the Central Bank of Norway, disclosed a holding of 3.30%. On 15 January 2015, BlackRock Inc., New York, disclosed a holding of 4.89%. On 10 February 2016, MFS Investment Management, Boston, disclosed a holding of 3.05%, and on 16 November 2016, The Capital Group Companies, Inc., Los Angeles, disclosed a holding of 3.01%.

In accordance with the FMIA, the aforementioned percentages were holdings that are not necessarily also registered in the UBS share register and calculated in relation to the total share capital of UBS Group AG reflected in the AoA at the time of the respective disclosure notification. Information on disclosures under the FMIA is available at www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html.

According to the share register, the shareholders (acting in their own name or in their capacity as nominees for other investors or beneficial owners) listed in the table below were registered in the UBS share register with 3% or more of the total share capital of UBS Group AG as of 31 December 2016.

Cross-shareholdings

We have no cross-shareholdings in excess of a reciprocal ownership of 5% of capital or voting rights with any other company.

Audited I

Shareholders registered in the UBS share register with 3% or more of the total share capital

% of share capital	31.12.16	31.12.15	31.12.14
Chase Nominees Ltd., London	9.43	9.14	9.05
DTC (Cede & Co.), New York ¹	6.62	6.14	5.76
Nortrust Nominees Ltd., London	3.88	3.60	3.52

¹ DTC (Cede & Co.), New York, “The Depository Trust Company”, is a US securities clearing organization.

Capital structure

Issued ordinary share capital

Under Swiss company law, shareholders must approve in a shareholders' meeting any increase in the total number of shares that may arise from an ordinary share capital increase or the creation of conditional or authorized capital. In 2016, our shareholders were not asked to approve any capital increase.

At year-end 2016, UBS Group AG had 3,850,766,389 issued shares with a par value of CHF 0.10 each, leading to a share capital of CHF 385,076,638.90. Share capital increased during the year, as shares were issued out of existing conditional capital due to the exercise of employee options.

Issued share capital of UBS Group AG

	Share capital in CHF	Number of shares	Par value in CHF
As of 31 December 2015	384,973,154	3,849,731,535	0.10
Issue of shares out of conditional capital due to employee options exercised in 2016	103,485	1,034,854	0.10
As of 31 December 2016	385,076,639	3,850,766,389	0.10

Distribution of UBS shares

As of 31 December 2016 <i>Number of shares registered</i>	Shareholders registered		Shares registered	
	Number	%	Number	% of shares issued
1–100	27,529	11.2	1,557,792	0.0
101–1,000	132,388	53.7	62,420,611	1.6
1,001–10,000	79,134	32.1	223,057,081	5.8
10,001–100,000	6,852	2.8	160,250,921	4.2
100,001–1,000,000	514	0.2	150,677,235	3.9
1,000,001–5,000,000	85	0.0	184,165,420	4.8
5,000,001–38,507,663 (1%)	25	0.0	274,486,712	7.1
1–2%	1	0.0	41,946,308	1.1
2–3%	2	0.0	168,520,641	4.4
3–4%	1	0.0	149,368,883	3.9
4–5%	0	0.0	0	0.0
Over 5%	2 ¹	0.0	618,262,445	16.1
Total registered	246,533	100.0	2,034,714,049 ²	52.8
Unregistered ³			1,816,052,340	47.2
Total shares issued			3,850,766,389	100.0

¹ On 31 December 2016, Chase Nominees Ltd., London, entered as a trustee / nominee, was registered with 9.43% of all UBS shares issued. However, according to the provisions of UBS Group AG, voting rights of trustees / nominees are limited to a maximum of 5% of all UBS shares issued. The US securities clearing organization DTC (Cede & Co.), New York, was registered with 6.62% of all UBS shares issued and is not subject to this 5% voting limit as a securities clearing organization. ² Of the total shares registered, 354,346,255 shares did not carry voting rights. ³ Shares not entered in the UBS share register as of 31 December 2016.

Conditional share capital

At year-end 2016, the following conditional share capital was available to UBS Group AG's BoD:

At the Extraordinary General Meeting (EGM) held on 26 November 2014, the shareholders approved the increase of conditional capital to be issued through the voluntary or mandatory exercise of conversion rights and / or warrants to a maximum of CHF 38,000,000 represented by up to 380,000,000 fully paid registered shares with a nominal value of CHF 0.10 each. The BoD has not made use of the allowance to issue such bonds or warrants.

At the same EGM, the shareholders also approved the increase of the conditional capital to be issued upon exercise of employees' options. In 2016, options on 1,034,854 shares were exercised with a total of 129,994,836 conditional capital shares being available at the end of 2016 to satisfy further exercises of options.

→ Refer to article 4a of UBS Group AG's Articles of Association for more information on the terms and conditions of the issue of shares out of existing conditional capital. The Articles of Association are available at www.ubs.com/governance

Authorized share capital

UBS Group AG had no authorized capital available on 31 December 2016.

Conditional capital of UBS Group AG

As of 31 December 2016	Maximum number of shares to be issued	Year approved by Extraordinary General Meeting	% of shares issued
Employee equity participation plans	129,994,836	2014	3.38%
Conversion rights / warrants granted in connection with bonds	380,000,000	2014	9.87%
Total	509,994,836		13.25%

Shareholders, legal entities and nominees: type and geographical distribution

As of 31 December 2016	Shareholders registered	
	Number	%
Individual shareholders	241,084	97.8
Legal entities	5,169	2.1
Nominees, fiduciaries	280	0.1
Total registered shares		
Unregistered shares		
Total	246,533	100.0

	Individual shareholders		Legal entities		Nominees		Total	
	Number	%	Number	%	Number	%	Number	%
Americas	6,276	2.5	191	0.1	129	0.1	6,596	2.7
of which: USA	5,524	2.2	104	0.0	122	0.0	5,750	2.3
Asia Pacific	5,442	2.2	137	0.1	24	0.0	5,603	2.3
Europe, Middle East and Africa	12,727	5.2	240	0.1	82	0.0	13,049	5.3
of which: Germany	4,391	1.8	26	0.0	5	0.0	4,422	1.8
of which: UK	4,539	1.8	10	0.0	9	0.0	4,558	1.8
of which: Rest of Europe	3,644	1.5	201	0.1	67	0.0	3,912	1.6
of which: Middle East and Africa	149	0.1	7	0.0	1	0.0	157	0.1
Switzerland	216,639	87.9	4,601	1.9	45	0.0	221,285	89.8
Total registered shares								
Unregistered shares								
Total	241,084	97.8	5,169	2.1	280	0.1	246,533	100.0

Changes in capital

In accordance with International Financial Reporting Standards, Group equity attributable to shareholders amounted to CHF 53.7 billion as of 31 December 2016 (2015: CHF 55.3 billion; and 2014: CHF 50.6 billion). UBS Group AG shareholders' equity was represented by 3,850,766,389 issued shares as of 31 December 2016 (2015: 3,849,731,535 shares; and 2014: 3,717,128,324 shares).

→ Refer to the "Statement of changes in equity" in the "Consolidated financial statements" section of this report for more information on changes in shareholders' equity over the last three years

Ownership

Ownership of UBS Group AG shares is widely spread. The tables in this section provide information about the distribution of UBS Group AG shareholders by category and geographic location. This information relates only to registered shareholders and cannot be assumed to be representative of UBS Group AG's entire investor base or the actual beneficial ownership. Only shareholders registered in the share register as "shareholders with voting rights" are entitled to exercise voting rights.

→ Refer to "Shareholders' participation rights" in this section for more information

As of 31 December 2016, 1,680,367,794 UBS Group AG shares carried voting rights, 354,346,255 shares were entered in the share register without voting rights, and 1,816,052,340 shares were not registered. All shares were fully paid up and eligible for dividends. There are no preferential rights for shareholders, and no

other classes of shares are issued by UBS Group AG.

At year-end 2016, we owned 138,441,772 UBS Group AG registered shares, which corresponded to 3.60% of the total share capital of UBS Group AG. At the same time, we had acquisition and disposal positions relating to 154,828,558 and 220,478,987 voting rights of UBS Group AG, corresponding to 4.02% and 5.73% of the total voting rights of UBS Group AG, respectively. Of the disposal positions, 5.53% consisted of voting rights on shares deliverable in respect of employee awards. The calculation methodology for the acquisition and disposal positions is based on the FMIO-FINMA, which sets forth that all future potential share delivery obligations, irrespective of the contingent nature of the delivery, must be taken into account.

Shares and participation certificates

UBS Group AG has a single class of shares, which are registered shares in the form of uncertificated securities (in the sense of the Swiss Code of Obligations) and intermediary-held securities (in the sense of the Swiss Federal Act on Intermediated Securities of 3 October 2008, as amended). Each registered share has a par value of CHF 0.10 and carries one vote subject to the restrictions set out under "Transferability, voting rights and nominee registration."

We have no participation certificates outstanding.

Our shares are listed on the NYSE as global registered shares. As such, they can be traded and transferred across applicable borders, without the need for conversion, with identical shares traded on different stock exchanges in different currencies.

→ Refer to the "UBS shares" section of this report for more information

						Shares registered	
						Number	%
						440,763,838	11.4
						530,217,833	13.8
						1,063,732,378	27.6
						2,034,714,049	52.8
						1,816,052,340	47.2
						3,850,766,389	100.0
Individual shareholders		Legal entities		Nominees		Total	
Number of shares	%	Number of shares	%	Number of shares	%	Number of shares	%
14,029,489	0.4	60,176,929	1.6	348,802,352	9.1	423,008,770	11.0
12,310,084	0.3	46,121,831	1.2	348,577,465	9.1	407,009,380	10.6
21,896,060	0.6	72,937,558	1.9	8,829,517	0.2	103,663,135	2.7
38,942,947	1.0	23,124,169	0.6	685,769,597	17.8	747,836,713	19.4
12,748,718	0.3	290,431	0.0	15,957,777	0.4	28,996,926	0.8
16,447,868	0.4	2,709,680	0.1	561,031,851	14.6	580,189,399	15.1
9,329,857	0.2	19,883,051	0.5	108,769,969	2.8	137,982,877	3.6
411,809	0.0	245,702	0.0	10,000	0.0	667,511	0.0
365,895,342	9.5	373,979,177	9.7	20,330,912	0.5	760,205,431	19.7
440,763,838	11.4	530,217,833	13.8	1,063,732,378	27.6	2,034,714,049	52.8
0		0		0		1,816,052,340	47.2
440,763,838	11.4	530,217,833	13.8	1,063,732,378	27.6	3,850,766,389	100.0

Distributions to shareholders

The decision to pay a dividend and the amount of any dividend depend on a variety of factors, including our profits and cash flow generation and the maintenance of our targeted capital ratios.

At the AGM 2017, UBS's BoD intends to propose to shareholders a dividend of CHF 0.60 per share to be paid out of capital contribution reserves, subject to shareholder approval.

Transferability, voting rights and nominee registration

We do not apply any restrictions or limitations on the transferability of shares. Voting rights may be exercised without any restrictions by shareholders entered into the share register if they expressly render a declaration of beneficial ownership according to the provisions of the Articles of Association.

We have special provisions for the registration of fiduciaries and nominees. Fiduciaries and nominees are entered in the share register with voting rights up to a total of 5% of all issued UBS Group AG shares if they agree to disclose, upon our request, beneficial owners holding 0.3% or more of all issued UBS Group AG shares. An exception to the 5% voting limit rule is in place for securities clearing organizations, such as The Depository Trust Company in New York.

→ Refer to "Shareholders' participation rights" in this section for more information

Convertible bonds and options

As of 31 December 2016, there were no contingent capital securities or convertible bonds outstanding requiring the issuance of new shares.

→ Refer to the "Capital management" section of this report for more information on our outstanding capital instruments

As of 31 December 2016, there were 66,720,606 employee options outstanding, including stock appreciation rights. Options and stock appreciation rights equivalent to 12,301,093 shares were in the money and exercisable. Option-based compensation plans are sourced by either purchasing UBS Group AG shares in the market or issuing new shares out of conditional capital. As mentioned above, as of 31 December 2016, 129,994,836 unissued shares in conditional share capital were available for this purpose.

→ Refer to "Conditional share capital" in this section for more information on outstanding options

→ Refer to "Note 27 Equity participation and other compensation plans" in the "Consolidated financial statements" section of this report for more information on outstanding options and stock appreciation rights

Shareholders' participation rights

We are committed to shareholder participation in our decision-making process. Around 250,000 shareholders are directly registered and some 140,000 US shareholders via nominee companies. Shareholders are regularly informed about our activities and performance, and are personally invited to the general meetings of shareholders.

→ **Refer to "Information policy" in this section for more information**

Registered shareholders can access personalized services and important information related to share register entries and our general meetings of shareholders at www.ubs.com/shareholderportal. They can also enter their voting instructions electronically through the shareholder portal ahead of our general meetings of shareholders, and they can verify their voting instructions before and after the general meetings using cryptography. This method of encryption ensures that the voting instructions remain secret through the entire voting process. In addition, shareholders can order admission cards and register changes to their address details. The website also allows them to manage their subscriptions to shareholder-related publications and to communicate directly with UBS Shareholder Services via a secure channel. The shareholder portal is fully integrated into our website.

Shareholders who decide not to receive an invitation by ordinary mail, are informed of the upcoming AGM by an email notification that their personalized AGM invitation and related documentation is available on the shareholder portal.

Relations with shareholders

We fully subscribe to the principle of equal treatment of all shareholders, who range from large institutions to individual investors, and regularly inform them about Group developments.

The AGM offers shareholders the opportunity to raise any questions to the Board of Directors (BoD) and Group Executive Board (GEB), as well as to our internal and external auditors.

Voting rights, restrictions and representation

We place no restrictions on share ownership and voting rights. However, pursuant to general principles formulated by the BoD, nominee companies and trustees, who normally represent a large number of individual shareholders and may hold an unlimited number of shares, have voting rights limited to a maximum of 5% of all issued UBS Group AG shares in order to avoid the risk of unknown shareholders with large stakes being entered in the share register. Securities clearing organizations,

such as The Depository Trust Company in New York, are not subject to this 5% voting limit.

In order to be recorded in the share register with voting rights, shareholders must confirm that they acquired UBS Group AG shares in their own name and for their own account. Nominee companies and trustees are required to sign an agreement confirming their willingness to disclose, upon our request, individual beneficial owners holding more than 0.3% of all issued UBS Group AG shares.

All shareholders registered with voting rights are entitled to participate in general meetings of shareholders. If they do not wish to attend in person, they can issue instructions to accept, reject or abstain on each individual item on the meeting agenda, either by giving instructions to an independent proxy elected by the UBS Group AG shareholders or by appointing another registered shareholder of their choice to vote on their behalf. Alternatively, registered shareholders can issue their voting instructions to the independent proxy electronically through our shareholder portal. Nominee companies normally submit the proxy material to the beneficial owners and transmit the collected votes to the independent proxy.

Statutory quorums

Motions, including the election and re-election of BoD members and the appointment of the auditors, are decided at a general meeting of shareholders by an absolute majority of the votes cast, excluding blank and invalid ballots. For the approval of certain specific issues, the Swiss Code of Obligations requires a positive vote from a two-thirds majority of the votes represented at a general meeting of shareholders, and from the absolute majority of the par value of shares represented at the meeting. Such issues include the creation of shares with privileged voting rights, the introduction of restrictions on the transferability of registered shares, conditional and authorized capital increases, and restrictions or exclusions of shareholders' preemptive rights.

The Articles of Association also require a two-thirds majority of votes represented for approval of any change to their provisions regarding the number of BoD members, any decision to remove one-quarter or more of the BoD members, and any modification to the provision establishing this qualified quorum.

Votes and elections are normally conducted electronically to ascertain the exact number of votes cast. Voting by a show of hands remains possible if a clear majority is predictable. Shareholders representing at least 3% of the votes represented may request that a vote or election be carried out electronically or by written ballot. In order to allow shareholders to clearly express their views on all individual topics, each item on the agenda is put to a vote separately and BoD members are elected on a person-by-person basis.

Convocation of general meetings of shareholders

The AGM must be held within six months of the close of the financial year (31 December) and normally takes place in early May. A personal invitation including a detailed agenda and explanation of each motion is made available to every registered shareholder at least 20 days ahead of the scheduled AGM. The meeting agenda is also published in the Swiss Official Gazette of Commerce as well as at www.ubs.com/agm.

Extraordinary General Meetings may be convened whenever the BoD or the auditors consider it necessary. Shareholders individually or jointly representing at least 10% of the share capital may at any time, including during an AGM, ask in writing for an Extraordinary General Meeting to be convened to address a specific issue they put forward.

Placing of items on the agenda

Pursuant to our Articles of Association, shareholders individually or jointly representing shares with an aggregate minimum par value of CHF 62,500 may submit proposals for matters to be

placed on the agenda for consideration at the next general meeting of shareholders.

We publish the deadline for submitting such proposals in the Swiss Official Gazette of Commerce and at www.ubs.com/agm. Requests for items to be placed on the agenda must include the actual motions to be put forward, together with a short explanation. The BoD formulates opinions on the proposals, which are published together with the motions.

Registrations in the share register

The general rules for entry into our Swiss share register with voting rights also apply before general meetings of shareholders. The same rules apply to our US transfer agent that operates the US share register for all UBS Group AG shares in a custodian account in the US. In order to determine the voting rights of each shareholder, our share register generally closes two business days before a shareholder meeting. Our independent proxy agent processes voting instructions from shareholders with voting right as long as technically possible, generally also until two business days before a shareholder meeting.

Board of Directors

The Board of Directors (BoD) of UBS Group AG, under the leadership of the Chairman of the BoD (Chairman), consists of six to 12 members as per our Articles of Association (AoA). The BoD decides on the strategy of the Group upon recommendation of the Group Chief Executive Officer (Group CEO) and is responsible for the overall direction, supervision and control of the Group and its management, as well as for supervising compliance with applicable laws, rules and regulations. The BoD exercises oversight over UBS Group AG and its subsidiaries and is responsible for ensuring the establishment of a clear Group governance framework to ensure effective steering and supervision of the Group, taking into account the material risks to which UBS Group AG and its subsidiaries are exposed.

The BoD has ultimate responsibility for the success of the Group and for delivering sustainable shareholder value within a framework of prudent and effective controls, approves all financial statements for issue and appoints and removes all Group Executive Board (GEB) members.

The BoD of UBS AG, under the leadership of the Chairman, decides on the strategy of UBS AG upon recommendation by the President of the Executive Board and exercises the ultimate supervision on management. Its ultimate responsibility for the success of UBS AG is exercised subject to the parameters set by the Group.

Members of the Board of Directors

At the AGM on 10 May 2016, Michel Demaré, David Sidwell, Reto Francioni, Ann F. Godbehere, William G. Parrett, Isabelle Romy, Beatrice Weder di Mauro and Joseph Yam were re-elected as members of the BoD, and Robert W. Scully and Dieter Wemmer were elected for their first term. At the same time,

Axel A. Weber was re-elected Chairman of the Board of Directors, and Ann F. Godbehere, Michel Demaré, Reto Francioni and William G. Parrett were elected as members of the Compensation Committee. Additionally, ADB Altorfer Duss & Beilstein AG was elected independent proxy agent. Following their election, the BoD appointed Michel Demaré as Vice Chairman and David Sidwell as Senior Independent Director of UBS Group AG.

Article 31 of our AoA limits the number of mandates that members of the BoD may hold outside the UBS Group to four board memberships in listed companies and five additional mandates in non-listed companies. Mandates in companies that are controlled by us or that control us are not subject to this limitation. In addition, members of the BoD may hold no more than 10 mandates at UBS's request and 10 mandates in associations, charitable organizations, foundations, trusts, and employee welfare foundations. No member of the BoD reaches the thresholds described in article 31 of the AoA.

The following biographies provide information on the BoD members and the Group Company Secretary. In addition to information on mandates, the biographies include information on memberships or other activities or functions, as required by the SIX Swiss Exchange Corporate Governance Directive. As of 1 January 2017, the role of Group Company Secretary has been assumed by Markus Baumann. He succeeded Luzius Cameron, who assumed a new role within the firm.

All members of UBS Group AG's BoD are also members of UBS AG's BoD, and committee membership is the same for both entities. However, as of 1 January 2017, the only BoD committees of UBS AG are the Audit Committee and the Risk Committee. The Senior Independent Director function is also no longer applicable to UBS AG.



Axel A. Weber

German, born 1957

Functions at UBS Group AG

Chairman of the Board of Directors / Chairperson of the Corporate Culture and Responsibility Committee / Chairperson of the Governance and Nominating Committee

Professional history and education

Axel A. Weber was elected to the Board of Directors (BoD) of UBS AG at the 2012 AGM and of UBS Group AG in November 2014. He is Chairman of the BoD of both UBS AG and UBS Group AG. He has chaired the Governance and Nominating Committee since 2012 and became Chairperson of the Corporate Culture and Responsibility Committee in 2013. Mr. Weber was president of the German Bundesbank between 2004 and 2011, during which time he also served as a member of the Governing Council of the European Central Bank, a member of the Board of Directors of the Bank for International Settlements, German governor of the International Monetary Fund, and as a member of the G7 and G20 Ministers and Governors. He was a member of the steering committees of the European Systemic Risk Board in 2011 and the Financial Stability Board from 2010 to 2011. From 2002 to 2004, Mr. Weber served as a member of the German Council of Economic Experts. His academic career encompasses professorships in international economics, monetary economics and economic theory at the universities of Cologne, Frankfurt am Main, Bonn and Chicago. Mr. Weber holds a master's degree in economics from the University of Constance and a PhD in economics from the University of Siegen, where he also received his habilitation. He holds honorary doctorates from the universities of Duisburg-Essen and Constance.

Other activities and functions

- Board member of the Swiss Bankers Association
- Member of the Board of Trustees of Avenir Suisse
- Advisory Board member of the "Beirat Zukunft Finanzplatz"
- Board member of the Swiss Finance Council
- Chairman of the Board of the Institute of International Finance
- President of the International Monetary Conference
- Member of the European Financial Services Round Table
- Member of the European Banking Group
- Member of the Monetary Economics and International Advisory Panel, Monetary Authority of Singapore
- Member of the Group of Thirty, Washington, DC
- Chairman of the DIW Berlin Board of Trustees
- Advisory Board member of the Department of Economics at the University of Zurich



Michel Demaré

Belgian and Swiss, born 1956

Functions at UBS Group AG

Independent Vice Chairman / member of the Audit Committee / member of the Compensation Committee / member of the Governance and Nominating Committee

Professional history and education

Michel Demaré was elected to the BoD of UBS AG at the 2009 AGM and of UBS Group AG in November 2014. In April 2010, he was appointed independent Vice Chairman for the first time. He has been a member of the Audit Committee since 2009 and the Governance and Nominating Committee since 2010. He became a member of the Compensation Committee in 2013. Mr. Demaré joined ABB in 2005 as Chief Financial Officer (CFO) and as a member of the Group Executive Committee. He stepped down from his function in ABB in January 2013. Between February and August 2008, he acted as the interim CEO of ABB. From September 2008 to March 2011, he combined his role as CFO with that of President of Global Markets. Mr. Demaré joined ABB from Baxter International Inc., where he was CFO Europe from 2002 to 2005. Prior to this, he spent 18 years at the Dow Chemical Company, holding various treasury and risk management positions in Belgium, France, the US and Switzerland. Between 1997 and 2002, Mr. Demaré was CFO of the Global Polyolefins and Elastomers division. He began his career as an officer in the multinational banking division of Continental Illinois National Bank of Chicago, and was based in Antwerp. Mr. Demaré graduated with an MBA from the Katholieke Universiteit Leuven, Belgium, and holds a degree in applied economics from the Université Catholique de Louvain, Belgium.

Other activities and functions

- Chairman of the Board of Syngenta
- Board member of Louis-Dreyfus Commodities Holdings BV
- Vice Chairman of the Supervisory Board of IMD, Lausanne
- Chairman of the Syngenta Foundation for Sustainable Agriculture
- Advisory Board member of the Department of Banking and Finance at the University of Zurich



David Sidwell

American (US) and British, born 1953

Functions at UBS Group AG

Senior Independent Director / Chairperson of the Risk Committee / member of the Governance and Nominating Committee

Professional history and education

David Sidwell was elected to the BoD of UBS AG at the 2008 AGM and of UBS Group AG in November 2014. In April 2010, he was appointed Senior Independent Director for the first time. He has chaired the Risk Committee since 2008 and has been a member of the Governance and Nominating Committee since 2011. Mr. Sidwell was Executive Vice President and CFO of Morgan Stanley between 2004 and 2007. Before joining Morgan Stanley he worked for JPMorgan Chase & Co., where, in his 20 years of service, he held a number of different positions, including controller and, from 2000 to 2004, CFO of the Investment Bank. Prior to this, he was with Price Waterhouse in both London and New York. Mr. Sidwell graduated from Cambridge University and qualified as a chartered accountant with the Institute of Chartered Accountants in England and Wales.

Other activities and functions

- Senior advisor at Oliver Wyman, New York
- Board member of Chubb Limited
- Board member of GAVI Alliance
- Chairman of the Board of Village Care, New York
- Director of the National Council on Aging, Washington, DC



Reto Francioni

Swiss, born 1955

Functions at UBS Group AG

Member of the Compensation Committee / member of the Corporate Culture and Responsibility Committee / member of the Risk Committee

Professional history and education

Reto Francioni was elected to the BoD of UBS AG at the 2013 AGM and of UBS Group AG in November 2014. He has been a member of the Corporate Culture and Responsibility Committee since 2013, the Compensation Committee since 2014 and the Risk Committee since 2015. He was CEO of Deutsche Börse AG from 2005 to 2015. Since 2006, he has been a professor of applied capital markets theory at the University of Basel. From 2002 to 2005, he was Chairman of the Supervisory Board and President of the SWX Group, Zurich. Mr. Francioni was co-CEO and Spokesman for the Board of Directors of Consors AG, Nuremberg, from 2000 to 2002. Between 1993 and 2000, he held various management positions at Deutsche Börse AG, including that of Deputy CEO from 1999 to 2000. From 1992 to 1993, he served in the corporate finance division of Hoffmann-La Roche, Basel. Prior to this, he was on the executive board of Association Tripartite Bourses for several years. From 1985 to 1988, he worked for the former Credit Suisse, holding positions in the equity sales and legal departments. He started his professional career in 1981 in the commerce division of Union Bank of Switzerland. Mr. Francioni completed his studies in law in 1981 and his PhD in 1987 at the University of Zurich.

Other activities and functions

- Board member of Coca-Cola HBC AG
- Chairman of the Board of Swiss International Air Lines AG
- Board member of Francioni AG
- Board member of MedTech Innovation Partners AG



Ann F. Godbehere

Canadian and British, born 1955

Functions at UBS Group AG

Chairperson of the Compensation Committee / member of the Audit Committee

Professional history and education

Ann F. Godbehere was elected to the BoD of UBS AG at the 2009 AGM and of UBS Group AG in November 2014. She has chaired the Compensation Committee since 2011 and has been a member of the Audit Committee since 2009. Ms. Godbehere was appointed CFO and Executive Director of Northern Rock in February 2008, serving in these roles during the initial phase of the business's public ownership until the end of January 2009. Prior to this role, she served as CFO of Swiss Re Group from 2003 to 2007. Ms. Godbehere was CFO of its Property & Casualty division in Zurich for two years. Prior to this, she served as CFO of the Life & Health division in London for three years. From 1997 to 1998, she was CEO of Swiss Re Life & Health Canada and head of IT for Swiss Re in North America. Between 1996 and 1997, she was CFO of Swiss Re Life & Health North America. Ms. Godbehere is a certified general accountant and was made a fellow of the Chartered Professional Accountant Association in 2014 and fellow of the Certified General Accountant Association of Canada in 2003.

Other activities and functions

- Board member of Prudential plc (chairman of the audit committee)
- Board member of Rio Tinto plc (chairman of the audit committee)
- Board member of Rio Tinto Limited (chairman of the audit committee)
- Board member of British American Tobacco plc



William G. Parrett

American (US), born 1945

Functions at UBS Group AG

Chairperson of the Audit Committee / member of the Compensation Committee / member of the Corporate Culture and Responsibility Committee

Professional history and education

William G. Parrett was elected to the BoD of UBS AG at the October 2008 Extraordinary General Meeting and of UBS Group AG in November 2014. He has chaired the Audit Committee since 2009, has been a member of the Corporate Culture and Responsibility Committee since 2012 and the Compensation Committee since 2015. Mr. Parrett served his entire executive career with Deloitte Touche Tohmatsu. He was CEO from 2003 until his retirement in 2007. Between 1999 and 2003, he was a Managing Partner of Deloitte & Touche USA LLP and served on Deloitte's Global Executive Committee between 1999 and 2007. Mr. Parrett founded Deloitte's US National Financial Services Industry Group in 1995 and its Global Financial Services Industry Group in 1997, both of which he led as Chairman. In his 40 years of experience in professional services, Mr. Parrett served public, private, governmental and state-owned clients worldwide. Mr. Parrett has a bachelor's degree in accounting from St. Francis College, New York, and is a certified public accountant (New York).

Other activities and functions

- Board member of the Eastman Kodak Company (chairman of the audit and finance committee)
- Board member of the Blackstone Group LP (chairman of the audit committee and chairman of the conflicts committee)
- Board member of Thermo Fisher Scientific Inc. (chairman of the audit committee)
- Board member of Conduent Inc.
- Member of the Committee on Capital Markets Regulation
- Member of the Carnegie Hall Board of Trustees
- Past Chairman of the Board of the United States Council for International Business
- Past Chairman of United Way Worldwide



Isabelle Romy

Swiss, born 1965

Functions at UBS Group AG

Member of the Audit Committee / member of the Governance and Nominating Committee

Professional history and education

Isabelle Romy was elected to the BoD of UBS AG at the 2012 AGM and of UBS Group AG in November 2014. She has been a member of the Audit Committee and the Governance and Nominating Committee since 2012. Ms. Romy is a partner at Froriep Legal AG, a large Swiss business law firm. From 1995 to 2012, she worked for another major Swiss law firm based in Zurich, where she was a partner from 2003 to 2012. Her legal practice includes litigation and arbitration in cross-border cases. Ms. Romy has been an associate professor at the University of Fribourg and at the Federal Institute of Technology in Lausanne (EPFL) since 1996. Between 2003 and 2008, she served as a deputy judge at the Swiss Federal Supreme Court. From 1999 to 2006, she was a member of the Ethics Commission at the EPFL. Ms. Romy earned her PhD in law (Dr. iur.) at the University of Lausanne in 1990 and has been a qualified attorney-at-law admitted to the bar since 1991. From 1992 to 1994, she was a visiting scholar at Boalt Hall School of Law, University of California, Berkeley, and completed her professorial thesis at the University of Fribourg in 1996.

Other activities and functions

- Vice Chairman of the Sanction Commission of SIX Swiss Exchange
- Member of the Fundraising Committee of the Swiss National Committee for UNICEF



Robert W. Scully

American (US), born 1950

Function at UBS Group AG

Member of the Risk Committee

Professional history and education

Robert W. Scully was elected to the BoD of UBS AG and UBS Group AG at the 2016 AGM. He has been a member of the Risk Committee since 2016. Mr. Scully served as a Member of the Office of the Chairman of Morgan Stanley from 2007 to 2009 and was its Co-President responsible for Asset Management, Discover Credit Cards from 2006 to 2007. Prior to assuming the position of Co-President, he was Chairman of Global Capital Markets from 2004 to 2006, Vice Chairman of Investment Banking from 1999 to 2006, and Managing Director from 1996 to 2009. Mr. Scully was Managing Director at Lehman Brothers from 1993 to 1996, having worked for Scully Brothers Foss & Wight from 1989 to 1993 as Managing Director and for Salomon Brothers in Investment Banking and Capital Markets from 1980 to 1989, where he became a Managing Director in 1984. He began his career in the banking industry with Chase Manhattan Bank in 1972 and then worked as an investment banker for Blyth Eastman Dillon & Co. from 1977 to 1980. Mr. Scully graduated in 1972 with a bachelor's degree in psychology from Princeton University and holds an MBA from Harvard University.

Other activities and functions

- Board member of Chubb Limited
- Board member of Zoetis Inc.
- Board member of KKR & Co LP
- Board member of the Dean's Advisors of Harvard Business School



Beatrice Weder di Mauro

Italian and Swiss, born 1965

Functions at UBS Group AG

Member of the Audit Committee / member of the Risk Committee

Professional history and education

Beatrice Weder di Mauro was elected to the BoD of UBS AG at the 2012 AGM and of UBS Group AG in November 2014. She has been a member of the Audit Committee since 2012 and became a member of the Risk Committee in 2013. She has been a professor of economics, economic policy and international macroeconomics at the Johannes Gutenberg University of Mainz since 2001. Currently she is a distinguished fellow at INSEAD in Singapore (on leave from the University of Mainz). Ms. Weder di Mauro has served as non-executive director on the boards of globally leading companies in development finance, pharmaceuticals, technology and insurance. Ms. Weder di Mauro was a member of the German Council of Economic Experts from 2004 to 2012. In 2010, she was a resident scholar at the International Monetary Fund (IMF) in Washington, DC, and, in 2006, a visiting scholar at the National Bureau of Economic Research, Cambridge, MA. She was an associate professor of economics at the University of Basel between 1998 and 2001 and a research fellow at the United Nations University in Tokyo from 1997 to 1998. Prior to this, she was an economist at the IMF in Washington, DC. Ms. Weder di Mauro earned her PhD in economics at the University of Basel in 1993 and received her habilitation there in 1999.

Other activities and functions

- Supervisory Board member of Robert Bosch GmbH
- Board member of Bombardier Inc.
- Member of the ETH Zurich Foundation Board of Trustees
- Economic Advisory Board member of Fraport AG
- Advisory Board member of Deloitte Germany
- Deputy Chairman of the University Council of the University of Mainz
- Member of the Senate of the Max Planck Society



Dieter Wemmer

Swiss and German, born 1957

Function at UBS Group AG
Member of the Risk Committee

Professional history and education

Dieter Wemmer was elected to the BoD of UBS AG and UBS Group AG at the 2016 AGM. He has been a member of the Risk Committee since 2016. Mr. Wemmer has been Chief Financial Officer (CFO) of Allianz SE since January 2013. He joined Allianz SE in 2012 as a member of the Board of Management, responsible for the insurance business in France, Benelux, Italy, Greece and Turkey and for the Center of Competence "Global Property & Casualty." He was CFO of Zurich Insurance Group (Zurich) from 2007 to 2011. From 2010 to 2011 he was made Zurich's Regional Chairman of Europe. Prior to this, Mr. Wemmer was CEO of the Europe General Insurance business and member of Zurich's Group Executive Committee from 2004 to 2007. He held various other management positions in the Zurich Group such as Chief Operating Officer of the Europe General Insurance business from 2003 to 2004, Head of Mergers and Acquisitions from 1999 to 2003 and Head of Financial Controlling from 1997 to 1999. He began his career in the insurance industry within the Zurich Group in 1986 in Cologne after graduating from the University of Cologne with a master's degree and acquiring his doctorate in mathematics in 1985.

Other activities and functions

- Administrative Board member Allianz Asset Management AG and Allianz Investment Management SE, both Allianz Group mandates
- Member of the CFO Forum
- Member of the Systemic Risk Working Group of the ECB and the BIS
- Chairman of the Economic & Finance Committee of Insurance Europe
- Member of the Berlin Center of Corporate Governance



Joseph Yam

Chinese and Hong Kong citizen, born 1948

Functions at UBS Group AG
Member of the Corporate Culture and Responsibility Committee / member of the Risk Committee

Professional history and education

Joseph Yam was elected to the BoD of UBS AG at the 2011 AGM and of UBS Group AG in November 2014. He has been a member of the Corporate Culture and Responsibility Committee and the Risk Committee since 2011. He is Executive Vice President of the China Society for Finance and Banking and in that capacity has served as an advisor to the People's Bank of China since 2009. Mr. Yam was instrumental in the establishment of the Hong Kong Monetary Authority and served as Chief Executive from 1993 until his retirement in 2009. He began his career in Hong Kong as a statistician in 1971 and served the public for over 38 years. During his service, he occupied several positions such as Director of the Office of the Exchange Fund from 1991, Deputy Secretary for Monetary Affairs from 1985 and Principal Assistant Secretary for Monetary Affairs from 1982. Mr. Yam graduated from the University of Hong Kong in 1970 with first class honors in social sciences. He holds honorary doctorate degrees and professorships from a number of universities in Hong Kong and overseas.

Other activities and functions

- Board member of Johnson Electric Holdings Limited
- Board member of UnionPay International Co., Ltd.
- International Advisory Council member of China Investment Corporation
- Distinguished Research Fellow at the Institute of Global Economics and Finance at the Chinese University of Hong Kong



Markus Baumann

Swiss, born 1963

Function at UBS Group AG
Group Company Secretary

Professional history and education

Markus Baumann was appointed Group Company Secretary of UBS Group AG and Company Secretary of UBS AG by the Board of Directors as of January 2017. He has been with UBS for over 35 years and has held a broad range of leadership roles across the Group in Switzerland, the US and Japan, including Chief of Staff to the Chairman of the Board of Directors since 2015 and Chief Operating Officer of Group Internal Audit from 2006 to 2015. Before this, he worked as Chief Operating Officer EMEA for UBS Asset Management. Earlier in his career, Mr. Baumann worked in Japan for four years as Corporate Planning Officer and assistant to the CEO. He joined UBS in 1979 as a banking apprentice, covering the full range of universal banking activities. Mr. Baumann holds an MBA from INSEAD Fontainebleau and a Swiss Federal Diploma as a Business Analyst.

Elections and terms of office

The BoD proposes the individual nominated to be Chairman, who in turn is elected by shareholders at the AGM.

In addition, shareholders elect each member of the BoD individually, as well as the members of the Compensation Committee, on an annual basis. The BoD in turn appoints one or more Vice Chairmen, a Senior Independent Director, the members of the BoD committees and their respective Chairpersons, and the Group Company Secretary.

As set out in the Organization Regulations, BoD members are normally expected to serve for a minimum of three years. No BoD member may serve for more than 12 consecutive terms of office. In exceptional circumstances, the BoD may extend this limit.

Organizational principles and structure

Following each AGM, the BoD meets to appoint one or more Vice Chairmen, a Senior Independent Director, the BoD committee members other than the Compensation Committee members, who are elected by the shareholders, and their respective Chairpersons. At the same meeting, the BoD appoints a Group Company Secretary, who acts as secretary to the BoD and its committees.

According to the Articles of Association and the Organization Regulations, the BoD meets as often as business requires, but it must meet at least six times a year. During 2016, a total of 19 BoD meetings and calls were held, nine of which were attended by GEB members. Average participation in BoD meetings and

calls was 97%. In addition to the BoD meetings attended by the GEB, the Group CEO partly attended most meetings of the BoD without GEB participation. The average duration of these meetings and calls was 110 minutes. In 2016, the frequency and length of meetings were the same for UBS Group AG and UBS AG.

At every BoD meeting, each committee chairperson provides the BoD with an update on current activities of his or her committee as well as important committee issues.

At least once a year, the BoD reviews its own performance as well as the performance of each of its committees. This review is based on an assessment of the BoD under the auspices of the Governance and Nominating Committee, as well as on a self-assessment of the BoD committees, and seeks to determine whether the BoD and its committees are functioning effectively and efficiently. The self-assessment of the BoD committees for 2016 will be concluded in spring 2017. At least every three years, the BoD assessments include an appraisal by an external expert. The latest, concerning the year 2015, was completed in spring 2016 and concluded that the BoD was operating effectively.

The committees listed on the following pages assist the BoD in the performance of its responsibilities. These committees and their charters are described in the Organization Regulations, published at www.ubs.com/governance. Topics of common interest or affecting more than one committee were discussed at joint committees' meetings. During 2016, seven joint committees' meetings were held for UBS Group AG (the same number of meetings was also held for UBS AG).

Board of Directors

Members on 31 December 2016	Meeting attendance without GEB ²		Meeting and call attendance with GEB		Key responsibilities include:
Axel A. Weber, Chairman	10/10	100%	9/9	100%	<p>The BoD has ultimate responsibility for the success of the Group and for delivering sustainable shareholder value within a framework of prudent and effective controls. It decides on the Group's strategic aims and the necessary financial and human resources upon recommendation of the Group CEO and sets the Group's values and standards to ensure that its obligations to its shareholders and other stakeholders are met.</p> <p>Refer to the Organization Regulations of UBS Group AG at www.ubs.com/governance for more information</p>
Michel Demaré	10/10	100%	9/9	100%	
David Sidwell	10/10	100%	9/9	100%	
Reto Francioni	10/10	100%	9/9	100%	
Ann F. Godbehere	10/10	100%	9/9	100%	
William G. Parrett	10/10	100%	9/9	100%	
Isabelle Romy	10/10	100%	8/9	89%	
Robert W. Scully ¹	7/7	100%	6/6	100%	
Beatrice Weder di Mauro	10/10	100%	9/9	100%	
Dieter Wemmer ¹	4/7	57%	3/6	50%	
Joseph Yam	10/10	100%	9/9	100%	

¹ Robert W. Scully and Dieter Wemmer were elected to the BoD at the AGM 2016. ² Additionally, two unscheduled calls took place in 2016.

Audit Committee

The Audit Committee consists of five BoD members as indicated in the table below, all of whom were determined by the BoD to be fully independent. As a group, members of the Audit Committee must have the necessary qualifications and skills to perform all of their duties and together must possess financial literacy and experience in banking and risk management.

The Audit Committee itself does not perform audits but monitors the work of the external auditors, Ernst & Young Ltd (EY), who in turn are responsible for auditing UBS Group AG's and UBS AG's consolidated and standalone annual financial statements and for reviewing the quarterly financial statements.

Together with the external auditors and Group Internal Audit, the Audit Committee in particular reviews the annual financial statements of UBS Group AG and UBS AG as well as the consolidated annual and the quarterly financial statements and the consolidated annual report of UBS Group AG and UBS AG, as proposed by management, in order to recommend approval to the BoD or propose any adjustments the Audit Committee considers appropriate.

Periodically, and at least annually, the Audit Committee assesses the qualifications, expertise, effectiveness, independence and performance of the external auditors and their lead audit partner, in order to support the BoD in reaching a decision in relation to the appointment or dismissal of the external auditors and to the rotation of the lead audit partner. The BoD then submits these proposals to the shareholders for approval at the AGM.

During 2016, the Audit Committee held 8 committee meetings and 10 calls with an average participation rate of 96%. On average the duration of each of the meetings and calls was approximately 140 minutes. In 2016, for both UBS Group

AG and UBS AG, the frequency and length of meetings were the same. All meetings and calls of the Audit Committee were attended by the Group Chief Financial Officer and the Group Controller and Chief Accounting Officer and most of the meetings were attended by the Group CEO. In addition, the chair of the committee met once with FINMA and on a periodic basis with the Federal Reserve Bank of New York (FRBNY).

All Audit Committee members have accounting or related financial management expertise and, in compliance with the rules established pursuant to the US Sarbanes-Oxley Act of 2002, at least one member qualifies as a financial expert. The New York Stock Exchange (NYSE) listing standards on corporate governance set more stringent independence requirements for members of audit committees than for the other members of the BoD. Each of the five members of the Audit Committee is an external BoD member who, in addition to satisfying our independence criteria, does not receive, directly or indirectly, any consulting, advisory or compensatory fees from UBS Group AG other than in his or her capacity as a BoD member, does not hold, directly or indirectly, UBS Group AG shares in excess of 5% of the outstanding capital and (except as noted below) does not serve on the audit committees of more than two other public companies. However, the NYSE listing standards on corporate governance allow for an exemption for audit committee members to serve on more than three audit committees of public companies, provided that all BoD members determine that such simultaneous service does not impair the member's ability to effectively serve on each committee and to fulfill his or her obligations. Considering the credentials of William G. Parrett, the BoD has granted this exemption in his case.

Audit Committee

Members on 31 December 2016	Meeting and call attendance		Key responsibilities include:
William G. Parrett (Chair)	18/18	100%	<p>The function of the Audit Committee is to serve as an independent and objective body with oversight of:</p> <ul style="list-style-type: none"> (i) UBS Group AG's and the Group's accounting policies, financial reporting and disclosure controls and procedures; (ii) the quality, adequacy and scope of external audit; (iii) UBS Group AG's and the Group's compliance with financial reporting requirements; (iv) the Executives' approach to internal controls with respect to the production and integrity of the financial statements and disclosure of the financial performance; and (v) the performance of Group Internal Audit in conjunction with the Chairman. <p>The Executives are responsible for the preparation, presentation and integrity of the financial statements. External auditors are responsible for auditing UBS Group AG's and the Group's annual financial statements and for reviewing the quarterly financial statements.</p>
Michel Demaré	16/18	89%	
Ann F. Godbehere	18/18	100%	
Isabelle Romy	18/18	100%	
Beatrice Weder di Mauro	16/18	89%	

Refer to the Organization Regulations of UBS Group AG at www.ubs.com/governance for more information

Compensation Committee

The Compensation Committee consists of four independent BoD members as indicated in the table. The Compensation Committee also reviews the compensation disclosures included in this report.

During 2016, the Compensation Committee held seven meetings and two calls with a participation rate of 100%. On average the duration of each of the meetings and calls was approximately 100 minutes. The meetings were held in the presence of external advisors, the Chairman and generally the Group CEO. In 2016, the frequency and length of meetings were the same for both UBS Group AG and UBS AG. The chair of the committee met with regulators as appropriate.

→ Refer to “Our compensation governance framework” and “Total Reward Principles” in the “Compensation” section of this report for more information on the Compensation Committee’s decision-making procedures

Corporate Culture and Responsibility Committee

As of 31 December 2016, the Corporate Culture and Responsibility Committee consisted of the Chairman and three independent BoD members as listed in the table. The Group CEO and the Global Head of UBS and Society are permanent guests of the Corporate Culture and Responsibility Committee, while the regional Presidents attend two of the meetings as guests. During 2016, six meetings were held with an average participation rate of 92%. On average the duration of each of the meetings was approximately 80 minutes. In 2016, the frequency and length of meetings were the same for both UBS Group AG and UBS AG.

→ Refer to the “UBS and Society” section of this report for more information

Compensation Committee

Members on 31 December 2016	Meeting and call attendance	Key responsibilities include:
Ann F. Godbehere (Chair)	9/9 100%	The function of the Compensation Committee is responsible for: (i) supporting the BoD in its duties to set guidelines on compensation and benefits, (ii) approving the total compensation for the Chairman and the non-independent BoD members, (iii) establishing, together with the Chairman, financial and non-financial performance targets for the Group CEO and reviewing, upon the recommendation from the Group CEO, financial and non-financial performance targets for the other GEB members, (iv) evaluating, in consultation with the Chairman, the performance of the Group CEO in meeting agreed targets, as well as informing the BoD of the outcome of the performance assessments of the GEB members, (v) proposing, together with the Chairman, total individual compensation for the independent BoD members and Group CEO for approval by the BoD and (vi) proposing to the BoD for approval, upon recommendation by the Group CEO, the total individual compensation for GEB members.
Michel Demaré	9/9 100%	
Reto Francioni	9/9 100%	
William G. Parrett	9/9 100%	

Refer to the Organization Regulations of UBS Group AG at www.ubs.com/governance for more information

Corporate Culture and Responsibility Committee

Members on 31 December 2016	Meeting and call attendance	Key responsibilities include:
Axel A. Weber (Chair)	6/6 100%	The Corporate Culture and Responsibility Committee supports the BoD in its duties to safeguard and advance the Group’s reputation for responsible and sustainable conduct. Its function is forward-looking in that it monitors and reviews societal trends and transformational developments and assesses their potential relevance for the Group. In undertaking this assessment, it reviews stakeholder concerns and expectations pertaining to the societal performance of UBS and to the development of its corporate culture. The Corporate Culture and Responsibility Committee’s function also encompasses the monitoring of the current state and implementation of the programs and initiatives within the Group pertaining to corporate culture and corporate responsibility.
Reto Francioni	5/6 83%	
William G. Parrett	5/6 83%	
Joseph Yam	6/6 100%	

Refer to the Organization Regulations of UBS Group AG at www.ubs.com/governance for more information

Governance and Nominating Committee

As of 31 December 2016, the Governance and Nominating Committee consisted of the Chairman and three independent members as listed in the table. During 2016, eight meetings and one call were held with a participation rate of 100%. On average the duration of each of the meetings and the call was approximately 50 minutes. In 2016, the frequency and length of meetings were similar for both UBS Group AG and UBS AG. All meetings of the Governance and Nominating Committee were attended by the Group CEO.

Risk Committee

As of 31 December 2016, the Risk Committee comprised six independent BoD members as listed in the table. During 2016, the Risk Committee held eight committee meetings and three calls with an average participation rate of 95%. On average the duration of each of the meetings and calls was approximately 280 minutes. In 2016, the frequency and length of meetings were the same for both UBS Group AG and UBS AG. Usually, the Group CEO, the Group CFO, the Group CRO and the Group General Counsel attend the meetings and calls. The committee met once with the FRBNY and the Connecticut Department of Banking. The chair met once each with the FCA, the PRA and with FINMA, and with the FRBNY on a periodic basis.

Governance and Nominating Committee

Members on 31 December 2016	Meeting and call attendance	Key responsibilities include:
Axel A. Weber (Chair)	9/9 100%	<p>The function of the Governance and Nominating Committee is to support the BoD in fulfilling its duty to establish best practices in corporate governance across the Group, to conduct a BoD assessment (self- or external assessment), to establish and maintain a process for appointing new BoD members and GEB members (in the latter case, upon proposal of the Group CEO) and to manage the succession planning of all GEB members.</p> <p>Refer to the Organization Regulations of UBS Group AG at www.ubs.com/governance for more information</p>
Michel Demaré	9/9 100%	
Isabelle Romy	9/9 100%	
David Sidwell	9/9 100%	

Risk Committee

Members on 31 December 2016	Meeting and call attendance	Key responsibilities include:
David Sidwell (Chair)	11/11 100%	<p>The function of the Risk Committee is to oversee and support the BoD in fulfilling its duty to supervise and set an appropriate risk management and control framework in the areas of:</p> <ul style="list-style-type: none"> (i) risk management and control, including credit, market, country, legal, compliance, operational and conduct risks; (ii) treasury and capital management, including funding, liquidity and equity attribution; and (iii) balance sheet management. <p>The Risk Committee considers the potential effects of the aforementioned risks on the Group's reputation. For these purposes, the Risk Committee will receive all relevant information from the GEB and has the authority to meet with regulators/ third parties in consultation with the Group CEO.</p> <p>Refer to the Organization Regulations of UBS Group AG at www.ubs.com/governance for more information</p>
Reto Francioni	11/11 100%	
Robert W. Scully ¹	7/8 88%	
Beatrice Weder di Mauro	11/11 100%	
Dieter Wemmer ¹	6/8 75%	
Joseph Yam	11/11 100%	

¹ Robert W. Scully and Dieter Wemmer were elected to the BoD at the AGM 2016.

Special Committee

The Special Committee is an ad hoc committee with a standing composition and is called and held on an ad hoc basis.

The Special Committee is composed of four independent BoD members and focuses on internal and regulatory investigations. As of 31 December 2016, David Sidwell chaired the Special Committee with Michel Demaré, William G. Parrett and Isabelle Romy as additional members. During 2016, four committee meetings and four telephone conferences were held with an average participation rate of 94%. On average the duration of each of the meetings and telephone conferences was approximately 110 minutes. In 2016, the frequency and length of meetings were similar for both UBS Group AG and UBS AG.

Roles and responsibilities of the Chairman of the Board of Directors

Axel A. Weber serves as a full-time Chairman of the BoD, in line with his employment contract.

The Chairman coordinates tasks within the BoD, calls BoD meetings and sets their agendas. Under the leadership of the Chairman, the BoD decides on the strategy of the Group upon recommendations by the Group CEO, exercises ultimate supervision over management and appoints all GEB members.

The Chairman presides over all general meetings of shareholders and works with the committee chairpersons to coordinate the work of all BoD committees. Together with the Group CEO, the Chairman is responsible for ensuring effective communication with shareholders and other stakeholders, including government officials, regulators and public organizations. This is in addition to establishing and maintaining a close working relationship with the Group CEO and other GEB members, and providing advice and support when appropriate; including continuing to support the firm's cultural change as a key priority on the basis of our Principles and Behaviors.

In 2016, the Chairman met on a regular basis with core supervisory authorities, including FINMA and the Swiss National Bank, in Switzerland, the FRBNY / Connecticut Department of Banking in the US, and with the PRA and the FCA in the UK. Meetings with other important supervisory authorities, in regions such as Asia-Pacific, EMEA and the US, were scheduled on an ad hoc or needs-driven basis.

Roles and responsibilities of the Vice Chairmen and the Senior Independent Director

The BoD appoints one or more Vice Chairmen and a Senior Independent Director. If the BoD appoints more than one Vice Chairman, one of them must be independent. Michel Demaré has been appointed as Vice Chairman, and David Sidwell has been appointed as Senior Independent Director. A Vice Chairman is required to lead the BoD in the absence of the Chairman and to provide support and advice to the Chairman. At least twice a year, the Senior Independent Director organizes and leads a meeting of the independent BoD members in the absence of the Chairman. In 2016, three independent BoD meetings were held for UBS Group AG and UBS AG with an average participation of 93% and an average duration of approximately 80 minutes. The Senior

Independent Director relays to the Chairman any issues or concerns brought forth by the independent BoD members and acts as a point of contact for shareholders and stakeholders seeking to engage in discussions with an independent BoD member.

Important business connections of independent members of the Board of Directors

As a global financial services provider and a major Swiss bank, we enter into business relationships with many large companies, including some in which our BoD members assume management or independent board responsibilities. The Governance and Nominating Committee determines in each instance whether the nature of the Group's business relationship with such a company might compromise our BoD members' capacity to express independent judgment.

Our Organization Regulations require three-quarters of the UBS Group AG BoD members and one-third at UBS AG to be independent. For this purpose, independence is determined in accordance with the FINMA circular 08/24 "Supervision and Internal Control," the New York Stock Exchange rules, and the rules and regulations of other securities exchanges on which the UBS Group AG shares are listed, if any, applying the strictest standard.

In 2016, our BoD met the standards of the Organization Regulations for the percentage of directors that are considered independent under the criteria described above. Due to our Chairman's full-time employment by UBS Group AG, he is not considered independent.

All relationships and transactions with UBS Group AG's independent BoD members are conducted in the ordinary course of business and are on the same terms as those prevailing at the time for comparable transactions with non-affiliated persons. All relationships and transactions with BoD members' associated companies are conducted at arm's length.

→ Refer to "Note 32 Related parties" in the "Consolidated financial statements" section of this report for more information

Checks and balances: Board of Directors and Group Executive Board

We operate under a strict dual board structure, as mandated by Swiss banking law. The separation of responsibilities between the BoD and the GEB is clearly defined in the Organization Regulations. The BoD decides on the strategy of the Group upon recommendations by the Group CEO and supervises and monitors the business, whereas the GEB, headed by the Group CEO, has executive management responsibility. The functions of Chairman of the BoD and Group CEO are assigned to two different people, ensuring a separation of power. This structure establishes checks and balances and preserves the institutional independence of the BoD from the day-to-day management of the Group, for which responsibility is delegated to the GEB under the leadership of the Group CEO. No member of one board may simultaneously be a member of the other.

Supervision and control of the GEB remain with the BoD. The authorities and responsibilities of the two bodies are governed by the Articles of Association and the Organization Regulations, including the latter document's "Annex B – Key approval authorities."

→ Refer to www.ubs.com/governance for more information on checks and balances for the Board of Directors and Group Executive Board

Skills, expertise and training of the Board of Directors

The BoD is composed of members with a broad spectrum of skills, educational backgrounds, experience and expertise from a range of sectors that reflect the nature and scope of the firm's business. With a view to recruiting needs, the Governance and Nominating Committee uses a skills / experience matrix as a tool to identify any gaps in the competencies considered most relevant to the BoD, taking into consideration the bank's business composition, risk profile, strategy and geographic reach.

We asked our Board members to rate their 4 strongest competencies out of the following 12 categories:

- banking (wealth management, asset management, personal and corporate banking)
- experience as chief executive officer or chairman
- executive board leadership experience (e.g., as chief financial officer, chief risk officer or chief operating officer)
- corporate responsibility and sustainability
- finance, audit, accounting
- human resources management, including compensation
- insurance
- investment banking, capital markets
- legal, compliance
- regulator, central bank
- risk management
- technology, cyber security

The Governance and Nominating Committee reviews these categories annually to confirm that it continues to match the most relevant skill and experience competencies.

For 2016, competencies in all twelve categories were represented in our BoD. Particularly strong levels of experience and expertise existed in the areas of:

- finance, audit, accounting
- risk management
- regulator, central bank and
- banking and investment banking

Furthermore, 9 of the 11 BoD members have held or currently hold chairman, CEO or other executive board-level leadership positions.

Moreover, education remained an important priority for our BoD members. In addition to a comprehensive induction program for new BoD members, continuous training and topical deep-dives are part of the BoD agenda.

Information and control instruments vis-à-vis the Group Executive Board

The BoD is kept informed of the activities of the GEB in various ways, including minutes of GEB meetings being made available to the BoD. The Group CEO and other GEB members also regularly update the BoD on important issues at BoD meetings.

At BoD meetings, BoD members may request from BoD or GEB members any information about matters concerning the Group that they require to fulfill their duties. Outside meetings, BoD members may request information from other BoD and GEB members. Such requests must be approved by the Chairman.

The internal audit function independently, objectively and systematically assesses:

- the effectiveness of processes to define strategy and risk appetite as well as the overall adherence to the approved strategy
- the effectiveness of governance processes, risk management and internal controls
- the soundness of the risk and control culture
- the effectiveness and sustainability of remediation activities
- the reliability and integrity of financial and operational information, i.e., whether activities are properly, accurately and completely recorded, and the quality of underlying data and models, and
- the effectiveness of processes to comply with legal, regulatory and statutory requirements, as well as with internal policies and contracts, i.e., assessing whether such requirements are met, and the adequacy of processes to sustainably meet them

The Head of Group Internal Audit (GIA) reports directly to the Chairman. In addition, the internal audit organization has a functional reporting line to the Audit Committee in line with their responsibilities as set forth in our Organization Regulations. The Audit Committee annually assesses and approves the appropriateness of Group Internal Audit's annual audit plan and annual audit objectives, and monitors GIA's discharge of its annual audit objectives, including being informed of the results of the annual audit plan. The Audit Committee is in regular contact with the Head of GIA. GIA issues quarterly governance and annual activity reports, providing a broad overview of significant audit results and key issues, control themes and trends based on individual audit results, continuous risk assessment and issue assurance results. The reports are provided to the Chairman of the BoD, members of the Audit and the Risk Committees, the GEB and other stakeholders.

→ Refer to the "Risk management and control" section of this report for more information

Group Executive Board

The Board of Directors (BoD) delegates the management of the business to the Group Executive Board (GEB).

Responsibilities, authorities and organizational principles of the Group Executive Board

Under the leadership of the Group CEO, the GEB has executive management responsibility for the steering of the Group and its business. It assumes overall responsibility for developing the Group and business division strategies and the implementation of approved strategies. The GEB constitutes itself as the risk council of the Group. In this function, the GEB has overall responsibility for establishing and supervising the implementation of risk management and control principles, as well as for managing the risk profile of the Group as a whole, as determined by the BoD and the Risk Committee. In 2016, the GEB held 16 meetings and two GEB offsite meetings. In 2016, the frequency of meetings for both UBS Group AG and UBS AG was the same.

→ Refer to the Organization Regulations of UBS Group AG at www.ubs.com/governance for more information on the authorities of the Group Executive Board

Responsibilities and authorities of the Group Asset and Liability Management Committee

The Group Asset and Liability Management Committee (Group ALCO), established by the GEB, is responsible for supporting the GEB in its responsibility to promote the usage of the Group's assets and liabilities in line with the Group's strategy, regulatory commitments and the interests of shareholders and other stakeholders. Group ALCO proposes the framework for capital management, capital allocation, funding and liquidity risk and proposes limits and targets for the Group to the BoD for approval. It oversees the balance sheet management of the Group, its business divisions and Corporate Center. The Organization Regulations additionally specify which powers of the GEB are delegated to the Group ALCO. In 2016, the Group ALCO held nine meetings for UBS Group AG and UBS AG.

Management contracts

We have not entered into management contracts with any companies or natural persons that do not belong to the Group.

Members of the Group Executive Board

As per our announcement of 11 May 2016, Lukas Gähwiler assumed a new strategic role as Chairman of Region Switzerland as of 1 September 2016. He stepped down from the GEB and from his role as President Personal & Corporate Banking and President UBS Switzerland. Martin Blessing, formerly CEO of Commerzbank AG until April 2016, succeeded Lukas Gähwiler in all of his roles and became a member of the GEB as of 1 September 2016.

In line with Swiss law, article 36 of UBS Group AG's Articles of Association (AoA) limits the number of mandates that members of the GEB may hold outside the UBS Group to one board membership in a listed company (other than UBS Group AG and UBS AG) and five additional mandates in non-listed companies. In addition, GEB members may hold no more than 10 mandates at the request of the company and eight mandates in associations, charitable organizations, foundations, trusts and employee welfare foundations. No member of the GEB reaches the threshold described in article 36 of the AoA.

The following biographies provide information on the GEB members currently in office. In addition to information on mandates, the biographies include memberships or other activities or functions, as required by the SIX Swiss Exchange Corporate Governance Directive.

At UBS AG, management of the business is also delegated, and the Executive Board, under the leadership of its President, has executive management responsibility for UBS AG and its business. All members of UBS Group AG's GEB are also members of UBS AG's Executive Board, with the exception of Mr. Blessing. Similarly to the Group ALCO, UBS AG's Asset and Liability Management Committee is responsible for promoting the usage of UBS AG's financial resources in line with the UBS AG and Group strategy and regulatory requirements.



Sergio P. Ermotti

Swiss, born 1960

Function at UBS Group AG
Group Chief Executive Officer

Professional history and education

Sergio P. Ermotti has been Group Chief Executive Officer of UBS Group AG since November 2014, having held the same position at UBS AG since November 2011 and on an interim basis between September and November 2011. Mr. Ermotti became a member of the GEB in April 2011 and was Chairman and CEO of UBS Group Europe, Middle East and Africa from April to November 2011. From 2007 to 2010, he was Group Deputy Chief Executive Officer at UniCredit, Milan, and was responsible for the strategic business areas of Corporate and Investment Banking, and Private Banking. He joined UniCredit in 2005 as Head of Markets & Investment Banking Division. Between 2001 and 2003, he worked at Merrill Lynch, serving as co-Head of Global Equity Markets and as a member of the Executive Management Committee for Global Markets & Investment Banking. He began his career with Merrill Lynch in 1987 and held various positions within equity derivatives and capital markets. Mr. Ermotti is a Swiss-certified banking expert and is a graduate of the Advanced Management Programme at Oxford University.

Other activities and functions

- Chairman of the Board of Directors of UBS Switzerland AG
- Chairman of the Board of Directors of UBS Business Solutions AG
- Chairman of the UBS Optimus Foundation Board
- Chairman of the Fondazione Ermotti, Lugano
- Chairman and President of the Board of the Swiss-American Chamber of Commerce
- Board member of the Fondazione Lugano per il Polo Culturale, Lugano
- Board member of the Global Apprenticeship Network
- Member of the Institut International d'Etudes Bancaires



Martin Blessing

German, born 1963

Functions at UBS Group AG
President Personal & Corporate Banking and President UBS Switzerland

Professional history and education

Martin Blessing is a member of the GEB of UBS Group AG. He was appointed President Personal & Corporate Banking and President UBS Switzerland as well as President of the Executive Board of UBS Switzerland AG in September 2016. Before joining UBS, he was CEO of Commerzbank AG from 2008 to April 2016. In his 15 years at Commerzbank, he held various senior management positions on Commerzbank's Executive Board: in 2008, he became Spokesman of the Executive Board; from 2004 to 2008, he was Head of Corporate Banking, and he was Head IT & Operations from 2006 to 2008. From 2001 to 2004, he was Head of Private Clients. From 2000 to 2001, Mr. Blessing served as CEO, Advance Bank of the Dresdner Bank. From 1997 to 2000, he acted as Dresdner's joint Head Private Clients. Mr. Blessing worked for McKinsey & Company from 1989 to 1996, the last two years as a partner. Mr. Blessing holds an MBA from the University of Chicago and graduated in 1987 in business administration from the University of St. Gallen.

Other activities and functions

- Executive Board member of Baden-Baden Entrepreneur Talks



Christian Bluhm

German, born 1969

Function at UBS Group AG
Group Chief Risk Officer

Professional history and education

Christian Bluhm became a member of the GEB and was appointed Group Chief Risk Officer of UBS Group AG and UBS AG in January 2016. He joined UBS from FMS Wertmanagement where he had been Chief Risk & Financial Officer since 2010 and Spokesman of the Executive Board from 2012 to 2015. From 2004 to 2009, he worked for Credit Suisse where he was Managing Director responsible for Credit Risk Management in Switzerland and Private Banking worldwide. Mr. Bluhm was Head of Credit Portfolio Management until 2008 and then Head of Credit Risk Management Analytics & Instruments after the financial crisis in 2008. From 2001 to 2004, he worked for Hypovereinsbank in Munich in Group Credit Portfolio Management, heading a team that specialized in Structured Finance Analytics. Before starting his banking career with Deutsche Bank in Credit Risk Management in 1999, he worked as a postdoctoral fellow at Cornell University in Ithaca and as a scientific assistant at the University of Greifswald. Mr. Bluhm holds a degree in mathematics and informatics from the University of Erlangen-Nuremberg and received his PhD in mathematics in 1996 from the same university.

Other activities and functions

- Board member of UBS Business Solutions AG
- Board member of UBS Switzerland AG



Markus U. Diethelm

Swiss, born 1957

Function at UBS Group AG
Group General Counsel

Professional history and education

Markus U. Diethelm has been Group General Counsel of UBS Group AG since November 2014, having held the same position at UBS AG since September 2008, when he became a member of the GEB. He was Executive Board member of UBS Business Solutions AG from 2015 to 2016. From 1998 to 2008, he served as Group Chief Legal Officer at Swiss Re, and he was appointed to the company's Group Executive Board in 2007. Prior to this, he was with Los Angeles-based law firm Gibson, Dunn & Crutcher and focused on corporate matters, securities transactions, litigation and regulatory investigations while working out of the firm's Brussels and Paris offices. From 1989 to 1992, he practiced at Shearman & Sterling in New York, specializing in mergers and acquisitions. In 1988, he worked at Paul, Weiss, Rifkind, Wharton & Garrison in New York. After starting his career in 1983 with Bär & Karrer, he served as a law clerk at the District Court of Uster in Switzerland from 1984 to 1985. Mr. Diethelm holds a law degree from the University of Zurich and a master's degree and a PhD from Stanford Law School. Mr. Diethelm is a qualified attorney-at-law admitted to the bar in Zurich, Geneva and in New York State.

Other activities and functions

- Board member of UBS Business Solutions AG
- Chairman of the Swiss-American Chamber of Commerce's legal committee
- Member of the Swiss Advisory Council of the American Swiss Foundation
- Member of the Foundation Council of the UBS International Center of Economics in Society
- Foundation Board member of the International Red Cross and Red Crescent Museum
- Member of the Professional Ethics Commission of the Association of Swiss Corporate Lawyers



Kirt Gardner

American (US), born 1959

Function at UBS Group AG
Group Chief Financial Officer

Professional history and education

Kirt Gardner became a member of the GEB and was appointed Group Chief Financial Officer of UBS Group AG and UBS AG in January 2016. He was CFO Wealth Management from 2013 to 2015. Prior to this, he held a number of leadership positions at Citigroup, including CFO and Head of Strategy within Global Transaction Services from 2010 to 2013, Head of Strategy, Planning and Risk Strategy for the Corporate and Institutional Division from 2006 to 2010 and Head of Global Strategy and Cost Management for the Consumer Bank from 2004 to 2006. Prior to this, he held the position of Global Head of Financial Services Strategy for BearingPoint, for which he worked in Asia and New York for four years. From 1994 to 2000, he was Managing Director with Barents Group, working in the US, Asia, Latin America and Europe. Mr. Gardner holds a bachelor's degree in economics from Williams College, a master's degree from the University of Pennsylvania and an MBA in finance from Wharton School.

Other activities and functions

- Board member of UBS Business Solutions AG



Sabine Keller-Busse

German and Swiss, born 1965

Function at UBS Group AG
Group Head Human Resources

Professional history and education

Sabine Keller-Busse became a member of the GEB of UBS Group AG and UBS AG in January 2016. She has been Group Head Human Resources since August 2014. Having joined UBS in 2010, she served as Chief Operating Officer UBS Switzerland until 2014. Prior to this, she led Credit Suisse's Private Clients Region Zurich division for two years. From 1995 to 2008, Ms. Keller-Busse worked for McKinsey & Company, where she had been Senior Partner since 2001. She started her professional career at Siemens AG in a trainee program, which she completed with a commercial diploma. Ms. Keller-Busse holds a master's degree in business administration from the University of St. Gallen and received a PhD in business administration from the same university.

Other activities and functions

- Board member of SIX Group (Chairman of the nomination & compensation committee)
- Foundation Board member of the UBS Pension Fund
- Foundation Board member of the University Hospital Zurich



Ulrich Körner

German and Swiss, born 1962

Functions at UBS Group AG

President Asset Management and President UBS Europe, Middle East and Africa

Professional history and education

Ulrich Körner has been President Asset Management of UBS Group AG (formerly CEO Global Asset Management) since November 2014, having held the same position at UBS AG since January 2014. He became a member of the GEB in April 2009 and was Group Chief Operating Officer from 2009 to 2013. In addition, he was appointed President UBS Europe, Middle East and Africa (formerly CEO of UBS Group Europe, Middle East and Africa) in December 2011. In 1998, Mr. Körner joined Credit Suisse. He served as a member of the Credit Suisse Group Executive Board from 2003 to 2008, holding various management positions, including CFO and Chief Operating Officer. From 2006 to 2008, he was responsible for the entire Swiss client business as CEO Credit Suisse Switzerland. Mr. Körner received a PhD in business administration from the University of St. Gallen and served for several years as an auditor at Price Waterhouse and as a management consultant at McKinsey & Company.

Other activities and functions

- Member of the Supervisory Board of UBS Europe SE
- Chairman of the Foundation Board of the UBS Pension Fund
- Chairman of the Widder Hotel, Zurich
- Vice President of the Board of Lyceum Alpinum Zuoz
- Member of the Financial Service Chapter Board of the Swiss-American Chamber of Commerce
- Advisory Board member of the Department of Banking and Finance at the University of Zurich
- Member of the business advisory council of the Laureus Foundation Switzerland



Axel P. Lehmann

Swiss, born 1959

Function at UBS Group AG

Group Chief Operating Officer

Professional history and education

Axel P. Lehmann became a member of the GEB and was appointed Group Chief Operating Officer of UBS Group AG and UBS AG in January 2016. He has been President of the Executive Board of UBS Business Solutions AG since March 2016. He was a member of the BoD of UBS AG from 2009 to 2015 and of UBS Group AG from 2014 to 2015. During his entire tenure on the Board, he had been a member of the Risk Committee and, from 2011 to 2013, a member of the Governance and Nominating Committee. Mr. Lehmann became a member of Zurich Insurance Group's (Zurich) Group Executive Committee in 2002, holding various management positions, including CEO for the European and North America businesses, and from 2008 to 2015 as Chief Risk Officer with additional responsibilities for Group IT, as Regional Chairman for Europe, Middle East and Africa and Chairman for Farmers Group Inc. In 2001, he was appointed CEO for Northern, Central and Eastern Europe and Zurich Group Germany, having served as a member of the company's Group Management Board since 2000 with responsibility for group-wide business development functions. In 1996, he joined Zurich as a member of the Executive Committee of Zurich Switzerland and subsequently held various executive management and corporate development positions within Zurich Switzerland. Prior to joining Zurich, Mr. Lehmann was head of corporate planning and controlling at Swiss Life, project manager and Vice President of the Institute of Insurance Economics at the University of St. Gallen and a visiting professor at Bocconi University in Milan. Mr. Lehmann holds a PhD and a master's degree in business administration and economics from the University of St. Gallen. He is also a graduate of the Wharton Advanced Management Program and an honorary professor of business administration and service management at the University of St. Gallen.

Other activities and functions

- Board member of UBS Business Solutions AG
- Co-Chair of the Global Future Council of the Future of Financial and Monetary Systems of WEF
- Chairman of the Board of the Institute of Insurance Economics at the University of St. Gallen
- Member of the International and Alumni Advisory Board at the University of St. Gallen
- Member of the Swiss-American Chamber of Commerce Chapter Doing Business in USA



Tom Naratil

American (US), born 1961

Functions at UBS Group AG

President Wealth Management Americas and President UBS Americas

Professional history and education

Tom Naratil became President Wealth Management Americas and President UBS Americas of UBS Group AG and UBS AG in January 2016. He became a member of the GEB in June 2011 and was Group CFO of UBS AG from 2011 to 2015. He held the same position for UBS Group AG from 2014 to 2015. In addition to the role of Group CFO, he was Group Chief Operating Officer from 2014 to 2015. He was President of the Executive Board of UBS Business Solutions AG from 2015 to March 2016. He served as CFO and Chief Risk Officer of Wealth Management Americas from 2009 until his appointment as Group CFO in 2011. Before 2009, he held various senior management positions within UBS, including heading the Auction Rate Securities Solutions Group during the financial crisis in 2008. He was named Global Head of Marketing, Segment & Client Development in 2007, Global Head of Market Strategy & Development in 2005, and Director of Banking and Transactional Solutions, Wealth Management USA, in 2002. During this time, he was a member of the Group Managing Board. He joined Paine Webber Incorporated in 1983 and after the merger with UBS became Director of the Investment Products Group. Mr. Naratil holds an MBA in economics from New York University and a Bachelor of Arts in history from Yale University.

Other activities and functions

- Chairman of UBS Americas Holding LLC
- Board member of the American Swiss Foundation
- Board member of the Clearing House Supervisory Board
- Member of the Board of Consultants for the College of Nursing at Villanova University



Andrea Orcel

Italian, born 1963

Function at UBS Group AG
President Investment Bank

Professional history and education

Andrea Orcel has been President Investment Bank of UBS Group AG (formerly CEO Investment Bank) since November 2014, having held the same position for UBS AG since November 2012. He became a member of the GEB in July 2012 and was co-CEO of the Investment Bank from July to November 2012. In January 2016, he was appointed Senior Officer Outside of Australia for UBS Australia Branch, and since December 2014, he has additionally held the position as Chief Executive for UBS Limited and UBS AG London Branch. He joined UBS from Bank of America Merrill Lynch, where he had been Executive Chairman Investment Bank since 2009, President of Emerging Markets (excluding Asia) since 2010 and CEO of European Card Services since 2011. Prior to the acquisition of Merrill Lynch by Bank of America, Mr. Orcel was a member of Merrill Lynch's global management committee and Head of Global Origination, which combined Investment Banking and Capital Markets. He held a number of other leadership positions, including President of Global Markets & Investment Banking for Europe, Middle East and Africa (EMEA) and Head of EMEA Origination beginning in 2004. Between 2003 and 2007, he led the Global Financial Institutions Group, of which he had been part since joining Merrill Lynch in 1992. Prior to this, he worked at Goldman Sachs and the Boston Consulting Group. Mr. Orcel holds an MBA from INSEAD and a degree in economics and commerce, summa cum laude, from the University of Rome.

Other activities and functions

- Board member of UBS Limited
- Board member of UBS Americas Holding LLC



Kathryn Shih

British, born 1958

Function at UBS Group AG
President UBS Asia Pacific

Professional history and education

Kathryn Shih became a member of the GEB of UBS Group AG and UBS AG and was appointed President UBS Asia Pacific in January 2016. She has been Head Wealth Management Asia Pacific since 2002. She was CEO of UBS Hong Kong from 2003 to 2008. Prior to this, she held various leadership positions in Wealth Management Asia Pacific. She has been with the firm for nearly 30 years, since joining Swiss Bank Corporation in 1987 as a client advisor and then serving as Head Private Banking from 1994 to 1998. In the 1980s, Ms. Shih worked for Citibank in the Consumer Services Group and as an executive trainee with PCI Capital Asia Ltd. She conferred as a Certified Private Wealth Professional by the Private Wealth Management Association, Hong Kong, in 2015 and as a Certified Financial Planner from the Institute of Financial Planners, Hong Kong, in 2001 and completed the Advanced Executive Program at Northwestern University in 1999. Ms. Shih holds a bachelor of arts degree from Indiana University in the US and a master's degree in business management from the Asian Institute of Management in the Philippines.

Other activities and functions

- Board member of Kenford International Ltd.
- Board member of Shih Co Charitable Foundation Ltd.
- Board member of Zygate Group Ltd.
- Member of the Hong Kong Trade Development Council (Financial Services Advisory Committee)



Jürg Zeltner

Swiss, born 1967

Function at UBS Group AG
President Wealth Management

Professional history and education

Jürg Zeltner became President of Wealth Management of UBS Group AG (formerly CEO of UBS Wealth Management) in November 2014, having held the same position for UBS AG since January 2012. He became a member of the GEB in February 2009, and until January 2012, he served as co-CEO of UBS Wealth Management & Swiss Bank. In November 2007, he was appointed as Head of Wealth Management North, East & Central Europe. From 2005 to 2007, he was CEO of UBS Deutschland, Frankfurt, and, prior to this, he held various management positions in the former Wealth Management division of UBS. Between 1987 and 1998, he was with Swiss Bank Corporation in various roles within the Private and Corporate Client division in Berne, New York and Zurich. Mr. Zeltner holds a diploma in business administration from the College of Higher Vocational Education in Berne and is a graduate of the Advanced Management Program at Harvard Business School.

Other activities and functions

- Board member of the German-Swiss Chamber of Commerce
- Member of the IMD Foundation Board, Lausanne

Change of control and defense measures

We refrain from restrictions regarding change of control and defense measures that would hinder developments initiated in, or supported by, the financial markets. We also do not have any specific defenses in place to prevent hostile takeovers.

Duty to make an offer

According to the Swiss Financial Market Infrastructure Act, an investor who has acquired more than 33⅓% of all voting rights of a company listed in Switzerland (directly, indirectly or in concert with third parties), whether they are exercisable or not, is required to submit a takeover offer for all listed shares outstanding. We have not elected to change or opt out of this rule.

Clauses on change of control

Neither the employment agreement with the Chairman of the BoD nor any employment contracts with the GEB members or employees holding key functions within the company (Group Managing Directors) contain change of control clauses.

All employment contracts with GEB members stipulate a notice period of six months. During the notice period, GEB members are entitled to their salaries and the continuation of existing employment benefits and may be eligible to be considered for a discretionary performance award based on their contribution during the time worked.

In case of a change of control, we may, at our discretion, accelerate the vesting of and / or relax applicable forfeiture provisions of employees' awards, and defer lapse date of options or stock appreciation rights.

→ **Refer to the "Compensation" section of this report for more information**

Auditors

Audit is an integral part of corporate governance. While safeguarding their independence, the external auditors closely coordinate their work with Group Internal Audit. The Audit Committee, and ultimately the Board of Directors (BoD), supervises the effectiveness of audit work.

→ Refer to “Board of Directors” in this section for more information on the Audit Committee

External independent auditors

At the Annual General Meeting (AGM) of shareholders in 2016, Ernst & Young Ltd (EY) were re-elected as auditors for the Group for a one-year term of office. EY assume virtually all auditing functions according to laws, regulatory requests and the Articles of Association. Since 2015, Marie-Laure Delarue has been the EY lead partner in charge of the Group financial audit and her incumbency is limited to five years. Since 2016, Ira S. Fitlin has been the co-signing partner for the financial statement audit, with an incumbency limit of seven years. Patrick Schwaller has been the Lead Auditor to the Swiss Financial Market Supervisory Authority (FINMA) since 2015, with an incumbency limited to six years due to prior audit service to UBS in another role. Marc Ryser has been the co-signing partner for the FINMA audit since 2012, with an incumbency limit of seven years.

During 2016, the Audit Committee held 10 meetings and calls with the external auditors. In addition, one training session was held.

Special auditor for capital increase

At the AGM on 7 May 2015, BDO AG were reappointed as special auditors for a three-year term of office. The special auditors provide audit opinions in connection with capital increases independently from the auditors.

Fees paid to external independent auditors

The fees (including expenses) paid to EY are set forth in the table below. In addition, EY received CHF 26.0 million in 2016 (CHF 29.3 million in 2015) for services performed on behalf of our investment funds, many of which have independent fund boards or trustees.

Audit work includes all services necessary to perform the audit for the Group in accordance with applicable laws and generally accepted auditing standards, as well as other assurance services that conventionally only the auditor can provide. These include statutory and regulatory audits, attest services and the review of documents to be filed with regulatory bodies. The additional services classified as audit in 2016 included several engagements for which EY were mandated at the request of FINMA.

Fees paid to external independent auditors

UBS Group AG and its subsidiaries (including UBS AG) paid the following fees (including expenses) to its external independent auditors.

CHF thousand	31.12.16	31.12.15
Audit		
Global audit fees	49,585	45,516
Additional services classified as audit (services required by law or statute, including work of a non-recurring nature mandated by regulators)	9,214	14,191
Total audit	58,799¹	59,707
Non-audit		
Audit-related fees	7,685	8,684
<i>of which: assurance and attest services</i>	2,893	3,327
<i>of which: control and performance reports</i>	4,177	5,260
<i>of which: consultation concerning financial accounting and reporting standards</i>	615	96
Tax services	1,747	3,088
Other	1,051	1,102
Total non-audit	10,484¹	12,874

¹ Of the total audit and non-audit fees of CHF 69,283 thousand for UBS Group AG (consolidated), CHF 67,483 thousand relates to UBS AG (consolidated).

Audit-related work comprises assurance and related services that are traditionally performed by the auditor, such as attest services related to financial reporting, internal control reviews, performance standard reviews and consultation concerning financial accounting and reporting standards.

Tax work involves services performed by professional staff in EY's tax division and includes tax compliance and tax consultation with respect to our own affairs.

"Other" services are permitted services which include technical IT security control reviews and assessments.

Preapproval procedures

To ensure EY's independence, all services provided by EY have to be preapproved by the Audit Committee. A preapproval may be granted either for a specific mandate or in the form of a blanket preapproval authorizing a limited and well-defined type and amount of services.

The Audit Committee has delegated preapproval authority to its Chairperson, and the Group Chief Financial Officer (Group CFO) and Group Controller and Chief Accounting Officer submit all proposals for services by EY to the Chairperson of the Audit Committee for approval, unless there is a blanket preapproval in place. At each quarterly meeting, the Audit Committee is informed of the approvals granted by its Chairperson and of services authorized under blanket preapprovals.

Group Internal Audit

Group Internal Audit (GIA) performs the internal auditing function for the Group (including UBS AG, where it is referred to as Internal Audit) and in 2016 operated with an approved headcount of 365 personnel. It is an independent and objective function that supports the Group in achieving its strategic, operational, financial and compliance objectives, and the BoD in

discharging its governance responsibilities. GIA provides assurance by assessing the reliability of financial and operational information, effectiveness of processes for compliance with legal, regulatory and statutory requirements. Audit reports that include significant issues are provided to the Group CEO, relevant GEB members and other responsible management. The Chairman, Audit Committee and Risk Committee of the BoD are also regularly informed of such issues.

In addition, GIA assures whether issues with moderate to significant impact have been successfully remediated. This responsibility applies to issues identified by all sources: business management (first line of defense), control functions (second line of defense), GIA (third line of defense), external auditors and regulators. GIA also cooperates closely with risk control functions and internal and external legal advisors on investigations into major control issues.

To maximize GIA's independence from management, the Head of GIA reports to the Chairman of the BoD and to the Audit Committee, which assesses annually whether GIA has sufficient resources to perform its function, as well as its independence and performance. GIA's role, position, responsibilities and accountability are set out in our Organization Regulations and the Charter for Group Internal Audit, published at www.ubs.com/governance. The latter also applies to UBS AG's internal audit function. GIA has unrestricted access to all accounts, books, records, systems, premises and personnel, and must be provided with all information and data that it needs to fulfill its auditing duties. The Audit Committee may order special audits to be conducted, and other BoD members, committees or the Group CEO may request such audits in consultation with the Audit Committee.

GIA enhances the efficiency of its work through coordination and close cooperation with the external auditors.

Information policy

We provide regular information to our shareholders and to the financial community.

Financial reports for UBS Group AG will be published as follows

First quarter 2017	28 April 2017
Second quarter 2017	28 July 2017
Third quarter 2017	27 October 2017

The Annual General Meeting of shareholders of UBS Group AG will take place as follows

2017	4 May 2017
2018	3 May 2018

→ Refer to the corporate calendar at www.ubs.com/investors for future financial report publication and other key dates, including UBS AG's financial report publication dates

We meet with institutional investors worldwide throughout the year and regularly hold results presentations, attend and present at investor conferences and, from time to time, host investor days. When possible, investor meetings are hosted by senior management and are always attended by members of our Investor Relations team. We use various technologies such as webcasting, audio links and cross-location video conferencing to widen our audience and maintain contact with shareholders globally.

We make our publications available to all shareholders simultaneously to ensure they have equal access to our financial information.

Registered shareholders may opt to receive a physical copy of our annual report or our annual review, which reflects on specific initiatives and achievements of the Group and provides an overview of the Group's activities during the year as well as key financial information. Shareholders can also request UBS Group AG's quarterly financial reports, or download our financial publications electronically at www.ubs.com/investors. In addition, shareholders can change their subscription preferences at www.ubs.com/shareholderportal.

→ Refer to www.ubs.com/investors for a complete set of published reporting documents and a selection of senior management industry conference presentations

→ Refer to the "Information sources" section of this report for more information

Financial disclosure principles

We fully support transparency and consistent and informative disclosure. We aim to communicate our strategy and results in a manner that allows stakeholders to gain a good understanding of how our Group works, what our growth prospects are and the risks our businesses and our strategy entail. We assess feedback from analysts and investors on a regular basis and, where appropriate, reflect this in our disclosures. To continue achieving these goals, we apply the following principles in our financial reporting and disclosure:

- *Transparency* that enhances the understanding of economic drivers and builds trust and credibility
- *Consistency* within each reporting period and between reporting periods
- *Simplicity* that allows readers to gain a good understanding of the performance of our businesses
- *Relevance* by focusing not only on what is required by regulation or statute but also on what is relevant to our stakeholders and
- *Best practice* that leads to improved standards

Consistent with our financial reporting and disclosure principles, our financial reports contain disclosures aligned with the recommendations issued by the Enhanced Disclosure Task Force (EDTF) in its "Enhancing the Risk Disclosures of Banks" report on 29 October 2012. We regard the improvement of our disclosures as an ongoing commitment.

→ Refer to our EDTF index under "Annual reporting" at www.ubs.com/investors for more information on the location of relevant disclosures in line with the EDTF recommendations within our Annual Report or Pillar 3 report 2016

Financial reporting policies

We report our Group's results at the end of every quarter, including a breakdown of results by business division and disclosures or key developments relating to risk management and control, capital, liquidity and funding management. Each quarter, we publish quarterly financial reports for UBS Group AG on the same day as the earnings releases.

UBS Group AG's and UBS AG's consolidated financial statements are prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

→ **Refer to "Note 1 Summary of significant accounting policies" in the "Consolidated financial statements" section of this report for more information on the basis of accounting**

We are committed to maintaining the transparency of our reported results and to permit analysts and investors to make meaningful comparisons with prior periods. If there is a major reorganization of our business divisions or if changes to accounting standards or interpretations lead to a material change in the Group's reported results, our results are restated for previous periods as required by applicable accounting standards. These restatements show how our results would have been reported on the new basis and provide clear explanations of all relevant changes.

US disclosure requirements

As a foreign private issuer, we must file reports and other information, including certain financial reports, with the US Securities and Exchange Commission (SEC) under the US federal securities laws. We file an annual report on Form 20-F and furnish our quarterly financial reports and other material information under cover of Form 6-K to the SEC. These reports are available at www.ubs.com/investors and on the SEC's website at www.sec.gov.

An evaluation was carried out under the supervision of management, including the Group CEO, Group CFO and the Group Controller and Chief Accounting Officer, on the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15e) under the US Securities Exchange Act of 1934. Based on that evaluation, the Group CEO and Group CFO concluded that our disclosure controls and procedures were effective as of 31 December 2016. No significant changes have been made to our internal controls or to other factors that could significantly affect these controls subsequent to the date of their evaluation.

→ **Refer to the "Consolidated financial statements" section of this report for more information**

UBS and Society

As a leader in sustainability in the financial industry, we focus on the long term and work to create value for our stakeholders. We are committed to promoting the common good by being proactive, purposeful and accountable. Our UBS and Society organization coordinates all our activities and capabilities in sustainable investing (SI) and philanthropy, environmental and human rights policies governing client and supplier relationships, our own environmental footprint, as well as our firm's community investment.

We succeed as an organization by generating long-term, sustainable and measurable benefits for our clients, shareholders and communities. Our thinking and acting in this regard are embedded in one of our firm's Principles, namely sustainable performance, and we focus on ensuring that our investment-related activities take into consideration long-term sustainability and the broader perspective.

We are continuously looking for better ways to do business and support our clients and communities. Our concept of stewardship goes beyond our clients' assets, to encompass taking care of what we leave behind for future generations. This means that we also measure our performance relating to the environment, good governance, our social impact and other key components of sustainability. To this end, we assess our progress against the following overarching aims:

UBS and Society overarching aims and selection of key targets

- 1 Making sustainability the **everyday standard** across the firm**
 - Retain favorable position of UBS in key ESG ratings
- 2 Making sustainable performance part of **every client conversation****
 - Conduct conversations with key institutional clients about ESG themes and expectations
- 3 Supporting clients in channeling a **growing portion of their assets** toward addressing societal challenges, including through innovative financial mechanisms**
 - Business divisions and areas to explore and launch innovative financial products and services
- 4 **Training** employees on sustainability**
 - Execute divisional trainings in order to support implementation of Mainstreaming Sustainable Performance initiative
- 5 Creating a **credible sustainability approach****
 - Execute action plans for integrating ESG factors across UBS's core investment processes
 - Further moving UBS Annual Review toward integrated reporting
- 6 Measuring the **impact** of our **community investment** activities**
 - Track and monitor data set showing impact of Community Affairs-related activities / projects
- 7 Supporting the **transition to a low-carbon economy** through our comprehensive climate change strategy**
 - Execute on 2020 greenhouse gas reduction target and operational environmental targets, including the execution of the RE100 plan
 - Investigate emerging methodologies and forward-looking climate change disclosure

We organize UBS and Society via three pillars: how we do business, how we support our clients and how we support our communities.

→ Refer to www.ubs.com/ubsandsociety for more information

How we do business

Strong, well-understood principles and policies are the foundation for empowering our people to operate in a manner that meets the expectations of our stakeholders. We also recognize that we have a role to play in leading debates on important societal topics and in collaborating to set high standards in and beyond our industry.

Governance

Our Board of Directors' (BoD's) Corporate Culture and Responsibility Committee (CCRC) monitors the current state and implementation of the Group's programs and initiatives pertaining to corporate culture and corporate responsibility. It also regularly reviews stakeholder expectations and concerns about UBS's societal performance and corporate culture. The CCRC's function is forward-looking in that it monitors and reviews societal trends and transformational developments and assesses their potential relevance to the Group. The Group Chief Executive Officer (Group CEO) and the Global Head of UBS and Society are permanent guests of the committee. In 2016, the regional Presidents attended two of the six yearly CCRC meetings as guests.

The Global Head of UBS and Society leads the execution and further development of UBS and Society.

The UBS and Society Operating Committee oversees and coordinates the execution of UBS and Society at Group Executive Board (GEB) level. In 2016, the committee was chaired by the Wealth Management and Asia Pacific Presidents.

The Global Environmental & Social Risk Committee, at GEB level, defines the environmental and social risk (ESR) framework and independent controls that align UBS's ESR appetite with UBS and Society. It is chaired by the Group Chief Risk Officer, who is responsible for the development and implementation of principles and appropriate independent control frameworks for ESR within UBS.

The business divisions set, develop and execute relevant annual objectives for UBS and Society initiatives. Corporate Center defines the annual objectives related to in-house environmental and responsible supply chain management. Objectives related to Community Affairs are developed and executed at regional level, within the global framework of the UBS and Society program.

→ Refer to "Board of Directors" in the "Corporate governance" section of this report for more information

→ Refer to the Organization Regulations of UBS Group AG at www.ubs.com/governance for the charter of the CCRC

→ Refer to the 2017 GRI objectives of UBS at www.ubs.com/gri for more information

UBS and Society



Key principles and policies

The principles and standards set out in our Code of Conduct and Ethics (Code) apply to all aspects of our business and the way we engage with our stakeholders. The Code aims to support a culture where ethical and responsible behavior is ingrained. All employees have to confirm annually that they have read the Code and other key documents and policies. In 2016, we continued training and raising employee awareness of the Code, including through a mandatory conduct and culture training module.

The CCRC oversees the annual review of the Code by the GEB and the BoD. Following the 2015 / 2016 review, the current Code was published in mid-2016.

→ **Refer to the UBS Code of Conduct and Ethics at www.ubs.com/code for more information**

The Code incorporates key components of UBS and Society, notably managing environmental and social risks, investing sustainably, and contributing to the well-being of our local communities to promote our goal of generating long-term, sustainable and measurable benefits for our clients, shareholders and communities.

The scope, principles, responsibilities and structure of UBS and Society are set out in more detail in our UBS and Society policy.

→ **Refer to www.ubs.com/ubsandsociety-policy for more information**

Stakeholder relations and employee engagement

The activities we describe in this section are designed to identify and enable us to address the key points at which UBS is able to exert a positive impact on society and the environment. Our

regular engagement with a wide range of stakeholders and many significant external organizations and initiatives supports us in this important process.

In addition, our annual UBS Materiality Assessment, as defined by the Global Reporting Initiative (GRI), helps us capture the views of our stakeholders on the topics they regard as most relevant to our firm.

Our GRI-based Materiality Assessment draws on formal and informal monitoring, from our dialog with stakeholders and from relevant external studies and reports. The results of the assessment are captured in a GRI-based materiality matrix that distills the views of the stakeholders with whom we interact. It covers 25 topics, the top-rated being, as in 2015, "conduct and culture," "client protection" and "financial stability and resilience."

Actively engaging employees is a critical factor in the successful execution of the UBS and Society strategy. This ranges from sustainability-related training and awareness raising activities, including on sustainable investing to about 1,200 employees in our wealth management businesses in 2016, to the Grand Challenge, a major UBS and Society initiative, in which more than 1,200 employees took part and came up with 245 proposals for innovative financial solutions to help address some of society's biggest challenges.

→ **Refer to www.ubs.com/materiality for the UBS 2016 GRI-based materiality matrix and for more information on the assessment process**

→ **Refer to the "Our employees" section of this report for more information on our firm's culture and employees**

Advancing sustainability in the financial sector – UBS's key activities in 2016

Initiative	Focus topic	Role / activity of UBS	Key outcome of initiative in 2016
UN Global Compact (UNGC)	Sustainable Development Goals (SDGs)	Keynote speech by UBS Chairman at UNGC Leaders Summit on the financial sector's role in implementing the SDGs	Call to action for companies to integrate SDGs in their activities
G20 Green Finance Study Group (GFSG)	Green finance	UBS case study on climate change stress testing presented at GFSG meeting and included in input paper for G20 summit	Input paper <i>Environmental risk analysis by financial institutions – a review of global practice</i>
UN Environment Programme (UNEP)	Sustainable financial system	Member of Swiss team and contributor to Swiss report <i>Proposals for a Roadmap towards a Sustainable Financial System in Switzerland</i>	Report <i>UNEP Inquiry: Design of a Sustainable Financial System</i>
Financial Stability Board (FSB) Task Force on Climate-related Financial Disclosures (TCFD)	Climate change	Member of TCFD and feedback provider on its draft reports	TCFD recommendations
European Financial Services Round Table (EFR)	Climate change	UBS Chairman signed the <i>Call for a strong, ambitious implementation of the Paris Agreement (Call)</i> UBS case study on climate change	<i>Call</i> document submitted for the 22 nd Conference of the Parties (COP)
Natural Capital Finance Alliance (NCFA)	Natural capital	Project partner to pilot test drought scenarios in bank portfolios	Drought stress testing tool and report under development
Natural Capital Finance Alliance (NCFA)	Natural capital	Member of technical advisory panel	Project launch in Switzerland (hosted by UBS)
National Action Plan (NAP) Switzerland	Human rights	Participant in multi-stakeholder consultation process	Publication of NAP
Thun Group of Banks	Human rights	Convener of Group	Discussion paper on the implications of UN Guiding Principles 13 and 17 (January 2017)
Organisation for Economic Co-operation and Development (OECD)	Due diligence	Member of the advisory board of the OECD Responsible Business Conduct project	OECD paper on responsible business conduct for institutional investors
Principles for Responsible Investing (PRI)	Proxy voting	Co-lead of PRI collaboration platform <i>Exploring the proxy voting chain</i>	Publication of findings
Policy Outlook (POLO) Platform	Sustainability regulation	Co-convener of Platform	Platform's first annual roundtable
WWF Banking on World Heritage Sites	UNESCO (natural) world heritage sites	Participant in WWF-organized workshops	Assessment of banks' policies wording and implementation

Environmental and social risk assessments

	GRI ¹	For the year ended		% change from
		31.12.16	31.12.15	31.12.14
Cases referred for assessment ²	FS2	2,671	2,192	1,812
by region				
Americas	FS2	395	295	354
Asia Pacific	FS2	556	520	317
Europe, Middle East and Africa	FS2	341	257	297
Switzerland	FS2	1,379	1,120	844
by business division				
Wealth Management	FS2	429	396	291
Wealth Management Americas	FS2	20	20	21
Personal & Corporate Banking	FS2	1,226	980	749
Asset Management	FS2	2	0	7
Investment Bank	FS2	971	776	654
Corporate Center ³	FS2	23	20	90

¹ Global Reporting Initiative (refer to www.globalreporting.org). FS stands for the performance indicators defined in the GRI Financial Services Sector Supplement. ² Transactions and client onboarding requests referred to and assessed by environmental and social risk function. ³ Relates to procurement / sourcing of products and services.

Management of environmental and social risks

We use our ESR framework to assess and manage potential adverse effects on the environment and on human rights, as well as any associated environmental and social risks to which our clients' and our own assets may be exposed. Our comprehensive ESR standards, which are regularly reviewed by our Global ESR Committee, govern client and supplier relationships and are enforced Group-wide.

We have set ESR standards in product development, investments, financing and for supply chain management decisions. As part of our due diligence process we engage with clients and suppliers to better understand their processes and policies and to explore how any environmental and social risks may be mitigated. We avoid transactions, products, services, activities or suppliers if they are associated with material environmental and social risks that cannot be properly assessed or mitigated. Our ESR standards include the description of controversial activities and other areas of concern we will not engage in, or we will only engage in under stringent criteria, as outlined below. We will not do business with a counterparty or an issuer that in our judgment does not address environmental or social issues in an appropriate and responsible manner.

Our standard risk, compliance and operations processes involve procedures and tools for identifying, assessing and monitoring environmental and social risks. These include client onboarding, transaction due diligence, product development and investment decision processes, own operations, supply chain management and portfolio reviews. These processes are geared toward identifying clients, transactions or suppliers potentially in breach of our standards or otherwise subject to significant environmental and human rights controversies. Advanced data analytics on companies associated with such risks is integrated into the web-based compliance tool we use before we enter into a client or supplier relationship, or transaction. The systematic nature of this tool significantly enhances our ability to identify potential risk. In 2016, 2,671 referrals were assessed by our environmental and social risk unit, of which 83 were rejected or not further pursued,

258 were approved with qualifications and 26 were pending.

→ Refer to www.ubs.com/esr for more information

We will not do business if associated with severe environmental or social damage to or through the use of:	We will only do business under stringent criteria in the following areas:
<ul style="list-style-type: none"> – UNESCO world heritage sites – Wetlands, endangered species – High conservation value forests, illegal logging and use of fire – Child labor, forced labor, indigenous peoples' rights 	<ul style="list-style-type: none"> – Soft commodities: palm oil, soy, timber – Power generation: coal-fired power plants, large dams, nuclear power – Extractives: hydraulic fracturing, oil sands, arctic drilling, coal mining, precious metals, diamonds

Climate change strategy

Our climate change strategy is part of the UBS and Society governance, overseen by the CCRC. We focus on risk management, investments, financing, research and our own operations. We identify and manage climate-related risks and opportunities as part of our ISO 14001-certified environmental management system. At portfolio level, we regularly review sensitive sectors and activities, and we also estimate our firm's vulnerability to climate change risks using scenario-based stress testing approaches and other forward-looking portfolio analyses.

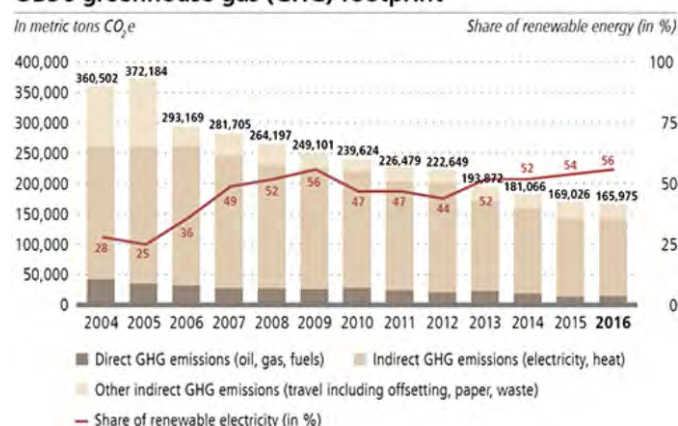
In December 2016, the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) provided its guidance on climate-related disclosures, which UBS welcomes and supports. While we will fully evaluate the TCFD's recommendations for our 2017 disclosure, our climate change strategy already encompasses the four thematic areas covered by the TCFD's recommendations, namely governance, strategy, risk management, and metrics and targets.

→ Refer to www.ubs.com/climate for more information on our climate change strategy

In-house environmental management

We manage our environmental program through an environmental management system in accordance with the ISO 14001 standard. In addition, our greenhouse gas (GHG) emissions data is externally verified on the basis of ISO 14064 standards. Our environmental program encompasses investments in sustainable real estate and efficient information technology, energy and water efficiency, paper and waste reduction and recycling, the use of environmentally friendly products, such as renewable energy or recycled paper, and business travel and employee commuting reduction.

UBS's greenhouse gas (GHG) footprint



We set quantitative targets to reduce UBS's Group-wide CO₂ emissions and the environmental impact of our operations. In support of our commitment to RE100, a global initiative that encourages multinational companies to make a commitment to using 100% renewable power by 2020, we have committed to sourcing 100% of the firm's electricity from renewable sources by 2020. This will reduce the firm's GHG footprint by 75% by 2020 compared with 2004 levels.

In 2016, we further reduced UBS's GHG emissions by 1.8%, or 2.8% per full-time employee, year on year. We recorded a total reduction of 54% from baseline year 2004. In 2016, we reduced our energy consumption by more than 14% compared with 2012, thus outperforming our target of a 10% reduction by 2016. In 2016, 55.6% of UBS's worldwide electricity consumption was sourced from renewable energy.

→ Refer to www.ubs.com/environment for more information on our environmental targets and performance

Responsible supply chain management

We aim to reduce negative environmental and social effects of the goods and services UBS purchases, and we engage with suppliers to promote responsible practices. Our responsible supply chain management (RSCM) principles embed UBS's ethics and values in our interactions with our suppliers, contractors and service partners. We apply an RSCM framework to identify, assess and monitor supplier practices with regard to human and labor rights, the environment, health and safety, and anti-corruption principles. In 2016, remediation measures were requested for 40% of suppliers of newly sourced goods and services with potentially high impact to improve their adherence to UBS's RSCM standards.

→ Refer to www.ubs.com/rscm for more information

Sustainability ratings and recognitions¹

Ratings and recognitions	Scope	UBS result
Dow Jones Sustainability Indices (DJSI)	Environmental, Social and Governance (ESG) performance	Industry Group Leader Index member of DJSI World and DJSI Europe
FTSE4Good Index	ESG performance	Index member
CDP	Climate change	Climate A List
Sustainalytics	ESG performance	ranked eighth among 249 sector peers
MSCI	ESG performance	BBB score
STOXX ESG Leaders Index	ESG performance	Index member
Oekom	ESG performance	Corporate responsibility prime status
GRESB	Sustainability assessment of real estate (RE) equity and RE debt funds	<ul style="list-style-type: none"> Green Star status for 14 AM Global equity funds Highest rating (five stars) for 7 out of 14 funds
GRESB	Sustainability assessment of infrastructure funds	<ul style="list-style-type: none"> UBS International Infrastructure Fund (IIF I) ranked first for infrastructure funds globally IIF I and IIF II top-ranked in Management & Policy rankings
Bloomberg New Energy Finance	Ranking of global renewable energy and cleantech financing	<ul style="list-style-type: none"> ranked third in the Public Markets co-lead manager category ranked fifteenth in the M&A financial adviser category
UK Stewardship Code	Quality of asset manager's reporting as regards the UK Stewardship Code's seven principles and supporting guidance	Tier 1 signatory
Better Society Award (UK)	Partnership with a national charity	Winner
National CSR Award (UK)	Best Community Development	Winner
Company for Good	Driving corporate giving in Singapore	Founding Member (status by invitation only)

¹ All information provided is as of 31 December 2016.

Ratings and recognitions

Our commitment and progress in the area of sustainability are reflected in important external ratings, rankings and recognitions. In 2016, our firm maintained its leadership position in the Diversified Financials industry group of the Dow Jones Sustainability Indices (DJSI), the most widely recognized sustainability rating. The DJSI evaluates companies' sustainability practices and recognizes the best performers. The Industry Group Leader report for UBS explains that, through the implementation of UBS and Society, UBS ensures that it fulfills its commitment to provide consistent and sustainable returns to its clients, while also promoting ethical practices for the common good. It highlights innovative financial products launched by UBS, cites the firm as exemplary in social and environmental reporting practices and emphasizes UBS's impressive progress in mitigating risk.

How we support our clients

In 2016, we made a commitment to ensure that all of our investment activities take into consideration long-term and broader perspectives that can be relevant for investment performance.

Our clients increasingly want financial advice as well as the right products in order to use their resources to address societal issues. As the world's largest wealth manager, we are well placed to provide this support, based on a consistent Group-wide approach.

Sustainable investments

As of 31 December 2016, sustainable investments increased to CHF 976 billion compared with CHF 934 billion as of the end of 2015, representing 35% of our total invested assets. Major increases in relative terms were observed among our integration and impact investments, which increased 64% and 228%, respectively, compared with 2015.

Key sustainable investing products and services in 2016 (select)

Product / service	Business division	Key features
UBS Oncology Impact Fund ¹	Wealth Management (WM)	<ul style="list-style-type: none"> – Aimed at developing new and innovative treatments for one of the most prominent challenges in health care: cancer – Closed at USD 471 million
UBS Loans for Growth ¹	WM	<ul style="list-style-type: none"> – Provides innovative debt-based funding to emerging markets financial intermediaries, which in turn lend to small and medium-sized companies to support local economic development – USD 50 million impact fund
Sustainable investing research ¹	WM, Wealth Management Americas (WMA), Investment Bank (IB)	<ul style="list-style-type: none"> – Sustainable value creation in emerging markets; Doing well by doing good: impact investing; Gender diversity matters; Green bonds are investable; Going Further – a philanthropic health portfolio – 38 ESG Industry Postcards
UBS Long Term Themes Equity Fund ¹	WM, Asset Management (AM)	<ul style="list-style-type: none"> – Invests in companies, which are solution providers for challenges, including water scarcity, emerging market infrastructure, waste management and recycling and emerging market health care
ESG Portfolio Analyzer ¹	WMA	<ul style="list-style-type: none"> – Provides transparency and analysis of ESG topics in client portfolios
Philanthropy advisory ¹	WM, WMA	<ul style="list-style-type: none"> – A total of over 400 ultra high net worth individuals or philanthropists attended UBS Philanthropy Forums in the Americas, Asia and Switzerland – Substantial advisory services for nearly 1,000 clients
UBS Optimus Foundation ¹	WM	<ul style="list-style-type: none"> – CHF 59 million raised in donations – CHF 59 million grants to partners approved
Actively managed funds ¹	AM	<ul style="list-style-type: none"> – Launched in 2016: US Corporate Bond Sustainable, US Enhanced Sustainable Equity, Switzerland Enhanced Sustainable
Voting (on behalf of clients) ¹	AM	<ul style="list-style-type: none"> – Provided instructions (based on AM's corporate governance principles) to vote on 97,670 separate resolutions, at 9,895 company meetings
Renewable energy and cleantech financing ¹	IB	<ul style="list-style-type: none"> – Participation in significant renewables and cleantech deals globally, for both established utilities clients and innovative growth stage companies
Green Bonds ¹	IB	<ul style="list-style-type: none"> – Participation in three major Green Bond issuances
Energy check-up for SMEs ²	Personal & Corporate Banking (P&C)	<ul style="list-style-type: none"> – UBS SME efficiency bonus for energy reduction plan with overall energy savings of 20,452 MWh/a, equivalent to the annual energy consumption of approximately 1,000 single-family homes
Preferred strategic partner for advisory and financing transactions related to Switzerland's energy strategy 2050 ¹	P&C	<ul style="list-style-type: none"> – Supports energy utilities in raising capital on international capital markets to progress their quest for renewable energy – 13 strategic transactions executed for Switzerland's five large energy utilities

¹ All information provided is as of 31 December 2016. ² Information provided is as of 31 December 2015.

In Wealth Management, we aim to systematically include a sustainable investing (SI) optionality in our mandate offerings, and to provide our clients with impact investing products and sustainable mutual fund solutions. In 2016, we further expanded the SI optionality to core affluent and high net worth clients from Global Emerging Markets, Germany and Italy. UBS Manage™ offerings with SI focus are constructed with a focus on investing in instruments with a favorable SI rating, while staying in line with our Chief Investment Office House View. On average one in five UBS Manage™ Advanced [CH] clients chooses the SI focus for their newly opened mandate. We also arrange platforms, roundtables and networking events for our clients to exchange ideas and gather know-how.

Asset Management offers a range of SI funds that combine material sustainability factors with a rigorous fundamental investment process. We apply the concept of shared value, according to which companies pursue sustainability practices and create value not only for the shareholder but also for a wider range of stakeholders. Our investment themes include renewable energy, environmental stewardship, social integration, healthcare, resource efficiency, and demographics. We continue to work on a cutting-edge, multi-year mandate from a large pension fund to build a global impact equities portfolio with measureable societal impact. Once developed and vetted, the social impact metrics arising from the mandate will help influence Asset Management's investment strategies.

The Investment Bank provides capital-raising and strategic advisory services globally to companies offering products that make a positive contribution to climate change mitigation and adaptation, including those in the solar, wind, hydro, energy efficiency, waste and biofuels, and transport sectors. In 2016, the total deal value in equity or debt capital market services relating to these areas was CHF 59.8 billion, and CHF 106.3 billion in financial advisory services.

Personal & Corporate Banking clients have access to appropriate products from Asset Management and Wealth Management and are participating in our Group-wide approach to sustainable investing. We also support Swiss small and medium-sized enterprises (SME) in their energy-saving efforts. As promoted by the Swiss Energy Agency's SME model, clients benefit from the agency's "energy check-up for SMEs" at

reduced costs and are granted UBS cash premiums for committing to an energy reduction plan within the scheme.

Having the financial expertise, networks and access to the capital required to build or support innovative financial products, we are committed to introducing novel financial solutions that can be replicated and scaled. With our Oncology Impact Fund and the Loans for Growth impact fund, we confirmed our leading position in the impact investing space.

As of 31 December 2016, we also held green bonds in the amount of CHF 460 million in our high-quality liquid assets portfolios under the management of Corporate Center – Group Asset and Liability Management.

→ Refer to www.ubs.com/sustainableinvesting for more information

Sustainable investments¹

CHF billion, except where indicated	GRI ²	For the year ended			% change from 31.12.15
		31.12.16	31.12.15	31.12.14	
UBS total invested assets		2,821	2,689	2,734	5
Core SI products and mandates	FS11	145.43	138.45	110.21	5
Integration ³	FS11	5.53	3.37	2.62	64
Integration / RPI ⁴	FS11	54.60	49.06	34.66	⁵ 11
Impact investing ⁶	FS11	2.49	0.76		228
Exclusionary screening ⁷	FS11	76.11	79.20	68.60	(4)
Third-party ⁸	FS11	6.70	6.06	4.34 ¹⁰	10
Norms-based screening⁹	FS11	830.35	795.07	466.52 ¹⁰	4
Total sustainable investments	FS11	975.79	933.53	576.73 ¹⁰	5
SI proportion of total invested assets (%)	FS11	34.59	34.72	21.09	

¹ All figures are based on the level of knowledge as of January 2017. ² FS stands for the performance indicators defined in the Global Reporting Initiative Financial Services Sector Supplement. ³ Applies to the active selection of companies, focusing on how a company's strategies, processes and products impact its financial success, the environment and society. This includes best-in-class, thematic investments or the systematic and explicit inclusion of environmental, social and governance (ESG) factors into traditional financial analysis. ⁴ UBS Asset Management Responsible Property Investment (RPI) strategy. ⁵ Invested assets, subject to RPI strategy in 2014, were restated. ⁶ Impact investments are targeted investments with a financial return and a clear social and/or environmental return objective. No data available for 2014. ⁷ Includes customized screening services (single or multiple exclusion criteria). ⁸ SI products from third-party providers applying either integration, impact investing and/or exclusionary approach. ⁹ Reporting scope expanded in 2015 to include all actively managed discretionary segregated mandates. Duplication with other SI categories was subtracted to avoid double counting. ¹⁰ Due to changes in reporting scopes in 2015, comparability with 2014 data is limited.

Sustainable investing is an approach that seeks to incorporate environmental, social and/or governance considerations into investment decisions. SI strategies seek to achieve one or several of the following objectives: achieve a positive environmental or social impact, align investments with an investor's personal values or improve portfolio risk and return characteristics.

Core SI includes all SI products that involve a strict and diligent asset selection process including exclusions and/or different types of positive selection such as best-in-class, thematic or ESG integration and impact investing.

Norms-based screening includes all assets that are subject to restrictions under UBS policy on the prohibition of investments in companies related to anti-personnel mines and cluster munitions (includes all actively managed discretionary segregated mandates and all actively managed retail and institutional funds).

Research³

In response to growing client demand, we research the impact of environmental, social and governance (ESG) issues on various sectors and companies. Our specialized teams regularly publish research on topics that we believe will shape our future. Our experience and sector knowledge help us determine what is material by raising questions about the effects of ESG issues on the competitive landscape in the global sectors that we cover, as well as about how companies are affected in relative terms.

Our Chief Investment Office Wealth Management (CIO) regularly translates key societal and environmental concerns into investment themes as part of its Longer Term Investments series and global Research-based Advice. In 2016, some notable examples of this were sustainable value creation in emerging markets, gender diversity and energy efficiency.

For our sustainability-specific strategies in Asset Management, we have developed a cutting-edge database of fundamental sustainability data, at firm and industry group level. It is used alongside valuation data from our analysts to rank the investment universe on both fundamental and sustainability attractiveness. The database mirrors the approach taken by the Sustainability Accounting Standards Board in building its Materiality Matrix™. We believe that this sustainability key performance indicator database gives us a significant proprietary edge in integrating fundamental and material sustainability data into the investment processes. It allows us to ensure that valuation and sustainability factors are taken into account and receive equal weighing in the decision-making process.

Philanthropy

Building on our award-winning track record and 12 years' experience, we have a global team of in-house experts in place who specialize in all areas of philanthropy and strategic charitable giving. We support clients as they develop their own philanthropic approach from offering objective, independent and tailored advice, to providing them with the opportunity to attend important events and access a global network of likeminded individuals with whom to collaborate and share their ideas and knowledge.

→ Refer to www.ubs.com/philanthropy for more information

Optimus Foundation

UBS Optimus Foundation is an award-winning, expert grant-making foundation that helps our clients use their wealth to drive positive and sustainable social change for children. The foundation connects clients with inspiring entrepreneurs, new technologies and proven models that help children to survive and thrive. It selects and continuously monitors programs that improve children's health, education and protection and that have the potential to be transformative, scalable and sustainable. As UBS covers all of the foundation's administrative costs, it guarantees that 100% of all donations go to the support programs that deliver such benefits for children. In 2016, we helped improve the well-being of 1.6 million children globally. Effective philanthropy is about more than simply funding existing programs. It is also about long-term thinking. That is why, in certain instances, Optimus supports partners in building their capacities, enabling them to reach more children more efficiently, funds research to better understand the issues that prevent children from thriving and undertakes advocacy efforts to promote wider adoption of the most promising programs.

→ Refer to www.ubs.com/optimus for more information

How we support our communities

We have a responsibility toward the communities in which we operate. We therefore have a long-standing global Community Affairs strategy, executed through regional programs focused on two key themes: education and entrepreneurship. Through these programs, we build sustainable partnerships with non-profit organizations and social enterprises to overcome disadvantages in our local communities, thus ensuring we make a lasting impact. Some examples include:

- Project Entrepreneur, an initiative to increase female-founded high-growth start-ups in the US
- Young Enterprise Switzerland, including hosting a very successful company competition for students
- Halogen Foundation's Network For Teaching Entrepreneurship in Singapore dedicated to teaching disadvantaged youths leadership, entrepreneurial skills and financial literacy

- The Bridge Academy secondary school in London, supporting students from disadvantaged backgrounds to achieve best-ever exam results

We engage beyond financial support – our employees are key to the success of our community programs. We encourage employees to support our local communities by:

- facilitating employee volunteering,
- offering employees up to two days a year to volunteer, and
- matching employees' donations to charities.

By providing diverse opportunities for our employees to volunteer their time and skills in support of our community partners, we seek to align our community program with our core business.

Since 2014, we have enhanced our focus on measuring the impact of our community programs by using the London Benchmarking Group's standard model for measuring and reporting on our community investment globally. This framework, together with global coordination of reporting, allows us to effectively evaluate and focus our programs.

Community investment 2016

In 2016, we strengthened our strategic focus on education and entrepreneurship through increased global measurement and coordination and by enhancing existing and new partnerships in our local communities. We also launched UBS Social Innovators, a UBS and Society initiative to help build further alignment with our business. A search to identify and support high-potential social enterprises that are delivering innovative solutions to society's most pressing challenges culminated in the selection of 12 regional finalists and three UBS Social Innovators from over 1,200 expressions of interest from 96 countries. The program will increasingly build upon existing regional Community Affairs programs to support social enterprise skills, such as our partnerships with Social Entrepreneurship Impact & Finance (seif) in Switzerland and the Foundation for Young Australians' Young Social Pioneer Program in Australia.

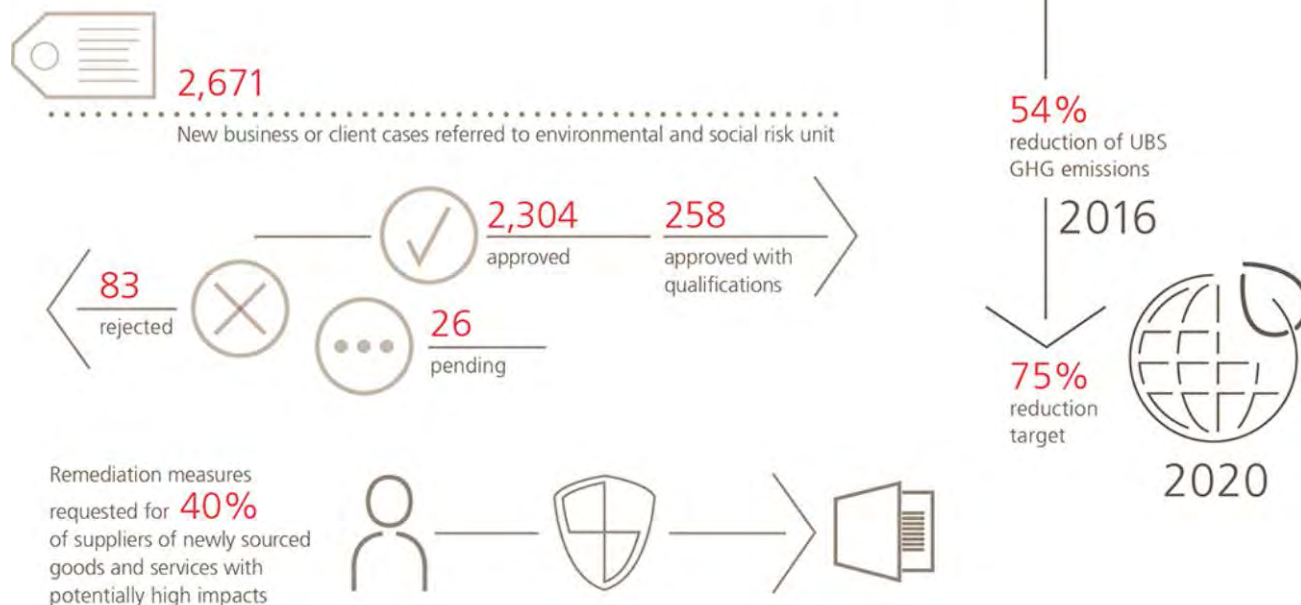
In 2016, UBS made direct cash contributions totaling CHF 30 million. 91% of UBS's Community Affairs grants were made in the areas of education and entrepreneurship. 30% of our employees volunteered in social and community engagement projects compared with 27% in 2015. Additionally, UBS contributed a total of CHF 23 million to its affiliated foundations in Switzerland, to the UBS Optimus Foundation and to the UBS Anniversary Education Initiative.

Our Community Affairs program benefited 117,389 young people and entrepreneurs across all of the regions in which we operate.

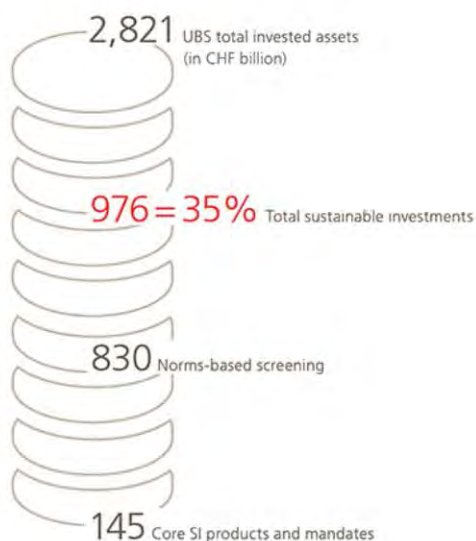
→ Refer to www.ubs.com/community for more information and examples of our community investments

UBS and Society key performance indicators in 2016

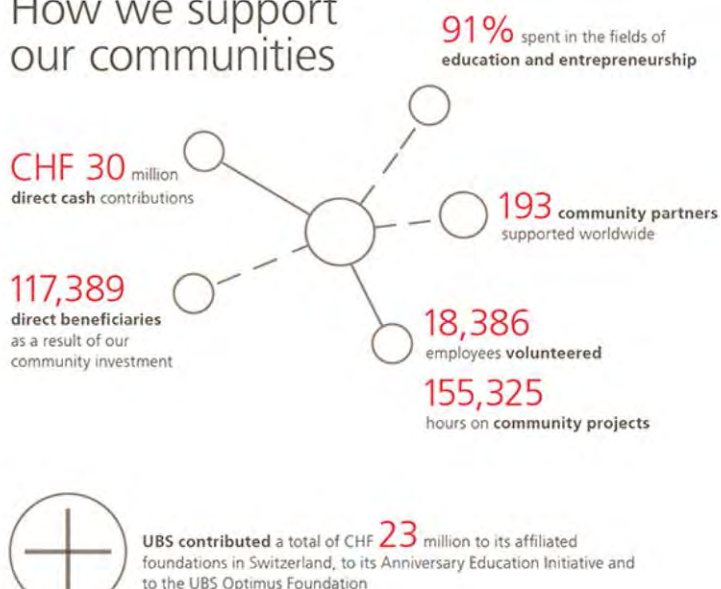
How we do business



How we support our clients



How we support our communities



UBS Optimus Foundation



CHF **59** million raised in donations
CHF **59** million grants to partners approved

Our employees

Our ability to deliver on our business strategy is closely linked with the quality and commitment of our employees. Our human resource (HR) strategy therefore seeks to ensure that we hire, support, develop and engage employees at all levels who have the diverse backgrounds, skills and experience to advise our clients, navigate volatile markets, develop new products, embrace innovation and manage both risk and evolving regulations. We invest in our employees and support initiatives that build engagement and strengthen our corporate culture, based on our belief that the right strategy and a strong, cohesive culture drive excellent performance.

Building our culture

Having a strong culture is vital to our sustained success. In 2013, we introduced the three keys to success – our Pillars, Principles and Behaviors. They help us achieve our vision, execute our strategy and determine how we work together. Since then, we have continuously focused on driving cultural change and on embedding our core values more deeply into the identity of the firm. In 2016, we continued our large-scale culture change program, with over 200 ongoing initiatives at all levels of the organization: Group, divisional and regional. One key initiative is our Group Franchise Awards (GFA) program, which we have implemented to recognize culture-building behavior. The GFA allow us to track cross-business collaboration and ideas for simplifying our processes. The program has created a lot of momentum and has been deployed across the Group.

Our three keys to success



Our Pillars are the foundation for everything we do.

Capital strength
Efficiency and effectiveness
Risk management

Our Principles are what we stand for as a firm.

Client focus
Excellence
Sustainable performance

Our Behaviors are what we stand for individually.

Integrity
Collaboration
Challenge

Attracting and recruiting talent

Positive culture change is both advanced and sustained through individuals who share our vision and core values. Therefore, a key effort has been to define a relevant and differentiating commitment to select these candidates.

We source employees through a variety of channels. Our first priority is to consider current employees for open roles. Internal mobility builds connections across the firm and enables employees at all levels to leverage existing skills and develop new ones. Having long-term career prospects with us is an important driver for career satisfaction with existing employees and it attracts external talent.

From outside the firm, we source candidates directly and through job boards, advertisements, social media, external recruitment agencies and employee referrals. In 2016, as an employer of choice for people at all career stages, we received almost 490,000 applications and we hired 7,886 external candidates, including 401 client advisors for Wealth Management and 178 financial advisors for Wealth Management Americas.

Throughout 2016, we continued to hire new employees to support the growth of our Business Solution Centers (BSCs) in the US, India, China and Poland. Co-locating teams of HR, IT, Operations, Risk Control and other specialists enhances collaboration and efficiency and reduces overall costs. In 2016, offshore and nearshore employees accounted for approximately 15% of our global Corporate Center workforce. We expect the growth of our BSCs to continue into 2017, with a particular focus on the Asia Pacific region.

Hiring and training entry level talent is a priority for all business divisions. In 2016, we hired 750 interns and employed 478 new university graduates in one of our graduate talent programs. In Switzerland, we hired 290 apprentices for business and IT roles, and 197 trainees for our Bank Entry Program for high school graduates.

- Refer to www.ubs.com/careers for more information and to follow our careers blog
- Refer to www.ubs.com/awards for more information on UBS's rankings as an employer

A top employer again in 2016

- World's Most Attractive Employers (Universum): global top 50
- 2016 Financial Services Gender-Equality Index member (Bloomberg)
- Switzerland's Most Attractive Employers (Universum): ranked second by business students
- Vault Banking 50 (Vault, US)
- The Times Top 100 Graduate Employers (The Times)
- Ideal Financial Services Employers (eFinancialCareers): Asia top 20

Diversity and inclusion

The work we have done to build a cohesive and collaborative culture is amplified by our ongoing success in increasing diversity and inclusion across the firm. In our experience, teams with diversity in race, ethnicity, age, gender, background, education, sexual orientation and other aspects better understand and relate to clients' needs. Diversity of thought, opinion and experience helps us make better decisions. Similarly, an inclusive work environment attracts high-quality people and makes the firm a better place to work. Our HR policies and procedures underscore our commitment to a diverse and inclusive workplace, with equal opportunities for all employees.

We are committed to hiring, retaining and promoting more women at all levels across the firm. In 2016, among other initiatives, we continued to build on our aspiration to increase the ratio of women in management roles to one-third. We embedded management accountability for supporting this goal and continued to develop career support, HR processes and technology solutions to help us better retain women at all career stages.

In May 2016, we launched a new UBS Career Comeback program in Switzerland and the US aimed at enabling professionals to return to corporate jobs after a career break. In Switzerland, our program is unique in that it hires people into permanent positions for which we are currently recruiting, while in the US we hire people into potentially permanent roles through a structured 16-week program. Both programs feature on-the-job experience, classroom learning and mentoring. Altogether, the 2016 program gave 26 women and one man the opportunity to relaunch their careers.

In addition to our strategic initiatives, every year we support numerous internal and external activities in each region focused on education and coaching. Internally, our employee networks host events on gender, culture, life stage, sexual orientation and other topics on a regular basis. In 2016, we sponsored 32 employee networks globally, with more than 18,500 members.

→ Refer to www.ubs.com/diversity for more information

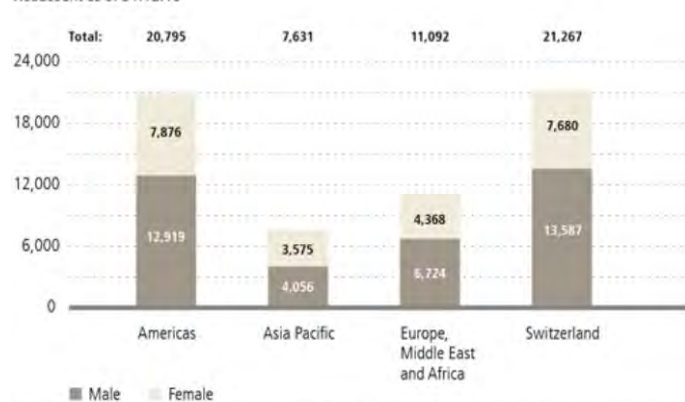
Gender distribution by employee category¹

Headcount as of 31.12.16	Officers (Director and above)		Officers (other officers)		Employees		Total	
	Number	%	Number	%	Number	%	Number	%
Male	18,021	77	12,100	60	7,165	42	37,286	61
Female	5,432	23	8,165	40	9,902	58	23,499	39
Total	23,453	100	20,265	100	17,067	100	60,785	100

¹ Calculated on the basis that a person (working full-time or part-time) is considered one headcount (in this table only). This accounts for the total UBS employee number of 60,785 as of 31 December 2016, which excludes staff from UBS Card Center, Hotel Seepark Thun, Wolfsberg and the Widder Hotel.

Gender distribution by geographical region¹

Headcount as of 31.12.16



¹ Calculated on the basis that a person (working full-time or part-time) is considered one headcount in this graph only. Looking at subregional data, the Americas consists of the US at 19,945 and the rest of the Americas at 850. EMEA consists of the UK at 5,466, the rest of Europe at 5,439 and Middle East and Africa at 187. This accounts for the total UBS employee number of 60,785 as of 31 December 2016, which excludes staff from UBS Card Center, Hotel Seepark Thun, Wolfsberg and the Widder Hotel.

Experience for the firm's senior executives, along with mid- and first-level line manager programs, help define our expectations for leadership excellence, build confidence in our strategy and increase commitment to the firm's three keys to success.

Beyond strategic initiatives, we also offer key talent development programs, business education and role-specific training. Group-wide key talent programs prepare both junior and senior employees for enhanced responsibilities and line management or leadership roles. We also place particular emphasis on providing training and development opportunities for early-career and mid-level employees. For example, we are one of the top educators of entry level talent in Switzerland, investing each year in training programs for more than 2,000 young people, including students, high school and university graduates, interns and apprentices.

In 2016, our permanent employees participated in approximately 719,000 development activities, including mandatory training on compliance, business and other topics. This was an average of 11.8 training sessions, or 2.4 training days, per employee.

Developing and managing our workforce

Developing current and future leaders is crucial to our success, and we expect them to be champions for our strategy and culture. Each year, programs like our Senior Leadership

Spotlight on advisor training

In 2012, UBS defined expectations for its client advisors that developed into a formal certification program. In doing so, we became the first Swiss bank to have certified client advisors. Since then, more than 4,300 UBS client advisors have completed the program.

Strong advisory skills are a business imperative, and we invest accordingly in training for client-facing employees.

Examples include:

- All client advisors in Wealth Management must earn an externally accredited certificate and recertify every three years.
- All client advisors in Personal & Corporate Banking must earn

a role-based and externally accredited certificate and recertify every three years.

- Certain client-facing employees are nominated for the Wealth Management Master, a partnership between UBS and Rochester-Bern Executive Programs. In 2016, the first 75 graduates were awarded a dual degree: a master of science in wealth management from the University of Rochester and a master of advanced studies in finance from the University of Bern.
- Financial advisors in the US are fully registered and remain informed on changing industry and market

dynamics through a comprehensive mandatory training curriculum and continuing education offerings.

- Select Wealth Management Americas financial advisors participate in firm-sponsored development events to enhance their market and client-facing skill sets as well as their knowledge of current wealth management topics.
- Aspiring financial advisors in the US are required to complete a rigorous 24-month training program; select candidates participate in a specialized Wealth Planning Analyst program prior to managing client accounts.

Managing and rewarding performance

Effective people management is key to sustaining a high-performing and culturally cohesive organization. We assess performance and behavior, the two elements that impact long-term profitability and culture. Our year-end reviews thus measure both what was achieved and how those results were achieved. Separate ratings underscore the importance of the firm's Behaviors for individual and Group success, and both are considered in development, reward and promotion decisions.

Our compensation philosophy is to align the interests of our employees with those of our clients and investors. Our Total

Reward Principles underpin our approach to compensation by establishing a framework that balances performance with prudent risk-taking, and aim to:

- attract and engage a talented, diverse workforce
- foster effective performance management
- align reward with sustainable performance
- support appropriate and controlled risk-taking

→ **Refer to the "Compensation" section of this report for more information**

Personnel by region

		As of		% change from
		31.12.15	31.12.14	31.12.15
<i>Full-time equivalents</i>	31.12.16			
Americas	20,522	20,816	20,951	(1)
<i>of which: US</i>	19,695	19,897	19,715	(1)
Asia Pacific	7,539	7,539	7,385	0
Europe, Middle East and Africa	10,746	10,505	10,254	2
<i>of which: UK</i>	5,206	5,373	5,425	(3)
<i>of which: rest of Europe</i>	5,373	4,957	4,663	8
<i>of which: Middle East and Africa</i>	167	176	166	(5)
Switzerland	20,581	21,238	21,564	(3)
Total	59,387	60,099	60,155	(1)

Our responsibilities

We aim to be a high-quality employer, with our identity and our values embedded into all of our people management practices. We offer competitive benefits to all employees, which may include insurance, pension, retirement and personal leave. These benefits often go beyond market practice or legal requirements. For example, we offer employees up to two days each year to volunteer in local communities. We also support flexible working arrangements, including telecommuting, part-time roles, job sharing and partial retirement. On a divisional level, initiatives like Wealth Management's Health Matters program empower employees to prioritize their health and accentuate health as a key driver of performance. In 2016, related initiatives included Global Health Day, in which more than 6,000 employees participated, and a Global Health & Performance Conference.

A wide range of resources are available to help employees navigate work-life issues and personal challenges. For example, assistance programs offer support and counseling for challenges such as illness, conflict, bereavement, mental health issues or elderly care. Also, new parents in all locations can take paid time off after a child is born or adopted. We meet the statutory parental leave standards in all locations and exceed them in most. As an example, paid leave in the US and Puerto Rico is set at 16 weeks for the primary caregiver and two weeks for the secondary caregiver. In addition, we have redeployment and outplacement programs in every region, as well as clear policies and processes for handling redundancies.

Our Code of Conduct and Ethics (Code) is the basis for all HR policies, guidelines and procedures. It includes a commitment to the health and safety of both employees and external staff.

→ Refer to www.ubs.com/healthandsafety for more information

Employees have a voice in shaping our culture

We strive to listen to our employees, and offering opportunities to influence the firm's future is important to us. In 2016, UBS invited all permanent employees to provide feedback on how we are doing as a firm. The goal was to give employees a voice in

shaping our culture, to challenge the status quo and to improve the firm. Globally, 74% of eligible employees participated in the survey. A significant majority of respondents agreed that they like and are proud to work at UBS, and a similar proportion thinks the firm has a positive work environment with a healthy work-life balance. In addition to the Group-wide survey, we poll representative employees several times a year. Our ongoing ambition is to have a highly motivated workforce that models integrity, collaboration and challenge in their daily work. We also want to be the clear employer of choice in the financial services industry. Our goal is to achieve overall engagement ratings in the top quartile.

Grievances and whistleblowing protection

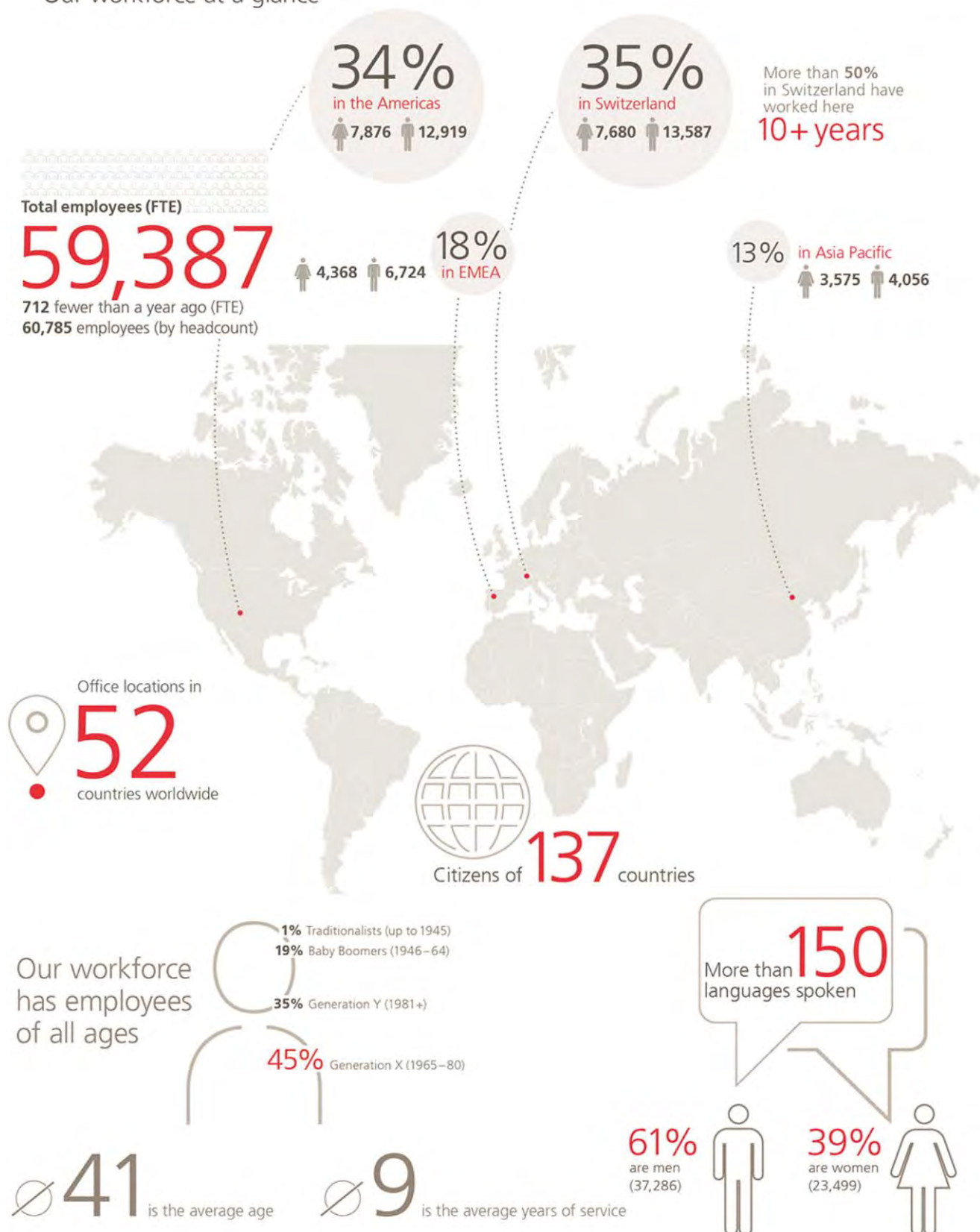
No firm is exempt from workplace issues. Therefore, we have established procedures in every region to help us resolve any employee grievances, and employees are strongly encouraged to speak with their line manager or HR about any concerns. Likewise, our whistleblowing policy and procedures offer multiple channels for staff to raise concerns, either openly or anonymously, about suspected breaches of laws, regulations, rules and other legal requirements to which the Group is subject, or of our Code, policies or relevant professional standards.

→ Refer to the "Risk management and control" section of this report for more information

Employee representation

As a responsible employer, we maintain an open dialog with our employee representation groups. The UBS Employee Forum for Europe includes representatives from 16 countries and considers pan-European issues that may affect our performance, prospects or operations. Similar forums in Switzerland and the UK address topics such as health and safety, changes to workplace conditions, pensions, redundancies and business transfers. Collectively, these groups represent approximately 51% of our global workforce.

Our workforce at a glance¹



¹Calculated on/as of 31.12.16 on a headcount basis of 60,785 unless specified to be on a full-time equivalent (FTE) basis, where we include proportionate numbers of part-time employees.

Compensation

Dear shareholders,

The Board of Directors and I wish to thank you for your support at last year's Annual General Meeting and for sharing your views on our compensation practices over the course of the past year. I am pleased to present our Compensation Report for 2016.

2016 performance

Despite continued strong industry-wide headwinds in 2016, including a challenging market environment and negative investor sentiment, we delivered solid results while prudently managing resources and risk. We also increased our cost savings run rate by around CHF 0.5 billion to CHF 1.6 billion.

UBS's net profit attributable to shareholders was CHF 3.2 billion. UBS's capital position remained strong, with a fully applied CET1 capital ratio of 13.8% and a fully applied CET1 leverage ratio of 3.5%. The Board of Directors (BoD) intends to propose a dividend of CHF 0.60 per share to shareholders for the financial year 2016, which is unchanged from the ordinary dividend for the financial year 2015.

2016 performance award and expenses

In line with the Group and business division performance in 2016, the firm's total performance award management pool for the year was CHF 2.9 billion, down 17% from 2015. As in previous years, the overall performance award pool was determined based on a range of performance considerations, including risk-adjusted profit and capital strength.

The performance award pool for the Group Executive Board (GEB), including the Group CEO, was CHF 71.9 million. On a per capita basis, given the expansion to 12 full-time equivalent members in 2016, the per capita performance award decreased by 16%. As a percentage of the adjusted Group profit before tax, the GEB performance award pool was 1.3%, well below the cap of 2.5%.

2016 compensation framework

Our compensation framework has remained largely unchanged since 2012 with no material changes for 2016. We focused on ensuring stability of our overall framework and reinforcing our principles. The consistency in our approach to compensation over the past five years has strengthened our culture of sustainable performance, accountability and appropriate risk-taking.

Compared with most of our peers' compensation frameworks, we believe our framework ensures a closer alignment of employee and investor interests by linking a greater proportion of variable compensation to the firm's own equity and debt instruments and subjecting awards to longer deferral periods. With this approach, our compensation framework rewards longer-term performance, supports our capital base and allows us to pay competitively. As of 31 December 2016, CHF 2.3 billion of the Deferred Contingent Capital Plan was included in our eligible capital and contributed 1.0% to our loss-absorbing capacity ratio.

New regulatory requirements in 2016 continued to drive local adjustments of our compensation practices. For instance, in the UK, the Prudential Regulation Authority and the Financial Conduct Authority introduced the Senior Managers and Certification Regime, which tightens the requirements for the personal accountability of individuals in certain senior roles. As required, we have implemented specific compensation changes for Senior Management Functions, such as extending the deferral of variable compensation to 7 years and extending the claw-back period to 10 years.

Culture and behaviors

To emphasize our focus on behavior as part of the UBS culture, we reward not only what results were achieved, but also how they were achieved.

Since 2010 we have had a structured Incidents & Consequences process in place which ensures that disciplinary actions and control incidents are reflected in year-end compensation decisions. Beginning in 2016, the firm has introduced a multi-year review of incidents to ensure a holistic view on reward-related decisions. Our disciplinary

approach for violations of our Code of Conduct and Ethics, and the incorporation of conduct risk in our operational risk framework demonstrate our commitment to treat each other as well as our clients and counterparties appropriately and to act with integrity in the financial markets.

Annual General Meeting 2017

The BoD and the Compensation Committee appreciate the opportunity to engage with many of our shareholders on compensation matters.

At the Annual General Meeting (AGM) 2017 on 4 May 2017, we will seek your support on the following compensation-related items:

- the maximum aggregate amount of compensation for the BoD for the period from AGM 2017 to AGM 2018
- the maximum aggregate amount of fixed compensation for the GEB for 2018



Ann F. Godbehere
Chair of the Compensation
Committee of the Board of
Directors

- the aggregate amount of variable compensation for the GEB for 2016
- shareholder endorsement in an advisory vote for the Compensation Report

You will find more information about our 2016 compensation approach on the following pages.

Ann F. Godbehere
Chair of the Compensation Committee of
the Board of Directors

2016 compensation philosophy

Total Reward Principles

Our compensation philosophy is to align the interests of our employees with those of our clients and investors, building on our guiding principles of client focus, excellence and sustainable performance. Our Total Reward Principles establish the framework for determining our performance award pool and guide the allocation and delivery mechanisms of compensation to employees, including deferred compensation programs. The Principles underpin our approach to compensation by establishing a framework that balances performance and prudent risk-taking with a focus on conduct and sound risk management practices.

Our compensation structure is aligned with our strategic priorities. It encourages employees to develop a strong client franchise, create sustainable value and achieve the highest standards of performance. Moreover, we reward behavior that helps build and protect the firm's reputation – specifically integrity, collaboration and challenge. We strive for excellence and sustainable performance in everything we do. Compensation for each employee is based on individual, team, business division and Group performance, within the context of the markets in which we operate.

Overview of our Total Reward Principles

Our Total Reward Principles outline how we structure our compensation framework and apply it to all employees globally. They may vary in certain locations due to local laws and regulations. The table below provides a summary of our Total Reward Principles.

Attract and engage a diverse, talented workforce	We provide talented employees with pay that is appropriately balanced between fixed and variable elements, competitive in the market and paid out over an appropriate period
Foster effective individual performance management and communication	Thorough evaluation of individual performance and adherence to our behaviors, combined with effective communication, ensures there is a direct connection between achievement of business objectives and compensation across the firm
Align reward with sustainable performance	We cultivate a culture of integration and collaboration within the firm. Our approach to compensation fosters a sense of engagement among employees and serves to align their long-term interests with those of clients and stakeholders
Support appropriate and controlled risk-taking	Compensation is structured such that employees behave in a manner consistent with the firm's risk framework and tolerance, thereby protecting our capital and reputation, and enhancing the quality of our financial results, in line with what our investors expect from us

Approach to compensation

How are performance awards determined and allocated?



Performance award pool is determined by considering risk-adjusted and sustainable performance, including:

- quality of earnings
- progress on strategic initiatives
- affordability
- market competitiveness/position
- returns to investors

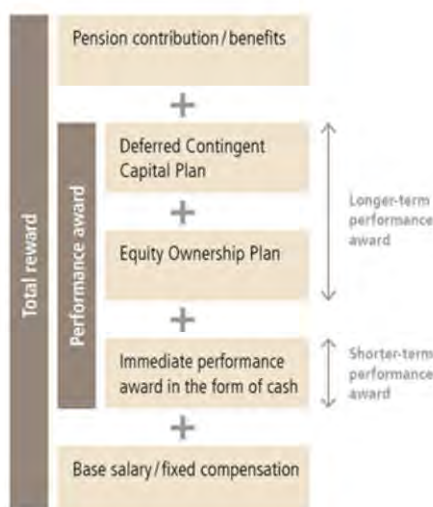


Performance award pool is allocated to employees based on Group, business division, team and individual performance, including:

- client focus
- financial results and capital management
- risk management
- people and talent development
- Principles and Behaviors

How is total reward delivered?

- Substantial amounts of awards deferred and aligned with investors
- At least 50% deferred for Key Risk Takers
- Long-term deferral of up to five years, or longer for certain regulated employees
- Shareholder- and debt holder-aligned vehicles



What are our Group Executive Board pay for performance safeguards?

Pay structure

- At least 80% of awards are at risk of forfeiture
- Cap on individual performance awards and cap on total GEB performance award pool
- No leverage in compensation plans
- Share ownership requirements

Performance award process

- Allocations based on a balanced scorecard with quantitative and qualitative key performance indicators
- Control function evaluation

Employment terms

- Six-month notice period in employment contracts
- No hedging strategies allowed

Shareholder approval

- Binding votes on aggregate GEB compensation
- Advisory vote on the Compensation Report

2016 performance and compensation funding

Our performance in 2016

In 2016, our businesses were exposed to a variety of adverse factors, including low and negative interest rates, geopolitical tensions, divisive politics and persistent regulatory uncertainty, which resulted in a challenging year for the industry. Throughout the year, we remained focused on disciplined strategic execution and on providing advice to our clients to help them navigate through turbulent global markets.

Despite the numerous challenges we faced, we reported a solid financial performance and again demonstrated that our balanced business mix and geographic diversification are important differentiators for UBS. Adjusted¹ profit before tax declined 5% to CHF 5.3 billion and net profit attributable to UBS Group AG shareholders decreased by 48% to CHF 3.2 billion, mainly due to a significant net upward revaluation of deferred tax assets in 2015, which was not repeated in 2016. Our adjusted return on tangible equity for 2016 was 9.0%, and 11.1% excluding the effects of deferred tax assets.

We made good progress on our ambitious CHF 2.1 billion cost reduction target, increasing our net cost savings run rate by around CHF 0.5 billion to CHF 1.6 billion, despite elevated regulatory costs and while investing for growth.

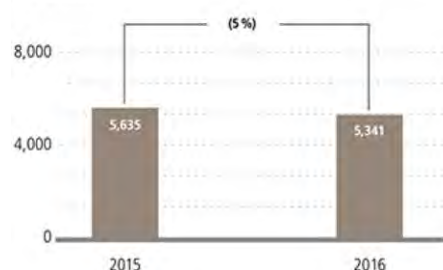
From a capital perspective, we ended 2016 with a strong fully applied common equity tier 1 (CET1) capital ratio of 13.8%, despite an increase in risk-weighted assets (RWA) due to regulatory changes. At the end of 2016, our fully applied CET1 leverage ratio was 3.53%, up from 3.35% at the end of 2015. We continued to complete measures to improve our resolvability, establishing our US intermediate holding company and implementing our Group service company structure.

Despite the challenges for UBS and the industry as a whole, our solid results and disciplined execution, together with our strong capital position, have enabled our Board of Directors to propose a dividend of CHF 0.60 per share. This is unchanged from last year's ordinary dividend and represents a payout ratio of 71% of net profit attributable to shareholders.

¹ Please refer to "Group performance" in the "Financial and operating performance" section of this report for more information on adjusted results.

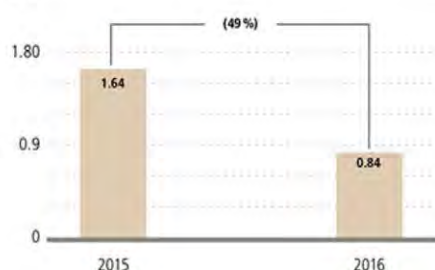
Profit before tax, adjusted

CHF million



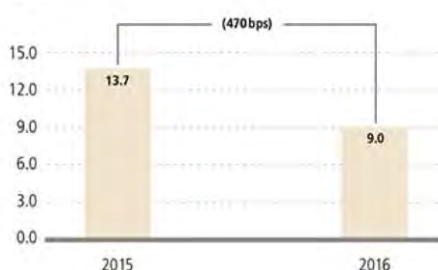
Diluted earnings per share (EPS)

CHF



Return on tangible equity (RoTE), adjusted

in %



Our Wealth Management business reported adjusted pre-tax profit of CHF 2.4 billion, a decrease of 15% compared with 2015, as reduced costs were more than offset by lower revenues due to a variety of factors, including negative client sentiment and cross-border outflows, which drove a 21% decline in transaction revenue and a 7% decline in recurring net fee income. Net new money was CHF 26.8 billion, reflecting an annual growth rate of 2.8%, despite cross-border outflows of CHF 14 billion.

Wealth Management Americas reported record adjusted profit before tax of USD 1.3 billion, up 43% compared with 2015. Operating income increased by 3%, while expenses decreased by 2%. The business division also implemented changes to its operating model to move decision-making closer to clients; better leveraging its capabilities and investing in technology aimed at empowering our people with more effective resources. Net new money was USD 15.4 billion, representing an annual growth rate of 1.5%.

Personal & Corporate Banking reported its best adjusted pre-tax profit since 2008 of CHF 1.8 billion, up 4% compared with 2015. Net new business volume growth for personal banking was 3.1% and the business division also achieved its highest net client acquisition in personal banking.

Our Asset Management business reported adjusted pre-tax profit of CHF 552 million, down 10% compared with 2015. Net new money outflows excluding money market flows totaled CHF 22.5 billion for the year. 2016 was a challenging year for active asset managers, with accelerated shifts out of active into passive investments.

Adjusted pre-tax profit in the Investment Bank decreased 34% to CHF 1.5 billion, as lower revenues were partly offset by lower costs. Market conditions and broader macroeconomic trends over 2016 did not favor our business and geographic mix. Adjusted return on attributed equity of 19.6% for 2016 reflects the business division's early actions on costs and proactive balance sheet management. The business division again maintained strict discipline on resource utilization, reducing its leverage ratio denominator by 14%. Risk-weighted assets increased by 12% to CHF 70 billion, predominantly due to regulatory requirements and changes to our operational risk RWA allocation.

Corporate Center reported an adjusted pre-tax loss of CHF 2.1 billion compared with a loss of CHF 2.6 billion in 2015, mainly reflecting reduced expenses in Services and Non-core and Legacy Portfolio in 2016.

→ Refer to "Group performance" in the "Financial and operating performance" section of this report for more information

Performance award pool funding

Our performance award pool funding framework is based on business performance, which is measured across multiple dimensions. We assess Group and business division performance, including achievement against a set of performance targets, and we also consider performance relative to industry peers, general market competitiveness and progress against our strategic objectives, including capital growth as well as risk-weighted assets, balance sheet and cost efficiency. We look at the firm's risk profile and culture, the extent to which operational risks and audit issues have been identified and resolved, and the success of risk reduction initiatives. Certain risk-related objectives are the same Group-wide and include adhering to investment risk guidelines, Group risk policies, and avoiding significant operational risks.

Each business division's performance award pool is initially accrued as a percentage of profit before performance award, which is risk-adjusted by factoring in a capital charge. In determining the final pool, we also consider progress on our strategic objectives, quality of earnings, affordability, returns to investors and market competitiveness. Business division performance is adjusted for items that do not represent underlying performance, primarily restructuring expenses, litigation and regulatory costs arising from matters that predate current management, and gains or losses related to divestments or sales of real estate.

Our compensation philosophy focuses on balancing performance with prudent risk-taking and retaining talented employees. To achieve this, as performance improves, we reduce our overall performance award funding percentage. In strong years, this prevents excessive compensation, resulting in an increased proportion of contribution before compensation being available for distribution to shareholders or being added to the Group's capital. In contrast, when performance declines, the performance award pool will generally decrease, but, we may increase the funding rate to remain flexible enough to make adequate provisions to ensure our compensation practices remain competitive.

Performance award funding process – illustrative overview



2016 performance award pool and expenses

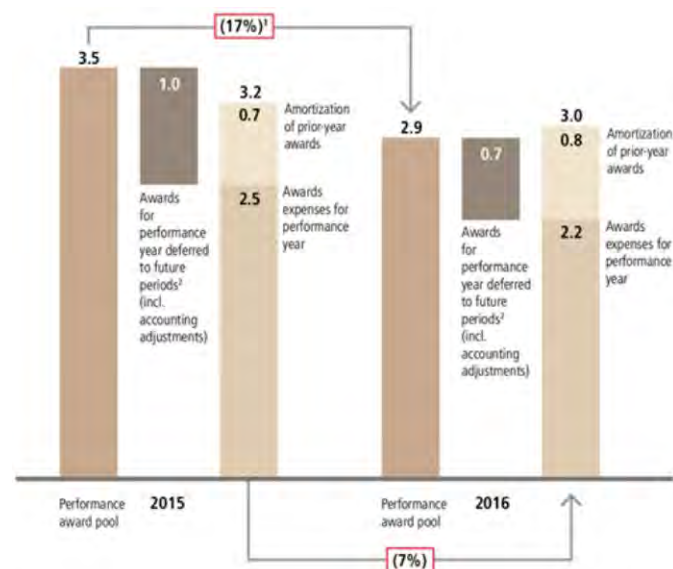
The performance award pool, which includes all discretionary performance-based variable awards for 2016, was CHF 2.9 billion, reflecting a decrease of 17% compared with 2015.

Performance award expenses for 2016 decreased by 7% to CHF 3.0 billion. This reflects the decrease in the performance award pool for 2016, partly offset by higher expenses related to the amortization of awards from prior years. The "Performance award expenses" chart on this page compares the performance award pool with performance award expenses.

→ Refer to the "Our deferred variable compensation plans for 2016" section of this report for more information

Performance award expenses

CHF billion



¹ Excluding employer-paid taxes and social security. ² Estimate. The actual amount to be expensed in future periods may vary, e.g., due to forfeitures.

2016 compensation for the Group CEO and the other GEB members

Base salary, role-based allowance, pensions and benefits

Each GEB member receives a fixed base salary, which is reviewed annually by the Compensation Committee. The Group CEO's annual base salary for 2016 was CHF 2.5 million and has remained unchanged since his appointment in 2011. The other GEB members received a salary of CHF 1.5 million (or local currency equivalent). This level has also remained unchanged since 2011.

One GEB member is considered a Material Risk Taker (MRT) in the UK and is in a UK Senior Management Function (SMF). Therefore, he receives a role-based allowance in addition to his base salary. This allowance reflects the market value of this specific role and is only paid while the GEB member is considered an MRT. Such an allowance represents a shift in the compensation mix between fixed and variable compensation and not an increase in total compensation. The allowance consists of a cash portion and a blocked UBS share award, which is granted annually.

Pension contributions and benefits for GEB members are in line with local practices for other employees. No enhanced or supplementary pension contributions are made for the GEB.

At the Annual General Meeting (AGM), shareholders are asked to approve the maximum aggregate amount of fixed compensation for the members of the GEB for the following financial year.

- Refer to the "Our compensation model for employees other than GEB members" section of this report for more information on MRTs and SMFs
- Refer to the "Our compensation governance framework" section of this report for more information on the shareholders' vote on the GEB compensation

Performance assessment

Annual performance awards for the Group CEO and other GEB members are at the full discretion of the Board of Directors (BoD) and, in aggregate, subject to shareholder approval at the AGM.

We use individual balanced scorecards to assess the GEB members' performance against a number of quantitative and qualitative key performance indicators (KPIs).

The quantitative measures for the Group CEO are based on overall Group performance. For other GEB members, they are based on both Group performance and the performance of the relevant business division and / or region; for those who lead Group control functions, or who are solely regional Presidents, are assessed on the performance of the Group and the function or region they oversee. Quantitative measures account for 65% of the assessment.

Qualitative measures, which relate to our Pillars, Principles and Behaviors, account for 35% of the assessment and are the same for all GEB members, including the Group CEO. The second table below provides an overview of the quantitative and qualitative KPIs, which the balanced scorecard is based on.

The weighting between Group, business division, regional and functional KPIs varies depending on a GEB member's role. A significant weight is given to Group KPIs for all GEB members.

The performance assessment on the basis of the quantitative and qualitative measures results in an overall rating, which is the starting point for determining a GEB member's annual performance award. This approach is not mechanical, as the Compensation Committee can exercise its judgment with respect to the performance achieved relative to the prior year, the strategic plan, and competitors, and considers the Group CEO's recommendation.

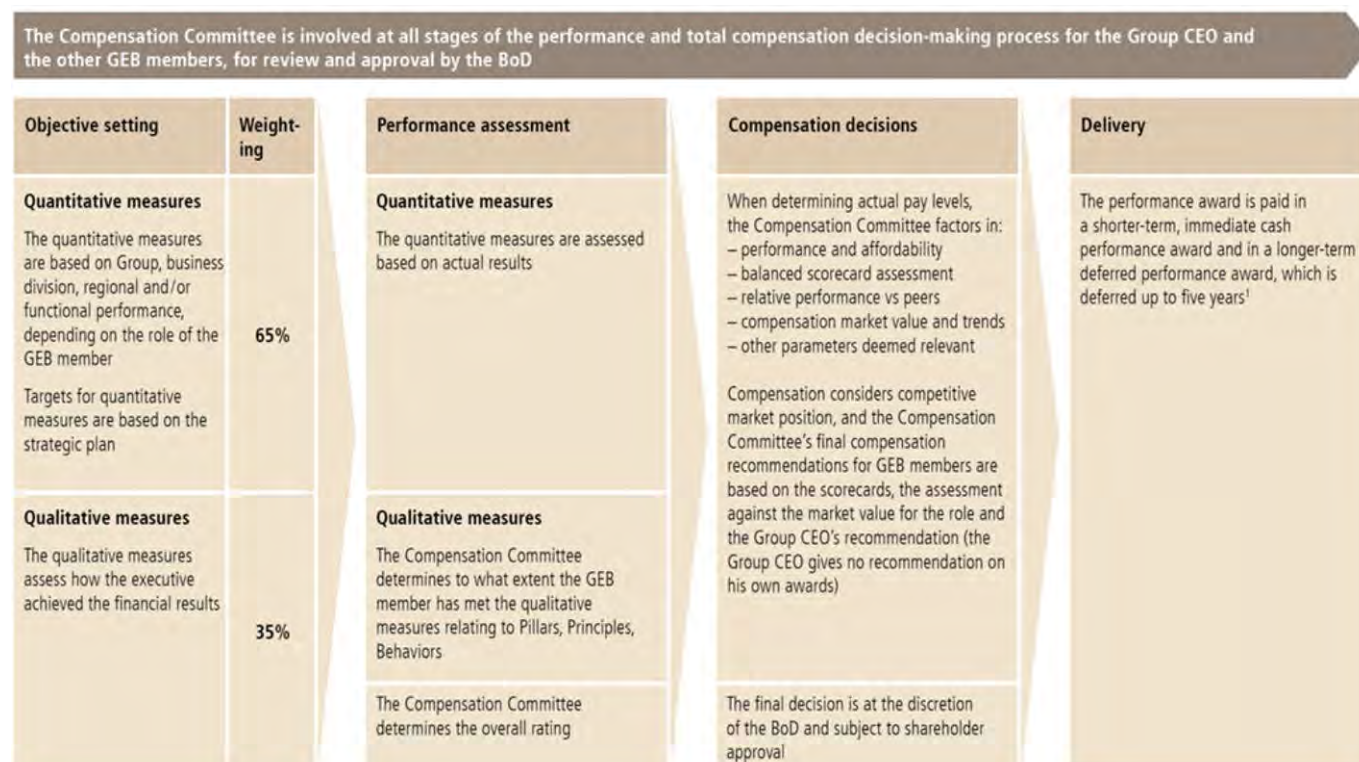
The Compensation Committee's recommendations are then reviewed and must be approved by the BoD. The Compensation Committee, and then the full BoD, follow a similar process in setting the compensation for the Group CEO, except that the Group CEO gives no recommendation on his own award.

While the BoD retains full discretion in determining variable compensation for the Group CEO and the other GEB members, the total amount of the awards may not exceed 2.5% of adjusted Group profit before tax. Additionally, variable compensation for individual GEB members and the Group CEO may not exceed the specified individual compensation caps, as described later in this section.

The final aggregate performance award for the GEB, including the Group CEO, for a financial year is subject to shareholder approval at the following AGM. The individual variable performance awards for each GEB member will only be confirmed upon shareholder approval at the AGM.

Overview of the GEB compensation determination process

The compensation for the Group CEO and the other GEB members is governed by a rigorous process under Compensation Committee and BoD oversight. The illustration below shows how compensation for all GEB members is determined.



¹ Senior Management Functions have extended deferral periods, with the deferred performance awards vesting in equal installments between years 3 and 7.

Overview of the quantitative and qualitative measures – balanced scorecard

Quantitative and qualitative measures consider performance versus plan as well as year-on-year performance and other factors including relative performance and market conditions.

Quantitative / qualitative measures		
Group		A range of financial metrics including adjusted Group return on tangible equity, adjusted Group profit before tax, CET1 capital ratio (fully applied)
Business division, regional and or functional KPIs (if applicable)¹		Business division and/or regional KPIs vary but may include: net new money growth rate, adjusted divisional / regional profit before tax, adjusted cost / income ratio, net new business volume growth rate, net interest margin, adjusted RoAE, Basel III RWA and LRD expectations Specific functional KPIs for Corporate Center GEB members
Pillars	Capital management	Establishes and maintains capital strength and CET1 capital ratio. Generates efficiencies and deploys our capital more efficiently and effectively
	Efficiency and effectiveness	Contributes to the development and execution of our strategy. The measure also looks to ensure that there is success across all business lines, functions and regions
	Risk management	Ensures risk management through an effective control framework. Captures the degree to which risks are self-identified and focuses on the individual's success in ensuring compliance with all the various regulatory frameworks. Helps shape the firm's relationship with regulators through ongoing dialog
Principles²	Client focus	Increases client satisfaction and maintains high levels of satisfaction over the long term. This includes promoting collaboration across business divisions and fostering the delivery of the whole firm to our clients
	Excellence	Human Capital Management – develops successors for the most senior positions, facilitates talent mobility within the firm and promotes a diverse and inclusive workforce Product and Service Quality – strives for excellence in the products and services we offer to our clients
	Sustainable performance	Brand and Reputation – protects the Group's reputation and ensures full compliance with our standards and principles Culture – takes a personal role in making Principles and Behaviors front and center of the business requirements. Furthermore, this measure evaluates the individual's ability to reinforce a culture of accountability and responsibility, demonstrating our commitment to be a responsible corporate citizen and to act with integrity in all our interactions with stakeholders
Behaviors	Integrity	Is responsible and accountable for what they say and do; cares about clients, investors and colleagues; acts as a role model
	Collaboration	Places the interests of clients and the firm before their own and those of their business; works across the firm; respects and values diverse perspectives
	Challenge	Encourages self and others to constructively challenge the status quo; learns from mistakes and experiences

¹ Both regional and functional KPIs may include qualitative measures. ² Overall results may also consider strategic progress and result relative to market environment.

Benchmarking against peers

When recommending performance awards for the Group CEO and the other GEB members, the Compensation Committee reviews the respective total compensation for each role against the broader market as well as a group of peer companies selected for the comparability of their size, business mix, geographic presence and the extent to which they compete against us for talent. The Compensation Committee also considers our peers' strategies, practices, pay levels and regulatory environment. Overall, the total compensation for a GEB member's specific role considers the compensation paid by our primary peer group for a comparable role and performance.

The Compensation Committee periodically reviews and approves the primary peer group for executive compensation. For 2016, the primary peer group remained unchanged and consisted of:

Bank of America	Credit Suisse	Julius Baer
Barclays	Deutsche Bank	Morgan Stanley
BlackRock	Goldman Sachs	Standard Chartered
BNP Paribas	HSBC	
Citigroup	JPMorgan Chase	

This group is broadened for the purposes of business division benchmarking and for the review of specific roles, as appropriate.

2016 deferred performance awards

For each GEB member, at least 80% of the performance award is deferred, while a maximum of 20% can be paid out in the form of immediate cash, subject to a cap of CHF / USD 1 million (or local currency equivalent). Any amount above this cap is granted in notional shares under the Equity Ownership Plan (EOP).

For the performance year 2016, a minimum of 50% of the overall performance award is granted under the EOP, which vests in three equal installments in years 3 to 5, provided that performance conditions are met.

The remaining 30% of the overall performance award is granted under the Deferred Contingent Capital Plan (DCCP). Under the DCCP, GEB members are awarded notional additional tier 1 instruments that vest after five years with discretionary annual interest payments.

The DCCP contributes to the Group's total loss-absorbing capital, and the awards granted to GEB members are subject to a common equity tier 1 capital ratio write-down trigger of 10%, which is higher than the trigger for other employees and holders of similar debt issued by the UBS Group. Moreover, GEB members forfeit 20% of the granted DCCP award for each loss-making year during the vesting period. This means that 100% of the award is subject to risk of forfeiture in addition to the capital ratio trigger.

For the GEB member whose role is considered an SMF, the overall deferral period is seven years, and the awards are subject to the applicable claw-back provisions. Given that an SMF is also a UK MRT, 50% of any immediate cash is delivered in vested shares that are blocked for six months, as required by regulators. Additionally, EOP installments are required to be blocked for an additional six months upon vesting.

For GEB members, the average deferral period is 4.4 years. Our compensation plans have no upward leverage, such as multiplier factors, and therefore do not encourage excessive risk-taking.

The Compensation Committee has determined that performance conditions for all GEB members' awards due to vest in March 2017 have been satisfied and thus the awards will vest in full.

- Refer to the "Our deferred variable compensation plans for 2016" section of this report for more information
- Refer to the "Our compensation model for employees other than GEB members" section of this report for more information on MRTs and SMFs
- Refer to "Vesting of outstanding awards granted in prior years subject to performance conditions" under "Supplemental information" in this section of this report for more information

Share ownership requirements: aligning GEB members' interests with those of our shareholders

In addition to our compensation framework, our share ownership policy requires the Group CEO to hold a minimum of 500,000 UBS shares and other GEB members to hold a minimum of 350,000 UBS shares. GEB members must build up their minimum shareholding within five years from their appointment and retain it throughout their tenure. The total number of UBS shares held by a GEB member consists of any vested or unvested shares and any privately held shares. GEB members may not sell any UBS shares before they reach the aforementioned minimum ownership thresholds. At the end of 2016, the GEB members met the required share ownership level, except for those newly appointed during 2016, who will have five years to build up and meet the required share ownership level.

Caps on the GEB performance award pool

The size of the GEB performance award pool may not exceed 2.5% of the adjusted Group profit before tax. This links overall GEB compensation to the firm's profitability.

For 2016, the Group's adjusted profit before tax was CHF 5.3 billion and the total GEB performance award pool was CHF 71.9 million (CHF 71.3 million in 2015). The performance award pool as a percentage of adjusted Group profit before tax was 1.3%, which is well below the cap of 2.5%.

In line with the individual compensation caps introduced in 2013 on the proportion of fixed pay to variable pay for all GEB members, the Group CEO's performance award is capped at five times his fixed compensation. Performance awards of other GEB members are capped at seven times their fixed compensation. For 2016, performance awards for GEB members and the Group CEO were, on average, 3.3 times their fixed compensation (excluding benefits and contributions to retirement benefit plans).

Employment contracts

The employment contracts of the GEB members do not include severance terms, sometimes referred to as golden parachutes, or supplementary pension plan contributions. All employment contracts for GEB members are subject to a notice period of six months. A GEB member leaving the firm before the end of a performance year may be considered for a discretionary performance award based on their contribution during that performance year and in line with the approach described in this report. Such awards are at the full discretion of the BoD, which may decide not to grant any awards.

2016 compensation framework for GEB members

Up to 20% of the annual performance award is paid in the form of immediate cash and at least 80% will be deferred for up to five years¹, with at least 50% granted under the Equity Ownership Plan (EOP) and the remaining 30% under the Deferred Contingent Capital Plan (DCCP). The compensation framework for 2016 remains the same as for 2015. The chart below is an illustrative example.

Payout of performance award ¹		Key features		Pay for performance and safeguards		
DCCP					<p>Our compensation framework is designed to pay for performance. A performance award is based on a balanced scorecard assessing the individual's performance against a number of quantitative and qualitative key performance indicators</p> <p>At least 80% of the performance award is at risk of forfeiture</p> <p>Compensation plan forfeiture provisions enable the firm to reduce the unvested deferred portion if the compensation plans' relevant performance conditions are not met</p>	
30%			30%			
EOP					<p>Our compensation framework contains a number of features designed to ensure that risk is appropriately managed with safeguards to discourage inappropriate risk-taking:</p> <ul style="list-style-type: none">– no upward leverage, such as multiplier factors. Potential realized pay cannot exceed the award granted (excluding potential share price appreciation, dividends and interest payments). The final deferred payout can be forfeited up to 100% in cases where performance conditions are not met or harmful acts provisions apply– a balanced mix of shorter-term and longer-term performance awards with a focus on deferral– a cap on the total GEB performance award pool of 2.5% of adjusted Group profit before tax– individual caps on the proportion of fixed to variable pay for the Group CEO and other GEB members– six-month notice period included in the employment contracts– an evaluation of each GEB member's risk control effectiveness and adherence to risk-related policies and guidelines as part of their individual qualitative assessment– provisions that enable the firm to trigger forfeiture of some, or all, of the unvested deferred performance award if an employee commits certain harmful acts, or if the employment is terminated for cause	
at least 50%			16%			
				17%		
				17%		
Cash						
up to 20%	20%					
Base salary ³						
2016	2017	2018	2019	2020	2021	2022
Share retention			500,000 shares for the Group CEO 350,000 shares for other GEB members			
			GEB members are required to hold a certain number of UBS shares as long as they are in office. This holding has to be built up within a maximum of five years from the date of their appointment to the GEB			

¹ Senior Management Functions have extended deferral periods, with the deferred performance awards vesting in equal installments between years 3 and 7. ² UK Material Risk Takers receive 50% in form of blocked shares. ³ May include role-based allowances that have been made in line with market practice in response to regulatory requirements.

2016 compensation for the Group Chief Executive Officer

The performance award for the Group CEO, Sergio Ermotti, is based on the achievement of both quantitative and qualitative performance targets as described earlier in this section. These targets were set to reflect the strategic priorities determined by the Chairman and the BoD, including risk-adjusted profitability, our capital position and adjusted return on tangible equity, as well as a range of qualitative measures to assess the quality and sustainability of the performance. Mr. Ermotti's performance assessment was also based on behavioral measures. The table on the following page summarizes the metrics used to assess Mr. Ermotti's performance as Group CEO for 2016.

The BoD recognized Mr. Ermotti's strong leadership in a year in which the Group achieved solid financial performance despite a challenging business environment. He successfully managed the capital position of the bank and achieved strong capital ratios.

Adjusted profit before tax declined by 5% to CHF 5.3 billion, and net profit attributable to UBS Group AG shareholders was down 48% to CHF 3.2 billion, mainly due to a significant net upward revaluation of deferred tax assets in 2015, which was not repeated in 2016. UBS's adjusted return on tangible equity for 2016 was 9.0% and 11.1% excluding the effects of deferred tax assets.

UBS made good progress on achieving its ambitious CHF 2.1 billion net cost reduction target; increasing net cost savings by CHF 0.5 billion to CHF 1.6 billion despite elevated regulatory costs, while also investing to strengthen its competitive position.

The BoD also considered Mr. Ermotti's focus on maintaining UBS's capital strength, which is the foundation of our success. UBS ended 2016 with a strong fully applied CET1 capital ratio of 13.8%; above our 13% target, and a fully applied CET1 leverage ratio of 3.53%, which is already above the 2020 minimum. The firm also issued over CHF 14 billion in AT1 capital instruments and TLAC-eligible senior unsecured notes, bringing its total loss-absorbing capacity to over CHF 73 billion.

The firm ended the year with a strong financial position under Mr. Ermotti's leadership and, as a result, the BoD intends

to propose to the shareholders an ordinary dividend of CHF 0.60 in line with the ordinary dividend for 2015.

In 2016, under Mr. Ermotti's oversight, the firm successfully executed a series of measures to improve the resolvability of the Group in response to too big to fail requirements in Switzerland and other countries. The establishment of UBS Americas Holding LLC as our US intermediate holding company was completed, and our Group service company implemented.

The BoD also acknowledged the strong performance relative to qualitative goals in 2016. Mr. Ermotti remained committed to our strategy, focused on disciplined execution and continued to drive cost reduction programs while maintaining a clear tone from the top regarding the risk and control environment.

Mr. Ermotti demonstrated his strong commitment to clients, to steer the development and implementation of client-centric products and to deliver services of high quality. One of Mr. Ermotti's significant achievements in 2016 was the successful recomposition of the Group Executive Board (GEB). As part of his continued commitment to talent retention and development, he spearheaded initiatives to improve diversity at senior levels, to strengthen internal mobility and to ensure succession planning.

Mr. Ermotti set a clear and consistent expectation with regard to Behaviors. The BoD considered the further significant progress made in the organization's cultural transformation, which remains a key priority under Mr. Ermotti's leadership.

Reflecting his achievements in 2016, the BoD approved the proposal by the Compensation Committee to grant Mr. Ermotti a performance award of CHF 10.9 million, bringing his total compensation for the year (excluding benefits and contributions to his retirement benefit plan) to CHF 13.4 million. The performance award is subject to shareholder approval as part of the aggregate GEB 2016 variable compensation and will be delivered with 61% deferred in EOP over years 3 to 5 and 30% in DCCP after 5 years, subject to the achievement of certain performance and other forfeiture conditions. The remaining 9% (CHF 1 million) will be delivered in immediate cash.

→ **Refer to the "Our deferred variable compensation plans for 2016" section of this report for more information**

Balanced scorecard for the Group CEO

Quantitative ¹ measures (65%)		Weighting	2016 results	2016 assessment	
					100%
Adjusted Group profit before tax		25%	CHF 5,341 million	2016 vs plan 2016 vs 2015	
Adjusted Group RoTE		25%	9.0%	2016 vs plan 2016 vs 2015	
Capital management ² CET1 capital ratio, fully applied Post-stress CET1 ratio, fully applied CET1 leverage ratio, fully applied		15%	13.8% >10% 3.53%	2016 vs plan 2016 vs 2015	
Qualitative ³ measures (35%)		Weighting	Measures	2016 assessment	
					100%
Pillars	Capital management	35%	Optimizes usage of resources across business and legal entities. Generates efficiencies and deploys our capital efficiently and effectively across business units	vs goals	
	Efficiency and effectiveness		Effective management of the organization's cost basis while maintaining proper risk controls and service quality to clients as well as ensuring appropriate reinvestment in our businesses		
	Risk management		Ensures risk management through an effective control framework. Captures the degree to which risks are self-identified and focuses on the individual's success in ensuring compliance with the Group and all various regulatory frameworks		
Principles ⁴	Client focus		Focus on unrivaled client focus at every level of our business, building relationships that make us stand out from our peers. Promotes collaboration across business divisions and fosters the delivery of the whole firm to our clients to ensure continued and growing levels of satisfaction over the long term	vs goals	
	Excellence		Drives an organization that strives for excellence in everything we do, from the people we employ to the products and services we offer to our clients		
	Sustainable performance		Maintains focus on the long term and works continuously to strengthen our reputation as a rock-solid firm providing consistent returns to our stakeholders. Protects the Group's reputation and ensures full compliance with our standards and principles across all stakeholders		
Behaviors	Integrity		Ensures the organization is creating an environment where employees are responsible and accountable for what they say and do, that they care about clients, investors and colleagues, and acts as a role model	vs goals	
	Collaboration		Drives the organization to place the interests of clients and the firm before the employees' own and those of their business, to work across the firm and to respect and value diverse perspectives		
	Challenge		Supports and encourages self and others to constructively challenge the status quo; learns from mistakes and experiences		

¹ Quantitative measures and target levels were based on internal performance objectives in our 2016 Operating Plan. ² CET1 capital ratio and post-stress CET1 ratio exceeded plan and required capital thresholds. Overall assessment was driven by CET1 leverage ratio. ³ The qualitative measures used to assess the effectiveness of the Group CEO are outlined in detail in the table "Overview of the quantitative and qualitative measures – balanced scorecard" in this report. ⁴ Overall results also consider strategic progress and result relative to market environment.

Total compensation for GEB members for the performance year 2016

The GEB performance awards are at the discretion of the Board of Directors (BoD) based on the assessment of quantitative and qualitative performance measures and, in aggregate, subject to shareholder approval. The aggregate performance award pool

for the GEB, which increased from 10 to 12 full-time equivalent members, was CHF 71.9 million for 2016. On a per capita basis, the performance award decreased by 16% compared with 2015.

At the AGM 2017, shareholders will vote on the aggregate 2016 total variable compensation for the GEB.

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Total compensation for GEB members

CHF, except where indicated¹

Name, function	For the year	Base salary ²	Contribution to retirement benefit plans ³	Benefits ⁴	Total fixed compensation	Immediate cash ⁵	Annual performance award under EOP ⁶	Annual performance award under DCCP ⁷	Total variable compensation	Total fixed and variable compensation ⁸
Sergio P. Ermotti, Group CEO (highest-paid)	2016	2,500,000	261,181	42,577	2,803,758	1,000,000	6,630,000	3,270,000	10,900,000	13,703,758
Sergio P. Ermotti, Group CEO (highest-paid)	2015	2,500,000	261,181	50,080	2,811,261	1,000,000	7,050,000	3,450,000	11,500,000	14,311,261
Aggregate of all GEB members ^{9, 10, 11}	2016	21,601,925	2,387,649	1,977,703	25,967,277	11,289,350	39,040,650	21,570,000	71,900,000	97,867,277
	2015	19,138,288	1,407,042	1,614,998	22,160,327	9,745,110	40,129,890	21,375,000	71,250,000	93,410,328

¹ Local currencies have been translated into Swiss francs at the exchange rates stated in "Note 34 Currency translation rates" in the "Consolidated financial statements" section of this report, or at the performance award currency exchange rate. ² Includes role-based allowances that have been made in line with market practice in response to the EU Capital Requirements Directive of 2013 (CRD IV). ³ Includes the portion related to the employer's contribution to the statutory pension scheme. ⁴ All benefits are valued at market price. ⁵ In accordance with the remuneration section of the UK Prudential Regulation Rulebook, the immediate cash includes blocked shares for one GEB member. ⁶ For EOP awards for the performance year 2016, the number of shares has been determined by dividing the amount by CHF 15.75 or USD 15.67, the average closing share price of UBS shares over the last ten trading days in February 2017. For EOP awards for the performance year 2015, the number of shares was determined by dividing the amount by CHF 14.98 and USD 15.09, the average closing share price of UBS shares over the last ten trading days in February 2016. ⁷ The amounts reflect the amount of the notional additional tier 1 instrument excluding future notional interest. For DCCP awards for the performance year 2016, the notional interest rate is set at 5.95% for awards denominated in US dollars and 2.55% for awards denominated in Swiss francs. For DCCP awards for the performance year 2015, the notional interest rate is set at 7.35% for awards denominated in US dollars and 4.15% for awards denominated in Swiss francs. ⁸ Excludes the portion related to the legally required employer's social security contributions for 2016 and 2015, which are estimated at grant at CHF 5,131,867 and CHF 4,132,667, respectively, of which CHF 856,796 and CHF 898,596, respectively, for the highest-paid GEB member. The legally required employees' social security contributions are included in the amounts shown in the table above, as appropriate. ⁹ Twelve GEB members were in office on 31 December 2016 and 10 members were in office on 31 December 2015. ¹⁰ 2016 includes compensation for Lukas Gähwiler for eight months in office as a GEB member. ¹¹ Excludes salaries and employer's contribution to the statutory pension scheme and benefits as part of the employment contract during the notice period of CHF 1,753,997 for two GEB members who stepped down on 31 December 2015. No such payments were made in 2015.

Fixed and variable compensation for GEB members¹

CHF in million, except where indicated	Total for the year ended 2016		Not deferred		Deferred ²		Total for the year ended 2015
	Amount	%	Amount	%	Amount	%	Amount
Total compensation							
Amount ³	94	100	33	35	61	65	90
Number of beneficiaries	13						10
Fixed compensation^{3, 4}	22	23	22	100	0	0	19
Cash-based	20	21	20		0		17
Equity-based	2	2	2		0		3
Variable compensation	72	77	11	16	61	84	71
Immediate cash ⁵	11	12	11		0		10
Equity Ownership Plan (EOP)	39	42	0		39		40
Deferred Contingent Capital Plan (DCCP)	22	23	0		22		21

¹ The figures relate to all GEB members in office in 2016, including compensation for Lukas Gähwiler for eight months in office as a GEB member. ² Based on the specific plan vesting and reflecting the total award value at grant, which may differ from the accounting expenses. ³ Excludes benefits and employer's contribution to retirement benefit plans. ⁴ Includes base salary and role-based allowances, rounded to the nearest million. ⁵ Includes allocation of vested but blocked shares, in line with the remuneration section of the UK Prudential Regulation Rulebook.

2016 compensation for the Board of Directors

Chairman of the BoD

Under the leadership of the Chairman, Axel A. Weber, the BoD determines, among other things, the strategy for the Group based on recommendations by the Group CEO, exercises ultimate supervision over management and appoints all GEB members.

The Chairman presides over all general meetings of shareholders, and works with the committee chairpersons to coordinate the work of all BoD committees. Together with the Group CEO, the Chairman is responsible for ensuring effective communication with shareholders and other stakeholders, including government officials, regulators and public organizations. This is in addition to establishing and maintaining a close working relationship with the Group CEO and other GEB members, and providing advice and support when appropriate, as well as continuing to support the firm's cultural change as a key priority on the basis of our Principles and Behaviors.

The Chairman's total compensation is contractually capped at CHF 5.7 million, excluding benefits and pension fund contributions. His total compensation for 2016 consisted of a cash payment of CHF 3.5 million and a share component of CHF 2.2 million delivered in 139,682 UBS shares at CHF 15.75 per share. The shares are blocked from distribution for four years. Accordingly, his total reward, including benefits and pension fund contributions for his service as Chairman for the full year 2016, was CHF 6,069,569.

→ **Refer to "Board of Directors" in the "Corporate governance" section of this report for more information on the responsibilities of the Chairman**

The share component ensures that the Chairman's pay is aligned with the Group's long-term performance. The Chairman's employment agreement does not provide for severance terms or supplementary contributions to pension plans. Benefits for the Chairman are in line with local practices for UBS employees. The Compensation Committee approves the Chairman's compensation annually, taking into consideration fee or compensation levels for comparable roles outside the firm.

Independent BoD members

All BoD members except the Chairman are deemed independent directors and receive a fixed base fee of CHF 325,000 per annum. In addition to the base fee, independent BoD members receive committee retainers for their services on the firm's various board committees. The Senior Independent Director and the Vice Chairman of the BoD each receive an additional retainer of CHF 250,000. Independent BoD members must use a minimum of 50% of their fees to purchase UBS shares that are blocked for four years. They may elect to use up to 100% of their fees to purchase blocked UBS shares. In all cases, the number of shares that independent BoD members are entitled to purchase is calculated at a discount of 15% below the average market price over the last 10 trading days in February. Independent BoD members do not receive performance awards, severance payments or benefits. The chart on the following page provides details and additional information on the remuneration framework for independent BoD members.

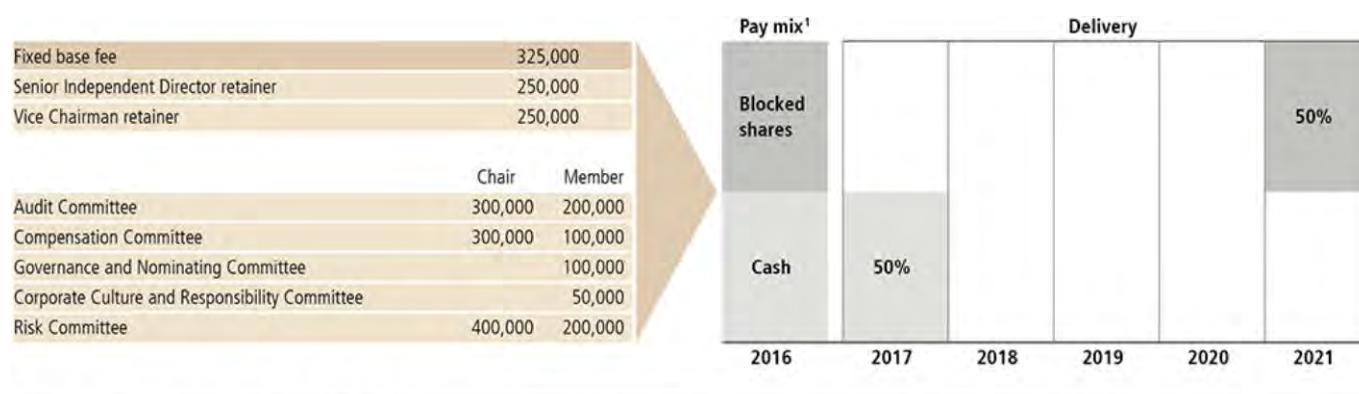
Base fees, committee retainers and any other payments to be received by independent BoD members are subject to an annual review based on a proposal submitted by the Chairman of the BoD to the Compensation Committee, which in turn submits a recommendation to the BoD for approval. The BoD proposes at each AGM for shareholder approval the aggregate amount of BoD remuneration, including compensation of the Chairman, which applies until the subsequent AGM.

The "Remuneration details and additional information for independent BoD members" table shows the remuneration for each independent BoD member for the period from AGM 2016 to AGM 2017. The fixed base fees are unchanged from the 2015 / 16 period and have been broadly flat since 1998.

2016 / 2017 remuneration framework for independent BoD members

CHF, except where indicated

Fees include retainers for Committee chair or membership and / or specific roles that are paid per annum. At least 50% of the total amounts must be used to purchase shares that are blocked for four years.



¹ Independent BoD members can elect to use 100% of their remuneration to purchase blocked UBS shares. UBS blocked shares are granted with a price discount of 15% and are blocked for four years.

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Total payments to BoD members

CHF, except where indicated

	For the year	Total ¹
Aggregate of all BoD members	2016	13,219,569
	2015	12,778,308

¹ Includes social security contributions paid by the BoD members but excludes the portion related to the legally required social security contributions paid by UBS, which for 2016 are estimated at grant at CHF 662,740 and for 2015 at CHF 653,272.

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Compensation details and additional information for non-independent BoD members

CHF, except where indicated

Name, function ¹	For the year	Base salary	Annual share award ²	Benefits ³	Contributions to retirement benefit plans ⁴	Total ⁵
Axel A. Weber, Chairman	2016	3,500,000	2,200,000	108,388	261,181	6,069,569
	2015	3,500,000	2,200,000	72,959	261,181	6,034,141

¹ Axel A. Weber was the only non-independent member in office on both 31 December 2016 and 31 December 2015. ² These shares are blocked for four years. ³ Benefits are all valued at market price. ⁴ Includes the portion related to UBS's contribution to the statutory pension scheme. ⁵ Excludes the portion related to the legally required social security contributions paid by UBS, which for 2016 are estimated at grant at CHF 368,695 and for 2015 at CHF 368,257. The legally required social security contributions paid by the non-independent BoD members are included in the amounts shown in this table, as appropriate.

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Remuneration details and additional information for independent BoD members

CHF, except where indicated

Name, function ¹	Audit Committee	Compensation Committee	Corporate Culture and Responsibility Committee	Governance and Nominating Committee	Risk Committee	For the period AGM to AGM	Base fee	Committee retainer(s)	Additional payments ²	Total ³	Share percentage ⁴	Number of shares ⁵
Michel Demaré, Vice Chairman	M	M		M		2016/2017	325,000	400,000	250,000	975,000	50	36,407
	M	M		M		2015/2016	325,000	400,000	250,000	975,000	50	38,295
David Sidwell, Senior Independent Director				M	C	2016/2017	325,000	500,000	250,000	1,075,000	50	40,141
				M	C	2015/2016	325,000	500,000	250,000	1,075,000	50	42,223
Reto Francioni, member		M	M		M	2016/2017	325,000	350,000		675,000	50	25,205
		M	M		M	2015/2016	325,000	255,000		580,000	50	22,780
Ann F. Godbehere, member	M	C				2016/2017	325,000	500,000		825,000	50	30,806
	M	C				2015/2016	325,000	500,000		825,000	50	32,403
Axel P. Lehmann, former member					M	2016/2017	–	–		–	–	–
					M	2015/2016	210,347	129,444		339,792	100	25,217
William G. Parrett, member	C	M	M			2016/2017	325,000	450,000		775,000	50	28,939
	C	M	M			2015/2016	325,000	402,500		727,500	50	28,574
Isabelle Romy, member	M			M		2016/2017	325,000	300,000		625,000	50	23,338
	M			M		2015/2016	325,000	300,000		625,000	50	24,548
Robert W. Scully, member					M	2016/2017	325,000	200,000		525,000	100	29,917
					M	2015/2016	–	–		–	–	–
Jes Staley, former member		M			M	2016/2017	–	–		–	–	–
		M			M	2015/2016	154,375	142,500		296,875	0	0
Beatrice Weder di Mauro, member	M				M	2016/2017	325,000	400,000		725,000	50	27,072
	M				M	2015/2016	325,000	400,000		725,000	50	28,476
Dieter Wemmer, member					M	2016/2017	215,000	160,000		375,000	50	14,002
					M	2015/2016	–	–		–	–	–
Joseph Yam, member			M		M	2016/2017	325,000	250,000		575,000	50	21,471
			M		M	2015/2016	325,000	250,000		575,000	50	22,584
Total 2016/2017										7,150,000		
Total 2015/2016										6,744,167		

Legend: C = Chairperson of the respective Committee, M = Member of the respective Committee

1 10 independent BoD members were in office on 31 December 2016. Robert W. Scully and Dieter Wemmer were elected at the AGM on 10 May 2016. Nine independent BoD members were in office on 31 December 2015. Jes Staley was elected at the AGM on 7 May 2015 and stepped down on 28 October 2015. Reto Francioni was appointed as a Risk Committee member on 29 October 2015 and William G. Parrett was appointed as a Compensation Committee member on 29 October 2015, both succeeding Jes Staley. Axel P. Lehmann stepped down as BoD member on 31 December 2015. Jes Staley, Reto Francioni, William G. Parrett and Axel P. Lehmann were remunerated pro rata temporis for 2015. On Dieter Wemmer's request, his remuneration has been reduced to account for his meeting attendance as he faced a number of scheduling conflicts in 2016. 2 These payments are associated with the Vice Chairman or the Senior Independent Director function. 3 Excludes UBS's portion related to the legally required social security contributions, which for the period from the AGM 2016 to the AGM 2017 are estimated at grant at CHF 294,045 and which for the period from the AGM 2015 to the AGM 2016 were estimated at grant at CHF 285,015. The legally required social security contributions paid by the independent BoD members are included in the amounts shown in this table, as appropriate. 4 Fees are paid 50% in cash and 50% in blocked UBS shares. However, independent BoD members may elect to have 100% of their remuneration paid in blocked UBS shares. 5 For 2016, UBS shares, valued at CHF 15.75 (average price of UBS shares at the SIX Swiss Exchange over the last 10 trading days of February 2017), were granted with a price discount of 15%. These shares are blocked for four years. For 2015, UBS shares, valued at CHF 14.98 (average price of UBS shares at the SIX Swiss Exchange over the last 10 trading days of February 2016), were granted with a price discount of 15%. These shares are blocked for four years. 6 Number of shares is reduced in case of the 100% election to deduct legally required contributions. All remuneration payments are, where applicable, subject to social security contributions and / or withholding tax.

Our compensation governance framework

Board of Directors and Compensation Committee

The Board of Directors (BoD) is ultimately responsible for approving and overseeing the compensation strategy proposed by the Compensation Committee, which determines compensation-related matters in line with the principles set forth in the Articles of Association.

As determined in the Articles of Association and the firm's Organization Regulations, the Compensation Committee is the supervisory body for our human resources and compensation policies. It ensures that we have appropriate governance and oversight of our compensation process and practices, that we have strong alignment between pay and performance, and that our compensation system does not encourage inappropriate risk-taking. Our Compensation Committee consists of four independent BoD members who are elected annually by the shareholders at the Annual General Meeting (AGM).

Among other responsibilities, the Compensation Committee, on behalf of the BoD:

- reviews our Total Reward Principles
- reviews and approves the design of the compensation framework
- reviews performance award funding throughout the year and proposes the final performance award pool to the BoD for approval
- together with the Group CEO, reviews performance targets and performance assessments and proposes base salaries and annual performance awards for the other GEB members to the BoD, which approves the total compensation of each GEB member
- together with the Chairman of the BoD, establishes performance targets, evaluates performance and proposes the compensation for the Group CEO to the BoD
- approves the total compensation for the Chairman of the BoD
- together with the Chairman, proposes the total individual compensation for independent BoD members for approval by the BoD
- together with the BoD, proposes the maximum aggregate amounts of compensation for the BoD and for the GEB, to be submitted for approval by shareholders at the AGM
- reviews the Compensation Report and approves any material public disclosures on compensation matters

The Compensation Committee meets at least four times a year. In 2016, the Compensation Committee held seven meetings and two conference calls. All meetings were fully attended. The Chairman of the BoD attended all meetings and the Group CEO all but one meeting. The Chairman of the BoD and the Group

CEO were not present during discussions related to their own compensation or performance evaluations. The Chairperson of the Compensation Committee may also invite other executives to join the meeting in an advisory capacity. No individual whose compensation is reviewed is allowed to attend meetings during which specific decisions are made about their compensation. Such decisions are at the discretion of the Compensation Committee and the BoD.

After the meetings, the Chairperson of the Compensation Committee reports to the BoD on the activities of the Compensation Committee and the matters discussed. In addition, where necessary, the Chairperson submits proposals for approval by the full BoD. The minutes of Compensation Committee meetings are sent to all members of the BoD.

On 31 December 2016, the Compensation Committee members were Ann F. Godbehere, who chairs the committee, Michel Demaré, Reto Francioni and William G. Parrett.

External advisors

The Compensation Committee may retain external advisors to support it in fulfilling its duties. In 2016, HCM International Ltd. provided independent advice on compensation matters. HCM International Ltd. holds no other mandates with UBS. The compensation consulting firm Willis Towers Watson provided the Compensation Committee with data on market trends and benchmarks, including in relation to GEB and BoD compensation. Various subsidiaries of Willis Towers Watson provide similar data to Human Resources in relation to compensation for employees below the BoD and GEB level. Willis Towers Watson holds no other compensation-related mandates with UBS.

The Risk Committee's role in compensation

The Risk Committee, a committee of the BoD, works closely with the Compensation Committee to ensure that our approach to compensation reflects proper risk management and control. The Risk Committee supervises and sets appropriate risk management and risk control principles and receives regular briefings on how risk is factored into the compensation process. It also monitors Group Risk Control's involvement in compensation and reviews risk-related aspects of the compensation process.

→ Refer to www.ubs.com/governance for more information

Compensation Committee 2016 / 2017 key activities and timeline

This table provides an overview of the Compensation Committee's key scheduled activities from AGM 2016 to AGM 2017.

	June	July	Sept	Oct	Nov	Dec	Jan	Mar
Strategy, policy and governance								
Revised Total Reward Principles	●							
3-year strategic plan on variable compensation					●			
Compensation disclosure and stakeholder communication matters		●					●	●
AGM reward-related items	●							●
Compensation Committee governance				●				●
Annual compensation review								
Accruals and full-year forecast of the performance award pool funding	●	●	●	●	●	●	●	
Performance targets and performance assessment of the Group CEO and GEB members						●	●	
Group CEO and GEB members salaries and individual performance awards							●	
Update on market practice, trends and peer group matters	●		●		●			
Pay for performance, including governance on certain higher-paid employees, and non-standard compensation arrangements	●						●	●
Board of Directors remuneration								●
Compensation framework								
Compensation framework and deferred compensation matters			●				●	
Risk and regulatory								
Risk management in the compensation approach and joint meeting with BoD Risk Committee			●					
Regulatory activities impacting employees and engagement with regulators	●	●		●	●			●

Compensation governance

The table below provides an overview of compensation governance by specific role.

Recipients	Compensation recommendations developed by	Approved by	Communicated by
Chairman of the BoD	Chairperson of the Compensation Committee	Compensation Committee ¹	Compensation Committee
Independent BoD members (remuneration system and fees)	Compensation Committee and Chairman of the BoD	BoD ¹	Chairman of the BoD
Group CEO	Compensation Committee and Chairman of the BoD	BoD ¹	Chairman of the BoD
Other GEB members	Compensation Committee and Group CEO	BoD ¹	Group CEO
Key Risk Takers (KRTs) / (senior) employees	Respective GEB member together with functional management team	Individual compensation for KRTs and senior employees: Group CEO	Line manager
		Performance award pool for all employees: BoD	

¹ Aggregate compensation for the GEB and aggregate remuneration for the BoD are subject to shareholder approval.

Shareholder engagement and say-on-pay votes at the AGM Approved compensation

UBS is committed to an ongoing dialog with our shareholders to ascertain their perspectives on developments and trends in compensation and corporate governance matters. In line with the Swiss Ordinance against Excessive Compensation in Listed Stock Corporations, we seek binding shareholder approval for the aggregate compensation for the GEB and for the BoD. The BoD believes that prospective approval for the fixed remuneration for the BoD and the GEB provides the firm and its governing bodies with the certainty necessary to operate effectively. Furthermore, retrospective approval for the GEB's variable compensation awards aligns total compensation for the GEB to performance and contribution and to developments in the market place and across peers. The combination of the binding votes on compensation and the advisory vote on the compensation framework reflects our commitment to our shareholders to having their say-on-pay.

→ Refer to "Provisions of the Articles of Association related to compensation" at the end of this section for more information

For the performance year 2016, shareholders approved at the AGM 2015 a maximum aggregate fixed compensation amount of CHF 25,000,000 for the members of the GEB, including base salaries, role-based allowances in response to CRD IV, estimated standard contribution to retirement benefit plans, other benefits and a buffer. Following the increase in the number of GEB members from 10 to 12 as of January 2016, the aggregate fixed compensation paid in 2016 to current and former¹ GEB members exceeded the approved amount for 2016. Funded from the available statutory supplementary amount², as approved by shareholders in 2014, an additional amount of CHF 2,721,274 was used to pay a portion of the fixed compensation of the new GEB members.

¹ Includes salaries and employer's contribution to the statutory pension scheme and benefits as part of the employment contract during the notice period for two GEB members who stepped down on 31 December 2015. No such payments were made in 2015.

² The additional amount was used to equally fund the increase of the Group Executive Board, with Sabine Keller-Busse as Group Head Human Resources and Axel P. Lehmann as Group Chief Operating Officer (Group COO). The Group COO role was held by the Group CFO in prior years and was split in 2016; the Group Head Human Resources role has been a GEB level role since 2016.

Say-on-pay – compensation-related votes at the AGM 2016

2016 AGM say-on-pay voting schemes		2016 actual shareholder votes	Vote "for"	Compensation granted
Binding vote on GEB variable compensation	Proposal on the aggregate amount of variable compensation for the GEB for the past performance year	Shareholders approved CHF 71,250,000 for the financial year 2015 ^{1, 2, 3}	85.9%	CHF 71,250,000
Binding vote on GEB fixed compensation	Proposal on the maximum amount of fixed compensation for the GEB for the following financial year	Shareholders approved CHF 28,500,000 for the financial year 2017	95.1%	To be disclosed in the 2017 Compensation Report
Binding vote on BoD remuneration	Proposal on the maximum aggregate amount of remuneration for the BoD for the period from AGM to AGM. This ensures that the term of office and the compensation period are aligned	Shareholders approved CHF 14,000,000 for the period from the 2016 AGM to 2017 AGM ^{1, 2}	91.8%	CHF 13,219,569
Advisory vote on Compensation Report	Proposal on the prior-year Compensation Report, which provides valuable feedback on compensation practice in relation to UBS's compensation framework, governance and policy	Shareholders approved the UBS Group AG Compensation Report 2015 in an advisory vote	84.8%	

¹ Local currencies are translated into Swiss francs at the exchange rates stated in "Note 36 Currency translation rates" in the "Consolidated financial statements" section of the Annual Report 2015. ² Excludes the portion related to the legally required employer's social security contributions. ³ Ten GEB members were in office on 31 December 2015.

Our compensation model for employees other than GEB members

Base salary

Employees' fixed compensation reflects their level of skills, role and experience, as well as local market practices. Fixed compensation generally consists of a base salary and, if applicable, a role-based allowance. Base salaries are usually paid monthly or fortnightly. We offer our employees competitive base salaries, although salary levels vary between functions and locations. Since 2011, salary increases have been limited. With effect from March 2017, total base salaries increased by CHF 80 million or 1.4%. Such increases will continue to be granted to employees who were promoted, have scarce or in-demand skillsets, delivered a very strong performance or took on increased responsibilities.

Overall, we focus on total compensation. For example, 2016 performance award pools take into account salary increases granted earlier in the year. We will continue to review salaries and performance awards in light of market developments, affordability, our performance and our commitment to deliver sustainable returns to our shareholders.

In addition to a base salary and as part of fixed compensation, some regulated employees may receive a role-based allowance as described in the "Material Risk Takers" section of this report. Such allowance represents a shift in the compensation mix between fixed and variable compensation and not an increase in total compensation.

Pensions, benefits, and employee share purchase program

We offer certain benefits to our employees such as health insurance and retirement benefits. These benefits may vary depending on the employee's location and are intended to be competitive in each of the markets in which we operate. Pension contributions and pension plans also vary across locations and countries in accordance with local requirements and market practice. However, pension plan rules in any one location are generally the same for all employees, including management.

The Equity Plus Plan is our employee share purchase program. It allows employees below the rank of managing director to contribute up to 30% of their base salary and / or up to 35% of their performance award (up to CHF / USD 20,000 annually) for the purchase of UBS shares. Eligible employees may buy UBS shares at market price and receive one matching share for every three shares purchased through the program. The matching shares vest after three years, provided the employee remains employed with the firm and has retained the purchased shares throughout the holding period.

→ **Refer to "Note 26 Pension and other post-employment benefit plans" in the "Consolidated financial statements" section of this report for more information**

Performance award

Most of our employees are eligible for an annual discretionary performance award. The level of the award depends on the firm's overall performance, the employee's business division performance, as well as individual performance and behavior, reflecting their overall contribution to the firm's success. The award is at the complete discretion of the firm. To link pay with performance, the key performance indicators (KPIs) used to measure our progress in executing our strategy are taken into account when determining the size of each business division's performance award pool. The KPIs also serve as a basis for setting specific performance conditions for vesting of certain deferred compensation plan grants.

In addition to the firm's principles around Client focus, Excellence and Sustainable performance, on an individual level, behaviors related to Integrity, Collaboration and Challenge are part of the performance management approach. Therefore, when assessing performance, we not only take into account what was achieved, but also how those results were achieved.

Benchmarking

Because of the diversity of our businesses, our choice of benchmark companies focuses on the comparability of business division, location and scope of role. For certain businesses or roles, we may take into account practices at other major international banks, other large Swiss private banks, private equity firms, hedge funds and non-financial firms. Furthermore, we also benchmark employee compensation internally for comparable roles within and across business divisions and locations.

Deferral of performance awards

We encourage our employees to deliver sustainable performance. In practice, this means that employees with the highest levels of compensation have a higher effective deferral rate of their performance awards. If an employee's total compensation exceeds CHF / USD 300,000, a significant part of their performance award will be deferred for up to five years, or longer for certain regulated employees.

The deferred amount increases at higher marginal rates in line

with the value of the performance award. The portion of the performance award paid out in immediate cash is capped at CHF / USD 1 million (or the equivalent in other currencies). Amounts in excess of the cash cap are deferred in notional shares under the Equity Ownership Plan (EOP). The effective deferral rate therefore depends on the amount of the performance award and the amount of total compensation.

Of the deferred annual performance award, at least 60% is deferred in UBS notional shares under the EOP and up to 40% is deferred in notional instruments under the Deferred Contingent Capital Plan (DCCP). Asset Management employees receive at least 75% of their deferred performance awards in notional funds under the EOP and up to 25% under the DCCP. The average deferral period for deferred performance awards for employees below GEB level is 3.5 years.

- **Refer to the "Our deferred variable compensation plans for 2016" section of this report for more information**
- **Refer to "Note 27 Equity participation and other compensation plans" in the "Consolidated financial statements" section of this report for more information on local plans**

Other variable compensation components

To support hiring and retention, particularly at senior levels, we may offer certain other compensation components. These include:

- Replacement payments to compensate employees for deferred awards forfeited as a result of joining the firm. Such payments are industry practice and are often necessary to attract senior candidates, who generally have a significant portion of their awards deferred at their current employer, where continued employment is required to avoid forfeiture.
- Retention payments made to key employees to induce them to stay, particularly during critical periods for the firm.
- On a very limited basis, guarantees may be required to attract individuals with certain skills and experience. These awards are fixed incentives subject to our standard deferral rules and are limited to the first full year of employment.
- Award grants to employees hired late in the year to replace performance awards that they would have earned at their previous employer, but have foregone by joining the firm. These awards are structured with the same level of deferral as for employees at a similar level at UBS. In exceptional cases, candidates may be offered a sign-on award to increase the chances of them accepting our offer.

These other variable compensation components are subject to a comprehensive governance process. Authorization and responsibility may go up to the BoD Compensation Committee, depending on the amount or type of such payments.

Employees who are made redundant may receive severance payments. Our severance terms comply with the applicable local laws (legally obligated severance). In certain locations, we may provide severance packages that are negotiated with our local social partners and may go beyond the applicable minimum legal requirements (standard severance). Such payments are governed by location-specific severance policies. In addition, we may make severance payments that exceed legally obligated or standard severance payments (supplemental severance) where we believe that they are aligned with market practice and appropriate under the circumstances. No severance payments are made to members of the GEB.

Sign-on payments, replacement payments, guarantees and severance payments

	Total 2016	of which: expenses recognized in 2016 ⁵	of which: expenses to be recognized in 2017 and later	Total 2015	Number of beneficiaries	
					2016	2015
<i>CHF million, except where indicated</i>						
Total sign-on payments¹	43	27	16	21	145	114
<i>of which: Key Risk Takers²</i>	<i>19</i>	<i>12</i>	8	11	<i>10</i>	14
Total replacement payments³	65	24	41	85	221	252
<i>of which: Key Risk Takers²</i>	<i>26</i>	<i>17</i>	9	44	<i>14</i>	27
Total guarantees³	13	6	7	44	17	35
<i>of which: Key Risk Takers²</i>	<i>0</i>	<i>0</i>	0	29	<i>0</i>	13
Total severance payments^{1, 4}	271	271	0	166	2,637	1,850
<i>of which: Key Risk Takers²</i>	<i>4</i>	<i>4</i>	0	2	<i>17</i>	6

¹ GEB members are not eligible for sign-on or severance payments. ² Expenses for Key Risk Takers are full-year amounts for individuals in office on 31 December 2016. Key Risk Takers include employees with a total compensation exceeding CHF / USD 2.5 million (Highly Paid Employees). ³ No GEB member received replacement payments or guarantees for 2016 or 2015. ⁴ Severance payments include legally obligated and standard severance. ⁵ Expenses before post-vesting transfer restrictions.

Compensation for financial advisors in Wealth Management Americas

In line with market practice for US wealth management businesses, the compensation for financial advisors in Wealth Management Americas is based on production payout and awards. Production payout, paid monthly, is primarily based on compensable revenue. Financial advisors may also qualify for deferred awards, which vest over various time periods of up to 10 years depending on the type of award. The awards are based on strategic performance measures, including production, length of service with the firm and net new business. Production payout rates and awards may be reduced for, among other things, errors, negligence or carelessness, or a failure to comply with the firm's rules, standards, practices and policies or applicable laws and regulations.

Key Risk Takers

Key Risk Takers (KRTs) are globally defined as those employees who, by the nature of their roles, have been determined to materially set, commit or control significant amounts of the firm's resources and / or exert significant influence over its risk

profile. This includes employees who work in front-office roles, logistics and control functions. Identifying KRTs is part of our risk control framework and an important element in ensuring we incentivize only appropriate risk-taking. For 2016, 661 employees were classified as KRTs, including all 12 GEB members. This group also includes all employees with a total compensation exceeding CHF / USD 2.5 million (Highly Paid Employees) who may not have been identified as KRTs during the performance year.

The performance of employees identified as KRTs during the performance year is evaluated by the control functions.

In line with regulatory requirements, KRTs' performance awards are subject to a mandatory deferral of at least 50%, regardless of whether the deferral threshold has been met. A KRT's deferred compensation award will only vest if the relevant Group and / or business division performance conditions are met. Like for all other employees, the deferred portion of KRTs' compensation is also subject to forfeiture or reduction if the KRT commits harmful acts.

Group Managing Directors (GMDs) receive part of their annual performance award under the DCCP and EOP with the same vesting conditions as for KRTs.

Fixed and variable compensation for Key Risk Takers¹

CHF million, except where indicated	Total for the year ended 2016		Not deferred		Deferred ²		Total for the year ended 2015 ³
	Amount	%	Amount	%	Amount	%	Amount
Total compensation							
Amount ⁴	1,138	100	619	54	519	46	1,413
Number of beneficiaries	649						659
Fixed compensation ^{4,5}	386	34	386	100	0	0	398
Cash-based	357	31	357		0		376
Equity-based	29	3	29		0		22
Variable compensation	752	66	233	31	519	69	1,015
Immediate cash ⁶	233	21	233		0		280
Equity Ownership Plan (EOP)	322	28	0		322		462
Deferred Contingent Capital Plan (DCCP)	197	17	0		197		273

¹ Includes employees with a total compensation exceeding CHF / USD 2.5 million (Highly Paid Employees), excluding GEB members who were in office on 31 December 2016. ² Based on the specific plan vesting and reflecting the total value at grant, which may differ from the accounting expenses. ³ Figures for 2015 as reported in our Annual Report 2015. ⁴ Excludes benefits and employer's contribution to retirement benefit plans. ⁵ Includes base salary and role-based allowances. ⁶ Includes allocation of vested but blocked shares, in line with the remuneration section of the UK Prudential Regulation Rulebook.

Material Risk Takers

For entities that are regulated in the EU, we have to identify individuals who are deemed to be Material Risk Takers (MRTs) based on the guidelines issued by the European Banking Authority (EBA). In the UK, under the guidance of the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA), we identified a group of 640 UK MRTs for 2016. This group consists of senior management, risk takers, staff engaged in control functions and any employee whose total compensation is above a certain threshold. In line with the EBA guidelines, 50% of UK MRTs' performance awards that are paid out immediately are delivered in UBS shares that are blocked for six months. Any notional shares granted to UK MRTs under the EOP for their performance in 2016 are subject to an additional six-month blocking period post vesting. Since 2015, performance awards granted to UK MRTs have also been subject to claw-back provisions for a period of up to seven years from the date of grant. Under these provisions, the firm may claim repayment of both the immediate and the deferred element of any discretionary performance award if an individual is found to have contributed substantially to causing significant financial losses to the Group or a material downward restatement of disclosed results, or engaged in misconduct and / or failed to take expected actions, which contributed to significant harm to the Group's reputation.

In line with market practice, MRTs may receive a role-based allowance in addition to their base salary. This role-based allowance reflects the market value of a specific role and is fixed, non-forfeitable compensation. Unlike salary, a role-based allowance is paid only for as long as the employee is in a specific role. Importantly, the role-based allowance represents a shift in the compensation mix between fixed and variable compensation and not an increase in total compensation.

Similar to 2015, the 2016 role-based allowances consisted of an immediate cash portion and, where applicable, a blocked UBS share award. Other EU-based employees who are subject to regulation have similar compensation structures in order to comply with EBA and local requirements.

UK Senior Managers and Certification Regime

In March 2016, the Senior Managers and Certification Regime (SMCR) of the UK PRA and FCA came into effect. Under the SMCR, certain specified responsibilities are allocated to named individuals performing designated Senior Management Functions (SMFs). Individuals in the certification group under SMCR are those performing certain significant functions, MRTs and / or those in certain other identified categories.

SMFs are subject to specific compensation requirements, which we have implemented for the performance year 2016, including longer deferral and claw-back periods. We have extended the deferral period for SMFs to seven years, with the deferred performance awards vesting in equal installments between years 3 and 7. We have also amended the claw-back policy to allow claw-back for up to 10 years from the date of performance award grants (applicable if an individual is subject to an investigation at the end of the initial seven-year claw-back period).

Control functions and Group Internal Audit

Our control functions, Risk Control (including Compliance), Finance and Legal, must be independent in order to monitor risk effectively. Therefore, we determine their compensation independently from the revenue producers that they oversee, supervise or support. Their performance award pool is not based on the performance of these businesses, but on the performance of the Group as a whole. In addition, we consider other factors, such as how effectively the function has performed, and our market position. Decisions on individual compensation for the senior managers of the control functions are made by the function heads and approved by the Group CEO. Decisions on individual compensation for the members of Group Internal Audit (GIA) are made by the Head of GIA and approved by the Chairman of the BoD. Upon proposal by the Chairman, total compensation for the Head of GIA is approved by the Compensation Committee in consultation with the Audit Committee.

Our deferred variable compensation plans for 2016

Deferred compensation

To ensure our employees' and stakeholders' interests are aligned and that compensation is appropriately linked to longer-term sustainable performance, a significant part of performance awards above a total compensation threshold are deferred in UBS notional shares and / or UBS notional instruments for up to five years, or longer for certain regulated employees.

For all employees with a total compensation above CHF / USD 300,000, a specific amount of the overall performance award is deferred. For 2016, 48% of the overall performance award for this group of employees was deferred.

Our current performance award components are not classified as "on-top" long-term incentive awards, because they are not granted in addition to and beyond an annual performance award and they do not include leverage features based on potential future performance. We believe UBS has one of the most rigorous deferral regimes in the industry.

The average deferral period is 4.4 years for GEB members and 3.5 years for employees below GEB level. To promote sustainable performance over the longer-term, our deferred compensation components are kept at risk through a mix of notional equity and capital instruments with long durations and malus conditions. Malus conditions enable the firm to forfeit unvested deferred awards under certain circumstances, including performance and harmful acts provisions. Deferred awards granted to the most senior employees and to Highly Paid Employees (employees with a total compensation exceeding CHF / USD 2.5 million) remain subject to performance conditions. Deferred compensation is delivered through two plans: the Equity Ownership Plan (EOP) primarily aligns employee interest with those of our shareholders and the Deferred Contingent Capital Plan (DCCP) aligns with the interests of bondholders.

Overview of our deferred variable compensation plans

		Equity Ownership Plan	Deferred Contingent Capital Plan
Beneficiaries		GEB members, Key Risk Takers and all employees with total compensation greater than CHF / USD 300,000	GEB members, Key Risk Takers and all employees with total compensation greater than CHF / USD 300,000
Deferral mix (between EOP and DCCP)		GEB members: at least 62.5% Asset Management employees: at least 75% All other employees: at least 60%	GEB members: up to 37.5% Asset Management employees: up to 25% All other employees: up to 40%
Vesting schedule		GEB members/SMFs: vests in three installments after years 3, 4 and 5 Asset Management employees: vests in three installments after years 2, 3 and 5 All other employees: vests in equal installments after years 2 and 3	SMFs: vests in two installments after years 6 and 7 GEB members (who are not SMFs) and all other employees: vests in full after 5 years
Conditions influencing payout	Share price	✓	
	Forfeiture clauses	✓	✓
	Harmful acts	✓	✓
	Performance conditions	GEB members, GMDs, Key Risk Takers (including Highly Paid Employees) and SMFs: number of UBS shares delivered at vesting depends on the achievement of both Group and respective business division performance conditions ¹	Depends on whether a trigger event or viability event has occurred and, for GEB members, also on profitability
Profitability as funding driver		✓	✓
Instrument		UBS notional shares ² (eligible for dividend equivalents)	Notional instruments and interest

¹ Includes Asset Management employees who are GMDs or Key Risk Takers (including Highly Paid Employees). ² Notional funds for Asset Management employees.

Equity Ownership Plan

The Equity Ownership Plan (EOP) is a mandatory deferral plan for all employees with total compensation greater than CHF / USD 300,000. These employees receive at least 60% of their deferred performance award under the EOP in notional shares, which are eligible for reinvested dividend equivalents. For 2016, around 4,800 employees received EOP awards. EOP awards are granted annually.

The plan includes provisions that allow the firm to reduce or fully forfeit the unvested deferred portion of the granted EOP award if an employee commits certain harmful acts, and in most cases trigger forfeiture where employment has been terminated.

EOP awards granted to Asset Management employees have a different vesting schedule and deferral mix, as shown in the table "Overview of our deferred variable compensation plans" on the previous page, and are granted as cash-settled notional funds. This aligns Asset Management employee compensation closer with industry standards and thus helps us retain our best talent.

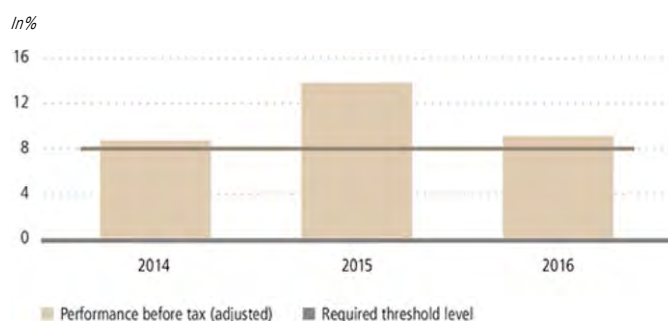
EOP awards granted to GEB members, Group Managing Directors (GMDs), Key Risk Takers (including Highly Paid Employees) and SMFs will only vest if both Group and business division performance requirements are met. Group performance is measured on the basis of average adjusted Group RoTE over the performance period. Business division performance is measured on the basis of the business division's average adjusted RoAE. For Corporate Center employees, it is measured on the basis of the aggregate RoAE of all business divisions. By linking the vesting of EOP awards with minimum return on equity performance over a multi-year time horizon, we encourage our employees to develop and manage the business in a way that delivers sustainable returns.

At Group level, the performance requirement for the award to be able to vest in full is an adjusted RoTE of 8%. The intent is to promote sustained performance by keeping variable compensation of earlier years at a prudently established level of risk.

The primary measure to determine vesting of EOP awards is the average adjusted Group RoTE. If the average adjusted Group RoTE is equal to or above the performance threshold of 8%, the EOP award will vest in full, provided that the relevant business division performance requirement has also been met. If the average adjusted Group RoTE is 0% or negative, the installment will be fully forfeited for the entire firm regardless of any business division's individual performance. If the average adjusted Group RoTE is between 0% and 8%, the award will vest on a linear basis at 0–100%, again provided that the relevant business division performance requirement is met.

The secondary measure to determine vesting of EOP awards is business division RoAE. If the business division RoAE performance threshold (refer to the table on the next page) is met, the EOP award will vest in accordance with the achievement of the primary measure. However, if the RoAE falls below the minimum threshold but is above 0%, the award will be partly forfeited. The extent of the forfeiture depends on how far the actual RoAE falls below the performance threshold for that business division and can be up to 40% of the award that would otherwise vest based on the average adjusted Group RoTE. If the actual RoAE for a business division is 0% or negative, the installment will be fully forfeited for that business division. The Compensation Committee determines whether the performance requirements have been met.

Adjusted Group RoTE performance

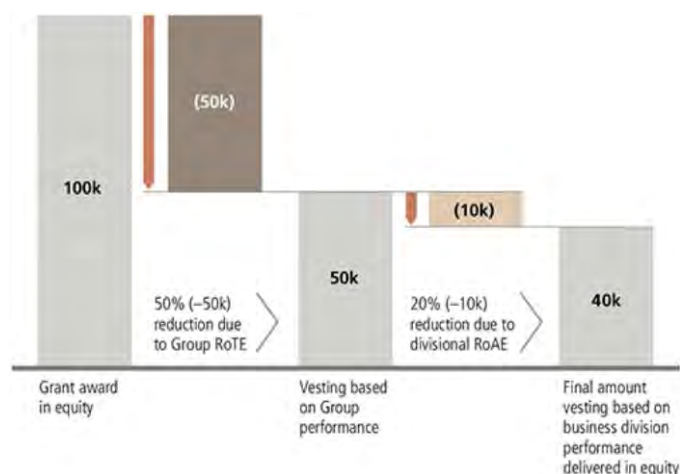


Illustrative example for EOP performance requirements

The amount due to vest under the EOP will depend on the degree to which the RoAE and RoTE performance requirements have been satisfied. Assuming a constant share price, the award may forfeit up to 100% based on the Group RoTE performance. The remaining award is further subject to 100% forfeiture if the business division RoAE is less than 0%, or up to 40% if the business division RoAE is between 0% and the business division performance threshold.

Example:

- EOP award grant: CHF 100,000 in equity
- Adjusted Group RoTE threshold: 8%. 3-year average Group performance: 4%
- Business division RoAE threshold: 20%. 3-year average business division performance: 10%

**Performance requirements for EOP awards granted in February 2017**

The Compensation Committee annually reviews the Group RoTE and each business division's RoAE performance requirement for the upcoming performance award grants under the EOP. The performance requirements are set in the light of past experience as well as forward-looking three-year strategic plan

considerations. Final performance requirements also reflect changes in the attributed equity framework. Once set, they remain in place for all EOP performance vesting installments for that particular award year.

	Installment vesting after	Applicable performance period
GEB / SMF	3 years	2017, 2018 and 2019
	4 years	2018, 2019 and 2020
	5 years	2019, 2020 and 2021
GMDs, Key Risk Takers (including Highly Paid Employees)	2 years	2017 and 2018
	3 years	2017, 2018 and 2019

Group RoTE performance threshold

Adjusted Group RoTE performance threshold	≥8%
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Business division RoAE performance thresholds

Wealth Management	≥30%
Wealth Management Americas	≥12%
Personal & Corporate Banking	≥12%
Asset Management	≥20%
Investment Bank	≥10%
Corporate Center ¹	≥15%

¹ For Corporate Center employees, operating businesses RoAE performance threshold.

Deferred Contingent Capital Plan

The Deferred Contingent Capital Plan (DCCP) is a mandatory deferral plan for all employees with total compensation greater than CHF / USD 300,000. These employees receive up to 40% of their deferred performance award under the DCCP, with the exception of Asset Management employees, who receive up to 25%, and GEB members, who receive up to 37.5%. DCCP awards are granted annually. For 2016, around 4,800 employees received DCCP awards.

Employees are awarded notional additional tier 1 (AT1) instruments, which can be settled either in the form of a cash payment or a perpetual, marketable AT1 instrument, at the discretion of the firm. Prior to grant, employees can elect to have their DCCP awards denominated in either Swiss francs or US dollars.

DCCP awards vest in full after five years and up to seven years for SMFs, unless there is a trigger event. They are written down if the Group's common equity tier 1 (CET1) capital ratio falls below 10% for GEB members and below 7% for all other employees. Awards are also forfeited if a viability event occurs, that is, if FINMA notifies the firm in writing that the DCCP awards must be written down to prevent an insolvency, bankruptcy or failure of UBS, or if the firm receives a commitment of extraordinary support from the public sector that is necessary to prevent such an event. As an additional performance condition, GEB members forfeit 20% of their

award for each loss-making year during the vesting period. Like the EOP, the DCCP also has provisions that allow the firm to apply malus on some, or all, of the unvested deferred portion of a granted award if an employee commits certain harmful acts, or in most cases trigger forfeiture where employment has been terminated.

Under the DCCP, employees may receive discretionary annual interest payments. The notional interest rate for grants in 2017 was 2.55% for awards denominated in Swiss francs and 5.95% for awards denominated in US dollars. These interest rates are based on the current market rates for such AT1 instruments. Interest will be paid out annually, subject to review and confirmation by the firm.

The DCCP contributes to the Group's total loss-absorbing capital. Therefore, DCCP awards not only support competitive pay, but also provide a loss absorption buffer that protects the firm's capital position. The following table illustrates the impact of the DCCP on our AT1 and tier 2 capital as well as on our total loss-absorbing capacity ratio.

- Refer to the "Supplemental information" section of this report for more information on performance award- and personnel-related expenses
- Refer to the "Our compensation model for employees other than GEB members" section of this report for more information on longer vesting and claw-back periods for MRTs and SMFs

Impact of the Deferred Contingent Capital Plan on our loss-absorbing capacity¹

CHF million, except where indicated	31.12.16	31.12.15	31.12.14
Deferred Contingent Capital Plan (DCCP)	2,271	1,903	1,413
of which: high-trigger loss-absorbing additional tier 1 capital	1,380	991	467
of which: high-trigger loss-absorbing tier 2 capital ²	891	912	946
DCCP contribution to the total loss-absorbing capacity ratio (%) ³	1.0	0.9	0.7

¹ Refer to "Bondholder information" at www.ubs.com/investors for more information on the capital instruments of UBS Group AG and of UBS AG both on a consolidated and a standalone basis. ² DCCP awards granted for the performance years 2012 and 2013. Swiss SRB framework including transitional arrangements (phase-in) as of 31 December 2016. Based on the former Swiss SRB framework for 31 December 2015 and 31 December 2014. ³ Impact for periods prior to 31 December 2016 were calculated for the former Swiss SRB total capital ratio.

Supplemental information

Performance awards granted for the 2016 performance year

The “Total variable compensation” table below shows the amount of variable compensation awarded to employees for the performance year 2016, together with the number of beneficiaries for each type of award granted. In the case of deferred awards, the final amount paid to an employee depends on performance conditions and consideration of relevant forfeiture provisions. The deferred share award amount is based on the market value of these awards on the date of grant.

The “Deferred compensation” table on the next page shows the current economic value of unvested outstanding deferred variable compensation awards subject to ex-post adjustments.

For share-based plans, the economic value is determined

based on the closing share price on 30 December 2016. For notional funds, it is determined using the latest available market price for the underlying funds at year-end 2016, and for deferred cash plans, it is determined based on the outstanding amount of cash owed to award recipients. All awards made under our deferred variable compensation plans listed in the “Deferred compensation” table on the next page are subject to ex-post adjustments, whether implicitly, through exposure to share price movements, or explicitly, for example, through forfeitures instigated by the firm.

→ Refer to “Note 27 Equity participation and other compensation plans” in the “Consolidated financial statements” section of this report for more information

Total variable compensation¹

	Expenses		Expenses deferred to future periods		Adjustments ²		Total		Number of beneficiaries	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
<i>CHF million, except where indicated</i>										
Cash performance awards	1,817	2,073	0	0	0	(1)	1,817	2,072	47,581	46,272
Deferred Contingent Capital Plan	133	172	266	343	0	0	399	514	4,785	5,432
UBS share plans	214	261	372	524	54	63	639	848	4,388	5,036
Equity Ownership Plan – notional funds	26	28	34	34	0	0	60	63	428	438
Total performance award pool	2,191	2,535	671	900	54	62	2,916	3,497	47,603	46,311

	Expenses		Expenses deferred to future periods		Adjustments ²		Total	
	2016	2015	2016	2015	2016	2015	2016	2015
<i>CHF million, except where indicated</i>								
Total variable compensation – other³	266	184	162	248	(98)⁴	(160)⁴	330	271

	Expenses		Expenses deferred to future periods		Adjustments ²		Total		Number of beneficiaries	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
<i>CHF million, except where indicated</i>										
Total WMA financial advisor compensation⁵	2,695	2,673	804	1,716	0	0	3,499	4,389	7,025	7,038

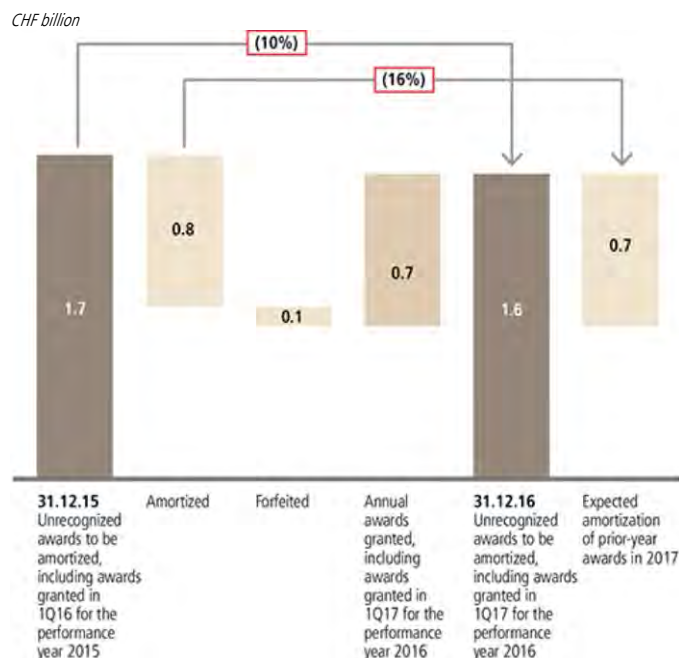
¹ Expenses under “Total variable compensation – other” and “Total WMA financial advisor compensation” are not part of UBS’s performance award pool. ² Adjustments relating to post-vesting transfer restrictions and other adjustments. ³ Replacement payments and retention plan payments, including the 2012 Special Plan Award Program. ⁴ Included in expenses deferred to future periods is an amount of CHF 98 million (2015: CHF 160 million) relating to future interest on the DCCP. As the amount recognized as performance award represents the present value of the award at the date it is granted to the employee, this interest amount is adjusted out in the analysis. ⁵ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements.

Performance award expenses in the 2016 performance year

Performance award expenses include all immediate expenses related to 2016 compensation awards and expenses deferred to 2016 related to awards made in prior years. The chart "Amortization of deferred compensation" shows the amount at the end of 2016 of unrecognized awards to be amortized in subsequent years. This was CHF 1.6 billion for 2016 and CHF 1.7 billion for 2015.

The table below shows the value of actual ex-post explicit and implicit adjustments to outstanding deferred compensation in the financial year 2016. Ex-post adjustments occur after an award has been granted. Ex-post explicit adjustments occur when we adjust compensation by forfeiting deferred awards. Ex-post implicit adjustments are unrelated to any action taken by the firm and occur as a result of share price movements that impact the value of an award. The total value of ex-post explicit adjustments made to UBS shares in 2016, based on the approximately 5 million shares forfeited during 2016, is a reduction of CHF 77 million. The total value of ex-post explicit adjustments made to UBS options and share-settled stock appreciation rights (SARs) in 2016, based on the approximately 0.1 million options / SARs forfeited during 2016, is a reduction of CHF 0.5 million. The size of implicit adjustments is mainly due to an increase in the share price. However, the share price as of year-end means that many of the options previously granted remain out of the money. Hence, the majority of outstanding option awards had no intrinsic value at the end of 2016.

Amortization of deferred compensation



Deferred compensation^{1, 2}

CHF million, except where indicated	Relating to awards for 2016	Relating to awards for prior years ³	Total	of which: exposed to ex-post adjustments	Total deferred compensation year-end 2015
Deferred Contingent Capital Plan	399	1,890	2,289	100%	1,911
Equity Ownership Plan	639	2,531	3,171	100%	3,520
Equity Ownership Plan – notional funds	60	378	438	100%	455
Discontinued deferred compensation plans ⁴	0	6	6	100%	19
Total	1,098	4,805	5,903		5,905

¹ Based on specific plan vesting and reflecting the economic value of the outstanding awards, which may differ from the accounting expenses. ² Refer to "Note 27 Equity participation and other compensation plans" in the "Consolidated financial statements" section of this report for more information. ³ Takes into account the ex-post implicit adjustments, given the share price movements since grant. ⁴ Senior Executive Equity Ownership Plan (SEEO), Incentive Performance Plan (IPP).

Ex-post explicit and implicit adjustments to deferred compensation in 2016¹

CHF million	Ex-post explicit adjustments ⁴		Ex-post implicit adjustments to unvested awards ⁵	
	31.12.16	31.12.15	31.12.16	31.12.15
UBS notional bonds (DCCP)	(48)	(53)		
UBS shares (EOP, SEEO) ²	(77)	(146)	107	412
UBS options (KESOP) and SARs (KESAP) ²	0	(1)	0	0
UBS notional funds (EOP) ³	(3)	(6)	11	3

¹ Compensation (performance awards and other variable compensation) relating to awards for previous performance years. ² Senior Executive Equity Ownership Plan (SEEO), Key Employee Appreciation Rights Plan (KESAP) and Key Employee Stock Option Plan (KESOP) are discontinued deferred compensation plans. ³ Awards granted under this plan are cash-settled and 100% susceptible to ex-post implicit adjustments. ⁴ Ex-post explicit adjustments are calculated as units forfeited during the year, valued at the share price on 30 December 2016 (CHF 15.95) and on 30 December 2015 (CHF 19.52) for UBS shares and valued with the fair value at grant for UBS options. For the notional funds awarded to Asset Management employees under the EOP, this represents the forfeiture credits recognized in 2016 and 2015. For the DCCP, the fair value at grant of the forfeited awards during the year is reflected. ⁵ Ex-post implicit adjustments for UBS shares are calculated based on the difference between the weighted average grant date fair value and the share price at year-end. The amount for notional funds is calculated using the mark-to-market change during 2016 and 2015.

Total personnel expenses for 2016

As of 31 December 2016, there were 59,387 employees (on a full-time equivalent basis). The "Personnel expenses" table below shows our total personnel expenses for 2016. It includes salaries, pension contributions and other personnel costs, social security contributions and variable compensation. Variable compensation includes discretionary cash performance awards paid in 2017 for the 2016 performance year, the amortization of unvested deferred awards granted in previous years and the cost of deferred awards granted to employees who are eligible for retirement in the context of the compensation framework at the date of grant.

The performance award pool reflects the value of discretionary performance awards granted relating to the 2016 performance year, including awards that are paid out immediately and those that are deferred. To determine our variable compensation expenses, the following adjustments are

required in order to reconcile the performance award pool to the accounting expenses recognized in the Group's financial statements prepared in accordance with IFRS:

- reduction for the unrecognized future amortization (including accounting adjustments) of unvested deferred awards granted in 2017 for the performance year 2016
- addition for the 2016 amortization of unvested deferred awards granted in prior years

As a large part of compensation consists of deferred awards, the amortization of unvested deferred awards granted in prior years forms a significant part of the IFRS accounting expenses in both 2015 and 2016.

→ Refer to "Note 27 Equity participation and other compensation plans" in the "Consolidated financial statements" section of this report for more information

Personnel expenses

CHF million	Expenses				
	Relating to awards for 2016	Relating to awards for prior years	Total 2016	2015	2014
Salaries¹	6,230	0	6,230	6,282	6,269
Cash performance awards	1,817	(42)	1,775	1,980	1,714
Deferred Contingent Capital Plan	133	295	428	429	349
Deferred cash plans	0	6	6	12	12
UBS share plans	214	485	699	722	680
UBS share option plans	0	0	0	0	0
Equity Ownership Plan - notional funds	26	39	65	67	65
Total variable compensation - performance awards²	2,191	781	2,972	3,210	2,820
<i>of which: guarantees for new hire</i>	<i>6</i>	<i>23</i>	<i>30</i>	<i>38</i>	<i>48</i>
Variable compensation - other²	266	151	418	346	466
<i>of which: replacement payments³</i>	<i>24</i>	<i>62</i>	<i>86</i>	<i>76</i>	<i>81</i>
<i>of which: forfeiture credits</i>	<i>0</i>	<i>(73)</i>	<i>(73)</i>	<i>(86)</i>	<i>(70)</i>
<i>of which: severance payments⁴</i>	<i>217</i>	<i>0</i>	<i>217</i>	<i>157</i>	<i>162</i>
<i>of which: retention plan and other payments</i>	<i>26</i>	<i>163</i>	<i>188</i>	<i>198</i>	<i>292</i>
Contractors	420	0	420	365	234
Social security	723	24	747	820	791
Pension and other post-employment benefit plans⁵	670	0	670	808	711
Wealth Management Americas: financial advisor compensation^{2, 6}	2,695	1,002	3,697	3,552	3,385
Other personnel expenses	541	24	565	600	605
Total personnel expenses⁷	13,737	1,983	15,720	15,981	15,280

¹ Includes role-based allowances. ² Refer to "Note 27 Equity participation and other compensation plans" in the "Consolidated financial statements" section of this report for more information. ³ Payments made to compensate employees for deferred awards forfeited as a result of joining UBS. Includes the expenses recognized in the financial year (mainly the amortization of the award). ⁴ Includes legally obligated and standard severance payments. ⁵ Includes credits related to changes to retiree benefit plans in the US of CHF 24 million, CHF 41 million for the years ended 31 December 2015 and 31 December 2014, respectively. Refer to "Note 26 Pension and other post-employment benefit plans" in the "Consolidated financial statements" section of this report for more information. ⁶ Consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment, which are subject to vesting requirements. ⁷ Includes net restructuring expenses of CHF 751 million, CHF 460 million and CHF 327 million for the years ended 31 December 2016, 31 December 2015 and 31 December 2014, respectively. Refer to "Note 30 Changes in organization and disposals" in the "Consolidated financial statements" section of this report for more information.

Vesting of outstanding awards granted in prior years subject to performance conditions

The tables below show the extent to which the performance conditions for awards granted in prior years have been met and the percentage of the awards that vest in 2017.

Senior Executive Equity Ownership Plan (SEEOP) 2011 / 2012		
Performance requirement	Performance achieved	% of installment vesting
Adjusted operating profit before tax for the business division or, for Corporate Center, adjusted Group operating profit before tax	As the Group and the business divisions reported an operating profit for 2016, the profitability performance condition has been satisfied, hence the fifth installment of the SEEOP 2011 / 2012 awards vests in full	100%

Equity Ownership Plan (EOP) 2012 / 2013, EOP 2013 / 2014 and EOP 2014 / 2015		
Performance requirement	Performance achieved	% of installment vesting
Group return on tangible equity and the divisional return on attributed equity	The Group and divisional performance conditions have been satisfied. For the EOP 2012 / 2013, the second installment for the GEB members vests in full. For the EOP 2013 / 2014, the first installment for the GEB members and the second installment for all other employees, covered under the plan, vest in full. For the EOP 2014 / 2015, the first installment for all other employees covered under the plan vests in full	100%

Discontinued deferred compensation plans

The table below lists discontinued compensation plans that had outstanding balances as of 31 December 2016 or that were retired in 2016. The firm has not granted any options since 2009. The strike price for stock options awarded under prior compensation plans has not been reset.

→ Refer to “Note 27 Equity participation and other compensation plans” in the “Consolidated financial statements” section of this report for more information

Plan	Years granted	Eligible employees	Instrument	Performance conditions	Vesting period and other conditions	Status as of March 2017
Senior Executive Equity Ownership Plan (SEEOP)	2010–2012	GEB members and GMDs	Shares	Depends on whether the business division makes a loss (the amount forfeited depends on the extent of the loss and generally ranges from 10% to 50% of the award portion due to vest)	Vests in equal installments over a five-year period, subject to continued employment and harmful act provisions	Expired
Key Employee Stock Appreciation Rights Plan (KESAP) and Key Employee Stock Option Plan (KESOP)	2002–2009	Selected employees (approximately 17,000 employees between 2002 and 2009)	Share-settled stock appreciation rights (SARs) or stock options	None	Vests in full three years after grant, subject to continued employment, non-solicitation of clients and employees and non-disclosure of proprietary information	Expired (some options / SARs remain exercisable)
Senior Executive Stock Appreciation Rights Plan (SESAP) and Senior Executive Stock Option Plan (SESOP)	2002–2009	GEB members and members of the Group Managing Board	Share-settled SARs or stock options	None	Vests in full three years after grant, subject to continued employment, non-solicitation of clients and employees and non-disclosure of proprietary information	Expired (some options / SARs remain exercisable)

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Share and option ownership / entitlements of GEB members¹

Name, function	on 31 December	Number of unvested shares / at risk ²	Number of vested shares	Total number of shares	Potentially conferred voting rights in %	Number of options ³	Potentially conferred voting rights in % ⁴
	2016	1,365,537	265,515	1,631,052	0.097	0	0.000
Sergio P. Ermotti, Group Chief Executive Officer	2015	947,964	155,736	1,103,700	0.059	0	0.000
	2016	0	0	0	0.000	0	0.000
Martin Blessing, President Personal & Corporate Banking and President UBS Switzerland	2015	—	—	—	—	—	—
	2016	0	0	0	0.000	0	0.000
Christian Bluhm, Group Chief Risk Officer	2015	—	—	—	—	—	—
	2016	538,520	154,820	693,340	0.041	0	0.000
Markus U. Diethelm, Group General Counsel	2015	447,694	61,797	509,491	0.027	0	0.000
	2016	—	—	—	—	—	—
Lukas Gähwiler, former President Personal & Corporate Banking and President UBS Switzerland	2015	558,657	1,515	560,172	0.030	0	0.000
	2016	142,646	38,581	181,227	0.011	0	0.000
Kirt Gardner, Group Chief Financial Officer	2015	—	—	—	—	—	—
	2016	200,272	120,897	321,169	0.019	0	0.000
Sabine Keller-Busse, Group Head Human Resources	2015	—	—	—	—	—	—
	2016	797,165	95,597	892,762	0.053	0	0.000
Ulrich Körner, President Asset Management and President UBS EMEA	2015	642,813	95,597	738,410	0.039	0	0.000
	2016	0	277,978	277,978	0.017	0	0.000
Axel P. Lehmann, Group Chief Operating Officer	2015	—	—	—	—	—	—
	2016	838,193	352,634	1,190,827	0.071	412,917	0.025
Tom Naratil, President Wealth Management Americas and President UBS Americas	2015	598,172	310,054	908,226	0.049	555,115	0.030
	2016	1,203,535	207,114	1,410,649	0.084	0	0.000
Andrea Orcel, President Investment Bank	2015	933,686	117,646	1,051,332	0.056	0	0.000
	2016	567,777	0	567,777	0.034	143,869	0.009
Kathryn Shih, President UBS Asia Pacific	2015	—	—	—	—	—	—
	2016	881,976	1,075	883,051	0.053	64,164	0.004
Jürg Zeltner, President Wealth Management	2015	683,767	3,721	687,488	0.037	86,279	0.005
	2016	6,535,621	1,514,211	8,049,832	0.479	620,950	0.037
Total	2015	6,747,010	1,677,989	8,424,999	0.450	1,401,686	0.075

¹ Includes all vested and unvested shares and options of GEB members, including those held by related parties. ² Includes shares granted under variable compensation plans with forfeiture provisions. The actual number of shares vesting in the future will be calculated under the terms of the plans. Refer to the "Our deferred variable compensation plans for 2016" section of this report for more information on the plans. ³ Refer to "Note 27 Equity participation and other compensation plans" in the "Consolidated financial statements" section of this report for more information. ⁴ No conversion rights outstanding.

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Total of all vested and unvested shares of GEB members^{1, 2}

	Total	of which: vested	of which: vesting				
			2017	2018	2019	2020	2021
Shares on 31 December 2016	8,049,833	1,514,211	1,267,603	1,750,024	1,762,463	1,132,150	623,381
			2016	2017	2018	2019	2020
Shares on 31 December 2015	8,424,999	1,677,989	1,148,988	1,561,296	2,004,014	1,314,398	718,314

¹ Includes shares held by related parties. ² Includes shares granted under variable compensation plans with forfeiture provisions. The actual number of shares vesting in the future will be calculated under the terms of the plans. Refer to the "Our deferred variable compensation plans for 2016" section of this report for more information.

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Number of shares of BoD members¹

Name, function	on 31 December	Number of shares held	Voting rights in %
Axel A. Weber, Chairman	2016	635,751	0.038
	2015	488,889	0.026
Michel Demaré, Vice Chairman	2016	254,287	0.015
	2015	215,992	0.012
David Sidwell, Senior Independent Director	2016	205,540	0.012
	2015	163,317	0.009
Reto Francioni, member	2016	51,567	0.003
	2015	28,787	0.002
Ann F. Godbehere, member	2016	201,457	0.012
	2015	169,054	0.009
Axel P. Lehmann, former member ²	2016	–	–
	2015	252,761	0.014
William G. Parrett, member	2016	104,385	0.006
	2015	104,271	0.006
Isabelle Romy, member	2016	91,038	0.005
	2015	66,490	0.004
Robert W. Scully, member ²	2016	0	0.000
	2015	–	–
Beatrice Weder di Mauro, member	2016	99,737	0.006
	2015	71,261	0.004
Dieter Wemmer, member ²	2016	0	0.000
	2015	–	–
Joseph Yam, member	2016	109,938	0.007
	2015	87,354	0.005
Total	2016	1,753,700	0.104
	2015	1,648,176	0.088

¹ Includes blocked and unblocked shares held by BoD members, including those held by related parties. No options were granted in 2016 and 2015. ² Dieter Wemmer and Robert W. Scully were newly elected at the AGM on 10 May 2016 and Axel P. Lehmann stepped down from the BoD as of 31 December 2015 and joined the GEB on 1 January 2016.

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Total of all blocked and unblocked shares of BoD members¹

	Total	of which: unblocked	of which: blocked until			
			2017	2018	2019	2020
Shares on 31 December 2016	1,753,700	276,602	337,751	385,005	367,597	386,745
			2016	2017	2018	2019
Shares on 31 December 2015	1,648,176	211,748	232,917	384,118	416,408	402,985

¹ Includes shares held by related parties.

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Vested and unvested options of GEB members¹

on 31 December	Total number of options ²	Number of options ³	Year of grant	Vesting date	Expiry date	Strike price
Tom Naratil, President Wealth Management Americas and President UBS Americas						
2016	412,917	131,277	2007	01.03.2010	28.02.2017	CHF 73.67
		181,640	2008	01.03.2011	28.02.2018	CHF 35.66
		100,000	2009	01.03.2012	27.02.2019	CHF 11.35
2015	555,115	142,198	2006	01.03.2009	28.02.2016	CHF 72.57
		131,277	2007	01.03.2010	28.02.2017	CHF 73.67
		181,640	2008	01.03.2011	28.02.2018	CHF 35.66
		100,000	2009	01.03.2012	27.02.2019	CHF 11.35
Kathryn Shih, President UBS Asia Pacific						
2016	143,869	69,270	2007	01.03.2010	28.02.2017	CHF 73.67
		74,599	2008	01.03.2011	28.02.2018	CHF 35.66
2015	—					
Jürg Zeltner, President Wealth Management						
2016	64,164	7,105	2007	01.03.2008	28.02.2017	CHF 67.00
		7,105	2007	01.03.2009	28.02.2017	CHF 67.00
		7,103	2007	01.03.2010	28.02.2017	CHF 67.00
		223	2007	02.03.2009	02.03.2017	CHF 67.08
		42,628	2008	01.03.2011	28.02.2018	CHF 35.66
2015	86,279	7,106	2006	01.03.2007	28.02.2016	CHF 65.97
		7,103	2006	01.03.2008	28.02.2016	CHF 65.97
		7,103	2006	01.03.2009	28.02.2016	CHF 65.97
		110	2006	03.03.2008	03.03.2016	CHF 65.91
		242	2006	09.06.2008	09.06.2016	CHF 61.84
		230	2006	08.09.2008	08.09.2016	CHF 65.76
		221	2006	08.12.2008	08.12.2016	CHF 67.63
		7,105	2007	01.03.2008	28.02.2017	CHF 67.00
		7,105	2007	01.03.2009	28.02.2017	CHF 67.00
		7,103	2007	01.03.2010	28.02.2017	CHF 67.00
		223	2007	02.03.2009	02.03.2017	CHF 67.08
		42,628	2008	01.03.2011	28.02.2018	CHF 35.66

¹ Includes all options held by GEB members, including those held by related parties. ² No conversion rights outstanding. ³ Refer to "Note 27 Equity participation and other compensation plans" in the "Consolidated financial statements" section of this report for more information.

Audited I

Loans granted to GEB members¹

In line with article 38 of the Articles of Association of UBS Group AG, GEB members may be granted loans. Such loans are made in the ordinary course of business on substantially the same terms as those granted to other employees, including interest rates and collateral, and neither involve more than the normal

risk of collectability nor contain any other unfavorable features for the firm. The total amount of such loans must not exceed CHF 20 million per GEB member.

CHF, except where indicated²

Name, function	on 31 December	Loans ³
Ulrich Körner, President Asset Management and President UBS EMEA (highest loan in 2016)	2016	8,286,193
Ulrich Körner, President Asset Management and President UBS EMEA (highest loan in 2015)	2015	10,621,777
Aggregate of all GEB members	2016	37,137,347 ⁴
	2015	29,032,017

¹ No loans have been granted to related parties of the GEB members at conditions not customary in the market. ² Local currencies are translated into Swiss francs at the exchange rates stated in "Note 34 Currency translation rates" in the "Consolidated financial statements" section of this report. ³ All loans granted are secured loans. ⁴ Excludes an unused uncommitted credit facility of CHF 2,430,050 that had been granted to one GEB member.

Audited I

Loans granted to BoD members¹

In line with article 33 of the Articles of Association of UBS Group AG, loans to independent BoD members are made in the ordinary course of business at general market conditions. The Chairman as a non-independent member may be granted loans in the ordinary course of business on substantially the same

terms as those granted to employees, including interest rates and collateral, neither involving more than the normal risk of collectability nor containing any other unfavorable features for the firm. The total amount of such loans must not exceed CHF 20 million per BoD member.

CHF, except where indicated²

	on 31 December	Loans ³
Aggregate of all BoD members	2016	3,653,370 ⁵
	2015	3,604,950

¹ No loans have been granted to related parties of the BoD members at conditions not customary in the market. ² Local currencies are translated into Swiss francs at the exchange rates stated in "Note 34 Currency translation rates" in the "Consolidated financial statements" section of this report. ³ All loans granted are secured loans. ⁴ CHF 600,000 for Reto Francioni and CHF 3,053,370 for William G. Parrett in 2016 and CHF 600,000 for Reto Francioni and CHF 3,004,950 for William G. Parrett in 2015. ⁵ Excludes an unused uncommitted credit facility of CHF 254,448 that had been granted to one BoD member.

Audited I

Compensation paid to former BoD and GEB members¹

CHF, except where indicated²

	For the year	Compensation	Benefits	Total
Former BoD members	2016	0	0	0
	2015	0	0	0
Aggregate of all former GEB members ³	2016	0	44,381	44,381
	2015	435,448	39,999	475,447
Aggregate of all former BoD and GEB members	2016	0	44,381	44,381
	2015	435,448	39,999	475,447

¹ Compensation or remuneration that is related to the former members' activity on the BoD or GEB or that is not at market conditions. ² Local currencies are translated into Swiss francs at the exchange rates stated in "Note 34 Currency translation rates" in the "Consolidated financial statements" section of this report. ³ Includes a payment in 2016 to one former GEB member and payments in 2015 to two former GEB members.

Provisions of the Articles of Association related to compensation

Under the say-on-pay provisions in Switzerland, shareholders of Swiss-listed companies have significant influence over board and management compensation. At UBS, this is achieved by means of an annual binding say-on-pay vote in accordance with the following Articles of Association provisions related to compensation:

Say-on-pay: The AGM shall approve the proposals of the BoD in relation to the maximum aggregate amount of compensation of the BoD for the period until the next AGM, the maximum aggregate amount of fixed compensation of the GEB for the following financial year and the aggregate amount of variable compensation of the GEB for the preceding financial year. The BoD may submit for approval deviating or

additional proposals. In the event the AGM does not approve a proposal, the BoD shall determine, taking into account all relevant factors, an aggregate amount or partial amounts for subsequent approval by shareholders.

Principles of compensation:

Compensation of the BoD comprises a base remuneration and may comprise other compensation elements and benefits. Compensation of the GEB consists of fixed and variable compensation elements. Variable compensation elements depend on quantitative and qualitative performance measures as determined by the BoD. Remuneration of the BoD and compensation of the GEB may be paid or granted in the form of cash, shares, financial instruments or units, in kind or in

the form of benefits. The BoD determines the key features such as grant, vesting, exercise and forfeiture conditions and applicable harmful acts provisions.

Additional amount for GEB members hired after the vote on the aggregate amount of compensation by the AGM:

For the compensation of GEB members who will be appointed after the approval for compensation by the AGM, and to the extent that the aggregate amount of compensation as approved does not suffice, an amount of up to 40% of the average of total annual compensation paid or granted to the GEB during the previous three years is available without further approval by the AGM.

→ Refer to www.ubs.com/governance for more information



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To the General Meeting of
UBS Group AG, Zurich

Basel, 9 March 2017

Report of the statutory auditor on the compensation report

We have audited the compensation report dated 9 March 2017 of UBS Group AG for the year ended 31 December 2016. The audit was limited to the information according to articles 14 – 16 of the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance) contained in the tables labeled “audited” on pages 276 to 279 and page 301 of the compensation report.



Board of Directors' responsibility

The Board of Directors is responsible for the preparation and overall fair presentation of the compensation report in accordance with Swiss law and the Ordinance. The Board of Directors is also responsible for designing the compensation system and defining individual compensation packages.



Auditor's responsibility

Our responsibility is to express an opinion on the compensation report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the compensation report complies with Swiss law and articles 14 – 16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the compensation report with regard to compensation, loans and credits in accordance with articles 14 – 16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the compensation report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of compensation, as well as assessing the overall presentation of the compensation report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.



Page 2



Opinion

In our opinion, the compensation report for the year ended 31 December 2016 of UBS Group AG complies with Swiss law and articles 14 – 16 of the Ordinance.

Ernst & Young Ltd

Marie-Laure Delarue
Licensed audit expert
(Auditor in charge)

Bruno Patusi
Licensed audit expert

Consolidated financial statements

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Management's report on internal control over financial reporting

Management's responsibility for internal control over financial reporting

The Board of Directors and management of UBS Group AG (UBS) are responsible for establishing and maintaining adequate internal control over financial reporting. UBS's internal control over financial reporting is designed to provide reasonable assurance regarding the preparation and fair presentation of published financial statements in accordance with IFRS as issued by the IASB.

UBS's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation and fair presentation of financial statements, and that receipts and expenditures of the company are being made only in accordance with authorizations of UBS management; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management's assessment of internal control over financial reporting as of 31 December 2016

UBS management has assessed the effectiveness of UBS's internal control over financial reporting as of 31 December 2016 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (2013 Framework). Based on this assessment, management believes that, as of 31 December 2016, UBS's internal control over financial reporting was effective.

The effectiveness of UBS's internal control over financial reporting as of 31 December 2016 has been audited by Ernst & Young Ltd, UBS's independent registered public accounting firm, as stated in their report appearing on pages 309 to 310, which expresses an unqualified opinion on the effectiveness of UBS's internal control over financial reporting as of 31 December 2016.

Reports of the statutory auditor / independent registered public accounting firm

The accompanying reports of the independent registered public accounting firm on the financial statements (refer to page 317) and internal control over financial reporting (refer to pages 309 to 310) of UBS Group AG are included in our filing on 10 March 2017 with the Securities and Exchange Commission on Form 20-F pursuant to US reporting obligations.

The accompanying statutory auditor's report on the audit of the consolidated financial statements (refer to pages 311 to 316) of UBS Group AG is included in our filings on 10 March 2017 with all other relevant non-US exchanges.



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Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of
UBS Group AG

We have audited UBS Group AG and subsidiaries' internal control over financial reporting as of 31 December 2016, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (the COSO criteria). UBS Group AG's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting.

Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, UBS Group AG and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of 31 December 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of UBS Group AG and subsidiaries as of 31 December 2016 and 2015, and the related consolidated income statements, statements of comprehensive income, changes in equity and cash flows, and notes thereto, for each of the three years in the period ended 31 December 2016, and our report dated 9 March 2017 expresses an unqualified opinion thereon.

Ernst & Young Ltd

Ernst & Young Ltd
Basel, 9 March 2017



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To the General Meeting of
UBS Group AG, Zurich

Basel, 9 March 2017

Statutory auditor's report on the audit of the consolidated financial statements



Opinion

We have audited the consolidated financial statements of UBS Group AG and its subsidiaries (the Group), which comprise the consolidated balance sheets as of 31 December 2016 and 2015, and the consolidated income statements, statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended 31 December 2016, and notes to the consolidated financial statements, including a summary of significant accounting policies on pages 318 to 463.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended 31 December 2016 in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.



Basis for opinion

We conducted our audit in accordance with Swiss law, Swiss Auditing Standards and International Standards on Auditing (ISAs). Our responsibilities under those provisions and standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.



Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report, including in relation to these



matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Deferred tax asset valuation

Area of focus We focused on this area because there is significant judgment exercised when determining the valuation of Deferred Tax Assets ("DTAs") given the significant amount of tax net operating loss carryforwards (net operating losses or "NOLs") the Group has available. DTAs can be recognized to the extent it is probable they will be utilized to offset taxable profits within the loss carryforward period or be used against deductible temporary differences. The estimate of future taxable income is based on the strategic plan which is then allocated to the tax-paying entities in the various jurisdictions. The recognition of deferred tax assets is therefore sensitive to changes in the strategic plan as well as to assumptions made in the allocation of future taxable income.

See note 8 to the financial statements on pages 357 to 360.

Our audit response

We tested the design and operational effectiveness of the Group's key controls over the recognition and measurement of DTAs and the assumptions used in estimating the Group's future taxable income.

We assessed the completeness and accuracy of the data used for the estimations of future taxable income. This included auditing of computations of the models applied to the recognition process for DTAs and testing the control framework around the models.

We involved EY specialists to assess the key economic assumptions embedded in the strategic plan. We compared key inputs used by the Group to forecast future taxable income to externally available data, the Group's historical data and performance and assessed the sensitivity of the outcomes to reasonably possible changes in assumptions.

We assessed the completeness and accuracy of the data used in the determination of the legal entity allocation, the assumptions applied by the Group, and the accuracy of the computation of the legal entity allocations.

We also assessed whether the Group's disclosure regarding the application of judgment in estimating recognized and unrecognized DTAs reflect the Group's deferred tax position (within note 8).



Legal provision & contingencies

Area of focus We focused on this area because the Group operates in a legal and regulatory environment that is exposed to significant litigation and similar risks arising from disputes and regulatory proceedings. Such matters are subject to many uncertainties and the outcome may be difficult to predict. These uncertainties inherently affect the amount and timing of potential outflows with respect to the provisions which have been established and other contingent liabilities. Overall, the legal provision should represent the Group's best estimate for existing legal matters that have a probable and estimable impact on the Group's financial position.

See note 20 to the financial statements on pages 377 to 388.

Our audit response

We tested the design and operational effectiveness of the Group's key controls over the legal provision and contingencies process.

We assessed the methodologies on which the provision amounts are based, recalculated the provisions, and tested the completeness and accuracy of the underlying information. We read the legal analyses supporting the judgmental aspects impacted by legal interpretations. We obtained correspondence directly from external legal counsel to corroborate the information provided by the Group and followed up directly with external counsel as deemed necessary.

We also assessed the Group's provisions and contingent liabilities disclosure (within note 20).



Valuation of complex or illiquid trading portfolio assets and liabilities, financial assets and liabilities and derivative financial instruments held at fair value

Area of focus We focused on this area because of the complexity and judgments and assumptions over the fair valuation of financial assets and liabilities with significant unobservable inputs.

We have continued to focus on market developments in fair value methodologies and specifically on the Group's higher estimation uncertainty ("HEU") products, Credit Valuation Adjustment ("CVA") / Funding Valuation Adjustment ("FVA"), and Own Credit Adjustment ("OCA") Curve.

See note 22 to the financial statements on pages 390 to 410.

Our audit response We tested the design and operating effectiveness of the key controls over the financial instrument valuation processes, including controls over market data inputs into valuation models, model governance, and valuation adjustments.

We tested a sample of the valuation models and the inputs used in those models, using a variety of techniques, including comparing inputs to available market data.

We selected a sample of positions and independently determined estimated values and compared the values to the Group's recorded values.

In addition, we evaluated the methodology and inputs used by the Group in determining funding and credit fair value adjustments on uncollateralized derivatives and fair value option liabilities.

We also assessed the Group's disclosure (within note 22).

IT Controls relevant to financial reporting

Area of focus We focused on this area because the Group is highly dependent on its IT systems for business processes and financial reporting. The Group continues to invest in its IT systems to meet client needs and business requirements including the effectiveness of its logical access and change management IT controls.

Our audit response In assessing the reliability of electronic data processing, we included specialized IT auditors as part of our audit team. Our audit procedures focused on the IT infrastructure and applications relevant to financial reporting including testing of the design and operating effectiveness of key IT general controls and IT automated controls.

Our audit procedures related to logical access included testing of user access management, privileged user access, periodic access right recertifications and user authentication controls.



Other information in the annual report

The Board of Directors is responsible for the other information in the Annual Report. The other information comprises all information included in the Annual Report, but does not include the consolidated financial statements (pages 318 – 463), the unconsolidated financial statements of UBS Group AG (pages 637 – 651), the compensation report (pages 276-279 and page 301), disclosures denoted with an audited “signpost”, and our auditor’s report thereon.

Our opinions on the consolidated financial statements, the standalone financial statements of UBS Group AG and the compensation report do not cover the other information and we do not express any form of assurance conclusion thereon other than the disclosures denoted with an audited “signpost”.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the Annual Report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.



Responsibility of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.



Auditor’s responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, Swiss Auditing Standards and ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: <http://www.expertsuisse.ch/en/audit-report-for-public-companies>. This description forms part of our auditor’s report.



Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements in accordance with the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

Ernst & Young Ltd

Marie-Laure Delarue
Licensed Audit Expert
(Auditor in Charge)

Ira S. Fitlin
Certified Public Accountant (U.S.)



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Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of

UBS Group AG

We have audited the accompanying consolidated balance sheets of UBS Group AG and subsidiaries as of 31 December 2016 and 2015, and the related consolidated income statements, statements of comprehensive income, changes in equity and cash flows, and notes thereto, for each of the three years in the period ended 31 December 2016. These financial statements are the responsibility of the Company's Board of Directors. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of UBS Group AG and subsidiaries at 31 December 2016 and 2015, and the consolidated results of their operations and their cash flows for each of the three years in the period ended 31 December 2016, in conformity with International Financial Reporting Standards, as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), UBS Group AG and subsidiaries' internal control over financial reporting as of 31 December 2016, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated 9 March 2017 expressed an unqualified opinion thereon.

Ernst & Young Ltd

Ernst & Young Ltd

Basel, 9 March 2017

UBS Group AG consolidated financial statements

Primary financial statements

Audited I

Income statement

CHF million, except per share data	Note	For the year ended			% change from
		31.12.16	31.12.15	31.12.14	
Interest income	3	13,787	13,177	13,194	5
Interest expense	3	(7,373)	(6,445)	(6,639)	14
Net interest income	3	6,413	6,732	6,555	(5)
Credit loss (expense) / recovery	11	(37)	(117)	(78)	(68)
Net interest income after credit loss expense		6,376	6,615	6,477	(4)
Net fee and commission income	4	16,397	17,140	17,076	(4)
Net trading income	3	4,948	5,742	3,842	(14)
Other income	5	599	1,107	632	(46)
Total operating income		28,320	30,605	28,027	(7)
Personnel expenses	6	15,720	15,981	15,280	(2)
General and administrative expenses	7	7,434	8,107	9,387	(8)
Depreciation and impairment of property, equipment and software	14	985	920	817	7
Amortization and impairment of intangible assets	15	91	107	83	(15)
Total operating expenses		24,230	25,116	25,567	(4)
Operating profit / (loss) before tax		4,090	5,489	2,461	(25)
Tax expense / (benefit)	8	805	(898)	(1,180)	
Net profit / (loss)		3,286	6,386	3,640	(49)
Net profit / (loss) attributable to preferred noteholders				142	
Net profit / (loss) attributable to non-controlling interests		82	183	32	(55)
Net profit / (loss) attributable to shareholders		3,204	6,203	3,466	(48)
Earnings per share (CHF)					
Basic	9	0.86	1.68	0.93	(49)
Diluted	9	0.84	1.64	0.91	(49)

Statement of comprehensive income

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Comprehensive income attributable to shareholders			
Net profit / (loss)	3,204	6,203	3,466
Other comprehensive income that may be reclassified to the income statement			
Foreign currency translation			
Foreign currency translation movements, before tax	251	(140)	1,800
Foreign exchange amounts reclassified to the income statement from equity	126	(90)	2
Income tax relating to foreign currency translation movements	(84)	(2)	(7)
Subtotal foreign currency translation, net of tax	292	(231)	1,795
Financial assets available for sale			
Net unrealized gains / (losses) on financial assets available for sale, before tax	240	175	335
Impairment charges reclassified to the income statement from equity	5	1	75
Realized gains reclassified to the income statement from equity	(372)	(292)	(243)
Realized losses reclassified to the income statement from equity	25	44	25
Income tax relating to net unrealized gains / (losses) on financial assets available for sale	28	8	(51)
Subtotal financial assets available for sale, net of tax	(73)	(63)	141
Cash flow hedges			
Effective portion of changes in fair value of derivative instruments designated as cash flow hedges, before tax	246	544	2,068
Net realized (gains) / losses reclassified to the income statement from equity	(1,082)	(1,182)	(1,185)
Income tax relating to cash flow hedges	170	128	(195)
Subtotal cash flow hedges, net of tax	(666)	(509)	689
Total other comprehensive income that may be reclassified to the income statement, net of tax	(447)	(804)	2,625
Other comprehensive income that will not be reclassified to the income statement			
Defined benefit plans			
Gains / (losses) on defined benefit plans, before tax	(876)	316	(1,410)
Income tax relating to defined benefit plans	52	(18)	238
Subtotal defined benefit plans, net of tax	(824)	298	(1,172)
Own credit on financial liabilities designated at fair value			
Gains / (losses) from own credit on financial liabilities designated at fair value, before tax	(120)		
Income tax relating to own credit on financial liabilities designated at fair value	5		
Subtotal own credit on financial liabilities designated at fair value, net of tax	(115)		
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(939)	298	(1,172)
Total other comprehensive income	(1,386)	(506)	1,453
Total comprehensive income attributable to shareholders	1,817	5,698	4,920

Table continues on the next page.

Statement of comprehensive income (continued)

Table continued from previous page.

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Comprehensive income attributable to preferred noteholders			
Net profit / (loss)			142
Other comprehensive income that will not be reclassified to the income statement			
Foreign currency translation movements, before tax			80
Income tax relating to foreign currency translation movements			0
Subtotal foreign currency translation, net of tax			80
Total comprehensive income attributable to preferred noteholders			221
Comprehensive income attributable to non-controlling interests			
Net profit / (loss)	82	183	32
Other comprehensive income that may be reclassified to the income statement			
Other comprehensive income that may be reclassified to the income statement, before tax	0	(12)	5
Income tax relating to other comprehensive income that may be reclassified to the income statement	0	2	(2)
Total other comprehensive income that may be reclassified to the income statement, net of tax	0	(10)	3
Other comprehensive income that will not be reclassified to the income statement			
Foreign currency translation movements, before tax	271	(95)	80
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	271	(95)	80
Gains / (losses) on defined benefit plans, before tax	0	6	(44)
Income tax relating to defined benefit plans	0	(1)	8
Subtotal defined benefit plans, net of tax	0	5	(36)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	271	(90)	44
Total other comprehensive income	271	(99)	47
Total comprehensive income attributable to non-controlling interests	352	83	79
Total comprehensive income			
Net profit / (loss)	3,286	6,386	3,640
Other comprehensive income	(1,116)	(605)	1,580
of which: other comprehensive income that may be reclassified to the income statement	(447)	(814)	2,628
of which: other comprehensive income that will not be reclassified to the income statement	(669)	208	(1,048)
Total comprehensive income	2,170	5,781	5,220

Balance sheet

CHF million	Note	31.12.16	31.12.15	% change from 31.12.15
Assets				
Cash and balances with central banks		107,767	91,306	18
Due from banks	10, 11	13,156	11,948	10
Cash collateral on securities borrowed	24	15,111	25,584	(41)
Reverse repurchase agreements	24	66,246	67,893	(2)
Trading portfolio assets	22	96,575	124,035	(22)
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	23	30,260	51,943	(42)
Positive replacement values	12, 22, 24	158,411	167,435	(5)
Cash collateral receivables on derivative instruments	24	26,664	23,763	12
Loans	10, 11	306,325	311,954	(2)
Financial assets designated at fair value	22, 24, 25	65,353	6,146	963
Financial assets available for sale	13, 22	15,676	62,543	(75)
Financial assets held to maturity	13	9,289		
Investments in associates	28	963	954	1
Property, equipment and software	14	8,331	7,695	8
Goodwill and intangible assets	15	6,556	6,568	0
Deferred tax assets	8	13,155	12,835	2
Other assets	16	25,436	22,160	15
Total assets		935,016	942,819	(1)
Liabilities				
Due to banks	17	10,645	11,836	(10)
Cash collateral on securities lent	24	2,818	8,029	(65)
Repurchase agreements	24	6,612	9,653	(32)
Trading portfolio liabilities	22	22,824	29,137	(22)
Negative replacement values	12, 22, 24	153,810	162,430	(5)
Cash collateral payables on derivative instruments	24	35,472	38,282	(7)
Due to customers	17	423,672	390,185	9
Financial liabilities designated at fair value	18, 22, 24	55,017	62,995	(13)
Debt issued	19	103,649	93,147	11
Provisions	20	4,174	4,164	0
Other liabilities	8, 21	62,020	75,652	(18)
Total liabilities		880,714	885,511	(1)
Equity				
Share capital		385	385	0
Share premium		28,254	31,164	(9)
Treasury shares		(2,249)	(1,693)	33
Retained earnings		31,725	29,504	8
Other comprehensive income recognized directly in equity, net of tax		(4,494)	(4,047)	11
Equity attributable to shareholders		53,621	55,313	(3)
Equity attributable to non-controlling interests		682	1,995	(66)
Total equity		54,302	57,308	(5)
Total liabilities and equity		935,016	942,819	(1)

Statement of changes in equity

CHF million	Share capital	Share premium	Treasury shares	Retained earnings
Balance as of 1 January 2014	384	33,906	(1,031)	20,608
Issuance of share capital	0			
Acquisition of treasury shares			(918) ³	
Delivery of treasury shares under share-based compensation plans		(265)	455	
Other disposal of treasury shares			64 ³	
Premium on shares issued and warrants exercised		3		
Share-based compensation expensed in the income statement		909		
Tax (expense) / benefit		3		
Dividends		(938) ²		
Equity classified as obligation to purchase own shares		45		
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)				
Total comprehensive income for the year				2,295
<i>of which: net profit / (loss)</i>				3,466
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				(1,172)
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				
Changes to legal structure / reorganization: effect of establishment of UBS Group AG	(37)	(3,078)		(2,219)
Changes to legal structure / reorganization: increase in UBS Group AG's ownership interest in UBS AG	24	2,006	37	1,449
Balance as of 31 December 2014	372	32,590	(1,393)	22,134
Issuance of share capital	0			
Acquisition of treasury shares			(1,538) ³	
Delivery of treasury shares under share-based compensation plans		(596)	797	
Other disposal of treasury shares		1	478 ³	
Premium on shares issued and warrants exercised		33		
Share-based compensation expensed in the income statement		858		
Tax (expense) / benefit		9		
Dividends		(2,760) ²		
Equity classified as obligation to purchase own shares		1		
New consolidations / (deconsolidations) and other increases / (decreases)				
Total comprehensive income for the year				6,502
<i>of which: net profit / (loss)</i>				6,203
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				298
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				
Changes to legal structure / reorganization: increase in UBS Group AG's ownership interest in UBS AG	13	1,029	(37)	868
Balance as of 31 December 2015	385	31,164	(1,693)	29,504

Other comprehensive income recognized directly in equity, net of tax ¹	<i>of which: foreign currency translation</i>	<i>of which: financial assets available for sale</i>	<i>of which: cash flow hedges</i>	Total equity attributable to shareholders	Preferred noteholders	Non-controlling interests	Total equity
(5,866)	(7,425)	95	1,463	48,002	1,893	41	49,936
				0			0
				(918)			(918)
				190			190
				64			64
				3			3
				909			909
				3			3
				(938)	(142)	(4)	(1,084)
				45			45
				0	1		1
				0		1	1
2,625	1,795	141	689	4,920	221	79	5,220
				3,466	142	32	3,640
2,625	1,795	141	689	2,625		3	2,628
				(1,172)		(36)	(1,208)
				0	80	80	160
366	593	(25)	(203)	(4,968)	(1,974)	6,942	0
(218)	(369)	16	135	3,299		(3,299)	0
(3,093)	(5,406)	228	2,084	50,608	0	3,760	54,368
				0			0
				(1,538)			(1,538)
				200			200
				479			479
				33			33
				858			858
				9			9
				(2,760)		(124)	(2,884)
				1			1
				0		0	0
(804)	(231)	(63)	(509)	5,698		83	5,781
				6,203		183	6,386
(804)	(231)	(63)	(509)	(804)		(10)	(814)
				298		5	304
				0		(95)	(95)
(150)	(220)	7	63	1,724		(1,724)	0
(4,047)	(5,857)	172	1,638	55,313	0	1,995	57,308

Statement of changes in equity (continued)

<i>CHF million</i>	Share capital	Share premium	Treasury shares	Retained earnings
Balance as of 31 December 2015	385	31,164	(1,693)	29,504
Issuance of share capital	0			
Acquisition of treasury shares			(1,401) ³	
Delivery of treasury shares under share-based compensation plans		(682)	796	
Other disposal of treasury shares		(2)	49 ³	
Premium on shares issued and warrants exercised		5		
Share-based compensation expensed in the income statement		861		
Tax (expense) / benefit		28		
Dividends		(3,164) ²		
Equity classified as obligation to purchase own shares				
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		43		(44)
Total comprehensive income for the year				2,265
<i>of which: net profit / (loss)</i>				3,204
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				(824)
<i>of which: OCI that will not be reclassified to the income statement, net of tax – own credit</i>				(115)
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				
Balance as of 31 December 2016	385	28,254	(2,249)	31,725

1 Excludes defined benefit plans and own credit that are recorded directly in retained earnings. 2 Reflects the payment of an ordinary cash dividend of CHF 0.60 (2015: CHF 0.50, 2014: CHF 0.25) and the payment of a special cash dividend of CHF 0.25 (2015: CHF 0.25) per dividend-bearing share out of the capital contribution reserve. 3 Includes treasury shares acquired and disposed of by the Investment Bank in its capacity as a market-maker in UBS shares and related derivatives and to hedge certain issued structured debt instruments. These acquisitions and disposals are reported on the basis of net month-to-date movements

Other comprehensive income recognized directly in equity, net of tax ¹	<i>of which: foreign currency translation</i>	<i>of which: financial assets available for sale</i>	<i>of which: cash flow hedges</i>	Total equity attributable to shareholders	Preferred noteholders	Non-controlling interests	Total equity
(4,047)	(5,857)	172	1,638	55,313		1,995	57,308
				0			0
				(1,401)			(1,401)
				115			115
				46			46
				5			5
				861			861
				28			28
				(3,164)		(83)	(3,246)
				0			0
				0		(1,583)	(1,583)
				(1)		0	0
(447)	292	(73)	(666)	1,817		352	2,170
				3,204		82	3,286
(447)	292	(73)	(666)	(447)			(447)
				(824)			(824)
				(115)			(115)
				0		271	271
(4,494)	(5,564)	98	972	53,621		682	54,302

UBS Group AG shares issued and treasury shares held

	For the year ended	
<i>Number of shares</i>	31.12.16	31.12.15
Shares issued		
Balance at the beginning of the year	3,849,731,535	3,717,128,324
Issuance of shares	1,034,854	132,603,211
Balance at the end of the year	3,850,766,389	3,849,731,535
Treasury shares		
Balance at the beginning of the year	98,706,275	87,871,737
Acquisitions	90,448,847	89,594,586
Disposals	(50,713,350)	(78,760,048)
Balance at the end of the year	138,441,772	98,706,275

Conditional share capital

As of 31 December 2016, 129,994,836 additional UBS Group AG shares could have been issued to fund UBS's employee share option programs.

Additional conditional capital up to a maximum number of 380,000,000 UBS Group AG shares was available as of 31 December 2016 for conversion rights and warrants granted in connection with the issuance of bonds or similar financial instruments.

Statement of cash flows

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Cash flow from / (used in) operating activities			
Net profit / (loss)	3,286	6,386	3,640
Non-cash items included in net profit and other adjustments:			
Depreciation and impairment of property, equipment and software	985	920	817
Amortization and impairment of intangible assets	91	107	83
Credit loss expense / (recovery)	37	117	78
Share of net profits of associates	(106)	(169)	(94)
Deferred tax expense / (benefit)	(7)	(1,613)	(1,635)
Net loss / (gain) from investing activities	(1,176)	(934)	(227)
Net loss / (gain) from financing activities	9,647	(1,451)	2,135
Other net adjustments	(267)	3,686	(7,250)
Net change in operating assets and liabilities:			
Due from / to banks	(1,180)	1,763	(1,235)
Cash collateral on securities borrowed and reverse repurchase agreements	7,933	(2,712)	32,262
Cash collateral on securities lent and repurchase agreements	(6,637)	(2,909)	(3,698)
Trading portfolio and replacement values	6,054	6,830	(5,576)
Financial assets designated at fair value	(60,650)	(1,325)	2,696
Cash collateral on derivative instruments	(4,169)	3,285	(7,301)
Loans	3,658	1,386	(20,427)
Due to customers	33,572	(18,404)	8,804
Other assets, provisions and other liabilities	(6,874)	8,696	4,734
Income taxes paid, net of refunds	(656)	(551)	(600)
Net cash flow from / (used in) operating activities	(16,457)	3,109	7,205
Cash flow from / (used in) investing activities			
Purchase of subsidiaries, associates and intangible assets	(26)	(13)	(18)
Disposal of subsidiaries, associates and intangible assets ¹	93	477	70
Purchase of property, equipment and software	(1,777)	(1,841)	(1,915)
Disposal of property, equipment and software	209	542	350
Purchase of financial assets available for sale	(7,271)	(101,189)	(136,330)
Disposal and redemption of financial assets available for sale	54,097	93,584	140,438
Net (purchase) / redemption of financial assets held to maturity	(8,996)		
Net cash flow from / (used in) investing activities	36,328	(8,441)	2,596

Table continues on the next page.

Statement of cash flows (continued)

Table continued from previous page.

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Cash flow from / (used in) financing activities			
Net short-term debt issued / (repaid)	5,440	(6,404)	(2,921)
Net movements in treasury shares and own equity derivative activity	(1,248)	(845)	(694)
Distributions paid on UBS shares	(3,164)	(2,760)	(938)
Issuance of long-term debt, including financial liabilities designated at fair value	33,256	47,790	40,982
Repayment of long-term debt, including financial liabilities designated at fair value	(33,885)	(44,221)	(34,210)
Net changes in non-controlling interests and preferred notes	(1,371)	(156)	(113)
Net cash flow from / (used in) financing activities	(972)	(6,595)	2,108
Total cash flow			
Cash and cash equivalents at the beginning of the year	103,044	116,715	96,284
Net cash flow from / (used in) operating, investing and financing activities	18,900	(11,928)	11,909
Effects of exchange rate differences on cash and cash equivalents	(806)	(1,742)	8,522
Cash and cash equivalents at the end of the year²	121,138	103,044	116,715
<i>of which: cash and balances with central banks</i>	<i>107,715</i>	<i>91,306</i>	<i>104,073</i>
<i>of which: due from banks</i>	<i>11,959</i>	<i>10,814</i>	<i>11,772</i>
<i>of which: money market paper³</i>	<i>1,465</i>	<i>924</i>	<i>869</i>
Additional information			
Net cash flow from / (used in) operating activities includes:			
Interest received in cash	12,228	11,144	11,321
Interest paid in cash	6,129	5,270	5,360
Dividends on equity investments, investment funds and associates received in cash ⁴	1,595	2,120	1,961

¹ Includes dividends received from associates. ² CHF 2,662 million, CHF 3,963 million and CHF 4,178 million of cash and cash equivalents (mainly reflected in Due from banks) were restricted as of 31 December 2016, 31 December 2015 and 31 December 2014, respectively. Refer to Note 23 for more information. ³ Money market paper is included in the balance sheet under Trading portfolio assets (31 December 2016: CHF 75 million, 31 December 2015: CHF 795 million, 31 December 2014: CHF 835 million), Financial assets available for sale (31 December 2016: CHF 430 million, 31 December 2015: CHF 129 million, 31 December 2014: CHF 34 million) and Financial assets designated at fair value (31 December 2016: CHF 959 million, 31 December 2015: CHF 0 million, 31 December 2014: CHF 0 million). ⁴ Includes dividends received from associates (2016: CHF 50 million, 2015: CHF 114 million, 2014: CHF 54 million) reported within cash flow from / (used in) investing activities.

Notes to the UBS Group AG consolidated financial statements

Note 1 Summary of significant accounting policies

a) Significant accounting policies

UBS Group AG was established in 2014 as the holding company of the Group and in 2015 it increased its ownership interest in UBS AG to 100%, following the successful completion of the procedure under article 33 of the Swiss Stock Exchange Act (SESTA procedure). Refer to Note 30 for more information. The consolidated financial statements of UBS Group AG were prepared as a continuation of the consolidated financial statements of UBS AG, applying the same accounting policies under International Financial Reporting Standards (IFRS).

This Note describes the significant accounting policies applied in the preparation of the consolidated financial statements (the "Financial Statements") of UBS Group AG and its subsidiaries ("UBS" or the "Group"). On 9 March 2017, the Financial Statements were authorized for issue by the Board of Directors.

Basis of accounting

The Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB), and are presented in Swiss francs (CHF), the currency of Switzerland, where UBS Group AG is incorporated.

Disclosures provided in the "Risk, treasury and capital management" section of this report that are marked as audited form an integral part of the Financial Statements. These disclosures relate to requirements under IFRS 7, *Financial Instruments: Disclosures* and IAS 1, *Presentation of Financial Statements* and are not repeated in this section.

The accounting policies described in this Note have been applied consistently in all years presented unless otherwise stated in Note 1b.

Critical accounting estimates and judgments

Preparation of these Financial Statements under IFRS requires management to apply judgment and make estimates and assumptions that affect reported amounts of assets, liabilities, income and expenses and disclosure of contingent assets and liabilities, and may involve significant uncertainty at the time they are made. Such estimates and assumptions are based on the best available information. UBS regularly reassesses the estimates and assumptions, which encompass historical

experience, expectations of the future and other pertinent factors, to determine their continuing relevance based on current conditions and it updates them as necessary. Changes in those estimates and assumptions may have a significant impact on the Financial Statements. Further, actual results may differ significantly from UBS's estimates, which could result in significant loss to the Group, beyond what it anticipated or provided for.

The following areas contain estimation uncertainty or require critical judgment and have a significant effect on the amounts recognized in the Financial Statements:

- consolidation of structured entities (refer to item 1 in this Note and to Note 28)
- fair value of financial instruments (refer to item 3f in this Note and to Note 22)
- allowances and provisions for credit losses for financial assets held at amortized cost (refer to item 3g in this Note and to Note 11)
- pension and other post-employment benefit plans (refer to item 7 in this Note and to Note 26)
- income taxes (refer to item 8 in this Note and to Note 8)
- goodwill (refer to item 11 in this Note and to Note 15)
- provisions and contingent liabilities (refer to item 12 in this Note and to Note 20).

1) Consolidation

a. Consolidation principles

The Financial Statements comprise the financial statements of the parent company (UBS Group AG) and its subsidiaries, including controlled structured entities (SEs), presented as a single economic entity, whereby intercompany transactions and balances have been eliminated. UBS consolidates all entities that it controls, which is the case when it has (i) power over the relevant activities of the entity, (ii) exposure to an entity's variable returns and (iii) the ability to use its power to affect an entity's returns.

Where an entity is governed by voting rights, control is generally indicated by a direct shareholding of more than one-half of the voting rights.

Note 1 Summary of significant accounting policies (continued)

In other cases, the assessment of control is more complex and requires greater use of judgment. Where UBS has an interest in an entity that absorbs variability, UBS considers whether it has power over the relevant activities of the entity that allows it to affect the variability of its returns. Consideration is given to all facts and circumstances to determine whether the Group has power over another entity, that is, the current ability to direct the relevant activities of an entity when decisions about those activities need to be made. Factors such as the purpose and design of the entity, rights held through contractual arrangements such as call rights, put rights or liquidation rights, as well as potential decision-making rights are all considered in this assessment. Where the Group has power over the relevant activities, a further assessment is made to determine whether, through that power, it has the ability to affect its own returns by assessing whether power is held in a principal or agent capacity. Consideration is given to (i) the scope of decision-making authority, (ii) rights held by other parties, including removal or other participating rights, and (iii) exposure to variability, including remuneration, relative to total variability of the entity as well as whether that exposure is different from that of other investors. If, after review of these factors, UBS concludes that it can exercise its power to affect its own returns, the entity is consolidated.

Subsidiaries, including SEs, are consolidated from the date when control is obtained and are deconsolidated from the date when control ceases. Control, or the lack thereof, is reassessed if facts and circumstances indicate that there is a change to one or more of the elements needed to establish that control is present.

→ Refer to Note 28 for more information

b. Structured entities

UBS sponsors the formation of SEs and interacts with non-sponsored SEs for a variety of reasons, including allowing clients to obtain or be exposed to particular risk profiles, to provide funding or to sell or purchase credit risk. An SE is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. Such entities generally have a narrow and well-defined objective and include those historically referred to as special purpose entities and some investment funds. UBS assesses whether an entity is an SE by considering the nature of the activities of the entity as well as the substance of voting or similar rights afforded to other parties, including investors and independent boards or directors. UBS considers rights such as the ability to liquidate the entity or remove the decision maker to be similar to voting rights when the holder has the substantive ability to exercise such rights without cause. In the absence of such rights or in cases where the existence of such rights cannot be fully established, the entity is considered to be an SE.

The classes of SEs UBS is involved with include:

- *Securitization structured entities* are established to issue securities to investors that are backed by assets held by the SE and whereby (i) significant credit risk associated with the securitized exposures has been transferred to third parties and (ii) there is more than one risk position or tranche issued by the securitization vehicle in line with the Basel III securitization definition. All securitization entities are classified as SEs.
- *Client investment structured entities* are established predominantly for clients to invest in specific assets or risk exposures through purchasing notes issued by the SE, predominantly on a fixed-term basis. The SE may source assets via a transfer from UBS or through an external market transaction. In some cases, UBS may enter into derivatives with the SE to either align the cash flows of the entity with the investor's intended investment objective or to introduce other desired risk exposures. In certain cases, UBS may have interests in a third-party-sponsored SE to hedge specific risks or participate in asset-backed financing.
- *Investment fund structured entities* have a collective investment objective, are managed by an investment manager and are either passively managed, so that any decision making does not have a substantive effect on variability, or are actively managed and investors or their governing bodies do not have substantive voting or similar rights. UBS creates and sponsors a large number of funds in which it may have an interest through the receipt of variable management fees and / or a direct investment. In addition, UBS has interests in a number of funds created and sponsored by third parties, including exchange-traded funds and hedge funds, to hedge issued structured products.

When UBS does not consolidate an SE, but has an interest in an SE or has sponsored an SE, disclosures are provided on the nature of these interests and sponsorship activities.

Critical accounting estimates and judgments

Each individual entity is assessed for consolidation in line with the aforementioned consolidation principles. The assessment of control can be complex and requires the use of significant judgment. As the nature and extent of UBS's involvement is unique to each entity, there is no uniform consolidation outcome by entity. Certain entities within a class may be consolidated while others may not.

→ Refer to Note 28 for more information

Note 1 Summary of significant accounting policies (continued)

2) Segment reporting

UBS's businesses are organized globally into five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank, all of which are supported by Corporate Center. The five business divisions qualify as reportable segments for the purpose of segment reporting and, together with Corporate Center, reflect the management structure of the Group. Corporate Center – Non-core and Legacy Portfolio is managed and reported as a separate reportable segment within Corporate Center. Financial information about the five business divisions and Corporate Center (with its units: Services, Group Asset and Liability Management (Group ALM), Non-core and Legacy Portfolio) is presented separately in internal management reports to the Group Executive Board, which is considered the "chief operating decision maker" pursuant to IFRS 8, *Operating Segments*.

UBS's internal accounting policies, which include management accounting policies and service level agreements, determine the revenues and expenses directly attributable to each reportable segment. Transactions between the reportable segments are carried out at internally agreed rates and are reflected in the operating results of the reportable segments. Revenue-sharing agreements are used to allocate external client revenues to reportable segments where several reportable segments are involved in the value creation chain. Commissions are credited to the reportable segments based on the corresponding client relationship. Total intersegment revenues for the Group are immaterial, as the majority of the revenues are allocated across the segments by means of revenue-sharing agreements. Net interest income is generally allocated to the reportable segments based on their balance sheet positions. Interest income earned from managing UBS's consolidated equity is allocated to the reportable segments based on average attributed equity. Assets and liabilities of the reportable segments are funded through and invested with Corporate Center – Group ALM, and the net interest margin is reflected in the results of each reportable segment.

Segment assets are based on a third-party view and do not include intercompany balances. This view is in line with internal reporting to the Group Executive Board. Certain assets managed centrally by Corporate Center – Services and Corporate Center – Group ALM may be allocated to the segments on a basis different to that which the corresponding costs or revenues are

allocated to. For example, certain assets that are reported in Corporate Center – Services or Corporate Center – Group ALM may be retained on the balance sheets of these components of Corporate Center notwithstanding that the costs or revenues associated with these assets may be entirely or partly allocated to the segments. Similarly, certain assets are reported in the business divisions, whereas the corresponding costs or revenues are entirely or partly allocated to Corporate Center – Services and Corporate Center – Group ALM.

→ **Refer to Note 2 for more information**

3) Financial instruments

a. Recognition

UBS recognizes financial instruments when it becomes a party to the contractual provisions of the instrument. UBS applies trade date accounting to derivatives and settlement date accounting to all non-derivative financial instruments.

UBS also acts in a fiduciary capacity, which results in the holding or placing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions. Unless the recognition criteria are satisfied, these assets and the related income are excluded from UBS's Financial Statements, as they are not assets of UBS.

Client cash balances associated with derivatives clearing and execution services are not recognized on the balance sheet if, through contractual agreement, regulation or practice, the Group neither obtains benefits from nor controls the client cash balances.

b. Classification, measurement and presentation

Upon initial recognition, UBS records financial instruments at fair value plus directly attributable transaction costs in the case of financial instruments not subsequently accounted for at fair value through profit or loss. After initial recognition, UBS classifies, measures and presents its financial assets and liabilities in accordance with IAS 39, *Financial Instruments: Recognition and Measurement* as described in the following table.

→ **Refer to Note 25a for an overview of financial assets and liabilities by IAS 39 category**

→ **Refer to the balance sheet for references to Notes that provide information on the composition of individual financial asset and liability categories**

Note 1 Summary of significant accounting policies (continued)

Financial assets classification	Significant items included	Measurement and presentation
Held for trading	<p>All derivatives with a positive replacement value, except those that are designated and effective hedging instruments.</p> <p>Any other financial asset acquired principally for the purpose of selling or repurchasing in the near term, or part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking. Included in this category are debt instruments (including those in the form of securities, money market paper and traded corporate and bank loans), equity instruments, and assets held under unit-linked investment contracts.</p>	<p>Measured at fair value with changes recognized in profit or loss.</p> <p>Changes in fair value, initial transaction costs and gains and losses realized on disposal or redemption are recognized in <i>Net trading income</i>, except interest and dividend income on non-derivatives (refer to item 3c in this Note), derivatives designated as hedging instruments in certain types of hedge accounting relationships and forward points on certain short duration foreign exchange contracts, which are reported in <i>Net interest income</i>.</p> <p>Derivative assets are generally presented as <i>Positive replacement values</i>.</p> <p>Bifurcated embedded derivatives are measured at fair value, but presented on the same balance sheet line as the host contract measured at amortized cost.</p>
Designated at fair value through profit or loss	<p>A financial asset may be designated at fair value through profit or loss only upon initial recognition and this designation is irrevocable.</p> <p>The fair value option can be applied only if one of the following criteria are met:</p> <ul style="list-style-type: none"> the financial instrument is a hybrid instrument that includes a substantive embedded derivative; the financial instrument is part of a portfolio that is risk managed on a fair value basis and reported to senior management on that basis; or the application of the fair value option eliminates or significantly reduces an accounting mismatch that would otherwise arise. <p>UBS designated at fair value through profit or loss the following instruments:</p> <ul style="list-style-type: none"> Certain structured loans, reverse repurchase and securities borrowing agreements that are managed on a fair value basis. Loans that are hedged predominantly with credit derivatives. These instruments are designated at fair value to eliminate an accounting mismatch. As of 1 January 2016, certain newly purchased debt securities held as high-quality liquid assets (HQLA) and managed by Corporate Center – Group ALM on a fair value basis. Assets held to hedge delivery obligations related to cash-settled employee compensation plans. These assets are designated at fair value in order to eliminate an accounting mismatch that would otherwise arise due to the liability being measured on a fair value basis. 	<p>Derivatives that are designated and effective hedging instruments are also measured at fair value. The presentation of fair value changes differs depending on the type of hedge relationship (refer to item 3k in this Note for more information).</p> <p>Held for trading assets (other than derivatives) are presented as <i>Trading portfolio assets</i>.</p> <p>Financial assets designated at fair value through profit or loss are presented as <i>Financial assets designated at fair value</i>.</p>
Loans and receivables (amortized cost)	<p>Non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are not assets for which the Group may not recover substantially all of its initial net investment for reasons other than credit deterioration. This classification includes:</p> <ul style="list-style-type: none"> cash and balances with central banks cash collateral receivables on derivative instruments residential and commercial mortgages secured loans, including reverse repurchase agreements, receivables under stock borrowing and lombard loans, and unsecured loans certain securities held within Corporate Center - Non-core and Legacy Portfolio trade and lease receivables. 	<p>Measured at amortized cost using the effective interest rate method less allowances for credit losses (refer to items 3c and 3q in this Note).</p> <p>Upfront fees and direct costs relating to loan origination, refinancing or restructuring as well as to loan commitments are deferred and amortized over the life of the loan using the effective interest rate method.</p> <p>Loans and receivables are presented on the balance sheet primarily as <i>Cash and balances with central banks, Due from banks, Loans, Cash collateral on securities borrowed, Reverse repurchase agreements</i> and <i>Cash collateral receivables on derivative instruments</i>.</p> <p>Exchange-traded derivatives and certain OTC derivatives cleared through central clearing counterparties which are either considered to be daily settled or qualify for netting (refer to items 3d and 3j in this Note) are presented within <i>Cash collateral receivables on derivative instruments</i>.</p>

Note 1 Summary of significant accounting policies (continued)

Financial assets classification	Significant items included	Measurement and presentation
Available for sale	Financial assets classified as available for sale are non-derivative financial assets that are not classified as held for trading, designated at fair value through profit or loss, or loans and receivables. This classification mainly includes debt securities held as HQLA and managed by Corporate Center – Group ALM, as well as certain asset-backed securities managed by Corporate Center – Group ALM	<p>Measured at fair value with unrealized gains and losses reported in <i>Other comprehensive income</i>, net of applicable income taxes, until such investments are sold, collected or otherwise disposed of, or until any such investment is determined to be impaired (refer to item 3i in this Note). Upon disposal, any accumulated balances in <i>Other comprehensive income</i> are reclassified to the income statement and reported within <i>Other income</i>.</p> <p>Interest and dividend income are recognized in the income statement in accordance with item 3c in this Note. Refer to item 13 in this Note for information on the treatment of foreign exchange translation gains and losses.</p>
Held to maturity	Non-derivative financial assets with fixed or determinable payments and fixed maturities for which UBS has the positive intention and ability to hold to maturity. As of 1 January 2016, UBS classified as held to maturity certain newly purchased debt securities held as HQLA and managed by Corporate Center – Group ALM.	Measured at amortized cost using the effective interest rate method less allowances for credit losses (refer to items 3c and 3g in this Note).
Financial liabilities classification	Significant items included	Measurement and presentation
Held for trading	<ul style="list-style-type: none"> – Obligations to deliver financial instruments, such as debt and equity instruments, which UBS has sold to third parties, but does not own (short positions). – Liabilities held under unit-linked investment contracts. – All derivatives with a negative replacement value, except those that are designated and effective hedging instruments. 	<p>Measurement of trading liabilities follows the same principles as held for trading assets and measurement of liabilities designated at fair value through profit or loss follows the same principles as assets designated at fair value through profit or loss.</p> <p>Presented as <i>Trading portfolio liabilities</i> and <i>Financial liabilities designated at fair value</i>, respectively.</p>
Designated at fair value through profit or loss	<ul style="list-style-type: none"> – Issued hybrid debt instruments that primarily include equity-linked, credit-linked and rates-linked bonds or notes. – Issued debt instruments managed on a fair value basis. – Loan commitments that are hedged predominantly with credit derivatives and hence eliminate an accounting mismatch. 	<p>Derivative liabilities are generally presented as <i>Negative replacement values</i>.</p> <p>Bifurcated embedded derivatives are measured at fair value, but are presented on the same balance sheet line as the host contract.</p> <p>Derivatives that are designated and effective hedging instruments are also measured at fair value. The presentation of fair value changes differs depending on the type of hedge relationship (refer to item 3k in this Note for more information).</p> <p>Amounts due under unit-linked investment contracts are presented as <i>Other liabilities</i>.</p>
Amortized cost	<ul style="list-style-type: none"> – Demand and time deposits, retail savings / deposits, cash collateral on securities lent, non-structured fixed-rate bonds, subordinated debt, certificates of deposit, covered bonds. – Cash collateral payables on derivative instruments. 	<p>Measured at amortized cost using the effective interest rate method.</p> <p>Amortized cost liabilities are presented on the balance sheet primarily as <i>Due to banks</i>, <i>Due to customers</i>, <i>Cash collateral on securities lent</i>, <i>Repurchase agreements</i>, <i>Cash collateral payables on derivative instruments</i> and <i>Debt issued</i>.</p> <p>Exchange-traded derivatives and certain OTC derivatives cleared through central clearing counterparties which are either considered to be daily settled or qualify for netting (refer to items 3d and 3j of this Note) are presented within <i>Cash collateral payables on derivative instruments</i>.</p>

Note 1 Summary of significant accounting policies (continued)

c. Interest income and expense

Interest income or expense is determined by reference to a financial instrument's amortized-cost basis calculated using the effective interest rate (EIR) method. UBS also uses this method to determine the interest income and expense for financial instruments (excluding derivatives) measured at fair value through profit or loss that is presented within *Net interest income*.

Upfront fees, including loan commitment fees where a loan is expected to be issued, and direct costs are included within the initial measurement of a financial instrument measured at amortized cost or classified as available for sale. Such fees and costs are therefore recognized over the expected life of the instrument as part of its EIR.

Fees related to loan commitments where no loan is expected to be issued, as well as loan syndication fees where UBS does not retain a portion of the syndicated loan or where UBS does retain a portion of the syndicated loan at the same effective yield for comparable risk as other participants, are included in *Net fee and commission income*.

Interest income on financial assets, excluding derivatives, is included in *Interest income* when positive and in *Interest expense* when negative, because negative interest income arising on a financial asset does not meet the definition of revenue. Similarly, interest expense on financial liabilities, excluding derivatives, is included in *Interest expense*, except when interest rates are negative, in which case it is included in *Interest income*. Dividend income on all financial assets is included in *Interest income*.

→ Refer to Note 3 for more information

d. Derecognition

Financial assets

UBS derecognizes a financial asset, or a portion of a financial asset, from its balance sheet where the contractual rights to cash flows from the asset have expired, or have been transferred, usually by sale, thus exposing the purchaser to either substantially all the risks and rewards of the asset or a significant part of the risks and rewards combined with the unconditional ability to sell or pledge the asset.

A financial asset is considered to have been transferred when UBS (i) transfers the contractual rights to receive the cash flows of the financial asset or (ii) retains the contractual rights to receive the cash flows of that asset, but assumes a contractual

obligation to pay the cash flows to one or more entities.

Where financial assets have been pledged as collateral or in similar arrangements, they are considered to have been transferred if the counterparty has received the contractual right to the cash flows of the pledged assets, as may be evidenced, for example, by the counterparty's right to sell or repledge the assets. Where the counterparty to the pledged financial assets has not received the contractual right to the cash flows, UBS does not consider this to be a transfer for the purposes of derecognition.

UBS enters into certain transactions where it transfers financial assets recognized on its balance sheet but retains either all or a portion of the risks and rewards of the transferred financial assets. If all or substantially all of the risks and rewards are retained, the transferred financial assets are not derecognized from the balance sheet; for example, securities lending and repurchase transactions or where financial assets are sold to a third party with a total return swap resulting in UBS retaining all or substantially all of the risks and rewards of the transferred assets. These types of transactions are accounted for as secured financing transactions as described in item 3e of this Note.

In transactions where substantially all of the risks and rewards of ownership of a financial asset are neither retained nor transferred, UBS derecognizes the financial asset if control over the asset is surrendered, and the rights and obligations retained following the transfer are recognized separately as assets and liabilities, respectively. In transfers where control over the financial asset is retained, UBS continues to recognize the asset to the extent of its continuing involvement, determined by the extent to which it is exposed to changes in the value of the transferred asset following the transfer.

Certain over-the-counter (OTC) derivative contracts and most exchange-traded futures and options contracts cleared through central clearing counterparties are considered to be settled on a daily basis through the daily margining process, as the payment or receipt of the variation margin represents legal or economic settlement of a derivative contract, which results in derecognition of the associated positive and negative replacement values.

→ Refer to Notes 1b and 24 for more information

Note 1 Summary of significant accounting policies (continued)

Financial liabilities

UBS derecognizes a financial liability from its balance sheet when it is extinguished, such as when the obligation specified in the contract is discharged, canceled or has expired. When an existing financial liability is exchanged for a new one from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification results in derecognition of the original liability and the recognition of a new liability with any difference in the respective carrying amounts being recognized in the income statement.

e. Securities borrowing / lending and repurchase / reverse repurchase transactions

Securities borrowing / lending and repurchase / reverse repurchase transactions are generally entered into on a collateralized basis. In such transactions, UBS typically borrows or lends equity and debt securities in exchange for securities or cash collateral. Additionally, UBS borrows securities from its clients' custody accounts in exchange for a fee.

These transactions are treated as collateralized financing transactions where the securities transferred / received are not derecognized or recognized on balance sheet. Securities transferred / received with the right to resell or repledge are disclosed separately.

In reverse repurchase and securities borrowing agreements, the cash delivered is derecognized and a corresponding receivable, including accrued interest, is recorded in the balance sheet lines *Reverse repurchase agreements* and *Cash collateral on securities borrowed*, respectively, representing UBS's right to receive the cash. Similarly, in repurchase and securities lending agreements, the cash received is recognized and a corresponding obligation, including accrued interest, is recorded in the balance sheet lines *Repurchase agreements* and *Cash collateral on securities lent*, respectively. Additionally, the sale of securities that is settled by delivering securities received in reverse repurchase or securities borrowing transactions triggers the recognition of a trading liability.

Repurchase and reverse repurchase transactions with the same counterparty, maturity, currency and Central Securities Depository (CSD) are generally presented net, subject to meeting the netting requirements described in item 3j of this Note.

→ Refer to Notes 23 and 24 for more information

f. Fair value of financial instruments

UBS accounts for a significant portion of its assets and liabilities at fair value. Fair value is the price on the measurement date that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market, or in the most advantageous market in the absence of a principal market.

All financial instruments measured at fair value are categorized into one of three fair value hierarchy levels. The fair values of Level 1 financial instruments are based on quoted prices in active markets. The fair values of Level 2 financial instruments are based on valuation techniques for which all significant inputs are, or are based on, observable market data. The fair values of Level 3 financial instruments are based on valuation techniques for which significant inputs are not based on observable market data.

Critical accounting estimates and judgments

The use of valuation techniques, modeling assumptions and estimates of unobservable market inputs require significant judgment and could affect the amount of gain or loss recorded for a particular position. Valuation techniques that rely more heavily on unobservable inputs require a higher level of judgment to calculate a fair value than those entirely based on observable inputs.

Valuation techniques, including models, that are used to determine fair values are periodically reviewed and validated by qualified personnel, independent of those who created them. Models are calibrated to ensure that outputs reflect observable market data, to the extent possible. Also, models prioritize the use of observable inputs, when available, over unobservable inputs. Judgment is required in selecting appropriate models as well as inputs for which observable data is less readily or not available.

UBS's valuation techniques may not fully reflect all the factors relevant to the fair value of financial instruments held. Valuations are therefore adjusted, where appropriate, to allow for additional factors, including credit risk, model risk and liquidity risk.

UBS's governance framework over fair value measurement is described in Note 22b.

The level of subjectivity and the degree of management judgment involved in the development of estimates and the selection of assumptions is more significant for instruments valued using specialized and sophisticated models and where some or all of the parameter inputs are less observable (Level 3 instruments) and may require adjustment to reflect factors that market participants would consider in estimating fair value, such as close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors, which are presented in Note 22d. The Group provides a sensitivity analysis of the impact upon the Level 3 financial instruments of using reasonably possible alternative assumptions for the unobservable parameters within Note 22g.

→ Refer to Note 22 for more information

Note 1 Summary of significant accounting policies (continued)

g. Allowances and provisions for credit losses for financial assets held at amortized cost

A claim is impaired and an allowance or provision for credit losses is recognized when objective evidence demonstrates that a loss event was incurred after the initial recognition and that the loss event has an impact on the future cash flows that can be reliably estimated. UBS considers a claim to be impaired if it will be unable to collect all amounts due on the claim based on the original contractual terms due to credit deterioration of the issuer or counterparty. A claim can be a loan or receivable carried at amortized cost, or a commitment, such as a letter of credit, a guarantee or a similar instrument.

An allowance for credit losses is reported as a decrease in carrying value of a claim on the balance sheet. For an off-balance sheet item, such as a commitment, a provision for credit loss is reported in *Provisions*. Changes to allowances and provisions for credit losses are recognized in *Credit loss expense/recovery*.

→ Refer to Notes 10 and 11 for more information

Critical accounting estimates and judgments

Allowances and provisions for credit losses are evaluated at both a counterparty-specific level and collectively. Judgment is used in making assumptions about the timing and amount of impairment losses.

Counterparty-specific allowances and provisions

Loans are evaluated individually for impairment if objective evidence indicates that a loan may be impaired. Individual credit exposures are evaluated on the basis of the borrower's overall financial condition, resources and payment record, the prospects of support from contractual guarantors and, where applicable, the realizable value of any collateral. The impairment loss for a loan is the excess of the carrying value of the financial asset over the estimated recoverable amount. The estimated recoverable amount is the present value, calculated using the loan's original effective interest rate, of expected future cash flows, including amounts that may result from restructuring or the liquidation of collateral. If a loan has a variable interest rate, the discount rate for calculating the recoverable amount is the current effective interest rate. Upon impairment, the accrual of interest income based on the original terms of the loan is discontinued. Instead, the increase in the present value of the impaired loan due to the passage of time is calculated and reported within *Interest income*.

Collective allowances and provisions

Collective allowances and provisions are calculated for portfolios with similar credit risk characteristics, taking into account historical loss experience and current conditions. The methodology and assumptions used are reviewed regularly to reduce any differences between estimated and actual loss experience. For all of its portfolios, UBS also assesses whether there have been any unforeseen developments that might result in impairments but are not immediately observable at a counterparty level. To determine whether an event-driven collective allowance for credit losses is required, UBS considers global economic drivers to assess the most vulnerable countries and industries. As the allowance cannot be allocated to individual loans, the loans are not considered to be impaired and interest is accrued on each loan according to its contractual terms. If objective evidence becomes available that indicates that an individual financial asset is impaired, it is removed from the group of financial assets assessed for impairment on a collective basis and is assessed separately as counterparty-specific.

All impaired loans are reviewed and analyzed at least annually. Any subsequent changes to the amounts and timing of the expected future cash flows compared with prior estimates result in a change in the allowance for credit losses and are charged or credited to *Credit loss expense / recovery*. An allowance for impairment is reversed only when the credit quality has improved to such an extent that there is reasonable assurance of timely collection of principal and interest in accordance with the original contractual terms of the claim, or the equivalent value thereof. A write-off is made when all or part of a claim is deemed uncollectible or forgiven. Write-offs reduce the principal amount of a claim and are charged against previously established allowances for credit losses. Recoveries, in part or in full, of amounts previously written off are credited to *Credit loss expense / recovery*.

Note 1 Summary of significant accounting policies (continued)

h. Renegotiated loans

A renegotiated or restructured loan is a loan for which the terms have been modified or for which additional collateral has been requested that was not contemplated in the original contract.

Typical key features of terms and conditions granted through renegotiation to avoid default include special interest rates, postponement of interest or amortization payments, modification of the schedule of repayments or amendment of loan maturity. There is no change in the EIR following a renegotiation.

If a loan is renegotiated with preferential conditions (i.e., new or modified terms and conditions are agreed upon which do not meet the normal market criteria for the quality of the obligor and the type of loan), it is still classified as non-performing. It will remain so until the loan is collected or written off and will be assessed for impairment on an individual basis.

Concessions granted where there is no evidence of financial difficulty, or where any changes to terms and conditions are within UBS's usual risk appetite, are not deemed restructured.

A restructuring of a loan could lead to a fundamental change in the terms and conditions of a loan, resulting in the original loan being derecognized and a new loan being recognized.

If a loan is derecognized in these circumstances, the new loan is measured at fair value at initial recognition. Any allowance taken to date against the original loan is derecognized and is not attributed to the new loan. Consequently, the new loan is assessed for impairment on an individual basis. If the loan is not impaired, the loan is included within the general collective loan assessment for the purpose of measuring credit losses.

i. Impairment of financial assets classified as available for sale

At each balance sheet date, UBS assesses whether indicators of impairment are present. Available-for-sale debt instruments are impaired when there is objective evidence, using the same criteria described in item 3g, that, as a result of one or more events that occurred after the initial recognition of the asset, the estimated future cash flows have decreased.

Objective evidence that there has been an impairment of an available-for-sale equity instrument is a significant or prolonged decline in the fair value of the asset. UBS uses a rebuttable presumption that such instruments are impaired where there has been a decline in fair value of more than 20% below its original cost or fair value has been below original cost for more than six months.

To the extent a financial asset classified as available for sale is determined to be impaired, the related cumulative net unrealized loss previously recognized in *Other comprehensive income* is reclassified to the income statement within *Other income*. For equity instruments, any further loss is recognized directly in the income statement, whereas for debt instruments, any further loss is recognized in the income statement only if there is additional objective evidence of impairment. After the recognition of an impairment on a financial asset classified as available for sale, increases in the fair value of equity instruments are reported in *Other comprehensive income*. For debt instruments, such increases in the fair value, up to amortized cost in the transaction currency, are recognized in *Other income*, provided that the fair value increase is related to an event occurring after the impairment loss was recorded. Increases in excess of that amount are reported in *Other comprehensive income*.

j. Netting

UBS nets financial assets and liabilities on its balance sheet if (i) it has the unconditional and legally enforceable right to set off the recognized amounts, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS and all of the counterparties, and (ii) intends either to settle on a net basis or to realize the asset and settle the liability simultaneously. Netted positions include, for example, certain derivatives and repurchase and reverse repurchase transactions with various counterparties, exchanges and clearing houses.

In assessing whether UBS intends to either settle on a net basis, or to realize the asset and settle the liability simultaneously, emphasis is placed on the effectiveness of operational settlement mechanics in eliminating substantially all credit and liquidity exposure between the counterparties. This condition precludes offsetting on the balance sheet for substantial amounts of UBS's financial assets and liabilities, even though they may be subject to enforceable netting arrangements. For OTC derivative contracts, balance sheet offsetting is generally only permitted in circumstances in which a market settlement mechanism exists via an exchange or central clearing counterparty, that effectively accomplishes net settlement through a daily exchange of collateral via a cash margining process. For repurchase arrangements and securities financing transactions, balance sheet offsetting may be permitted only to the extent that the settlement mechanism eliminates, or results in insignificant, credit and liquidity risk, and processes the receivables and payables in a single settlement process or cycle.

→ Refer to Notes 1b and 24 for more information

Note 1 Summary of significant accounting policies (continued)

k. Hedge accounting

The Group uses derivative instruments to manage exposures to interest rate and foreign currency risks, including exposures arising from forecast transactions. Qualifying derivative and non-derivative instruments may be designated as hedging instruments in (i) hedges of the change in fair value of recognized assets or liabilities (fair value hedges), (ii) hedges of the variability in future cash flows attributable to a recognized asset or liability or highly probable forecast transactions (cash flow hedges) or (iii) hedges of a net investment in a foreign operation (net investment hedges).

At the time a financial instrument is designated in a hedge relationship, UBS formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction and the methods that will be used to assess the effectiveness of the hedging relationship. Accordingly, UBS assesses, both at the inception of the hedge and on an ongoing basis, whether the hedging instruments, primarily derivatives, have been "highly effective" in offsetting changes in the fair value or cash flows associated with the designated risk of the hedged items. A hedge is considered highly effective if the following criteria are met: (i) at inception of the hedge and throughout its life, the hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk and (ii) actual results of the hedge are within a range of 80–125%. In the case of hedging forecast transactions, the transaction must have a high probability of occurring and must present an exposure to variations in cash flows that could ultimately affect the reported net profit or loss. UBS discontinues hedge accounting when (i) it determines that a hedging instrument is not, or has ceased to be, highly effective as a hedge, (ii) the derivative expires or is sold, terminated or exercised, (iii) the hedged item matures, is sold or repaid or (iv) forecast transactions are no longer deemed highly probable. The Group may also discontinue hedge accounting voluntarily.

Hedge ineffectiveness represents the amount by which the changes in the fair value of the hedging instrument differ from changes in the fair value of the hedged item attributable to the hedged risk, or the amount by which changes in the present value of future cash flows of the hedging instrument exceed changes in the present value of expected cash flows of the hedged item. Such ineffectiveness is recorded in current period earnings in *Net trading income*. Interest income and expense on derivatives designated as hedging instruments in effective hedge relationships is included in *Interest income*.

Fair value hedges

For qualifying fair value hedges, the change in the fair value of the hedging instrument is recognized in the income statement along with the change in the fair value of the hedged item that is attributable to the hedged risk. In fair value hedges of interest rate risk, the fair value change of the hedged item attributable

to the hedged risk is reflected as an adjustment to the carrying value of the hedged item. If the hedge accounting relationship is terminated for reasons other than the derecognition of the hedged item, the adjustment to the carrying value is amortized to the income statement over the remaining term to maturity of the hedged item using the effective interest rate method. For a portfolio hedge of interest rate risk, the equivalent change in fair value is reflected within *Other assets* or *Other liabilities*. If the hedge relationship is terminated for reasons other than the derecognition of the hedged item, the amount included in *Other assets* or *Other liabilities* is amortized to the income statement over the remaining term to maturity of the hedged items using the straight-line method.

Cash flow hedges

Fair value gains or losses associated with the effective portion of derivatives designated as cash flow hedges for cash flow repricing risk are recognized initially in *Other comprehensive income* within *Equity*. When the hedged forecast cash flows affect profit or loss, the associated gains or losses on the hedging derivatives are reclassified from *Equity* to the income statement.

If a cash flow hedge of forecasted transactions is no longer considered effective, or if the hedge relationship is terminated, the cumulative gains or losses on the hedging derivatives previously reported in *Equity* remain there until the committed or forecasted transactions occur and affect profit or loss. If the forecasted transactions are no longer expected to occur, the deferred gains or losses are reclassified immediately to the income statement.

Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized directly in *Equity* (and presented in the statement of changes in equity and statement of comprehensive income under *Foreign currency translation*), while any gains or losses relating to the ineffective and / or undesignated portion (for example, the interest element of a forward contract) are recognized in the income statement. Upon disposal or partial disposal of the foreign operation, the cumulative value of any such gains or losses recognized in *Equity* associated with the entity is reclassified to the income statement.

Economic hedges that do not qualify for hedge accounting

Derivative instruments that are transacted as economic hedges, but do not qualify for hedge accounting, are treated in the same way as derivative instruments used for trading purposes (i.e., realized and unrealized gains and losses are recognized in *Net trading income*), except for the forward points on certain short duration foreign exchange contracts, which are reported in *Net interest income*.

→ Refer to Note 12 for more information

Note 1 Summary of significant accounting policies (continued)

l. Embedded derivatives

Derivatives may be embedded in other financial instruments (host contracts). For example, they could be represented by the conversion feature embedded in a convertible bond. Such hybrid instruments arise predominantly from the issuance of certain structured debt instruments. An embedded derivative is generally required to be separated from the host contract and accounted for as a standalone derivative instrument at fair value through profit or loss if (i) the host contract is not carried at fair value with changes in fair value reported in the income statement, (ii) the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract and (iii) the terms of the embedded derivative would meet the definition of a standalone derivative, were they contained in a separate contract.

Typically, UBS applies the fair value option to hybrid instruments (refer to item 3b in this Note for more information), in which case bifurcation of an embedded derivative component is not required.

m. Debt issued

Debt issued is carried at amortized cost, including contingent capital instruments that contain contractual provisions under which the principal amounts would be written down upon either a specified CET1 ratio breach or a determination by FINMA that a viability event has occurred. Such contractual provisions are not derivatives as the underlying is deemed to be a non-financial variable specific to a party to the contract. In contrast, where there is a legal "bail-in" mechanism for write-down or conversion into equity (as is the case, for instance, with senior unsecured debt issued by the Group that is subject to write-down or conversion under resolution authority granted to FINMA under Swiss law), such mechanism does not form part of the contractual terms and, therefore, does not affect the amortized cost accounting treatment applied to these instruments. If the debt were to be written down or converted into equity in a future period, this would result in the full or partial derecognition of the financial liabilities, with the difference between the carrying value of the debt written down or converted into equity and the fair value of any equity shares issued recognized in the income statement.

In cases where, as part of the Group's risk management activity, fair value hedge accounting is applied to fixed-rate debt instruments carried at amortized cost, their carrying amount is adjusted for changes in fair value related to the hedged exposure. Refer to item 3k for more information on hedge accounting.

Debt issued and subsequently repurchased in relation to market-making or other activities is treated as redeemed. A gain or loss on redemption (depending on whether the repurchase price of the bond is lower or higher than its carrying value) is recorded in *Other income*. A subsequent sale of own bonds in the market is treated as a reissuance of debt.

n. Own credit

From 1 January 2016 onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained earnings* and will not be reclassified to the income statement in future periods.

→ Refer to Note 1b for more information

o. Loan commitments

Loan commitments are arrangements under which clients can borrow stipulated amounts under defined terms and conditions.

Loan commitments that can be canceled at any time by UBS at its discretion are neither recognized on the balance sheet nor included in off-balance sheet disclosures.

Loan commitments that cannot be canceled by UBS once the commitments are communicated to the beneficiary or which are revocable only due to automatic cancellation upon deterioration in a borrower's creditworthiness are considered irrevocable and are classified as (i) derivative loan commitments measured at fair value through profit or loss, (ii) loan commitments designated at fair value through profit or loss or (iii) other loan commitments. Other loan commitments are not recorded on the balance sheet, but a provision is recognized through profit or loss if it is probable that a loss has been incurred and a reliable estimate of the amount of the obligation can be made. Any change in the liability relating to these other loan commitments is recorded in the income statement in *Credit loss expense / recovery*.

When a client draws on a commitment, the resulting loan is presented under *Loans*, except for cases where designation at fair value through profit or loss applies.

p. Financial guarantee contracts

Financial guarantee contracts are contracts that require the issuer to make specified payments to reimburse the holder for an incurred loss because a specified debtor fails to make payments when due in accordance with the terms of a specified debt instrument. UBS issues such financial guarantees to banks, financial institutions and other parties on behalf of clients to secure loans, overdrafts and other banking facilities.

Certain issued financial guarantees that are managed on a fair value basis are designated at fair value through profit or loss.

Financial guarantees that are not managed on a fair value basis are initially recognized in the financial statements at fair value and are subsequently measured at the higher of the amount initially recognized less cumulative amortization, and to the extent a payment under the guarantee has become probable, the present value of the expected payment. Any change in the liability relating to probable expected payments resulting from guarantees is recorded in the income statement in *Credit loss expense / recovery*.

Note 1 Summary of significant accounting policies (continued)

4) Fee income

UBS earns fee income from a diverse range of services it provides to its clients. Fee income can be divided into two broad categories: (i) fees earned from services that are provided over a certain period of time, such as portfolio management and advisory fees, and (ii) fees earned from providing transaction-type services, such as underwriting fees, corporate finance fees and brokerage fees.

Fees earned from services that are provided over a certain period of time are recognized ratably over the service period, with the exception of performance-linked fees or fee components with specific performance criteria. Such fees are recognized when the performance criteria are fulfilled and when collectibility is reasonably assured.

Fees earned from providing transaction-type services are recognized when the service has been completed and the fee is fixed or determinable, i.e., not subject to refund or adjustment.

Fee income generated from providing a service which does not result in the recognition of a financial instrument is presented within *Net fee and commission income*. Fees generated from the acquisition, issue or disposal of a financial instrument are presented in the income statement in line with the balance sheet classification of that financial instrument.

→ Refer to Note 4 for more information

5) Cash and cash equivalents

For the purposes of the statement of cash flows, cash and cash equivalents comprise balances with an original maturity of three months or less, including cash, money market paper and balances with central and other banks.

6) Equity participation and other compensation plans

Equity participation plans

UBS has established several equity participation plans that are settled in UBS's equity instruments or an amount that is based on the value of such instruments. These awards are generally subject to conditions that require employees to complete a specified period of service and, for performance shares, to satisfy specified performance targets. Compensation expense is recognized, on a per tranche basis, over the service period based on an estimate of the number of instruments expected to vest and is adjusted to reflect actual outcomes. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed termination provisions, recognition of expense is accelerated to the termination date.

Where no future service is required, such as for employees who are retirement eligible or who have met certain age and years-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. Such awards may remain forfeitable until the legal vesting date if certain non-vesting conditions are not met, such as breach of good-leaver clauses or harmful acts. For equity-settled awards, forfeiture events resulting from breach of a non-vesting condition do not result in an adjustment to expense.

Compensation expense is measured by reference to the fair value of the equity instruments on the date of grant adjusted, when relevant, to take into account the terms and conditions inherent in the award, including dividend rights, transfer restrictions in effect beyond the vesting date, and non-vesting conditions. For equity-settled instruments, fair value is determined at the date of grant and is not remeasured unless its terms are modified such that the fair value immediately after modification exceeds the fair value immediately prior to modification. Any increase in fair value resulting from a modification is recognized as compensation expense, either over the remaining service period or, for vested awards, immediately. For cash-settled awards, fair value is remeasured at each reporting date such that the cumulative expense recognized equals the cash distributed.

→ Refer to Note 27 for more information

Other compensation plans

UBS has established deferred compensation plans which are settled in cash or other financial instruments, the amount of which may be fixed or may vary based on the achievement of specified performance conditions or the value of specified underlying assets. Compensation expense is recognized over the period that the employee provides services to become entitled to the award. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed termination provisions, recognition of expense is accelerated to the termination date. Where no future service is required, such as for employees who are retirement eligible or who have met certain age and years-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. The amount recognized is based on the present value of the amount expected to be paid under the plan and is remeasured at each reporting date, so that the cumulative expense recognized equals the cash or the fair value of respective financial instruments distributed.

→ Refer to Note 27 for more information

Note 1 Summary of significant accounting policies (continued)

7) Pension and other post-employment benefit plans

UBS sponsors various post-employment benefit plans for its employees worldwide, which include defined benefit and defined contribution pension plans, and other post-employment benefits such as medical and life insurance benefits that are payable after the completion of employment.

→ Refer to Note 26 for more information

Defined benefit pension plans

Defined benefit pension plans specify an amount of benefit that an employee will receive, which usually depends on one or more factors, such as age, years of service and compensation. The defined benefit liability recognized in the balance sheet is the present value of the defined benefit obligation less the fair value of the plan assets at the balance sheet date with changes resulting from remeasurements recorded immediately in *Other comprehensive income*. If the fair value of the plan assets is higher than the present value of the defined benefit obligation, the recognition of the resulting net defined benefit asset is limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. UBS applies the projected unit credit method to determine the present value of its defined benefit obligations, the related current service cost and, where applicable, past service cost. The projected unit credit method sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation. These amounts, which take into account the specific features of each plan, including risk sharing between employee and employer, are calculated periodically by independent qualified actuaries.

Critical accounting estimates and judgments

The net defined benefit liability or asset at the balance sheet date and the related personnel expense depend on the expected future benefits to be provided, determined using a number of economic and demographic assumptions. A range of assumptions could be applied, and different assumptions could significantly alter the defined benefit liability or asset and pension expense recognized. The most significant assumptions include life expectancy, the discount rate, expected salary increases, pension increases and, in addition for the Swiss plan and one of the US defined benefit pension plans, interest credits on retirement savings account balances. Life expectancy is determined by reference to published mortality tables. The discount rate is determined by reference to the rates of return on high-quality fixed-income investments of appropriate currency and term at the measurement date. The assumption for salary increases reflects the long-term expectations for salary growth and takes into account inflation, seniority, promotion and other relevant factors such as supply and demand in the labor market. A sensitivity analysis for reasonable possible movements in each significant assumption for UBS's post-employment obligations is provided within Note 26.

Defined contribution plans

A defined contribution plan is a pension plan under which UBS pays fixed contributions into a separate entity from which post-employment and other benefits are paid. UBS has no legal or constructive obligation to pay further contributions if the plan does not hold sufficient assets to pay employees the benefits relating to employee service in the current and prior periods. UBS's contributions are expensed when the employees have rendered services in exchange for such contributions. This is generally in the year of contribution. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

Other post-employment benefits

UBS also provides post-employment medical and life insurance benefits to certain retirees in the US and the UK. The expected costs of these benefits are recognized over the period of employment using the same accounting methodology used for defined benefit pension plans.

8) Income taxes

UBS is subject to the income tax laws of Switzerland and those of the non-Swiss jurisdictions in which UBS has business operations.

The Group's provision for income taxes is composed of current and deferred taxes. Current income taxes represent taxes to be paid or refunded for the current period or previous periods.

Deferred taxes are recognized for temporary differences between the carrying amounts and tax bases of assets and liabilities that will result in deductible amounts in future periods and are measured using the applicable tax rates and laws that will be in effect when such differences are expected to reverse.

Deferred tax assets arise from a variety of sources, the most significant being: (i) tax losses that can be carried forward to be used against profits in future years and (ii) expenses recognized in the Group's income statement that are not deductible until the associated cash flows occur. Deferred tax assets are recognized only to the extent that it is probable that sufficient taxable profits will be available against which these differences can be used. When an entity or tax group has a history of recent losses, deferred tax assets are only recognized to the extent there are sufficient taxable temporary differences or there is convincing other evidence that sufficient taxable profit will be available against which the unused tax losses can be utilized.

Note 1 Summary of significant accounting policies (continued)

Deferred tax liabilities are recognized for temporary differences between the carrying amounts of assets and liabilities in the balance sheet that reflect the expectation that certain items will give rise to taxable income in future periods.

Deferred and current tax assets and liabilities are offset when (i) they arise in the same tax reporting group, (ii) they relate to the same tax authority, (iii) the legal right to offset exists and (iv) they are intended to be settled net or realized simultaneously.

Current and deferred taxes are recognized as income tax benefit or expense in the income statement except for current and deferred taxes recognized (i) upon the acquisition of a subsidiary, (ii) for unrealized gains or losses on financial instruments that are classified as available for sale, (iii) for changes in fair value of derivative instruments designated as cash flow hedges, (iv) for remeasurements of defined benefit plans, (v) for certain foreign currency translations of foreign operations, and (vi) for gains and losses on the sale of treasury shares. Amounts relating to points (ii), (iii), (iv) and (v) are recognized in *Other comprehensive income* within *Equity*.

Critical accounting estimates and judgments

Tax laws are complex and judgment and interpretations about the application of such laws are required when accounting for income taxes. UBS considers the performance of its businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of its deferred tax assets, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing deferred tax assets. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

The level of deferred tax asset recognition is influenced by management's assessment of UBS's future profitability based on relevant business plan forecasts. Existing assessments are reviewed and, if necessary, revised to reflect changed circumstances. This review is conducted annually, in the second half of each year, but adjustments may be made at other times, if required. In a situation where recent losses have been incurred, convincing evidence that there will be sufficient future profitability is required.

If profit forecast assumptions in future periods deviate from the current outlook, the value of UBS's deferred tax assets may be affected. Recognition of any decrease in the carrying amount of deferred tax assets in the income statement would reduce net profit and equity but would not affect cash flows.

Judgment is also required to forecast the expected outcome of uncertain tax positions that may require the interpretation of tax laws and the resolution of any income tax-related appeals or litigation that are incorporated into the estimate of income and deferred tax.

→ Refer to Note 8 for more information

9) Investment in associates

Entities where UBS has significant influence over the financial and operating policies of the entity, but does not have control, are classified as investments in associates and accounted for under the equity method of accounting. Typically, UBS has significant influence when it holds or has the ability to hold between 20% and 50% of a company's voting rights. Investments in associates are initially recognized at cost, and the carrying amount is increased or decreased after the date of acquisition to recognize the Group's share of the investee's comprehensive income and any impairment losses.

→ Refer to Note 28 for more information

10) Property, equipment and software

Property, equipment and software includes own-used properties, leasehold improvements, information technology hardware, externally purchased and internally generated software, as well as communication and other similar equipment. Property, equipment and software is carried at cost less accumulated depreciation and impairment losses and is reviewed at each reporting date for indication for impairment. Software development costs are capitalized only when the costs can be measured reliably and it is probable that future economic benefits will arise. Depreciation of property, equipment and software begins when they are available for use, that is, when they are in the location and condition necessary for them to be capable of operating in the manner intended by management. Depreciation is calculated on a straight-line basis over an asset's estimated useful life. The estimated useful economic lives of UBS's property, equipment and software are:

- properties, excluding land: ≤ 67 years
- IT hardware and communication equipment: ≤ 7 years
- other machines and equipment: ≤ 10 years
- software: ≤ 10 years
- leasehold improvements: shorter of the lease term or the economic life of asset (typically ≤ 20 years)

→ Refer to Notes 1b and 14 for more information

Note 1 Summary of significant accounting policies (continued)

11) Goodwill and intangible assets

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of net identifiable assets of the acquired entity at the date of the acquisition. Goodwill is not amortized, but at the end of each reporting period, UBS assesses whether there is any indication that goodwill is impaired. If such indicators exist, UBS is required to test the goodwill for impairment. Irrespective of whether there is any indication of impairment, UBS tests goodwill for impairment annually. UBS considers the segments, as reported in Note 2a, as separate cash-generating units, since this is the level at which the performance of investments is reviewed and assessed by management. The impairment test is performed for each segment to which goodwill is allocated by comparing the recoverable amount, based on its value-in-use, to the carrying amount of the respective segment. An impairment charge is recognized if the carrying amount exceeds the recoverable amount.

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of UBS's goodwill may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce net profit and equity, but would not affect cash flows.

Intangible assets are comprised of separately identifiable intangible items arising from business combinations and certain purchased trademarks and similar items. Intangible assets are recognized at cost. The cost of an intangible asset acquired in a business combination is its fair value at the date of acquisition. Intangible assets with a finite useful life are amortized using the straight-line method over their estimated useful life, generally not exceeding 20 years. In rare cases, intangible assets can have an indefinite useful life, in which case they are not amortized. At each reporting date, intangible assets are reviewed for indications of impairment. If such indications exist, the intangible assets are analyzed to assess whether their carrying amount is fully recoverable. An impairment loss is recognized if the carrying amount exceeds the recoverable amount.

Critical accounting estimates and judgments

UBS's methodology for goodwill impairment testing is based on a model which is most sensitive to the following key assumptions: (i) forecasts of earnings available to shareholders in years one to three, (ii) changes in the discount rates and (iii) changes in the long-term growth rate. Key assumptions used to determine the recoverable amounts of each segment are tested for sensitivity by applying a reasonably possible change to those assumptions. Refer to Note 15 for the discussion of how the reasonably possible changes in those key assumptions may affect the results delivered by UBS's model for goodwill impairment testing.

→ Refer to Notes 2 and 15 for more information

12) Provisions and contingent liabilities

Provisions are liabilities of uncertain timing or amount, and are recognized when (i) UBS has a present obligation as a result of a past event, (ii) it is probable that an outflow of resources will be required to settle the obligation and (iii) a reliable estimate of the amount of the obligation can be made.

The majority of UBS's provisions relate to litigation, regulatory and similar matters, restructuring, employee benefits, real estate and loan commitments and guarantees. Provisions that are similar in nature are aggregated to form a class, while the remaining provisions, including those of less significant amounts, are presented under *Other provisions*. Provisions are presented separately on the balance sheet and, when they are no longer considered uncertain in timing or amount, are reclassified to *Other liabilities – Other*.

The Group recognizes provisions for litigation, regulatory and similar matters when, in the opinion of management after seeking legal advice, it is more likely than not that the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against the Group, but are nevertheless expected to be, based on the Group's experience with similar asserted claims.

Restructuring provisions are recognized when a detailed and formal restructuring plan has been approved and a valid expectation has been raised that the restructuring will be carried out, either through commencement of the plan or announcements to affected employees.

Provisions are recognized for lease contracts if the unavoidable costs of a contract exceed the benefits expected to be received under it (onerous lease contracts). For example, this may occur when a significant portion of a leased property is expected to be vacant for an extended period.

Provisions for employee benefits are recognized mainly in respect of service anniversaries and sabbatical leave.

Provisions are recognized at the best estimate of the consideration required to settle the present obligation at the balance sheet date. Such estimates are based on all available information and are revised over time as more information becomes available. If the effect of the time value of money is material, provisions are discounted and measured at the present value of the expenditure expected to settle or discharge the obligation, using a rate that reflects the current market assessments of the time value of money and the risks specific to the obligation.

When all conditions required to recognize a provision are not met, a contingent liability is disclosed, unless the likelihood of an outflow of resources is remote. Contingent liabilities are also disclosed for possible obligations that arise from past events whose existence will be confirmed only by uncertain future events not wholly within the control of UBS. Such disclosures are not made if it is not practicable to do so.

Note 1 Summary of significant accounting policies (continued)

Critical accounting estimates and judgments

Recognition of provisions often involves significant judgment in assessing the existence of an obligation that results from past events and in estimating the probability, timing and amount of any outflows of resources. This is particularly the case for litigation, regulatory and similar matters, which, due to their nature, are subject to many uncertainties making their outcome difficult to predict. Such matters may involve unique fact patterns or novel legal theories, proceedings that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Determining whether an obligation exists as a result of a past event and estimating the probability, timing and amount of any potential outflows is based on a variety of assumptions, variables, and known and unknown uncertainties.

The amount of any provision recognized is sensitive to the assumptions used and there could be a wide range of possible outcomes for any particular matter.

Statistical or other quantitative analytical tools are of limited use in determining whether to establish or determine the amount of provisions in the case of litigation, regulatory or similar matters. Furthermore, information currently available to management may be incomplete or inaccurate, increasing the risk of erroneous assumptions with regard to the future development of such matters. Management regularly reviews all the available information regarding such matters, including legal advice which is a significant consideration, to assess whether the recognition criteria for provisions have been satisfied and to determine the timing and amount of any potential outflows.

→ Refer to Note 20 for more information

13) Foreign currency translation

Transactions denominated in a foreign currency are translated into the functional currency of the reporting entity at the spot exchange rate on the date of the transaction. At the balance sheet date, all monetary assets and liabilities denominated in foreign currency are translated into the functional currency using the closing exchange rate. Non-monetary items measured at historical cost are translated at the exchange rate on the date of the transaction. Foreign currency translation differences on non-monetary financial assets classified as available for sale are generally recorded directly in *Equity* until the asset is sold or becomes impaired. However, translation differences on available for sale monetary financial assets are reported in *Net trading income* on an amortized-cost basis, along with all other foreign currency translation differences on monetary assets and liabilities.

Upon consolidation, assets and liabilities of foreign operations are translated into Swiss francs (CHF), UBS's presentation

currency, at the closing exchange rate on the balance sheet date, and income and expense items are translated at the average rate for the period. The resulting foreign currency translation differences attributable to shareholders are recognized directly in *Foreign currency translation* within *Equity*, which forms part of *Total equity attributable to shareholders*, whereas the foreign currency translation differences attributable to non-controlling interests are shown within *Equity attributable to non-controlling interests*.

When a foreign operation is disposed or partially disposed of and UBS loses control over the foreign operation, the cumulative amount of foreign currency translation differences within *Total equity attributable to shareholders* and *Equity attributable to non-controlling interests* related to that foreign operation is reclassified to the income statement as part of the gain or loss on disposal. When UBS disposes of a portion of its interest in a subsidiary that includes a foreign operation but retains control, the related portion of the cumulative currency translation balance is reclassified to *Equity attributable to non-controlling interests*.

→ Refer to Note 34 for more information

14) Equity, treasury shares and contracts on UBS Group AG shares

Non-controlling interests and preferred noteholders

Net profit and *Equity* are presented including non-controlling interests and preferred noteholders. *Net profit* is split into *Net profit attributable to shareholders*, *Net profit attributable to non-controlling interests* and *Net profit attributable to preferred noteholders*. *Equity* is split into *Equity attributable to shareholders*, *Equity attributable to non-controlling interests* and *Equity attributable to preferred noteholders*.

UBS Group AG shares held (treasury shares)

UBS Group AG shares held by the Group are presented in *Equity* as *Treasury shares* at their acquisition cost and are deducted from *Equity* until they are canceled or reissued. The difference between the proceeds from sales of treasury shares and their weighted average cost (net of tax, if any) is reported as *Share premium*.

Net cash settlement contracts

Contracts on UBS Group AG shares that require net cash settlement, or provide the counterparty or UBS with a settlement option that includes a choice of settling net in cash, are classified as held for trading, with changes in fair value reported in the income statement as *Net trading income*.

Note 1 Summary of significant accounting policies (continued)

15) Leasing

UBS enters into lease contracts, or contracts that include lease components, predominantly of premises and equipment, and primarily as lessee. Leases that transfer substantially all the risks and rewards, but not necessarily legal title in the underlying assets, are classified as finance leases. All other leases are classified as operating leases. UBS is not a lessee in any material finance leases.

Lease contracts classified as operating leases where UBS is the lessee include non-cancellable long-term leases of office buildings in most UBS locations. Operating lease rentals payable are recognized as an expense on a straight-line basis over the lease term, which commences with control of the physical use of the property. Lease incentives are treated as a reduction of rental expense and are recognized on a consistent basis over the lease term.

Where UBS acts as lessor under a finance lease, a receivable is recognized in *Loans* at an amount equal to the present value of the aggregate of the minimum lease payments plus any

unguaranteed residual value that UBS expects to recover at the end of the lease term. Initial direct costs are also included in the initial measurement of the lease receivable. Lease payments received during the lease term are allocated to repayment of the outstanding receivable and interest income to reflect a constant periodic rate of return on UBS's net investment using the interest rate implicit in the lease. UBS reviews the estimated unguaranteed residual value annually, and if the estimated residual value to be realized is less than the amount assumed at lease inception, a loss is recognized for the expected shortfall.

Certain arrangements do not take the legal form of a lease but convey a right to use an asset in return for a payment or series of payments. For such arrangements, UBS determines at the inception of the arrangement whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets and, if so, the arrangement is accounted for as a lease.

→ Refer to Notes 10 and 31 for more information

b) Changes in accounting policies, comparability and other adjustments

Own credit

On 1 January 2016, UBS adopted the own credit presentation requirements of IFRS 9, *Financial Instruments*. From this date onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained earnings*. As the Group does not hedge changes in own credit arising on financial liabilities designated at fair value, presenting own credit within *Other comprehensive income* does not create or increase an accounting mismatch in the income statement. The unrealized and any realized own credit recognized in *Other comprehensive income* will not be reclassified to the income statement in future periods. Changes in own credit presented in prior periods have not been restated and remain within *Net trading income*.

Balance sheet classification of newly purchased high-quality liquid debt securities

Starting 2016, UBS generally classifies newly purchased debt securities held as high-quality liquid assets (HQLA), and managed by Corporate Center – Group Asset and Liability Management (Group ALM), as either financial assets designated at fair value through profit or loss or financial assets held to maturity. Debt securities acquired prior to 2016 and held for liquidity purposes remain classified as available for sale financial assets.

Most of the HQLA debt securities purchased since the beginning of 2016 are classified as financial assets designated at fair value through profit or loss and are intended to reduce accounting mismatches by ensuring that changes in the fair value of the securities are recognized in the income statement in line with the associated interest rate derivatives used for risk management purposes. A portion of HQLA debt securities are classified as financial assets held to maturity.

Note 1 Summary of significant accounting policies (continued)

Interest rate swaps converted to a settlement model

In 2016, UBS elected to convert its interest rate swaps (IRS) transacted with the London Clearing House and Japan Securities Clearing Corporation from the previous collateral model to a settlement model. The IRS are now legally settled on a daily basis, resulting in derecognition of the associated assets and liabilities. Previously, UBS applied IAS 32 netting principles to offset the fair value of IRS with the associated variation margin. Gross cash collateral receivables and payables on derivative instruments and corresponding netting presented in Note 24 decreased by CHF 64 billion as of 31 December 2016, with no change to net cash collateral receivables and payables on derivative instruments recognized on the balance sheet. Consequently, the move to a settlement model resulted in a significant decrease in the fair value of interest rate swaps with the London Clearing House designated as hedging instruments.

→ Refer to Notes 12 and 24 for more information

Derecognition of exchange-traded derivative client cash balances from the Group's balance sheet

In accordance with the Group's accounting policy, client cash balances associated with derivatives clearing and execution services are not recognized on the balance sheet if, through contractual agreement, regulation or practice, the Group neither obtains benefits from nor controls the client cash balances. These conditions are considered to have been met when (i) the Group is not permitted to reinvest client cash balances, (ii) interest paid by central counterparties (CCPs), brokers or deposit banks on cash deposits forms part of the client cash balances with deductions being made solely as compensation for clearing and execution services provided, (iii) the Group does not guarantee and is not liable to clients for the performance of the CCP, broker or deposit bank and (iv) the client cash balances are legally isolated from the Group's estate.

During 2016, the Group formally and legally waived certain rights available to it under the rules of the US Commodity Futures Trading Commission that had previously enabled it to invest certain client cash balances in other assets, making them a source of benefit to the Group. As a result, the Group derecognized related client cash balances. Consequently, *Cash collateral receivables on derivative instruments* decreased by CHF 2.5 billion, *Due from banks* decreased by CHF 0.2 billion and *Cash collateral payables on derivative instruments* decreased by CHF 2.7 billion as of 31 December 2016.

Transfer of the Risk Exposure Management function from Corporate Center – Non-core and Legacy Portfolio to Corporate Center – Group ALM

Consistent with changes in the manner in which operating segment performance is assessed, UBS transferred in 2016 the Risk Exposure Management (REM) function from Corporate Center – Non-core and Legacy Portfolio to Corporate Center – Group ALM to further harmonize REM risk management responsibility with the reporting structure and align it more

closely with other activities performed by Corporate Center – Group ALM.

REM primarily performs risk management over credit, debit and funding valuation adjustments for the Group's over-the-counter derivatives portfolio. Prior-period segment profit and loss information was restated to reflect this transfer, which had no impact at a Group level. In Note 2, gross revenues from REM activities are now presented in Corporate Center – Group ALM within *Net interest income* and *Non-interest income*. Revenue allocations from REM to business divisions and other Corporate Center units are presented within *Allocations from Corporate Center – Group ALM to business divisions and other Corporate Center units*. There was no effect on operating profit before tax for any segment for any period from this restatement. Prior-period information for balance sheet assets has not been restated, as the effect would not have been material.

Changes to statement of changes in equity

In 2016, UBS refined the presentation of effects from share-based compensation on share premium and treasury shares in the statement of changes in equity.

The new disclosure line *Delivery of treasury shares under share-based compensation plans*, reflecting the average cost of treasury shares, provides the effect on share premium and treasury shares resulting from the delivery of treasury shares to employees. Also, the effects from *Share-based compensation expensed in the income statement* and *Other disposal of treasury shares* are now presented separately. The former disclosure lines *Disposal of treasury shares*, *Treasury share gains / (losses)* and *Employee share and share option plans* have been removed.

These changes did not affect total equity or any components of equity. Prior-period information has been adjusted accordingly.

Changes to the estimated useful life of certain IT hardware and communication equipment and software

In 2016, UBS extended the estimated useful life for certain IT hardware and communication equipment and software from five to seven years, resulting in CHF 16 million and CHF 26 million lower depreciation expenses in 2016, respectively. These changes are expected to result in approximately CHF 120 million and CHF 60 million lower depreciation expenses in 2017 and 2018, respectively.

Annual Improvements to IFRSs 2012 – 2014 Cycle; Amendments to IFRS 11, Joint Arrangements; IAS 16, Property, Plant and Equipment; IAS 38, Intangible Assets; and IAS 1, Presentation of Financial Statements

In 2016, UBS adopted a number of interpretations and amendments to standards, that did not have a material impact on the Group's financial statements.

Note 1 Summary of significant accounting policies (continued)

c) International Financial Reporting Standards and Interpretations to be adopted in 2017 and later and other adjustments

IFRS 9, Financial Instruments

In July 2014, the IASB published the final version of IFRS 9, *Financial Instruments*. The standard reflects the classification and measurement, impairment and hedge accounting phases of the IASB's project to replace IAS 39, *Financial Instruments: Recognition and Measurement*.

IFRS 9 requires all financial assets, except equity instruments, to be classified at amortized cost, fair value through other comprehensive income (OCI) or fair value through profit or loss, on the basis of the entity's business model for managing the financial assets and its contractual cash flow characteristics. If a financial asset meets the criteria to be measured at amortized cost or at fair value through OCI measurement, it can be designated at fair value through profit or loss under the fair value option if doing so would significantly reduce or eliminate an accounting mismatch. Equity instruments that are not held for trading may be accounted for at fair value through OCI, with no subsequent reclassification of realized gains or losses to the income statement, while all other equity instruments will be accounted for at fair value through profit or loss. IFRS 9 classification and measurement requirements for liabilities are unchanged except that any gain or loss arising on a financial liability designated at fair value through profit or loss that is attributable to changes in the issuer's own credit risk (own credit) is presented in OCI and not recognized in the income statement.

IFRS 9 introduces a forward-looking expected credit loss (ECL) approach, replacing the incurred loss impairment approach for financial instruments in IAS 39, and the loss-provisioning approach for financial guarantees and loan commitments in IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*. Expected credit losses are required to be recognized in profit or loss for all financial assets measured at amortized cost, debt instruments measured at fair value through OCI, lease receivables, financial guarantees and loan commitments. A 12-month expected credit loss is generally recognized on inception, with a lifetime credit loss required if a significant increase in credit risk (SICR) arises. A lifetime loss allowance is always recognized for credit-impaired financial assets.

IFRS 9 also includes an optional revised hedge accounting model, which further aligns the accounting treatment with the risk management practices.

UBS early adopted the own credit presentation change in the first quarter of 2016 and will adopt the classification and measurement and impairment changes on 1 January 2018 in

line with the mandatory effective date. UBS is still assessing whether it will adopt the optional IFRS 9 hedge accounting requirements pending the IASB completing their project on macro hedge accounting strategies. In line with IFRS 9, UBS does not intend to restate prior periods and will recognize the difference between carrying amounts as of 31 December 2017 and those on adoption of IFRS 9 on 1 January 2018 in opening retained earnings.

UBS has assessed all material positions under the revised classification and measurement requirements and has identified certain debt instruments that will not qualify for amortized cost accounting but will be measured at fair value through profit or loss under IFRS 9. However, this is not expected to have significant effects on UBS's financial statements, as the instruments are predominantly collateralized short-term lending arrangements with no material differences between their amortized cost value and fair value. In addition, the Group is monitoring the IASB's project to amend IFRS 9 to allow for basic lending arrangements with symmetrical break clauses to continue to qualify for amortized cost accounting. These clauses are common features in Swiss private mortgages as a consequence of Swiss law, and in Swiss corporate lending due to market practice, and may result in compensation for early termination being paid by either the borrower or UBS. The IASB is expected to issue an exposure draft in April 2017, effective 1 January 2018 in line with IFRS 9's effective date. Based on the anticipated amendments, the Group expects that its private mortgages and corporate loans can continue to be measured at amortized cost.

Overall, the level of credit losses is expected to increase under IFRS 9 alongside additional income statement volatility due to the use of uncertain forward-looking assumptions and the application of the SICR approach. Initial ECL results, calculated for key portfolios in a prototype environment with preliminary models and scenarios, indicate an increase in credit losses that should not have a significant impact on equity on adoption, due to the relatively short contractual maturities, the high quality of UBS's loan book and the current benign credit environment. Actual results on 1 January 2018 may differ significantly given the preliminary status of the models and data included in the prototype and the possibility of changes in the macroeconomic environment. UBS continues to monitor the potential effects of IFRS 9 on its regulatory capital requirements, but does not expect any impact to be material.

→ Refer to Note 1b for more information on own credit /

Note 1 Summary of significant accounting policies (continued)

IFRS 15, Revenue from Contracts with Customers

In May 2014, the IASB issued IFRS 15, *Revenue from Contracts with Customers* replacing IAS 18 *Revenue*. IFRS 15 establishes principles for revenue recognition that apply to all contracts with customers except those relating to financial instruments, leases and insurance contracts and requires an entity to recognize revenue as performance obligations are satisfied. In particular, the standard now specifies that variable consideration is only recognized to the extent that it is highly probable that a significant reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved. This may affect when certain performance-based and asset-based fees can be recognized.

It also provides guidance on when revenues and expenses should be presented on a gross or net basis and establishes a cohesive set of disclosure requirements for information on the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers.

UBS will adopt the standard as of its mandatory effective date on 1 January 2018 and will apply it on a modified retrospective basis, recognizing the cumulative effect of initially applying the standard as an adjustment to the opening balance of retained earnings. UBS continues to assess the impact of the new standard on its financial statements, but currently does not expect any impact to be material.

IFRS 16, Leases

In January 2016, the IASB issued IFRS 16, *Leases*, which replaces IAS 17, *Leases*, and will come into effect on 1 January 2019. The standard substantially changes how lessees must account for operating lease commitments, requiring an on-balance sheet liability with a corresponding right-of-use asset to be recognized on the balance sheet, compared with the current off-balance sheet treatment of such leases. Early adoption is permitted for companies that also apply IFRS 15, *Revenue from Contracts with Customers*. UBS expects to report an increase in assets and liabilities from adoption in line with its operating lease commitments as at 1 January 2019.

→ Refer to Note 31 for more information

Amendments to IAS 12, Income Taxes

In January 2016, the IASB issued narrow-scope amendments to IAS 12, *Income Taxes*, clarifying how to account for deferred tax assets related to debt instruments measured at fair value. Entities are required to apply the amendments for annual periods beginning on or after 1 January 2017. UBS expects that the adoption of these amendments will not have a material impact on its financial statements.

Amendments to IAS 7, Statement of Cash Flows

In January 2016, the IASB issued amendments to IAS 7, *Statement of Cash Flows*, which, among other things, require companies to provide information about changes in their financial liabilities arising from financing activities, including changes from cash flows and non-cash changes, such as foreign exchange gains or losses. UBS will adopt the amendments in the first quarter of 2017.

Amendments to IFRS 2, Share-based Payment

In June 2016, the IASB issued amendments to IFRS 2, *Share-based Payment*, which are mandatorily effective as of 1 January 2018, with early adoption permitted. The amendments require that the approach used to account for vesting and non-vesting conditions when measuring cash-settled share-based payments is consistent with that used for equity-settled share-based payments. The amendments also clarify the classification of share-based payments settled net of withholding tax as well as the accounting consequences resulting from a modification of share-based payments from cash-settled to equity-settled. UBS expects that the adoption of these amendments will not have a material impact on its financial statements.

IFRIC 22, Foreign Currency Transactions and Advance Consideration

In December 2016, the IFRS Interpretations Committee of the IASB issued IFRIC Interpretation 22, *Foreign Currency Transactions and Advance Consideration*, which clarifies that the date of the transaction for the purpose of determining the exchange rate to apply on initial recognition of the related asset, expense or income is the date on which the entity initially recognizes the non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration. Entities are required to apply IFRIC 22 for annual periods beginning on or after 1 January 2018. UBS expects that the adoption of this IFRS Interpretation will not have a material impact on its financial statements.

Note 2a Segment reporting

The operational structure of the Group is comprised of Corporate Center and five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank.

Wealth Management

Wealth Management provides comprehensive advice and tailored financial services to wealthy private clients around the world, except those served by Wealth Management Americas. Its clients benefit from the full spectrum of resources that UBS as a global firm can offer, including banking and lending solutions, wealth planning, investment management solutions and corporate finance advice. Wealth Management's guided architecture model gives clients access to a wide range of products from the world's leading third-party institutions that complement its own products.

Wealth Management Americas

Wealth Management Americas provides advice-based solutions through financial advisors who deliver a fully integrated set of products and services specifically designed to address the needs of their clients. Its business is primarily domestic US but includes Canada and international business booked in the US.

Personal & Corporate Banking

Personal & Corporate Banking provides comprehensive financial products and services to private, corporate and institutional clients in Switzerland and is among the leading players in the private and corporate loan market in Switzerland, with a well-collateralized and conservatively managed lending portfolio.

Its business is a central element of UBS's universal bank delivery model in Switzerland. Personal & Corporate Banking works with the wealth management, investment bank and asset management businesses to ensure that clients receive the best products and solutions for their specific financial needs. Personal & Corporate Banking is also an important source of growth for other business divisions in Switzerland through client referrals. In addition, Personal & Corporate Banking manages a substantial part of UBS's Swiss infrastructure and banking products platform, both of which are leveraged across the Group.

Asset Management

Asset Management provides investment management products and services, platform solutions and advisory support to institutions, wholesale intermediaries and wealth management clients around the world, with an onshore presence in 22 countries. Asset management is a leading fund house in Europe, the largest mutual fund manager in Switzerland and one of the largest fund of hedge funds and real estate investment managers in the world. Its global investment capabilities include all major traditional and alternative asset classes.

Investment Bank

The Investment Bank is present in over 35 countries, with principal offices in all major financial centers, providing investment advice, financial solutions and capital markets access. It serves corporate, institutional and wealth management clients across the globe and forms a synergetic partnership with UBS's wealth management, personal and corporate banking and asset management businesses.

The business division is organized into Corporate Client Solutions and Investor Client Services and also includes UBS Securities Research.

Corporate Center

Corporate Center is comprised of Services, Group Asset and Liability Management (Group ALM) and Non-core and Legacy Portfolio.

Services consists of the Group Chief Operating Officer area (Group Corporate Services, Group Operations, Group Sourcing, Group Technology), Group Finance, Group Legal, Group Human Resources, Group Risk Control, Group Communications and Branding, Group Regulatory and Governance, and UBS and Society.

Group ALM manages the structural risks of UBS's balance sheet, including interest rate risk in the banking book, currency risk and collateral risk, as well as the risks associated with the Group's liquidity and funding portfolios. Group ALM also seeks to optimize the Group's financial performance by better matching assets and liabilities within the context of the Group's liquidity, funding and capital targets. Group ALM serves all business divisions and other Corporate Center units through three main risk management areas, and its risk management is fully integrated into the Group's risk governance framework.

Non-core and Legacy Portfolio is comprised of the positions from businesses that were part of the Investment Bank prior to its restructuring and is overseen by a committee chaired by the Group Chief Risk Officer.

Note 2a Segment reporting (continued)

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
For the year ended 31 December 2016									
Net interest income	1,932	1,347	1,892	(33)	1,006	(322)	589	3	6,413
Non-interest income	4,975	6,320	1,768	1,957	6,953	183	(295)	84	21,944
Allocations from CC – Group ALM to business divisions and other CC units	389	118	332	7	(260)	36	(512)	(110)	0
Income ¹	7,296	7,785	3,990	1,931	7,699	(102)	(219)	(23)	28,357
Credit loss (expense) / recovery	(5)	(3)	(6)	0	(11)	0	0	(13)	(37)
Total operating income	7,291	7,782	3,984	1,931	7,688	(102)	(219)	(36)	28,320
Personnel expenses	2,349	4,819	845	727	3,082	3,801	31	66	15,720
General and administrative expenses	640	570	285	241	805	4,145	17	732	7,434
Services (to) / from Corporate Center and other business divisions	2,348	1,235	1,080	506	2,765	(8,164)	(49)	280	0
of which: services from CC – Services	2,256	1,221	1,186	530	2,675	(8,204)	110	225	0
Depreciation and impairment of property, equipment and software	2	2	15	1	21	944	0	0	985
Amortization and impairment of intangible assets ²	4	50	0	4	12	21	0	0	91
Total operating expenses ³	5,343	6,675	2,224	1,479	6,684	747	(1)	1,078	24,230
Operating profit / (loss) before tax	1,948	1,107	1,760	452	1,004	(849)	(218)	(1,114)	4,090
Tax expense / (benefit)									805
Net profit / (loss)									3,286
Additional Information									
Total assets	115,539	65,882	139,912	12,028	242,302	23,669	267,200	68,485	935,016
Additions to non-current assets	26	4	23	1	3	1,759	0	0	1,816

¹ Impairments of financial assets available for sale for the year ended 31 December 2016 totaled CHF 5 million, of which CHF 3 million was recorded in Asset Management. ² Refer to Note 15 for more information. ³ Refer to Note 30 for information on restructuring expenses.

Note 2a Segment reporting (continued)¹

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
For the year ended 31 December 2015									
Net interest income	1,825	1,067	1,890	(34)	1,573	(340)	730	21	6,732
Non-interest income	5,859	6,213	1,603	2,077	7,526	435	378	(101)	23,990
Allocations from CC – Group ALM to business divisions and other CC units	471	104	421	15	(211)	145	(832)	(114)	0
Income ²	8,155	7,384	3,913	2,057	8,889	241	277	(195)	30,722
Credit loss (expense) / recovery	0	(4)	(37)	0	(68)	0	0	(8)	(117)
Total operating income	8,155	7,381	3,877	2,057	8,821	241	277	(203)	30,605
Personnel expenses	2,532	4,579	873	729	3,220	3,903	30	116	15,981
General and administrative expenses	637	822	264	232	841	4,483	22	806	8,107
Services (to) / from Corporate Center and other business divisions	2,289	1,209	1,077	502	2,817	(8,215)	(57)	379	0
of which: services from CC – Services	2,209	1,193	1,180	523	2,731	(8,245)	96	313	0
Depreciation and impairment of property, equipment and software	5	3	17	2	26	868	0	0	920
Amortization and impairment of intangible assets ³	3	51	0	8	24	21	0	0	107
Total operating expenses ⁴	5,465	6,663	2,231	1,474	6,929	1,059	(5)	1,301	25,116
Operating profit / (loss) before tax	2,689	718	1,646	584	1,892	(818)	282	(1,503)	5,489
Tax expense / (benefit)									(898)
Net profit / (loss)									6,386
Additional Information									
Total assets	119,850	60,993	141,164	12,874	253,486	22,566	237,517	94,369	942,819
Additions to non-current assets	6	4	14	1	18	1,851	0	1	1,895

¹ Figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. Refer to Note 1b for more information. ² Impairments of financial assets available for sale for the year ended 31 December 2015 totaled CHF 1 million, all in Wealth Management. ³ Refer to Note 15 for more information. ⁴ Refer to Note 30 for information on restructuring expenses.

Note 2a Segment reporting (continued)¹

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
For the year ended 31 December 2014									
Net interest income	1,693	864	1,801	(39)	1,583	(338)	731	258	6,555
Non-interest income	5,726	6,004	1,575	1,914	6,823	158	101	(751)	21,550
Allocations from CC – Group ALM to business divisions and other CC units	481	116	461	27	(100)	217	(831)	(371)	0
Income ²	7,902	6,984	3,836	1,902	8,306	37	2	(863)	28,105
Credit loss (expense) / recovery	(1)	15	(95)	0	2	0	0	2	(78)
Total operating income	7,901	6,998	3,741	1,902	8,308	37	2	(862)	28,027
Personnel expenses	2,467	4,363	850	643	2,964	3,843	26	124	15,280
General and administrative expenses	918	550	293	305	2,671	4,123	22	505	9,387
Services (to) / from Corporate Center and other business divisions	2,180	1,137	1,074	478	2,711	(8,046)	(48)	514	0
of which: services from CC – Services	2,122	1,121	1,196	495	2,658	(8,084)	88	404	0
Depreciation and impairment of property, equipment and software	4	0	17	2	32	762	0	0	817
Amortization and impairment of intangible assets ³	5	48	0	9	15	6	0	0	83
Total operating expenses ⁴	5,574	6,099	2,235	1,435	8,392	688	0	1,144	25,567
Operating profit / (loss) before tax	2,326	900	1,506	467	(84)	(652)	2	(2,005)	2,461
Tax expense / (benefit)									(1,180)
Net profit / (loss)									3,640
Additional Information									
Total assets	127,588	56,026	143,711	15,207	292,347	19,871	237,902	169,826	1,062,478
Additions to non-current assets	7	6	9	2	7	1,677	0	0	1,708

¹ Figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. Refer to Note 1b for more information. ² Impairments of financial assets available for sale for the year ended 31 December 2014 totaled CHF 76 million, of which CHF 49 million was recorded in the Investment Bank and CHF 23 million in Corporate Center – Non-core and Legacy Portfolio. ³ Refer to Note 15 for more information. ⁴ Refer to Note 30 for information on restructuring expenses.

Note 2b Segment reporting by geographic location

The operating regions shown in the table below correspond to the regional management structure of the Group. The allocation of operating income to these regions reflects, and is consistent with, the basis on which the business is managed and its performance is evaluated. These allocations involve assumptions and judgments that management considers to be reasonable, and may be refined to reflect changes in estimates or management structure. The main principles of the allocation methodology are that client revenues are attributed to the

domicile of the client and trading and portfolio management revenues are attributed to the country where the risk is managed. This revenue attribution is consistent with the mandate of the regional Presidents. Certain revenues, such as those related to Corporate Center – Non-core and Legacy Portfolio, are managed at a Group level. These revenues are included in the *Global* line.

The geographic analysis of non-current assets is based on the location of the entity in which the assets are recorded.

For the year ended 31 December 2016

	Total operating income		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	11.7	41	7.4	47
<i>of which: US</i>	11.1	39	7.0	44
Asia Pacific	4.1	14	0.7	4
Europe, Middle East and Africa	6.1	22	1.8	11
Switzerland	6.8	24	6.0	38
Global	(0.4)	(1)	0.0	0
Total	28.3	100	15.9	100

For the year ended 31 December 2015

	Total operating income		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	11.3	37	7.1	47
<i>of which: US</i>	10.7	35	6.7	44
Asia Pacific	5.0	16	0.5	3
Europe, Middle East and Africa	6.8	22	1.7	11
Switzerland	7.1	23	5.9	39
Global	0.5	2	0.0	0
Total	30.6	100	15.2	100

For the year ended 31 December 2014

	Total operating income		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	10.7	38	7.0	48
<i>of which: US</i>	10.1	36	6.6	45
Asia Pacific	4.6	16	0.4	3
Europe, Middle East and Africa	6.8	24	1.5	10
Switzerland	6.8	24	5.6	38
Global	(0.9)	(3)	0.0	0
Total	28.0	100	14.6	100

Income statement notes

Note 3 Net interest and trading income

CHF million	For the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Net interest and trading income				
Net interest income	6,413	6,732	6,555	(5)
Net trading income	4,948	5,742	3,842	(14)
Total net interest and trading income	11,361	12,474	10,397	(9)
Wealth Management	2,998	3,034	2,845	(1)
Wealth Management Americas	1,839	1,537	1,352	20
Personal & Corporate Banking	2,532	2,613	2,536	(3)
Asset Management	(29)	(5)	0	480
Investment Bank	4,277	5,186	4,517	(18)
of which: Corporate Client Solutions	822	1,001	1,030	(18)
of which: Investor Client Services	3,455	4,185	3,487	(17)
Corporate Center	(256)	110	(854)	
of which: Services	(89)	(3)	34	
of which: Group ALM	(104)	426	16	
of which: own credit on financial liabilities designated at fair value ¹		553	292	(100)
of which: Non-core and Legacy Portfolio	(62)	(313)	(904)	(80)
Total net interest and trading income	11,361	12,474	10,397	(9)
Net interest income				
Interest income				
Interest income from loans and deposits ^{2, 3}	9,570	8,625	8,722	11
Interest income from securities financing transactions ⁴	1,136	896	752	27
Interest income from trading portfolio ⁵	2,465	3,071	3,196	(20)
Interest income from financial assets and liabilities designated at fair value	361	194	208	86
Interest income from financial assets available for sale and held to maturity ⁶	253	391	315	(35)
Total	13,787	13,177	13,194	5
Interest expense				
Interest expense on loans and deposits ⁶	826	476	708	74
Interest expense on securities financing transactions ⁷	1,233	976	827	26
Interest expense on trading portfolio ⁸	1,614	1,670	1,804	(3)
Interest expense on financial assets and liabilities designated at fair value	841	730	919	15
Interest expense on debt issued	2,858	2,592	2,382	10
Total	7,373	6,445	6,639	14
Net interest income	6,413	6,732	6,555	(5)
Net trading income				
Investment Bank Corporate Client Solutions	188	321	276	(41)
Investment Bank Investor Client Services	3,332	3,494	2,760	(5)
Other business divisions and Corporate Center	1,428	1,928	807	(26)
Net trading income	4,948	5,742	3,842	(14)
of which: net gains / (losses) from financial assets designated at fair value	(191)	(127)	(89)	50
of which: net gains / (losses) from financial liabilities designated at fair value ⁹	(1,362)	3,701	(2,380)	

1 Refer to Note 1b for more information. 2 Includes interest income on impaired loans and advances of CHF 21 million for 2016, CHF 16 million for 2015 and CHF 15 million for 2014. 3 Consists of interest income from balances with central banks, amounts due from banks and loans, and negative interest on amounts due to banks and customers. 4 Includes interest income on securities borrowed and reverse repurchase agreements and negative interest, including fees, on securities lent and repurchase agreements. 5 Includes dividend income. 6 Consists of interest expense on amounts due to banks and customers, and negative interest on balances with central banks, amounts due from banks and loans. 7 Includes interest expense on securities lent and repurchase agreements and negative interest, including fees, on securities borrowed and reverse repurchase agreements. 8 Includes expense related to dividend payment obligations on trading liabilities. 9 Excludes fair value changes of hedges related to financial liabilities designated at fair value and foreign currency translation effects arising from translating foreign currency transactions into the respective functional currency, both of which are reported within net trading income.

Note 4 Net fee and commission income

CHF million	For the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Underwriting fees	946	1,246	1,470	(24)
of which: equity underwriting fees	516	836	947	(38)
of which: debt underwriting fees	431	410	522	5
M&A and corporate finance fees	733	737	731	(1)
Brokerage fees	3,541	3,930	3,918	(10)
Investment fund fees	3,155	3,567	3,717	(12)
Portfolio management and advisory fees	8,035	7,858	7,343	2
Other	1,747	1,678	1,760	4
Total fee and commission income	18,157	19,016	18,940	(5)
Brokerage fees paid	757	869	818	(13)
Other	1,003	1,007	1,045	0
Total fee and commission expense	1,760	1,876	1,863	(6)
Net fee and commission income	16,397	17,140	17,076	(4)
of which: net brokerage fees	2,784	3,060	3,100	(9)

Note 5 Other income

CHF million	For the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Associates and subsidiaries				
Net gains / (losses) from disposals of subsidiaries ¹	(150) ²	264 ²	56	
Net gains / (losses) from disposals of investments in associates	0	0	69	
Share of net profits of associates	106	169	94	(37)
Total	(44)	433	219	
Financial assets available for sale				
Net gains / (losses) from disposals	346	252	219	37
Impairment charges	(5)	(1)	(76)	400
Total	342	251	143	36
Net income from properties (excluding net gains / (losses) from disposals) ³	25	28	30	(11)
Net gains / (losses) from disposals of properties held for sale	125	378	44	(67)
Net gains / (losses) from disposals of loans and receivables	(3)	26	39	
Other	154	(9) ⁴	157	
Total other income	599	1,107	632	(46)

¹ Includes foreign exchange gains / (losses) reclassified from other comprehensive income related to disposed foreign subsidiaries and branches. ² 2016 includes a loss on sale of a subsidiary of CHF 23 million in Wealth Management. 2015 includes a net gain on sale of subsidiaries of CHF 113 million in Wealth Management and a net gain on sale of subsidiaries of CHF 56 million in Asset Management. Refer to Note 30 for more information. ³ Includes net rent received from third parties and net operating expenses. ⁴ Includes a net gain on sale of businesses of CHF 56 million in Wealth Management. Refer to Note 30 for more information.

Note 6 Personnel expenses

	For the year ended			% change from
CHF million	31.12.16	31.12.15	31.12.14	31.12.15
Salaries ¹	6,230	6,282	6,269	(1)
Variable compensation – performance awards ²	2,972	3,210	2,820	(7)
<i>of which: guarantees for new hires</i>	30	38	48	(21)
Variable compensation – other ²	418	346	466	21
<i>of which: replacement payments³</i>	86	76	81	13
<i>of which: forfeiture credits</i>	(73)	(86)	(70)	(15)
<i>of which: severance payments⁴</i>	217	157	162	38
<i>of which: retention plan and other payments</i>	188	198	292	(5)
Wealth Management Americas: Financial advisor compensation ² , ⁵	3,697	3,552	3,385	4
Contractors	420	365	234	15
Social security	747	820	791	(9)
Pension and other post-employment benefit plans ⁶	670	808	711	(17)
Other personnel expenses	565	600	605	(6)
Total personnel expenses⁷	15,720	15,981	15,280	(2)

¹ Includes role-based allowances. ² Refer to Note 27 for more information. ³ Replacement payments are payments made to compensate employees for deferred awards forfeited as a result of joining UBS. ⁴ Includes legally obligated and standard severance payments. ⁵ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. ⁶ Refer to Note 26 for more information. ⁷ Includes net restructuring expenses of CHF 751 million, CHF 460 million and CHF 327 million for the years ended 31 December 2016, 31 December 2015 and 31 December 2014, respectively. Refer to Note 30 for more information.

Note 7 General and administrative expenses

	For the year ended			% change from
CHF million	31.12.16	31.12.15	31.12.14	31.12.15
Occupancy	935	930	1,005	1
Rent and maintenance of IT and other equipment	511	510	479	0
Communication and market data services	626	611	608	2
Administration	713	718	610	(1)
Marketing and public relations	467	486	468	(4)
Travel and entertainment	423	460	458	(8)
Professional fees	1,234	1,354	1,306	(9)
Outsourcing of IT and other services	1,637	1,743	1,603	(6)
Provisions for litigation, regulatory and similar matters ¹	795	1,087	2,594	(27)
Other	93	208	256	(55)
Total general and administrative expenses²	7,434	8,107	9,387	(8)

¹ Reflects the net increase in provisions for litigation, regulatory and similar matters recognized in the income statement. Refer to Note 20 for more information. Also includes recoveries from third parties of CHF 13 million, CHF 10 million and CHF 10 million for the years ended 31 December 2016, 31 December 2015 and 31 December 2014, respectively. ² Includes net restructuring expenses of CHF 695 million, CHF 761 million and CHF 319 million for the years ended 31 December 2016, 31 December 2015 and 31 December 2014, respectively. Refer to Note 30 for more information.

Note 8 Income taxes

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Tax expense / (benefit)			
Swiss			
Current	459	239	46
Deferred	635	330	1,348
Non-Swiss			
Current	353	476	409
Deferred	(642)	(1,943)	(2,983)
Total income tax expense / (benefit) recognized in the income statement	805	(898)	(1,180)

Income tax recognized in the income statement

The Swiss current tax expense of CHF 459 million related to taxable profits, mainly earned by Swiss subsidiaries, against which no losses were available to offset. The Swiss deferred tax expense of CHF 635 million reflected a decrease of deferred tax assets previously recognized in relation to tax losses carried forward and temporary differences.

The non-Swiss current tax expense of CHF 353 million related to taxable profits earned by non-Swiss subsidiaries and branches, against which no losses were available to offset. The non-Swiss net deferred tax benefit of CHF 642 million was primarily due to

an increase in US deferred tax assets, reflecting updated profit forecasts.

UBS considers the performance of its businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of its deferred tax assets, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing deferred tax assets. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Operating profit / (loss) before tax	4,090	5,489	2,461
of which: Swiss	2,629	3,753	1,173
of which: Non-Swiss	1,461	1,736	1,288
Income taxes at Swiss tax rate of 21%	859	1,153	517
Increase / (decrease) resulting from:			
Non-Swiss tax rates differing from Swiss tax rate	74	(73)	70
Tax effects of losses not recognized	185	107	325
Previously unrecognized tax losses now utilized	(39)	(107)	(285)
Non-taxable and lower taxed income	(353)	(297)	(384)
Non-deductible expenses and additional taxable income	950	541	1,069
Adjustments related to prior years - current tax	22	29	5
Adjustments related to prior years - deferred tax	2	(48)	(9)
Change in deferred tax valuation allowances	(986)	(2,419)	(2,373)
Adjustments to deferred tax balances arising from changes in tax rates	19	190	(183)
Other items	72	27	69
Income tax expense / (benefit)	805	(898)	(1,180)

Note 8 Income taxes (continued)

The components of operating profit before tax, and the differences between income tax expense reflected in the financial statements and the amounts calculated at the Swiss tax rate, are provided in the table on the previous page and explained below.

Non-Swiss tax rates differing from Swiss tax rate

To the extent that Group profits or losses arise outside Switzerland, the applicable local tax rate may differ from the Swiss tax rate. This item reflects, for such profits or losses, an adjustment from the tax expense / benefit that would arise at the Swiss tax rate and the tax expense / benefit that would arise at the applicable local tax rate. If an entity generates a profit, a tax expense arises where the local tax rate is in excess of the Swiss tax rate and a tax benefit arises where the local tax rate is below the Swiss tax rate. Conversely, if an entity incurs a loss, a tax benefit arises where the local tax rate is in excess of the Swiss tax rate and a tax expense arises where the local tax rate is less than the Swiss tax rate.

Tax effects of losses not recognized

This item relates to tax losses of entities arising in the year, which are not recognized as deferred tax assets. Consequently, no tax benefit arises in relation to those losses. Therefore, the tax benefit calculated by applying the local tax rate to those losses as described above is reversed.

Previously unrecognized tax losses now utilized

This item relates to taxable profits of the year, which are offset by tax losses of previous years, for which no deferred tax assets were previously recorded. Consequently, no current tax or

deferred tax expense arises in relation to those taxable profits. Therefore, the tax expense calculated by applying the local rate on those profits is reversed.

Non-taxable and lower taxed income

This item relates to profits for the year, which are either permanently not taxable or are taxable, but at a lower rate of tax than the local tax rate. It also includes any permanent deductions made for tax purposes, which are not reflected in the accounts, thereby effectively ensuring that profits covered by the deduction are not taxable.

Non-deductible expenses and additional taxable income

This item mainly relates to income for the year, which is imputed for tax purposes for an entity, but is not included in its operating profit. In addition, it includes expenses for the year that are permanently non-deductible.

Adjustments related to prior years – current tax

This item relates to adjustments to current tax expense for prior years, for example, if the tax payable for a year agreed with the tax authorities is expected to differ from the amount previously reflected in the financial statements.

Adjustments related to prior years – deferred tax

This item relates to adjustments to deferred tax positions recognized in prior years, for example, if a tax loss for a year is fully recognized and the amount of the tax loss agreed with the tax authorities is expected to differ from the amount previously recognized as deferred tax assets in the accounts.

Note 8 Income taxes (continued)

Change in deferred tax valuation allowances

This item includes revaluations of deferred tax assets previously recognized resulting from reassessments of expected future taxable profits. It also includes changes in temporary differences in the year, for which deferred tax is not recognized. The amount in the year mainly relates to the upward revaluation of deferred tax assets.

Adjustments to deferred tax balances arising from changes in tax rates

This item relates to remeasurements of deferred tax assets and liabilities recognized due to changes in tax rates. These have the effect of changing the future tax saving that is expected from tax losses or deductible tax differences and therefore the amount of deferred tax assets recognized or, alternatively, changing the tax cost of additional taxable income from taxable temporary differences and therefore the deferred tax liability.

Other items

Other items include other differences between profits or losses at the local tax rate and the actual local tax expense or benefit, including increases in provisions for uncertain positions in relation to the current year, interest accruals for such provisions in relation to prior years and other items.

Income tax recognized directly in equity

Certain tax expenses and benefits were recognized directly in equity. These included a tax benefit of CHF 170 million related to cash flow hedges (2015: benefit of CHF 131 million), a tax benefit of CHF 28 million related to financial assets classified as available for sale (2015: benefit of CHF 8 million), a tax expense of CHF 84 million related to foreign currency translation gains and losses (2015: expense of CHF 1 million), a tax benefit of CHF 52 million related to defined benefit plans (2015: expense of CHF 19 million) and a tax benefit of CHF 5 million (2015: CHF 0 million) related to own credit. In addition, they included a tax benefit of CHF 28 million recognized in share premium (2015: benefit of CHF 9 million). Furthermore, there were net foreign currency translation movements related to the effects of exchange rate changes on tax assets and liabilities denominated in currencies other than Swiss francs.

Deferred tax assets and liabilities

The Group has deferred tax assets related to tax loss carry-forwards and other items as shown in the table below. As of 31 December 2016, deferred tax assets of CHF 1,689 million (31 December 2015: CHF 2,094 million) were recognized by entities that incurred losses in either the current or preceding year based on projections of future taxable profits. The valuation allowance reflects deferred tax assets that were not recognized because it was not considered probable that future taxable profits will be available to utilize the related tax loss carry-forwards and deductible temporary differences.

CHF million	31.12.16			31.12.15		
	Gross	Valuation allowance	Recognized	Gross	Valuation allowance	Recognized
Deferred tax assets¹						
Tax loss carry-forwards	24,627	(16,430)	8,197	25,471	(18,378)	7,093
Temporary differences	6,346	(1,388)	4,958	7,026	(1,284)	5,742
<i>of which: related to compensation and benefits</i>	1,420	(208)	1,211	1,576	(267)	1,310
<i>of which: related to trading assets</i>	935	(118)	817	1,116	(77)	1,038
<i>of which: related to investments in subsidiaries and goodwill</i>	2,059	0	2,059	2,310	0	2,310
<i>of which: other</i>	1,932	(1,062)	870	2,023	(940)	1,084
Total deferred tax assets	30,973	(17,818)	13,155	32,497	(19,661)	12,835
Deferred tax liabilities						
Goodwill and intangible assets			24			28
Financial assets			2			1
Investments in associates and other			18			27
Total deferred tax liabilities			44			56

¹ Less deferred tax liabilities as applicable.

Note 8 Income taxes (continued)

As of 31 December 2016, tax loss carry-forwards totaling CHF 49,478 million (31 December 2015: CHF 56,973 million), which are not recognized as deferred tax assets, were available to be offset against future taxable profits. These tax losses expire as outlined in the table below.

Unrecognized tax loss carry-forwards

CHF million	31.12.16	31.12.15
Within 1 year	0	3,727
From 2 to 5 years	66	33
From 6 to 10 years	910	753
From 11 to 20 years	32,603	34,833
No expiry	15,899	17,627
Total	49,478	56,973

In general, Swiss tax losses can be carried forward for seven years, US federal tax losses for 20 years and UK and Jersey tax losses for an unlimited period.

The Group recognizes deferred tax liabilities on undistributed earnings of subsidiaries, except to the extent that those earnings are indefinitely invested. As of 31 December 2016, no such earnings were considered indefinitely invested.

The financial statements have been prepared on the basis that UBS Limited is able to offset part of its taxable profits against losses transferred from UBS AG. During 2016, the UK tax authorities indicated that they do not agree with this tax return filing position. If the authorities ultimately prevail on this point, UBS Limited would incur a further reduction in recognized deferred tax assets of approximately CHF 60 million, as well as additional current tax expenses for periods from 2014 onward of approximately CHF 70 million.

Note 9 Earnings per share (EPS) and shares outstanding

	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Basic earnings (CHF million)				
Net profit / (loss) attributable to shareholders	3,204	6,203	3,466	(48)
Diluted earnings (CHF million)				
Net profit / (loss) attributable to shareholders	3,204	6,203	3,466	(48)
Less: (profit) / loss on own equity derivative contracts	0	0	0	
Net profit / (loss) attributable to shareholders for diluted EPS	3,204	6,203	3,466	(48)
Weighted average shares outstanding				
Weighted average shares outstanding for basic EPS	3,719,764,322	3,690,375,879	3,720,188,713	1
Effect of dilutive potential shares resulting from notional shares, in-the-money options and warrants outstanding	104,244,665	90,898,386	85,325,322	15
Weighted average shares outstanding for diluted EPS	3,824,008,987	3,781,274,265	3,805,514,035	1
Earnings per share (CHF)				
Basic	0.86	1.68	0.93	(49)
Diluted	0.84	1.64	0.91	(49)
Shares outstanding				
Shares issued	3,850,766,389	3,849,731,535	3,717,128,324	0
Treasury shares	138,441,772	98,706,275	87,871,737	40
Shares outstanding	3,712,324,617	3,751,025,260	3,629,256,587	(1)

The table below outlines the potential shares which could dilute basic earnings per share in the future, but were not dilutive for the periods presented.

Number of shares	As of or for the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Potentially dilutive instruments				
Employee share-based compensation awards	46,981,698	67,766,835	94,335,120	(31)
Other equity derivative contracts	8,419,122	6,061,848	6,728,173	39
Total	55,400,820	73,828,683	101,063,293	(25)

Balance sheet notes: assets

Note 10 Due from banks and loans (held at amortized cost)

<i>CHF million</i>	31.12.16	31.12.15
By type of exposure		
Due from banks, gross	13,159	11,951
Allowance for credit losses	(3)	(3)
Due from banks, net	13,156	11,948
Loans, gross		
Residential mortgages	142,197	141,608
Commercial mortgages	19,765	21,509
Lombard loans	104,999	107,084
Other loans ¹	36,481	38,552
Finance lease receivables ²	986	1,083
Securities	2,494	2,807
Subtotal	306,921	312,643
Allowance for credit losses	(596)	(689)
Loans, net	306,325	311,954
Total due from banks and loans, net³	319,481	323,902

¹ Includes corporate loans. ² Refer to Note 31 for more information. ³ Refer to Note 25b for more information on collateral and credit enhancements.

Note 11 Allowances and provisions for credit losses

<i>CHF million</i>						
By movement	Specific allowances	Collective allowances	Total allowances	Provisions¹	Total 31.12.16	Total 31.12.15
Balance at the beginning of the year	686	6	692	35	727	735
Write-offs / usage of provisions	(143)	(2)	(145)	0	(145)	(164)
Recoveries	21	0	22	0	22	48
Increase / (decrease) recognized in the income statement	21	6	28	9	37	117
Reclassifications	(10)	0	(10)	10	0	0
Foreign currency translation	(1)	0	0	0	0	(11)
Other	12	0	12	0	12	2
Balance at the end of the year	587	12	599	54	653	727

¹ Represents provisions for loan commitments and guarantees. Refer to Note 20 for more information. Refer to the "Treasury management" section of this report for the maximum irrevocable amount of loan commitments and guarantees.

By balance sheet line	Specific allowances	Collective allowances	Total allowances	Provisions	Total 31.12.16	Total 31.12.15
Due from banks	3	0	3		3	3
Loans	585	12	596		596	689
Provisions ¹				54	54	35
Balance at the end of the year	587	12	599	54	653	727

¹ Represents provisions for loan commitments and guarantees.

Note 12 Derivative instruments and hedge accounting

Derivatives: overview

A derivative is a financial instrument of which the value is derived from one or more variables (underlyings). Underlyings may be indices, foreign currency exchange or interest rates, or the value of shares, commodities, bonds or other financial instruments. A derivative commonly requires little or no initial net investment by either counterparty to the trade.

The majority of derivative contracts are negotiated with respect to notional amounts, tenor, price and settlement mechanisms, as is customary with other financial instruments.

Over-the-counter (OTC) derivative contracts are usually traded under a standardized International Swaps and Derivatives Association (ISDA) master agreement between UBS and its counterparties. Terms are negotiated directly with counterparties and the contracts will have industry-standard settlement mechanisms prescribed by ISDA. Recent rules, introduced by regulators in various jurisdictions, require or will soon require the payment and collection of initial and variation margin on certain OTC derivative contracts which may have a bearing on their price and other relevant terms.

The industry continues to promote the use of central counterparties (CCPs) to clear OTC trades. The trend toward CCP clearing and settlement will generally facilitate the reduction of systemic credit exposures.

Other derivative contracts are standardized in terms of their amounts and settlement dates, and are bought and sold on regulated exchanges. These are commonly referred to as exchange-traded derivatives (ETD) contracts. Exchanges offer the benefits of pricing transparency, standardized daily settlement of changes in value and consequently reduced credit risk.

For presentation purposes, the Group's derivative contracts are subject to IFRS netting provisions. Derivative instruments are measured at fair value and generally classified as *Positive replacement values* and *Negative replacement values* on the balance sheet. However, ETD that are economically settled on a daily basis and OTC derivatives that are either legally settled or in substance net settled on a daily basis are classified as *Cash collateral receivables on derivative instruments* or *Cash collateral payables on derivative instruments*. Changes in the replacement values of derivatives are recorded in *Net trading income* unless the derivatives are designated and effective as hedging instruments in certain types of hedge accounting relationships.

→ Refer to Note 1a item 3j for more information

→ Refer to Note 24 for more information on the values of positive and negative replacement values after consideration of netting potential allowed under enforceable netting arrangements

The Group uses various derivative instruments for both trading and hedging purposes. Derivative product types as well as valuation principles and techniques applied by the Group are described in Note 22. *Positive replacement values* represent the estimated amount the Group would receive if the derivative contract were sold on the balance sheet date. *Negative replacement values* indicate the estimated amount the Group would pay to transfer its obligations in respect of the underlying contract were it required or entitled to do so on the balance sheet date.

Derivatives embedded in other financial instruments are not included in the "Derivative instruments" table within this Note. Bifurcated embedded derivatives are presented on the same balance sheet line as the host contract. In cases where UBS applies the fair value option to hybrid instruments, bifurcation of an embedded derivative component is not required and as such this component is also not included in the table "Derivative instruments" table.

→ Refer to Notes 18 and 22 for more information

Risks of derivative instruments

Derivative instruments are transacted in many trading portfolios, which generally include several types of instruments, not just derivatives. The market risk of derivatives is predominantly managed and controlled as an integral part of the market risk of these portfolios. The Group's approach to market risk is described in the audited sections of the "Risk management and control" section of this report.

Derivative instruments are also transacted with many different counterparties, most of whom are also counterparties for other types of business. The credit risk of derivatives is managed and controlled in the context of the Group's overall credit exposure to its counterparties. The Group's approach to credit risk is described in the audited portions of "Credit risk" in the "Risk management and control" section of this report. It should be noted that, although the positive replacement values shown on the balance sheet can be an important component of the Group's credit exposure, the positive replacement values related to a respective counterparty are rarely an adequate reflection of the Group's credit exposure in its derivatives business with that counterparty. This is generally the case because, on the one hand, replacement values can increase over time (potential future exposure), while on the other hand, exposure may be mitigated by entering into master netting agreements and bilateral collateral arrangements. Both the exposure measures used internally by the Group to control credit risk and the capital requirements imposed by regulators reflect these additional factors.

Note 12 Derivative instruments and hedge accounting (continued)

Derivative instruments¹

	31.12.16					31.12.15				
	PRV ²	Notional values related to PRV ³	NRV ⁴	Notional values related to NRV ³	Other notional values ³	PRV ²	Notional values related to PRV ³	NRV ⁴	Notional values related to NRV ³	Other notional values ³
<i>CHF billion</i>										
Interest rate contracts										
Over-the-counter (OTC) contracts										
Forward contracts ⁶	0.1	29.6	0.1	21.9	2,242.8	0.1	48.6	0.2	51.9	2,351.4
Swaps	45.2	599.3	38.3	552.6	7,064.2	57.0	840.1	48.2	782.0	5,904.7
Options	12.6	478.1	13.9	480.6		17.3	581.7	19.1	549.8	
Exchange-traded contracts										
Futures					326.4					346.0
Options	0.0	45.4	0.0	4.5	96.2	0.0	22.7	0.0	15.5	169.4
Agency transactions ⁷	0.2		0.2			0.1		0.1		
Total	58.0	1,152.4	52.5	1,059.6	9,729.6	74.5	1,493.1	67.6	1,399.3	8,771.4
Credit derivative contracts										
Over-the-counter (OTC) contracts										
Credit default swaps	3.7	116.9	3.9	135.2		6.1	152.7	6.0	165.7	
Total return swaps	0.2	3.3	0.9	4.3		0.6	5.0	0.6	4.1	
Options and warrants	0.0	2.9	0.0	0.1		0.0	4.2	0.0	0.1	
Total	3.9	123.1	4.8	139.6		6.7	161.9	6.7	169.8	
Foreign exchange contracts										
Over-the-counter (OTC) contracts										
Forward contracts	21.8	715.6	19.0	650.9		17.8	727.6	16.6	673.9	
Interest and currency swaps	43.2	1,220.8	42.0	1,115.0		38.3	1,429.9	37.6	1,330.1	
Options	11.1	530.3	11.0	513.7		9.5	496.8	9.3	478.0	
Exchange-traded contracts										
Futures					6.1					8.1
Options	0.0	2.9	0.1	6.0		0.0	3.4	0.0	4.6	
Agency transactions ⁷	0.0		0.0			0.0		0.0		
Total	76.1	2,469.6	72.1	2,285.6	6.1	65.7	2,657.7	63.5	2,486.6	8.1
Equity / index contracts										
Over-the-counter (OTC) contracts										
Forward contracts	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Swaps	3.6	76.5	4.8	69.0		2.9	64.1	4.3	87.0	
Options	3.7	49.6	5.8	92.8		4.8	59.1	6.7	92.6	
Exchange-traded contracts										
Futures					33.0					30.0
Options	3.8	142.5	4.6	155.8	21.6	4.3	107.2	5.2	126.0	13.4
Agency transactions ⁷	6.9		6.9			5.0		4.9		
Total	18.0	268.6	22.1	317.6	54.5	16.9	230.3	21.2	305.6	43.3

Table continues on the next page.

Note 12 Derivative instruments and hedge accounting (continued)

Derivative instruments (continued)¹

Table continued from the previous page.

	31.12.16					31.12.15				
	PRV ²	Notional values related to PRV ³	NRV ⁴	Notional values related to NRV ³	Other notional values ⁵	PRV ²	Notional values related to PRV ³	NRV ⁴	Notional values related to NRV ³	Other notional values ⁵
<i>CHF billion</i>										
Commodity contracts										
Over-the-counter (OTC) contracts										
Forward contracts	0.3	4.8	0.1	2.7		0.3	2.8	0.3	2.3	
Swaps	0.4	10.9	0.5	13.4		0.7	9.9	0.5	9.4	
Options	0.5	14.1	0.2	9.9		0.9	11.8	0.6	7.5	
Exchange-traded contracts										
Futures					9.1					8.2
Forward contracts	0.1	5.9	0.0	4.6		0.0	4.4	0.2	3.7	
Options	0.0	3.2	0.1	5.3	0.0	0.0	1.0	0.1	1.9	0.1
Agency transactions ⁷	0.9		0.9			1.5		1.5		
Total	2.3	39.0	2.0	35.9	9.1	3.4	30.0	3.2	24.6	8.3
Unsettled purchases of non-derivative financial instruments ⁸	0.1	18.4	0.1	9.7		0.1	9.6	0.2	16.7	
Unsettled sales of non-derivative financial instruments ⁸	0.1	13.0	0.2	11.5		0.2	20.1	0.1	6.4	
Total derivative instruments, based on IFRS netting⁹	158.4	4,084.0	153.8	3,859.6	9,799.3	167.4	4,602.7	162.4	4,409.0	8,831.1

¹ Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. As of 31 December 2016, these derivatives amounted to a PRV of CHF 0.1 billion (related notional values of CHF 1.9 billion) and an NRV of CHF 0.0 billion (related notional values of CHF 3.1 billion). As of 31 December 2015, these derivatives amounted to a PRV of CHF 0.1 billion (related notional values of CHF 0.6 billion) and an NRV of CHF 0.2 billion (related notional values of CHF 3.4 billion). ² PRV: Positive replacement value. ³ In cases where replacement values are presented on a net basis on the balance sheet, the respective notional values of the netted replacement values are still presented on a gross basis. ⁴ NRV: Negative replacement value. ⁵ Other notional values relate to derivatives that are cleared through either a central clearing counterparty or an exchange. The fair value of these derivatives is presented on the balance sheet net of the corresponding cash margin under Cash collateral receivables on derivative instruments and Cash collateral payables on derivative instruments and was not material for the periods presented. ⁶ Negative replacement values as of 31 December 2016 include CHF 0.1 billion related to derivative loan commitments (31 December 2015: CHF 0.1 billion). No notional amounts related to these replacement values are included in the table. The maximum irrevocable amount related to these commitments was CHF 14.3 billion as of 31 December 2016 (31 December 2015: CHF 15.8 billion). ⁷ Notional values of exchange-traded agency transactions and OTC cleared transactions entered into on behalf of clients are not disclosed due to their significantly different risk profile. ⁸ Changes in the fair value of purchased and sold non-derivative financial instruments between trade date and settlement date are recognized as replacement values. ⁹ Refer to Note 24 for more information on netting arrangements.

The notional amount of a derivative is generally the quantity of the underlying instrument on which the derivative contract is based and is the reference against which changes in the value of the derivative are measured. Notional values in themselves are generally not a direct indication of the values that are exchanged between parties, and are therefore not a direct measure of risk or financial exposure but are viewed as an indication of the scale of the different types of derivatives entered into by the Group.

The maturity profile of OTC interest rate contracts held as of 31 December 2016, based on notional values, was: approximately 52% (31 December 2015: 53%) mature within one year, 29% (31 December 2015: 29%) within one to five years and 19% (31 December 2015: 18%) after five years. Notional values of interest rate contracts cleared with a clearing house that qualify for IFRS balance sheet netting or are legally settled on a daily basis are presented under *Other notional values* and are categorized into maturity buckets on the basis of contractual maturities of the cleared underlying derivative contracts.

Derivatives transacted for trading purposes

Most of the Group's derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Trading activities include market-making to directly support the facilitation and execution of client activity. Market-making involves quoting bid and offer prices to other market participants with the intention of generating revenues based on spread and volume.

Credit derivatives

UBS is an active dealer in the fixed income market, including credit default swaps (CDS) and related products, with respect to a large number of issuers' securities. The primary purposes of these activities are market-making, primarily on behalf of clients, and ongoing hedging of trading book exposures.

Note 12 Derivative instruments and hedge accounting (continued)

Market-making activity, which is undertaken within the Investment Bank, consists of buying and selling single-name CDS, index CDS, loan CDS and related referenced cash instruments to facilitate client trading activity. UBS also actively utilizes CDS to economically hedge specific counterparty credit risks in its accrual and traded loan portfolios (including off-balance sheet loan commitments) with the aim of reducing concentrations in individual names, sectors or specific portfolios.

In addition, UBS actively utilizes CDS to economically hedge specific counterparty credit risks in its OTC derivative portfolios, including financial instruments that are designated at fair value through profit or loss.

The tables below provide more information on credit protection bought and sold, including replacement and notional value information by instrument type and counterparty type. The value of protection bought and sold is not, in isolation, a measure of UBS's credit risk. Counterparty relationships are viewed in terms of the total outstanding credit risk, which relates to other instruments in addition to CDS, and in connection with collateral arrangements in place. On a notional value basis, approximately 29% of credit protection bought and sold as of 31 December 2016 matures within one year (31 December 2015: 22%), approximately 61% within one to five years (31 December 2015: 68%) and approximately 10% after five years (31 December 2015: 10%).

Credit derivatives by type of instrument

	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
<i>CHF billion</i>						
Single-name credit default swaps	1.6	1.3	91.4	1.3	1.4	81.3
Multi-name index-linked credit default swaps	0.2	0.8	38.4	0.5	0.4	38.3
Multi-name other credit default swaps	0.0	0.0	1.5	0.0	0.0	1.1
Total rate of return swaps	0.1	0.7	5.5	0.0	0.2	2.1
Options and warrants	0.0	0.0	2.9	0.0	0.0	0.1
Total 31 December 2016	2.0	2.8	139.7	1.9	2.0	122.9
<i>of which: credit derivatives related to economic hedges</i>	<i>1.4</i>	<i>2.4</i>	<i>111.7</i>	<i>1.5</i>	<i>1.5</i>	<i>96.2</i>
<i>of which: credit derivatives related to market-making</i>	<i>0.5</i>	<i>0.3</i>	<i>28.0</i>	<i>0.4</i>	<i>0.5</i>	<i>26.7</i>

	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
<i>CHF billion</i>						
Single-name credit default swaps	3.1	1.9	115.5	1.9	2.9	105.1
Multi-name index-linked credit default swaps	0.3	0.6	48.0	0.6	0.5	45.6
Multi-name other credit default swaps	0.1	0.1	2.4	0.0	0.1	1.8
Total rate of return swaps	0.5	0.2	6.3	0.1	0.4	2.8
Options and warrants	0.0	0.0	4.2	0.0	0.0	0.1
Total 31 December 2015	4.0	2.8	176.4	2.6	3.9	155.3
<i>of which: credit derivatives related to economic hedges</i>	<i>2.7</i>	<i>2.4</i>	<i>152.8</i>	<i>2.2</i>	<i>2.5</i>	<i>132.8</i>
<i>of which: credit derivatives related to market-making</i>	<i>1.4</i>	<i>0.4</i>	<i>23.6</i>	<i>0.4</i>	<i>1.3</i>	<i>22.5</i>

Note 12 Derivative instruments and hedge accounting (continued)

Credit derivatives by counterparty

	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
<i>CHF billion</i>						
Broker-dealers	0.4	0.2	20.9	0.2	0.3	16.1
Banks	0.9	1.0	60.8	0.8	1.0	52.6
Central clearing counterparties	0.3	0.9	47.2	0.8	0.4	47.1
Other	0.4	0.8	10.9	0.2	0.3	7.1
Total 31 December 2016	2.0	2.8	139.7	1.9	2.0	122.9

	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
<i>CHF billion</i>						
Broker-dealers	0.8	0.3	27.3	0.2	0.6	19.5
Banks	1.9	1.3	78.0	1.2	1.6	68.3
Central clearing counterparties	0.4	0.8	55.3	0.9	0.9	58.9
Other	0.8	0.4	15.8	0.3	0.8	8.7
Total 31 December 2015	4.0	2.8	176.4	2.6	3.9	155.3

UBS's CDS trades are documented using industry standard forms of documentation or equivalent terms documented in a bespoke agreement. The agreements that govern CDS generally do not contain recourse provisions that would enable UBS to recover from third parties any amounts paid out by UBS.

The types of credit events that would require UBS to perform under a CDS contract are subject to agreement between the parties at the time of the transaction. However, nearly all transactions are traded using credit events that are applicable under certain market conventions based on the type of reference entity to which the transaction relates. Applicable credit events by market conventions include bankruptcy, failure to pay, restructuring, obligation acceleration and repudiation / moratorium.

Contingent collateral features of derivative liabilities

Certain derivative instruments contain contingent collateral or termination features triggered upon a downgrade of the published credit ratings of the Group in the normal course of business. Based on UBS's credit ratings as of 31 December 2016, CHF 0.1 billion, CHF 0.3 billion and CHF 1.1 billion would have been required for contractual obligations related to OTC derivatives in the event of a one-notch, two-notch and three-notch reduction in long-term credit ratings, respectively. In evaluating UBS's liquidity requirements, UBS considers additional collateral or termination payments that would be required in the event of a reduction in UBS's long-term credit ratings, and a corresponding reduction in UBS's short-term ratings.

Derivatives transacted for hedging purposes

The Group enters into derivative transactions for the purposes of hedging risks inherent in assets, liabilities and forecasted transactions. The accounting treatment of hedge transactions varies according to the nature of the instrument hedged and whether the hedge qualifies as such for accounting purposes.

Derivative transactions that qualify and are designated as hedges for accounting purposes are described under the corresponding headings in this Note (fair value hedges, cash flow hedges and hedges of net investments in foreign operations). The Group's accounting policies for derivatives designated and accounted for as hedging instruments are described in Note 1a item 3k, where terms used in the following sections are explained.

The Group has also entered into various hedging strategies utilizing derivatives for which hedge accounting has not been applied. These include interest rate swaps and other interest rate derivatives (e.g., futures) for day-to-day economic interest rate risk management purposes. In addition, the Group has used equity futures, options and, to a lesser extent, swaps for economic hedging in a variety of equity trading strategies to offset underlying equity and equity volatility exposure. The Group has also entered into CDS that provide economic hedges for credit risk exposures (refer to "Credit derivatives" in this Note). Fair value changes of derivatives that are part of economic relationships, but do not qualify for hedge accounting treatment, are reported in *Net trading income*, except for the forward points on certain short duration foreign exchange contracts, which are reported in *Interest income*.

Effective 30 June 2016, UBS elected to convert its interest rate swaps transacted with the London Clearing House from the previous collateral model to a settlement model. As a result, the fair value of outstanding derivatives designated as hedging instruments decreased significantly compared with the prior-year comparatives.

Note 12 Derivative instruments and hedge accounting (continued)

Fair value hedges: interest rate risk related to debt instruments

The Group's fair value hedges principally consist of interest rate swaps that are used to protect against changes in the fair value of fixed-rate debt instruments, such as non-structured fixed-rate bonds, covered bonds and subordinated debt, due to

movements in market interest rates. The fair values of outstanding interest rate derivatives designated as fair value hedges were assets of CHF 152 million and liabilities of CHF 1 million as of 31 December 2016 and assets of CHF 1,656 million and liabilities of CHF 11 million as of 31 December 2015.

Fair value hedges of interest rate risk

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Gains / (losses) on hedging instruments	140	554	1,113
Gains / (losses) on hedged items attributable to the hedged risk	(144)	(552)	(1,111)
Net gains / (losses) representing ineffective portions of fair value hedges	(4)	2	2

Fair value hedges: portfolio interest rate risk related to loans

The Group also applies fair value hedge accounting to mortgage loan portfolio interest rate risk. The change in fair value of the hedged items is recorded separately from the hedged item and is included within *Other assets* on the balance sheet. The fair

values of outstanding interest rate derivatives designated for these hedges as of 31 December 2016 were liabilities of CHF 44 million (31 December 2015: assets of CHF 7 million and liabilities of CHF 327 million).

Fair value hedges of portfolio interest rate risk

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Gains / (losses) on hedging instruments	(128)	(176)	(694)
Gains / (losses) on hedged items attributable to the hedged risk	116	147	676
Net gains / (losses) representing ineffective portions of fair value hedges	(12)	(29)	(18)

Cash flow hedges of forecasted transactions

The Group is exposed to variability in future interest cash flows on non-trading financial assets and liabilities that bear interest at variable rates or are expected to be refinanced or reinvested in the future. The amounts and timing of future cash flows, representing both principal and interest flows, are projected on the basis of contractual terms and other relevant factors, including estimates of prepayments and defaults. The aggregate principal balances and interest cash flows across all portfolios over time form the basis for identifying the non-trading interest rate risk of the Group, which is hedged with interest rate swaps, the maximum maturity of which is 12 years. The table on the following page shows forecasted principal balances on which

expected interest cash flows arise as of 31 December 2016. Amounts shown represent, by time bucket, average assets and liabilities subject to forecasted cash flows designated as hedged items in cash flow hedge accounting relationships.

As of 31 December 2016, the fair values of outstanding derivatives designated as cash flow hedges of forecasted transactions were CHF 68 million assets and CHF 5 million liabilities (31 December 2015: CHF 2,176 million assets and CHF 195 million liabilities).

In 2016, a gain of CHF 11 million was recognized in *Net trading income* due to hedge ineffectiveness, compared with a gain of CHF 150 million in 2015 and a gain of CHF 87 million in 2014.

Note 12 Derivative instruments and hedge accounting (continued)

Principal balances subject to cash flow forecasts

CHF billion	Within 1 year	1–3 years	3–5 years	5–10 years	Over 10 years
Assets	57	75	48	51	0
Liabilities	4	5	3	4	0
Net balance	53	70	45	47	0

Hedges of net investments in foreign operations

The Group applies hedge accounting for certain net investments in foreign operations. As of 31 December 2016, the positive replacement values and negative replacement values of FX derivatives (mainly FX swaps) designated as hedging instruments in net investment hedge accounting relationships were CHF 122 million and CHF 79 million, respectively (31 December 2015: positive replacement values of CHF 170 million and negative replacement values of CHF 79 million). As of 31 December 2016, the underlying hedged structural exposures in several currencies amounted to CHF 7.5 billion (31 December 2015: CHF 5.5 billion).

Hedges of structural FX exposures in currencies other than the US dollar may be comprised of two jointly designated derivatives as the foreign currency risk may be hedged against the US dollar first and then converted into Swiss francs, the presentation currency of the Group, as part of a separate FX derivative transaction. The aggregated notional amount of designated hedging derivatives as of 31 December 2016 was CHF 12.5 billion in total (31 December 2015: CHF 11.2 billion), including CHF 7.5 billion notional values related to US dollar versus Swiss franc swaps and CHF 5.0 billion notional values related to derivatives hedging foreign currencies (other than the US dollar) versus the US dollar. The effective portion of gains and losses of these FX swaps is transferred directly to OCI to offset foreign currency translation (FCT) gains and losses on the net investments in foreign branches and subsidiaries. As such, these

FX swaps hedge the structural FX exposure resulting in the accumulation of FCT on the level of individual foreign branches and subsidiaries and hence on the total FCT OCI of the Group.

UBS designates certain non-derivative foreign currency financial assets and liabilities of foreign branches or subsidiaries as hedging instruments in net investment hedge accounting arrangements. The FX translation difference recorded in FCT OCI of the non-derivative hedging instrument of one foreign entity offsets the structural FX exposure of another foreign entity. Therefore, the aggregated FCT OCI of the Group is unchanged from this hedge designation. As of 31 December 2016, the nominal amount of non-derivative financial assets and liabilities designated as hedging instruments in such net investment hedges was CHF 1.5 billion and CHF 1.5 billion, respectively (31 December 2015: CHF 3.1 billion non-derivative financial assets and CHF 3.1 billion non-derivative financial liabilities).

Ineffectiveness of hedges of net investments in foreign operations was not material in 2016, 2015 and 2014.

Undiscounted cash flows

The table below provides undiscounted cash flow information for derivative instruments designated in hedge accounting relationships.

Derivatives designated in hedge accounting relationships (undiscounted cash flows)

CHF billion	On demand	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
Interest rate swaps¹							
FX swaps / forwards							
Cash inflows	0	2	10	0	0	0	11
Cash outflows	0	2	10	0	0	0	11
Net cash flows	0	0	0	0	0	0	0

¹ Undiscounted cash inflows and cash outflows of interest rate swaps as of 31 December 2016 were not material as the majority of interest rate swaps designated in hedge accounting relationships are legally settled on a daily basis.

Note 13 Financial assets available for sale and held to maturity

a) Financial assets available for sale

CHF million	31.12.16	31.12.15
Financial assets available for sale by issuer type¹		
Debt instruments		
Government and government agencies	11,650	47,245
of which: US	7,779	21,424
of which: Germany	1,774	8,583
of which: UK	373	2,782
of which: France	355	3,566
of which: Netherlands	319	2,934
Banks	1,845	12,268
Corporates and other	1,554	2,385
Total debt instruments	15,048	61,898
Equity instruments	628	645
Total financial assets available for sale	15,676	62,543
Unrealized gains – before tax	309	462
Unrealized (losses) – before tax	(117)	(171)
Net unrealized gains / (losses) – before tax	193	291
Net unrealized gains / (losses) – after tax	96	167

¹ Refer to Note 22c for more information on product type and fair value hierarchy categorization.

b) Financial assets held to maturity

CHF million	31.12.16	31.12.15
Financial assets held to maturity by issuer type		
Debt instruments		
Government and government agencies	7,416	0
of which: US	4,688	0
of which: Germany	1,708	0
of which: France	867	0
Banks	1,873	0
Total financial assets held to maturity	9,289	0

Note 14 Property, equipment and software

At historical cost less accumulated depreciation

CHF million	Own-used properties	Leasehold improvements	IT hardware and communication	Internally generated software	Purchased software	Other machines and equipment	Projects in progress	31.12.16	31.12.15
Historical cost									
Balance at the beginning of the year	7,863	3,183	1,878	2,375	412	866	1,270	17,847	17,442
Additions	58	38	201	3	99	35	1,355	1,788	1,853
Disposals / write-offs ¹	(71)	(277)	(568)	(16)	(89)	(83)	0	(1,104)	(1,306)
Reclassifications	(103)	535	58	711	0	45	(1,447)	(200) ⁶	(32)
Foreign currency translation	(15)	(10)	(48)	(36)	(14)	3	(53)	(172)	(109)
Balance at the end of the year	7,732	3,469	1,521	3,037	408	866	1,125	18,159	17,847
Accumulated depreciation									
Balance at the beginning of the year	4,356	2,211	1,425	1,275	276	609	0	10,153	10,593
Depreciation	164	193	202	286	49	65	0	959	903
Impairment ²	11	1	1	9	5	0	0	26	18
Disposals / write-offs ¹	(71)	(264)	(568)	(16)	(89)	(83)	0	(1,090)	(1,260)
Reclassifications	(152)	6	0	0	0	1	0	(146) ⁶	(23)
Foreign currency translation	(8)	(15)	(32)	(13)	(9)	1	0	(75)	(78)
Balance at the end of the year	4,300	2,132	1,027	1,542	233	594	0	9,828	10,153
Net book value at the end of the year^{3, 4}	3,432	1,337	495	1,495	175	272	1,125⁵	8,331	7,695

¹ Includes write-offs of fully depreciated assets. ² Impairment charges recorded in 2016 relate to assets for which the recoverable amount was determined based on value-in-use (recoverable amount of the impaired assets: CHF 31 million Own-used properties, CHF 2 million Leasehold improvements, CHF 28 million Internally generated software, CHF 3 million Purchased software). ³ As of 31 December 2016, contractual commitments to purchase property in the future amounted to approximately CHF 0.3 billion. ⁴ Includes CHF 21 million related to leased assets, mainly IT hardware and communication. ⁵ Includes CHF 994 million related to Internally generated software, CHF 110 million related to Own-used properties and CHF 19 million related to Leasehold improvements. ⁶ Reflects reclassifications to Properties held for sale (CHF 54 million on a net basis) reported within Other assets.

Note 15 Goodwill and intangible assets

Introduction

UBS performs an impairment test on its goodwill assets on an annual basis or when indicators of impairment exist. UBS considers the segments, as reported in Note 2a, as separate cash-generating units (CGUs). The impairment test is performed for each segment to which goodwill is allocated by comparing the recoverable amount, based on its value-in-use, with the carrying amount of the respective segment. An impairment charge is recognized if the carrying amount exceeds the recoverable amount. As of 31 December 2016, total goodwill recognized on the balance sheet was CHF 6.3 billion, of which CHF 1.3 billion, CHF 3.6 billion and CHF 1.4 billion was carried by Wealth Management, Wealth Management Americas and Asset Management, respectively. Based on the impairment testing methodology described below, UBS concluded that the goodwill balances as of 31 December 2016 allocated to these segments remain recoverable and thus were not impaired.

Methodology for goodwill impairment testing

The recoverable amounts are determined using a discounted cash flow model, which has been adapted to use inputs that consider features of the banking business and its regulatory environment. The recoverable amount of a segment is the sum of the discounted earnings attributable to shareholders from the first three forecasted years and the terminal value. The terminal value, which covers all periods beyond the third year, is calculated on the basis of the forecast of third-year profit, the discount rate and the long-term growth rate and is adjusted for the effect of the capital assumed to be needed to support the perpetual growth implied by the long-term growth rate.

The carrying amount for each segment is determined by reference to the Group's equity attribution framework. Within this framework, which is described in the "Capital management" section of this report, we attribute equity to the businesses on the basis of their risk-weighted assets and leverage ratio denominator, their goodwill and intangible assets as well as equity directly associated with activity that Group ALM manages centrally on behalf of the business divisions. The total amount of equity attributed to CGUs can differ from equity attributable to shareholders. The framework is primarily used for purposes of measuring the performance of the businesses and includes certain management assumptions. Attributed equity equals the capital that a segment requires to conduct its business and is considered an appropriate starting point from which to determine the carrying value of the segments. The

attributed equity methodology is aligned with the business planning process, the inputs from which are used in calculating the recoverable amounts of the respective CGU. The revision of the equity attribution methodology effective as of 1 January 2017 would have no impact on the outcome of the goodwill impairment test as of 31 December 2016.

→ **Refer to the "Capital management" section of this report for more information on the equity attribution framework**

Assumptions

Valuation parameters used within the Group's impairment test model are linked to external market information, where applicable. The model used to determine the recoverable amount is most sensitive to changes in the forecast earnings available to shareholders in years one to three, to changes in the discount rates and to changes in the long-term growth rate. The applied long-term growth rate is based on long-term economic growth rates for different regions worldwide. Earnings available to shareholders are estimated on the basis of forecast results, which are part of the business plan approved by the BoD.

The discount rates are determined by applying a capital asset pricing model-based approach, as well as considering quantitative and qualitative inputs from both internal and external analysts and the view of management. The discount rates were unchanged between 2015 and 2016.

Key assumptions used to determine the recoverable amounts of each segment are tested for sensitivity by applying a reasonably possible change to those assumptions. Forecast earnings available to shareholders were changed by 20%, the discount rates were changed by 1.5 percentage points and the long-term growth rates were changed by 0.75 percentage points, reflecting the current market environment. Under all scenarios, the recoverable amounts for each segment exceeded the respective carrying amount, such that the reasonably possible changes in key assumptions would not result in impairment.

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of goodwill may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce IFRS equity and net profit. It would not affect cash flows and, as goodwill is required to be deducted from capital under the Basel III capital framework, no effect would be expected on the Group total capital ratios.

Note 15 Goodwill and intangible assets (continued)

Discount and growth rates

In %	Discount rates		Growth rates	
	31.12.16	31.12.15	31.12.16	31.12.15
Wealth Management	9.0	9.0	1.7	1.7
Wealth Management Americas	9.0	9.0	2.4	2.4
Asset Management	9.0	9.0	2.4	2.4
Investment Bank	11.0	11.0	2.4	2.4

CHF million	Goodwill		Intangible assets		31.12.16	31.12.15
	Total	Infrastructure	Customer relationships, contractual rights and other	Total		
Historical cost						
Balance at the beginning of the year	6,240	761	820	1,581	7,821	7,957
Additions	16		8	8	24	30
Disposals	(2)		(2)	(2)	(3)	(32)
Write-offs			(75)	(75)	(75)	(20)
Foreign currency translation	57	12	(12)	0	57	(114)
Balance at the end of the year	6,311	773	739	1,512	7,823	7,821
Accumulated amortization and impairment						
Balance at the beginning of the year		578	675	1,253	1,253	1,171
Amortization		38	53	91	91	94
Impairment ¹			0	0	0	13
Disposals			(1)	(1)	(1)	(1)
Write-offs			(75)	(75)	(75)	(20)
Foreign currency translation		10	(11)	(1)	(1)	(5)
Balance at the end of the year		626	641	1,267	1,267	1,253
Net book value at the end of the year	6,311	147	98	245	6,556	6,568

¹ Impairment charges recorded in 2016 and 2015 relate to assets for which the recoverable amount was determined based on value-in-use (recoverable amount of the impaired assets: CHF 3 million for 2016 and CHF 4 million for 2015).

The table below presents goodwill and intangible assets by segment for the year ended 31 December 2016.

CHF million	Wealth Management	Wealth Management Americas	Investment Bank	Asset Management	Corporate Center – Services	Total
Goodwill						
Balance at the beginning of the year	1,312	3,514	29	1,385		6,240
Additions	16					16
Disposals	(2)					(2)
Foreign currency translation	(23)	57	7	17		57
Balance at the end of the year	1,303	3,571	36	1,401		6,311
Intangible assets						
Balance at the beginning of the year	38	199	53	8	30	328
Additions / transfers	8	0				8
Disposals			0			0
Amortization	(4)	(49)	(12)	(4)	(21)	(91)
Impairment		0				0
Foreign currency translation	(1)	2				1
Balance at the end of the year	40	152	41	4	9	245

Note 15 Goodwill and intangible assets (continued)

The table below presents estimated, aggregated amortization expenses for intangible assets.

CHF million	Intangible assets
Estimated, aggregated amortization expenses for:	
2017	68
2018	58
2019	47
2020	38
2021	6
Thereafter	19
Not amortized due to indefinite useful life	9
Total	245

Note 16 Other assets

CHF million	31.12.16	31.12.15
Prime brokerage receivables ¹	9,828	11,341
Recruitment loans to financial advisors	3,087	3,184
Other loans to financial advisors	471	418
Bail deposit ²	1,213	1,221
Accrued interest income	526	462
Accrued income – other	818	844
Prepaid expenses	1,010	1,033
Net defined benefit pension and post-employment assets ³	0	50
Settlement and clearing accounts	516	402
VAT and other tax receivables	292	398
Properties and other non-current assets held for sale	111	134
Assets of disposal group held for sale ⁴	5,137	279
Other	2,427	2,393
Total other assets	25,436	22,160

¹ Prime brokerage services include clearance, settlement, custody, financing and portfolio reporting services for corporate clients trading across multiple asset classes. Prime brokerage receivables are mainly comprised of margin lending receivables. ² Refer to Note 20b item 1 for more information. ³ Refer to Note 26 for more information. ⁴ Refer to Note 30 for more information.

Balance sheet notes: liabilities

Note 17 Due to banks and customers

CHF million	31.12.16	31.12.15
Due to banks	10,645	11,836
Due to customers	423,672	390,185
<i>of which: demand deposits</i>	194,044	172,778
<i>of which: retail savings / deposits</i>	170,729	161,848
<i>of which: time deposits</i>	52,716	49,421
<i>of which: fiduciary deposits</i>	6,184	6,139
Total due to banks and customers	434,317	402,021

Note 18 Financial liabilities designated at fair value

CHF million	31.12.16	31.12.15
Issued debt instruments		
Equity-linked ¹	29,831	30,965
Rates-linked	10,150	16,587
Credit-linked	4,101	3,652
Fixed-rate	2,972	4,098
Other	2,875	1,231
Total issued debt instruments	49,930	56,534
<i>of which: issued by UBS AG with original maturity greater than one year² - ³</i>	36,347	40,081
Over-the-counter debt instruments		
Equity-linked ¹	1,992	2,885
Other	2,671	2,608
Total over-the-counter debt instruments	4,663	5,493
<i>of which: issued by UBS AG with original maturity greater than one year² - ⁴</i>	4,210	4,497
Repurchase agreements	395	849
Loan commitments and guarantees⁵	29	119
Total	55,017	62,995
<i>of which: life-to-date own credit (gain) / loss</i>	(141)	(287)

¹ Includes investment fund unit-linked instruments issued. ² Issued by the standalone legal entity UBS AG. Based on original contractual maturity without considering any early redemption features. ³ More than 99% of the balance as of 31 December 2016 was unsecured (31 December 2015: more than 98% of the balance was unsecured). ⁴ More than 35% of the balance as of 31 December 2016 was unsecured (31 December 2015: more than 35% of the balance was unsecured). ⁵ Loan commitments recognized as Financial liabilities designated at fair value until drawn and recognized as Loans. See Note 1a item 3o for more information.

As of 31 December 2016 and 31 December 2015, the contractual redemption amount at maturity of financial liabilities designated at fair value through profit or loss was not materially different from the carrying value.

The table on the following page shows the residual contractual maturity of the carrying value of financial liabilities designated at fair value, split between fixed-rate and floating-rate instruments based on the contractual terms, and does not consider any early redemption features. Interest rate ranges for

future interest payments related to these financial liabilities designated at fair value have not been included in the table on the following page as a majority of these liabilities are structured products, and therefore the future interest payments are highly dependent upon the embedded derivative and prevailing market conditions at the time each interest payment is made.

→ Refer to Note 25d for maturity information on an undiscounted cash flow basis

Note 18 Financial liabilities designated at fair value (continued)

Contractual maturity of carrying value

CHF million	2017	2018	2019	2020	2021	2022-2026	Thereafter	Total 31.12.16	Total 31.12.15
UBS AG¹									
Non-subordinated debt									
Fixed-rate	3,979	984	644	262	400	807	2,429	9,505	10,702
Floating-rate	17,904	4,136	3,739	3,363	1,653	4,156	7,805	42,757	49,824
Subtotal	21,884	5,120	4,383	3,625	2,053	4,963	10,234	52,262	60,526
Other subsidiaries²									
Non-subordinated debt									
Fixed-rate	197	171	842	31	67	68	390	1,768	993
Floating-rate	495	136	119	0	0	87	150	987	1,475
Subtotal	692	307	961	31	67	155	540	2,755	2,469
Total	22,576	5,427	5,345	3,656	2,121	5,118	10,774	55,017	62,995

¹ Comprises instruments issued by the standalone legal entity UBS AG. ² Comprises instruments issued by subsidiaries of UBS AG.

Note 19 Debt issued held at amortized cost

CHF million	31.12.16	31.12.15
Certificates of deposit	20,207	11,967
Commercial paper	1,653	3,824
Other short-term debt	4,318	5,424
Short-term debt¹	26,178	21,215
Senior fixed-rate bonds	27,008	31,240
of which: issued by UBS AG with original maturity greater than one year ²	26,850	31,078
Senior unsecured debt that contributes to total loss-absorbing capacity ³	16,890	5,633
Covered bonds	5,836	8,490
Subordinated debt	19,325	17,763
of which: high-trigger loss-absorbing additional tier 1 capital instruments	5,429	2,837
of which: low-trigger loss-absorbing additional tier 1 capital instruments	2,342	2,326
of which: low-trigger loss-absorbing tier 2 capital instruments	10,429	10,346
of which: non-Basel III-compliant tier 2 capital instruments	1,125	2,254
Debt issued through the central bond institutions of the Swiss regional or cantonal banks	8,302	8,237
Other long-term debt	112	570
of which: issued by UBS AG with original maturity greater than one year ²	94	278
Long-term debt⁴	77,472	71,932
Total debt issued held at amortized cost⁵	103,649	93,147

¹ Debt with an original maturity of less than one year. ² Issued by the standalone legal entity UBS AG. Based on original contractual maturity without considering any early redemption features. 100% of the balance as of 31 December 2016 was unsecured (31 December 2015: 100% of the balance was unsecured). ³ Issued by UBS Group Funding (Jersey) Ltd., a funding subsidiary directly held and guaranteed by UBS Group AG. ⁴ Debt with original maturity greater than or equal to one year. The classification of debt issued into short-term and long-term does not consider any early redemption features. ⁵ Net of bifurcated embedded derivatives with a net positive fair value of CHF 38 million as of 31 December 2016 (31 December 2015: net negative fair value of CHF 130 million).

The Group uses interest rate and foreign exchange derivatives to manage the risks inherent in certain debt instruments held at amortized cost. In certain cases, the Group applies hedge accounting for interest rate risk as discussed in Note 1a item 3k and Note 12. As a result of applying hedge accounting, the

carrying value of debt issued increased by CHF 490 million and by CHF 1,037 million as of 31 December 2016 and 2015, respectively, reflecting changes in fair value due to interest rate movements.

Note 19 Debt issued held at amortized cost (continued)

Subordinated debt consists of unsecured debt obligations that are contractually subordinated in right of payment to all other present and future non-subordinated obligations of the respective issuing entity. All of the subordinated debt instruments outstanding as of 31 December 2016 pay a fixed rate of interest.

The table below shows the residual contractual maturity of the carrying value of debt issued, split between fixed-rate and floating-rate based on the contractual terms, and does not consider any early redemption features. The effects from interest rate swaps, which are used to hedge various fixed-rate debt issuances by changing the repricing characteristics into those similar to floating-rate debt, are also not considered in the table below.

→ Refer to Note 25d for maturity information on an undiscounted cash flow basis

Contractual maturity of carrying value

CHF million, except where indicated	2017	2018	2019	2020	2021	2022-2026	Thereafter	Total 31.12.16	Total 31.12.15
UBS Group AG¹									
Subordinated debt									
Fixed-rate	0	0	0	0	0	0	7,771	7,771	5,163
Interest rates (range in %)							5.8-7.1		
Subtotal	0	0	0	0	0	0	7,771	7,771	5,163
UBS AG²									
Non-subordinated debt									
Fixed-rate	22,624	7,662	4,026	4,342	2,729	1,338	3	42,724	40,153
Interest rates (range in %)	0-5.9	0.5-6.6	2.4-4.0	0-4.9	1.3-1.4	4.0-4.0	0		
Floating-rate	12,113	1,017	1,017	254	0	0	1,536	15,937	17,907
Subordinated debt									
Fixed-rate	418	0	0	0	0	11,136	0	11,554	12,600
Interest rates (range in %)	4.1-7.4					4.8-8.8			
Subtotal	35,154	8,679	5,043	4,597	2,729	12,474	1,539	70,215	70,659
Other subsidiaries³									
Non-subordinated debt									
Fixed-rate	736	793	745	2,248	2,980	15,352	990	23,843	17,020
Interest rates (range in %)	0-8.1	0-3.8	0-2.9	0-3.2	0-3.0	0-4.1	0-2.8		
Floating-rate	0	1	0	303	1,008	508	0	1,820	306
Subtotal	736	793	745	2,551	3,987	15,860	990	25,663	17,325
Total	35,890	9,473	5,788	7,148	6,717	28,334	10,300	103,649	93,147

¹ Comprises debt issued by the standalone legal entity UBS Group AG. ² Comprises debt issued by the standalone legal entity UBS AG. ³ Comprises debt issued by other direct subsidiaries of UBS Group AG and by subsidiaries of UBS AG.

Note 20 Provisions and contingent liabilities

a) Provisions

CHF million	Operational risks ¹	Litigation, regulatory and similar matters ²	Restructuring	Loan commitments and guarantees	Real estate	Employee benefits ⁵	Other	Total 31.12.16	Total 31.12.15
Balance at the beginning of the year	47	2,983	624	35	157	198	120	4,164	4,366
Increase in provisions recognized in the income statement	34	906	409	18	14	5	48	1,433	1,778
Release of provisions recognized in the income statement	(3)	(98)	(113)	(9)	(5)	(30)	(29)	(288)	(337)
Provisions used in conformity with designated purpose	(26)	(554)	(415)	0	(23)	(85)	(49)	(1,152)	(1,660)
Capitalized reinstatement costs	0	0	(1)	0	(1)	0	0	(2)	5
Reclassifications	0	0	0	10	0	0	0	10	9
Foreign currency translation / unwind of discount	(1)	25	(5)	0	1	(11)	2	10	3
Balance at the end of the year	50	3,261	498³	54	142⁴	77	91	4,174	4,164

¹ Comprises provisions for losses resulting from security risks and transaction processing risks. ² Comprises provisions for losses resulting from legal, liability and compliance risks. ³ Includes personnel-related restructuring provisions of CHF 150 million as of 31 December 2016 (31 December 2015: CHF 110 million) and provisions for onerous lease contracts of CHF 348 million as of 31 December 2016 (31 December 2015: CHF 514 million). ⁴ Includes reinstatement costs for leasehold improvements of CHF 87 million as of 31 December 2016 (31 December 2015: CHF 95 million) and provisions for onerous lease contracts of CHF 55 million as of 31 December 2016 (31 December 2015: CHF 62 million). ⁵ Includes provisions for sabbatical and anniversary awards as well as provisions for severance that are not part of restructuring provisions.

Restructuring provisions primarily relate to onerous lease contracts and severance payments. The use of onerous lease provisions is driven by the maturities of the underlying lease contracts. Severance-related provisions are used within a short time period, usually within six months, but potential changes in amount may be triggered when natural staff attrition reduces

the number of people affected by a restructuring and therefore the estimated costs.

Information on provisions and contingent liabilities in respect of litigation, regulatory and similar matters, as a class, is included in Note 20b. There are no material contingent liabilities associated with the other classes of provisions.

Note 20 Provisions and contingent liabilities (continued)

b) Litigation, regulatory and similar matters

The Group operates in a legal and regulatory environment that exposes it to significant litigation and similar risks arising from disputes and regulatory proceedings. As a result, UBS (which for purposes of this Note may refer to UBS Group AG and / or one or more of its subsidiaries, as applicable) is involved in various disputes and legal proceedings, including litigation, arbitration, and regulatory and criminal investigations.

Such matters are subject to many uncertainties, and the outcome and the timing of resolution are often difficult to predict, particularly in the earlier stages of a case. There are also situations where the Group may enter into a settlement agreement. This may occur in order to avoid the expense, management distraction or reputational implications of continuing to contest liability, even for those matters for which the Group believes it should be exonerated. The uncertainties inherent in all such matters affect the amount and timing of any potential outflows for both matters with respect to which provisions have been established and other contingent liabilities. The Group makes provisions for such matters brought against it when, in the opinion of management after seeking legal advice, it is more likely than not that the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against the Group, but are nevertheless expected to be, based on the Group's experience with similar asserted claims. If any of those conditions is not met, such matters result in contingent liabilities. If the amount of an obligation cannot be reliably estimated, a liability exists that is not recognized even if an outflow of resources is probable. Accordingly, no provision is established even if the potential outflow of resources with respect to select matters could be significant.

Specific litigation, regulatory and other matters are described below, including all such matters that management considers to be material and others that management believes to be of significance due to potential financial, reputational and other effects. The amount of damages claimed, the size of a transaction or other information is provided where available and appropriate in order to assist users in considering the magnitude of potential exposures.

In the case of certain matters below, we state that we have established a provision, and for the other matters, we make no such statement. When we make this statement and we expect disclosure of the amount of a provision to prejudice seriously our position with other parties in the matter because it would reveal what UBS believes to be the probable and reliably estimable outflow, we do not disclose that amount. In some cases we are subject to confidentiality obligations that preclude such disclosure. With respect to the matters for which we do not state whether we have established a provision, either (a) we have not established a provision, in which case the matter is treated as a contingent liability under the applicable accounting standard or (b) we have established a provision but expect disclosure of that fact to prejudice seriously our position with other parties in the matter because it would reveal the fact that UBS believes an outflow of resources to be probable and reliably estimable.

With respect to certain litigation, regulatory and similar matters for which we have established provisions, we are able to estimate the expected timing of outflows. However, the aggregate amount of the expected outflows for those matters for which we are able to estimate expected timing is immaterial relative to our current and expected levels of liquidity over the relevant time periods.

Note 20 Provisions and contingent liabilities (continued)

The aggregate amount provisioned for litigation, regulatory and similar matters as a class is disclosed in Note 20a above. It is not practicable to provide an aggregate estimate of liability for our litigation, regulatory and similar matters as a class of contingent liabilities. Doing so would require us to provide speculative legal assessments as to claims and proceedings that involve unique fact patterns or novel legal theories, that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Although we therefore cannot provide a numerical estimate of the future losses that could arise from litigation, regulatory and similar matters, we believe that the aggregate amount of possible future losses from this class that are more than remote substantially exceeds the level of current provisions. Litigation, regulatory and similar matters may also result in non-monetary penalties and consequences. For example, the Non-Prosecution Agreement (NPA) described in item 5 of this Note, which we entered into with the US Department of Justice (DOJ), Criminal Division, Fraud Section in connection with our submissions of benchmark interest rates, including, among others, the British Bankers' Association London Interbank Offered Rate (LIBOR), was terminated by the DOJ based on its

determination that we had committed a US crime in relation to foreign exchange matters. As a consequence, UBS AG pleaded guilty to one count of wire fraud for conduct in the LIBOR matter, paid a USD 203 million fine and is subject to a three-year term of probation. A guilty plea to, or conviction of, a crime (including as a result of termination of the NPA) could have material consequences for UBS. Resolution of regulatory proceedings may require us to obtain waivers of regulatory disqualifications to maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations and may permit financial market utilities to limit, suspend or terminate our participation in such utilities. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material consequences for UBS.

The risk of loss associated with litigation, regulatory and similar matters is a component of operational risk for purposes of determining our capital requirements. Information concerning our capital requirements and the calculation of operational risk for this purpose is included in the "Capital management" section of this report.

Provisions for litigation, regulatory and similar matters by business division and Corporate Center unit^{1, 2}

CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Total 31.12.16	Total 31.12.15
Balance at the beginning of the year	245	459	83	16	585	310	0	1,284	2,983	3,053
Increase in provisions recognized in the income statement	76	113	7	5	43	5	0	606	856	1,263
Release of provisions recognized in the income statement	(6)	(15)	(4)	(6)	(2)	(3)	0	(11)	(48)	(166)
Provisions used in conformity with designated purpose	(19)	(137)	(9)	(9)	(13)	(49)	0	(318)	(554)	(1,174)
Foreign currency translation / unwind of discount	(4)	6	0	0	3	(4)	0	24	25	7
Balance at the end of the year	292	425	78	5	616	259	0	1,585	3,261	2,983

¹ Provisions, if any, for the matters described in this disclosure are recorded in Wealth Management (item 3), Wealth Management Americas (item 4), the Investment Bank (item 8), CC – Services (item 7) and CC – Non-core and Legacy Portfolio (item 2). Provisions, if any, for the matters described in this disclosure in items 1 and 6 are allocated between Wealth Management and Personal & Corporate Banking, and provisions, if any, for the matters described in this disclosure in item 5 are allocated between the Investment Bank, CC – Services and CC – Non-core and Legacy Portfolio. ² Provision movements are grouped by item for purposes of this table and may therefore differ from those shown in the table in Note 20a.

Note 20 Provisions and contingent liabilities (continued)

1. Inquiries regarding cross-border wealth management businesses

Tax and regulatory authorities in a number of countries have made inquiries, served requests for information or examined employees located in their respective jurisdictions relating to the cross-border wealth management services provided by UBS and other financial institutions. It is possible that implementation of automatic tax information exchange and other measures relating to cross-border provision of financial services could give rise to further inquiries in the future. UBS has received disclosure orders from the Swiss Federal Tax Administration (FTA) to transfer information based on requests for international administrative assistance in tax matters. The requests concern a number of UBS account numbers pertaining to current and former clients and are based on data from 2006 and 2008. UBS has taken steps to inform affected clients about the administrative assistance proceedings and their procedural rights, including the right to appeal. The requests are based on data received from the German authorities, who seized certain data related to UBS clients booked in Switzerland during their investigations and have apparently shared this data with other European countries. UBS expects additional countries to file similar requests. In addition, the Swiss Federal Supreme Court ruled in September 2016 that the double taxation agreement between the Netherlands and Switzerland provides a sufficient legal basis for an administrative assistance group request without specifying the names of the targeted taxpayers, which makes it more likely that similar requests for administrative assistance will be granted by the FTA.

In 2013, as a result of investigations in France, UBS (France) S.A. and UBS AG were put under formal examination ("*mise en examen*") for complicity in having illicitly solicited clients on French territory and were declared witness with legal assistance ("*témoïn assisté*") regarding the laundering of proceeds of tax fraud and of banking and financial solicitation by unauthorized persons. In 2014, UBS AG was placed under formal examination with respect to the potential charges of laundering of proceeds of tax fraud, and the investigating judges ordered UBS AG to provide bail ("caution") of EUR 1.1 billion. UBS AG appealed the determination of the bail amount, but both the appeal court ("*Cour d'Appel*") and the French Supreme Court ("*Cour de Cassation*") upheld the bail amount and rejected the appeal in full in late 2014. UBS AG filed an application to the European Court of Human Rights (ECHR) to challenge various aspects of the French court's decision. In January 2017, the ECHR denied UBS's application. The Swiss Federal Administrative Court ruled in October 2016 that in the administrative assistance proceedings related to the French bulk request, UBS has the right to appeal all final FTA client data disclosure orders. In September 2015, the former CEO of UBS Wealth Management was placed under

formal examination in connection with these proceedings. In addition, the investigating judges have sought to issue arrest warrants against three Swiss-based former employees of UBS AG who did not appear when summoned by the investigating judge.

In 2015, UBS (France) S.A. was placed under formal examination for complicity regarding the laundering of proceeds of tax fraud and of banking and financial solicitation by unauthorized persons for the years 2004 until 2008 and declared witness with legal assistance for the years 2009 to 2012. A bail of EUR 40 million was imposed and subsequently reduced by the Court of Appeals to EUR 10 million.

In February 2016, the investigating judge notified UBS AG and UBS (France) S.A. that he has closed his investigation. In July 2016, UBS AG and UBS (France) S.A. received the National Financial Prosecutor's recommendation ("*réquisitoire*"). As permitted, the parties have commented on the recommendation. The next procedural step will be for the judge to issue his final decree ("*ordonnance de renvoi en correctionnelle*"), which would set out any charges for which UBS AG and UBS (France) S.A. will be tried, both legally and factually, and transfer the case to court.

UBS has been notified by the Belgian investigating judge that it is under formal investigation ("*inculpé*") regarding the laundering of proceeds of tax fraud and of banking, financial solicitation by unauthorized persons and serious tax fraud.

In 2015, UBS received inquiries from the US Attorney's Office for the Eastern District of New York and from the US Securities and Exchange Commission (SEC), which are investigating potential sales to US persons of bearer bonds and other unregistered securities in possible violation of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and the registration requirements of the US securities laws. UBS is cooperating with the authorities in these investigations.

UBS has, and reportedly numerous other financial institutions have, received inquiries from authorities concerning accounts relating to the Fédération Internationale de Football Association (FIFA) and other constituent soccer associations and related persons and entities. UBS is cooperating with authorities in these inquiries.

Our balance sheet at 31 December 2016 reflected provisions with respect to matters described in this item 1 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

Note 20 Provisions and contingent liabilities (continued)

2. Claims related to sales of residential mortgage-backed securities and mortgages

From 2002 through 2007, prior to the crisis in the US residential loan market, UBS was a substantial issuer and underwriter of US residential mortgage-backed securities (RMBS) and was a purchaser and seller of US residential mortgages. A subsidiary of UBS, UBS Real Estate Securities Inc. (UBS RESI), acquired pools of residential mortgage loans from originators and (through an affiliate) deposited them into securitization trusts. In this manner, from 2004 through 2007, UBS RESI sponsored approximately USD 80 billion in RMBS, based on the original principal balances of the securities issued.

UBS RESI also sold pools of loans acquired from originators to third-party purchasers. These whole loan sales during the period 2004 through 2007 totaled approximately USD 19 billion in original principal balance.

We were not a significant originator of US residential loans. A subsidiary of UBS originated approximately USD 1.5 billion in US residential mortgage loans during the period in which it was active from 2006 to 2008 and securitized less than half of these loans.

RMBS-related lawsuits concerning disclosures: UBS is named as a defendant relating to its role as underwriter and issuer of RMBS in lawsuits related to approximately USD 2.5 billion in original face amount of RMBS underwritten or issued by UBS. Of the USD 2.5 billion in original face amount of RMBS that remains at issue in these cases, approximately USD 1.2 billion was issued in offerings in which a UBS subsidiary transferred underlying loans (the majority of which were purchased from third-party originators) into a securitization trust and made representations and warranties about those loans (UBS-sponsored RMBS). The remaining USD 1.3 billion of RMBS to which these cases relate was issued by third parties in securitizations in which UBS acted as underwriter (third-party RMBS).

In connection with certain of these lawsuits, UBS has indemnification rights against surviving third-party issuers or originators for losses or liabilities incurred by UBS, but UBS cannot predict the extent to which it will succeed in enforcing those rights.

UBS is a defendant in a lawsuit brought by the National Credit Union Administration (NCUA) as conservator for certain failed credit unions, asserting misstatements and omissions in the offering documents for RMBS purchased by the credit unions. The lawsuit was filed in the US District Court for the District of Kansas. The original principal balance at issue in the case is approximately USD 1.15 billion. In March 2017, UBS and

NCUA reached an agreement in principle to resolve this matter. In the second quarter of 2016, UBS resolved a similar case brought by the NCUA in the US District Court for the Southern District of New York (SDNY) relating to RMBS with an original principal balance of approximately USD 400 million, for a total of approximately USD 69.8 million, in addition to reasonable attorneys' fees incurred by NCUA.

Lawsuits related to contractual representations and warranties concerning mortgages and RMBS: When UBS acted as an RMBS sponsor or mortgage seller, we generally made certain representations relating to the characteristics of the underlying loans. In the event of a material breach of these representations, we were in certain circumstances contractually obligated to repurchase the loans to which the representations related or to indemnify certain parties against losses. UBS has received demands to repurchase US residential mortgage loans as to which UBS made certain representations at the time the loans were transferred to the securitization trust aggregating approximately USD 4.1 billion in original principal balance. Of this amount, UBS considers claims relating to approximately USD 2 billion in original principal balance to be resolved, including claims barred by the statute of limitations. Substantially all of the remaining claims are in litigation, including the matters described in the next paragraph. UBS believes that new demands to repurchase US residential mortgage loans are time-barred under a decision rendered by the New York Court of Appeals.

In 2012, certain RMBS trusts filed an action (Trustee Suit) in the SDNY seeking to enforce UBS RESI's obligation to repurchase loans in the collateral pools for three RMBS securitizations with an original principal balance of approximately USD 2 billion, for which Assured Guaranty Municipal Corp., a financial guaranty insurance company, had previously demanded repurchase. A bench trial in the SDNY adjourned in May 2016. Approximately 9,000 loans were at issue in the trial. In September 2016, the court issued an order ruling on numerous legal and factual issues and applying those rulings to 20 exemplar loans. The court further ordered that a lead master be appointed to apply the court's rulings to the loans that remain at issue following the trial. With respect to the loans subject to the Trustee Suit that were originated by institutions still in existence, UBS intends to enforce its indemnity rights against those institutions.

We also have tolling agreements with certain institutional purchasers of RMBS concerning their potential claims related to substantial purchases of UBS-sponsored or third-party RMBS.

Note 20 Provisions and contingent liabilities (continued)

Provision for claims related to sales of residential mortgage-backed securities and mortgages

USD million	31.12.16	31.12.15
Balance at the beginning of the year	1,218	849
Increase in provision recognized in the income statement	589	662
Release of provision recognized in the income statement	0	(94)
Provision used in conformity with designated purpose	(307)	(199)
Balance at the end of the year	1,500	1,218

Mortgage-related regulatory matters: In 2014, UBS received a subpoena from the US Attorney's Office for the Eastern District of New York issued pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), which seeks documents and information related to UBS's RMBS business from 2005 through 2007. In 2015, the Eastern District of New York identified a number of transactions that are the focus of their inquiry, and has subsequently provided a revised list of transactions. We have provided and continue to provide information. UBS continues to respond to the FIRREA subpoena and to subpoenas from the New York State Attorney General and other state attorneys general relating to its RMBS business. In addition, UBS has also been responding to inquiries from both the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) (who is working in conjunction with the US

Attorney's Office for Connecticut and the DOJ) and the SEC relating to trading practices in connection with purchases and sales of mortgage-backed securities in the secondary market from 2009 through 2014. We are cooperating with the authorities in these matters.

As reflected in the table "Provision for claims related to sales of residential mortgage-backed securities and mortgages," our balance sheet at 31 December 2016 reflected a provision of USD 1,500 million with respect to matters described in this item 2. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of this matter cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

Note 20 Provisions and contingent liabilities (continued)

3. Madoff

In relation to the Bernard L. Madoff Investment Securities LLC (BMIS) investment fraud, UBS AG, UBS (Luxembourg) S.A. and certain other UBS subsidiaries have been subject to inquiries by a number of regulators, including the Swiss Financial Market Supervisory Authority (FINMA) and the Luxembourg Commission de Surveillance du Secteur Financier (CSSF). Those inquiries concerned two third-party funds established under Luxembourg law, substantially all assets of which were with BMIS, as well as certain funds established in offshore jurisdictions with either direct or indirect exposure to BMIS. These funds now face severe losses, and the Luxembourg funds are in liquidation. The last reported net asset value of the two Luxembourg funds before revelation of the Madoff scheme was approximately USD 1.7 billion in the aggregate although that figure likely includes fictitious profit reported by BMIS. The documentation establishing both funds identifies UBS entities in various roles, including custodian, administrator, manager, distributor and promoter, and indicates that UBS employees serve as board members. UBS (Luxembourg) S.A. and certain other UBS subsidiaries are responding to inquiries by Luxembourg investigating authorities, without, however, being named as parties in those investigations. In 2009 and 2010, the liquidators of the two Luxembourg funds filed claims on behalf of the funds against UBS entities, non-UBS entities and certain individuals, including current and former UBS employees. The amounts claimed are approximately EUR 890 million and EUR 305 million, respectively. The liquidators have filed supplementary claims for amounts that the funds may possibly be held liable to pay the BMIS Trustee. These amounts claimed by the liquidator are approximately EUR 564 million and EUR 370 million, respectively. In addition, a large number of alleged beneficiaries have filed claims against UBS entities (and non-UBS entities) for purported losses relating to the Madoff scheme. The majority of these cases are pending in Luxembourg, where appeals were filed by the claimants against the 2010 decisions of the court in which the claims in a number of test cases were held to be inadmissible. In 2014, the Luxembourg Court of Appeal

dismissed one test case appeal in its entirety, which decision was appealed by the investor. In 2015, the Luxembourg Supreme Court found in favor of UBS and dismissed the investor's appeal. In June 2016, the Luxembourg Court of Appeal dismissed the remaining test cases in their entirety. In the US, the BMIS Trustee filed claims in 2010 against UBS entities, among others, in relation to the two Luxembourg funds and one of the offshore funds. The total amount claimed against all defendants in these actions was not less than USD 2 billion. Following a motion by UBS, in 2011, the SDNY dismissed all of the BMIS Trustee's claims other than claims for recovery of fraudulent conveyances and preference payments that were allegedly transferred to UBS on the ground that the BMIS Trustee lacks standing to bring such claims. In 2013, the Second Circuit affirmed the District Court's decision and, in 2014, the US Supreme Court denied the BMIS Trustee's petition seeking review of the Second Circuit ruling. In November 2016, the bankruptcy court issued an opinion dismissing the remaining claims for recovery of subsequent transfers of fraudulent conveyances and preference payments on the ground that the US Bankruptcy Code does not apply to transfers that occurred outside the US. The BMIS Trustee has indicated that he will appeal. In 2014, several claims, including a purported class action, were filed in the US by BMIS customers against UBS entities, asserting claims similar to the ones made by the BMIS Trustee, seeking unspecified damages. One claim was voluntarily withdrawn by the plaintiff. In 2015, following a motion by UBS, the SDNY dismissed the two remaining claims on the basis that the New York courts did not have jurisdiction to hear the claims against the UBS entities. The plaintiff in one of those claims has appealed the dismissal. In Germany, certain clients of UBS are exposed to Madoff-managed positions through third-party funds and funds administered by UBS entities in Germany. A small number of claims have been filed with respect to such funds. In 2015, a court of appeal ordered UBS to pay EUR 49 million, plus interest of approximately EUR 15.3 million.

Note 20 Provisions and contingent liabilities (continued)

4. Puerto Rico

Declines since August 2013 in the market prices of Puerto Rico municipal bonds and of closed-end funds (the funds) that are sole-managed and co-managed by UBS Trust Company of Puerto Rico and distributed by UBS Financial Services Incorporated of Puerto Rico (UBS PR) have led to multiple regulatory inquiries, as well as customer complaints and arbitrations with aggregate claimed damages of approximately USD 2.0 billion, of which claims with aggregate claimed damages of approximately USD 861 million have been resolved through settlements, arbitration or withdrawal of the claim. The claims are filed by clients in Puerto Rico who own the funds or Puerto Rico municipal bonds and / or who used their UBS account assets as collateral for UBS non-purpose loans; customer complaint and arbitration allegations include fraud, misrepresentation and unsuitability of the funds and of the loans. A shareholder derivative action was filed in 2014 against various UBS entities and current and certain former directors of the funds, alleging hundreds of millions of US dollars in losses in the funds. In 2015, defendants' motion to dismiss was denied. Defendants' requests for permission to appeal that ruling were denied by the Puerto Rico Court of Appeals and the Puerto Rico Supreme Court. In 2014, a federal class action complaint also was filed against various UBS entities, certain members of UBS PR senior management, and the co-manager of certain of the funds seeking damages for investor losses in the funds during the period from May 2008 through May 2014. Defendants had moved to dismiss that complaint, and in December 2016, defendants' motion to dismiss was granted in part and denied in part. In 2015, a class action was filed in Puerto Rico state court against UBS PR seeking equitable relief in the form of a stay of any effort by UBS PR to collect on non-purpose loans it acquired from UBS Bank USA in December 2013 based on plaintiffs' allegation that the loans are not valid. The trial court denied defendants' motion to dismiss the action based on a forum selection clause in the loan agreements; the Puerto Rico Supreme Court has stayed the action pending its review of defendants' appeal from that ruling.

In 2014, UBS reached a settlement with the Office of the Commissioner of Financial Institutions for the Commonwealth of Puerto Rico (OCFI) in connection with OCFI's examination of UBS's operations from January 2006 through September 2013, pursuant to which UBS is paying up to an aggregate of USD 7.7 million in investor education contributions and restitution.

In 2015, the SEC and the Financial Industry Regulatory Authority (FINRA) announced settlements with UBS PR of their separate investigations stemming from the 2013 market events. Without admitting or denying the findings in either matter, UBS PR agreed in the SEC settlement to pay USD 15 million and USD 18.5 million in the FINRA matter. We also understand that the DOJ is conducting a criminal inquiry into the impermissible reinvestment of non-purpose loan proceeds. We are cooperating with the authorities in this inquiry.

In 2011, a purported derivative action was filed on behalf of

the Employee Retirement System of the Commonwealth of Puerto Rico (System) against over 40 defendants, including UBS PR, which was named in connection with its underwriting and consulting services. Plaintiffs alleged that defendants violated their purported fiduciary duties and contractual obligations in connection with the issuance and underwriting of approximately USD 3 billion of bonds by the System in 2008 and sought damages of over USD 800 million. Defendants' motion to dismiss is pending. In September 2016, the System announced its intention to join the action as a plaintiff, and the court has since ordered that plaintiffs must file an amended complaint.

Also, in 2013, an SEC Administrative Law Judge dismissed a case brought by the SEC against two UBS executives, finding no violations. The charges had stemmed from the SEC's investigation of UBS's sale of closed-end funds in 2008 and 2009, which UBS settled in 2012. Beginning in 2012, two federal class action complaints, which were subsequently consolidated, were filed against various UBS entities, certain of the funds, and certain members of UBS PR senior management, seeking damages for investor losses in the funds during the period from January 2008 through May 2012 based on allegations similar to those in the SEC action. In September 2016, the court denied plaintiffs' motion for class certification. In October 2016, plaintiffs filed a petition with the US Court of Appeals for the First Circuit seeking permission to bring an interlocutory appeal challenging the denial of their motion for class certification. Defendants have filed an opposition to plaintiffs' petition.

Beginning in 2015, agencies and public corporations of the Commonwealth have defaulted on certain interest payments, and in July 2016, the Commonwealth defaulted on payments on its general obligation debt. Executive orders of the Governor that have diverted funds to pay for essential services instead of debt payments and stayed any action to enforce creditors' rights on the Puerto Rico bonds continue to be in effect. In June 2016, US federal legislation created an oversight board with power to oversee Puerto Rico's finances and to restructure its debt. The oversight board is authorized to impose, and has imposed, a stay on exercise of creditors' rights. These events, further defaults, any further legislative action to create a legal means of restructuring Commonwealth obligations or to impose additional oversight on the Commonwealth's finances, or any restructuring of the Commonwealth's obligations, may increase the number of claims against UBS concerning Puerto Rico securities, as well as potential damages sought.

Our balance sheet at 31 December 2016 reflected provisions with respect to matters described in this item 4 in amounts that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provisions that we have recognized.

Note 20 Provisions and contingent liabilities (continued)

5. Foreign exchange, LIBOR, and benchmark rates, and other trading practices

Foreign exchange-related regulatory matters: Following an initial media report in 2013 of widespread irregularities in the foreign exchange markets, UBS immediately commenced an internal review of its foreign exchange business, which includes our precious metals and related structured products businesses. Since then, various authorities have commenced investigations concerning possible manipulation of foreign exchange markets, including FINMA, the Swiss Competition Commission (WEKO), the DOJ, the SEC, the US Commodity Futures Trading Commission (CFTC), the Board of Governors of the Federal Reserve System (Federal Reserve Board), the California State Attorney General, the UK Financial Conduct Authority (FCA) (to which certain responsibilities of the UK Financial Services Authority (FSA) have passed), the UK Serious Fraud Office (SFO), the Australian Securities and Investments Commission (ASIC), the Hong Kong Monetary Authority (HKMA), the Korea Fair Trade Commission (KFTC) and the Brazil Competition Authority (CADE). In addition, WEKO is, and a number of other authorities reportedly are, investigating potential manipulation of precious metals prices. UBS has taken and will continue to take appropriate action with respect to certain personnel as a result of its ongoing review.

In 2014, UBS reached settlements with the FCA and the CFTC in connection with their foreign exchange investigations, and FINMA issued an order concluding its formal proceedings with respect to UBS relating to its foreign exchange and precious metals businesses. UBS has paid a total of approximately CHF 774 million to these authorities, including GBP 234 million in fines to the FCA, USD 290 million in fines to the CFTC, and CHF 134 million to FINMA representing confiscation of costs avoided and profits. In 2015, the Federal Reserve Board and the Connecticut Department of Banking issued an Order to Cease and Desist and Order of Assessment of a Civil Monetary Penalty Issued upon Consent (Federal Reserve Order) to UBS AG. As part of the Federal Reserve Order, UBS AG paid a USD 342 million civil monetary penalty.

In 2015, the DOJ's Criminal Division (Criminal Division) terminated the December 2012 Non-Prosecution Agreement (NPA) with UBS AG related to UBS's submissions of benchmark interest rates. As a result, UBS AG entered into a plea agreement with the Criminal Division pursuant to which UBS AG pleaded guilty to a one-count criminal information filed in the US District Court for the District of Connecticut charging UBS AG with one count of wire fraud in violation of 18 USC Sections 1343 and 2. Sentencing occurred on 5 January 2017. Under the plea agreement, UBS AG has paid a USD 203 million fine and is subject to a three-year term of probation starting on the sentencing date. The criminal information charges that, between approximately 2001 and 2010, UBS AG engaged in a scheme to defraud counterparties to interest rate derivatives transactions by manipulating benchmark interest rates, including Yen LIBOR. The

Criminal Division terminated the NPA based on its determination, in its sole discretion, that certain UBS AG employees committed criminal conduct that violated the NPA, including fraudulent and deceptive currency trading and sales practices in conducting certain foreign exchange market transactions with clients and collusion with other participants in certain foreign exchange markets.

We have ongoing obligations to cooperate with these authorities and to undertake certain remediation, including actions to improve UBS's processes and controls.

UBS has been granted conditional leniency or conditional immunity by the Antitrust Division of the DOJ (Antitrust Division) from prosecution for EUR / USD collusion and entered into a non-prosecution agreement covering other currency pairs. As a result, UBS AG will not be subject to prosecutions, fines or other sanctions for antitrust law violations by the Antitrust Division, subject to UBS AG's continuing cooperation. However, the conditional leniency and conditional immunity grant does not bar government agencies from asserting other claims and imposing sanctions against UBS AG, as evidenced by the settlements and ongoing investigations referred to above. UBS has also been granted conditional immunity by authorities in certain jurisdictions, including WEKO, in connection with potential competition law violations relating to foreign exchange and precious metals businesses and, as a result, will not be subject to prosecutions, fines or other sanctions for antitrust or competition law violations in those jurisdictions, subject to UBS AG's continuing cooperation as the leniency applicant.

Investigations relating to foreign exchange and precious metals matters by numerous authorities, including the CFTC, remain ongoing notwithstanding these resolutions.

Foreign exchange-related civil litigation: Putative class actions have been filed since November 2013 in US federal courts and in other jurisdictions against UBS and other banks on behalf of putative classes of persons who engaged in foreign currency transactions with any of the defendant banks. They allege collusion by the defendants and assert claims under the antitrust laws and for unjust enrichment. In 2015, additional putative class actions were filed in federal court in New York against UBS and other banks on behalf of a putative class of persons who entered into or held any foreign exchange futures contracts and options on foreign exchange futures contracts since 1 January 2003. The complaints assert claims under the Commodity Exchange Act (CEA) and the US antitrust laws. In 2015, a consolidated complaint was filed on behalf of both putative classes of persons covered by the US federal court class actions described above. UBS has entered into a settlement agreement that would resolve all of these US federal court class actions. The agreement, which has been preliminarily approved by the court and is subject to final court approval, requires, among other things, that UBS pay an aggregate of USD 141 million and provide cooperation to the settlement classes.

Note 20 Provisions and contingent liabilities (continued)

A putative class action has been filed in federal court in New York against UBS and other banks on behalf of participants, beneficiaries, and named fiduciaries of plans qualified under the Employee Retirement Income Security Act of 1974 (ERISA) for whom a defendant bank provided foreign currency exchange transactional services, exercised discretionary authority or discretionary control over management of such ERISA plan, or authorized or permitted the execution of any foreign currency exchange transactional services involving such plan's assets. The complaint asserts claims under ERISA. The parties filed a stipulation to dismiss the case with prejudice. The plaintiffs have appealed the dismissal.

In 2015, a putative class action was filed in federal court against UBS and numerous other banks on behalf of a putative class of persons and businesses in the US who directly purchased foreign currency from the defendants and their co-conspirators for their own end use. That action has been transferred to federal court in New York. Motions to dismiss are pending.

In 2016, a putative class action was filed in federal court in New York against UBS and numerous other banks on behalf of a putative class of persons and entities who had indirectly purchased FX instruments from a defendant or co-conspirator in the US. The complaint asserts claims under federal and state antitrust laws. Motions to dismiss will be filed.

In 2015, UBS was added to putative class actions pending against other banks in federal court in New York and other jurisdictions on behalf of putative classes of persons who had bought or sold physical precious metals and various precious metal products and derivatives. The complaints in these lawsuits assert claims under the antitrust laws and the CEA, and other claims. In October 2016, the court in New York granted UBS's motions to dismiss the putative class actions relating to gold and silver. Plaintiffs in those cases are seeking to amend their complaints to add new allegations about UBS. UBS's motion to dismiss the putative class action relating to platinum and palladium remains pending.

LIBOR and other benchmark-related regulatory matters: Numerous government agencies, including the SEC, the CFTC, the DOJ, the FCA, the SFO, the Monetary Authority of Singapore (MAS), the HKMA, FINMA, the various state attorneys general in the US and competition authorities in various jurisdictions have conducted or are continuing to conduct investigations regarding submissions with respect to LIBOR and other benchmark rates. These investigations focus on whether there were improper attempts by UBS, among others, either acting on our own or together with others, to manipulate LIBOR and other benchmark rates at certain times.

In 2012, UBS reached settlements with the FSA, the CFTC and the Criminal Division of the DOJ in connection with their investigations of benchmark interest rates. At the same time, FINMA issued an order concluding its formal proceedings with respect to UBS relating to benchmark interest rates. UBS has paid a total of approximately CHF 1.4 billion in fines and disgorgement, including GBP 160 million in fines to the FSA, USD 700 million in fines to the CFTC, USD 500 million in fines to the DOJ, and CHF 59 million in disgorgement to FINMA. UBS Securities Japan Co. Ltd. (UBSSJ) entered into a plea agreement with the DOJ under which it entered a plea to one count of wire fraud relating to the manipulation of certain benchmark interest rates, including Yen LIBOR. UBS entered into an NPA with the DOJ, which (along with the plea agreement) covered conduct beyond the scope of the conditional leniency / immunity grants described below, required UBS to pay the USD 500 million fine to the DOJ after the sentencing of UBSSJ and provided that any criminal penalties imposed on UBSSJ at sentencing be deducted from the USD 500 million fine. Under the NPA, we agreed, among other things, that for two years from 18 December 2012 UBS would not commit any US crime and we would advise DOJ of any potentially criminal conduct by UBS or any of its employees relating to violations of US laws concerning fraud or securities and commodities markets. The term of the NPA was extended by one year to 18 December 2015. In 2015, the Criminal Division terminated the NPA based on its determination, in its sole discretion, that certain UBS AG employees committed criminal conduct that violated the NPA.

In 2014, UBS reached a settlement with the European Commission (EC) regarding its investigation of bid-ask spreads in connection with Swiss franc interest rate derivatives and paid a EUR 12.7 million fine, which was reduced to this level based in part on UBS's cooperation with the EC. In December 2016, UBS reached a settlement with WEKO regarding its investigation of bid-ask spreads in connection with Swiss franc interest rate derivatives and received full immunity from fines. The MAS, HKMA and the Japan Financial Services Agency have also resolved investigations of UBS (and in some cases, other banks). We have ongoing obligations to cooperate with the authorities with whom we have reached resolutions and to undertake certain remediation with respect to benchmark interest rate submissions.

Investigations by the CFTC, ASIC and other governmental authorities remain ongoing notwithstanding these resolutions.

Note 20 Provisions and contingent liabilities (continued)

UBS has been granted conditional leniency or conditional immunity from authorities in certain jurisdictions, including the Antitrust Division of the DOJ and WEKO, in connection with potential antitrust or competition law violations related to submissions for Yen LIBOR and Euroyen TIBOR. As a result of these conditional grants, UBS will not be subject to prosecutions, fines or other sanctions for antitrust or competition law violations in the jurisdictions where we have conditional immunity in connection with the matters covered by the conditional grants, subject to our continuing cooperation as leniency applicant. However, since the Secretariat of WEKO has asserted that UBS does not qualify for full immunity, UBS has been unable to reach a settlement with WEKO, and therefore the investigation will continue. Furthermore, the conditional leniency and conditional immunity grants we have received do not bar government agencies from asserting other claims and imposing sanctions against us, as evidenced by the settlements and ongoing investigations referred to above. In addition, as a result of the conditional leniency agreement with the DOJ, we are eligible for a limit on liability to actual rather than treble damages were damages to be awarded in any civil antitrust action under US law based on conduct covered by the agreement and for relief from potential joint and several liability in connection with such civil antitrust action, subject to our satisfying the DOJ and the court presiding over the civil litigation of our cooperation. The conditional leniency and conditional immunity grants do not otherwise affect the ability of private parties to assert civil claims against us.

LIBOR and other benchmark-related civil litigation: A number of putative class actions and other actions are pending in the federal courts in New York against UBS and numerous other banks on behalf of parties who transacted in certain interest rate benchmark-based derivatives. Also pending in the US and in other jurisdictions are actions asserting losses related to various products whose interest rates were linked to LIBOR and other benchmarks, including adjustable rate mortgages, preferred and debt securities, bonds pledged as collateral, loans, depository accounts, investments and other interest-bearing instruments. All of the complaints allege manipulation, through various means, of various benchmark interest rates, including USD LIBOR, Euroyen TIBOR, Yen LIBOR, EURIBOR, CHF LIBOR, GBP LIBOR, USD ISDAFIX rates and other benchmark rates, and seek unspecified compensatory and other damages under varying legal theories.

In 2013, the US district court in the USD LIBOR action dismissed the federal antitrust and racketeering claims of certain USD LIBOR plaintiffs and a portion of their claims brought under the CEA and state common law. Certain plaintiffs appealed the decision to the Second Circuit, which, in May 2016, vacated the district court's ruling finding no antitrust injury and remanded the case back to the district court for a further determination on

whether plaintiffs have antitrust standing. In December 2016, the district court again dismissed plaintiffs' antitrust claims, this time for lack of personal jurisdiction over UBS and other foreign banks. In 2014, the court in one of the Euroyen TIBOR lawsuits dismissed certain of the plaintiff's claims, including federal antitrust claims. In 2015, the same court dismissed plaintiff's federal racketeering claims and affirmed its previous dismissal of plaintiff's antitrust claims. UBS and other defendants in other lawsuits including those related to EURIBOR, CHF LIBOR, GBP LIBOR and SIBOR have filed motions to dismiss. UBS has entered into an agreement with representatives of a class of bondholders to settle their USD LIBOR class action. The agreement is subject to court approval.

Since September 2014, putative class actions have been filed in federal court in New York and New Jersey against UBS and other financial institutions, among others, on behalf of parties who entered into interest rate derivative transactions linked to ISDAFIX. The complaints, which have since been consolidated into an amended complaint, allege that the defendants conspired to manipulate ISDAFIX rates from 1 January 2006 through January 2014, in violation of US antitrust laws and certain state laws, and seek unspecified compensatory damages, including treble damages. In March 2016, the court in the ISDAFIX action denied in substantial part defendants' motion to dismiss, holding that plaintiffs have stated Sherman Act, breach-of-contract and unjust-enrichment claims against defendants, including UBS AG.

Government bonds: Putative class actions have been filed in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. The complaints generally allege that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction. They assert claims under the antitrust laws and the CEA and for unjust enrichment. The cases have been consolidated in the SDNY. Following filing of these complaints, UBS and reportedly other banks are responding to investigations and requests for information from various authorities regarding US Treasury securities and other government bond trading practices. As a result of its review to date, UBS has taken appropriate action.

With respect to additional matters and jurisdictions not encompassed by the settlements and order referred to above, our balance sheet at 31 December 2016 reflected a provision in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

Note 20 Provisions and contingent liabilities (continued)

6. Swiss retrocessions

The Federal Supreme Court of Switzerland ruled in 2012, in a test case against UBS, that distribution fees paid to a firm for distributing third-party and intra-group investment funds and structured products must be disclosed and surrendered to clients who have entered into a discretionary mandate agreement with the firm, absent a valid waiver.

FINMA has issued a supervisory note to all Swiss banks in response to the Supreme Court decision. UBS has met the FINMA requirements and has notified all potentially affected clients.

The Supreme Court decision has resulted, and may continue to result, in a number of client requests for UBS to disclose and potentially surrender retrocessions. Client requests are assessed on a case-by-case basis. Considerations taken into account when assessing these cases include, among others, the existence of a discretionary mandate and whether or not the client documentation contained a valid waiver with respect to distribution fees.

Our balance sheet at 31 December 2016 reflected a provision with respect to matters described in this item 6 in an amount that UBS believes to be appropriate under the applicable accounting standard. The ultimate exposure will depend on client requests and the resolution thereof, factors that are difficult to predict and assess. Hence, as in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

7. Banco UBS Pactual tax indemnity

Pursuant to the 2009 sale of Banco UBS Pactual S.A. (Pactual) by UBS to BTG Investments, LP (BTG), BTG has submitted contractual indemnification claims that UBS estimates amount to approximately BRL 2.6 billion, including interest and penalties,

which is net of liabilities retained by BTG. The claims pertain principally to several tax assessments issued by the Brazilian tax authorities against Pactual relating to the period from December 2006 through March 2009, when UBS owned Pactual. These assessments are being challenged in administrative and judicial proceedings. The majority of these assessments relate to the deductibility of goodwill amortization in connection with UBS's 2006 acquisition of Pactual and payments made to Pactual employees through various profit-sharing plans. In 2015, an intermediate administrative court issued a decision that was largely in favor of the tax authority with respect to the goodwill amortization assessment. In May 2016, the highest level of the administrative court agreed to review this decision on a number of the significant issues.

8. Investigation of UBS's role in initial public offerings in Hong Kong

The Hong Kong Securities and Futures Commission (SFC) has been conducting investigations into UBS's role as a sponsor of certain initial public offerings listed on the Hong Kong Stock Exchange. In October 2016, the SFC informed UBS that it intends to commence action against UBS and certain UBS employees with respect to sponsorship work in those offerings. If such action is taken, there may be financial ramifications for UBS, including fines and obligations to pay investor compensation, and suspension of UBS's ability to provide corporate finance advisory services in Hong Kong for a period of time. On 16 January 2017, a writ was filed by the SFC with Hong Kong's High Court in which UBS is named as one of six defendants from whom the SFC is seeking compensation in an unspecified amount for losses incurred by certain shareholders of China Forestry Holdings Company Limited, for whom UBS acted as a sponsor in connection with their 2009 listing application.

Note 21 Other liabilities

CHF million	31.12.16	31.12.15
Prime brokerage payables ¹	31,973	45,306
Amounts due under unit-linked investment contracts	9,286	15,718
Compensation-related liabilities	7,421	6,839
<i>of which: accrued expenses</i>	2,423	2,885
<i>of which: Deferred Contingent Capital Plan</i>	1,625	1,181
<i>of which: other deferred compensation plans</i>	2,107	2,038
<i>of which: net defined benefit pension and post-employment liabilities²</i>	1,266	736
Third-party interest in consolidated investment funds	701	536
Settlement and clearing accounts	1,012	894
Current and deferred tax liabilities ³	949	819
VAT and other tax payables	503	447
Deferred income	168	210
Accrued interest expenses	1,553	1,431
Other accrued expenses	2,448	2,500
Liabilities of disposal group held for sale ⁴	5,213	235
Other	793	718
Total other liabilities	62,020	75,652

¹ Prime brokerage services include clearance, settlement, custody, financing and portfolio reporting services for corporate clients trading across multiple asset classes. Prime brokerage payables are mainly comprised of client securities financing and deposits. ² Refer to Note 26 for more information. ³ Refer to Note 8 for more information. ⁴ Refer to Note 30 for more information.

Additional information

Note 22 Fair value measurement

This Note provides fair value measurement information for both financial and non-financial instruments and is structured as follows:

- a) Valuation principles
- b) Valuation governance
- c) Fair value hierarchy
- d) Valuation adjustments
- e) Transfers between Level 1 and Level 2
- f) Level 3 instruments: valuation techniques and inputs
- g) Level 3 instruments: sensitivity to changes in unobservable input assumptions
- h) Level 3 instruments: movements during the period
- i) Financial instruments not measured at fair value

a) Valuation principles

Fair value is defined as the price that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market (or most advantageous market, in the absence of a principal market) as of the measurement date. In measuring fair value, the Group uses various valuation approaches and applies a hierarchy for prices and inputs that maximizes the use of observable market data, if available.

All financial and non-financial assets and liabilities measured or disclosed at fair value are categorized into one of three fair value hierarchy levels. In certain cases, the inputs used to measure fair value may fall within different levels of the fair value hierarchy. For disclosure purposes, the level in the hierarchy within which the instrument is classified in its entirety is based on the lowest level input that is significant to the position's fair value measurement:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2 – valuation techniques for which all significant inputs are, or are based on, observable market data; or
- Level 3 – valuation techniques for which significant inputs are not based on observable market data.

If available, fair values are determined using quoted prices in active markets for identical assets or liabilities. An active market is one in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing data on an ongoing basis. Assets and liabilities that are quoted and traded in an active market are valued at the currently quoted price multiplied by the number of units of the instrument held.

Where the market for a financial instrument or non-financial asset or liability is not active, fair value is established using a valuation technique, including pricing models. Valuation techniques involve the use of estimates, the extent of which depends on the complexity of the instrument and the availability

of market-based data. Valuation adjustments may be made to allow for additional factors, including model, liquidity, credit and funding risks, which are not explicitly captured within the valuation technique, but which would nevertheless be considered by market participants when establishing a price. The limitations inherent in a particular valuation technique are considered in the determination of an asset or liability's classification within the fair value hierarchy.

Many cash instruments and over-the-counter (OTC) derivative contracts have bid and offer prices that can be observed in the marketplace. Bid prices reflect the highest price that a party is willing to pay for an asset. Offer prices represent the lowest price that a party is willing to accept for an asset. In general, long positions are measured at a bid price and short positions at an offer price, reflecting the prices at which the instruments could be transferred under normal market conditions. Offsetting positions in the same financial instrument are marked at the mid-price within the bid-offer spread.

Generally, the unit of account for a financial instrument is the individual instrument, and UBS applies valuation adjustments at an individual instrument level, consistent with that unit of account. However, if certain conditions are met, UBS may estimate the fair value of a portfolio of financial assets and liabilities with substantially similar and offsetting risk exposures on the basis of the net open risks.

For transactions where the valuation technique used to measure fair value requires significant inputs that are not based on observable market data, the financial instrument is initially recognized at the transaction price. This initial recognition amount may differ from the fair value obtained using the valuation technique. Any such difference is deferred and not recognized in the income statement and referred to as deferred day-1 profit or loss.

→ Refer to Note 22d for more information

Note 22 Fair value measurement (continued)

b) Valuation governance

UBS's fair value measurement and model governance framework includes numerous controls and other procedural safeguards that are intended to maximize the quality of fair value measurements reported in the financial statements. New products and valuation techniques must be reviewed and approved by key stakeholders from risk and finance control functions. Responsibility for the ongoing measurement of financial and non-financial instruments at fair value resides with the business divisions. In carrying out their valuation responsibilities, the businesses are required to consider the availability and quality of external market data and to provide justification and rationale for their fair value estimates.

Fair value estimates are validated by risk and finance control functions, which are independent of the business divisions.

Independent price verification is performed by finance through benchmarking the business divisions' fair value estimates with observable market prices and other independent sources. Controls and governance are in place to ensure the quality of third-party pricing sources where used. For instruments where valuation models are used to determine fair value, independent valuation and model control groups within finance and risk evaluate UBS's models on a regular basis, including valuation and model input parameters as well as pricing. As a result of the valuation controls employed, valuation adjustments may be made to the business divisions' estimates of fair value to align with independent market data and the relevant accounting standard.

→ **Refer to Note 22d for more information**

Note 22 Fair value measurement (continued)

c) Fair value hierarchy

The table below provides the fair value hierarchy classification of financial and non-financial assets and liabilities measured at fair value. The narrative that follows describes the different product types, valuation techniques used in measuring their fair value,

including significant valuation inputs and assumptions used, and the factors determining their classification within the fair value hierarchy.

Determination of fair values from quoted market prices or valuation techniques¹

CHF million	31.12.16				31.12.15			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets measured at fair value on a recurring basis								
Financial assets held for trading ²	76,044	14,292	1,689	92,025	96,388	21,934	2,070	120,393
of which:								
Government bills / bonds	10,500	1,319	0	11,820	12,911	3,277	5	16,193
Corporate and municipal bonds	58	6,638	591	7,287	232	8,096	698	9,026
Loans	0	1,356	681	2,037	0	1,769	816	2,585
Investment fund units	6,114	3,521	63	9,698	6,062	5,697	168	11,928
Asset-backed securities	0	470	215	685	0	958	201	1,159
Equity instruments	50,913	397	65	51,375	62,420	1,475	89	63,984
Financial assets for unit-linked investment contracts	8,459	591	74	9,123	14,764	663	93	15,519
Positive replacement values	434	155,428	2,549	158,411	545	164,025	2,865	167,435
of which:								
Interest rate contracts	8	57,703	278	57,988	1	74,443	88	74,531
Credit derivative contracts	0	2,562	1,313	3,875	0	5,384	1,272	6,656
Foreign exchange contracts	263	75,607	222	76,092	304	64,886	484	65,675
Equity / index contracts	1	17,274	729	18,003	2	15,938	996	16,936
Commodity contracts	0	2,269	8	2,277	0	3,363	25	3,388
Financial assets designated at fair value	39,641	23,632	2,079	65,353	170	2,675	3,301	6,146
of which:								
Government bills / bonds	39,439	4,361	0	43,799	4	0	0	4
Corporate and municipal bonds	15	16,860	0	16,875	0	0	0	0
Loans (including structured loans)	0	2,043	1,195	3,238	0	2,310	1,678	3,988
Structured reverse repurchase and securities borrowing agreements	0	40	644	684	0	40	1,510	1,550
Other	187	329	240	756	165	325	113	603
Financial assets available for sale	6,299	8,891	486	15,676	34,204	27,653	686	62,543
of which:								
Government bills / bonds	5,444	450	0	5,894	31,108	1,986	0	33,094
Corporate and municipal bonds	646	4,939	12	5,596	2,992	22,186	27	25,205
Investment fund units	0	51	126	177	0	64	139	202
Asset-backed securities	0	3,381	0	3,381	0	3,396	0	3,396
Equity instruments	204	71	336	611	103	21	517	641
Non-financial assets								
Precious metals and other physical commodities	4,583	0	0	4,583	3,670	0	0	3,670
Assets measured at fair value on a non-recurring basis								
Other assets ³	5,060	131	56	5,248	266	69	78	413
Total assets measured at fair value	132,062	202,377	6,860	341,298	135,242	216,362	9,001	360,605

Note 22 Fair value measurement (continued)

Determination of fair values from quoted market prices or valuation techniques (continued)¹

CHF million	31.12.16				31.12.15			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Liabilities measured at fair value on a recurring basis								
Trading portfolio liabilities	18,807	3,898	119	22,824	25,476	3,504	158	29,137
of which:								
Government bills / bonds	5,573	648	0	6,221	5,997	845	0	6,842
Corporate and municipal bonds	12	2,927	37	2,976	12	2,370	90	2,471
Investment fund units	484	91	20	595	666	52	20	738
Asset-backed securities	0	5	0	5	0	2	0	2
Equity instruments	12,738	227	62	13,026	18,802	235	47	19,084
Negative replacement values	539	149,255	4,016	153,810	640	158,494	3,296	162,430
of which:								
Interest rate contracts	12	51,990	475	52,476	2	67,225	326	67,553
Credit derivative contracts	0	3,269	1,538	4,807	0	5,350	1,303	6,653
Foreign exchange contracts	274	71,668	148	72,089	286	62,965	233	63,484
Equity / index contracts	1	20,254	1,854	22,109	1	19,722	1,433	21,156
Commodity contracts	0	2,040	1	2,041	0	3,222	0	3,222
Financial liabilities designated at fair value	2	44,007	11,008	55,017	1	52,321	10,673	62,995
of which:								
Issued debt instruments	0	40,242	9,688	49,930	0	47,197	9,337	56,534
Over-the-counter debt instruments	2	3,611	1,050	4,663	2	4,719	773	5,493
Structured repurchase agreements	0	130	266	395	0	293	556	849
Loan commitments and guarantees	0	25	5	29	0	113	7	119
Other liabilities – amounts due under unit-linked investment contracts	0	9,286	0	9,286	0	15,718	0	15,718
Liabilities measured at fair value on a non-recurring basis								
Other liabilities ³	0	5,213	0	5,213	0	235	0	235
Total liabilities measured at fair value	19,347	211,660	15,143	246,150	26,117	230,272	14,127	270,515

¹ Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. As of 31 December 2016, net bifurcated embedded derivative assets held at fair value, totaling CHF 50 million (of which CHF 58 million were net Level 2 assets and CHF 8 million net Level 2 liabilities), were recognized on the balance sheet within Due to customers and Debt issued. As of 31 December 2015, net bifurcated embedded derivative liabilities held at fair value, totaling CHF 130 million (of which CHF 106 million were net Level 2 assets and CHF 236 million net Level 2 liabilities), were recognized on the balance sheet within Debt issued. ² Financial assets held for trading do not include precious metals and other physical commodities. ³ Other assets and other liabilities primarily consist of assets held for sale as well as assets and liabilities of a disposal group held for sale, which are measured at the lower of their net carrying amount or fair value less costs to sell. Refer to Note 30 for more information.

Note 22 Fair value measurement (continued)

Valuation techniques

Valuation techniques are used to value positions for which a market price is not available from market sources. This includes certain less liquid debt and equity instruments, certain exchange-traded derivatives and all derivatives transacted in the OTC market. UBS uses widely recognized valuation techniques for determining the fair value of financial and non-financial instruments that are not actively traded and quoted. The most frequently applied valuation techniques include discounted value of expected cash flows, relative value and option pricing methodologies.

Discounted value of expected cash flows is a valuation technique that measures fair value using estimated expected future cash flows from assets or liabilities and then discounts these cash flows using a discount rate or discount margin that reflects the credit and / or funding spreads required by the market for instruments with similar risk and liquidity profiles to produce a present value. When using such valuation techniques, expected future cash flows are estimated using an observed or implied market price for the future cash flows or by using industry standard cash flow projection models. The discount factors within the calculation are generated using industry standard yield curve modeling techniques and models.

Relative value models measure fair value based on the market prices of equivalent or comparable assets or liabilities, making adjustments for differences between the characteristics of the observed instrument and the instrument being valued.

Option pricing models incorporate assumptions regarding the behavior of future price movements of an underlying referenced asset or assets to generate a probability-weighted future expected payoff for the option. The resulting probability-weighted expected payoff is then discounted using discount factors generated from industry standard yield curve modeling techniques and models. The option pricing model may be implemented using a closed-form analytical formula or other mathematical techniques (e.g., binomial tree or Monte Carlo simulation).

Where available, valuation techniques use market-observable assumptions and inputs. If such data is not available, inputs may be derived by reference to similar assets in active markets, from recent prices for comparable transactions or from other observable market data. In such cases, the inputs selected are based on historical experience and practice for similar or analogous instruments, derivation of input levels based on similar products with observable price levels and knowledge of current market conditions and valuation approaches.

For more complex instruments and instruments not traded in an active market, fair values may be estimated using a combination of observed transaction prices, consensus pricing services and relevant quotes. Consideration is given to the nature of the quotes (e.g., indicative or firm) and the relationship of recently evidenced market activity to the prices provided by

consensus pricing services. UBS also uses internally developed models, which are typically based on valuation methods and techniques recognized as standard within the industry.

Assumptions and inputs used in valuation techniques include benchmark interest rate curves, credit and funding spreads used in estimating discount rates, bond and equity prices, equity index prices, foreign exchange rates, levels of market volatility and correlation. Refer to Note 22f for more information. The discount curves used by the Group incorporate the funding and credit characteristics of the instruments to which they are applied.

Financial instruments excluding derivatives: product description, valuation and classification in the fair value hierarchy

Government bills and bonds

Product description: government bills and bonds include fixed-rate, floating-rate and inflation-linked bills and bonds issued by sovereign governments.

Valuation: these instruments are generally valued using prices obtained directly from the market. Instruments that cannot be priced directly using active market data are valued using discounted cash flow valuation techniques that incorporate market data for similar government instruments.

Fair value hierarchy: government bills and bonds are generally traded in active markets with prices that can be obtained directly from these markets, resulting in classification as Level 1, while the remaining positions are classified as Level 2.

Corporate and municipal bonds

Product description: corporate bonds include senior, junior and subordinated debt issued by corporate entities. Municipal bonds are issued by state and local governments. While most instruments are standard fixed- or floating-rate securities, some may have more complex coupon or embedded option features.

Valuation: corporate and municipal bonds are generally valued using prices obtained directly from the market for the security, or similar securities, adjusted for seniority, maturity and liquidity. When prices are not available, instruments are valued using discounted cash flow valuation techniques incorporating the credit spread of the issuer or similar issuers. For convertible bonds where no directly comparable price is available, issuances may be priced using a convertible bond model.

Fair value hierarchy: corporate and municipal bonds are generally classified as Level 1 or Level 2 depending on the depth of trading activity behind price sources. Level 3 instruments have no suitable pricing information available and also cannot be referenced to other securities issued by the same issuer. Therefore, such instruments are measured based on price levels for similar issuers adjusted for relative tenor and issuer quality.

Note 22 Fair value measurement (continued)

Traded loans and loans designated at fair value

Product description: these instruments include fixed-rate loans, corporate loans, recently originated commercial real estate loans and contingent lending transactions.

Valuation: loans are valued directly using market prices that reflect recent transactions or quoted dealer prices where available. Where no market price data are available, loans are valued using relative value benchmarking using pricing derived from debt instruments in comparable entities or different products in the same entity, or by using a credit default swap valuation technique, which requires inputs for credit spreads, credit recovery rates and interest rates. Recently originated commercial real estate loans are measured using a securitization approach based on rating agency guidelines. The valuation of the contingent lending transactions is dependent on actuarial mortality levels and actuarial life insurance policy lapse rates. Mortality and lapse rate assumptions are based on external actuarial estimations for large homogeneous pools, and contingencies are derived from a range relative to the actuarially expected amount.

Fair value hierarchy: instruments with suitably deep and liquid pricing information are classified as Level 2, while any positions requiring the use of valuation techniques, or for which the price sources have insufficient trading depth, are classified as Level 3.

Investment fund units

Product description: investment fund units are pools of assets, generally equity instruments and bonds, broken down to redeemable units.

Valuation: investment fund units are predominantly exchange-traded, with readily available quoted prices in liquid markets. Where market prices are not available, fair value may be measured using net asset values (NAV), taking into account any restrictions imposed upon redemption.

Fair value hierarchy: listed units are classified as Level 1, provided there is sufficient trading activity to justify active market classification, while other positions are classified as Level 2. Positions for which NAV is not available or which are not redeemable at the measurement date or shortly thereafter are classified as Level 3.

Asset-backed securities (ABS)

Product description: ABS include residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), other asset-backed securities (ABS) and collateralized debt obligations (CDO) and are instruments generally issued through the process of securitization of underlying interest-bearing assets.

Valuation: for liquid securities, the valuation process will use trade and price data, updated for movements in market levels between the time of trading and the time of valuation. Less liquid instruments are measured using discounted expected cash flows incorporating price data for instruments or indices with

similar risk profiles. Inputs to discounted expected cash flow techniques include asset prepayment rates, discount margin or discount yields, asset default rates and asset loss on default severity.

Fair value hierarchy: RMBS, CMBS and ABS are generally classified as Level 2. However, if significant inputs are unobservable, or if market or fundamental data are not available, they are classified as Level 3.

Equity instruments

Product description: equity instruments include stocks and shares, private equity positions and units held in hedge funds.

Valuation: listed equity instruments are generally valued using prices obtained directly from the market. Unlisted equity holdings, including private equity positions, are initially marked at their transaction price and are revalued when reliable evidence of price movement becomes available or when the position is deemed to be impaired. Fair value for units held in hedge funds is measured based on their published NAV, taking into account any restrictions imposed upon redemption.

Fair value hierarchy: the majority of equity securities are actively traded on public stock exchanges where quoted prices are readily and regularly available, resulting in Level 1 classification. Units held in hedge funds are classified as Level 2, except for positions for which published NAV is not available or which are not redeemable at the measurement date or shortly thereafter, in which case such positions are classified as Level 3.

Financial assets for unit-linked investment contracts

Product description: unit-linked investment contracts allow investors to invest in a pool of assets through issued investment units.

Valuation: the majority of assets are listed on exchanges and fair values are determined using quoted prices.

Fair value hierarchy: most assets are classified as Level 1 if actively traded, or Level 2 if trading is not active. However, instruments for which prices are not readily available are classified as Level 3.

Structured (reverse) repurchase agreements

Product description: structured (reverse) repurchase agreements are securities purchased under resale agreements and securities sold under repurchase agreements.

Valuation: these instruments are valued using discounted expected cash flow techniques. The discount rate applied is based on funding curves that are specific to the collateral eligibility terms for the contract in question.

Fair value hierarchy: collateral terms for these positions are not standard and therefore funding spread levels used for valuation purposes cannot be observed in the market. As a result, these positions are mostly classified as Level 3.

Note 22 Fair value measurement (continued)

Financial liabilities designated at fair value

Product description: debt instruments, primarily comprised of equity-, rates- and credit-linked issued notes, which are held at fair value under the fair value option. These instruments are tailored specifically to the holder's risk or investment appetite with structured coupons or payoffs.

Valuation: the risk management and the valuation approaches for these instruments are closely aligned with the equivalent derivatives business and the underlying risk, and the valuation techniques used for this component are the same as the relevant valuation techniques described below. For example, equity-linked notes should be referenced to equity / index contracts and credit-linked notes should be referenced to credit derivative contracts.

Fair value hierarchy: observability is closely aligned with the equivalent derivatives business and the underlying risk.

- Refer to Note 18 for more information on financial liabilities designated at fair value
- Refer to Note 22d for more information on own credit adjustments related to financial liabilities designated at fair value

Amounts due under unit-linked investment contracts

Product description: the financial liability represents the amounts due to unit holders.

Valuation: the fair values of investment contract liabilities are determined by reference to the fair value of the corresponding assets.

Fair value hierarchy: the liabilities themselves are not actively traded, but are mainly referenced to instruments that are actively traded and are therefore classified as Level 2.

Derivative instruments: product description, valuation and classification in the fair value hierarchy

The curves used for discounting expected cash flows in the valuation of collateralized derivatives reflect the funding terms associated with the relevant collateral arrangement for the instrument being valued. These collateral arrangements differ across counterparties with respect to the eligible currency and interest terms of the collateral. The majority of collateralized derivatives are measured using a discount curve that is based on funding rates derived from overnight interest in the cheapest eligible currency for the respective counterparty collateral agreement.

Uncollateralized and partially collateralized derivatives are discounted using the LIBOR (or equivalent) curve for the currency of the instrument. As described in Note 22d, the fair value of uncollateralized and partially collateralized derivatives is then adjusted by CVA, DVA and FVA as applicable, to reflect an estimation of the effect of counterparty credit risk, UBS's own credit risk and funding costs and benefits.

Interest rate contracts

Product description: interest rate swap contracts include interest rate swaps, basis swaps, cross-currency swaps, inflation swaps and interest rate forwards, often referred to as forward-rate agreements (FRA). Interest rate option contracts include caps and floors, swaptions, swaps with complex payoff profiles and other more complex interest rate options.

Valuation: interest rate swap contracts are valued by estimating future interest cash flows and discounting those cash flows using a rate that reflects the appropriate funding rate for the position being measured. The yield curves used to estimate future index levels and discount rates are generated using market standard yield curve models using interest rates associated with current market activity. The key inputs to the models are interest rate swap rates, FRA rates, short-term interest rate futures prices, basis swap spreads and inflation swap rates. Interest rate option contracts are valued using various market standard option models, using inputs that include interest rate yield curves, inflation curves, volatilities and correlations. The volatility and correlation inputs within the models are implied from market data based on market observed prices for standard option instruments trading within the market. Option models used to value more exotic products have a number of model parameter inputs that require calibration to enable the exotic model to price standard option instruments to the price levels observed in the market. When the maturity of the interest rate swap or option contract exceeds the term for which standard market quotes are observable for a significant input parameter, the contracts are valued by extrapolation from the last observable point using standard assumptions or by reference to another observable comparable input parameter to represent a suitable proxy for that portion of the term.

Fair value hierarchy: the majority of interest rate swaps are classified as Level 2 as the standard market contracts that form the inputs for yield curve models are generally traded in active and observable markets. Options are generally treated as Level 2 as the calibration process enables the model output to be validated to active market levels. Models calibrated in this way are then used to revalue the portfolio of both standard options as well as more exotic products. In most cases, there are active and observable markets for the standard market instruments that form the inputs for yield curve models as well as the financial instruments from which volatility and correlation inputs are derived. Exotic options for which appropriate volatility or correlation input levels cannot be implied from observable market data are classified as Level 3. Interest rate swap or option contracts are classified as Level 3 when the term exceeds standard market observable quotes.

Note 22 Fair value measurement (continued)

Credit derivative contracts

Product description: a credit derivative is a financial instrument that transfers credit risk related to a single underlying entity, a portfolio of underlying entities or a pool of securitized referenced assets. Credit derivative products include credit default swaps (CDS) on single names, indices, bespoke portfolios and securitized products, plus first to default swaps and certain total return swaps (TRS).

Valuation: credit derivative contracts are valued using industry standard models based primarily on market credit spreads, upfront pricing points and implied recovery rates. Where a derivative credit spread is not directly available it may be derived from the price of the reference cash bond. Correlation is an additional input for certain portfolio credit derivatives. Asset-backed credit derivatives are valued using a similar valuation technique to the underlying security with an adjustment to reflect the funding differences between cash and synthetic form. Inputs include prepayment rates, default rates, loss severity, discount margin / rate.

Fair value hierarchy classification: single entity and portfolio credit derivative contracts are classified as Level 2 when credit spreads, recovery rates and correlations are determined from actively traded observable market data. Where the underlying reference name(s) are not actively traded and the correlation cannot be directly mapped to actively traded tranche instruments, these contracts are classified as Level 3. Asset-backed credit derivatives follow the characteristics of the underlying security and are therefore distributed across Level 2 and Level 3.

Foreign exchange contracts

Product description: this includes open spot and forward foreign exchange (FX) contracts and OTC FX option contracts. OTC FX option contracts include standard call and put options, options with multiple exercise dates, path-dependent options, options with averaging features, options with discontinuous payoff characteristics, options on a number of underlying FX rates and multi-dimensional FX option contracts, which have a dependency on multiple FX pairs.

Valuation: open spot FX contracts are valued using the FX spot rate observed in the market. Forward FX contracts are valued using the FX spot rate adjusted for forward pricing points observed from standard market-based sources. OTC FX option contracts are valued using market standard option valuation models. The models used for shorter-dated options (i.e., maturities of five years or less) tend to be different than those used for longer-dated options because the models needed for longer-dated OTC FX contracts require additional consideration of interest rate and FX rate interdependency. Inputs to the option valuation models include spot FX rates, FX forward

points, FX volatilities, interest rate yield curves, interest rate volatilities and correlations. The inputs for volatility and correlation are implied through the calibration of observed prices for standard option contracts trading within the market. The valuation for multiple-dimensional FX options uses a multi-local volatility model, which is calibrated to the observed FX volatilities for all relevant FX pairs.

Fair value hierarchy: the markets for both FX spot and FX forward pricing points are both actively traded and observable and therefore such FX contracts are generally classified as Level 2. A significant proportion of OTC FX option contracts are classified as Level 2 as inputs are derived mostly from standard market contracts traded in active and observable markets. OTC FX option contracts classified as Level 3 include multiple-dimensional FX options and long-dated FX exotic option contracts where there is no active market from which to derive volatility or correlation inputs. The inputs used to value these OTC FX option contracts are calculated using consensus pricing services without an underlying principal market, historical asset prices or by extrapolation.

Equity / index contracts

Product description: equity / index contracts are equity forward contracts and equity option contracts. Equity option contracts include market standard single or basket stock or index call and put options as well as equity option contracts with more complex features.

Valuation: equity forward contracts have a single stock or index underlying and are valued using market standard models. The key inputs to the models are stock prices, estimated dividend rates and equity funding rates (which are implied from prices of forward contracts observed in the market). Estimated cash flows are then discounted using market standard discounted cash flow models using a rate that reflects the appropriate funding rate for that portion of the portfolio. When no market data is available for the instrument maturity, they are valued by extrapolation of available data, use of historical dividend data, or use of data for a related equity. Equity option contracts are valued using market standard models that estimate the equity forward level as described for equity forward contracts and incorporate inputs for stock volatility and for correlation between stocks within a basket. The probability-weighted expected option payoff generated is then discounted using market standard discounted cash flow models using a rate that reflects the appropriate funding rate for that portion of the portfolio. When volatility, forward or correlation inputs are not available, they are valued using extrapolation of available data, historical dividend, correlation or volatility data, or the equivalent data for a related equity.

Note 22 Fair value measurement (continued)

Fair value hierarchy: as inputs are derived mostly from standard market contracts traded in active and observable markets, a significant proportion of equity forward contracts are classified as Level 2. Equity option positions for which inputs are derived from standard market contracts traded in active and observable markets are also classified as Level 2. Level 3 positions are those for which volatility, forward or correlation inputs are not observable.

Commodity contracts

Product description: commodity derivative contracts include forward, swap and option contracts on individual commodities and on commodity indices.

Valuation: commodity forward and swap contracts are measured using market standard models that use market

forward levels on standard instruments. Commodity option contracts are measured using market standard option models that estimate the commodity forward level as described for commodity forward and swap contracts, incorporating inputs for the volatility of the underlying index or commodity. For commodity options on baskets of commodities or bespoke commodity indices, the valuation technique also incorporates inputs for the correlation between different commodities or commodity indices.

Fair value hierarchy: individual commodity contracts are typically classified as Level 2 because active forward and volatility market data are available.

→ Refer to Note 12 for more information on derivative instruments

d) Valuation adjustments

The output of a valuation technique is always an estimate of a fair value that cannot be measured with complete certainty. As a result, valuations are adjusted, where appropriate and when such factors would be considered by market participants in estimating fair value, to reflect close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors. Valuation adjustments are an important component of fair value for assets and liabilities that are measured using valuation techniques. Such adjustments are applied to reflect uncertainties within the fair value measurement process, to adjust for an identified model simplification or to incorporate an aspect of fair value that requires an overall portfolio assessment rather than an evaluation based on an individual instrument level characteristic.

Day-1 reserves

For new transactions where the valuation technique used to measure fair value requires significant inputs that are not based on observable market data, the financial instrument is initially

recognized at the transaction price. The transaction price may differ from the fair value obtained using a valuation technique where any such difference is deferred and not initially recognized in the income statement. These day-1 profit or loss reserves are reflected, where appropriate, as valuation adjustments.

The table below summarizes the changes in deferred day-1 profit or loss reserves during the respective period.

Deferred day-1 profit or loss related to financial instruments other than financial assets available for sale is released into *Net trading income* when pricing of equivalent products or the underlying parameters become observable or when the transaction is closed out.

Deferred day-1 profit or loss related to financial assets available for sale is released into *Other comprehensive income* when pricing of equivalent products or the underlying parameters become observable and is released into *Other income* when the assets are sold.

Deferred day-1 profit or loss

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Balance at the beginning of the year	421	480	486
Profit / (loss) deferred on new transactions	254	268	344
(Profit) / loss recognized in the income statement	(290)	(321)	(384)
(Profit) / loss recognized in other comprehensive income	(23)		
Foreign currency translation	9	(6)	35
Balance at the end of the year	371	421	480

Note 22 Fair value measurement (continued)

Own credit

In addition to considering the valuation of the derivative risk component, the valuation of financial liabilities designated at fair value also requires consideration of the funded component and specifically the own credit component of fair value. Own credit risk is reflected in the valuation of UBS's fair value option liabilities where this component is considered relevant for valuation purposes by UBS's counterparties and other market participants. However, own credit risk is not reflected in the valuation of UBS's liabilities that are fully collateralized or for other obligations for which it is established market practice not to include an own credit component.

The own credit presentation requirements of IFRS 9, *Financial Instruments*, were adopted as of 1 January 2016. From this date onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained Earnings*. As the Group does not hedge changes in own credit arising on financial liabilities designated at fair value, presenting own credit within *Other comprehensive income* does not create or increase an accounting mismatch in the income statement. The unrealized and any realized own

credit recognized in *Other comprehensive income* will not be reclassified to the income statement in future periods. Comparative period information was not restated.

Own credit is estimated using an own credit adjustment curve (OCA), which incorporates observable market data, including market-observed secondary prices for UBS senior debt, UBS credit default swap (CDS) spreads and senior debt curves of peers. The table below summarizes the effects of own credit adjustments related to financial liabilities designated at fair value. The change in unrealized own credit for the period ended consists of changes in fair value that are attributable to the change in UBS's credit spreads, as well as the effect of changes in fair values attributable to factors other than credit spreads, such as redemptions, effects from time decay and changes in interest and other market rates. Realized own credit is recognized when an instrument with an associated unrealized own credit adjustment is repurchased prior to the contractual maturity date. Life-to-date amounts reflect the cumulative unrealized change since initial recognition.

→ Refer to Note 18 for more information on financial liabilities designated at fair value

Own credit adjustments on financial liabilities designated at fair value

	For the year ended		
	Included in Other comprehensive income	Included in Net trading income	
CHF million	31.12.16	31.12.15	31.12.14
Recognized during the year:			
Realized gain / (loss)	18		
Unrealized gain / (loss)	(138)	553	292
Total gain / (loss), before tax	(120)		
		As of	
CHF million	31.12.16	31.12.15	31.12.14
Recognized on the balance sheet as of the end of the year:			
Unrealized life-to-date gain / (loss)	141	287	(302)

Note 22 Fair value measurement (continued)

Credit valuation adjustments

In order to measure the fair value of OTC derivative instruments, including funded derivative instruments which are classified as *Financial assets designated at fair value*, credit valuation adjustments (CVA) are necessary to reflect the credit risk of the counterparty inherent in these instruments. This amount represents the estimated fair value of protection required to hedge the counterparty credit risk of such instruments. A CVA is determined for each counterparty, considering all exposures to that counterparty, and is dependent on the expected future value of exposures, default probabilities and recovery rates, applicable collateral or netting arrangements, break clauses and other contractual factors.

Funding valuation adjustments

Funding valuation adjustments (FVA) reflect the costs and benefits of funding associated with uncollateralized and partially collateralized derivative receivables and payables and are calculated as the valuation effect from moving the discounting of the uncollateralized derivative cash flows from LIBOR to OCA using the CVA framework.

An FVA is also applied to collateralized derivative assets in cases where the collateral cannot be sold or repledged.

Debit valuation adjustments

A debit valuation adjustment (DVA) is estimated to incorporate own credit in the valuation of derivatives, effectively consistent with the CVA framework. DVA is determined for each counterparty, considering all exposures with that counterparty

and taking into account collateral netting agreements, expected future mark-to-market movements and UBS's credit default spreads.

Other valuation adjustments

Instruments that are measured as part of a portfolio of combined long and short positions are valued at mid-market levels to ensure consistent valuation of the long and short component risks. A liquidity valuation adjustment is then made to the overall net long or short exposure to move the fair value to bid or offer as appropriate, reflecting current levels of market liquidity. The bid-offer spreads used in the calculation of this valuation adjustment are obtained from market transactions and other relevant sources and are updated periodically.

Uncertainties associated with the use of model-based valuations are incorporated into the measurement of fair value through the use of model reserves. These reserves reflect the amounts that the Group estimates should be deducted from valuations produced directly by models to incorporate uncertainties in the relevant modeling assumptions, in the model and market inputs used, or in the calibration of the model output to adjust for known model deficiencies. In arriving at these estimates, the Group considers a range of market practices, including how it believes market participants would assess these uncertainties. Model reserves are reassessed periodically in light of data from market transactions, consensus pricing services and other relevant sources.

Valuation adjustments on financial instruments

	As of	
<i>Life-to-date gain / (loss), CHF million</i>	31.12.16	31.12.15
Credit valuation adjustments¹	(216)	(309)
Funding valuation adjustments	(106)	(160)
Debit valuation adjustments	5	47
Other valuation adjustments	(713)	(810)
<i>of which: liquidity</i>	(439)	(491)
<i>of which: model uncertainty</i>	(274)	(319)

¹ Amounts do not include reserves against defaulted counterparties.

Note 22 Fair value measurement (continued)

e) Transfers between Level 1 and Level 2

The amounts provided below reflect transfers between Level 1 and Level 2 for instruments that were held for the entire reporting period.

Assets totaling approximately CHF 0.2 billion, which were mainly comprised of financial assets held for trading, and liabilities totaling approximately CHF 0.1 billion, which were primarily comprised of financial liabilities held for trading, were transferred from Level 2 to Level 1 during 2016, generally due to increased levels of trading activity observed within the market.

Assets totaling approximately CHF 0.4 billion, which were mainly comprised of financial assets available for sale, largely corporate and municipal bonds, and financial assets held for trading, predominantly equity instruments and corporate and municipal bonds, were transferred from Level 1 to Level 2 during 2016, generally due to diminished levels of trading activity observed within the market. Transfers of financial liabilities from Level 1 to Level 2 during 2016 were not significant.

f) Level 3 instruments: valuation techniques and inputs

The table below presents material Level 3 assets and liabilities together with the valuation techniques used to measure fair value, the significant inputs used in the valuation technique that are considered unobservable and a range of values for those unobservable inputs.

The range of values represents the highest and lowest level input used in the valuation techniques. Therefore, the range does not reflect the level of uncertainty regarding a particular

input, but rather the different underlying characteristics of the relevant assets and liabilities. The ranges will therefore vary from period to period and parameter to parameter based on characteristics of the instruments held at each balance sheet date. Further, the ranges of unobservable inputs may differ across other financial institutions due to the diversity of the products in each firm's inventory.

Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities

CHF billion	Fair value				Valuation technique(s)	Significant unobservable input(s) ¹	Range of inputs						unit ¹
	Assets		Liabilities				31.12.16			31.12.15			
	31.12.16	31.12.15	31.12.16	31.12.15			low	high	weighted average ²	low	high	weighted average ²	
Financial assets held for trading / Trading portfolio liabilities, Financial assets / liabilities designated at fair value and Financial assets available for sale													
Corporate and municipal bonds	0.6	0.7	0.0	0.1	Relative value to market comparable	Bond price equivalent	0	128	88	0	134	94	points
Traded loans, loans designated at fair value, loan commitments and guarantees	2.0	2.6	0.0	0.0	Relative value to market comparable	Loan price equivalent	39	103	94	65	100	93	points
					Discounted expected cash flows	Credit spread	71	554		30	252		basis points
					Market comparable and securitization model	Discount margin	0	16	2	1	14	2	%
Equity instruments ³	0.4	0.6	0.1	0.0	Relative value to market comparable	Price							
Structured (reverse) repurchase agreements	0.6	1.5	0.3	0.6	Discounted expected cash flows	Funding spread	15	195		18	183		basis points
Issued and OTC debt instruments ⁴			10.7	10.1									

Note 22 Fair value measurement (continued)

Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities (continued)

CHF billion	Fair value				Valuation technique(s)	Significant unobservable input(s) ¹	Range of inputs						
	Assets		Liabilities				31.12.16			31.12.15			
	31.12.16	31.12.15	31.12.16	31.12.15			low	high	weighted average ²	low	high	weighted average ²	unit ¹
Replacement values													
Interest rate contracts	0.3	0.1	0.5	0.3	Option model	Volatility of interest rates	26	176		16	130		%
						Rate-to-rate correlation	84	94		84	94		%
						Intra-curve correlation	36	94		36	94		%
					Discounted expected cash flows	Constant prepayment rate ⁵				0	3		%
					Discounted expected cash flow based on modeled defaults and recoveries	Credit spreads	0	791		1	1,163		basis points
Credit derivative contracts	1.3	1.3	1.5	1.3		Upfront price points	1	13		8	25		%
						Recovery rates	0	50		0	95		%
						Credit index correlation	10	85		10	85		%
						Discount margin	(1)	68		1	72		%
						Credit pair correlation	59	100		57	94		%
					Discounted cash flow projection on underlying bond	Constant prepayment rate	1	15		0	15		%
						Constant default rate	1	8		0	9		%
						Loss severity	40	100		0	100		%
						Discount margin	0	11		1	15		%
						Bond price equivalent	3	100		0	104		points
Equity / index contracts	0.7	1.0	1.9	1.4	Option model	Equity dividend yields	0	15		0	57		%
						Volatility of equity stocks, equity and other indices	0	150		0	143		%
						Equity-to-FX correlation	(45)	82		(44)	82		%
						Equity-to-equity correlation	12	98		3	99		%

¹ The ranges of significant unobservable inputs are represented in points, percentages and basis points. Points are a percentage of par. For example, 100 points would be 100% of par. ² Weighted averages are provided for non-derivative financial instruments and were calculated by weighting inputs based on the fair values of the respective instruments. Weighted averages are not provided for inputs related to derivative contracts as this would not be meaningful. ³ The range of inputs is not disclosed due to the dispersion of possible values given the diverse nature of the investments. ⁴ Valuation techniques, significant unobservable inputs and the respective input ranges for issued debt instruments and OTC debt instruments are the same as the equivalent derivative or structured financing instruments presented elsewhere in this table. ⁵ The range of inputs is not disclosed as of 31 December 2016 because this unobservable input parameter was not significant to the respective valuation technique as of that date.

Note 22 Fair value measurement (continued)

Significant unobservable inputs in Level 3 positions

This section discusses the significant unobservable inputs used in the valuation of Level 3 instruments and assesses the potential effect that a change in each unobservable input in isolation may have on a fair value measurement, including information to facilitate an understanding of factors that give rise to the input ranges shown. Relationships between observable and unobservable inputs have not been included in the summary below.

Bond price equivalent

Where market prices are not available for a bond, fair value is measured by comparison with observable pricing data from similar instruments. Factors considered when selecting comparable instruments include credit quality, maturity and industry of the issuer. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield (either as an outright yield or as a spread to LIBOR). Bond prices are expressed as points of the nominal, where 100 represents a fair value equal to the nominal value (i.e., par).

For corporate and municipal bonds, the range represents the range of prices from reference issuances used in determining fair value. Bonds priced at 0 are distressed to the point that no recovery is expected, while prices significantly in excess of 100 or par relate to inflation-linked or structured issuances that pay a coupon in excess of the market benchmark as of the measurement date.

For credit derivatives, the bond price range represents the range of prices used for reference instruments that are typically converted to an equivalent yield or credit spread as part of the valuation process.

Loan price equivalent

Where market prices are not available for a traded loan, fair value is measured by comparison with observable pricing data for similar instruments. Factors considered when selecting comparable instruments include industry segment, collateral quality, maturity and issuer-specific covenants. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield. The range represents the range of prices derived from reference issuances of a similar credit quality used in measuring fair value for loans classified as Level 3. Loans priced at 0 are distressed to the point that no recovery is expected, while a current price of 100 represents a loan that is expected to be repaid in full.

Credit spread

Valuation models for many credit derivatives require an input for the credit spread, which is a reflection of the credit quality of the associated referenced underlying. The credit spread of a particular security is quoted in relation to the yield on a

benchmark security or reference rate, typically either US Treasury or LIBOR, and is generally expressed in terms of basis points. An increase / (decrease) in credit spread will increase / (decrease) the value of credit protection offered by CDS and other credit derivative products. The income statement effect from such changes depends on the nature and direction of the positions held. Credit spreads may be negative where the asset is more creditworthy than the benchmark against which the spread is calculated. A wider credit spread represents decreasing creditworthiness. The ranges represents a diverse set of underlyings, with the lower end of the range representing credits of the highest quality (e.g., approximating the risk of LIBOR) and the upper end of the range representing greater levels of credit risk.

Discount margin (DM)

The DM spread represents the discount rates used to present value cash flows of an asset to reflect the market return required for uncertainty in the estimated cash flows. DM spreads are a rate or rates applied on top of a floating index (e.g., LIBOR) to discount expected cash flows. Generally, a decrease / (increase) in the unobservable input in isolation would result in a significantly higher / (lower) fair value.

The different ranges represent the different discount rates across loans and credit derivatives. The high end of the range relates to securities that are priced very low within the market relative to the expected cash flow schedule. This indicates that the market is pricing an increased risk of credit loss into the security that is greater than what is being captured by the expected cash flow generation process. The low ends of the ranges are typical of funding rates on better quality instruments.

Funding spread

Structured financing transactions are valued using synthetic funding curves that best represent the assets that are pledged as collateral for the transactions. They are not representative of where UBS can fund itself on an unsecured basis, but provide an estimate of where UBS can source and deploy secured funding with counterparties for a given type of collateral. The funding spreads are expressed in terms of basis points over or under LIBOR, and if funding spreads widen, this increases the effect of discounting.

A small proportion of structured debt instruments and non-structured fixed-rate bonds within financial liabilities designated at fair value had an exposure to funding spreads that was longer in duration than the actively traded market.

Note 22 Fair value measurement (continued)

Volatility

Volatility measures the variability of future prices for a particular instrument and is generally expressed as a percentage, where a higher number reflects a more volatile instrument for which future price movements are more likely to occur. The minimum level of volatility is 0% and there is no theoretical maximum. Volatility is a key input into option models, where it is used to derive a probability-based distribution of future prices for the underlying instrument. The effect of volatility on individual positions within the portfolio is driven primarily by whether the option contract is a long or short position. In most cases, the fair value of an option increases as a result of an increase in volatility and is reduced by a decrease in volatility. Generally, volatility used in the measurement of fair value is derived from active market option prices (referred to as implied volatility). A key feature of implied volatility is the volatility “smile” or “skew,” which represents the effect of pricing options of different option strikes at different implied volatility levels.

Correlation

Correlation measures the inter-relationship between the movements of two variables. It is expressed as a percentage between –100% and +100%, where +100% represents perfectly correlated variables (meaning a movement of one variable is associated with a movement of the other variable in the same direction), and –100% implies the variables are inversely correlated (meaning a movement of one variable is associated with a movement of the other variable in the opposite direction). The effect of correlation on the measurement of fair value depends on the specific terms of the instruments being valued, due to the range of different payoff features within such instruments.

Rate-to-rate correlation is the correlation between interest rates of two separate currencies. Intra-curve correlation represents the correlation between different tenor points of the same yield curve. Credit index correlation reflects the implied correlation derived from different indices across different parts of the benchmark index capital structure. The input is particularly important for bespoke index tranches. Credit pair correlation is particularly important for first to default credit structures. Equity-to-FX correlation is important for equity options based on a currency different than the currency of the underlying stock. Equity-to-equity correlation is particularly important for complex options that incorporate, in some manner, different equities in the projected payoff. The closer the correlation is to 100%, the more related one equity is to another. For example, equities with a very high correlation could be from different parts of the same corporate structure.

Constant prepayment rate

A prepayment rate represents the amount of unscheduled principal repayment for a pool of loans. The prepayment estimate is based on a number of factors, such as historical prepayment rates for repaid and existing loans with similar characteristics and the future economic outlook, considering factors including, but not limited to, future interest rates. In general, a significant increase / (decrease) in this unobservable input in isolation would result in a significantly higher / (lower) fair value for bonds trading at a discount. For bonds trading at a premium the reverse would apply, with a decrease in fair value when the constant prepayment rate increases. However, in certain cases the effect of a change in prepayment speed on instrument price is more complicated and depends on both the precise terms of the securitization and the position of the instrument within the securitization capital structure.

The range represents the input assumption for credit derivatives on asset-backed securities. Securities with an input of 0% typically reflect no current prepayment behavior with respect to the underlying collateral, and with no expectation of this changing in the immediate future, while the high range relates to securities that are currently experiencing high prepayments. Different classes of asset-backed securities typically show different ranges of prepayment characteristics depending on a combination of factors, including the borrowers’ ability to refinance, prevailing refinancing rates, and the quality or characteristics of the underlying loan collateral pools.

Upfront price points

These are a component in the price quotation of credit derivative contracts, whereby the overall fair value price level is split between the credit spread and a component that is quoted and settled upfront on transacting a new contract. This latter component is referred to as upfront price points and represents the difference between the credit spread paid as protection premium on a current contract versus a small number of standard contracts defined by the market. Distressed credit names frequently trade and quote CDS protection only in upfront points rather than as a running credit spread. An increase / (decrease) in upfront points will increase / (decrease) the value of credit protection offered by CDS and other credit derivative products. The effect of increases or decreases in upfront price points depends on the nature and direction of the positions held. Upfront price points may be negative where a contract is quoting for a narrower premium than the market standard, but are generally positive, reflecting an increase in credit premium required by the market as creditworthiness deteriorates.

Note 22 Fair value measurement (continued)

Loss severity / recovery rate

The projected loss severity / recovery rate reflects the estimated loss that will be realized given expected defaults. Loss severity is generally applied to collateral within asset-backed securities while the recovery rate is the analogous pricing input for corporate or sovereign credits. Recovery is the reverse of loss severity, so a 100% recovery rate is the equivalent of a 0% loss severity. Increases in loss severity levels / decreases in recovery rates will result in lower expected cash flows into the structure upon the default of the instruments. In general, a significant decrease / (increase) in the loss severity in isolation would result in significantly higher / (lower) fair value for the respective asset-backed securities. The effect of a change in recovery rate on a credit derivative position will depend on whether credit protection has been bought or sold.

Loss severity is ultimately driven by the value recoverable from collateral held after foreclosure occurs relative to the loan principal and possibly unpaid interest accrued at that point. For credit derivatives, the loss severity range applies to derivatives on asset-backed securities. The recovery rate range represents the range of expected recovery levels on credit derivative contracts within the Level 3 portfolio.

The volatility of interest rates reflects the range of unobservable volatilities across different currencies and related underlying interest rate levels. Volatilities of low interest rates tend to be much higher than volatilities of high interest rates. In addition, different currencies may have significantly different implied volatilities. The volatility of equity stocks, equity and other indices reflects the range of underlying stock volatilities.

Constant default rate (CDR)

The CDR represents the percentage of outstanding principal balances in the pool that are projected to default and liquidate and is the annualized rate of default for a group of mortgages or loans. The CDR estimate is based on a number of factors, such as collateral delinquency rates in the pool and the future economic outlook. In general, a significant increase / (decrease) in this unobservable input in isolation would result in significantly lower / (higher) cash flows for the deal (and thus lower / (higher) valuations). However, different instruments within the capital structure can react differently to changes in the CDR. Generally, subordinated bonds will decrease in value as CDR increases, but for well protected senior bonds an increase in CDR may cause an increase in price. In addition, the presence of a guarantor wrap on the collateral pool of a security may result in notes at the junior end of the capital structure experiencing a price increase with an increase in the default rate.

The range represents the expected default percentage across the individual instruments' underlying collateral pools.

Equity dividend yields

The derivation of a forward price for an individual stock or index is important for measuring fair value for forward or swap contracts and for measuring fair value using option pricing models. The relationship between the current stock price and the forward price is based on a combination of expected future dividend levels and payment timings, and, to a lesser extent, the relevant funding rates applicable to the stock in question. Dividend yields are generally expressed as an annualized percentage of the share price with the lowest limit of 0% representing a stock that is not expected to pay any dividend. The dividend yield and timing represents the most significant parameter in determining fair value for instruments that are sensitive to an equity forward price.

Note 22 Fair value measurement (continued)

g) Level 3 instruments: sensitivity to changes in unobservable input assumptions

The table below summarizes those financial assets and liabilities classified as Level 3 for which a change in one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly, and the estimated effect thereof.

The table shown presents the favorable and unfavorable effects for each class of financial assets and liabilities for which the potential change in fair value is considered significant. The sensitivity data presented represent an estimation of valuation uncertainty based on reasonably possible alternative values for Level 3 inputs at the balance sheet date and do not represent the estimated effect of stress scenarios. Typically, these financial assets and liabilities are sensitive to a combination of inputs from Levels 1–3. Although well-defined interdependencies may exist between Levels 1–2 and Level 3 parameters (e.g., between interest rates, which are generally Level 1 or Level 2, and prepayments, which are generally Level 3), these have not been incorporated in the table. Further, direct inter-relationships between the Level 3 parameters discussed below are not a significant element of the valuation uncertainty.

Sensitivity data are estimated using a number of techniques, including the estimation of price dispersion among different market participants, variation in modeling approaches and

reasonably possible changes to assumptions used within the fair value measurement process. The sensitivity ranges are not always symmetrical around the fair values as the inputs used in valuations are not always precisely in the middle of the favorable and unfavorable range.

Sensitivity data are determined at a product or parameter level and then aggregated assuming no diversification benefit. The calculated sensitivity is applied to both the outright position and any related Level 3 hedge. The main interdependencies across different Level 3 products to a single unobservable input parameter have been included in the basis of netting exposures within the calculation. Aggregation without allowing for diversification involves the simple summation of individual results with the total sensitivity, therefore representing the effect of all unobservable inputs which, if moved to a reasonably possible favorable or unfavorable level at the same time, would result in a significant change in the valuation. Diversification would incorporate estimated correlations across different sensitivity results and, as such, would result in an overall sensitivity that would be less than the sum of the individual component sensitivities. The Group believes that, while there are diversification benefits within the portfolios representing these sensitivity numbers, they are not significant to this analysis.

Sensitivity of fair value measurements to changes in unobservable input assumptions

	31.12.16		31.12.15	
	Favorable changes ¹	Unfavorable changes ¹	Favorable changes ¹	Unfavorable changes ¹
<i>CHF million</i>				
Corporate and municipal bonds	34	(39)	24	(25)
Traded loans, loans designated at fair value, loan commitments and guarantees	82	(10)	88	(28)
Equity instruments	67	(47)	166	(74)
Interest rate derivative contracts, net	41	(42)	107	(67)
Credit derivative contracts, net	131	(183)	174	(196)
Foreign exchange derivative contracts, net	17	(8)	33	(28)
Equity / index derivative contracts, net	63	(63)	61	(57)
Issued debt instruments	96	(93)	136	(146)
Other	29	(31)	20	(20)
Total	560	(517)	809	(640)

¹ Of the total favorable changes, CHF 75 million as of 31 December 2016 (31 December 2015: CHF 164 million) related to financial assets available for sale. Of the total unfavorable changes, CHF 55 million as of 31 December 2016 (31 December 2015: CHF 71 million) related to financial assets available for sale.

Note 22 Fair value measurement (continued)

h) Level 3 instruments: movements during the period

Significant changes in Level 3 instruments

The table on the following pages presents additional information about Level 3 assets and liabilities measured at fair value on a recurring basis. Level 3 assets and liabilities may be hedged with instruments classified as Level 1 or Level 2 in the fair value hierarchy and, as a result, realized and unrealized gains and losses included in the table may not include the effect of related hedging activity. Furthermore, the realized and unrealized gains and losses presented within the table are not limited solely to those arising from Level 3 inputs, as valuations are generally derived from both observable and unobservable parameters.

Assets and liabilities transferred into or out of Level 3 are presented as if those assets or liabilities had been transferred at the beginning of the year.

Assets transferred into and out of Level 3 totaled CHF 3.5 billion and CHF 0.8 billion, respectively. Transfers into Level 3 were primarily comprised of traded loans and interest rate

contracts, due to decreased observability of the respective credit spread and rates volatility inputs. Transfers out of Level 3 were primarily comprised of traded loans and equity / index contracts, reflecting increased observability of the respective credit spread and equity volatility inputs.

Liabilities transferred into and out of Level 3 totaled CHF 2.2 billion and CHF 3.5 billion, respectively. Transfers into Level 3 were primarily comprised of equity-linked issued debt instruments and interest rate contracts, due to decreased observability of the respective equity and rates volatility inputs used to determine the fair value of the options embedded in these structures. Transfers out of Level 3 were primarily comprised of equity-linked issued debt instruments and fixed-rate issued debt instruments resulting from changes in the availability of the observable equity and rates volatility inputs used to determine the fair value of the options embedded in these structures.

Note 22 Fair value measurement (continued)

Movements of Level 3 instruments

CHF billion	Balance as of 31 December 2014	Total gains / losses included in comprehensive income			Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation
		Net interest income, net trading income and other income	of which: related to Level 3 instruments held at the end of the reporting period	Other compreh ensive income							
Financial assets held for trading	3.5	(0.2)	(0.4)		0.7	(7.6)	5.4	0.0	0.9	(0.5)	(0.1)
of which:											
Corporate and municipal bonds	1.4	0.0	0.0		0.5	(1.0)	0.0	0.0	0.1	(0.1)	(0.1)
Loans	1.1	(0.1)	(0.3)		0.1	(5.5)	5.4	0.0	0.2	(0.3)	0.0
Asset-backed securities	0.6	0.0	0.0		0.1	(0.6)	0.0	0.0	0.2	(0.1)	0.0
Other	0.5	(0.1)	(0.1)		0.1	(0.5)	0.0	0.0	0.4	0.0	0.0
Financial assets designated at fair value	3.5	0.0	0.0		0.0	0.0	0.8	(1.3)	0.8	(0.4)	(0.1)
of which:											
Loans (including structured loans)	1.0	(0.1)	(0.1)		0.0	0.0	0.7	(0.2)	0.8	(0.4)	0.0
Structured reverse repurchase and securities borrowing agreements	2.4	0.1	0.1		0.0	0.0	0.1	(1.0)	0.0	0.0	(0.1)
Other	0.1	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial assets available for sale	0.6	0.0	0.0	0.0	0.1	(0.1)	0.0	0.0	0.0	0.0	0.0
Positive replacement values	4.4	(0.4)	(0.1)		0.0	(0.1)	1.7	(2.9)	0.7	(0.5)	(0.1)
of which:											
Credit derivative contracts	1.7	(0.1)	0.2		0.0	0.0	0.9	(1.1)	0.1	(0.1)	(0.1)
Foreign exchange contracts	0.6	(0.1)	0.0		0.0	0.0	0.1	(0.1)	0.0	0.0	0.0
Equity / index contracts	1.9	0.0	(0.3)		0.0	(0.1)	0.7	(1.4)	0.2	(0.3)	0.0
Other	0.3	(0.1)	(0.1)		0.0	0.0	0.0	(0.3)	0.4	(0.1)	0.0
Negative replacement values	5.0	(0.4)	0.0		0.0	0.0	1.0	(2.2)	0.5	(0.5)	(0.1)
of which:											
Credit derivative contracts	1.7	0.3	0.6		0.0	0.0	0.0	(0.9)	0.3	(0.1)	0.0
Foreign exchange contracts	0.3	0.0	(0.1)		0.0	0.0	0.0	(0.1)	0.0	0.0	0.0
Equity / index contracts	2.4	(0.4)	(0.5)		0.0	0.0	0.9	(1.2)	0.1	(0.4)	(0.1)
Other	0.6	(0.2)	(0.1)		0.0	0.0	0.1	0.0	0.1	0.0	(0.1)
Financial liabilities designated at fair value	11.9	0.6	0.0		0.0	0.0	6.1	(6.7)	1.3	(2.2)	(0.3)
of which:											
Issued debt instruments	9.5	0.4	0.1		0.0	0.0	4.9	(4.4)	1.3	(2.2)	(0.2)
Over-the-counter debt instruments	1.5	0.2	(0.1)		0.0	0.0	1.2	(2.0)	0.0	0.0	(0.1)
Structured repurchase agreements	0.9	0.0	0.0		0.0	0.0	0.0	(0.3)	0.0	0.0	0.0

1 Total Level 3 assets as of 31 December 2016 were CHF 6.9 billion (31 December 2015: CHF 9.0 billion). Total Level 3 liabilities as of 31 December 2016 were CHF 15.1 billion (31 December 2015: CHF 14.1 billion).

Balance as of 31 December 2015	Total gains / losses included in comprehensive income			Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation	Balance as of 31 December 2016 ¹
	Net interest income, net trading income and other income	<i>of which: related to Level 3 instruments held at the end of the reporting period</i>	Other compreh ensive income								
2.1	0.1	0.0		0.9	(6.8)	4.1	0.0	1.7	(0.3)	(0.1)	1.7
0.7	0.2	0.1		0.6	(0.8)	0.0	0.0	0.1	(0.1)	(0.1)	0.6
0.8	(0.1)	(0.1)		0.1	(5.2)	4.1	0.0	1.1	(0.2)	0.0	0.7
0.2	0.0	0.0		0.0	(0.1)	0.0	0.0	0.2	0.0	0.0	0.2
0.4	0.0	0.0		0.2	(0.7)	0.0	0.0	0.4	0.0	0.0	0.2
3.3	(0.4)	(0.1)		0.1	0.0	0.7	(1.9)	0.5	(0.1)	0.0	2.1
1.7	(0.4)	(0.1)		0.0	0.0	0.6	(1.0)	0.4	(0.1)	0.0	1.2
1.5	0.0	0.0		0.0	0.0	0.0	(0.9)	0.0	0.0	0.0	0.6
0.1	0.0	0.0		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
0.7	0.0	0.0	0.0	0.1	(0.1)	0.0	0.0	0.0	(0.1)	0.0	0.5
2.9	(0.4)	(0.5)		0.0	0.0	1.0	(1.9)	1.3	(0.4)	0.0	2.5
1.3	(0.2)	(0.1)		0.0	0.0	0.6	(0.7)	0.4	(0.1)	0.0	1.3
0.5	0.0	0.0		0.0	0.0	0.1	(0.2)	0.0	(0.1)	0.0	0.2
1.0	(0.1)	0.0		0.0	0.0	0.4	(0.6)	0.2	(0.2)	0.0	0.7
0.1	(0.1)	(0.2)		0.0	0.0	0.0	(0.4)	0.7	0.0	0.0	0.3
3.3	0.6	0.5		0.0	0.0	1.5	(2.1)	1.2	(0.6)	0.0	4.0
1.3	0.5	0.6		0.0	0.0	0.2	(0.7)	0.3	(0.1)	0.0	1.5
0.2	0.0	0.0		0.0	0.0	0.0	(0.2)	0.1	0.0	0.0	0.1
1.4	0.3	0.1		0.0	0.0	1.0	(0.8)	0.2	(0.3)	0.0	1.9
0.3	(0.2)	(0.1)		0.0	0.0	0.2	(0.4)	0.7	(0.1)	0.0	0.5
10.7	1.0	0.6		0.0	0.0	5.0	(3.5)	0.9	(2.9)	(0.1)	11.0
9.3	0.9	0.6		0.0	0.0	4.1	(2.5)	0.8	(2.9)	(0.1)	9.7
0.8	0.1	0.0		0.0	0.0	0.8	(0.6)	0.1	0.0	0.0	1.1
0.6	0.0	0.0		0.0	0.0	0.1	(0.4)	0.0	0.0	0.0	0.3

Note 22 Fair value measurement (continued)

i) Financial instruments not measured at fair value

The table below provides the estimated fair values of financial instruments not measured at fair value.

Financial instruments not measured at fair value

CHF billion	31.12.16					31.12.15				
	Carrying value	Fair value				Carrying value	Fair value			
		Total	Level 1	Level 2	Level 3		Total	Level 1	Level 2	Level 3
Assets										
Cash and balances with central banks	107.8	107.8	107.8	0.0	0.0	91.3	91.3	91.3	0.0	0.0
Due from banks	13.2	13.2	12.5	0.7	0.0	11.9	11.9	11.5	0.5	0.0
Cash collateral on securities borrowed	15.1	15.1	0.0	15.1	0.0	25.6	25.6	0.0	25.6	0.0
Reverse repurchase agreements	66.2	66.2	0.0	62.5	3.7	67.9	67.9	0.0	65.8	2.1
Cash collateral receivables on derivative instruments	26.7	26.7	0.0	26.7	0.0	23.8	23.8	0.0	23.8	0.0
Loans	306.3	309.7	0.0	169.3	140.4	312.0	314.1	0.0	170.2	143.9
Financial assets held to maturity	9.3	9.1	6.3	2.8	0.0					
Other assets	18.5	18.5	0.0	18.5	0.0	20.0	20.0	0.0	20.0	0.0
Liabilities										
Due to banks	10.6	10.6	8.8	1.9	0.0	11.8	11.8	10.4	1.4	0.0
Cash collateral on securities lent	2.8	2.8	0.0	2.8	0.0	8.0	8.0	0.0	8.0	0.0
Repurchase agreements	6.6	6.6	0.0	6.6	0.0	9.7	9.7	0.0	9.6	0.0
Cash collateral payables on derivative instruments	35.5	35.5	0.0	35.5	0.0	38.3	38.3	0.0	38.3	0.0
Due to customers	423.7	423.7	0.0	423.7	0.0	390.2	390.2	0.0	390.2	0.0
Debt issued	103.7	106.1	0.0	103.5	2.6	93.0	95.5	0.0	89.5	6.0
Other liabilities	38.3	38.4	0.0	38.4	0.0	51.4	51.4	0.0	51.4	0.0

The fair values included in the table above were calculated for disclosure purposes only. The valuation techniques and assumptions described below relate only to the fair value of UBS's financial instruments not measured at fair value. Other institutions may use different methods and assumptions for their fair value estimation, and therefore such fair value disclosures cannot necessarily be compared from one financial institution to another. The following principles were applied when determining fair value estimates for financial instruments not measured at fair value:

- For financial instruments with remaining maturities greater than three months, the fair value was determined from quoted market prices, if available.
- Where quoted market prices were not available, the fair values were estimated by discounting contractual cash flows using current market interest rates or appropriate yield curves for instruments with similar credit risk and maturity. These estimates generally include adjustments for counterparty credit risk or UBS's own credit.
- For short-term financial instruments with remaining maturities of three months or less, the carrying amount, which is net of

credit loss allowances, is generally considered a reasonable estimate of fair value. The following financial instruments not measured at fair value had remaining maturities of three months or less as of 31 December 2016: 100% of cash and balances with central banks, 95% of amounts due from banks, 100% of cash collateral on securities borrowed, 83% of reverse repurchase agreements, 100% of cash collateral receivables on derivative instruments, 51% of loans, 4% of financial assets held to maturity, 82% of amounts due to banks, 100% of cash collateral on securities lent, 87% of repurchase agreements, 100% of cash collateral payables on derivative instruments, 99% of amounts due to customers and 15% of debt issued.

- The fair value estimates for repurchase and reverse repurchase agreements with variable and fixed interest rates, for all maturities, include the valuation of the interest rate component of these instruments. Credit and debit valuation adjustments have not been included in the valuation due to the short-term nature of these instruments.

Note 23 Restricted and transferred financial assets

This Note provides information on restricted financial assets (Note 23a), transfers of financial assets (Note 23b and 23c) and financial assets that are received as collateral with the right to resell or repledge these assets (Note 23d).

a) Restricted financial assets

Restricted financial assets consist of assets pledged as collateral against an existing liability or contingent liability and other assets that are otherwise explicitly restricted such that they cannot be used to secure funding.

Financial assets are mainly pledged as collateral in securities lending transactions, in repurchase transactions, against loans from Swiss mortgage institutions and in connection with the issuance of covered bonds. The Group generally enters into repurchase and securities lending arrangements under standard market agreements, with a market-based haircut applied to the collateral, which results in the associated liabilities having a carrying value below the carrying value of the assets. Pledged mortgage loans serve as collateral for existing liabilities against Swiss central mortgage institutions and for existing covered bond issuances of CHF 14,137 million as of 31 December 2016 (31 December 2015: CHF 16,727 million).

Other restricted financial assets include assets protected under client asset segregation rules, assets held by the Group's insurance entities to back related liabilities to the policy holders, assets held in certain jurisdictions to comply with explicit

minimum local asset maintenance requirements and assets held in consolidated bankruptcy remote entities such as certain investment funds and other structured entities. The carrying value of the liabilities associated with these other restricted financial assets is generally equal to the carrying value of the assets, with the exception of assets held to comply with local asset maintenance requirements for which the associated liabilities are greater.

UBS Group AG and its subsidiaries are generally not subject to significant restrictions that would prevent the transfer of dividends and capital within the Group. However, certain regulated subsidiaries are required to maintain capital and / or liquidity to comply with local regulations and may be subject to prudential limitations by regulators that limit the amount of funds that they can distribute or otherwise transfer. Non-regulated subsidiaries are generally not subject to such requirements and transfer restrictions. However, restrictions can also be the result of different legal, regulatory, contractual, entity or country-specific arrangements and / or requirements.

Restricted financial assets

CHF million	31.12.16	31.12.15
Financial assets pledged as collateral		
Trading portfolio assets	36,549	57,023
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	30,260	51,943
Loans ¹	19,887	24,980
Financial assets designated at fair value	776	0
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	636	0
Financial assets available for sale	0	632
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	0	6
Total financial assets pledged as collateral²	57,213	82,635
Other restricted financial assets		
Due from banks	2,625	3,285
Reverse repurchase agreements	658	1,099
Trading portfolio assets	12,129	24,388
Cash collateral receivables on derivative instruments	4,329	7,104
Loans	958	0
Financial assets designated at fair value	328	337
Financial assets available for sale	247	502
Other	5,195	480
Total other restricted financial assets	26,470	37,196
Total financial assets pledged and other restricted financial assets	83,683	119,830

¹ All related to mortgage loans that serve as collateral for existing liabilities against Swiss central mortgage institutions and for existing covered bond issuances. Of these pledged mortgage loans, approximately CHF 1.9 billion for 31 December 2016 (31 December 2015: approximately CHF 4.4 billion) could be withdrawn or used for future liabilities or covered bond issuances without breaching existing collateral requirements.

² Does not include assets placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes (31 December 2016: CHF 4.7 billion; 31 December 2015: CHF 4.9 billion).

Note 23 Restricted and transferred financial assets (continued)

b) Transferred financial assets that are not derecognized in their entirety

The table below presents information for financial assets that have been transferred but are subject to continued recognition in full, as well as recognized liabilities associated with those transferred assets.

Transferred financial assets subject to continued recognition in full

CHF million	31.12.16		31.12.15	
	Carrying value of transferred assets	Carrying value of associated liabilities recognized on-balance sheet	Carrying value of transferred assets	Carrying value of associated liabilities recognized on-balance sheet
Trading portfolio assets which may be sold or repledged by counterparties	30,260	11,260	51,943	13,146
relating to securities lending and repurchase agreements in exchange for cash received	11,410	11,260	13,406	13,146
relating to securities lending agreements in exchange for securities received	17,341	0	37,097	0
relating to other financial asset transfers	1,509	0	1,440	0
Financial assets designated at fair value which may be sold or repledged by counterparties	636	630	0	0
Financial assets available for sale which may be sold or repledged by counterparties	0	0	6	6
Total financial assets transferred	30,896	11,890	51,950	13,152

Transactions in which financial assets are transferred, but continue to be recognized in their entirety on UBS's balance sheet include securities lending and repurchase agreements as well as other financial asset transfers. Repurchase and securities lending arrangements are, for the most part, conducted under standard market agreements and are undertaken with counterparties subject to UBS's normal credit risk control processes.

→ Refer to Note 1a item 3e for more information on repurchase agreements and securities lending agreements

As of 31 December 2016, approximately one-third of the transferred financial assets were trading portfolio assets transferred in exchange for cash, in which case the associated recognized liability represents the amount to be repaid to counterparties. For securities lending and repurchase agreements, a haircut between 0% and 15% is generally applied to the transferred assets, which results in associated liabilities having a carrying value below the carrying value of the transferred assets. The counterparties to the associated liabilities presented in the table above have full recourse to UBS.

In securities lending arrangements entered into in exchange for the receipt of other securities as collateral, neither the securities received nor the obligation to return them are recognized on UBS's balance sheet, as the risks and rewards of ownership are not transferred to UBS. In cases where such financial assets received are subsequently sold or repledged in another transaction, this is not considered to be a transfer of financial assets.

Other financial asset transfers primarily include securities transferred to collateralize derivative transactions, for which the carrying value of associated liabilities is not provided in the table above because those replacement values are managed on a portfolio basis across counterparties and product types, and therefore there is no direct relationship between the specific collateral pledged and the associated liability.

Transferred financial assets that are not subject to derecognition in full, but which remain on the balance sheet to the extent of the Group's continuing involvement, were not material as of 31 December 2016 and as of 31 December 2015.

Note 23 Restricted and transferred financial assets (continued)

c) Transferred financial assets that are derecognized in their entirety with continuing involvement

Continuing involvement in a transferred and fully derecognized financial asset may result from contractual provisions in the transfer agreement or from a separate agreement with the counterparty or a third party entered into in connection with the transfer.

Purchased and retained interests in securitization vehicles

In cases where UBS has transferred assets into a securitization vehicle and retained or purchased interests therein, UBS has a continuing involvement in those transferred assets.

As of 31 December 2016, the majority of the retained continuing involvement related to securitization positions held in the trading portfolio, primarily collateralized debt obligations, US commercial mortgage-backed securities and residential mortgage-backed securities. The fair value and carrying amount of UBS's continuing involvement related to these purchased and retained interests was CHF 5 million as of 31 December 2016, and UBS recognized gains of CHF 11 million in 2016 related to these positions. As of 31 December 2016, life-to-date losses of

CHF 1,173 million have been recorded related to the positions held as of 31 December 2016.

As of 31 December 2015, the fair value and carrying amount of UBS's continuing involvement related to purchased and retained interests in securitization vehicles was CHF 15 million, and UBS recognized gains of CHF 16 million in 2015 related to these positions. As of 31 December 2015, life-to-date losses of CHF 1,566 million were recorded related to the positions held as of 31 December 2015.

The maximum exposure to loss related to purchased and retained interests in securitization structures was CHF 28 million as of 31 December 2016 compared with CHF 55 million as of 31 December 2015.

Undiscounted cash outflows of CHF 23 million may be payable to the transferee in future periods as a consequence of holding the purchased and retained interests. The earliest period in which payment may be required is less than one month.

d) Off-balance sheet assets received

The table below presents assets received from third parties that can be sold or repledged, that are not recognized on the balance sheet, but that are held as collateral, including amounts that have been sold or repledged.

Off-balance sheet assets received

CHF million	31.12.16	31.12.15
Fair value of assets received which can be sold or repledged	429,327	401,511
received as collateral under reverse repurchase, securities borrowing and lending arrangements, derivative transactions and other transactions ¹	423,524	393,839
received in unsecured borrowings	5,803	7,672
Thereof sold or repledged ²	316,323	286,757
in connection with financing activities	277,341	241,992
to satisfy commitments under short sale transactions	22,824	29,137
in connection with derivative and other transactions ¹	16,158	15,628

¹ Includes securities received as initial margin from its clients that UBS is required to remit to CCPs, brokers and deposit banks through its exchange-traded derivative (ETD) clearing and execution services. ² Does not include off-balance sheet securities (31 December 2016: CHF 30.9 billion; 31 December 2015: CHF 47.3 billion) placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes for which there are no associated liabilities or contingent liabilities.

Note 24 Offsetting financial assets and financial liabilities

UBS enters into netting agreements with counterparties to manage the credit risks associated primarily with repurchase and reverse repurchase transactions, securities borrowing and lending, and over-the-counter (OTC) and exchange-traded derivatives (ETD). These netting agreements and similar arrangements generally enable the counterparties to set off liabilities against available assets received in the ordinary course of business and / or in the event that the counterparty to the transaction is unable to fulfill its contractual obligations. The right of setoff is a legal right to settle or otherwise eliminate all or a portion of an amount due by applying an amount receivable from the same counterparty against it, thus reducing credit exposure.

The table below provides a summary of financial assets subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral received to mitigate credit exposures for these financial assets. The gross financial assets of the Group that are subject to offsetting, enforceable netting arrangements and similar agreements are reconciled to the net amounts presented within the associated balance sheet line, after giving effect to financial liabilities with the same counterparties that have been offset on the balance sheet and other financial assets not subject to an enforceable netting arrangement or similar agreement. Further, related amounts for financial liabilities and collateral received that are not offset on the balance sheet are shown to arrive at financial assets after consideration of netting potential.

The Group engages in a variety of counterparty credit mitigation strategies in addition to netting and collateral arrangements. Therefore, the net amounts presented in the tables on this and on the next page do not purport to represent the Group's actual credit exposure.

Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

Assets subject to netting arrangements									
	Netting recognized on the balance sheet			Netting potential not recognized on the balance sheet ⁴			Assets not subject to netting arrangements ⁵	Total assets	
	Gross assets before netting	Netting with gross liabilities ³	Net assets recognized on the balance sheet	Financial liabilities	Collateral received	Assets after consideration of netting potential	Assets recognized on the balance sheet	Total assets after consideration of netting potential	Total assets recognized on the balance sheet
<i>As of 31.12.16, CHF billion</i>									
Cash collateral on securities borrowed	4.2	0.0	4.2	(0.9)	(3.3)	0.0	10.9	10.9	15.1
Reverse repurchase agreements	128.4	(71.5)	56.9	(2.1)	(54.8)	0.0	9.3	9.3	66.2
Positive replacement values	152.3	(2.5)	149.8	(113.1)	(26.7)	10.0	8.6	18.6	158.4
Cash collateral receivables on derivative instruments ¹	37.2	(15.1)	22.1	(14.2)	(1.0)	7.0	4.5	11.5	26.7
Financial assets designated at fair value	1.7	0.0	1.7	0.0	(0.6)	1.1	63.7	64.7	65.4
Total assets	323.8	(89.1)	234.7	(130.3)	(86.3)	18.1	97.1	115.2	331.8
<i>As of 31.12.15, CHF billion</i>									
Cash collateral on securities borrowed ²	8.2	0.0	8.2	(3.1)	(5.2)	0.0	17.3	17.3	25.6
Reverse repurchase agreements	117.9	(62.1)	55.8	(4.4)	(51.4)	0.0	12.1	12.1	67.9
Positive replacement values	161.9	(2.5)	159.3	(123.0)	(25.5)	10.8	8.1	18.9	167.4
Cash collateral receivables on derivative instruments ¹	85.9	(66.3)	19.6	(10.9)	(1.5)	7.2	4.1	11.3	23.8
Financial assets designated at fair value	2.4	0.0	2.4	0.0	(1.8)	0.6	3.7	4.4	6.1
Total assets	376.4	(131.0)	245.4	(141.3)	(85.4)	18.7	45.4	64.1	290.8

¹ The net amount of Cash collateral receivables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and ETD that are economically settled on a daily basis. In 2016 UBS elected to convert its IRS transacted with the London Clearing House and Japan Securities Clearing Corporation from the previous collateral model to a settlement model. As a result, gross assets and liabilities and corresponding netting decreased by CHF 64 billion as of 31 December 2016, with no change to net assets and liabilities recognized on the balance sheet. Refer to Note 1b for more information. ² In 2016, balances as of 31 December 2015 were revised to conform to the presentation for balances as of 31 December 2016. This resulted in a CHF 16 billion decrease in Assets subject to netting arrangements with a corresponding increase in Assets not subject to netting arrangements. This change did not impact amounts recognized on the balance sheet since IAS 32 netting was not applied under either presentation as the relevant netting criteria were not met. Furthermore, the level of collateralization for these assets did not change as result of this presentational change. ³ The logic of the table results in amounts presented in the "Netting with gross liabilities" column corresponding directly to the amounts presented in the "Netting with gross assets" column in the liabilities table presented on the following page. ⁴ For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped by the relevant netting agreement so as not to exceed the net amount of financial assets presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table. ⁵ Includes assets not subject to enforceable netting arrangements and other out-of-scope items.

Note 24 Offsetting financial assets and financial liabilities (continued)

The table below provides a summary of financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral pledged to mitigate credit exposures for these financial liabilities. The gross financial liabilities of UBS that are subject to offsetting, enforceable netting arrangements and similar agreements are reconciled to the net amounts presented within the associated

balance sheet line, after giving effect to financial assets with the same counterparties that have been offset on the balance sheet and other financial liabilities not subject to an enforceable netting arrangement or similar agreement. Further, related amounts for financial assets and collateral pledged that are not offset on the balance sheet are shown to arrive at financial liabilities after consideration of netting potential.

Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

	Liabilities subject to netting arrangements						Liabilities not subject to netting arrangements ⁴	Total liabilities	
	Netting recognized on the balance sheet			Netting potential not recognized on the balance sheet ³					
	Gross liabilities before netting	Netting with gross assets ²	Net liabilities recognized on the balance sheet	Financial assets	Collateral pledged	Liabilities after consideration of netting potential	Liabilities recognized on the balance sheet	Total liabilities after consideration of netting potential	Total liabilities recognized on the balance sheet
<i>As of 31.12.16, CHF billion</i>									
Cash collateral on securities lent	2.6	0.0	2.6	(0.9)	(1.7)	0.0	0.2	0.2	2.8
Repurchase agreements	76.7	(71.5)	5.2	(2.1)	(3.1)	0.0	1.4	1.4	6.6
Negative replacement values	146.3	(2.5)	143.9	(113.1)	(16.6)	14.2	10.0	24.2	153.8
Cash collateral payables on derivative instruments ¹	48.5	(15.1)	33.4	(20.8)	(1.4)	11.2	2.1	13.3	35.5
Financial liabilities designated at fair value	2.8	0.0	2.8	0.0	(0.2)	2.6	52.2	54.8	55.0
Total liabilities	276.9	(89.1)	187.9	(137.0)	(22.9)	28.0	65.9	93.9	253.7
<i>As of 31.12.15, CHF billion</i>									
Cash collateral on securities lent	7.9	0.0	7.9	(3.1)	(4.8)	0.0	0.1	0.1	8.0
Repurchase agreements	69.0	(62.1)	6.9	(4.4)	(2.5)	0.0	2.8	2.8	9.7
Negative replacement values	154.2	(2.5)	151.7	(123.0)	(17.4)	11.3	10.7	22.1	162.4
Cash collateral payables on derivative instruments ¹	99.9	(66.3)	33.6	(19.0)	(2.5)	12.1	4.7	16.8	38.3
Financial liabilities designated at fair value	3.9	0.0	3.9	0.0	(0.7)	3.1	59.1	62.3	63.0
Total liabilities	334.9	(131.0)	203.9	(149.4)	(28.0)	26.5	77.4	104.0	281.4

¹ The net amount of Cash collateral payables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and ETD that are economically settled on a daily basis. In 2016 UBS elected to convert its IRS transacted with the London Clearing House and Japan Securities Clearing Corporation from the previous collateral model to a settlement model. As a result, gross assets and liabilities and corresponding netting decreased by CHF 64 billion as of 31 December 2016, with no change to net assets and liabilities recognized on the balance sheet. Refer to Note 1b for more information. ² The logic of the table results in amounts presented in the "Netting with gross assets" column corresponding directly to the amounts presented in the "Netting with gross liabilities" column in the assets table presented on the previous page. ³ For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped by the relevant netting agreement so as not to exceed the net amount of financial liabilities presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table. ⁴ Includes liabilities not subject to enforceable netting arrangements and other out-of-scope items.

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments

a) Measurement categories of financial assets and liabilities

The table below provides information about the carrying amounts of individual classes of financial instruments within the measurement categories of financial assets and liabilities as defined in IAS 39 *Financial Instruments: Recognition and Measurement*. Only those assets and liabilities that are financial instruments as

defined in IAS 32 *Financial Instruments: Presentation* are included in the table below, which causes certain balances to differ from those presented on the balance sheet.

→ Refer to Note 22 for more information on how the fair value of financial instruments is determined

Measurement categories of financial assets and financial liabilities

CHF million	31.12.16	31.12.15
Financial assets¹		
Held for trading		
Trading portfolio assets	92,025	120,393
Due to customers ²	12	0
Debt issued ²	38	106
Positive replacement values	158,411	167,435
Total	250,486	287,934
Fair value through profit or loss		
Financial assets designated at fair value	65,353	6,146
Other assets	131	0
Total	65,483	6,146
Financial assets at amortized cost		
Cash and balances with central banks	107,767	91,306
Due from banks	13,156	11,948
Cash collateral on securities borrowed	15,111	25,584
Reverse repurchase agreements	66,246	67,893
Cash collateral receivables on derivative instruments	26,664	23,763
Loans ³	306,325	311,954
Financial assets held to maturity	9,289	0
Other assets	18,504	20,048
Total	563,063	552,496
Available for sale		
Financial assets available for sale	15,676	62,543
Total financial assets	894,709	909,119
Financial liabilities		
Held for trading		
Trading portfolio liabilities	22,824	29,137
Debt issued ²	0	236
Negative replacement values	153,810	162,430
Total	176,634	191,803
Fair value through profit or loss		
Financial liabilities designated at fair value	55,017	62,995
Amounts due under unit-linked investment contracts	9,286	15,718
Other liabilities	131	0
Total	64,434	78,713
Financial liabilities at amortized cost		
Due to banks	10,645	11,836
Cash collateral on securities lent	2,818	8,029
Repurchase agreements	6,612	9,653
Cash collateral payables on derivative instruments	35,472	38,282
Due to customers	423,684	390,185
Debt issued	103,687	93,018
Other liabilities	38,349	51,384
Total	621,267	602,387
Total financial liabilities	862,335	872,903

¹ As of 31 December 2016, CHF 126 billion of Loans, CHF 0 billion of Due from banks, CHF 1 billion of Reverse repurchase agreements, CHF 10 billion of Financial assets available for sale, CHF 29 billion of Financial assets designated at fair value and CHF 8 billion of Financial assets held to maturity are expected to be recovered or settled after 12 months. As of 31 December 2015, CHF 123 billion of Loans, CHF 0 billion of Due from banks, CHF 1 billion of Reverse repurchase agreements, CHF 30 billion of Financial assets available for sale and CHF 3 billion of Financial assets designated at fair value are expected to be recovered or settled after 12 months. ² Represents the embedded derivative component of structured financial instruments for which the fair value option has not been applied and that is presented within Due to customers and Debt issued on the balance sheet. ³ Includes finance lease receivables of CHF 1.0 billion as of 31 December 2016 (31 December 2015: CHF 1.1 billion). Refer to Notes 10 and 31 for more information.

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

b) Maximum exposure to credit risk

The tables on the following pages provide the Group's maximum exposure to credit risk by class of financial instrument and the respective collateral and other credit enhancements mitigating credit risk for these classes of financial instruments.

The maximum exposure to credit risk includes the carrying amounts of financial instruments recognized on the balance sheet subject to credit risk and the notional amounts for off-

balance sheet arrangements. Where information is available, collateral is presented at fair value. For other collateral such as real estate, a reasonable alternative value is used. Credit enhancements, such as credit derivative contracts and guarantees, are included at their notional amounts. Both are capped at the maximum exposure to credit risk for which they serve as security.

Maximum exposure to credit risk

	31.12.16							
		Collateral				Credit enhancements		
	Maximum exposure to credit risk	Cash collateral received	Collateralized by securities	Secured by real estate	Other collateral ¹	Netting	Credit derivative contracts	Guarantees
CHF billion								
Financial assets measured at amortized cost on the balance sheet								
Balances with central banks	107.1							
Due from banks ²	13.2							
Cash collateral on securities borrowed	15.1		14.8					
Reverse repurchase agreements	66.2		62.5		3.2			
Cash collateral receivables on derivative instruments ^{3, 4}	26.7					15.1		
Loans ⁵	306.3	17.4	99.6	158.2	14.6		0.1	1.8
Financial assets held to maturity	9.3							
Other assets	18.6		10.0					
Total financial assets measured at amortized cost	562.5	17.4	186.9	158.2	17.7	15.1	0.1	1.8
Financial assets measured at fair value on the balance sheet								
Positive replacement values ⁴	158.4		5.3			134.5		
Trading portfolio assets – debt instruments ^{6, 7}	21.8							
Financial assets designated at fair value – debt instruments ⁸	64.8		2.6				0.6	
Financial assets available for sale – debt instruments ⁸	14.9							
Total financial assets measured at fair value	259.9	0.0	7.9	0.0	0.0	134.5	0.6	0.0
Total maximum exposure to credit risk reflected on the balance sheet	822.4	17.4	194.9	158.2	17.7	149.6	0.7	1.8
Guarantees ⁹	16.7	1.4	2.0	0.2	1.2		0.1	3.0
Loan commitments ⁹	54.4	0.1	3.9	1.0	9.5		4.8	2.0
Forward starting transactions, reverse repurchase and securities borrowing agreements	10.2		10.2					
Total maximum exposure to credit risk not reflected on the balance sheet	81.3	1.5	16.1	1.1	10.6	0.0	4.9	5.1
Total	903.7	18.9	210.9	159.4	28.4	149.6	5.7	6.8

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

Maximum exposure to credit risk (continued)

CHF billion	31.12.15							
	Maximum exposure to credit risk	Collateral			Other collateral ¹	Credit enhancements		
		Cash collateral received	Collateralized by securities	Secured by real estate		Netting	Credit derivative contracts	Guarantees
Financial assets measured at amortized cost on the balance sheet								
Balances with central banks	89.8							
Due from banks ²	11.9		0.2					0.1
Cash collateral on securities borrowed	25.6		25.1					
Reverse repurchase agreements	67.9		62.8		4.6			
Cash collateral receivables on derivative instruments ^{3, 4}	23.8					12.4		
Loans	312.0	13.1	101.0	164.4	15.2		0.4	2.9
Other assets	20.0		11.1					
Total financial assets measured at amortized cost	550.9	13.1	200.1	164.4	19.8	12.4	0.4	3.0
Financial assets measured at fair value on the balance sheet								
Positive replacement values ⁴	167.4		5.8			142.7		
Trading portfolio assets - debt instruments ^{6, 7}	29.0							
Financial assets designated at fair value – debt instruments ⁸	5.6		3.5		0.1		0.6	
Financial assets available for sale – debt instruments ⁸	61.7							
Total financial assets measured at fair value	263.7	0.0	9.3	0.0	0.1	142.7	0.6	0.0
Total maximum exposure to credit risk reflected on the balance sheet	814.7	13.1	209.4	164.4	19.8	155.2	1.0	3.0
Guarantees ⁹	16.0	1.2	2.1	0.2	1.5		0.1	3.0
Loan commitments ⁹	56.1		1.8	1.7	8.7		6.9	2.0
Forward starting transactions, reverse repurchase and securities borrowing agreements	6.6		6.6					
Total maximum exposure to credit risk not reflected on the balance sheet	78.6	1.2	10.5	1.9	10.2	0.0	7.0	5.0
Total	893.3	14.3	220.0	166.3	30.1	155.2	8.1	8.0

¹ Includes but not limited to life insurance contracts, inventory, accounts receivable, mortgage loans, patents, and copyrights. ² Due from banks includes amounts held with third-party banks on behalf of clients. The credit risk associated with these balances may be borne by those clients. ³ Included within Cash collateral receivables on derivative instruments are margin balances due from exchanges or clearing houses. Some of these margin balances reflect amounts transferred on behalf of clients who retain the associated credit risk. ⁴ The amount shown in the netting column represents the netting potential not recognized on the balance sheet. Refer to Note 24 for more information. ⁵ In 2016, UBS aligned its collateral allocation processes across business divisions with a risk-based approach which prioritizes collateral mainly according to its liquidity profile. This resulted in increases in loans collateralized by cash of CHF 3.3 billion and increases in loans collateralized by securities of CHF 3.1 billion, while loans secured by real estate decreased by CHF 5.2 billion and loans secured by guarantees decreased by CHF 1.2 billion. ⁶ These positions are generally managed under the market risk framework. For the purpose of this disclosure, collateral and credit enhancements were not considered. ⁷ Does not include debt instruments held for unit-linked investment contracts and investment fund units. ⁸ Does not include investment fund units. Financial assets designated at fair value collateralized by securities consisted of structured loans and reverse repurchase and securities borrowing agreements. ⁹ The amount shown in the "Guarantees" column largely relates to sub-participations. Refer to the "Treasury management" section of this report for more information.

Maximum exposure to credit risk for financial assets designated at fair value

The maximum exposure to credit risk of loans, but not structured loans, designated at fair value is generally mitigated by credit derivatives or similar instruments. As of 31 December 2016, the credit risk of such loans with a total notional amount of CHF 609 million (31 December 2015: CHF 687 million) was mitigated by credit derivatives with a total notional amount of CHF 578 million (31 December 2015: CHF 630 million) and a fair value of negative CHF 7 million (31 December 2015: positive CHF 4 million).

Changes in the fair value of loans designated at fair value

attributable to changes in credit risk were not material for the years ended 31 December 2016 and 31 December 2015 and from inception until 31 December 2016 and 31 December 2015.

Similarly, changes in the fair value of credit derivatives mitigating the credit risk of loans designated at fair value were not material for the years ended 31 December 2016 and 31 December 2015 and from inception until 31 December 2016 and 31 December 2015.

→ Refer to Note 22 for more information on financial assets designated at fair value

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

c) Financial assets subject to credit risk by rating category

Financial assets subject to credit risk by rating category

CHF billion	31.12.16						
Rating category ¹	0–1	2–3	4–5	6–8	9–13	Defaulted	Total
Balances with central banks	106.2	0.9					107.1
Due from banks	0.6	9.7	2.0	0.5	0.3		13.2
Cash collateral on securities borrowed and reverse repurchase agreements	29.2	24.5	20.1	6.9	0.7		81.4
Positive replacement values	19.6	96.9	34.2	7.4	0.4		158.4
Cash collateral receivables on derivative instruments	6.4	12.2	6.4	1.6	0.2		26.7
Trading portfolio assets – debt instruments ²	9.0	6.8	2.9	1.7	1.3		21.8
Loans	31.7	127.2	63.1	63.6	19.1	1.6	306.3
Financial assets designated at fair value – debt instruments ³	48.4	12.6	1.0	1.6	1.3		64.8
Financial assets available for sale - debt instruments ³	12.7	1.8	0.2	0.1			14.9
Financial assets held to maturity	8.4	0.9					9.3
Other assets	0.1	2.0	6.2	7.7	2.2	0.3	18.6
Guarantees, commitments and forward starting transactions							
Guarantees	2.0	6.4	3.7	3.6	0.7	0.3	16.7
Loan commitments	2.4	19.5	17.1	8.7	6.5	0.1	54.4
Forward starting transactions, reverse repurchase and securities borrowing agreements	0.6	9.4	0.3				10.2
Total	277.4	330.9	157.1	103.5	32.7	2.2	903.7

	31.12.15						
Rating category ¹	0–1	2–3	4–5	6–8	9–13	Defaulted	Total
Balances with central banks	87.9	1.3	0.6				89.8
Due from banks	1.3	8.8	1.1	0.7			11.9
Cash collateral on securities borrowed and reverse repurchase agreements	21.7	40.2	20.1	11.2	0.4		93.5
Positive replacement values	20.7	116.9	23.2	5.9	0.7		167.4
Cash collateral receivables on derivative instruments	8.4	10.2	4.7	0.4	0.1		23.8
Trading portfolio assets – debt instruments ²	14.2	8.6	3.1	1.9	1.2		29.0
Loans	31.9	132.1	67.5	61.4	17.7	1.4	312.0
Financial assets designated at fair value – debt instruments ³	0.0	0.5	1.0	3.0	0.9	0.1	5.6
Financial assets available for sale - debt instruments ³	52.4	9.2					61.7
Other assets	0.2	2.2	7.5	8.0	1.7	0.4	20.0
Guarantees, commitments and forward starting transactions							
Guarantees	2.2	7.1	3.6	2.2	0.7	0.3	16.0
Loan commitments	1.8	22.4	19.6	6.1	6.2	0.0	56.1
Forward starting transactions, reverse repurchase and securities borrowing agreements		6.5		0.0			6.6
Total	242.6	366.0	152.1	100.8	29.6	2.2	893.3

¹ Refer to the "Internal UBS rating scale and mapping of external ratings" table in the "Risk management and control" section of this report for more information on rating categories. ² Does not include debt instruments held for unit-linked investment contracts and investment fund units. ³ Does not include investment fund units.

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

d) Maturity analysis of financial liabilities

The contractual maturities for non-derivative and non-trading financial liabilities as of 31 December 2016 are based on the earliest date on which UBS could be contractually required to pay. The total amounts that contractually mature in each time band are also shown for 31 December 2015. Derivative positions

and trading liabilities, predominantly made up of short sale transactions, are assigned to the column *Due within 1 month*, as this provides a conservative reflection of the nature of these trading activities. The contractual maturities may extend over significantly longer periods.

Maturity analysis of financial liabilities¹

CHF billion	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
Financial liabilities recognized on balance sheet²						
Due to banks	7.4	1.4	1.8	0.1	0.0	10.7
Cash collateral on securities lent	2.2	0.6				2.8
Repurchase agreements	4.7	1.0	0.7	0.1	0.0	6.6
Trading portfolio liabilities ^{3, 4}	22.8					22.8
Negative replacement values ³	153.8					153.8
Cash collateral payables on derivative instruments	35.5					35.5
Due to customers	406.8	13.3	2.9	0.7	0.1	423.7
Financial liabilities designated at fair value ⁵	16.8	14.7	11.1	8.4	5.9	57.0
Debt issued ⁶	7.8	8.3	23.8	37.3	40.0	117.2
Other liabilities	46.4					46.4
Total 31.12.16	704.3	39.2	40.4	46.6	46.0	876.6
Total 31.12.15	710.3	44.3	36.4	53.6	44.6	889.2
Guarantees, commitments and forward starting transactions⁷						
Loan commitments	54.0	0.2	0.2	0.0		54.4
Guarantees	16.7					16.7
Forward starting transactions						
Reverse repurchase agreements	10.2					10.2
Securities borrowing agreements	0.0					0.0
Total 31.12.16	81.0	0.2	0.2	0.0	0.0	81.4
Total 31.12.15	78.1	0.2	0.2	0.1	0.0	78.7

¹ Non-financial liabilities such as deferred income, deferred tax liabilities, provisions and liabilities on employee compensation plans are not included in this analysis. ² Except for trading portfolio liabilities and negative replacement values (see footnote 3), the amounts presented generally represent undiscounted cash flows of future interest and principal payments. ³ Carrying value is fair value. Management believes that this best represents the cash flows that would have to be paid if these positions had to be settled or closed out. Refer to Note 12 for undiscounted cash flows of derivatives designated in hedge accounting relationships. ⁴ Contractual maturities of trading portfolio liabilities are: CHF 21.8 billion due within one month (2015: CHF 27.2 billion), CHF 1.0 billion due between one month and one year (2015: CHF 1.2 billion) and CHF 0.1 billion due between 1 and 5 years (2015: CHF 0.8 billion). ⁵ Future interest payments on variable rate liabilities are determined by reference to the applicable interest rate prevailing as of the reporting date. Future principal payments that are variable are determined by reference to the conditions existing at the reporting date. ⁶ The time bucket Due after 5 years includes perpetual loss-absorbing additional tier 1 capital instruments. ⁷ Comprises the maximum irrevocable amount of guarantees, commitments and forward starting transactions.

e) Reclassification of financial assets

In 2008 and 2009, certain financial assets were reclassified from *Trading portfolio assets* to *Loans*. On their reclassification date, these assets had fair values of CHF 26 billion and CHF 0.6 billion, respectively.

The reclassification of financial assets reflected UBS's change in intent and ability to hold these financial assets for the foreseeable future rather than for trading in the near term. The financial assets were reclassified using their fair value on the date of the reclassification, which became their new cost basis at that date.

As of 31 December 2016, the carrying value of the remaining

reclassified financial assets, which were entirely comprised of municipal auction rate securities, was CHF 0.2 billion (31 December 2015: CHF 0.2 billion), which was approximately equal to the fair value of these assets.

The overall effect on operating profit before tax from reclassified financial assets for the year ended 31 December 2016 was a profit of CHF 1 million (2015: CHF 23 million). If the financial assets had not been reclassified, the impact on operating profit before tax for the year ended 31 December 2016 would have been a profit of CHF 10 million.

Note 26 Pension and other post-employment benefit plans

The table below provides information about expenses for pension and other post-employment benefit plans. These expenses are part of *Personnel expenses*.

Income statement – expenses related to pension and other post-employment benefit plans

CHF million	31.12.16	31.12.15	31.12.14
Net periodic expenses for defined benefit plans	435	569	467
of which: related to major pension plans ¹	412	546	508
of which: Swiss plan ²	381	515	458
of which: UK plan	(2)	18	17
of which: US and German plans	33	12	33
of which: related to post-employment medical and life insurance plans ³	4	4	(36)
of which: UK plan	1	1	2
of which: US plans	3	2	(37)
of which: related to remaining plans and other expenses ⁴	19	19	(5)
Expenses for defined contribution plans ⁵	236	239	244
of which: UK plans	77	86	91
of which: US plan	106	100	91
of which: remaining plans	53	53	62
Total pension and other post-employment benefit plan expenses⁶	670	808	711

1 Refer to Note 26a for more information. 2 The reduction in net periodic pension expenses for the Swiss pension plan between 2016 and 2015 related primarily to changes in demographic and financial assumptions. 3 Refer to Note 26b for more information. The US post-employment life insurance policy was terminated in 2014. Only the amounts disclosed for 2014 include expenses with regard to life insurance benefits. 4 Other expenses include differences between actual and estimated performance award accruals and net accrued pension expenses related to restructuring. 5 Refer to Note 26c for more information. 6 Refer to Note 6.

The table below provides information relating to amounts recognized in *Other comprehensive income* for defined benefit plans.

Other comprehensive income – gains / (losses) on defined benefit plans

CHF million	31.12.16	31.12.15	31.12.14
Major pension plans ¹	(837)	339	(1,456)
of which: Swiss plan	(105)	58	(1,032)
of which: UK plan	(610)	317	(168)
of which: US and German plans	(122)	(35)	(256)
Post-employment medical and life insurance plans ²	(13)	(3)	(5)
of which: UK plan	(6)	6	(3)
of which: US plans	(7)	(9)	(2)
Remaining plans	(26)	(14)	7
Gains / (losses) recognized in other comprehensive income, before tax	(876)	322	(1,454)
Tax (expense) / benefit relating to defined benefit plans recognized in other comprehensive income	52	(19)	247
Gains / (losses) recognized in other comprehensive income, net of tax³	(824)	303	(1,208)
of which: attributable to shareholders	(824)	298	(1,172)
of which: attributable to non-controlling interests	0	5	(36)

1 Refer to Note 26a for more information. 2 Refer to Note 26b for more information. The US post-employment life insurance policy was terminated in 2014. Amounts with regard to life insurance benefits are included only in the year ended on 31 December 2014. 3 Refer to the "Statement of comprehensive income".

Note 26 Pension and other post-employment benefit plans (continued)

UBS recognizes assets and liabilities with respect to defined benefit plans within *Other assets* and *Other liabilities*.

As of 31 December 2016 and 31 December 2015, the Swiss pension plan was in a surplus situation. However, a surplus is only recognized on the balance sheet to the extent that it does

not exceed the estimated future economic benefit. Since the estimated future economic benefit was zero as of 31 December 2016 and 31 December 2015, no net defined benefit pension asset was recognized on the balance sheet.

The tables below provide information on UBS's assets and liabilities with respect to defined benefit plans.

Balance sheet – net defined benefit pension and post-employment asset

CHF million	31.12.16	31.12.15
Major pension plans ¹	0	50
of which: Swiss plan	0	0
of which: UK plan	0	50
Total net defined benefit pension and post-employment asset²	0	50

¹ Refer to Note 26a for more information. ² Refer to Note 16.

Balance sheet – net defined benefit pension and post-employment liability

CHF million	31.12.16	31.12.15
Major pension plans ¹	1,140	622
of which: Swiss plan	0	0
of which: UK plan	529	0
of which: US and German plans ²	611	622
Post-employment medical insurance plans ³	91	84
of which: UK plan	26	25
of which: US plans	65	59
Remaining plans	35	30
Total net defined benefit pension and post-employment liability⁴	1,266	736

¹ Refer to Note 26a for more information. ² Of the total liability as of 31 December 2016, CHF 265 million related to US plans and CHF 346 million related to German plans (31 December 2015: CHF 315 million related to US plans and CHF 307 million related to German plans). ³ Refer to Note 26b for more information. ⁴ Refer to Note 21.

Note 26 Pension and other post-employment benefit plans (continued)

a) Defined benefit pension plans

UBS has established defined benefit pension plans for its employees in various jurisdictions, with the major plans located in Switzerland, the UK, the US and Germany.

The overall investment policy and strategy for UBS's defined benefit pension plans is guided by the objective of achieving an investment return which, together with contributions, ensures that there will be sufficient assets to pay pension benefits as they fall due while also mitigating various risks. For the plans with assets (i.e., funded plans), the investment strategies are managed under local laws and regulations in each jurisdiction. The asset allocation is determined by the governance body with reference to the prevailing current and expected economic and market conditions and in consideration of specific asset class risk in the risk profile. Within this framework, UBS ensures that the fiduciaries consider how the asset investment strategy correlates with the maturity profile of the plan liabilities and the respective potential effect on the funded status of the plans, including potential short-term liquidity requirements.

The defined benefit obligations (DBOs) for all of UBS's defined benefit pension plans are directly affected by changes in yields of high-quality corporate bonds quoted in an active market in the currency of the respective pension plan, as the applicable discount rate used to determine the DBO is based on these yields. For the funded plans, the pension assets are invested in a diversified portfolio of financial assets, including real estate, bonds, investment funds and cash across geographic regions to ensure a balance of risk and return. Under IAS 19, volatility arises in each pension plan's net asset / liability position because the fair value of the plan's financial assets is not fully correlated to movements in the value of the plan's DBO. Specific asset-liability matching strategies for each pension plan are independently determined by the responsible governance body. The net asset / liability volatility for each plan is dependent on the specific financial assets chosen by each plan's governance body. For certain pension plans, a liability-driven investment approach is applied to a portion of the plan assets to reduce potential volatility.

Swiss pension plan

The Swiss pension plan covers employees of UBS AG and employees of companies having close economic or financial ties with UBS and exceeds the minimum benefit requirements under Swiss pension law.

Contributions to the pension plan are paid by both the employer and the employees. The Swiss pension plan allows employees to choose the level of contributions paid by them. Employee contributions are calculated as a percentage of the contributory salary and are deducted monthly. The percentages deducted from salary depend on age and choice of contribution category and vary between 1% and 13.5% of contributory base salary and between 0% and 9% of contributory variable compensation. Depending on the age of the employee, UBS pays a contribution that ranges between 6.5% and 27.5% of contributory base salary and between 3.6% and 9% of contributory variable compensation. UBS also pays risk contributions which are used to finance benefits paid out in the event of death and disability, as well as to finance bridging pensions.

The plan benefits include retirement benefits and disability, death and survivor pensions. The pension plan offers to members at the normal retirement age of 64 a choice between a lifetime pension with or without full restitution and a partial or full lump sum payment. Members can draw early retirement benefits starting from the age of 58. Since 2015, employees have the possibility to make additional purchases of benefits to fund early retirement benefits (Plan 58+).

The pension amount payable is a result of the conversion rate applied on the accumulated balance of the individual plan participant's pension account at the retirement date. The accumulated balance of each individual plan participant's pension account is based on credited vested benefits transferred from previous employers, purchases of benefits and the employee and employer contributions that have been made to the pension account of each individual plan participant, as well as the interest accrued on the accumulated balance. The interest rate accrued is defined annually by the Pension Foundation Board.

Although the Swiss pension plan is based on a defined contribution promise under Swiss pension law, it is accounted for as a defined benefit plan under IAS 19, primarily because of the obligation to accrue interest on the pension accounts and the payment of lifetime pension benefits.

Note 26 Pension and other post-employment benefit plans (continued)

The Swiss pension plan is governed by a Pension Foundation Board as required by Swiss pension law. The responsibilities of this board are defined by Swiss pension law and by the plan rules. An actuarial valuation under Swiss pension law is performed regularly. According to Swiss pension law, a temporary limited underfunding is permitted. However, should an underfunded situation occur, the Pension Foundation Board is required to take the necessary measures to ensure that full funding can be expected to be restored within a maximum period of 10 years. If a Swiss pension plan were to become significantly underfunded on a Swiss pension law basis, additional employer and employee contributions could be required. In these situations, the risk is shared between employer and employees, and the employer is not legally obliged to cover more than 50% of the additional contributions required. As of 31 December 2016, the Swiss pension plan had a technical funding ratio under Swiss pension law of 125.4% (31 December 2015: 123.3%).

The investment strategy of the Swiss plan is implemented on the basis of a multi-level investment and risk management process and is in line with Swiss pension law, including the rules and regulations relating to diversification of plan assets. These rules, among others, specify restrictions to the composition of plan assets, e.g., there is a limit of 50% for investments in equities. The investment strategy of the Swiss plan is aligned with the defined risk budget set out by the Pension Foundation Board. The risk budget is determined on the basis of regularly performed asset and liability management analyses. In order to implement the risk budget, the Swiss plan may use direct investments, investment funds and derivatives. To mitigate foreign currency risk, a specific currency hedging strategy is in place. The Pension Foundation Board strives for a medium- and long-term balance between assets and liabilities.

As of 31 December 2016, the Swiss pension plan was in a surplus situation on an International Financial Reporting Standards (IFRS) measurement basis, as the fair value of plan assets exceeded the DBO by CHF 1,749 million (31 December 2015: surplus of CHF 1,283 million). However, a surplus is only recognized on the balance sheet to the extent that it does not exceed the estimated future economic benefit, which equals the difference between the present value of the estimated future net service cost and the present value of the estimated future employer contributions. The maximum future economic benefit is highly variable based on changes in the discount rate. Both as of 31 December 2016 and 31 December 2015, the estimated future economic benefit was zero and hence no net defined benefit asset was recognized on the balance sheet. As of 31 December 2016, the difference between the pension plan surplus and the estimated future economic benefit, i.e., the asset ceiling effect, was CHF 1,749 million (31 December 2015: CHF 1,283 million). CHF 452 million out of the total movement of CHF 466 million was recognized in *Other comprehensive income* and CHF 14 million related to interest expense on the asset ceiling effect was recognized in the income statement. As of 31

December 2015, the total asset ceiling effect of CHF 1,283 million was recognized in *Other comprehensive income*. The employer contributions expected to be made to the Swiss pension plan in 2017 are estimated to be CHF 478 million.

Non-Swiss pension plans

UBS locations outside of Switzerland offer various defined benefit pension plans in accordance with local regulations and practices. The non-Swiss locations with major defined benefit pension plans are the UK, the US and Germany. Defined benefit pension plans in other locations are not material to the financial results of UBS and hence not separately disclosed.

The non-Swiss plans provide benefits in the event of retirement, death or disability. The level of benefits provided depends on the specific rate of benefit accrual and the level of employee compensation. UBS's general principle is to ensure that the plans are adequately funded on the basis of actuarial valuations. Local pension regulations and tax requirements are the primary drivers for determining when contributions are required.

UK pension plan

The UK plan is a career-average revalued earnings scheme, and benefits increase automatically based on UK price inflation. Normal retirement age for participants in the UK plan is 60. The UK defined benefit pension plan participants are no longer accruing benefits for current or future service. Active employees instead participate in the UK defined contribution plan.

The governance responsibility for the UK plan lies jointly with the Pension Trustee Board, which is required under local pension laws, and UBS. The employer contributions to the pension fund reflect agreed-upon deficit-funding contributions, which are determined on the basis of the most recent actuarial valuation using assumptions agreed by the Pension Trustee Board and UBS. In the event of underfunding, UBS and the Pension Trustee Board must agree on a deficit recovery plan within statutory deadlines. In 2016, UBS did not make any deficit-funding contributions (2015: CHF 316 million).

The plan assets are invested in a diversified portfolio of financial assets. A liability-driven investment approach is applied, as a portion of the plan assets is invested in inflation-indexed bonds which provide a partial hedge against price inflation. If price inflation increases, the DBO will likely increase more significantly than the change in the fair value of plan assets, which would result in an increase in the net defined benefit liability. Plan rules and local pension legislation cap the level of inflationary increase that can be applied to plan benefits.

As the plan is obligated to provide guaranteed lifetime pension benefits to plan participants upon retirement, increases in life expectancy will result in an increase in the plan's liabilities. The sensitivity to changes in life expectancy is particularly high in the UK plan as the pension benefits are indexed to price inflation.

Note 26 Pension and other post-employment benefit plans (continued)

As of 31 December 2016, the UK plan was in a deficit situation on an IFRS measurement basis as the DBO exceeded the fair value of plan assets by CHF 529 million (31 December 2015: surplus of CHF 50 million).

No employer contributions are currently scheduled to be made to the UK defined benefit pension plan in 2017.

US pension plans

There are two distinct major defined benefit pension plans in the US. Normal retirement age for participants in both US plans is 65. The plans are closed to new entrants, who instead can participate in defined contribution plans.

One of the major defined benefit pension plans is a contribution-based plan in which each participant accrues a percentage of salary in a pension account. The pension account is credited annually with interest based on a rate that is linked to the average yield on one-year US government bonds. For the other major defined benefit pension plan, retirement benefits accrue based on the career-average earnings of each individual plan participant. Upon retirement, the plans allow participants a choice between a lump sum payment and a lifetime pension.

As required under local state pension laws, both plans have fiduciaries who, together with UBS, are responsible for the governance of the plans. UBS regularly reviews the contribution strategy for these plans. In determining the contribution strategy, UBS considers the minimum funding requirements (i.e., 80% funded ratio on a basis determined under local pension regulations) and the cost of any premiums that must be paid to the Pension Benefit Guaranty Corporation for having an underfunded plan. In 2016, the contributions made by UBS were CHF 172 million (2015: CHF 50 million).

The plan assets for both plans are invested in a diversified portfolio of financial assets. Each pension plan's fiduciaries are responsible for the investment decisions with respect to the plan assets. A liability-driven investment approach is applied for one of the US plans to support the volatility management in the net asset / liability position. Derivative instruments may also be employed to manage volatility.

In 2015, the US pension plan rules were amended to the effect that former UBS employees with vested benefits in the US

defined benefit pension plans have the option to receive a lump sum payment (or early annuity payments) instead of a lifetime pension commencing at retirement age. This resulted in a reduction in the DBO of CHF 24 million and a corresponding gain recognized in the income statement in 2015, of which CHF 21 million was recorded in Wealth Management Americas.

The employer contributions expected to be made to the US defined benefit pension plans in 2017 are estimated to be CHF 20 million.

German pension plans

There are two different defined benefit pension plans in Germany, and both are contribution-based plans. No plan assets are set aside to fund these plans, and benefits are directly paid by UBS. Normal retirement age for the participants in the German plans is 65. Within the larger of the two pension plans, each participant accrues a percentage of salary in a pension account. The accumulated account balance of the plan participant is credited on an annual basis with guaranteed interest at a rate of 5%. In the other plan, amounts are accrued annually based on employee elections. For this plan, the accumulated account balance is credited on an annual basis with a guaranteed interest rate of 4% for amounts accrued after 2009. Both German plans are regulated under German pension law, under which the responsibility to pay pension benefits when they are due rests entirely with UBS. For the German plans, a portion of the pension payments is directly increased in line with price inflation.

The benefits expected to be paid by UBS to the participants of the German plans in 2017 are estimated to be CHF 9 million.

Financial information by plan

The table on the following pages provides an analysis of the movement in the net asset / liability recognized on the balance sheet for defined benefit pension plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

Note 26 Pension and other post-employment benefit plans (continued)

Defined benefit pension plans

CHF million	Swiss plan		UK plan		US and German plans		Total	
For the year ended	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Defined benefit obligation at the beginning of the year	22,636	23,956	3,350	3,949	1,619	1,693	27,605	29,598
Current service cost	471	589	0	0	9	10	480	599
Interest expense	240	270	116	137	62	57	419	463
Plan participant contributions	210	205	0	0	0	0	210	205
Remeasurements	477	(1,231)	922	(441)	125	(8)	1,524	(1,681)
of which: actuarial (gains) / losses due to changes in demographic assumptions	(659)	(1,038)	(63)	(122)	3	34	(719)	(1,125)
of which: actuarial (gains) / losses due to changes in financial assumptions	698	(237)	1,022	(201)	107	(71)	1,827	(509)
of which: experience (gains) / losses ¹	438	44	(37)	(119)	15	28	416	(47)
Past service cost related to plan amendments	0	0	0	0	0	(24)	0	(24)
Curtailments	(96)	(81)	0	0	0	0	(96)	(81)
Benefit payments	(1,074)	(1,071)	(135)	(128)	(98)	(83)	(1,307)	(1,283)
Termination benefits	0	1	0	0	0	0	0	1
Other movements	0	0	0	0	19	0	19	0
Foreign currency translation	0	0	(549)	(166)	20	(26)	(529)	(192)
Defined benefit obligation at the end of the year	22,865	22,636	3,704	3,350	1,755	1,619	28,325	27,605
of which: amounts owing to active members	10,419	10,359	290	255	258	267	10,967	10,881
of which: amounts owing to deferred members	0	0	2,210	1,864	584	523	2,794	2,388
of which: amounts owing to retirees	12,446	12,278	1,204	1,230	913	829	14,563	14,336
Fair value of plan assets at the beginning of the year	23,919	23,931	3,400	3,381	997	1,029	28,316	28,341
Return on plan assets excluding amounts included in interest income	824	109	312	(124)	2	(44)	1,139	(59)
Interest income	258	273	118	118	44	39	420	430
Employer contributions – excluding termination benefits	486	482	0	316	179	57	665	855
Employer contributions – termination benefits	0	1	0	0	0	0	0	1
Plan participant contributions	210	205	0	0	0	0	210	205
Benefit payments	(1,074)	(1,071)	(135)	(128)	(98)	(83)	(1,307)	(1,283)
Administration expenses, taxes and premiums paid	(10)	(10)	0	0	(6)	(8)	(16)	(18)
Foreign currency translation	0	0	(520)	(163)	26	7	(494)	(156)
Fair value of plan assets at the end of the year	24,614	23,919	3,175	3,400	1,144	997	28,934	28,316
Asset ceiling effect at the beginning of the year	1,283	0	0	0	0	0	1,283	0
Interest expense on asset ceiling effect	14	0	0	0	0	0	14	0
Asset ceiling effect excluding interest expense on asset ceiling effect	452	1,283	0	0	0	0	452	1,283
Asset ceiling effect at the end of the year	1,749	1,283	0	0	0	0	1,749	1,283
Net defined benefit asset / (liability)	0	0	(529)	50	(611)	(622)	(1,140)	(572)

Movement in the net asset / (liability) recognized on the balance sheet

Net asset / (liability) recognized on the balance sheet at the beginning of the year	0	(25)	50	(568)	(622)	(664)	(572)	(1,256)
Net periodic expenses	(381)	(515)	2	(18)	(33)	(12)	(412)	(546)
Amounts recognized in other comprehensive income	(105)	58	(610)	317	(122)	(35)	(837)	339
Employer contributions – excluding termination benefits	486	482	0	316	179	57	665	855
Employer contributions – termination benefits	0	1	0	0	0	0	0	1
Other movements	0	0	0	0	(19)	0	(19)	0
Foreign currency translation	0	0	29	3	6	33	35	36
Net asset / (liability) recognized on the balance sheet at the end of the year	0	0	(529)	50	(611)	(622)	(1,140)	(572)

Funded and unfunded plans

Defined benefit obligation from funded plans	22,865	22,636	3,704	3,350	1,316	1,288	27,885	27,274
Defined benefit obligation from unfunded plans	0	0	0	0	440	331	440	331
Plan assets	24,614	23,919	3,175	3,400	1,144	997	28,934	28,316
Surplus / (deficit)	1,749	1,283	(529)	50	(611)	(622)	609	711
Asset ceiling effect	1,749	1,283	0	0	0	0	1,749	1,283
Net defined benefit asset / (liability)	0	0	(529)	50	(611)	(622)	(1,140)	(572)

¹ Experience (gains) / losses are a component of actuarial remeasurements of the defined benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred.

Note 26 Pension and other post-employment benefit plans (continued)

Analysis of amounts recognized in net profit

CHF million	Swiss plan		UK plan		US and German plans		Total	
For the year ended	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Current service cost	471	589	0	0	9	10	480	599
Interest expense related to defined benefit obligation	240	270	116	137	62	57	419	463
Interest income related to plan assets	(258)	(273)	(118)	(118)	(44)	(39)	(420)	(430)
Interest expense on asset ceiling effect	14	0	0	0	0	0	14	0
Administration expenses, taxes and premiums paid	10	10	0	0	6	8	16	18
Plan amendments	0	0	0	0	0	(24)	0	(24)
Curtailments	(96)	(81)	0	0	0	0	(96)	(81)
Termination benefits	0	1	0	0	0	0	0	1
Net periodic expenses	381	515	(2)	18	33	12	412	546

Analysis of amounts recognized in other comprehensive income (OCI)

CHF million	Swiss plan		UK plan		US and German plans		Total	
For the year ended	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Remeasurement of defined benefit obligation	(477)	1,231	(922)	441	(125)	8	(1,524)	1,681
Return on plan assets excluding amounts included in interest income	824	109	312	(124)	2	(44)	1,139	(59)
Asset ceiling effect excluding interest expense on asset ceiling effect	(452)	(1,283)	0	0	0	0	(452)	(1,283)
Total gains / (losses) recognized in other comprehensive income, before tax	(105)	58	(610)	317	(122)	(35)	(837)	339
<i>of which: attributable to shareholders</i>	<i>(105)</i>	<i>53</i>	<i>(610)</i>	<i>315</i>	<i>(122)</i>	<i>(35)</i>	<i>(837)</i>	<i>333</i>
<i>of which: attributable to non-controlling interests</i>	<i>0</i>	<i>5</i>	<i>0</i>	<i>2</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>7</i>

The table below provides information on the duration of the DBO and the timing for expected benefit payments.

	Swiss plan		UK plan		US and German plans ¹	
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Duration of the defined benefit obligation (in years)	15.1	15.1	22.6	19.7	10.6	11.3
Maturity analysis of benefits expected to be paid						
CHF million						
Benefits expected to be paid within 12 months	1,140	1,146	72	80	103	92
Benefits expected to be paid between 1 and 3 years	2,204	2,218	164	177	213	185
Benefits expected to be paid between 3 and 6 years	3,394	3,403	315	338	328	291
Benefits expected to be paid between 6 and 11 years	5,439	5,526	710	785	562	509
Benefits expected to be paid between 11 and 16 years	5,041	5,173	856	981	514	510
Benefits expected to be paid in more than 16 years	17,162	18,892	6,064	7,348	958	1,172

¹ The duration of the defined benefit obligation represents a weighted average across US and German plans.

Note 26 Pension and other post-employment benefit plans (continued)

Actuarial assumptions

The measurement of each pension plan's DBO considers different actuarial assumptions. Changes in those assumptions lead to volatility in the DBO. The following principal actuarial assumptions are applied:

- Discount rate: the discount rate is based on the yield of high-quality corporate bonds quoted in an active market in the currency of the respective pension plan. Consequently, a decrease in the yield of high-quality corporate bonds increases the DBO. Conversely, an increase in the yield of high-quality corporate bonds decreases the DBO.
- Rate of salary increase: an increase in the salary of plan participants generally increases the DBO, specifically for the Swiss and German plans. For the UK plan as the plan is closed for future service, UBS employees no longer accrue future service benefits and thus salary increases have no effect on the DBO. For the US plans, only a small percentage of the total population continues to accrue benefits for future service, therefore the effect of a salary increase on the DBO is minimal.
- Rate of pension increase: for the Swiss plan, there is no automatic indexing of pensions. Any increase would be decided by the Pension Foundation Board. For the US plans, there is also no automatic indexing of pensions. For the UK plan, pensions are automatically indexed to price inflation as per plan rules and local pension legislation. The German plans are also automatically indexed and a portion of the pensions are directly increased by price inflation. An increase in price inflation in the UK and Germany increases the respective plan's DBO.
- Rate of interest credit on retirement savings: the Swiss plan and one of the US plans have retirement saving balances that are increased annually by an interest credit rate. For these plans, an increase in the interest credit rate increases the respective plan's DBO.
- Life expectancy: for most of UBS's defined benefit pension plans, the respective plan is obligated to provide guaranteed lifetime pension benefits. The DBO for all plans is calculated using an underlying best estimate of the life expectancy of plan participants. An increase in the life expectancy of plan participants increases the plan's DBO.

The actuarial assumptions used for the pension plans are based on the economic conditions prevailing in the jurisdiction in which they operate.

→ Refer to Note 1a item 7 for a description of the accounting policy for defined benefit pension plans

Changes in actuarial assumptions

UBS regularly reviews the actuarial assumptions used in calculating its DBO to determine their continuing relevance.

Swiss pension plan

In 2016, UBS continued to enhance its methodology for estimating the discount rate by improving the construction of the yield curve from Swiss high-quality corporate bonds. Furthermore, UBS refined its approach for estimating the life expectancy, the rate of employee disability and the rate of salary increases. These changes in estimates decreased the DBO of the Swiss pension plan by CHF 319 million, of which changes in demographic assumptions decreased the DBO by CHF 659 million and changes in financial assumptions increased the DBO by CHF 339 million. However, the effect from these changes in estimates was more than offset by experience losses and market-driven changes in the discount rate, resulting in a total upward remeasurement of the Swiss plan DBO of CHF 477 million, which was recognized in *Other comprehensive income*.

In 2015, the effect from an enhancement in methodology for estimating the discount rate and from the refinement of the approach to estimate the rate of salary increases, the rate of interest credit on retirement savings, the employee turnover rate, the rate of employee disabilities and the rate of marriage was a net decrease in the DBO of the Swiss pension plan of CHF 2,055 million, of which CHF 1,038 million related to demographic assumptions and CHF 1,017 million related to financial assumptions. The effect from these changes in estimates was partly offset by market-driven discount rate changes, resulting in an overall downward remeasurement of the Swiss plan DBO of CHF 1,231 million, which was recognized in *Other comprehensive income*.

Non-Swiss pension plans

In both 2016 and 2015, UBS also enhanced methodologies and refined approaches used to estimate various actuarial assumptions for its non-Swiss pension plans.

In 2016, these changes in estimates resulted in a total net decrease in the DBO of the UK pension plan of CHF 63 million, all related to demographic assumptions. However, the effect from these changes in estimates was more than offset mainly by market-driven discount rate changes, resulting in a total upward remeasurement of the UK plan DBO of CHF 922 million, which was recognized in *Other comprehensive income*.

In 2015, the changes in estimates resulted in a total net decrease in the DBO of the UK pension plan of CHF 192 million, of which CHF 122 million related to demographic assumptions and CHF 71 million related to financial assumptions. In addition, mainly market-driven discount rate changes reduced the DBO further, resulting in an overall downward remeasurement of the UK plan DBO of CHF 441 million, which was recognized in *Other comprehensive income*.

Note 26 Pension and other post-employment benefit plans (continued)

The tables below show the principal actuarial assumptions used in calculating the DBO at the end of the year.

Principal actuarial assumptions used

In %	Swiss plan		UK plan		US and German plans ¹	
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Discount rate	0.73	1.09	2.69	3.90	3.58	4.01
Rate of salary increase	1.30	1.75	0.00	0.00	2.86	2.89
Rate of pension increase	0.00	0.00	3.18	3.02	1.50	1.50
Rate of interest credit on retirement savings	0.73	1.09	0.00	0.00	1.74	1.48

¹ Represents weighted average assumptions across US and German plans.

Mortality tables and life expectancies for major plans

Country	Mortality table	Life expectancy at age 65 for a male member currently			
		aged 65		aged 45	
		31.12.16	31.12.15	31.12.16	31.12.15
Switzerland	BVG 2015 G CMI_2016 ¹	21.5	21.5	22.9	23.2
UK	S2PA CMI_2015, with projections	23.7	23.9	25.0	25.6
US	RP2014 WCHA, with MP2016 projection scale ²	22.9	23.0	24.4	24.5
Germany	Dr. K. Heubeck 2005 G	20.1	20.0	22.8	22.6

Country	Mortality table	Life expectancy at age 65 for a female member currently			
		aged 65		aged 45	
		31.12.16	31.12.15	31.12.16	31.12.15
Switzerland	BVG 2015 G CMI_2016 ¹	23.4	24.0	24.9	25.7
UK	S2PA CMI_2015, with projections	25.6	25.8	27.4	28.0
US	RP2014 WCHA, with MP2016 projection scale ²	24.5	24.6	26.1	26.2
Germany	Dr. K. Heubeck 2005 G	24.2	24.1	26.7	26.6

¹ In 2015, the mortality table BVG 2010 G was used. ² In 2015, the mortality table RP2014 WCHA, with MP2015 projection scale was used.

Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption, showing how the DBO would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the balance sheet date. Unforeseen

circumstances may arise, which could result in variations that are outside the range of alternatives deemed reasonably possible. Caution should be used in extrapolating the sensitivities below to the overall impact on the DBO as the sensitivities may not be linear.

Sensitivity analysis of significant actuarial assumptions¹

Increase / (decrease) in defined benefit obligation CHF million	Swiss plan		UK plan		US and German plans	
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Discount rate						
Increase by 50 basis points	(1,435)	(1,416)	(388)	(308)	(86)	(84)
Decrease by 50 basis points	1,630	1,609	452	354	94	92
Rate of salary increase						
Increase by 50 basis points	86	82	— ²	— ²	1	1
Decrease by 50 basis points	(79)	(86)	— ²	— ²	(1)	(1)
Rate of pension increase						
Increase by 50 basis points	1,178	1,163	435	343	6	6
Decrease by 50 basis points	— ³	— ³	(377)	(300)	(6)	(5)
Rate of interest credit on retirement savings						
Increase by 50 basis points	264	263	— ⁴	— ⁴	9	8
Decrease by 50 basis points	(250)	(249)	— ⁴	— ⁴	(8)	(8)
Life expectancy						
Increase in longevity by one additional year	796	719	136	97	44	42

¹ The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded. ² As the plan is closed for future service, a change in assumption is not applicable. ³ As the assumed rate of pension increase was 0% as of 31 December 2016 and as of 31 December 2015, a downward change in assumption is not applicable. ⁴ As the plan does not provide interest credits on retirement savings, a change in assumption is not applicable.

Note 26 Pension and other post-employment benefit plans (continued)

Fair value of plan assets

The table below provides information on the composition and fair value of plan assets of the Swiss, the UK and the US pension plans.

Composition and fair value of plan assets

Swiss plan

	31.12.16				31.12.15			
	Fair value			Plan asset allocation %	Fair value			Plan asset allocation %
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<i>CHF million</i>								
Cash and cash equivalents	869	0	869	4	517	0	517	2
Real estate / property								
Domestic	0	2,689	2,689	11	0	2,647	2,647	11
Investment funds								
Equity								
Domestic	938	0	938	4	699	0	699	3
Foreign	6,558	1,170	7,728	31	6,948	1,085	8,033	34
Bonds ¹								
Domestic, AAA to BBB–	2,222	0	2,222	9	2,112	0	2,112	9
Foreign, AAA to BBB–	5,877	0	5,877	24	6,109	0	6,109	26
Foreign, below BBB–	1,176	0	1,176	5	1,056	0	1,056	4
Real estate								
Foreign	0	42	42	0	0	63	63	0
Other	283	2,776	3,059	12	1,064	1,605	2,669	11
Other investments	0	15	15	0	0	15	15	0
Total	17,923	6,691	24,614	100	18,505	5,414	23,919	100

	31.12.16	31.12.15
Total fair value of plan assets	24,614	23,919
<i>of which:²</i>		
Bank accounts at UBS	432	517
UBS debt instruments	5	5
UBS shares	47	38
Securities lent to UBS ³	1,855	962
Property occupied by UBS	83	82
Derivative financial instruments, counterparty UBS ³	(220)	(170)

¹ The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification. ² Bank accounts at UBS encompass accounts in the name of the Swiss pension fund. The other positions disclosed in the table encompass both direct investments in UBS instruments and indirect investments, i.e., those made through funds that the pension fund invests in. ³ Securities lent to UBS and derivative financial instruments are presented gross of any collateral. Securities lent to UBS were fully covered by collateral as of 31 December 2016 and 31 December 2015. Net of collateral, derivative financial instruments amounted to CHF 76 million as of 31 December 2016 (31 December 2015: negative CHF 90 million).

Note 26 Pension and other post-employment benefit plans (continued)

Composition and fair value of plan assets (continued)

UK plan

	31.12.16				31.12.15			
	Fair value			Plan asset allocation %	Fair value			Plan asset allocation %
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<i>CHF million</i>								
Cash and cash equivalents	133	0	133	4	426	0	426	13
Bonds¹								
Domestic, AAA to BBB–	1,131	0	1,131	36	0	0	0	0
Domestic, below BBB–	1	0	1	0	0	0	0	0
Investment funds								
Equity								
Domestic	39	0	39	1	98	0	98	3
Foreign	984	0	984	31	1,080	0	1,080	32
Bonds ¹								
Domestic, AAA to BBB–	500	28	528	17	1,305	0	1,305	38
Domestic, below BBB–	23	0	23	1	53	0	53	2
Foreign, AAA to BBB–	245	0	245	8	189	0	189	6
Foreign, below BBB–	39	0	39	1	31	0	31	1
Real estate								
Domestic	39	72	111	4	46	68	115	3
Other	(35)	111	76	2	(32)	123	91	3
Other investments	(144)	10	(134)	(4)	6	7	13	0
Total fair value of plan assets	2,955	221	3,175	100	3,202	198	3,400	100

¹ The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification.

Note 26 Pension and other post-employment benefit plans (continued)

Composition and fair value of plan assets (continued)

US plans

	31.12.16				31.12.15			
	Fair value			Weighted average plan asset allocation %	Fair value			Weighted average plan asset allocation %
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<i>CHF million</i>								
Cash and cash equivalents	75	0	75	7	52	0	52	5
Bonds¹								
Domestic, AAA to BBB–	158	0	158	14	56	0	56	6
Domestic, below BBB–	13	0	13	1	60	0	60	6
Foreign, AAA to BBB–	42	0	42	4	17	0	17	2
Foreign, below BBB–	1	0	1	0	6	0	6	1
Investment funds								
Equity								
Domestic	264	0	264	23	240	0	240	24
Foreign	248	0	248	22	240	0	240	24
Bonds ¹								
Domestic, AAA to BBB–	218	0	218	19	134	0	134	13
Domestic, below BBB–	18	0	18	2	13	0	13	1
Foreign, AAA to BBB–	42	0	42	4	31	0	31	3
Foreign, below BBB–	5	0	5	0	3	0	3	0
Real estate								
Domestic	0	11	11	1	0	12	12	1
Other	19	0	19	2	56	42	98	10
Insurance contracts	0	18	18	2	0	17	17	2
Asset-backed securities	8	0	8	1	14	0	14	1
Other investments	3	0	3	0	5	0	5	0
Total fair value of plan assets	1,115	29	1,144	100	926	70	997	100

¹ The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification.

Note 26 Pension and other post-employment benefit plans (continued)

b) Post-employment medical insurance plans

In the US and the UK, UBS offers post-employment medical benefits that contribute to the health care coverage of certain employees and their beneficiaries after retirement.

The UK post-employment medical plan is closed to new entrants. The post-employment medical benefits in the UK and the US cover all types of medical expenses. These plans are not prefunded plans, and costs are recognized as incurred. In the US, the retirees also contribute to the cost of the post-employment medical benefits.

The benefits expected to be paid by UBS to the post-employment medical insurance plans in 2017 are estimated to be CHF 6 million.

The table below provides an analysis of the movement in the net asset / liability recognized on the balance sheet for post-employment medical plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

Post-employment medical insurance plans

CHF million	UK plan		US plans		Total	
For the year ended	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Post-employment benefit obligation at the beginning of the year	25	32	59	53	84	85
Current service cost	0	0	0	0	0	0
Interest expense	1	1	3	2	3	3
Plan participant contributions	0	0	2	2	2	2
Remeasurements	6	(6)	7	9	13	3
<i>of which: actuarial (gains) / losses due to changes in demographic assumptions</i>	1	2	(1)	2	0	4
<i>of which: actuarial (gains) / losses due to changes in financial assumptions</i>	5	(1)	1	(2)	6	(3)
<i>of which: experience (gains) / losses¹</i>	0	(7)	6	9	6	2
Benefit payments ²	(1)	(1)	(7)	(8)	(8)	(10)
Foreign currency translation	(4)	(2)	1	1	(3)	(1)
Post-employment benefit obligation at the end of the year	26	25	65	59	91	84
<i>of which: amounts owing to active members</i>	6	5	0	0	6	5
<i>of which: amounts owing to deferred members</i>	0	0	0	0	0	0
<i>of which: amounts owing to retirees</i>	21	20	65	59	86	79
Fair value of plan assets at the end of the year	0	0	0	0	0	0
Net post-employment benefit asset / (liability)	(26)	(25)	(65)	(59)	(91)	(84)

Analysis of amounts recognized in net profit

Current service cost	0	0	0	0	0	0
Interest expense related to post-employment benefit obligation	1	1	3	2	3	3
Net periodic expenses	1	1	3	2	4	4

Analysis of amounts recognized in other comprehensive income (OCI)

Remeasurement of post-employment benefit obligation	(6)	6	(7)	(9)	(13)	(3)
Total gains / (losses) recognized in other comprehensive income, before tax	(6)	6	(7)	(9)	(13)	(3)
<i>of which: attributable to shareholders</i>	(6)	6	(7)	(9)	(13)	(3)
<i>of which: attributable to non-controlling interests</i>	0	0	0	0	0	0

¹ Experience (gains) / losses are a component of actuarial remeasurements of the post-employment benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred. ² Benefit payments are funded by employer contributions and plan participant contributions.

Note 26 Pension and other post-employment benefit plans (continued)

Actuarial assumptions

The measurement of each medical insurance plan's post-employment benefit obligation considers different actuarial assumptions. On a country-by-country basis, the same discount rate is used for the calculation of the post-employment benefit obligation from medical insurance plans as for the DBO arising from pension plans. Changes in assumptions lead to volatility in the post-employment benefit obligation. The following principal actuarial assumptions are applied:

- Discount rate: similar to defined benefit pension plans, a decrease in the yield of high-quality corporate bonds increases the post-employment benefit obligation. Conversely, an increase in the yield of high-quality corporate bonds decreases the post-employment benefit obligation.
- Average health care cost trend rate: an increase in health care costs generally increases the post-employment benefit obligation.

- Life expectancy: as some plan participants have lifetime benefits under these plans, an increase in life expectancy increases the post-employment benefit obligation.

Changes in actuarial assumptions

UBS regularly reviews the actuarial assumptions used in calculating its post-employment benefit obligations to determine their continuing relevance. In 2016 and in 2015, UBS enhanced methodologies and refined approaches used to estimate several actuarial assumptions. These improvements in estimates resulted in a net increase in the post-employment benefit obligation.

Principal actuarial assumptions used to determine post-employment benefit obligations at the end of the year were:

Principal actuarial assumptions used¹

In %	UK plan		US plans ²	
	31.12.16	31.12.15	31.12.16	31.12.15
Discount rate	2.69	3.90	3.97	4.23
Average health care cost trend rate – initial	5.10	5.10	7.03	6.75
Average health care cost trend rate – ultimate	5.10	5.10	4.50	5.00

¹ The assumptions for life expectancies are provided within Note 26a. ² Represents weighted average assumptions across US plans.

Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption showing how the post-employment benefit obligation would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the balance sheet date. Unforeseen circumstances may arise, which

could result in variations that are outside the range of alternatives deemed reasonably possible. Caution should be used in extrapolating the sensitivities below to the overall impact on the post-employment benefit obligation, as the sensitivities may not be linear.

Sensitivity analysis of significant actuarial assumptions¹

Increase / (decrease) in post-employment benefit obligation	UK plan		US plans	
CHF million	31.12.16	31.12.15	31.12.16	31.12.15
Discount rate				
Increase by 50 basis points	(2)	(1)	(3)	(3)
Decrease by 50 basis points	2	2	3	3
Average health care cost trend rate				
Increase by 100 basis points	4	3	2	1
Decrease by 100 basis points	(3)	(3)	(1)	(1)
Life expectancy				
Increase in longevity by one additional year	2	2	5	5

¹ The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded.

c) Defined contribution plans

UBS sponsors a number of defined contribution plans in locations outside Switzerland. The locations with significant defined contribution plans are the US and the UK. Certain plans allow employees to make contributions and earn matching or other contributions from UBS. Employer contributions to defined

contribution plans are recognized as an expense, which, for the years ended 31 December 2016, 2015 and 2014, amounted to CHF 236 million, CHF 239 million and CHF 244 million, respectively.

Note 26 Pension and other post-employment benefit plans (continued)

d) Related-party disclosure

UBS is the principal provider of banking services for the pension fund of UBS in Switzerland. In this function, UBS is engaged to execute most of the pension fund's banking activities. These activities can include, but are not limited to, trading, securities lending and borrowing and derivative transactions. The non-Swiss UBS pension funds do not have a similar banking relationship with UBS.

The bank leases certain properties that are owned by the Swiss pension fund. As of 31 December 2016, the minimum commitment toward the Swiss pension fund under the related

leases is approximately CHF 11 million (31 December 2015: CHF 11 million).

→ Refer to the "Composition and fair value of plan assets" table in Note 26a for more information on fair value of investments in UBS instruments held by the Swiss pension fund

The following amounts have been received or paid by UBS from and to the pension and other post-employment benefit plans located in Switzerland, the UK and the US in respect of these banking activities and arrangements.

Related-party disclosure

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Received by UBS			
Fees	36	33	33
Paid by UBS			
Rent	4	5	6
Interest	(1)	(1)	0
Dividends and capital repayments	15	14	4

The transaction volumes in UBS shares and UBS debt instruments and the balances of UBS shares held as of 31 December were:

Transaction volumes – UBS shares and UBS debt instruments

	For the year ended	
	31.12.16	31.12.15
Financial instruments bought by pension funds		
UBS shares (in thousands of shares)	2,427	1,544
UBS debt instruments (par values, CHF million)	0	3
Financial instruments sold by pension funds or matured		
UBS shares (in thousands of shares)	1,618	2,255
UBS debt instruments (par values, CHF million)	0	4

UBS shares held by pension and other post-employment benefit plans

	31.12.16	31.12.15
Number of shares (in thousands of shares)	18,363	17,737
Fair value (CHF million)	293	344

Note 27 Equity participation and other compensation plans

a) Plans offered

The UBS Group has several equity participation and other compensation plans to align the interests of Group Executive Board (GEB) members, Key Risk Takers and other employees with the interests of investors while continuously meeting regulatory requirements. This Note provides a description of the most significant plans offered by the Group which relate to the performance year 2016 (awards granted in 2017) and those from prior years that were partly expensed in 2016.

→ Refer to Note 1a item 6 for a description of the accounting policy related to equity participation and other compensation plans

Mandatory share-based compensation plans

Equity Ownership Plan (EOP):

The EOP is a mandatory share-based compensation plan for all employees with total compensation greater than CHF/USD 300,000. These employees receive a portion of their annual performance-related compensation above the threshold in the form of notional shares. Furthermore, notional shares granted to GEB members, Key Risk Takers, Group Managing Directors (GMDs) or employees whose incentive awards exceed a certain threshold are subject to performance conditions. These performance conditions are based on the Group's return on tangible equity and the divisional return on attributed equity (for Corporate Center employees, the combined return on attributed equity of all business divisions). Certain awards, such as replacement awards issued outside the normal performance year cycle, may take the form of deferred cash under the EOP plan rules.

Notional shares represent a promise to receive UBS shares at vesting and do not carry voting rights during the vesting period. Notional shares granted before February 2014 have no rights to dividends, whereas awards granted since February 2014 carry a dividend equivalent which may be paid in notional shares or cash and which vests on the same terms and conditions as the awards. Awards are settled by delivering UBS shares at vesting, except in jurisdictions where this is not permitted for legal or tax reasons. EOP awards generally vest in equal installments after two and three years following grant (for GEB members, generally after three, four and five years). The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

Senior Executive Equity Ownership Plan (SEEOP):

Up to February 2012, GEB members and selected senior executives received a portion of their mandatory deferral in UBS shares or notional shares, which vested in equal installments

over a five-year vesting period and were forfeitable if certain conditions had not been met. The employee's business division or the Group as a whole had to be profitable in the financial year preceding scheduled vesting. Awards granted under SEEOP are settled by delivering UBS shares at vesting. No SEEOP awards have been granted since 2012.

Role-based allowances (RBAs):

Certain employees of EU regulated entities may receive an RBA in addition to their base salary. This allowance reflects the market value of a specific role and is only paid as long as the employee is within such a role. RBAs are offered in line with market practice and are generally paid in cash. In the UK, RBAs are partially awarded in cash and above a threshold in blocked UBS shares. Such shares will be unblocked in equal installments after two and three years. The compensation expense is recognized in the year of grant.

Mandatory deferred cash compensation plans

Deferred Contingent Capital Plan (DCCP):

The DCCP is a mandatory deferred cash compensation plan for all employees with total compensation greater than CHF/USD 300,000. DCCP awards granted up to January 2015 represent a right to receive a cash payment at vesting. For awards granted since February 2015, DCCP takes the form of notional additional tier 1 (AT1) capital instruments, which may be settled at the discretion of UBS in the form of a cash payment or a marketable AT1 capital instrument. Awards vest in full after five years unless there is a trigger or viability event. Awards granted under the DCCP are written down if UBS's common equity tier 1 capital ratio falls below 10% for GEB members and below 7% for all other employees. DCCP awards are also forfeited if a viability event occurs, that is, if FINMA provides a written notice to UBS that the DCCP awards must be written down to prevent an insolvency, bankruptcy or failure of UBS, or if UBS receives a commitment of extraordinary support from the public sector that is necessary to prevent such an event. Additionally, GEB members forfeit 20% of their award for each year during the vesting period in which UBS does not achieve an adjusted profit before tax. For awards granted up to January 2015, interest on the awards is paid annually, provided that UBS achieved an adjusted profit before tax in the preceding year. For awards granted since February 2015, interest payments are discretionary. The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

Note 27 Equity participation and other compensation plans (continued)

Long-Term Deferred Retention Senior Incentive Scheme (LTDRSIS):

Awards under the LTDRSIS were granted to employees in Australia up to and including 2014 and represent a profit share amount based on the profitability of the Australian business. Awards vest after three years and include an arrangement which allows for unpaid installments to be reduced if the business records a loss for the calendar year preceding vesting. The awards are generally forfeitable upon voluntary termination of employment with UBS.

Asset Management EOP:

In order to align deferred compensation of certain Asset Management employees with the performance of the funds they manage, EOP awards are granted to such employees in the form of cash-settled notional funds. The amount delivered depends on the value of the underlying investment funds at the time of vesting. The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

Wealth Management Americas financial advisor compensation

Financial advisor compensation plans generally provide for cash payments and deferred awards that are formula driven and fluctuate in proportion to the level of business activity.

UBS also may enter into compensation commitments with certain new financial advisors, primarily as a recruitment incentive and to incentivize certain eligible active financial advisors to achieve specified revenue production and other performance conditions. The compensation may be earned and paid to the employee during a period of continued employment and may be forfeited under certain circumstances.

GrowthPlus:

GrowthPlus is a program for selected financial advisors whose revenue production and length of service exceed defined thresholds from 2010 through 2017. Compensation arrangements were granted in 2010, 2011 and 2015, with additional arrangements expected to be issued in 2018. The awards are distributed over seven years, with the exception of 2018 arrangements which will be distributed over five years.

PartnerPlus:

PartnerPlus is a mandatory deferred cash compensation plan for certain eligible financial advisors. Awards (UBS company contributions) are based on a predefined formula during the performance year. Participants are also allowed to voluntarily contribute additional amounts otherwise payable during the year, up to a certain percentage of their pay, which vest upon contribution. Company contributions and voluntary

contributions are credited with interest in accordance with the terms of the plan. Rather than being credited with interest, a participant may elect to have voluntary contributions, along with vested company contributions, credited with notional earnings based on the performance of various mutual funds. Company contributions and interest on both company and voluntary contributions ratably vest in 20% installments six to ten years following grant date. Company contributions and interest on notional earnings on both company and voluntary contributions are forfeitable under certain circumstances.

Other share-based compensation plans

Equity Plus Plan (Equity Plus):

Equity Plus is a voluntary plan that provides eligible employees with the opportunity to purchase UBS shares at market value and receive one notional share for every three shares purchased, up to a maximum annual limit. Share purchases may be made annually from the performance award and / or monthly through deductions from salary. If the shares purchased are held for three years and, in general, if the employee remains in employment, the notional shares vest. For notional shares granted since April 2014, employees are entitled to receive a dividend equivalent, which may be paid in notional shares and / or cash.

Key Employee Stock Appreciation Rights Plan (KESAP) and Key Employee Stock Option Plan (KESOP):

Until 2009, key and high-potential employees were granted discretionary share-settled stock appreciation rights (SARs) or options on UBS shares with a strike price not less than the market value of a UBS share on the date of grant. A SAR gives employees the right to receive a number of UBS shares equal to the value of any market price increase of a UBS share between the grant date and the exercise date. One option entitles the holder to acquire one registered UBS share at the option's strike price. SARs and options are settled by delivering UBS shares, except in jurisdictions where this is not permitted for legal reasons. These awards are generally forfeitable upon termination of employment with UBS. No options or SARs awards have been granted since 2009.

Share delivery obligations

Share delivery obligations related to employee share-based compensation awards increased to 166 million shares as of 31 December 2016 compared with 138 million shares as of 31 December 2015. Share delivery obligations are calculated on the basis of unvested notional share awards, options and stock appreciation rights, taking applicable performance conditions into account.

Note 27 Equity participation and other compensation plans (continued)

As of 31 December 2016, UBS held 138 million treasury shares (31 December 2015: 98 million) which were available to satisfy share delivery obligations. Treasury shares held are delivered to employees at exercise or vesting. However, share delivery obligations related to certain options and stock

appreciation rights can also be satisfied by shares issued out of conditional capital. As of 31 December 2016, the number of UBS Group AG shares that could have been issued out of conditional capital for this purpose was 130 million (31 December 2015: 131 million).

b) Effect on the income statement

Effect on the income statement for the financial year and future periods

The table below provides information on compensation expenses related to performance awards and other variable compensation, including financial advisor compensation in Wealth Management Americas, recognized for the financial year ended 31 December 2016 and deferred compensation expense that will be recognized in the income statement for 2017 and

later. The deferred compensation expense in the table also includes vested and unvested awards, which relate to the performance year 2016. The majority of them were granted in February 2017. The total compensation expense for unvested share-based awards granted up to 31 December 2016 will be recognized in future periods over a weighted average period of 2.0 years.

Personnel expenses – recognized and deferred¹

CHF million	Personnel expenses for the year ended 2016			Personnel expenses deferred to 2017 and later		
	Expenses relating to awards for 2016	Expenses relating to awards for prior years	Total	Relating to awards for 2016	Relating to awards for prior years	Total
Performance awards						
Cash performance awards	1,817	(42)	1,775	0	0	0
Deferred Contingent Capital Plan	133	295	428	266	468	735
Deferred cash plans	0	6	6	0	5	5
Equity Ownership Plan – UBS shares	214	485	699	372	356	727
Equity Ownership Plan – notional funds	26	39	65	34	27	60
Total performance awards	2,191	781	2,972	671	856	1,527
Variable compensation						
Variable compensation – other	266	151	418 ²	162 ³	301 ⁴	463
Financial advisor compensation – cash payments	2,506	0	2,506	0	0	0
Compensation commitments with recruited financial advisors	43	756	799	607	2,120	2,727
GrowthPlus and other deferral plans	112	199	311	139	773	912
UBS share plans	33	48	81	57	120	177
Wealth Management Americas: Financial advisor compensation ⁵	2,695	1,002	3,697	804	3,013	3,816
Total	5,152	1,935	7,087	1,637	4,169	5,806

¹ In 2016, total personnel expenses related to share-based compensation were CHF 910 million, which related to performance awards (CHF 699 million), other variable compensation (CHF 40 million), role-based allowances (CHF 39 million), Wealth Management Americas financial advisor compensation (CHF 81 million), the Equity Plus Plan (CHF 24 million) and social security costs (CHF 27 million). Total personnel expenses related to share-based equity-settled compensation excluding social security were CHF 861 million. ² Includes replacement payments of CHF 86 million (of which CHF 62 million related to prior years), forfeiture credits of CHF 73 million (all related to prior years), severance payments of CHF 217 million (all related to 2016) and retention plan and other payments of CHF 188 million (of which CHF 163 million related to prior years). ³ Includes DCCP interest expense of CHF 98 million for DCCP awards 2016 (granted in 2017). ⁴ Includes DCCP interest expense of CHF 243 million for DCCP awards 2015, 2014 and 2013 (granted in 2016, 2015 and 2014, respectively). ⁵ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes charges related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date.

Note 27 Equity participation and other compensation plans (continued)

Personnel expenses – recognized and deferred¹

CHF million	Personnel expenses for the year ended 2015			Personnel expenses deferred to 2016 and later		
	Expenses relating to awards for 2015	Expenses relating to awards for prior years	Total	Relating to awards for 2015	Relating to awards for prior years	Total
Performance awards						
Cash performance awards	2,073	(94)	1,980	0	0	0
Deferred Contingent Capital Plan	172	258	429	343	446	789
Deferred cash plans	0	12	12	0	3	3
Equity Ownership Plan – UBS shares	261	461	722	524	338	861
Equity Ownership Plan – notional funds	28	38	67	34	35	69
Total performance awards	2,535	675	3,210	900	822	1,722
Variable compensation						
Variable compensation – other	184	162	346 ²	248 ³	293 ⁴	541
Financial advisor compensation – cash payments	2,460	0	2,460	0	0	0
Compensation commitments with recruited financial advisors	43	692	735	940	1,899	2,839
GrowthPlus and other deferral plans	132	142	275	710	456	1,166
UBS share plans	37	45	82	66	115	182
Wealth Management Americas: Financial advisor compensation ⁵	2,673	879	3,552	1,716	2,470	4,186
Total	5,391	1,716	7,108	2,864	3,585	6,449

¹ In 2015, total personnel expenses related to share-based compensation were CHF 966 million, which related to performance awards (CHF 722 million), other variable compensation (CHF 54 million), role-based allowances (CHF 26 million), Wealth Management Americas financial advisor compensation (CHF 82 million), the Equity Plus Plan (CHF 21 million) and social security costs (CHF 61 million). Total personnel expenses related to share-based equity-settled compensation excluding social security were CHF 858 million. ² Includes replacement payments of CHF 76 million (of which CHF 65 million related to prior years), forfeiture credits of CHF 86 million (all related to prior years), severance payments of CHF 157 million (all related to 2015) and retention plan and other payments of CHF 198 million (of which CHF 183 million related to prior years). ³ Includes DCCP interest expense of CHF 160 million for DCCP awards 2015 (granted in 2016). ⁴ Includes DCCP interest expense of CHF 200 million for DCCP awards 2014, 2013 and 2012 (granted in 2015, 2014 and 2013, respectively). ⁵ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes charges related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date.

Note 27 Equity participation and other compensation plans (continued)

Personnel expenses – recognized and deferred¹

CHF million	Personnel expenses for the year ended 2014			Personnel expenses deferred to 2015 and later		
	Expenses relating to awards for 2014	Expenses relating to awards for prior years	Total	Relating to awards for 2014	Relating to awards for prior years	Total
Performance awards						
Cash performance awards	1,822	(108)	1,714	0	0	0
Deferred Contingent Capital Plan	155	194	349	312	386	698
Deferred cash plans	0	12	12	0	8	8
Equity Ownership Plan – UBS shares	215	444	659	459	367	826
Incentive Performance Plan	0	21	21	0	0	0
Total UBS share plans	215	465	680	459	367	826
Equity Ownership Plan – notional funds	24	41	65	36	33	69
Total performance awards	2,216	604	2,820	807	794	1,601
Variable compensation						
Variable compensation – other	260	206	466 ²	307 ³	340 ⁴	647
Financial advisor compensation – cash payments	2,396	0	2,396	0	0	0
Compensation commitments with recruited financial advisors	39	636	675	524	2,058	2,582
GrowthPlus and other deferral plans	81	153	234	189	528	717
UBS share plans	23	57	80	41	143	184
Wealth Management Americas: Financial advisor compensation ⁵	2,539	846	3,385	754	2,729	3,483
Total	5,015	1,656	6,671	1,868	3,863	5,731

¹ In 2014, total personnel expenses related to share-based compensation were CHF 942 million, which related to performance awards (CHF 680 million), other variable compensation (CHF 113 million), role-based allowances (CHF 9 million), Wealth Management Americas financial advisor compensation (CHF 80 million), the Equity Plus Plan (CHF 19 million) and social security costs (CHF 42 million). Total personnel expenses related to share-based equity-settled compensation excluding social security were CHF 909 million. ² Includes replacement payments of CHF 81 million (of which CHF 70 million related to prior years), forfeiture credits of CHF 70 million (all related to prior years), severance payments of CHF 162 million (all related to 2014) and retention plan and other payments of CHF 292 million (of which CHF 206 million related to prior years). ³ Includes DCCP interest expense of CHF 121 million for DCCP awards 2014 (granted in 2015). ⁴ Includes DCCP interest expense of CHF 161 million for DCCP awards 2013 and 2012 (granted in 2014 and 2013, respectively). ⁵ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes charges related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date.

Note 27 Equity participation and other compensation plans (continued)

c) Movements during the year

UBS share and performance share awards

Movements in UBS share and notional share awards were:

UBS share awards

	Number of shares 2016	Weighted average grant date fair value (CHF)	Number of shares 2015	Weighted average grant date fair value (CHF)
Outstanding, at the beginning of the year	144,185,104	17	168,778,334	15
Shares awarded during the year	82,473,059	14	66,444,272	16
Distributions during the year	(56,018,881)	16	(84,411,907)	14
Forfeited during the year	(5,013,194)	15	(6,625,596)	16
Outstanding, at the end of the year	165,626,088	15	144,185,104	17
<i>of which: shares vested for accounting purposes</i>	<i>73,913,272</i>		<i>58,920,339</i>	

The fair value of shares that became legally vested, as all conditions had been met, and were distributed during the years ended 2016 and 2015 was CHF 829 million and CHF 1,443 million, respectively.

Movements in performance shares granted under the IPP and PEP were:

Incentive Performance Plan / Performance Equity Plan

	Number of performance shares		Weighted average fair value of performance shares at grant date (CHF) ¹	
	IPP	PEP	IPP	PEP
Forfeitable, as of 31 December 2014	12,742,168	767,531	22	13
Vested during 2015 ²	(12,017,543)	(337,718)	22	13
Forfeited during 2015	(673,468)	(429,813)	22	13
Forfeitable, as of 31 December 2015	51,157	0	22	0
Vested during 2016 ²	(13,609)	0	22	0
Forfeited 2016	(10,365)	0	22	0
Forfeitable, as of 31 December 2016 ³	27,183	0	22	0

¹ The weighted average fair value takes into account the applicable performance conditions and the range of possible outcomes. ² The corresponding number of UBS shares distributed in 2016 was 13,609 for IPP and 0 for PEP. In 2015, it amounted to 12,017,543 for IPP and 337,718 for PEP. ³ As of 31 December 2016 and 31 December 2015, the number of deliverable UBS shares was equal to the number of forfeitable performance shares.

Note 27 Equity participation and other compensation plans (continued)

UBS option awards

No option awards have been granted since 2009. Movements in option awards were:

UBS option awards

	Number of options 2016	Weighted average exercise price (CHF)	Number of options 2015	Weighted average exercise price (CHF) ¹
Outstanding, at the beginning of the year	80,848,217	45	108,396,107	45
Exercised during the year	(624,554)	12	(2,971,211)	13
Forfeited during the year	(51,065)	43	(113,015)	47
Expired unexercised	(24,259,307)	61	(24,463,664)	48
Outstanding, at the end of the year	55,913,291	39	80,848,217	45
Exercisable, at the end of the year	55,913,291	39	80,848,217	45

¹ Some of the options in this table have exercise prices denominated in USD that have been converted into CHF at the year-end spot exchange rate for the purposes of this table.

The table below provides additional information about options exercised and their intrinsic values:

For the year ended	31.12.16	31.12.15
Weighted average share price of options exercised (CHF)	16	19
Intrinsic value of options exercised during the year (CHF million)	2.6	19.5

Note 27 Equity participation and other compensation plans (continued)

The table below provides additional information about options outstanding and options exercisable as of 31 December 2016:

Range of exercise prices	Options outstanding				Options exercisable			
	Number of options outstanding	Weighted average exercise price (CHF)	Aggregate intrinsic value (CHF million)	Weighted average remaining contractual term (years)	Number of options exercisable	Weighted average exercise price (CHF)	Aggregate intrinsic value (CHF million)	Weighted average remaining contractual term (years)
CHF awards								
10.21–15.00	7,685,565	11.38	35.1	2.0	7,685,565	11.38	35.1	2.0
15.01–25.00	7,445,524	19.06	0.8	2.1	7,445,524	19.06	0.8	2.1
25.01–35.00	20,626,900	31.45	0.0	1.2	20,626,900	31.45	0.0	1.2
35.01–45.00	1,270,431	35.67	0.0	1.1	1,270,431	35.67	0.0	1.1
45.01–55.00	1,519,763	53.65	0.0	0.9	1,519,763	53.65	0.0	0.9
55.01–65.00	1,757,134	58.91	0.0	0.7	1,757,134	58.91	0.0	0.7
65.01–75.00	15,607,974	68.05	0.0	0.2	15,607,974	68.05	0.0	0.2
10.21–75.00	55,913,291		36.0		55,913,291		36.0	

UBS SAR awards

No SAR awards have been granted since 2009. Movements in SAR awards were:

UBS SARs awards

	Number of SARs 2016	Weighted average exercise price (CHF)	Number of SARs 2015	Weighted average exercise price (CHF)
Outstanding, at the beginning of the year	12,519,765	12	17,689,089	12
Exercised during the year	(1,579,449)	11	(4,917,534)	11
Forfeited during the year	(6,000)	11	(14,500)	12
Expired unexercised	(127,001)	12	(237,290)	12
Outstanding, at the end of the year	10,807,315	12	12,519,765	12
Exercisable, at the end of the year	10,807,315	12	12,519,765	12

The table below provides additional information about SARs exercised and their intrinsic values:

For the year ended	31.12.16	31.12.15
Weighted average share price of SARs exercised (CHF)	15	19
Intrinsic value of SARs exercised during the year (CHF million)	6.3	38.9

Note 27 Equity participation and other compensation plans (continued)

The table below provides additional information about SARs outstanding as of 31 December 2016:

Range of exercise prices	SARs outstanding				SARs exercisable			
	Number of SARs outstanding	Weighted average exercise price (CHF)	Aggregate intrinsic value (CHF million)	Weighted average remaining contractual term (years)	Number of SARs exercisable	Weighted average exercise price (CHF)	Aggregate intrinsic value (CHF million)	Weighted average remaining contractual term (years)
CHF								
9.35–12.50	10,457,315	11.34	48.2	2.1	10,457,315	11.34	48.2	2.1
12.51–15.00	4,000	14.22	0.0	2.5	4,000	14.22	0.0	2.5
15.01–17.50	42,000	16.80	0.0	2.4	42,000	16.80	0.0	2.4
17.51–20.00	304,000	19.25	0.0	2.7	304,000	19.25	0.0	2.7
9.35–20.00	10,807,315		48.2		10,807,315		48.2	

d) Valuation

UBS share awards

UBS measures compensation expense based on the average market price of the UBS share on the grant date as quoted on the SIX Swiss Exchange, taking into consideration post-vesting sale and hedge restrictions, non-vesting conditions and market conditions, where applicable. The fair value of the share awards subject to post-vesting sale and hedge restrictions is discounted on the basis of the duration of the post-vesting restriction and is referenced to the cost of purchasing an at-the-money European put option for the term of the transfer restriction. The weighted average discount for share and performance share awards granted during 2016 is approximately 18.1% (2015: 16.7%) of the market price of the UBS share. The grant date fair value of notional shares without dividend entitlements also includes a deduction for the present value of future expected dividends to be paid between the grant date and distribution.

UBS options and SARs awards

The fair values of options and SARs have been determined using a standard closed-formula option valuation model. The expected term of each instrument is calculated on the basis of historical employee exercise behavior patterns, taking into account the share price, strike price, vesting period and the contractual life of the instrument. The term structure of volatility is derived from the implied volatilities of traded options on UBS shares in combination with the observed long-term historical share price volatility. Expected future dividends are derived from traded UBS options or from the historical dividend pattern.

Note 28 Interests in subsidiaries and other entities

a) Interests in subsidiaries

UBS defines its significant subsidiaries as those entities that, either individually or in aggregate, contribute significantly to the Group's financial position or results of operations, based on a number of criteria, including the subsidiaries' equity and their contribution to the Group's total assets and profit or loss before tax, in accordance with the requirements set by IFRS 12, Swiss regulations and the rules of the US Securities and Exchange Commission (SEC).

Individually significant subsidiaries

The two tables below list the Group's individually significant subsidiaries as of 31 December 2016. Unless otherwise stated, the subsidiaries listed below have share capital consisting solely of ordinary shares, which are held fully by the Group, and the proportion of ownership interest held is equal to the voting rights held by the Group.

The country where the respective registered office is located is also the principal place of business. UBS AG operates through a global network of branches and a significant proportion of its business activity is conducted outside Switzerland in the UK, US, Singapore, Hong Kong and other countries. UBS Europe SE has branches and offices in a number of EU member states, including branches in Germany, Italy, Luxembourg and Spain.

Subsidiaries of UBS Group AG as of 31 December 2016

Company	Registered office	Share capital in million	Equity interest accumulated in %
UBS AG	Zurich and Basel, Switzerland	CHF 385.8	100.0
UBS Business Solutions AG	Zurich, Switzerland	CHF 1.0	100.0
UBS Group Funding (Jersey) Ltd.	St. Helier, Jersey	CHF 0.0	100.0
UBS Group Funding (Switzerland) AG	Zurich, Switzerland	CHF 0.1	100.0

Individually significant subsidiaries of UBS AG as of 31 December 2016

Company	Registered office	Primary business division	Share capital in million	Equity interest accumulated in %
UBS Americas Holding LLC	Wilmington, Delaware, USA	Corporate Center	USD 2,250.0 ¹	100.0
UBS Asset Management AG	Zurich, Switzerland	Asset Management	CHF 43.2	100.0
UBS Bank USA	Salt Lake City, Utah, USA	Wealth Management Americas	USD 0.0	100.0
UBS Europe SE	Frankfurt, Germany	Wealth Management	EUR 176.0	100.0
UBS Financial Services Inc.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Limited	London, United Kingdom	Investment Bank	GBP 226.6	100.0
UBS Securities LLC	Wilmington, Delaware, USA	Investment Bank	USD 1,283.1 ²	100.0
UBS Switzerland AG	Zurich, Switzerland	Personal & Corporate Banking	CHF 10.0	100.0

¹ Comprised of common share capital of USD 1,000 and non-voting preferred share capital of USD 2,250,000,000. ² Comprised of common share capital of USD 100,000 and non-voting preferred share capital of USD 1,283,000,000.

During 2016, the majority of the operating subsidiaries of Asset Management were transferred to UBS Asset Management AG to create a holding structure spanning the division's global activities outside the US. Also in 2016, UBS AG's direct Wealth Management subsidiaries UBS (Italia) SpA, UBS (Luxembourg) S.A. (including its branches in Austria, Denmark and Sweden), UBS Bank S.A. (Madrid) and UBS Bank (Netherlands) B.V. were

merged into UBS Deutschland AG, which was renamed to UBS Europe SE and is headquartered in Frankfurt, Germany.

UBS Americas Holding LLC, UBS Asset Management AG, UBS Europe SE, UBS Limited and UBS Switzerland AG are fully held by UBS AG. UBS Bank USA, UBS Financial Services Inc. and UBS Securities LLC are fully held, directly or indirectly, by UBS Americas Holding LLC.

Note 28 Interests in subsidiaries and other entities (continued)

Other subsidiaries

The table below lists other subsidiaries of UBS AG that are not individually significant but that contribute to the Group's total assets and aggregated profit before tax thresholds and are thereby disclosed in accordance with the requirements set by the SEC.

Other subsidiaries of UBS AG as of 31 December 2016

Company	Registered office	Primary business division	Share capital in million	Equity interest accumulated in %
UBS Americas Inc.	Wilmington, Delaware, USA	Corporate Center	USD 0.0	100.0
UBS Asset Management (Americas) Inc.	Wilmington, Delaware, USA	Asset Management	USD 0.0	100.0
UBS Asset Management (Australia) Ltd	Sydney, Australia	Asset Management	AUD 20.1 ¹	100.0
UBS Asset Management (Deutschland) GmbH	Frankfurt, Germany	Asset Management	EUR 7.7	100.0
UBS Asset Management (Hong Kong) Limited	Hong Kong, Hong Kong	Asset Management	HKD 150.0	100.0
UBS Asset Management (Japan) Ltd	Tokyo, Japan	Asset Management	JPY 2,200.0	100.0
UBS Asset Management (Singapore) Ltd	Singapore, Singapore	Asset Management	SGD 4.0	100.0
UBS Asset Management (UK) Ltd	London, United Kingdom	Asset Management	GBP 125.0	100.0
UBS Business Solutions US LLC	Wilmington, Delaware, USA	Corporate Center	USD 0.0	100.0
UBS Card Center AG	Glattbrugg, Switzerland	Personal & Corporate Banking	CHF 0.1	100.0
UBS Credit Corp.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Fund Advisor, L.L.C.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Fund Management (Luxembourg) S.A.	Luxembourg, Luxembourg	Asset Management	EUR 13.0	100.0
UBS Fund Management (Switzerland) AG	Basel, Switzerland	Asset Management	CHF 1.0	100.0
UBS Hedge Fund Solutions LLC	Wilmington, Delaware, USA	Asset Management	USD 0.1	100.0
UBS O'Connor LLC	Dover, Delaware, USA	Asset Management	USD 1.0	100.0
UBS Real Estate Securities Inc.	Wilmington, Delaware, USA	Investment Bank	USD 0.0	100.0
UBS Realty Investors LLC	Boston, Massachusetts, USA	Asset Management	USD 9.0	100.0
UBS Securities (Thailand) Ltd	Bangkok, Thailand	Investment Bank	THB 500.0	100.0
UBS Securities Australia Ltd	Sydney, Australia	Investment Bank	AUD 0.3 ¹	100.0
UBS Securities India Private Limited	Mumbai, India	Investment Bank	INR 140.0	100.0
UBS Securities Japan Co., Ltd.	Tokyo, Japan	Investment Bank	JPY 56,450.0	100.0
UBS Securities Pte. Ltd.	Singapore, Singapore	Investment Bank	SGD 420.4	100.0
UBS Services LLC	Wilmington, Delaware, USA	Corporate Center	USD 0.0	100.0
UBS South Africa (Proprietary) Limited	Sandton, South Africa	Investment Bank	ZAR 0.0	100.0
UBS UK Properties Limited	London, United Kingdom	Corporate Center	GBP 132.0	100.0
OOO UBS Bank	Moscow, Russia	Investment Bank	RUB 3,450.0	100.0
Topcard Service AG	Glattbrugg, Switzerland	Personal & Corporate Banking	CHF 0.2	100.0

¹ Includes a nominal amount relating to redeemable preference shares.

In 2016, UBS Italia SIM SpA, a subsidiary conducting activities of the Investment Bank, was converted to a branch of UBS Limited, London, via a cross-border merger transaction.

Note 28 Interests in subsidiaries and other entities (continued)

Changes in consolidation scope

In 2016, no significant subsidiaries were added to or removed from the scope of consolidation as a result of acquisitions or disposals.

Non-controlling interests

As of 31 December 2016 and 31 December 2015, non-controlling interests mainly comprised preferred notes issued by UBS AG. Apart from this, non-controlling interests were not material to the Group.

As of 31 December 2016 and 31 December 2015, there were no significant restrictions on UBS's ability to access or use the assets and settle the liabilities of the Group resulting from protective rights of non-controlling interests.

Consolidated structured entities

UBS consolidates a structured entity (SE) if it has power over the relevant activities of the entity, exposure to variable returns and the ability to use its power to affect its returns. Consolidated SEs include certain investment funds, securitization vehicles and client investment vehicles. UBS has no individually significant subsidiaries that are SEs.

Investment fund SEs are generally consolidated when the Group's aggregate exposure combined with its decision-making rights indicate the ability to use such power in a principal capacity. Typically the Group will have decision-making rights as

fund manager, earning a management fee, and will provide seed capital at the inception of the fund or hold a significant percentage of the fund units. Where other investors do not have the substantive ability to remove UBS as decision maker, the Group is deemed to have control and therefore consolidates the fund.

Securitization SEs are generally consolidated when the Group holds a significant percentage of the asset-backed securities issued by the SE and has the power to remove without cause the servicer of the asset portfolio.

Client investment SEs are generally consolidated when the Group has a substantive liquidation right over the SE or a decision right over the assets held by the SE and has exposure to variable returns through derivatives traded with the SE or holding notes issued by the SE.

In 2016 and 2015, the Group has not entered into any contractual obligation that could require the Group to provide financial support to consolidated SEs. In addition, the Group did not provide support, financial or otherwise, to a consolidated SE when the Group was not contractually obligated to do so, nor has the Group an intention to do so in the future. Further, the Group did not provide support, financial or otherwise, to a previously unconsolidated SE that resulted in the Group controlling the SE during the reporting period.

Note 28 Interests in subsidiaries and other entities (continued)

b) Interests in associates and joint ventures

As of 31 December 2016 and 2015, no associate or joint venture was individually material to the Group. In addition, there were no significant restrictions on the ability of associates or joint ventures to transfer funds to UBS Group AG or its

subsidiaries in the form of cash dividends or to repay loans or advances made. There were no quoted market prices for any associates or joint ventures of the Group.

Investments in associates and joint ventures

CHF million	31.12.16	31.12.15
Carrying amount at the beginning of the year	954	927
Additions	3	12
Disposals	(2)	(2)
Share of comprehensive income	82	151
<i>of which: share of net profit^{1, 2}</i>	106	169
<i>of which: share of other comprehensive income³</i>	(24)	(18)
Dividends received	(50)	(114)
Foreign currency translation	(23)	(20)
Carrying amount at the end of the year	963	954
<i>of which: associates</i>	<i>934</i>	<i>925</i>
<i>of which: UBS Securities Co. Limited, Beijing⁴</i>	<i>392</i>	<i>411</i>
<i>of which: SIX Group AG, Zurich⁵</i>	<i>426</i>	<i>413</i>
<i>of which: other associates</i>	<i>116</i>	<i>102</i>
<i>of which: joint ventures</i>	<i>29</i>	<i>29</i>

¹ For 2016, consists of CHF 94 million from associates and CHF 12 million from joint ventures. For 2015, consists of CHF 158 million from associates and CHF 11 million from joint ventures. ² In 2015, the SIX Group sold its stake in STOXX Ltd and Indexium Ltd. The UBS share of the resulting gain on sale was CHF 81 million. ³ For 2016, consists of negative CHF 25 million from associates and CHF 0 million from joint ventures. For 2015, consists of negative CHF 18 million from associates and CHF 0 million from joint ventures. ⁴ UBS AG's equity interest amounts to 24.99%. ⁵ UBS AG's equity interest amounts to 17.31%. UBS AG is represented on the Board of Directors.

Note 28 Interests in subsidiaries and other entities (continued)

c) Interests in unconsolidated structured entities

During 2016, the Group sponsored the creation of various SEs and interacted with a number of non-sponsored SEs, including securitization vehicles, client vehicles as well as certain investment funds, which UBS did not consolidate as of 31 December 2016 because it did not control these entities.

The table below presents the Group's interests in and maximum exposure to loss from unconsolidated SEs as well as the total assets held by the SEs in which UBS had an interest as of year-end, except for investment funds sponsored by third parties, for which the carrying value of UBS's interest as of year-end has been disclosed.

Interests in unconsolidated structured entities

CHF million, except where indicated	31.12.16				Maximum exposure to loss ¹
	Securitization vehicles	Client vehicles	Investment funds	Total	
Trading portfolio assets	634	394	6,215	7,243	7,243
Positive replacement values	40	76	101	217	217
Loans	0	0	79	79	79
Financial assets designated at fair value	103	83 ²	98	284	1,863
Financial assets available for sale	0	3,381	58	3,439	3,439
Other assets	289	37 ²	0	327	1,490
Total assets	1,066³	3,971	6,552	11,589	
Negative replacement values	33 ⁴	346	67	446	90
Total liabilities	33	346	67	446	
Assets held by the unconsolidated structured entities in which UBS had an interest (CHF billion)	72⁵	102⁶	334⁷		

CHF million, except where indicated	31.12.15				Maximum exposure to loss ¹
	Securitization vehicles	Client vehicles	Investment funds	Total	
Trading portfolio assets	1,060	463	6,102	7,624	7,624
Positive replacement values	41	101	57	200	200
Loans	0	0	101	101	101
Financial assets designated at fair value	0	97 ²	95	191	1,730
Financial assets available for sale	0	3,396	102	3,498	3,498
Other assets	0	45 ²	0	45	937
Total assets	1,101³	4,102	6,457	11,660	
Negative replacement values	30 ⁴	631	0	661	19
Total liabilities	30	631	0	661	
Assets held by the unconsolidated structured entities in which UBS had an interest (CHF billion)	141⁵	43⁶	320⁷		

¹ For purposes of this disclosure, maximum exposure to loss amounts do not consider the risk-reducing effects of collateral or other credit enhancements. ² Represents the carrying value of loan commitments, both designated at fair value and held at amortized cost. The maximum exposure to loss for these instruments is equal to the notional amount. ³ As of 31 December 2016, CHF 1.0 billion of the CHF 1.1 billion (31 December 2015: CHF 0.9 billion of the CHF 1.1 billion) was held in Corporate Center – Non-core and Legacy Portfolio. ⁴ Comprised of credit default swap (CDS) liabilities and other swap liabilities. The maximum exposure to loss for CDS is equal to the sum of the negative carrying value and the notional amount. For other swap liabilities, no maximum exposure to loss is reported. ⁵ Represents principal amount outstanding. ⁶ Represents the market value of total assets. ⁷ Represents the net asset value of the investment funds sponsored by UBS and the carrying value of UBS's interests in the investment funds not sponsored by UBS.

Note 28 Interests in subsidiaries and other entities (continued)

The Group retains or purchases interests in unconsolidated SEs in the form of direct investments, financing, guarantees, letters of credit, derivatives and through management contracts.

The Group's maximum exposure to loss is generally equal to the carrying value of the Group's interest in the SE, with the exception of guarantees, letters of credit and credit derivatives for which the contract's notional amount, adjusted for losses already incurred, represents the maximum loss that the Group is exposed to. In addition, the current fair value of derivative swap instruments with a positive replacement value only, such as total return swaps, is presented as the maximum exposure to loss. Risk exposure for these swap instruments could change over time with market movements.

The maximum exposure to loss disclosed in the table on the previous page does not reflect the Group's risk management activities, including effects from financial instruments that may be used to economically hedge the risks inherent in the unconsolidated SE or the risk-reducing effects of collateral or other credit enhancements.

In 2016 and 2015, the Group did not provide support, financial or otherwise, to an unconsolidated SE when not contractually obligated to do so, nor has the Group an intention to do so in the future.

In 2016 and 2015, income and expenses from interests in unconsolidated SEs primarily resulted from mark-to-market movements recognized in net trading income, which have generally been hedged with other financial instruments, as well as fee and commission income received from UBS sponsored funds.

Interests in securitization vehicles

As of 31 December 2016 and 31 December 2015, the Group held interests, both retained and acquired, in various securitization vehicles. As of 31 December 2016, a majority of the Group's interests in securitization vehicles related to a portfolio of asset-backed securities (ABS), which are held within Corporate Center – Non-core and Legacy Portfolio. The Investment Bank also retained interests in securitization vehicles related to financing, underwriting, secondary market and derivative trading activities. In some cases the Group may be required to absorb losses from an unconsolidated SE before other parties because the Group's interest is subordinated to others in the ownership structure.

An overview of the Group's interests in unconsolidated securitization vehicles and the relative ranking and external credit rating of those interests is presented in the table on the following page. The numbers outlined in this table differ from the securitization positions presented in the Basel III Pillar 3 UBS

Group AG 2016 report, under "Pillar 3, SEC filings & other disclosures" at www.ubs.com/investors, primarily due to: (i) exclusion from the table on the following page of synthetic securitizations transacted with entities that are not SEs and transactions in which the Group did not have an interest because it did not absorb any risk, (ii) a different measurement basis in certain cases (e.g., IFRS carrying value within the table above compared with net exposure amount at default for Basel III Pillar 3 disclosures) and (iii) different classification of vehicles viewed as sponsored by the Group versus sponsored by third parties.

- **Refer to Note 1a item 1 for more information on Group's accounting policies regarding consolidation and sponsorship of securitization vehicles and other structured entities**
- **Refer to the Basel III Pillar 3 UBS Group AG 2016 report under "Pillar 3, SEC filings & other disclosures" at www.ubs.com/investors for more information**

Interests in client vehicles

As of 31 December 2016 and 31 December 2015, the Group retained interests in client vehicles sponsored by UBS and third parties that relate to financing and derivative activities and to hedge structured product offerings. Included within these investments are securities guaranteed by US government agencies.

Interests in investment funds

The Group holds interests in a number of investment funds, primarily resulting from seed investments or to hedge structured product offerings. In addition to the interests disclosed in the table on the previous page, the Group manages the assets of various pooled investment funds and receives fees that are based, in whole or part, on the net asset value of the fund and / or the performance of the fund. The specific fee structure is determined on the basis of various market factors and considers the nature of the fund, the jurisdiction of incorporation as well as fee schedules negotiated with clients. These fee contracts represent an interest in the fund as they align the Group's exposure with investors, providing a variable return that is based on the performance of the entity. Depending on the structure of the fund, these fees may be collected directly from the fund assets and / or from the investors. Any amounts due are collected on a regular basis and are generally backed by the assets of the fund. The Group did not have any material exposure to loss from these interests as of 31 December 2016 or as of 31 December 2015.

Note 28 Interests in subsidiaries and other entities (continued)

Interests in unconsolidated securitization vehicles¹

	31.12.16				
	Residential mortgage- backed securities	Commercial mortgage- backed securities	Other asset- backed securities ²	Re-securiti- zation ³	Total
<i>CHF million, except where indicated</i>					
Sponsored by UBS					
Interests in senior tranches	103	34	0	14	151
<i>of which: rated investment grade</i>	0	34			34
<i>of which: rated sub-investment grade</i>	103				103
<i>of which: defaulted</i>				14	14
Interests in mezzanine tranches	1	0	0	0	1
<i>of which: rated sub-investment grade</i>	1				1
Total	104	34	0	14	152
<i>of which: Trading portfolio assets</i>	1	34	0	14	49
<i>of which: Financial assets designated at fair value</i>	103	0	0	0	103
Total assets held by the vehicles in which UBS had an interest (CHF billion)	2	13	0	1	16
Not sponsored by UBS					
Interests in senior tranches	165	4	241	125	535
<i>of which: rated investment grade</i>	165	4	241	125	535
Interests in mezzanine tranches	32	0	0	0	32
<i>of which: rated investment grade</i>	29				29
<i>of which: defaulted</i>	3				3
Interests in junior tranches	18	0	0	0	18
<i>of which: rated investment grade</i>	17				17
<i>of which: rated sub-investment grade</i>	1				1
Total	215	4	241	125	585
<i>of which: Trading portfolio assets</i>	215	4	241	125	585
Total assets held by the vehicles in which UBS had an interest (CHF billion)	41	8	5	1	56

¹ This table excludes receivables and derivative transactions with securitization vehicles. ² Includes credit card, auto and student loan structures. ³ Includes collateralized debt obligations.

Note 28 Interests in subsidiaries and other entities (continued)

Interests in unconsolidated securitization vehicles (continued)¹

	31.12.15				
	Residential mortgage-backed securities	Commercial mortgage-backed securities	Other asset-backed securities ²	Re-securitization ³	Total
<i>CHF million, except where indicated</i>					
Sponsored by UBS					
Interests in senior tranches	0	54	0	13	66
<i>of which: rated investment grade</i>		54	0		54
<i>of which: defaulted</i>				13	13
Interests in mezzanine tranches	3	7	0	0	10
<i>of which: rated investment grade</i>		7			7
<i>of which: rated sub-investment grade</i>	2				2
<i>of which: defaulted</i>	1				1
Total	3	61	0	13	77
<i>of which: Trading portfolio assets</i>	3	61	0	13	77
Total assets held by the vehicles in which UBS had an interest (CHF billion)	0	28	0	1	29
Not sponsored by UBS					
Interests in senior tranches	284	66	383	140	873
<i>of which: rated investment grade</i>	284	65	383	140	872
Interests in mezzanine tranches	61	17	17	0	95
<i>of which: rated investment grade</i>	58	17	17	0	92
<i>of which: defaulted</i>	3				3
Interests in junior tranches	11	3	0	0	14
<i>of which: rated investment grade</i>	11	0			11
<i>of which: not rated</i>	0	3			3
Total	356	86	400	140	983
<i>of which: Trading portfolio assets</i>	356	86	400	140	983
Total assets held by the vehicles in which UBS had an interest (CHF billion)	64	37	6	2	109

¹ This table excludes receivables and derivative transactions with securitization vehicles. ² Includes credit card, auto and student loan structures. ³ Includes collateralized debt obligations.

Note 28 Interests in subsidiaries and other entities (continued)

Sponsored unconsolidated structured entities in which UBS did not have an interest

For several sponsored SEs, no interest was held by the Group at year-end. However, during the respective reporting period the Group transferred assets, provided services and held instruments that did not qualify as an interest in these sponsored SEs, and accordingly earned income or incurred expenses from these entities. The table below presents the income earned and expenses incurred directly from these entities during the year as well as corresponding asset information. The table does not include income earned and expenses incurred from risk management activities, including income and expenses from financial instruments used to economically hedge instruments transacted with the unconsolidated SEs.

The majority of the fee income arose from investment funds that are sponsored and administrated by the Group, but managed by third parties. As the Group does not provide any active management services, UBS was not exposed to risk from the performance of these entities and was therefore deemed not to have an interest in them. In certain structures, the fees

receivable may be collected directly from the investors and have therefore not been included in the table below.

The Group also recorded net trading income from mark-to-market movements arising primarily from derivatives, such as interest rate and currency swaps as well as credit derivatives, through which the Group purchases protection, and financial liabilities designated at fair value, which do not qualify as interests because the Group does not absorb variability from the performance of the entity. Total income reported does not reflect economic hedges or other mitigating effects from the Group's risk management activities.

During 2016, UBS and third parties transferred assets totaling CHF 13 billion (2015: CHF 9 billion) into sponsored securitization and client vehicles created in 2016. For sponsored investment funds, transfers arose during the period as investors invested and redeemed positions, thereby changing the overall size of the funds, which, when combined with market movements, resulted in a total closing net asset value of CHF 14 billion (31 December 2015: CHF 12 billion).

Sponsored unconsolidated structured entities in which UBS did not have an interest at year-end¹

	As of or for the year ended			
	31.12.16			
<i>CHF million, except where indicated</i>	Securitization vehicles	Client vehicles	Investment funds	Total
Net interest income	3	(6)	0	(3)
Net fee and commission income	0	0	53	53
Net trading income	2	(158)	29	(128)
Total income	4	(165)	82	(78)
Asset information (CHF billion)	7²	6³	14⁴	

	As of or for the year ended			
	31.12.15			
<i>CHF million, except where indicated</i>	Securitization vehicles	Client vehicles	Investment funds	Total
Net interest income	2	(11)	0	(10)
Net fee and commission income	0	0	57	57
Net trading income	18	208	48	274
Total income	20	197	104	321
Asset information (CHF billion)	8²	1³	12⁴	

¹ These tables exclude profit attributable to non-controlling interests of CHF 78 million for the year ended 31 December 2016 and CHF 77 million for the year ended 31 December 2015. ² Represents the amount of assets transferred to the respective securitization vehicles. Of the total amount transferred, CHF 2 billion was transferred by UBS (31 December 2015: CHF 3 billion) and CHF 5 billion was transferred by third parties (31 December 2015: CHF 5 billion). ³ Represents total assets transferred to the respective client vehicles. Of the total amount transferred, CHF 5 billion was transferred by UBS (31 December 2015: CHF 1 billion) and CHF 1 billion was transferred by third parties (31 December 2015: CHF 1 billion). ⁴ Represents the total net asset value of the respective investment funds.

Note 29 Business combinations

In 2016 and 2015, UBS did not complete any significant business combinations.

Note 30 Changes in organization and disposals

Measures to improve the resolvability of the Group in response to too big to fail requirements in Switzerland and other countries in which the Group operates

In December 2014, UBS Group AG completed an exchange offer for the shares of UBS AG and became the holding company of the Group. During 2015, UBS Group AG completed a court procedure under article 33 of the Swiss Stock Exchange Act (SESTA procedure) resulting in the cancellation of the shares of the remaining minority shareholders of UBS AG. As a result, UBS Group AG owns 100% of the outstanding shares of UBS AG.

In June 2015, UBS transferred its Personal & Corporate Banking and Wealth Management business booked in Switzerland from UBS AG to UBS Switzerland AG.

Also in 2015, UBS implemented a more self-sufficient business and operating model for UBS Limited and established UBS Business Solutions AG as a direct subsidiary of UBS Group AG to act as the Group service company. The purpose of the service company structure is to improve the resolvability of the Group by enabling UBS to maintain operational continuity of critical services should a recovery or resolution event occur.

In the second half of 2015, UBS transferred the ownership of the majority of its existing service subsidiaries outside the US to UBS Business Solutions AG. As of 1 January 2017, UBS completed the transfer of the shared service employees in the US to its US service company, UBS Business Solutions US LLC.

As of 1 July 2016, UBS Americas Holding LLC was designated as UBS's intermediate holding company for its US subsidiaries as required under the enhanced prudential standards regulations pursuant to the Dodd-Frank Act. UBS Americas Holding LLC holds all of UBS's US subsidiaries and is subject to US capital requirements, governance requirements and other prudential regulation.

In addition, UBS transferred the majority of the operating subsidiaries of Asset Management to UBS Asset Management AG during 2016. Furthermore, UBS merged its Wealth Management subsidiaries in Italy, Luxembourg (including its branches in Austria, Denmark and Sweden), the Netherlands and Spain into UBS Deutschland AG, which was renamed to UBS Europe SE, to establish UBS's new European legal entity which is headquartered in Frankfurt, Germany.

UBS has established UBS Group Funding (Switzerland) AG, a wholly owned direct subsidiary of UBS Group AG, to issue future loss-absorbing additional tier 1 (AT1) capital instruments and total loss-absorbing capacity- (TLAC)-eligible senior unsecured debt, which will be guaranteed by UBS Group AG. UBS also intends to substitute the issuer of outstanding TLAC-eligible senior unsecured debt, with UBS Group Funding (Switzerland) AG replacing UBS Group Funding (Jersey) Limited as the issuer.

Sale of subsidiaries and businesses

In 2016, UBS agreed to sell a life insurance subsidiary within Wealth Management, which resulted in the recognition of a loss of CHF 23 million. This sale is currently expected to close in the first half of 2017 subject to customary closing conditions. As of 31 December 2016, the assets and liabilities of this business are presented as a disposal group held for sale within *Other assets* and *Other liabilities* and amounted to CHF 5,137 million and CHF 5,213 million, respectively.

In 2015, UBS sold its Alternative Fund Services (AFS) business to Mitsubishi UFJ Financial Group Investor Services. Upon completion of the sale, UBS recognized a gain on sale of CHF 56 million and reclassified an associated net foreign currency translation gain of CHF 119 million from *Other comprehensive income* to the income statement. Also during 2015, UBS completed the sale of certain subsidiaries and businesses within Wealth Management, which resulted in the recognition of a combined net gain of CHF 169 million.

Restructuring expenses

Restructuring expenses arise from programs that materially change either the scope of business that the Group engages in or the manner in which such business is conducted. Restructuring expenses are necessary to effect such programs and include items such as severance and other personnel-related expenses, duplicate headcount costs, impairment and accelerated depreciation of assets, contract termination costs, consulting fees, and related infrastructure and system costs. These costs are presented in the income statement according to the underlying nature of the expense.

Note 30 Changes in organization and disposals (continued)

Net restructuring expenses by business division and Corporate Center unit

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Wealth Management	447	323	185
Wealth Management Americas	139	137	55
Personal & Corporate Banking	117	101	64
Asset Management	100	82	50
Investment Bank	577	396	261
Corporate Center	78	196	61
of which: Services	57	140	30
of which: Non-core and Legacy Portfolio	21	56	31
Total net restructuring expenses	1,458	1,235	677
of which: personnel expenses	751	460	327
of which: general and administrative expenses	695	761	319
of which: depreciation and impairment of property, equipment and software	11	12	29
of which: amortization and impairment of intangible assets	0	2	2

Net restructuring expenses by personnel expense category

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Salaries	435	312	145
Variable compensation – performance awards	102	38	35
Variable compensation – other	209	108	138
Contractors	56	46	28
Social security	8	5	4
Pension and other post-employment benefit plans	(75)	(65)	(29)
Other personnel expenses	17	15	6
Total net restructuring expenses: personnel expenses	751	460	327

Net restructuring expenses by general and administrative expense category

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Occupancy	123	109	49
Rent and maintenance of IT and other equipment	94	31	23
Communication and market data services	1	0	0
Administration	16	6	3
Travel and entertainment	16	17	11
Professional fees	162	187	148
Outsourcing of IT and other services	289	316	82
Other ¹	(5)	95	2
Total net restructuring expenses: general and administrative expenses	695	761	319

¹ Mainly comprised of onerous real estate lease contracts.

Note 31 Operating leases and finance leases

Information on lease contracts classified as operating leases where UBS is the lessee is provided in Note 31a and information on finance leases where UBS acts as a lessor is provided in Note 31b.

a) Operating lease commitments

As of 31 December 2016, UBS was obligated under a number of non-cancelable operating leases for premises and equipment used primarily for banking purposes. The significant premises leases usually include renewal options and escalation clauses in line with general office rental market conditions, as well as rent

adjustments based on price indices. However, the lease agreements do not contain contingent rent payment clauses and purchase options, nor do they impose any restrictions on UBS's ability to pay dividends, engage in debt financing transactions or enter into further lease agreements.

<i>CHF million</i>	31.12.16
Expenses for operating leases to be recognized in:	
2017	715
2018	603
2019	520
2020	450
2021	387
2022 and thereafter	2,360
Subtotal commitments for minimum payments under operating leases	5,034
Less: Sublease rental income commitments	329
Net commitments for minimum payments under operating leases	4,705

<i>CHF million</i>	31.12.16	31.12.15	31.12.14
Gross operating lease expense recognized in the income statement	749	743	759
Sublease rental income	78	70	73
Net operating lease expense recognized in the income statement	671	673	686

b) Finance lease receivables

UBS leases a variety of assets to third parties under finance leases, such as commercial vehicles, production lines, medical equipment, construction equipment and aircraft. At the end of the respective lease term, assets may be sold to third parties or further leased. Lessees may participate in any sales proceeds achieved. Lease expenses cover the cost of the assets less their residual value as well as financing costs.

As of 31 December 2016, unguaranteed residual values of CHF 127 million had been accrued, and the accumulated allowance for uncollectible minimum lease payments receivable amounted to CHF 9 million. No contingent rents were received in 2016.

Lease receivables

<i>CHF million</i>	31.12.16		
	Total minimum lease payments	Unearned finance income	Present value
2017	327	21	306
2018–2021	601	32	568
Thereafter	115	3	112
Total	1,043	57	986

Note 32 Related parties

UBS defines related parties as associates (entities which are significantly influenced by UBS), joint ventures (entities in which UBS shares control with another party), post-employment benefit plans for UBS employees, key management personnel, close family members of key management personnel and entities

which are, directly or indirectly, controlled or jointly controlled by key management personnel or their close family members. Key management personnel is defined as members of the Board of Directors (BoD) and Group Executive Board (GEB).

a) Remuneration of key management personnel

The non-independent members of the BoD have top management employment contracts and receive pension benefits upon retirement. Total remuneration of the non-independent members of the BoD and GEB members, including those who stepped down during 2016, is provided in the table below.

Remuneration of key management personnel

CHF million	31.12.16	31.12.15	31.12.14
Base salaries and other cash payments ¹	25	23	22
Incentive awards – cash ²	11	10	8
Annual incentive award under DCCP	22	21	18
Employer's contributions to retirement benefit plans	3	2	2
Benefits in kind, fringe benefits (at market value)	2	2	1
Equity-based compensation ³	41	42	35
Total	104	99	86

¹ Includes role-based allowances that have been made in line with market practice in response to the EU Capital Requirements Directive of 2013 (CRD IV). ² Includes immediate and deferred cash. ³ Expenses for shares granted are calculated at grant date of the respective award and allocated over the vesting period, generally for 5 years. Refer to Note 27 for more information. In 2016, 2015 and 2014, equity-based compensation was entirely comprised of EOP awards.

The independent members of the BoD do not have employment or service contracts with UBS, and thus are not entitled to benefits upon termination of their service on the BoD. Payments

to these individuals for their services as external board members amounted to CHF 7.2 million in 2016, CHF 6.7 million in 2015 and CHF 7.1 million in 2014.

b) Equity holdings of key management personnel

Equity holdings of key management personnel

	31.12.16	31.12.15
Number of stock options from equity participation plans held by non-independent members of the BoD and the GEB members ¹	620,950	1,401,686
Number of shares held by members of the BoD, GEB and parties closely linked to them ²	3,267,911	3,326,165

¹ Refer to Note 27 for more information. ² Excludes shares granted under variable compensation plans with forfeiture provisions.

Of the share totals above, 95,597 shares were held by close family members of key management personnel on 31 December 2016 and 31 December 2015. No shares were held by entities that are directly or indirectly controlled or jointly controlled by key management personnel or their close family members on 31

December 2016 and 31 December 2015. Refer to Note 27 for more information. As of 31 December 2016, no member of the BoD or GEB was the beneficial owner of more than 1% of UBS Group AG's shares.

Note 32 Related parties (continued)

c) Loans, advances and mortgages to key management personnel

Non-independent members of the BoD and GEB members have been granted loans, fixed advances and mortgages on substantially the same terms and conditions that are available to other employees, which are based on terms and conditions granted to third parties but are adjusted for differing credit risk.

Independent BoD members are granted loans and mortgages under general market conditions.

Movements in the loan, advances and mortgage balances are as follows.

Loans, advances and mortgages to key management personnel¹

CHF million	2016	2015
Balance at the beginning of the year	33	27
Additions	21	6
Reductions	(13)	(1)
Balance at the end of the year	41 ²	33

¹ All loans are secured loans. ² Excludes CHF 2,684,498 of unused uncommitted credit facilities of one GEB and one BoD member.

d) Other related party transactions with entities controlled by key management personnel

In 2016 and 2015, UBS did not enter into transactions with entities which are directly or indirectly controlled or jointly controlled by UBS's key management personnel or their close family members and as of 31 December 2016, 31 December 2015 and 31 December 2014, there were no outstanding balances related to such transactions. Furthermore, in 2016 and

2015, entities controlled by key management personnel did not sell any goods or provide any services to UBS, and therefore did not receive any fees from UBS. UBS also did not provide services to such entities in 2015 and 2016, and therefore also received no fees.

Note 32 Related parties (continued)

e) Transactions with associates and joint ventures

Loans and outstanding receivables to associates and joint ventures

<i>CHF million</i>	2016	2015
Carrying value at the beginning of the year	476	552
Additions	4	9
Reductions	(8)	(85)
Foreign currency translation	0	0
Carrying value at the end of the year	472	476
<i>of which: unsecured loans</i>	461	464

Other transactions with associates and joint ventures

	As of or for the year ended	
<i>CHF million</i>	31.12.16	31.12.15
Payments to associates and joint ventures for goods and services received	153	149
Fees received for services provided to associates and joint ventures	3	7
Commitments and contingent liabilities to associates and joint ventures	4	4

→ Refer to Note 28 for an overview of investments in associates and joint ventures

Note 33 Invested assets and net new money

Invested assets

Invested assets include all client assets managed by or deposited with UBS for investment purposes. Invested assets include managed fund assets, managed institutional assets, discretionary and advisory wealth management portfolios, fiduciary deposits, time deposits, savings accounts and wealth management securities or brokerage accounts. All assets held for purely transactional purposes and custody-only assets, including corporate client assets held for cash management and transactional purposes, are excluded from invested assets as the Group only administers the assets and does not offer advice on how the assets should be invested. Also excluded are non-bankable assets (e.g., art collections) and deposits from third-party banks for funding or trading purposes.

Discretionary assets are defined as client assets that UBS decides how to invest. Other invested assets are those where the client ultimately decides how the assets are invested. When a single product is created in one business division and sold in another, it is counted in both the business division that manages the investment and the one that distributes it. This results in double counting within UBS total invested assets, as both business divisions are independently providing a service to their respective clients, and both add value and generate revenue.

Net new money

Net new money in a reporting period is the amount of invested assets that are entrusted to UBS by new and existing clients, less those withdrawn by existing clients and clients who terminated their relationship with UBS.

Net new money is calculated using the direct method, under which inflows and outflows to / from invested assets are determined at the client level based on transactions. Interest and dividend income from invested assets are not counted as net new money inflows. Market and currency movements as well as fees, commissions and interest on loans charged are excluded from net new money, as are the effects resulting from any acquisition or divestment of a UBS subsidiary or business. Reclassifications between invested assets and custody-only assets as a result of a change in the service level delivered are generally treated as net new money flows; however, where such change in service level directly results from a new externally imposed regulation, the one-time net effect of the implementation is reported as an asset reclassification without net new money impact.

The Investment Bank does not track invested assets and net new money. However, when a client is transferred from the Investment Bank to another business division, this produces net new money even though client assets were already with UBS. There were no such transfers between the Investment Bank and other business divisions in 2016 and 2015.

Invested assets and net new money

	For the year ended	
CHF billion	31.12.16	31.12.15
Fund assets managed by UBS	275	282
Discretionary assets	885	830
Other invested assets	1,661	1,577
Total invested assets¹	2,821	2,689
<i>of which: double count</i>	<i>176</i>	<i>185</i>
Net new money¹	27.2	27.7

¹ Includes double counts.

Development of invested assets

	For the year ended	
CHF billion	31.12.16	31.12.15
Total invested assets at the beginning of the year ¹	2,689	2,734
Net new money	27	28
Market movements ²	98	(24)
Foreign currency translation	21	(31)
Other effects	(14)	(16)
<i>of which: acquisitions / (divestments)</i>	<i>(14)</i>	<i>(16)</i>
Total invested assets at the end of the year¹	2,821	2,689

¹ Includes double counts. ² Includes interest and dividend income.

Note 34 Currency translation rates

The following table shows the rates of the main currencies used to translate the financial information of foreign operations into Swiss francs.

	Spot rate		Average rate ¹		
	As of		For the year ended		
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.14
1 USD	1.02	1.00	0.99	0.97	0.92
1 EUR	1.07	1.09	1.09	1.06	1.21
1 GBP	1.26	1.48	1.32	1.47	1.51
100 JPY	0.87	0.83	0.91	0.80	0.86

¹ Monthly income statement items of foreign operations with a functional currency other than the Swiss franc are translated with month-end rates into Swiss francs. Disclosed average rates for a year represent an average of 12 month-end rates, weighted according to the income and expense volumes of all foreign operations of the Group with the same functional currency for each month. Weighted average rates for individual business divisions may deviate from the weighted average rates for the Group.

Note 35 Events after the reporting period

Adjusting event subsequent to the publication of the unaudited fourth quarter 2016 report

The 2016 results and the balance sheet in this report differ from those presented in the unaudited fourth quarter 2016 report published on 27 January 2017 as a result of an adjusting event after the reporting period. Provisions for litigation, regulatory and similar matters increased reflecting an agreement in principle to resolve an RMBS matter related to the National Credit Union Association. This adjustment reduced 2016 net profit attributable to shareholders by CHF 102 million, and basic and diluted earnings per share by CHF 0.03 and CHF 0.02, respectively.

Sale of Fund Services units in Luxembourg and Switzerland

On 20 February 2017, UBS announced that it has entered into an agreement to sell Asset Management's fund administration servicing units in Luxembourg and Switzerland to Northern Trust. The transaction is expected to close in the second half of the year, subject to relevant approvals and other customary conditions. These units provide fund administration services for both UBS and third party funds with approximately CHF 420 billion in assets under administration.

Note 36 Main differences between IFRS and Swiss GAAP

The consolidated financial statements of UBS Group AG are prepared in accordance with International Financial Reporting Standards (IFRS). The Swiss Financial Market Supervisory Authority (FINMA) requires financial groups that present their financial statements under IFRS to provide a narrative explanation of the main differences between IFRS and Swiss GAAP (FINMA Circular 2015 / 1 and the Banking Ordinance). Included in this Note are the significant differences in the recognition and measurement between IFRS and the provisions of the Banking Ordinance and the guidelines of FINMA governing true and fair view financial statement reporting pursuant to Article 25 through Article 42 of the Banking Ordinance.

1. Consolidation

Under IFRS, all entities that are controlled by the holding entity are consolidated.

Under Swiss GAAP, controlled entities that are deemed immaterial to the Group or that are held temporarily only are exempt from consolidation, but instead are recorded as participations or financial investments.

2. Financial assets available for sale

Under IFRS, financial assets available for sale are carried at fair value. Changes in fair value are recorded directly in equity until an asset is sold, collected or otherwise disposed of, or until an asset is determined to be impaired. At the time an available-for-sale asset is determined to be impaired, the cumulative unrealized loss previously recognized in equity is included in net profit or loss for the respective period. On disposal of a financial asset available for sale, the cumulative unrealized gain or loss previously recognized in equity is reclassified to the income statement.

Under Swiss GAAP, classification and measurement of financial assets designated as available for sale depend on the nature of the asset. Equity instruments with no permanent holding intent, as well as debt instruments, are classified as *Financial investments* and measured at the lower of (amortized) cost or market value. Market value adjustments up to the original cost amount and realized gains or losses upon disposal of the investment are recorded in the income statement as *Other*

income from ordinary activities. Equity instruments with a permanent holding intent are classified as participations in *Investments in subsidiaries and other participations* and measured at cost less impairment. Impairment losses are recorded in the income statement as *Impairment of investments in subsidiaries and other participations*. Reversal of impairments up to the original cost amount as well as realized gains or losses upon disposal of the investment are recorded as *Extraordinary income / Extraordinary expenses* in the income statement.

3. Cash flow hedges

Under IFRS, when hedge accounting is applied, the fair value gain or loss on the effective portion of the derivative designated as a cash flow hedge is recognized in equity. When the hedged cash flows materialize, the accumulated unrealized gain or loss is reclassified to the income statement.

Under Swiss GAAP, the effective portion of the fair value change of the derivative instrument used to hedge cash flow exposures is deferred on the balance sheet as *Other assets* or *Other liabilities*. The deferred amounts are released to the income statement when the hedged cash flows materialize.

4. Fair value option

Under IFRS, UBS applies the fair value option to certain financial assets and financial liabilities not held for trading. Instruments for which the fair value option is applied are accounted for at fair value with changes in fair value reflected in *Net trading income*. The fair value option is applied primarily to structured debt instruments, certain non-structured debt instruments, high-quality liquid debt securities, structured reverse repurchase and repurchase agreements and securities borrowing agreements, certain structured and non-structured loans as well as loan commitments.

Under Swiss GAAP, the fair value option can only be applied to structured debt instruments that consist of a debt host contract and one or more embedded derivatives that do not relate to own equity. Furthermore, changes in fair value attributable to changes in unrealized own credit are not recognized in the income statement and the balance sheet.

Note 36 Main differences between IFRS and Swiss GAAP (continued)

5. Goodwill and intangible assets

Under IFRS, goodwill acquired in a business combination is not amortized but tested annually for impairment. Intangible assets with an indefinite useful life are also not amortized but tested annually for impairment.

Under Swiss GAAP, goodwill and intangible assets with indefinite useful lives are amortized over a period not exceeding five years, unless a longer useful life, which may not exceed 10 years, can be justified.

6. Pension and other post-employment benefit plans

Swiss GAAP permits the use of IFRS or Swiss accounting standards for pension and other post-employment benefit plans, with the election made on a plan-by-plan basis.

UBS has elected to apply IFRS (IAS 19) for the non-Swiss defined benefit plans in UBS AG standalone financial statements and Swiss GAAP (FER 16) for the Swiss pension plan in the UBS AG and the UBS Switzerland AG standalone financial statements. The requirements of Swiss GAAP are better aligned with the specific nature of Swiss pension plans, which are hybrid in that they combine elements of defined contribution and defined benefit plans, but are treated as defined benefit plans under IFRS. Key differences between Swiss GAAP and IFRS include the treatment of dynamic elements, such as future salary increases and future interest credits on retirement savings, which are not considered under the static method used in accordance with Swiss GAAP. Also, the discount rate used to determine the defined benefit obligation in accordance with IFRS is based on the yield of high-quality corporate bonds of the market in the respective pension plan country. The discount rate used in accordance with Swiss GAAP, i.e., the technical interest rate, is determined by the Pension Foundation Board based on the expected returns of the Board's investment strategy.

For defined benefit plans, IFRS requires the full defined benefit obligation net of the plan assets to be recorded on the balance sheet, with changes resulting from remeasurements recognized directly in equity. However, for non-Swiss defined benefit plans for which IFRS accounting is elected, changes due to remeasurements are recognized in the income statement of UBS AG standalone under Swiss GAAP.

Swiss GAAP requires that employer contributions to the pension fund are recognized as personnel expenses in the income statement. Further, Swiss GAAP requires an assessment as to whether, based on the financial statements of the pension fund prepared in accordance with Swiss accounting standards (FER 26), an economic benefit to, or obligation of, the employer arises from the pension fund and is recognized in the balance sheet when conditions are met. Conditions for recording a pension asset or liability would be met if, for example, an

employer contribution reserve is available or the employer is required to contribute to the reduction of a pension deficit (on an FER 26 basis).

7. Netting of replacement values

Under IFRS, replacement values and related cash collateral are reported on a gross basis unless the restrictive IFRS netting requirements are met: i) existence of master netting agreements and related collateral arrangements that are unconditional and legally enforceable, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS and its counterparties, and ii) UBS's intention to either settle on a net basis or to realize the asset and settle the liability simultaneously.

Under Swiss GAAP, replacement values and related cash collateral are generally reported on a net basis, provided the master netting and the related collateral agreements are legally enforceable in the event of default, bankruptcy or insolvency of UBS's counterparties.

8. Negative interest

Under IFRS, negative interest income arising on a financial asset does not meet the definition of interest income and, therefore, negative interest on financial assets and negative interest on financial liabilities are presented within interest expense and interest income, respectively.

Under Swiss GAAP, negative interest on financial assets is presented within interest income and negative interest on financial liabilities is presented within interest expense.

9. Extraordinary income and expense

Certain non-recurring and non-operating income and expense items, such as realized gains or losses from the disposal of participations, fixed and intangible assets, as well as reversals of impairments of participations and fixed assets, are classified as extraordinary items under Swiss GAAP. This distinction is not available under IFRS.

10. Other presentational differences

Under IFRS, financial statements are comprised of an Income statement, Statement of comprehensive income, Balance sheet, Statement of changes in equity, Statement of cash flows and Notes to the financial statements. Under Swiss GAAP, the concept of other comprehensive income does not exist and consequently no Statement of comprehensive income is required. In addition, various other presentational differences exist. ▲

UBS AG consolidated financial information

This section contains key figures for UBS AG (consolidated), as well as a comparison of selected financial and capital information between UBS Group AG (consolidated) and UBS AG (consolidated). Information for UBS AG (consolidated) does not differ materially from UBS Group AG on a consolidated basis.

Comparison UBS Group AG (consolidated) vs UBS AG (consolidated)

The accounting policies applied under International Financial Reporting Standards (IFRS) to both UBS Group AG and UBS AG consolidated financial statements are identical. However, there are certain scope and presentation differences which relate to:

- Assets, liabilities, operating income, operating expenses and operating profit before tax relating to UBS Group AG and its directly held subsidiaries, including UBS Business Solutions AG, are reflected in the consolidated financial statements of UBS Group AG but not of UBS AG. UBS AG's assets, liabilities, operating income, and operating expenses related to transactions with UBS Group AG and its directly held subsidiaries are not subject to elimination in the UBS AG

consolidated financial statements, but are eliminated in the UBS Group AG consolidated financial statements.

- Preferred notes issued by UBS AG are presented in the consolidated UBS Group AG balance sheet as equity attributable to NCI, while in the consolidated UBS AG balance sheet, these preferred notes are required to be presented as equity attributable to preferred noteholders.
 - Fully applied going concern capital of UBS AG (consolidated) was lower than fully applied going concern capital of UBS Group AG (consolidated) as of 31 December 2016, reflecting lower AT1 capital, partly offset by higher CET1 capital. The difference in CET1 capital was primarily due to compensation-related regulatory capital accruals, liabilities and capital instruments which are reflected on the level of UBS Group AG. The difference in AT1 capital relates to the issuances of AT1 capital notes by UBS Group AG, as well as Deferred Contingent Capital Plan (DCCP) awards granted for the performance years 2014, 2015 and 2016.
- **Refer to the "Capital management" section of this report for more information on differences in capital information between UBS Group AG (consolidated) and UBS AG (consolidated)**

UBS AG (consolidated) key figures

CHF million, except where indicated	As of or for the year ended		
	31.12.16	31.12.15	31.12.14
Results			
Operating income	28,421	30,605	28,026
Operating expenses	24,352	25,198	25,557
Operating profit / (loss) before tax	4,069	5,407	2,469
Net profit / (loss) attributable to shareholders	3,207	6,235	3,502
Key performance indicators¹			
Profitability			
Return on tangible equity (%)	6.9	13.5	8.2
Return on assets, gross (%)	3.0	3.1	2.8
Cost / income ratio (%)	85.6	82.0	90.9
Growth			
Net profit growth (%)	(48.6)	78.0	10.4
Net new money growth for combined wealth management businesses (%) ²	2.1	2.2	2.5
Resources³			
Common equity tier 1 capital ratio (fully applied, %) ⁴	14.5	15.4	14.2
Going concern leverage ratio (phase-in, %) ⁵	5.8		
Additional information			
Profitability			
Return on equity (RoE) (%)	5.9	11.7	7.0
Return on risk-weighted assets, gross (%) ⁶	13.2	14.3	12.6
Resources³			
Total assets	935,353	943,256	1,062,327
Equity attributable to shareholders	53,662	55,248	52,108
Common equity tier 1 capital (fully applied) ⁴	32,447	32,042	30,805
Common equity tier 1 capital (phase-in) ⁴	39,474	41,516	44,090
Risk-weighted assets (fully applied) ⁴	223,232	208,186	217,158
Common equity tier 1 capital ratio (phase-in, %) ⁴	17.5	19.5	19.9
Going concern capital ratio (fully applied, %) ⁵	16.3		
Going concern capital ratio (phase-in, %) ⁵	22.6		
Common equity tier 1 leverage ratio (fully applied, %) ⁷	3.7	3.6	3.1
Going concern leverage ratio (fully applied, %) ⁵	4.2		
Leverage ratio denominator (fully applied) ⁷	870,942	898,251	999,124
Other			
Invested assets (CHF billion) ⁸	2,821	2,689	2,734
Personnel (full-time equivalents) ^{9, 10}	56,208	58,131	60,155

¹ Refer to the "Measurement of performance" section of this report for the definition of our key performance indicators. ² Based on adjusted net new money, which excludes the negative effect on net new money in 2015 of CHF 9.9 billion from our balance sheet and capital optimization program. ³ Subsequent to the publication of the fourth quarter 2016 report, the Annual General Meeting of shareholders of UBS AG approved the distribution of a CHF 2,250 million dividend from UBS AG to UBS Group AG, which was higher than the previously estimated amount. This, in combination with the adjusting event after the reporting period described below, resulted in a reduction of CET1 capital (CHF 607 million on a fully applied basis and CHF 585 million on a phase-in basis), a reduction in the leverage ratio denominator (CHF 45 million on a fully applied basis and CHF 27 million on a phase-in basis) and respective capital ratios of UBS AG consolidated as of 31 December 2016. ⁴ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ⁵ Based on the revised Swiss SRB framework that became effective on 1 July 2016. ⁶ Based on fully applied risk-weighted assets. ⁷ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. ⁸ Includes invested assets for Personal & Corporate Banking. ⁹ As of 31 December 2016, the breakdown of personnel by business division and Corporate Center unit was: Wealth Management: 9,717; Wealth Management Americas: 13,512; Personal & Corporate Banking: 5,100; Asset Management: 2,308; Investment Bank: 4,734; CC – Services: 20,632; CC – Group ALM: 142; CC – Non-core and Legacy Portfolio: 63. ¹⁰ As of 31 December 2016, UBS Group AG employed 59,387 full-time equivalent personnel. The difference comprises 4 full-time equivalents in Wealth Management, 14 full-time equivalents in Wealth Management Americas, 43 full-time equivalents in Personal & Corporate Banking and 3,118 full-time equivalents in Corporate Center – Services.

The 2016 results and the balance sheet in this report differ from those presented in the unaudited fourth quarter 2016 report published on 27 January 2017 as a result of an adjusting event after the reporting period. Provisions for litigation, regulatory and similar matters increased reflecting an agreement in principle to resolve an RMBS matter related to the National Credit Union Association. This adjustment reduced 2016 net profit attributable to shareholders by CHF 102 million.

Comparison UBS Group AG (consolidated) versus UBS AG (consolidated)

	As of or for the year ended 31.12.16			As of or for the year ended 31.12.15		
	UBS Group AG (consolidated)	UBS AG (consolidated)	Difference (absolute)	UBS Group AG (consolidated)	UBS AG (consolidated)	Difference (absolute)
<i>CHF million, except where indicated</i>						
Income statement						
Operating income	28,320	28,421	(101)	30,605	30,605	0
Operating expenses	24,230	24,352	(122)	25,116	25,198	(82)
Operating profit / (loss) before tax	4,090	4,069	21	5,489	5,407	82
of which: Wealth Management	1,948	1,936	12	2,689	2,676	13
of which: Wealth Management Americas	1,107	1,081	26	718	692	26
of which: Personal & Corporate Banking	1,760	1,761	(1)	1,646	1,646	0
of which: Asset Management	452	451	1	584	583	1
of which: Investment Bank	1,004	962	42	1,892	1,852	40
of which: Corporate Center	(2,181)	(2,121)	(60)	(2,040)	(2,042)	2
of which: Services	(849)	(826)	(23)	(818)	(822)	4
of which: Group ALM	(218)	(182)	(36)	282	281	1
of which: Non-core and Legacy Portfolio	(1,114)	(1,113)	(1)	(1,503)	(1,501)	(2)
Net profit / (loss)	3,286	3,288	(2)	6,386	6,314	72
of which: net profit / (loss) attributable to shareholders	3,204	3,207	(3)	6,203	6,235	(32)
of which: net profit / (loss) attributable to preferred noteholders		78	(78)		77	(77)
of which: net profit / (loss) attributable to non-controlling interests	82	4	78	183	3	180
Statement of comprehensive income						
Other comprehensive income	(1,116)	(1,115)	(1)	(605)	(606)	1
of which: attributable to shareholders	(1,386)	(1,386)	0	(506)	(545)	39
of which: attributable to preferred noteholders		271	(271)		(59)	59
of which: attributable to non-controlling interests	271	0	271	(99)	(2)	(97)
Total comprehensive income	2,170	2,173	(3)	5,781	5,709	72
of which: attributable to shareholders	1,817	1,820	(3)	5,698	5,690	8
of which: attributable to preferred noteholders		349	(349)		18	(18)
of which: attributable to non-controlling interests	352	3	349	83	1	82
Balance sheet						
Total assets	935,016	935,353	(337)	942,819	943,256	(437)
Total liabilities	880,714	881,009	(295)	885,511	886,013	(502)
Total equity	54,302	54,343	(41)	57,308	57,243	65
of which: equity attributable to shareholders	53,621	53,662	(41)	55,313	55,248	65
of which: equity attributable to preferred noteholders		642	(642)		1,954	(1,954)
of which: equity attributable to non-controlling interests	682	40	642	1,995	41	1,954
Capital information						
Common equity tier 1 capital (fully applied)	30,693	32,447	(1,754)	30,044	32,042	(1,998)
Common equity tier 1 capital (phase-in)	37,788	39,474	(1,686)	40,378	41,516	(1,138)
Going concern capital (fully applied) ¹	39,844	36,294	3,550			
Going concern capital (phase-in) ¹	55,593	51,084	4,509			
Risk-weighted assets (fully applied)	222,677	223,232	(555)	207,530	208,186	(656)
Common equity tier 1 capital ratio (fully applied, %)	13.8	14.5	(0.7)	14.5	15.4	(0.9)
Common equity tier 1 capital ratio (phase-in, %)	16.8	17.5	(0.7)	19.0	19.5	(0.5)
Going concern capital ratio (fully applied, %) ¹	17.9	16.3	1.6			
Going concern capital ratio (phase-in, %) ¹	24.7	22.6	2.1			
Leverage ratio denominator (fully applied)	870,470	870,942	(472)	897,607	898,251	(644)
Common equity tier 1 leverage ratio (fully applied)	3.5	3.7	(0.2)	3.3	3.6	(0.3)
Going concern leverage ratio (fully applied, %) ¹	4.6	4.2	0.4			
Going concern leverage ratio (phase-in, %) ¹	6.4	5.8	0.6			

¹ Based on the revised Swiss SRB framework that became effective on 1 July 2016.

Management's report on internal control over financial reporting

Management's responsibility for internal control over financial reporting

The Board of Directors and management of UBS AG are responsible for establishing and maintaining adequate internal control over financial reporting. UBS AG's internal control over financial reporting is designed to provide reasonable assurance regarding the preparation and fair presentation of published financial statements in accordance with IFRS as issued by the IASB.

UBS AG's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation and fair presentation of financial statements, and that receipts and expenditures of the company are being made only in accordance with authorizations of UBS AG management; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management's assessment of internal control over financial reporting as of 31 December 2016

UBS AG management has assessed the effectiveness of UBS AG's internal control over financial reporting as of 31 December 2016 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (2013 Framework). Based on this assessment, management believes that, as of 31 December 2016, UBS AG's internal control over financial reporting was effective.

The effectiveness of UBS AG's internal control over financial reporting as of 31 December 2016 has been audited by Ernst & Young Ltd, UBS AG's independent registered public accounting firm, as stated in their report appearing on pages 469 to 470, which expresses an unqualified opinion on the effectiveness of UBS AG's internal control over financial reporting as of 31 December 2016.

Reports of the statutory auditor / independent registered public accounting firm

The accompanying reports of the independent registered public accounting firm on the financial statements (refer to page 477) and internal control over financial reporting (refer to pages 469 to 470) of UBS AG are included in our filing on 10 March 2017 with the Securities and Exchange Commission on Form 20-F pursuant to US reporting obligations.

The accompanying statutory auditor's report on the audit of the consolidated financial statements (refer to pages 471 to 476) of UBS AG is included in our filings on 10 March 2017 with all other relevant non-US exchanges.



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Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of
UBS AG

We have audited UBS AG and subsidiaries' internal control over financial reporting as of 31 December 2016, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (the COSO criteria). UBS AG's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting.

Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, UBS AG and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of 31 December 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of UBS AG and subsidiaries as of 31 December 2016 and 2015, and the related consolidated income statements, statements of comprehensive income, changes in equity and cash flows, and notes thereto, for each of the three years in the period ended 31 December 2016, and our report dated 9 March 2017 expresses an unqualified opinion thereon.

Ernst & Young Ltd

Ernst & Young Ltd
Basel, 9 March 2017



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To the General Meeting of
UBS AG, Zurich and Basel

Basel, 9 March 2017

Statutory auditor's report on the audit of the consolidated financial statements



Opinion

We have audited the consolidated financial statements of UBS AG and its subsidiaries (the Group), which comprise the consolidated balance sheets as of 31 December 2016 and 2015, and the consolidated income statements, statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended 31 December 2016, and notes to the consolidated financial statements, including a summary of significant accounting policies on pages 478-634.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended 31 December 2016 in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.



Basis for opinion

We conducted our audit in accordance with Swiss law, Swiss Auditing Standards and International Standards on Auditing (ISAs). Our responsibilities under those provisions and standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.



Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report, including in relation to these

matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Deferred tax asset valuation

Area of focus We focused on this area because there is significant judgment exercised when determining the valuation of Deferred Tax Assets (“DTAs”) given the significant amount of tax net operating loss carryforwards (net operating losses or “NOLs”) the Group has available. DTAs can be recognized to the extent it is probable they will be utilized to offset taxable profits within the loss carryforward period or be used against deductible temporary differences. The estimate of future taxable income is based on the strategic plan which is then allocated to the tax-paying entities in the various jurisdictions. The recognition of deferred tax assets is therefore sensitive to changes in the strategic plan as well as to assumptions made in the allocation of future taxable income.

See note 8 to the financial statements on pages 518 to 521

Our audit response We tested the design and operational effectiveness of the Group’s key controls over the recognition and measurement of DTAs and the assumptions used in estimating the Group’s future taxable income.

We assessed the completeness and accuracy of the data used for the estimations of future taxable income. This included auditing of computations of the models applied to the recognition process for DTAs and testing the control framework around the models.

We involved EY specialists to assess the key economic assumptions embedded in the strategic plan. We compared key inputs used by the Group to forecast future taxable income to externally available data, the Group’s historical data and performance and assessed the sensitivity of the outcomes to reasonably possible changes in assumptions.

We assessed the completeness and accuracy of the data used in the determination of the legal entity allocation, the assumptions applied by the Group, and the accuracy of the computation of the legal entity allocations.

We also assessed whether the Group’s disclosure regarding the application of judgment in estimating recognized and unrecognized DTAs reflect the Group’s deferred tax position (within note 8).



Legal provision & contingencies

Area of focus We focused on this area because the Group operates in a legal and regulatory environment that is exposed to significant litigation and similar risks arising from disputes and regulatory proceedings. Such matters are subject to many uncertainties and the outcome may be difficult to predict. These uncertainties inherently affect the amount and timing of potential outflows with respect to the provisions which have been established and other contingent liabilities. Overall, the legal provision should represent the Group's best estimate for existing legal matters that have a probable and estimable impact on the Group's financial position.

See note 20 to the financial statements on pages 539 to 550

Our audit response We tested the design and operational effectiveness of the Group's key controls over the legal provision and contingencies process.

We assessed the methodologies on which the provision amounts are based, recalculated the provisions, and tested the completeness and accuracy of the underlying information. We read the legal analyses supporting the judgmental aspects impacted by legal interpretations. We obtained correspondence directly from external legal counsel to corroborate the information provided by the Group and followed up directly with external counsel as deemed necessary.

We also assessed the Group's provisions and contingent liabilities disclosure (within note 20).

Valuation of complex or illiquid trading portfolio assets and liabilities, financial assets and liabilities and derivative financial instruments held at fair value

Area of focus We focused on this area because of the complexity and judgments and assumptions over the fair valuation of financial assets and liabilities with significant unobservable inputs.

We have continued to focus on market developments in fair value methodologies and specifically on the Group's higher estimation uncertainty ("HEU") products, Credit Valuation Adjustment ("CVA") / Funding Valuation Adjustment ("FVA"), and Own Credit Adjustment ("OCA") Curve.

See note 22 to the financial statements on pages 552 to 572

Our audit response We tested the design and operating effectiveness of the key controls over the financial instrument valuation processes, including controls over market data inputs into valuation models, model governance, and valuation adjustments.

We tested a sample of the valuation models and the inputs used in those models, using a variety of techniques, including comparing inputs to available market data.

We selected a sample of positions and independently determined estimated values and compared the values to the Group's recorded values.

In addition, we evaluated the methodology and inputs used by the Group in determining funding and credit fair value adjustments on uncollateralized derivatives and fair value option liabilities.

We also assessed the Group's disclosure (within note 22).

IT Controls relevant to financial reporting

Area of focus We focused on this area because the Group is highly dependent on its IT systems for business processes and financial reporting. The Group continues to invest in its IT systems to meet client needs and business requirements including the effectiveness of its logical access and change management IT controls.

Our audit response In assessing the reliability of electronic data processing, we included specialized IT auditors as part of our audit team. Our audit procedures focused on the IT infrastructure and applications relevant to financial reporting including testing of the design and operating effectiveness of key IT general controls and IT automated controls.

Our audit procedures related to logical access included testing of user access management, privileged user access, periodic access right recertifications and user authentication controls.



Other information in the annual report

The Board of Directors is responsible for the other information in the Annual Report. The other information comprises all information included in the Annual Report, but does not include the consolidated financial statements (pages 478 – 634), the compensation report (pages 276-279 and page 301), disclosures denoted with an audited “signpost”, and our auditor’s report thereon.

Our opinions on the consolidated financial statements and the compensation report do not cover the other information and we do not express any form of assurance conclusion thereon other than the disclosures denoted with an audited “signpost”.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the Annual Report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.



Responsibility of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.



Auditor’s responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, Swiss Auditing Standards and ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: <http://www.expertsuisse.ch/en/audit-report-for-public-companies>. This description forms part of our auditor’s report.



Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements in accordance with the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

Ernst & Young Ltd

Marie-Laure Delarue
Licensed Audit Expert
(Auditor in Charge)

Ira S. Fitlin
Certified Public Accountant (U.S.)



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Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of

UBS AG

We have audited the accompanying consolidated balance sheets of UBS AG and subsidiaries as of 31 December 2016 and 2015, and the related consolidated income statements, statements of comprehensive income, changes in equity and cash flows, and notes thereto, for each of the three years in the period ended 31 December 2016. These financial statements are the responsibility of the Company's Board of Directors. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of UBS AG and subsidiaries at 31 December 2016 and 2015, and the consolidated results of their operations and their cash flows for each of the three years in the period ended 31 December 2016, in conformity with International Financial Reporting Standards, as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), UBS AG and subsidiaries' internal control over financial reporting as of 31 December 2016, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated 9 March 2017 expressed an unqualified opinion thereon.

Ernst & Young Ltd

Ernst & Young Ltd

Basel, 9 March 2017

UBS AG consolidated financial statements

Primary financial statements

Audited I

Income statement

CHF million	Note	For the year ended			% change from 31.12.15
		31.12.16	31.12.15	31.12.14	
Interest income	3	13,782	13,178	13,194	5
Interest expense	3	(7,399)	(6,449)	(6,639)	15
Net interest income	3	6,383	6,729	6,555	(5)
Credit loss (expense) / recovery	11	(37)	(117)	(78)	(68)
Net interest income after credit loss expense		6,346	6,612	6,477	(4)
Net fee and commission income	4	16,447	17,184	17,076	(4)
Net trading income	3	4,943	5,696	3,841	(13)
Other income	5	685	1,112	632	(38)
Total operating income		28,421	30,605	28,026	(7)
Personnel expenses	6	15,591	15,954	15,280	(2)
General and administrative expenses	7	7,690	8,219	9,377	(6)
Depreciation and impairment of property, equipment and software	14	980	918	817	7
Amortization and impairment of intangible assets	15	91	107	83	(15)
Total operating expenses		24,352	25,198	25,557	(3)
Operating profit / (loss) before tax		4,069	5,407	2,469	(25)
Tax expense / (benefit)	8	781	(908)	(1,180)	
Net profit / (loss)		3,288	6,314	3,649	(48)
Net profit / (loss) attributable to preferred noteholders		78	77	142	1
Net profit / (loss) attributable to non-controlling interests		4	3	5	33
Net profit / (loss) attributable to shareholders		3,207	6,235	3,502	(49)

Statement of comprehensive income

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Comprehensive income attributable to shareholders			
Net profit / (loss)	3,207	6,235	3,502
Other comprehensive income that may be reclassified to the income statement			
Foreign currency translation			
Foreign currency translation movements, before tax	251	(174)	1,839
Foreign exchange amounts reclassified to the income statement from equity	126	(90)	2
Income tax relating to foreign currency translation movements	(84)	(1)	(7)
Subtotal foreign currency translation, net of tax	293	(266)	1,834
Financial assets available for sale			
Net unrealized gains / (losses) on financial assets available for sale, before tax	240	180	335
Impairment charges reclassified to the income statement from equity	5	1	76
Realized gains reclassified to the income statement from equity	(372)	(298)	(244)
Realized losses reclassified to the income statement from equity	25	45	25
Income tax relating to net unrealized gains / (losses) on financial assets available for sale	28	8	(52)
Subtotal financial assets available for sale, net of tax	(73)	(64)	140
Cash flow hedges			
Effective portion of changes in fair value of derivative instruments designated as cash flow hedges, before tax	246	550	2,086
Net realized (gains) / losses reclassified to the income statement from equity	(1,082)	(1,199)	(1,197)
Income tax relating to cash flow hedges	170	131	(196)
Subtotal cash flow hedges, net of tax	(666)	(518)	693
Total other comprehensive income that may be reclassified to the income statement, net of tax	(447)	(848)	2,667
Other comprehensive income that will not be reclassified to the income statement			
Defined benefit plans			
Gains / (losses) on defined benefit plans, before tax	(876)	322	(1,454)
Income tax relating to defined benefit plans	52	(19)	247
Subtotal defined benefit plans, net of tax	(824)	304	(1,208)
Own credit on financial liabilities designated at fair value			
Gains / (losses) from own credit on financial liabilities designated at fair value, before tax	(120)		
Income tax relating to own credit on financial liabilities designated at fair value	5		
Subtotal own credit on financial liabilities designated at fair value, net of tax	(115)		
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(939)	304	(1,208)
Total other comprehensive income	(1,386)	(545)	1,459
Total comprehensive income attributable to shareholders	1,820	5,690	4,961

Table continues on the next page.

Statement of comprehensive income (continued)

Table continued from previous page.

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Comprehensive income attributable to preferred noteholders			
Net profit / (loss)	78	77	142
Other comprehensive income that will not be reclassified to the income statement			
Foreign currency translation movements, before tax	271	(59)	119
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	271	(59)	119
Total other comprehensive income that will not be reclassified to the income statement, net of tax	271	(59)	119
Total comprehensive income attributable to preferred noteholders	349	18	260
Comprehensive income attributable to non-controlling interests			
Net profit / (loss)	4	3	5
Other comprehensive income that may be reclassified to the income statement			
Other comprehensive income that may be reclassified to the income statement, before tax	0	0	0
Income tax relating to other comprehensive income that may be reclassified to the income statement	0	0	0
Total other comprehensive income that may be reclassified to the income statement, net of tax	0	0	0
Other comprehensive income that will not be reclassified to the income statement			
Foreign currency translation movements, before tax	0	(2)	3
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	0	(2)	3
Gains / (losses) on defined benefit plans, before tax	0	0	0
Income tax relating to defined benefit plans	0	0	0
Subtotal defined benefit plans, net of tax	0	0	0
Total other comprehensive income that will not be reclassified to the income statement, net of tax	0	(2)	3
Total other comprehensive income	0	(2)	3
Total comprehensive income attributable to non-controlling interests	3	1	7
Total comprehensive income			
Net profit / (loss)	3,288	6,314	3,649
Other comprehensive income	(1,115)	(606)	1,580
of which: other comprehensive income that may be reclassified to the income statement	(447)	(848)	2,667
of which: other comprehensive income that will not be reclassified to the income statement	(669)	243	(1,087)
Total comprehensive income	2,173	5,709	5,229

Balance sheet

CHF million	Note	31.12.16	31.12.15	% change from 31.12.15
Assets				
Cash and balances with central banks		107,767	91,306	18
Due from banks	10, 11	13,125	11,866	11
Cash collateral on securities borrowed	24	15,111	25,584	(41)
Reverse repurchase agreements	24	66,246	67,893	(2)
Trading portfolio assets	22	96,661	124,047	(22)
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	23	30,260	51,943	(42)
Positive replacement values	12, 22, 24	158,411	167,435	(5)
Cash collateral receivables on derivative instruments	24	26,664	23,763	12
Loans	10, 11	307,004	312,723	(2)
Financial assets designated at fair value	22, 24, 25	65,024	5,808	
Financial assets available for sale	13, 22	15,676	62,543	(75)
Financial assets held to maturity	13	9,289		
Investments in associates	28	963	954	1
Property, equipment and software	14	8,297	7,683	8
Goodwill and intangible assets	15	6,556	6,568	0
Deferred tax assets	8	13,144	12,833	2
Other assets	16	25,412	22,249	14
Total assets		935,353	943,256	(1)
Liabilities				
Due to banks	17	10,645	11,836	(10)
Cash collateral on securities lent	24	2,818	8,029	(65)
Repurchase agreements	24	6,612	9,653	(32)
Trading portfolio liabilities	22	22,825	29,137	(22)
Negative replacement values	12, 22, 24	153,810	162,430	(5)
Cash collateral payables on derivative instruments	24	35,472	38,282	(7)
Due to customers	17	450,199	402,522	12
Financial liabilities designated at fair value	18, 22, 24	55,017	62,995	(13)
Debt issued	19	78,998	82,359	(4)
Provisions	20	4,169	4,163	0
Other liabilities	8, 21	60,443	74,606	(19)
Total liabilities		881,009	886,013	(1)
Equity				
Share capital		386	386	0
Share premium		29,505	29,477	0
Retained earnings		28,265	29,433	(4)
Other comprehensive income recognized directly in equity, net of tax		(4,494)	(4,047)	11
Equity attributable to shareholders		53,662	55,248	(3)
Equity attributable to preferred noteholders		642	1,954	(67)
Equity attributable to non-controlling interests		40	41	(2)
Total equity		54,343	57,243	(5)
Total liabilities and equity		935,353	943,256	(1)

Statement of changes in equity

<i>CHF million</i>	Share capital	Share premium	Treasury shares	Retained earnings
Balance as of 1 January 2014	384	33,906	(1,031)	20,608
Issuance of share capital	0			
Acquisition of treasury shares			(953)	
Delivery of treasury shares under share-based compensation plans		(266)	445	
Other disposal of treasury shares			61	
Premium on shares issued and warrants exercised		802		
Share-based compensation expensed in the income statement		870		
Tax (expense) / benefit		3		
Dividends		(938)		
Equity classified as obligation to purchase own shares		46		
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		(2,365)	1,440	
Total comprehensive income for the year				2,294
<i>of which: net profit / (loss)</i>				3,502
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				(1,208)
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				
Balance as of 31 December 2014	384	32,057	(37)	22,902
Issuance of share capital	1			
Acquisition of treasury shares			(292)	
Premium on shares issued and warrants exercised		290		
Tax (expense) / benefit		9		
Dividends		(2,914)		(8)
Equity classified as obligation to purchase own shares		0		
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		35	328	
Total comprehensive income for the year				6,538
<i>of which: net profit / (loss)</i>				6,235
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				304
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				

Other comprehensive income recognized directly in equity, net of tax ¹	<i>of which: foreign currency translation</i>	<i>of which: financial assets available for sale</i>	<i>of which: cash flow hedges</i>	Total equity attributable to shareholders	Preferred noteholders	Non-controlling interests	Total equity
(5,866)	(7,425)	95	1,463	48,002	1,893	41	49,936
				0			0
				(953)			(953)
				179			179
				61			61
				802			802
				870			870
				3			3
				(938)	(142)	(4)	(1,084)
				46			46
				0	1		1
				(925)		1	(924)
2,667	1,834	140	693	4,961	260	7	5,229
				3,502	142	5	3,649
2,667	1,834	140	693	2,667			2,667
				(1,208)			(1,208)
				0	119	3	121
(3,199)	(5,591)	236	2,156	52,108	2,013	45	54,165
				1			1
				(292)			(292)
				290			290
				9			9
				(2,922)	(77)	(5)	(3,004)
				0			0
				0	1		1
				364		(1)	363
(848)	(266)	(64)	(518)	5,690	18	1	5,709
				6,235	77	3	6,314
(848)	(266)	(64)	(518)	(848)			(848)
				304			304
				0	(59)	(2)	(61)

Statement of changes in equity (continued)

<i>CHF million</i>	Share capital	Share premium	Treasury shares	Retained earnings
Balance as of 31 December 2015	386	29,477	0	29,433
Issuance of share capital				
Premium on shares issued and warrants exercised		4		
Tax (expense) / benefit		25		
Dividends				(3,434)
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		(2)		(1)
Total comprehensive income for the year				2,267
<i>of which: net profit / (loss)</i>				3,207
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>				
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>				(824)
<i>of which: OCI that will not be reclassified to the income statement, net of tax – own credit</i>				(115)
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>				
Balance as of 31 December 2016	386	29,505	0	28,265

1 Excludes defined benefit plans and own credit that are recorded directly in retained earnings.

Other comprehensive income recognized directly in equity, net of tax ¹	<i>of which: foreign currency translation</i>	<i>of which: financial assets available for sale</i>	<i>of which: cash flow hedges</i>	Total equity attributable to shareholders	Preferred noteholders	Non-controlling interests	Total equity
(4,047)	(5,857)	172	1,638	55,248	1,954	41	57,243
				0			0
				4			4
				25			25
				(3,434)	(78)	(5)	(3,517)
				0	(1,583)		(1,583)
				(3)		0	(2)
(447)	293	(73)	(666)	1,820	349	3	2,173
				3,207	78	4	3,288
(447)	293	(73)	(666)	(447)			(447)
				(824)			(824)
				(115)			(115)
				0	271	0	271
(4,494)	(5,564)	98	972	53,662	642	40	54,343

UBS AG shares issued and treasury shares held

As of 31 December 2016, shares issued by UBS AG totaled 3,858,408,466 (31 December 2015: 3,858,408,466 shares).

No treasury shares were held as of 31 December 2016 and as of 31 December 2015.

Conditional share capital

As of 31 December 2016, UBS AG's share capital could have been increased through the issuance of 136,200,312 shares upon exercise of employee options.

Additional conditional capital up to a maximum number of 380,000,000 shares was available as of 31 December 2016 for conversion rights and warrants granted in connection with the issuance of bonds or similar financial instruments.

Statement of cash flows

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Cash flow from / (used in) operating activities			
Net profit / (loss)	3,288	6,314	3,649
Non-cash items included in net profit and other adjustments:			
Depreciation and impairment of property, equipment and software	980	918	817
Amortization and impairment of intangible assets	91	107	83
Credit loss expense / (recovery)	37	117	78
Share of net profits of associates	(106)	(169)	(94)
Deferred tax expense / (benefit)	2	(1,614)	(1,635)
Net loss / (gain) from investing activities	(1,176)	(934)	(227)
Net loss / (gain) from financing activities	9,647	(1,654)	2,135
Other net adjustments	(300)	3,628	(7,250)
Net change in operating assets and liabilities:			
Due from / to banks	(1,183)	1,768	(1,235)
Cash collateral on securities borrowed and reverse repurchase agreements	7,933	(2,712)	32,262
Cash collateral on securities lent and repurchase agreements	(6,637)	(2,909)	(3,698)
Trading portfolio and replacement values	6,024	6,853	(5,576)
Financial assets designated at fair value	(60,658)	(1,446)	2,697
Cash collateral on derivative instruments	(4,169)	3,285	(7,301)
Loans	3,740	841	(20,427)
Due to customers	33,925	(17,362)	8,803
Other assets, provisions and other liabilities	(8,204)	7,516	4,751
Income taxes paid, net of refunds	(649)	(551)	(600)
Net cash flow from / (used in) operating activities	(17,413)	1,997	7,231
Cash flow from / (used in) investing activities			
Purchase of subsidiaries, associates and intangible assets	(26)	(13)	(18)
Disposal of subsidiaries, associates and intangible assets ¹	93	477	70
Purchase of property, equipment and software	(1,746)	(1,841)	(1,915)
Disposal of property, equipment and software	209	547	350
Purchase of financial assets available for sale	(7,271)	(101,189)	(136,330)
Disposal and redemption of financial assets available for sale	54,097	93,584	140,438
Net (purchase) / redemption of financial assets held to maturity	(8,996)		
Net cash flow from / (used in) investing activities	36,359	(8,434)	2,596

Table continues on the next page.

Statement of cash flows (continued)

Table continued from previous page.

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Cash flow from / (used in) financing activities			
Net short-term debt issued / (repaid)	5,440	(6,404)	(2,921)
Net movements in treasury shares and own equity derivative activity	0	0	(719)
Distributions paid on UBS AG shares	(3,434)	(2,626)	(938)
Issuance of long-term debt, including financial liabilities designated at fair value	33,453	47,790	40,982
Repayment of long-term debt, including financial liabilities designated at fair value	(34,081)	(44,221)	(34,210)
Dividends paid and repayments of preferred notes	(1,366)	(108)	(110)
Net changes in non-controlling interests	(5)	(5)	(3)
Net cash flow from / (used in) financing activities	6	(5,573)	2,081
Total cash flow			
Cash and cash equivalents at the beginning of the year	102,962	116,715	96,284
Net cash flow from / (used in) operating, investing and financing activities	18,952	(12,011)	11,908
Effects of exchange rate differences on cash and cash equivalents	(807)	(1,742)	8,522
Cash and cash equivalents at the end of the year²	121,107	102,962	116,715
<i>of which: cash and balances with central banks</i>	107,715	91,306	104,073
<i>of which: due from banks</i>	11,927	10,732	11,772
<i>of which: money market paper³</i>	1,465	924	869
Additional information			
Net cash flow from / (used in) operating activities includes:			
Interest received in cash	12,223	11,144	11,321
Interest paid in cash	6,141	5,267	5,360
Dividends on equity investments, investment funds and associates received in cash ⁴	1,595	2,120	1,961

¹ Includes dividends received from associates. ² CHF 2,662 million, CHF 3,963 million and CHF 4,178 million of cash and cash equivalents (mainly reflected in Due from banks) were restricted as of 31 December 2016, 31 December 2015 and 31 December 2014, respectively. Refer to Note 23 for more information. ³ Money market paper is included in the balance sheet under Trading portfolio assets (31 December 2016: CHF 75 million, 31 December 2015: CHF 795 million, 31 December 2014: CHF 835 million), Financial assets available for sale (31 December 2016: CHF 430 million, 31 December 2015: CHF 129 million, 31 December 2014: CHF 34 million) and Financial assets designated at fair value (31 December 2016: CHF 959 million, 31 December 2015: CHF 0 million, 31 December 2014: CHF 0 million). ⁴ Includes dividends received from associates (2016: CHF 50 million, 2015: CHF 114 million, 2014: CHF 54 million) reported within cash flow from / (used in) investing activities.

Notes to the UBS AG consolidated financial statements

Note 1 Summary of significant accounting policies

a) Significant accounting policies

This Note describes the significant accounting policies applied in the preparation of the consolidated financial statements (the "Financial Statements") of UBS AG and its subsidiaries ("UBS AG"). On 9 March 2017, the Financial Statements were authorized for issue by the Board of Directors.

Basis of accounting

The Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB), and are presented in Swiss francs (CHF), the currency of Switzerland, where UBS AG is incorporated.

Disclosures provided in the "Risk, treasury and capital management" section of this report that are marked as audited form an integral part of the Financial Statements. These disclosures relate to requirements under IFRS 7, *Financial Instruments: Disclosures* and IAS 1, *Presentation of Financial Statements* and are not repeated in this section.

The accounting policies described in this Note have been applied consistently in all years presented unless otherwise stated in Note 1b.

Critical accounting estimates and judgments

Preparation of these Financial Statements under IFRS requires management to apply judgment and make estimates and assumptions that affect reported amounts of assets, liabilities, income and expenses and disclosure of contingent assets and liabilities, and may involve significant uncertainty at the time they are made. Such estimates and assumptions are based on the best available information. UBS AG regularly reassesses the estimates and assumptions, which encompass historical experience, expectations of the future and other pertinent factors, to determine their continuing relevance based on current conditions and it updates them as necessary. Changes in those estimates and assumptions may have a significant impact on the Financial Statements. Further, actual results may differ significantly from UBS AG's estimates, which could result in significant loss to it, beyond what it anticipated or provided for.

The following areas contain estimation uncertainty or require critical judgment and have a significant effect on the amounts recognized in the Financial Statements:

- consolidation of structured entities (refer to item 1 in this Note and to Note 28)
- fair value of financial instruments (refer to item 3f in this Note and to Note 22)
- allowances and provisions for credit losses for financial assets held at amortized cost (refer to item 3g in this Note and to Note 11)

- pension and other post-employment benefit plans (refer to item 7 in this Note and to Note 26)
- income taxes (refer to item 8 in this Note and to Note 8)
- goodwill (refer to item 11 in this Note and to Note 15)
- provisions and contingent liabilities (refer to item 12 in this Note and to Note 20).

1) Consolidation

a. Consolidation principles

The Financial Statements comprise the financial statements of UBS AG and its subsidiaries, including controlled structured entities (SEs), presented as a single economic entity, whereby intercompany transactions and balances have been eliminated. UBS AG consolidates all entities that it controls, which is the case when it has (i) power over the relevant activities of the entity, (ii) exposure to an entity's variable returns and (iii) the ability to use its power to affect an entity's returns.

Where an entity is governed by voting rights, control is generally indicated by a direct shareholding of more than one-half of the voting rights.

In other cases, the assessment of control is more complex and requires greater use of judgment. Where UBS AG has an interest in an entity that absorbs variability, UBS AG considers whether it has power over the relevant activities of the entity that allows it to affect the variability of its returns. Consideration is given to all facts and circumstances to determine whether UBS AG has power over another entity, that is, the current ability to direct the relevant activities of an entity when decisions about those activities need to be made. Factors such as the purpose and design of the entity, rights held through contractual arrangements such as call rights, put rights or liquidation rights, as well as potential decision-making rights are all considered in this assessment. Where UBS AG has power over the relevant activities, a further assessment is made to determine whether, through that power, it has the ability to affect its own returns by assessing whether power is held in a principal or agent capacity. Consideration is given to (i) the scope of decision-making authority, (ii) rights held by other parties, including removal or other participating rights and (iii) exposure to variability, including remuneration, relative to total variability of the entity as well as whether that exposure is different from that of other investors. If, after review of these factors, UBS AG concludes that it can exercise its power to affect its own returns, the entity is consolidated.

Subsidiaries, including SEs, are consolidated from the date when control is obtained and are deconsolidated from the date when control ceases. Control, or the lack thereof, is reassessed if facts and circumstances indicate that there is a change to one or more of the elements needed to establish that control is present.

→ Refer to Note 28 for more information

Note 1 Summary of significant accounting policies (continued)

b. Structured entities

UBS AG sponsors the formation of SEs and interacts with non-sponsored SEs for a variety of reasons, including allowing clients to obtain or be exposed to particular risk profiles, to provide funding or to sell or purchase credit risk. An SE is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. Such entities generally have a narrow and well-defined objective and include those historically referred to as special purpose entities and some investment funds. UBS AG assesses whether an entity is an SE by considering the nature of the activities of the entity as well as the substance of voting or similar rights afforded to other parties, including investors and independent boards or directors. UBS AG considers rights such as the ability to liquidate the entity or remove the decision maker to be similar to voting rights when the holder has the substantive ability to exercise such rights without cause. In the absence of such rights or in cases where the existence of such rights cannot be fully established, the entity is considered to be an SE.

The classes of SEs UBS AG is involved with include:

- *Securitization structured entities* are established to issue securities to investors that are backed by assets held by the SE and whereby (i) significant credit risk associated with the securitized exposures has been transferred to third parties and (ii) there is more than one risk position or tranche issued by the securitization vehicle in line with the Basel III securitization definition. All securitization entities are classified as SEs.
- *Client investment structured entities* are established predominantly for clients to invest in specific assets or risk exposures through purchasing notes issued by the SE, predominantly on a fixed-term basis. The SE may source assets via a transfer from UBS AG or through an external market transaction. In some cases, UBS AG may enter into derivatives with the SE to either align the cash flows of the entity with the investor's intended investment objective or to introduce other desired risk exposures. In certain cases, UBS AG may have interests in a third-party-sponsored SE to hedge specific risks or participate in asset-backed financing.
- *Investment fund structured entities* have a collective investment objective, are managed by an investment manager and are either passively managed, so that any decision making does not have a substantive effect on variability, or are actively managed and investors or their governing bodies do not have substantive voting or similar rights. UBS AG creates and sponsors a large number of funds in which it may have an interest through the receipt of variable management fees and / or a direct investment. In addition, UBS AG has interests in a number of funds created and sponsored by third parties, including exchange-traded funds and hedge funds, to hedge issued structured products.

When UBS AG does not consolidate an SE, but has an interest in an SE or has sponsored an SE, disclosures are provided on the nature of these interests and sponsorship activities.

Critical accounting estimates and judgments

Each individual entity is assessed for consolidation in line with the aforementioned consolidation principles. The assessment of control can be complex and requires the use of significant judgment. As the nature and extent of UBS AG's involvement is unique to each entity, there is no uniform consolidation outcome by entity. Certain entities within a class may be consolidated while others may not.

→ Refer to Note 28 for more information

2) Segment reporting

UBS AG's businesses are organized globally into five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank, all of which are supported by Corporate Center. The five business divisions qualify as reportable segments for the purpose of segment reporting and, together with Corporate Center, reflect the management structure of UBS AG. Corporate Center – Non-core and Legacy Portfolio is managed and reported as a separate reportable segment within Corporate Center. Financial information about the five business divisions and Corporate Center (with its units: Services, Group Asset and Liability Management (Group ALM), Non-core and Legacy Portfolio) is presented separately in internal reporting to management.

UBS AG's internal accounting policies, which include management accounting policies and service level agreements, determine the revenues and expenses directly attributable to each reportable segment. Transactions between the reportable segments are carried out at internally agreed rates and are reflected in the operating results of the reportable segments. Revenue-sharing agreements are used to allocate external client revenues to reportable segments where several reportable segments are involved in the value creation chain. Commissions are credited to the reportable segments based on the corresponding client relationship. Total intersegment revenues for UBS AG are immaterial, as the majority of the revenues are allocated across the segments by means of revenue-sharing agreements. Net interest income is generally allocated to the reportable segments based on their balance sheet positions. Interest income earned from managing UBS AG's consolidated equity is allocated to the reportable segments based on average attributed equity. Assets and liabilities of the reportable segments are funded through and invested with Corporate Center – Group ALM, and the net interest margin is reflected in the results of each reportable segment.

Note 1 Summary of significant accounting policies (continued)

Segment assets are based on a third-party view and do not include intercompany balances. This view is in line with internal reporting to management. Certain assets managed centrally by Corporate Center – Services and Corporate Center – Group ALM may be allocated to the segments on a basis different to that which the corresponding costs or revenues are allocated to. For example, certain assets that are reported in Corporate Center – Services or Corporate Center – Group ALM may be retained on the balance sheets of these components of Corporate Center notwithstanding that the costs or revenues associated with these assets may be entirely or partly allocated to the segments. Similarly, certain assets are reported in the business divisions, whereas the corresponding costs or revenues are entirely or partly allocated to Corporate Center – Services and Corporate Center – Group ALM.

→ **Refer to Note 2 for more information**

3) Financial instruments

a. Recognition

UBS AG recognizes financial instruments when it becomes a party to the contractual provisions of the instrument. UBS AG applies trade date accounting to derivatives and settlement date accounting to all non-derivative financial instruments.

UBS AG also acts in a fiduciary capacity, which results in the

holding or placing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions. Unless the recognition criteria are satisfied, these assets and the related income are excluded from UBS AG's Financial Statements, as they are not assets of UBS AG.

Client cash balances associated with derivatives clearing and execution services are not recognized on the balance sheet if, through contractual agreement, regulation or practice, UBS AG neither obtains benefits from nor controls the client cash balances.

b. Classification, measurement and presentation

Upon initial recognition, UBS AG records financial instruments at fair value plus directly attributable transaction costs in the case of financial instruments not subsequently accounted for at fair value through profit or loss. After initial recognition, UBS AG classifies, measures and presents its financial assets and liabilities in accordance with IAS 39, *Financial Instruments: Recognition and Measurement* as described in the following table.

- **Refer to Note 25a for an overview of financial assets and liabilities by IAS 39 category**
- **Refer to the balance sheet for references to Notes that provide information on the composition of individual financial asset and liability categories**

Note 1 Summary of significant accounting policies (continued)

Financial assets classification	Significant items included	Measurement and presentation
Held for trading	<p>All derivatives with a positive replacement value, except those that are designated and effective hedging instruments.</p> <p>Any other financial asset acquired principally for the purpose of selling or repurchasing in the near term, or part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking. Included in this category are debt instruments (including those in the form of securities, money market paper and traded corporate and bank loans), equity instruments, and assets held under unit-linked investment contracts.</p>	<p>Measured at fair value with changes recognized in profit or loss.</p> <p>Changes in fair value, initial transaction costs and gains and losses realized on disposal or redemption are recognized in <i>Net trading income</i>, except interest and dividend income on non-derivatives (refer to item 3c in this Note), derivatives designated as hedging instruments in certain types of hedge accounting relationships and forward points on certain short duration foreign exchange contracts, which are reported in <i>Net interest income</i>.</p> <p>Derivative assets are generally presented as <i>Positive replacement values</i>.</p>
Designated at fair value through profit or loss	<p>A financial asset may be designated at fair value through profit or loss only upon initial recognition and this designation is irrevocable.</p> <p>The fair value option can be applied only if one of the following criteria are met:</p> <ul style="list-style-type: none"> the financial instrument is a hybrid instrument that includes a substantive embedded derivative; the financial instrument is part of a portfolio that is risk managed on a fair value basis and reported to senior management on that basis; or the application of the fair value option eliminates or significantly reduces an accounting mismatch that would otherwise arise. <p>UBS AG designated at fair value through profit or loss the following instruments:</p> <ul style="list-style-type: none"> Certain structured loans, reverse repurchase and securities borrowing agreements that are managed on a fair value basis. Loans that are hedged predominantly with credit derivatives. These instruments are designated at fair value to eliminate an accounting mismatch. As of 1 January 2016, certain newly purchased debt securities held as high-quality liquid assets (HQLA) and managed by Corporate Center – Group ALM on a fair value basis. Assets held to hedge delivery obligations related to cash-settled employee compensation plans. These assets are designated at fair value in order to eliminate an accounting mismatch that would otherwise arise due to the liability being measured on a fair value basis. 	<p>Bifurcated embedded derivatives are measured at fair value, but presented on the same balance sheet line as the host contract measured at amortized cost.</p> <p>Derivatives that are designated and effective hedging instruments are also measured at fair value. The presentation of fair value changes differs depending on the type of hedge relationship (refer to item 3k in this Note for more information).</p> <p>Held for trading assets (other than derivatives) are presented as <i>Trading portfolio assets</i>.</p> <p>Financial assets designated at fair value through profit or loss are presented as <i>Financial assets designated at fair value</i>.</p>
Loans and receivables (amortized cost)	<p>Non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are not assets for which UBS AG may not recover substantially all of its initial net investment for reasons other than credit deterioration. This classification includes:</p> <ul style="list-style-type: none"> cash and balances with central banks cash collateral receivables on derivative instruments residential and commercial mortgages secured loans, including reverse repurchase agreements, receivables under stock borrowing and lombard loans, and unsecured loans certain securities held within Corporate Center - Non-core and Legacy Portfolio trade and lease receivables. 	<p>Measured at amortized cost using the effective interest rate method less allowances for credit losses (refer to items 3c and 3g in this Note).</p> <p>Upfront fees and direct costs relating to loan origination, refinancing or restructuring as well as to loan commitments are deferred and amortized over the life of the loan using the effective interest rate method.</p> <p>Loans and receivables are presented on the balance sheet primarily as <i>Cash and balances with central banks</i>, <i>Due from banks</i>, <i>Loans</i>, <i>Cash collateral on securities borrowed</i>, <i>Reverse repurchase agreements</i> and <i>Cash collateral receivables on derivative instruments</i>.</p> <p>Exchange-traded derivatives and certain OTC derivatives cleared through central clearing counterparties which are either considered to be daily settled or qualify for netting (refer to items 3d and 3j in this Note) are presented within <i>Cash collateral receivables on derivative instruments</i>.</p>

Note 1 Summary of significant accounting policies (continued)

Financial assets classification	Significant items included	Measurement and presentation
Available for sale	Financial assets classified as available for sale are non-derivative financial assets that are not classified as held for trading, designated at fair value through profit or loss, or loans and receivables. This classification mainly includes debt securities held as HQLA and managed by Corporate Center – Group ALM, as well as certain asset-backed securities managed by Corporate Center – Group ALM.	<p>Measured at fair value with unrealized gains and losses reported in <i>Other comprehensive income</i>, net of applicable income taxes, until such investments are sold, collected or otherwise disposed of, or until any such investment is determined to be impaired (refer to item 3i in this Note). Upon disposal, any accumulated balances in <i>Other comprehensive income</i> are reclassified to the income statement and reported within <i>Other income</i>.</p> <p>Interest and dividend income are recognized in the income statement in accordance with item 3c in this Note. Refer to item 13 in this Note for information on the treatment of foreign exchange translation gains and losses.</p>
Held to maturity	Non-derivative financial assets with fixed or determinable payments and fixed maturities for which UBS AG has the positive intention and ability to hold to maturity. As of 1 January 2016, UBS AG classified as held to maturity certain newly purchased debt securities held as HQLA and managed by Corporate Center – Group ALM.	Measured at amortized cost using the effective interest rate method less allowances for credit losses (refer to items 3c and 3g in this Note).
Financial liabilities classification	Significant items included	Measurement and presentation
Held for trading	<ul style="list-style-type: none"> – Obligations to deliver financial instruments, such as debt and equity instruments, which UBS AG has sold to third parties, but does not own (short positions). – Liabilities held under unit-linked investment contracts. – All derivatives with a negative replacement value, except those that are designated and effective hedging instruments. 	<p>Measurement of trading liabilities follows the same principles as held for trading assets and measurement of liabilities designated at fair value through profit or loss follows the same principles as assets designated at fair value through profit or loss.</p> <p>Presented as <i>Trading portfolio liabilities</i> and <i>Financial liabilities designated at fair value</i>, respectively.</p>
Designated at fair value through profit or loss	<ul style="list-style-type: none"> – Issued hybrid debt instruments that primarily include equity-linked, credit-linked and rates-linked bonds or notes. – Issued debt instruments managed on a fair value basis. – Loan commitments that are hedged predominantly with credit derivatives and hence eliminate an accounting mismatch. 	<p>Derivative liabilities are generally presented as <i>Negative replacement values</i>.</p> <p>Bifurcated embedded derivatives are measured at fair value, but are presented on the same balance sheet line as the host contract.</p> <p>Derivatives that are designated and effective hedging instruments are also measured at fair value. The presentation of fair value changes differs depending on the type of hedge relationship (refer to item 3k in this Note for more information).</p> <p>Amounts due under unit-linked investment contracts are presented as <i>Other liabilities</i>.</p>
Amortized cost	<ul style="list-style-type: none"> – Demand and time deposits, retail savings / deposits, cash collateral on securities lent, non-structured fixed-rate bonds, subordinated debt, certificates of deposit, covered bonds. – Cash collateral payables on derivative instruments. 	<p>Measured at amortized cost using the effective interest rate method</p> <p>Amortized cost liabilities are presented on the balance sheet primarily as <i>Due to banks</i>, <i>Due to customers</i>, <i>Cash collateral on securities lent</i>, <i>Repurchase agreements</i>, <i>Cash collateral payables on derivative instruments</i> and <i>Debt issued</i>.</p> <p>Exchange-traded derivatives and certain OTC derivatives cleared through central clearing counterparties which are either considered to be daily settled or qualify for netting (refer to items 3d and 3j of this Note) are presented within <i>Cash collateral payables on derivative instruments</i>.</p>

Note 1 Summary of significant accounting policies (continued)

c. Interest income and expense

Interest income or expense is determined by reference to a financial instrument's amortized-cost basis calculated using the effective interest rate (EIR) method. UBS AG also uses this method to determine the interest income and expense for financial instruments (excluding derivatives) measured at fair value through profit or loss that is presented within *Net interest income*.

Upfront fees, including loan commitment fees where a loan is expected to be issued, and direct costs are included within the initial measurement of a financial instrument measured at amortized cost or classified as available for sale. Such fees and costs are therefore recognized over the expected life of the instrument as part of its EIR.

Fees related to loan commitments where no loan is expected to be issued, as well as loan syndication fees where UBS AG does not retain a portion of the syndicated loan or where UBS AG does retain a portion of the syndicated loan at the same effective yield for comparable risk as other participants, are included in *Net fee and commission income*.

Interest income on financial assets, excluding derivatives, is included in *Interest income* when positive and in *Interest expense* when negative, because negative interest income arising on a financial asset does not meet the definition of revenue. Similarly, interest expense on financial liabilities, excluding derivatives, is included in *Interest expense*, except when interest rates are negative, in which case it is included in *Interest income*. Dividend income on all financial assets is included in *Interest income*.

→ Refer to Note 3 for more information

d. Derecognition

Financial assets

UBS AG derecognizes a financial asset, or a portion of a financial asset, from its balance sheet where the contractual rights to cash flows from the asset have expired, or have been transferred, usually by sale, thus exposing the purchaser to either substantially all the risks and rewards of the asset or a significant part of the risks and rewards combined with the unconditional ability to sell or pledge the asset.

A financial asset is considered to have been transferred when UBS AG (i) transfers the contractual rights to receive the cash flows of the financial asset or (ii) retains the contractual rights to receive the cash flows of that asset, but assumes a contractual

obligation to pay the cash flows to one or more entities.

Where financial assets have been pledged as collateral or in similar arrangements, they are considered to have been transferred if the counterparty has received the contractual right to the cash flows of the pledged assets, as may be evidenced, for example, by the counterparty's right to sell or repledge the assets. Where the counterparty to the pledged financial assets has not received the contractual right to the cash flows, UBS AG does not consider this to be a transfer for the purposes of derecognition.

UBS AG enters into certain transactions where it transfers financial assets recognized on its balance sheet but retains either all or a portion of the risks and rewards of the transferred financial assets. If all or substantially all of the risks and rewards are retained, the transferred financial assets are not derecognized from the balance sheet; for example, securities lending and repurchase transactions or where financial assets are sold to a third party with a total return swap resulting in UBS AG retaining all or substantially all of the risks and rewards of the transferred assets. These types of transactions are accounted for as secured financing transactions as described in item 3e of this Note.

In transactions where substantially all of the risks and rewards of ownership of a financial asset are neither retained nor transferred, UBS AG derecognizes the financial asset if control over the asset is surrendered, and the rights and obligations retained following the transfer are recognized separately as assets and liabilities, respectively. In transfers where control over the financial asset is retained, UBS AG continues to recognize the asset to the extent of its continuing involvement, determined by the extent to which it is exposed to changes in the value of the transferred asset following the transfer.

Certain over-the-counter (OTC) derivative contracts and most exchange-traded futures and options contracts cleared through central clearing counterparties are considered to be settled on a daily basis through the daily margining process, as the payment or receipt of the variation margin represents legal or economic settlement of a derivative contract, which results in derecognition of the associated positive and negative replacement values.

→ Refer to Notes 1b and 24 for more information

Note 1 Summary of significant accounting policies (continued)

Financial liabilities

UBS AG derecognizes a financial liability from its balance sheet when it is extinguished, such as when the obligation specified in the contract is discharged, canceled or has expired. When an existing financial liability is exchanged for a new one from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification results in derecognition of the original liability and the recognition of a new liability with any difference in the respective carrying amounts being recognized in the income statement.

e. Securities borrowing / lending and repurchase / reverse repurchase transactions

Securities borrowing / lending and repurchase / reverse repurchase transactions are generally entered into on a collateralized basis. In such transactions, UBS AG typically borrows or lends equity and debt securities in exchange for securities or cash collateral. Additionally, UBS AG borrows securities from its clients' custody accounts in exchange for a fee.

These transactions are treated as collateralized financing transactions where the securities transferred / received are not derecognized or recognized on balance sheet. Securities transferred / received with the right to resell or repledge are disclosed separately.

In reverse repurchase and securities borrowing agreements, the cash delivered is derecognized and a corresponding receivable, including accrued interest, is recorded in the balance sheet lines *Reverse repurchase agreements* and *Cash collateral on securities borrowed*, respectively, representing UBS AG's right to receive the cash. Similarly, in repurchase and securities lending agreements, the cash received is recognized and a corresponding obligation, including accrued interest, is recorded in the balance sheet lines *Repurchase agreements* and *Cash collateral on securities lent*, respectively. Additionally, the sale of securities that is settled by delivering securities received in reverse repurchase or securities borrowing transactions triggers the recognition of a trading liability.

Repurchase and reverse repurchase transactions with the same counterparty, maturity, currency and Central Securities Depository (CSD) are generally presented net subject to meeting the netting requirements described in item 3j of this Note.

→ Refer to Notes 23 and 24 for more information

f. Fair value of financial instruments

UBS AG accounts for a significant portion of its assets and liabilities at fair value. Fair value is the price on the measurement date that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market, or in the most advantageous market in the absence of a principal market.

All financial instruments measured at fair value are categorized into one of three fair value hierarchy levels. The fair values of Level 1 financial instruments are based on quoted prices in active markets. The fair values of Level 2 financial instruments are based on valuation techniques for which all significant inputs are, or are based on, observable market data. The fair values of Level 3 financial instruments are based on valuation techniques for which significant inputs are not based on observable market data.

Critical accounting estimates and judgments

The use of valuation techniques, modeling assumptions and estimates of unobservable market inputs require significant judgment and could affect the amount of gain or loss recorded for a particular position. Valuation techniques that rely more heavily on unobservable inputs require a higher level of judgment to calculate a fair value than those entirely based on observable inputs.

Valuation techniques, including models, that are used to determine fair values are periodically reviewed and validated by qualified personnel, independent of those who created them. Models are calibrated to ensure that outputs reflect observable market data, to the extent possible. Also, models prioritize the use of observable inputs, when available, over unobservable inputs. Judgment is required in selecting appropriate models as well as inputs for which observable data is less readily or not available.

UBS AG's valuation techniques may not fully reflect all the factors relevant to the fair value of financial instruments held. Valuations are therefore adjusted, where appropriate, to allow for additional factors, including credit risk, model risk, and liquidity risk.

UBS AG's governance framework over fair value measurement is described in Note 22b.

The level of subjectivity and the degree of management judgment involved in the development of estimates and the selection of assumptions is more significant for instruments valued using specialized and sophisticated models and where some or all of the parameter inputs are less observable (Level 3 instruments) and may require adjustment to reflect factors that market participants would consider in estimating fair value, such as close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors which are presented in Note 22d. UBS AG provides a sensitivity analysis of the impact upon the Level 3 financial instruments of using reasonably possible alternative assumptions for the unobservable parameters within Note 22g.

→ Refer to Note 22 for more information

Note 1 Summary of significant accounting policies (continued)

g. Allowances and provisions for credit losses for financial assets held at amortized cost

A claim is impaired and an allowance or provision for credit losses is recognized when objective evidence demonstrates that a loss event was incurred after the initial recognition and that the loss event has an impact on the future cash flows that can be reliably estimated. UBS AG considers a claim to be impaired if it will be unable to collect all amounts due on the claim based on the original contractual terms due to credit deterioration of the issuer or counterparty. A claim can be a loan or receivable carried at amortized cost, or a commitment, such as a letter of credit, a guarantee or a similar instrument.

An allowance for credit losses is reported as a decrease in carrying value of a claim on the balance sheet. For an off-balance sheet item, such as a commitment, a provision for credit loss is reported in *Provisions*. Changes to allowances and provisions for credit losses are recognized in *Credit loss expense / recovery*.

→ Refer to Notes 10 and 11 for more information

Critical accounting estimates and judgments

Allowances and provisions for credit losses are evaluated at both a counterparty-specific level and collectively. Judgment is used in making assumptions about the timing and amount of impairment losses.

Counterparty-specific allowances and provisions

Loans are evaluated individually for impairment if objective evidence indicates that a loan may be impaired. Individual credit exposures are evaluated on the basis of the borrower's overall financial condition, resources and payment record, the prospects of support from contractual guarantors and, where applicable, the realizable value of any collateral. The impairment loss for a loan is the excess of the carrying value of the financial asset over the estimated recoverable amount. The estimated recoverable amount is the present value, calculated using the loan's original effective interest rate, of expected future cash flows, including amounts that may result from restructuring or the liquidation of collateral. If a loan has a variable interest rate, the discount rate for calculating the recoverable amount is the current effective interest rate. Upon impairment, the accrual of interest income based on the original terms of the loan is discontinued. Instead, the increase in the present value of the impaired loan due to the passage of time is calculated and reported within *Interest income*.

Collective allowances and provisions

Collective allowances and provisions are calculated for portfolios with similar credit risk characteristics, taking into account historical loss experience and current conditions. The methodology and assumptions used are reviewed regularly to reduce any differences between estimated and actual loss experience. For all of its portfolios, UBS AG also assesses whether there have been any unforeseen developments that might result in impairments but are not immediately observable at a counterparty level. To determine whether an event-driven collective allowance for credit losses is required, UBS AG considers global economic drivers to assess the most vulnerable countries and industries. As the allowance cannot be allocated to individual loans, the loans are not considered to be impaired and interest is accrued on each loan according to its contractual terms. If objective evidence becomes available that indicates that an individual financial asset is impaired, it is removed from the group of financial assets assessed for impairment on a collective basis and is assessed separately as counterparty-specific.

All impaired loans are reviewed and analyzed at least annually. Any subsequent changes to the amounts and timing of the expected future cash flows compared with prior estimates result in a change in the allowance for credit losses and are charged or credited to *Credit loss expense / recovery*. An allowance for impairment is reversed only when the credit quality has improved to such an extent that there is reasonable assurance of timely collection of principal and interest in accordance with the original contractual terms of the claim, or the equivalent value thereof. A write-off is made when all or part of a claim is deemed uncollectible or forgiven. Write-offs reduce the principal amount of a claim and are charged against previously established allowances for credit losses. Recoveries, in part or in full, of amounts previously written off are credited to *Credit loss expense / recovery*.

Note 1 Summary of significant accounting policies (continued)

h. Renegotiated loans

A renegotiated or restructured loan is a loan for which the terms have been modified or for which additional collateral has been requested that was not contemplated in the original contract.

Typical key features of terms and conditions granted through renegotiation to avoid default include special interest rates, postponement of interest or amortization payments, modification of the schedule of repayments or amendment of loan maturity. There is no change in the EIR following a renegotiation.

If a loan is renegotiated with preferential conditions (i.e., new or modified terms and conditions are agreed upon which do not meet the normal market criteria for the quality of the obligor and the type of loan), it is still classified as non-performing. It will remain so until the loan is collected or written off and will be assessed for impairment on an individual basis.

Concessions granted where there is no evidence of financial difficulty, or where any changes to terms and conditions are within UBS AG's usual risk appetite, are not deemed restructured.

A restructuring of a loan could lead to a fundamental change in the terms and conditions of a loan, resulting in the original loan being derecognized and a new loan being recognized.

If a loan is derecognized in these circumstances, the new loan is measured at fair value at initial recognition. Any allowance taken to date against the original loan is derecognized and is not attributed to the new loan. Consequently, the new loan is assessed for impairment on an individual basis. If the loan is not impaired, the loan is included within the general collective loan assessment for the purpose of measuring credit losses.

i. Impairment of financial assets classified as available for sale

At each balance sheet date, UBS AG assesses whether indicators of impairment are present. Available-for-sale debt instruments are impaired when there is objective evidence, using the same criteria described in item 3g, that, as a result of one or more events that occurred after the initial recognition of the asset, the estimated future cash flows have decreased.

Objective evidence that there has been an impairment of an available-for-sale equity instrument is a significant or prolonged decline in the fair value of the asset. UBS AG uses a rebuttable presumption that such instruments are impaired where there has been a decline in fair value of more than 20% below its original cost or fair value has been below original cost for more than six months.

To the extent a financial asset classified as available for sale is determined to be impaired, the related cumulative net unrealized loss previously recognized in *Other comprehensive income* is reclassified to the income statement within *Other income*. For equity instruments, any further loss is recognized directly in the income statement, whereas for debt instruments, any further loss is recognized in the income statement only if there is additional objective evidence of impairment. After the recognition of an impairment on a financial asset classified as available for sale, increases in the fair value of equity instruments are reported in *Other comprehensive income*. For debt instruments, such increases in the fair value, up to amortized cost in the transaction currency, are recognized in *Other income*, provided that the fair value increase is related to an event occurring after the impairment loss was recorded. Increases in excess of that amount are reported in *Other comprehensive income*.

j. Netting

UBS AG nets financial assets and liabilities on its balance sheet if (i) it has the unconditional and legally enforceable right to set off the recognized amounts, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS AG and all of the counterparties, and (ii) intends either to settle on a net basis or to realize the asset and settle the liability simultaneously. Netted positions include, for example, certain derivatives and repurchase and reverse repurchase transactions with various counterparties, exchanges and clearing houses.

In assessing whether UBS AG intends to either settle on a net basis or to realize the asset and settle the liability simultaneously, emphasis is placed on the effectiveness of operational settlement mechanics in eliminating substantially all credit and liquidity exposure between the counterparties. This condition precludes offsetting on the balance sheet for substantial amounts of UBS AG's financial assets and liabilities, even though they may be subject to enforceable netting arrangements. For OTC derivative contracts, balance sheet offsetting is generally only permitted in circumstances in which a market settlement mechanism exists via an exchange or central clearing counterparty, that effectively accomplishes net settlement through a daily exchange of collateral via a cash margining process. For repurchase arrangements and securities financing transactions, balance sheet offsetting may be permitted only to the extent that the settlement mechanism eliminates, or results in insignificant, credit and liquidity risk, and processes the receivables and payables in a single settlement process or cycle.

→ Refer to Notes 1b and 24 for more information

Note 1 Summary of significant accounting policies (continued)

k. Hedge accounting

UBS AG uses derivative instruments to manage exposures to interest rate and foreign currency risks, including exposures arising from forecast transactions. Qualifying derivative and non-derivative instruments may be designated as hedging instruments in (i) hedges of the change in fair value of recognized assets or liabilities (fair value hedges), (ii) hedges of the variability in future cash flows attributable to a recognized asset or liability or highly probable forecast transactions (cash flow hedges) or (iii) hedges of a net investment in a foreign operation (net investment hedges).

At the time a financial instrument is designated in a hedge relationship, UBS AG formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction and the methods that will be used to assess the effectiveness of the hedging relationship. Accordingly, UBS AG assesses, both at the inception of the hedge and on an ongoing basis, whether the hedging instruments, primarily derivatives, have been “highly effective” in offsetting changes in the fair value or cash flows associated with the designated risk of the hedged items. A hedge is considered highly effective if the following criteria are met: (i) at inception of the hedge and throughout its life, the hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk and (ii) actual results of the hedge are within a range of 80–125%. In the case of hedging forecast transactions, the transaction must have a high probability of occurring and must present an exposure to variations in cash flows that could ultimately affect the reported net profit or loss. UBS AG discontinues hedge accounting when (i) it determines that a hedging instrument is not, or has ceased to be, highly effective as a hedge, (ii) the derivative expires or is sold, terminated or exercised, (iii) the hedged item matures, is sold or repaid or (iv) forecast transactions are no longer deemed highly probable. UBS AG may also discontinue hedge accounting voluntarily.

Hedge ineffectiveness represents the amount by which the changes in the fair value of the hedging instrument differ from changes in the fair value of the hedged item attributable to the hedged risk, or the amount by which changes in the present value of future cash flows of the hedging instrument exceed changes in the present value of expected cash flows of the hedged item. Such ineffectiveness is recorded in current period earnings in *Net trading income*. Interest income and expense on derivatives designated as hedging instruments in effective hedge relationships is included in *Interest income*.

Fair value hedges

For qualifying fair value hedges, the change in the fair value of the hedging instrument is recognized in the income statement along with the change in the fair value of the hedged item that is attributable to the hedged risk. In fair value hedges of interest rate risk, the fair value change of the hedged item attributable

to the hedged risk is reflected as an adjustment to the carrying value of the hedged item. If the hedge accounting relationship is terminated for reasons other than the derecognition of the hedged item, the adjustment to the carrying value is amortized to the income statement over the remaining term to maturity of the hedged item using the effective interest rate method. For a portfolio hedge of interest rate risk, the equivalent change in fair value is reflected within *Other assets* or *Other liabilities*. If the hedge relationship is terminated for reasons other than the derecognition of the hedged item, the amount included in *Other assets* or *Other liabilities* is amortized to the income statement over the remaining term to maturity of the hedged items using the straight-line method.

Cash flow hedges

Fair value gains or losses associated with the effective portion of derivatives designated as cash flow hedges for cash flow repricing risk are recognized initially in *Other comprehensive income* within *Equity*. When the hedged forecast cash flows affect profit or loss, the associated gains or losses on the hedging derivatives are reclassified from *Equity* to the income statement.

If a cash flow hedge of forecasted transactions is no longer considered effective, or if the hedge relationship is terminated, the cumulative gains or losses on the hedging derivatives previously reported in *Equity* remain there until the committed or forecasted transactions occur and affect profit or loss. If the forecasted transactions are no longer expected to occur, the deferred gains or losses are reclassified immediately to the income statement.

Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized directly in *Equity* (and presented in the statement of changes in equity and statement of comprehensive income under *Foreign currency translation*), while any gains or losses relating to the ineffective and / or undesignated portion (for example, the interest element of a forward contract) are recognized in the income statement. Upon disposal or partial disposal of the foreign operation, the cumulative value of any such gains or losses recognized in *Equity* associated with the entity is reclassified to the income statement.

Economic hedges that do not qualify for hedge accounting

Derivative instruments that are transacted as economic hedges, but do not qualify for hedge accounting, are treated in the same way as derivative instruments used for trading purposes (i.e., realized and unrealized gains and losses are recognized in *Net trading income*), except for the forward points on certain short duration foreign exchange contracts, which are reported in *Net interest income*.

→ Refer to Note 12 for more information

Note 1 Summary of significant accounting policies (continued)

l. Embedded derivatives

Derivatives may be embedded in other financial instruments (host contracts). For example, they could be represented by the conversion feature embedded in a convertible bond. Such hybrid instruments arise predominantly from the issuance of certain structured debt instruments. An embedded derivative is generally required to be separated from the host contract and accounted for as a standalone derivative instrument at fair value through profit or loss if (i) the host contract is not carried at fair value with changes in fair value reported in the income statement, (ii) the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract and (iii) the terms of the embedded derivative would meet the definition of a standalone derivative, were they contained in a separate contract.

Typically, UBS AG applies the fair value option to hybrid instruments (refer to item 3b in this Note for more information), in which case bifurcation of an embedded derivative component is not required.

m. Debt issued

Debt issued is carried at amortized cost, including contingent capital instruments that contain contractual provisions under which the principal amounts would be written down upon either a specified CET1 ratio breach or a determination by FINMA that a viability event has occurred. Such contractual provisions are not derivatives as the underlying is deemed to be a non-financial variable specific to a party to the contract. In contrast, where there is a legal "bail-in" mechanism for write-down or conversion into equity (as is the case, for instance, with senior unsecured debt issued by UBS AG that is subject to write-down or conversion under resolution authority granted to FINMA under Swiss law), such mechanism does not form part of the contractual terms and, therefore, does not affect the amortized cost accounting treatment applied to these instruments. If the debt were to be written down or converted into equity in a future period, this would result in the full or partial derecognition of the financial liabilities, with the difference between the carrying value of the debt written down or converted into equity and the fair value of any equity shares issued recognized in the income statement.

In cases where, as part of UBS AG's risk management activity, fair value hedge accounting is applied to fixed-rate debt instruments carried at amortized cost, their carrying amount is adjusted for changes in fair value related to the hedged exposure. Refer to item 3k for more information on hedge accounting.

Debt issued and subsequently repurchased in relation to market-making or other activities is treated as redeemed. A gain or loss on redemption (depending on whether the repurchase price of the bond is lower or higher than its carrying value) is recorded in *Other income*. A subsequent sale of own bonds in the market is treated as a reissuance of debt.

n. Own credit

From 1 January 2016 onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained earnings* and will not be reclassified to the income statement in future periods.

→ Refer to Note 1b for more information

o. Loan commitments

Loan commitments are arrangements under which clients can borrow stipulated amounts under defined terms and conditions.

Loan commitments that can be canceled at any time by UBS AG at its discretion are neither recognized on the balance sheet nor included in off-balance sheet disclosures.

Loan commitments that cannot be canceled by UBS AG once the commitments are communicated to the beneficiary, or which are revocable only due to automatic cancellation upon deterioration in a borrower's creditworthiness are considered irrevocable and are classified as (i) derivative loan commitments measured at fair value through profit or loss, (ii) loan commitments designated at fair value through profit or loss or (iii) other loan commitments. Other loan commitments are not recorded on the balance sheet, but a provision is recognized through profit or loss if it is probable that a loss has been incurred and a reliable estimate of the amount of the obligation can be made. Any change in the liability relating to these other loan commitments is recorded in the income statement in *Credit loss expense / recovery*.

When a client draws on a commitment, the resulting loan is presented under *Loans*, except for cases where designation at fair value through profit or loss applies.

p. Financial guarantee contracts

Financial guarantee contracts are contracts that require the issuer to make specified payments to reimburse the holder for an incurred loss because a specified debtor fails to make payments when due in accordance with the terms of a specified debt instrument. UBS AG issues such financial guarantees to banks, financial institutions and other parties on behalf of clients to secure loans, overdrafts and other banking facilities.

Certain issued financial guarantees that are managed on a fair value basis are designated at fair value through profit or loss.

Financial guarantees that are not managed on a fair value basis are initially recognized in the financial statements at fair value and are subsequently measured at the higher of the amount initially recognized less cumulative amortization, and to the extent a payment under the guarantee has become probable, the present value of the expected payment. Any change in the liability relating to probable expected payments resulting from guarantees is recorded in the income statement in *Credit loss expense / recovery*.

Note 1 Summary of significant accounting policies (continued)

4) Fee income

UBS AG earns fee income from a diverse range of services it provides to its clients. Fee income can be divided into two broad categories: (i) fees earned from services that are provided over a certain period of time, such as portfolio management and advisory fees, and (ii) fees earned from providing transaction-type services, such as underwriting fees, corporate finance fees and brokerage fees.

Fees earned from services that are provided over a certain period of time are recognized ratably over the service period, with the exception of performance-linked fees or fee components with specific performance criteria. Such fees are recognized when the performance criteria are fulfilled and when collectibility is reasonably assured.

Fees earned from providing transaction-type services are recognized when the service has been completed and the fee is fixed or determinable, i.e., not subject to refund or adjustment.

Fee income generated from providing a service which does not result in the recognition of a financial instrument is presented within *Net fee and commission income*. Fees generated from the acquisition, issue or disposal of a financial instrument are presented in the income statement in line with the balance sheet classification of that financial instrument.

→ Refer to Note 4 for more information

5) Cash and cash equivalents

For the purposes of the statement of cash flows, cash and cash equivalents comprise balances with an original maturity of three months or less, including cash, money market paper and balances with central and other banks.

6) Equity participation and other compensation plans

Transfer of deferred compensation plans

As part of the Group reorganization in 2014, UBS Group AG assumed obligations of UBS AG as grantor in connection with certain outstanding awards under employee share, option, notional fund and deferred cash compensation plans. This section describes the accounting policies applied to these plans during the periods prior to and post the Group reorganization and transfer of deferred compensation plans.

Equity participation plans

Periods prior to the Group reorganization and transfer of deferred compensation plans

UBS AG has established several equity participation plans that are settled in UBS AG's equity instruments or an amount that is based on the value of such instruments. These awards are generally subject to conditions that require employees to complete a specified period of service and, for performance shares, to satisfy specified performance targets. Compensation

expense is recognized, on a per tranche basis, over the service period based on an estimate of the number of instruments expected to vest and is adjusted to reflect actual outcomes. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed termination provisions, recognition of expense is accelerated to the termination date.

Where no future service is required, such as for employees who are retirement eligible or who have met certain age and years-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. Such awards may remain forfeitable until the legal vesting date if certain non-vesting conditions are not met, such as breach of good-leaver clauses or harmful acts. For equity-settled awards, forfeiture events resulting from breach of a non-vesting condition do not result in an adjustment to expense.

Compensation expense is measured by reference to the fair value of the equity instruments on the date of grant adjusted, when relevant, to take into account the terms and conditions inherent in the award, including dividend rights, transfer restrictions in effect beyond the vesting date, and non-vesting conditions. For equity-settled instruments, fair value is determined at the date of grant and is not remeasured unless its terms are modified such that the fair value immediately after modification exceeds the fair value immediately prior to modification. Any increase in fair value resulting from a modification is recognized as compensation expense, either over the remaining service period or, for vested awards, immediately. For cash-settled awards, fair value is remeasured at each reporting date such that the cumulative expense recognized equals the cash distributed.

→ Refer to Note 27 for more information

Periods post the Group reorganization and transfer of deferred compensation plans

UBS Group AG has established, and maintains the obligation to settle, several equity participation plans that are granted to employees of UBS AG. UBS AG recognizes the fair value of awards granted to its employees. These awards are generally subject to conditions that require employees to complete a specified period of service and, for performance shares, to satisfy specified performance targets. Compensation expense is recognized, on a per tranche basis, over the service period based on an estimate of the number of instruments expected to vest and is adjusted to reflect actual outcomes. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed terminations provisions, recognition of expense is accelerated to the termination date.

Note 1 Summary of significant accounting policies (continued)

Where no future service is required, such as for employees who are retirement eligible or who have met certain age and years-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. Such awards may remain forfeitable until the legal vesting date if certain non-vesting conditions are not met, such as breach of good-leaver clauses or harmful acts. Forfeiture events resulting from breach of a non-vesting condition do not result in an adjustment to expense.

UBS AG has no obligation to settle the awards and therefore awards over UBS Group AG shares are classified as equity settled share-based payment transactions. Compensation expense is measured by reference to the fair value of UBS Group AG equity instruments on the date of grant adjusted, when relevant, to take into account the terms and conditions inherent in the award, including dividend rights, transfer restrictions in effect beyond the vesting date, and non-vesting conditions. Fair value is determined at the date of grant and is not remeasured unless its terms are modified such that the fair value immediately after modification exceeds the fair value immediately prior to modification. Any increase in fair value resulting from a modification is recognized as compensation expense, either over the remaining service period or, for vested awards, immediately.

→ Refer to Note 27 for more information

Other compensation plans

The employees of UBS AG are granted deferred compensation plans which are settled in cash or other financial instruments, the amount of which may be fixed or may vary based on the achievement of specified performance conditions or the value of specified underlying assets. Compensation expense is recognized over the period that the employee provides services to become entitled to the award. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed termination provisions, recognition of expense is accelerated to the termination date. Where no future service is required, such as for employees who are retirement eligible or who have met certain age and years-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. The amount recognized is based on the present value of the amount expected to be paid under the plan and is remeasured at each reporting date, so that the cumulative expense recognized equals the cash or the fair value of respective financial instruments distributed.

→ Refer to Note 27 for more information

7) Pension and other post-employment benefit plans

UBS AG sponsors various post-employment benefit plans for its employees worldwide, which include defined benefit and defined contribution pension plans, and other post-employment

benefits such as medical and life insurance benefits that are payable after the completion of employment.

→ Refer to Note 26 for more information

Defined benefit pension plans

Defined benefit pension plans specify an amount of benefit that an employee will receive, which usually depends on one or more factors, such as age, years of service and compensation. The defined benefit liability recognized in the balance sheet is the present value of the defined benefit obligation less the fair value of the plan assets at the balance sheet date with changes resulting from remeasurements recorded immediately in *Other comprehensive income*. If the fair value of the plan assets is higher than the present value of the defined benefit obligation, the recognition of the resulting net defined benefit asset is limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. UBS AG applies the projected unit credit method to determine the present value of its defined benefit obligations, the related current service cost and, where applicable, past service cost. The projected unit credit method sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation. These amounts, which take into account the specific features of each plan, including risk sharing between employee and employer, are calculated periodically by independent qualified actuaries.

Critical accounting estimates and judgments

The net defined benefit liability or asset at the balance sheet date and the related personnel expense depend on the expected future benefits to be provided, determined using a number of economic and demographic assumptions. A range of assumptions could be applied and different assumptions could significantly alter the defined benefit liability or asset and pension expense recognized. The most significant assumptions include life expectancy, the discount rate, expected salary increases, pension increases, and in addition, for the Swiss plan and one of the US defined benefit pension plans, interest credits on retirement savings account balances. Life expectancy is determined by reference to published mortality tables. The discount rate is determined by reference to the rates of return on high-quality fixed-income investments of appropriate currency and term at the measurement date. The assumption for salary increases reflects the long-term expectations for salary growth and takes into account inflation, seniority, promotion and other relevant factors such as supply and demand in the labor market. A sensitivity analysis for reasonable possible movements in each significant assumption for UBS AG's post-employment obligations is provided within Note 26.

Note 1 Summary of significant accounting policies (continued)

Defined contribution plans

A defined contribution plan is a pension plan under which UBS AG pays fixed contributions into a separate entity from which post-employment and other benefits are paid. UBS AG has no legal or constructive obligation to pay further contributions if the plan does not hold sufficient assets to pay employees the benefits relating to employee service in the current and prior periods. UBS AG's contributions are expensed when the employees have rendered services in exchange for such contributions. This is generally in the year of contribution. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

Other post-employment benefits

UBS AG also provides post-employment medical and life insurance benefits to certain retirees in the US and the UK. The expected costs of these benefits are recognized over the period of employment using the same accounting methodology used for defined benefit pension plans.

8) Income taxes

UBS AG is subject to the income tax laws of Switzerland and those of the non-Swiss jurisdictions in which UBS AG has business operations.

UBS AG's provision for income taxes is composed of current and deferred taxes. Current income taxes represent taxes to be paid or refunded for the current period or previous periods.

Deferred taxes are recognized for temporary differences between the carrying amounts and tax bases of assets and liabilities that will result in deductible amounts in future periods and are measured using the applicable tax rates and laws that will be in effect when such differences are expected to reverse.

Deferred tax assets arise from a variety of sources, the most significant being: (i) tax losses that can be carried forward to be used against profits in future years and (ii) expenses recognized in UBS AG's income statement that are not deductible until the associated cash flows occur. Deferred tax assets are recognized only to the extent that it is probable that sufficient taxable profits will be available against which these differences can be used. When an entity or tax group has a history of recent losses, deferred tax assets are only recognized to the extent there are sufficient taxable temporary differences or there is convincing other evidence that sufficient taxable profit will be available against which the unused tax losses can be utilized.

Deferred tax liabilities are recognized for temporary differences between the carrying amounts of assets and liabilities in the balance sheet that reflect the expectation that certain items will give rise to taxable income in future periods.

Deferred and current tax assets and liabilities are offset when (i) they arise in the same tax reporting group, (ii) they relate to the same tax authority, (iii) the legal right to offset exists and (iv) they are intended to be settled net or realized simultaneously.

Current and deferred taxes are recognized as income tax benefit or expense in the income statement except for current and deferred taxes recognized (i) upon the acquisition of a subsidiary, (ii) for unrealized gains or losses on financial instruments that are classified as available for sale, (iii) for changes in fair value of derivative instruments designated as cash flow hedges, (iv) for remeasurements of defined benefit plans, (v) for certain foreign currency translations of foreign operations, and (vi) for gains and losses on the sale of treasury shares. Amounts relating to points (ii), (iii), (iv) and (v) are recognized in *Other comprehensive income* within *Equity*.

Critical accounting estimates and judgments

Tax laws are complex and judgment and interpretations about the application of such laws are required when accounting for income taxes. UBS AG considers the performance of its businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of its deferred tax assets, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing deferred tax assets. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

The level of deferred tax asset recognition is influenced by management's assessment of UBS AG's future profitability based on relevant business plan forecasts. Existing assessments are reviewed and, if necessary, revised to reflect changed circumstances. This review is conducted annually, in the second half of each year, but adjustments may be made at other times, if required. In a situation where recent losses have been incurred, convincing evidence that there will be sufficient future profitability is required.

If profit forecast assumptions in future periods deviate from the current outlook, the value of UBS AG's deferred tax assets may be affected. Recognition of any decrease in the carrying amount of deferred tax assets in the income statement would reduce net profit and equity but would not affect cash flows.

Judgment is also required to forecast the expected outcome of uncertain tax positions that may require the interpretation of tax laws and the resolution of any income tax-related appeals or litigation that are incorporated into the estimate of income and deferred tax.

→ Refer to Note 8 for more information

Note 1 Summary of significant accounting policies (continued)

9) Investment in associates

Entities where UBS AG has significant influence over the financial and operating policies of the entity, but does not have control, are classified as investments in associates and accounted for under the equity method of accounting. Typically, UBS AG has significant influence when it holds or has the ability to hold between 20% and 50% of a company's voting rights. Investments in associates are initially recognized at cost, and the carrying amount is increased or decreased after the date of acquisition to recognize UBS AG's share of the investee's comprehensive income and any impairment losses.

→ Refer to Note 28 for more information

10) Property, equipment and software

Property, equipment and software includes own-used properties, leasehold improvements, information technology hardware, externally purchased and internally generated software, as well as communication and other similar equipment. Property, equipment and software is carried at cost less accumulated depreciation and impairment losses, and is reviewed at each reporting date for indication for impairment. Software development costs are capitalized only when the costs can be measured reliably and it is probable that future economic benefits will arise. Depreciation of property, equipment and software begins when they are available for use, that is, when they are in the location and condition necessary for them to be capable of operating in the manner intended by management. Depreciation is calculated on a straight-line basis over an asset's estimated useful life. The estimated useful economic lives of UBS AG's property, equipment and software are:

- properties, excluding land: ≤ 67 years
- IT hardware and communication equipment: ≤ 7 years
- other machines and equipment: ≤ 10 years
- software: ≤ 10 years
- leasehold improvements: shorter of the lease term or the economic life of asset (typically ≤ 20 years)

→ Refer to Notes 1b and 14 for more information

11) Goodwill and intangible assets

Goodwill represents the excess of the cost of an acquisition over the fair value of UBS AG's share of net identifiable assets of the acquired entity at the date of the acquisition. Goodwill is not amortized, but at the end of each reporting period, UBS AG assesses whether there is any indication that goodwill is impaired. If such indicators exist, UBS AG is required to test the goodwill for impairment. Irrespective of whether there is any indication of impairment, UBS AG tests goodwill for impairment annually. UBS AG considers the segments, as reported in Note 2a, as separate cash-generating units, since this is the level at which the performance of investments is reviewed and assessed by management. The impairment test is performed for each segment to which goodwill is allocated by comparing the recoverable amount, based on its value-in-use, to the carrying amount of the respective segment. An impairment charge is

recognized if the carrying amount exceeds the recoverable amount.

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of UBS AG's goodwill may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce net profit and equity, but would not affect cash flows.

Intangible assets are comprised of separately identifiable intangible items arising from business combinations and certain purchased trademarks and similar items. Intangible assets are recognized at cost. The cost of an intangible asset acquired in a business combination is its fair value at the date of acquisition. Intangible assets with a finite useful life are amortized using the straight-line method over their estimated useful life, generally not exceeding 20 years. In rare cases, intangible assets can have an indefinite useful life, in which case they are not amortized. At each reporting date, intangible assets are reviewed for indications of impairment. If such indications exist, the intangible assets are analyzed to assess whether their carrying amount is fully recoverable. An impairment loss is recognized if the carrying amount exceeds the recoverable amount.

Critical accounting estimates and judgments

UBS AG's methodology for goodwill impairment testing is based on a model which is most sensitive to the following key assumptions: (i) forecasts of earnings available to shareholders in years one to three, (ii) changes in the discount rates and (iii) changes in the long-term growth rate. Key assumptions used to determine the recoverable amounts of each segment are tested for sensitivity by applying a reasonably possible change to those assumptions. Refer to Note 15 for the discussion of how the reasonably possible changes in those key assumptions may affect the results delivered by UBS AG's model for goodwill impairment testing.

→ Refer to Notes 2 and 15 for more information

12) Provisions and contingent liabilities

Provisions are liabilities of uncertain timing or amount, and are recognized when (i) UBS AG has a present obligation as a result of a past event, (ii) it is probable that an outflow of resources will be required to settle the obligation and (iii) a reliable estimate of the amount of the obligation can be made.

The majority of UBS AG's provisions relate to litigation, regulatory and similar matters, restructuring, employee benefits, real estate and loan commitments and guarantees. Provisions that are similar in nature are aggregated to form a class, while the remaining provisions, including those of less significant amounts, are presented under *Other provisions*. Provisions are presented separately on the balance sheet and, when they are no longer considered uncertain in timing or amount, are reclassified to *Other liabilities – Other*.

Note 1 Summary of significant accounting policies (continued)

UBS AG recognizes provisions for litigation, regulatory and similar matters when, in the opinion of management after seeking legal advice, it is more likely than not that UBS AG has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against UBS AG, but are nevertheless expected to be, based on UBS AG's experience with similar asserted claims.

Restructuring provisions are recognized when a detailed and formal restructuring plan has been approved and a valid expectation has been raised that the restructuring will be carried out, either through commencement of the plan or announcements to affected employees.

Provisions are recognized for lease contracts if the unavoidable costs of a contract exceed the benefits expected to be received under it (onerous lease contracts). For example, this may occur when a significant portion of a leased property is expected to be vacant for an extended period.

Provisions for employee benefits are recognized mainly in respect of service anniversaries and sabbatical leave.

Provisions are recognized at the best estimate of the consideration required to settle the present obligation at the balance sheet date. Such estimates are based on all available information and are revised over time as more information becomes available. If the effect of the time value of money is material, provisions are discounted and measured at the present value of the expenditure expected to settle or discharge the obligation, using a rate that reflects the current market assessments of the time value of money and the risks specific to the obligation.

When all conditions required to recognize a provision are not met, a contingent liability is disclosed, unless the likelihood of an outflow of resources is remote. Contingent liabilities are also disclosed for possible obligations that arise from past events whose existence will be confirmed only by uncertain future events not wholly within the control of UBS AG. Such disclosures are not made if it is not practicable to do so.

Critical accounting estimates and judgments

Recognition of provisions often involves significant judgment in assessing the existence of an obligation that results from past events and in estimating the probability, timing and amount of any outflows of resources. This is particularly the case for litigation, regulatory and similar matters, which, due to their nature, are subject to many uncertainties making their outcome difficult to predict. Such matters may involve unique fact patterns or novel legal theories, proceedings that have not yet

been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Determining whether an obligation exists as a result of a past event and estimating the probability, timing and amount of any potential outflows is based on a variety of assumptions, variables, and known and unknown uncertainties.

The amount of any provision recognized is sensitive to the assumptions used and there could be a wide range of possible outcomes for any particular matter.

Statistical or other quantitative analytical tools are of limited use in determining whether to establish or determine the amount of provisions in the case of litigation, regulatory or similar matters. Furthermore, information currently available to management may be incomplete or inaccurate, increasing the risk of erroneous assumptions with regard to the future development of such matters. Management regularly reviews all the available information regarding such matters, including legal advice which is a significant consideration, to assess whether the recognition criteria for provisions have been satisfied and to determine the timing and amount of any potential outflows.

→ Refer to Note 20 for more information

13) Foreign currency translation

Transactions denominated in a foreign currency are translated into the functional currency of the reporting entity at the spot exchange rate on the date of the transaction. At the balance sheet date, all monetary assets and liabilities denominated in foreign currency are translated into the functional currency using the closing exchange rate. Non-monetary items measured at historical cost are translated at the exchange rate on the date of the transaction. Foreign currency translation differences on non-monetary financial assets classified as available for sale are generally recorded directly in *Equity* until the asset is sold or becomes impaired. However, translation differences on available for sale monetary financial assets are reported in *Net trading income* on an amortized-cost basis, along with all other foreign currency translation differences on monetary assets and liabilities.

Upon consolidation, assets and liabilities of foreign operations are translated into Swiss francs (CHF), UBS AG's presentation currency, at the closing exchange rate on the balance sheet date, and income and expense items are translated at the average rate for the period. The resulting foreign currency translation differences attributable to shareholders are recognized directly in *Foreign currency translation* within *Equity*, which forms part of *Total equity attributable to shareholders*, whereas the foreign currency translation differences attributable to non-controlling interests are shown within *Equity attributable to non-controlling interests*.

Note 1 Summary of significant accounting policies (continued)

When a foreign operation is disposed or partially disposed of and UBS AG loses control over the foreign operation, the cumulative amount of foreign currency translation differences within *Total equity attributable to shareholders* and *Equity attributable to non-controlling interests* related to that foreign operation is reclassified to the income statement as part of the gain or loss on disposal. When UBS AG disposes of a portion of its interest in a subsidiary that includes a foreign operation but retains control, the related portion of the cumulative currency translation balance is reclassified to *Equity attributable to non-controlling interests*.

→ Refer to Note 34 for more information

14) Equity, treasury shares and contracts on UBS AG shares

Non-controlling interests and preferred noteholders

Net profit and *Equity* are presented including non-controlling interests and preferred noteholders. *Net profit* is split into *Net profit attributable to shareholders*, *Net profit attributable to non-controlling interests* and *Net profit attributable to preferred noteholders*. *Equity* is split into *Equity attributable to shareholders*, *Equity attributable to non-controlling interests* and *Equity attributable to preferred noteholders*.

UBS AG shares held (treasury shares)

UBS AG shares held by UBS AG are presented in *Equity* as *Treasury shares* at their acquisition cost and are deducted from *Equity* until they are canceled or reissued. The difference between the proceeds from sales of treasury shares and their weighted average cost (net of tax, if any) is reported as *Share premium*.

Net cash settlement contracts

Prior to the share-for-share exchange that took place in 2014, UBS AG issued contracts on own shares that required net cash settlement, or provided the counterparty or UBS AG with a settlement option which included a choice of settling net in cash. These contracts were classified as held for trading, with changes in fair value reported in the income statement as *Net trading income*.

Following the share-for-share exchange, these contracts continue to be accounted for in the same manner, however, they are no longer classified as contracts on own shares.

15) Leasing

UBS AG enters into lease contracts, or contracts that include lease components, predominantly of premises and equipment, and primarily as lessee. Leases that transfer substantially all the risks and rewards, but not necessarily legal title in the underlying assets, are classified as finance leases. All other leases are classified as operating leases. UBS AG is not a lessee in any material finance leases.

Lease contracts classified as operating leases where UBS AG is the lessee include non-cancellable long-term leases of office buildings in most UBS AG locations. Operating lease rentals payable are recognized as an expense on a straight-line basis over the lease term, which commences with control of the physical use of the property. Lease incentives are treated as a reduction of rental expense and are recognized on a consistent basis over the lease term.

Where UBS AG acts as lessor under a finance lease, a receivable is recognized in *Loans* at an amount equal to the present value of the aggregate of the minimum lease payments plus any unguaranteed residual value that UBS AG expects to recover at the end of the lease term. Initial direct costs are also included in the initial measurement of the lease receivable. Lease payments received during the lease term are allocated to repayment of the outstanding receivable and interest income to reflect a constant periodic rate of return on UBS AG's net investment using the interest rate implicit in the lease. UBS AG reviews the estimated unguaranteed residual value annually, and if the estimated residual value to be realized is less than the amount assumed at lease inception, a loss is recognized for the expected shortfall.

Certain arrangements do not take the legal form of a lease but convey a right to use an asset in return for a payment or series of payments. For such arrangements, UBS AG determines at the inception of the arrangement whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets and, if so, the arrangement is accounted for as a lease.

→ Refer to Notes 10 and 31 for more information

Note 1 Summary of significant accounting policies (continued)

b) Changes in accounting policies, comparability and other adjustments

Own credit

On 1 January 2016, UBS AG adopted the own credit presentation requirements of IFRS 9, *Financial Instruments*. From this date onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained earnings*. As UBS AG does not hedge changes in own credit arising on financial liabilities designated at fair value, presenting own credit within *Other comprehensive income* does not create or increase an accounting mismatch in the income statement. The unrealized and any realized own credit recognized in *Other comprehensive income* will not be reclassified to the income statement in future periods. Changes in own credit presented in prior periods have not been restated and remain within *Net trading income*.

Balance sheet classification of newly purchased high-quality liquid debt securities

Starting 2016, UBS AG generally classifies newly purchased debt securities held as high-quality liquid assets (HQLA), and managed by Corporate Center – Group Asset and Liability Management (Group ALM), as either financial assets designated at fair value through profit or loss or financial assets held to maturity. Debt securities acquired prior to 2016 and held for liquidity purposes remain classified as available for sale financial assets.

Most of the HQLA debt securities purchased since the beginning of 2016 are classified as financial assets designated at fair value through profit or loss and are intended to reduce accounting mismatches by ensuring that changes in the fair value of the securities are recognized in the income statement in line with the associated interest rate derivatives used for risk management purposes. A portion of HQLA debt securities are classified as financial assets held to maturity.

Note 1 Summary of significant accounting policies (continued)

Interest rate swaps converted to a settlement model

In 2016, UBS AG elected to convert its interest rate swaps (IRS) transacted with the London Clearing House and Japan Securities Clearing Corporation from the previous collateral model to a settlement model. The IRS are now legally settled on a daily basis, resulting in derecognition of the associated assets and liabilities. Previously, UBS AG applied IAS 32 netting principles to offset the fair value of IRS with the associated variation margin. Gross cash collateral receivables and payables on derivative instruments and corresponding netting presented in Note 24 decreased by CHF 64 billion as of 31 December 2016, with no change to net cash collateral receivables and payables on derivative instruments recognized on the balance sheet. Consequently, the move to a settlement model resulted in a significant decrease in the fair value of interest rate swaps with the London Clearing House designated as hedging instruments.

→ Refer to Notes 12 and 24 for more information

Derecognition of exchange-traded derivative client cash balances from UBS AG's balance sheet

In accordance with UBS AG's accounting policy, client cash balances associated with derivatives clearing and execution services are not recognized on the balance sheet if, through contractual agreement, regulation or practice, UBS AG neither obtains benefits from nor controls the client cash balances. These conditions are considered to have been met when (i) UBS AG is not permitted to reinvest client cash balances, (ii) interest paid by central counterparties (CCPs), brokers or deposit banks on cash deposits forms part of the client cash balances with deductions being made solely as compensation for clearing and execution services provided, (iii) UBS AG does not guarantee and is not liable to clients for the performance of the CCP, broker or deposit bank and (iv) the client cash balances are legally isolated from UBS AG's estate.

During 2016, UBS AG formally and legally waived certain rights available to it under the rules of the US Commodity Futures Trading Commission that had previously enabled it to invest certain client cash balances in other assets, making them a source of benefit to UBS AG. As a result, UBS AG derecognized related client cash balances. Consequently, *Cash collateral receivables on derivative instruments* decreased by CHF 2.5 billion, *Due from banks* decreased by CHF 0.2 billion and *Cash collateral payables on derivative instruments* decreased by CHF 2.7 billion as of 31 December 2016.

Transfer of the Risk Exposure Management function from Corporate Center – Non-core and Legacy Portfolio to Corporate Center – Group ALM

Consistent with changes in the manner in which operating segment performance is assessed, UBS AG transferred in 2016 the Risk Exposure Management (REM) function from Corporate Center – Non-core and Legacy Portfolio to Corporate Center – Group ALM to further harmonize REM risk management responsibility with the reporting structure and align it more

closely with other activities performed by Corporate Center – Group ALM.

REM primarily performs risk management over credit, debit and funding valuation adjustments for UBS AG's over-the-counter derivatives portfolio. Prior-period segment profit and loss information was restated to reflect this transfer, which had no impact at a UBS AG level. In Note 2, gross revenues from REM activities are now presented in Corporate Center – Group ALM within *Net interest income* and *Non-interest income*. Revenue allocations from REM to business divisions and other Corporate Center units are presented within Allocations from Corporate Center – Group ALM to business divisions and other Corporate Center units. There was no effect on operating profit before tax for any segment for any period from this restatement. Prior-period information for balance sheet assets has not been restated, as the effect would not have been material.

Changes to statement of changes in equity

In 2016, UBS AG refined the presentation of effects from share-based compensation on share premium and treasury shares in the statement of changes in equity.

The new disclosure line *Delivery of treasury shares under share-based compensation plans*, reflecting the average cost of treasury shares, provides the effect on share premium and treasury shares resulting from the delivery of treasury shares to employees. Also, the effects from *Share-based compensation expensed in the income statement* and *Other disposal of treasury shares* are now presented separately. The former disclosure lines *Disposal of treasury shares*, *Treasury share gains / (losses)* and *Employee share and share option plans* have been removed.

These changes did not affect total equity or any components of equity. Prior-period information has been adjusted accordingly.

Changes to the estimated useful life of certain IT hardware and communication equipment and software

In 2016, UBS AG extended the estimated useful life for certain IT hardware and communication equipment and software from five to seven years, resulting in CHF 16 million and CHF 26 million lower depreciation expenses in 2016, respectively. These changes are expected to result in approximately CHF 120 million and CHF 60 million lower depreciation expenses in 2017 and 2018, respectively.

Annual Improvements to IFRSs 2012 – 2014 Cycle; Amendments to IFRS 11, Joint Arrangements; IAS 16, Property, Plant and Equipment; IAS 38, Intangible Assets; and IAS 1, Presentation of Financial Statements

In 2016, UBS AG adopted a number of interpretations and amendments to standards, that did not have a material impact on UBS AG's financial statements.

Note 1 Summary of significant accounting policies (continued)

c) International Financial Reporting Standards and Interpretations to be adopted in 2017 and later and other adjustments

IFRS 9, Financial Instruments

In July 2014, the IASB published the final version of IFRS 9, *Financial Instruments*. The standard reflects the classification and measurement, impairment and hedge accounting phases of the IASB's project to replace IAS 39, *Financial Instruments: Recognition and Measurement*.

IFRS 9 requires all financial assets, except equity instruments, to be classified at amortized cost, fair value through other comprehensive income (OCI) or fair value through profit or loss, on the basis of the entity's business model for managing the financial assets and its contractual cash flow characteristics. If a financial asset meets the criteria to be measured at amortized cost or at fair value through OCI measurement, it can be designated at fair value through profit or loss under the fair value option if doing so would significantly reduce or eliminate an accounting mismatch. Equity instruments that are not held for trading may be accounted for at fair value through OCI, with no subsequent reclassification of realized gains or losses to the income statement, while all other equity instruments will be accounted for at fair value through profit or loss. IFRS 9 classification and measurement requirements for liabilities are unchanged except that any gain or loss arising on a financial liability designated at fair value through profit or loss that is attributable to changes in the issuer's own credit risk (own credit) is presented in OCI and not recognized in the income statement.

IFRS 9 introduces a forward-looking expected credit loss (ECL) approach, replacing the incurred loss impairment approach for financial instruments in IAS 39, and the loss-provisioning approach for financial guarantees and loan commitments in IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*. Expected credit losses are required to be recognized in profit or loss for all financial assets measured at amortized cost, debt instruments measured at fair value through OCI, lease receivables, financial guarantees and loan commitments. A 12-month expected credit loss is generally recognized on inception, with a lifetime credit loss required if a significant increase in credit risk (SICR) arises. A lifetime loss allowance is always recognized for credit-impaired financial assets.

IFRS 9 also includes an optional revised hedge accounting model, which further aligns the accounting treatment with the risk management practices.

UBS AG early adopted the own credit presentation change in the first quarter of 2016 and will adopt the classification and measurement and impairment changes on 1 January 2018 in

line with the mandatory effective date. UBS AG is still assessing whether it will adopt the optional IFRS 9 hedge accounting requirements pending the IASB completing their project on macro hedge accounting strategies. In line with IFRS 9, UBS AG does not intend to restate prior periods and will recognize the difference between carrying amounts as of 31 December 2017 and those on adoption of IFRS 9 on 1 January 2018 in opening retained earnings.

UBS AG has assessed all material positions under the revised classification and measurement requirements and has identified certain debt instruments that will not qualify for amortized cost accounting but will be measured at fair value through profit or loss under IFRS 9. However, this is not expected to have significant effects on UBS AG's financial statements as the instruments are predominantly collateralized short-term lending arrangements with no material differences between their amortized cost value and fair value. In addition, UBS AG is monitoring the IASB's project to amend IFRS 9 to allow for basic lending arrangements with symmetrical break clauses to continue to qualify for amortized cost accounting. These clauses are common features in Swiss private mortgages as a consequence of Swiss law and in Swiss corporate lending due to market practice, and may result in compensation for early termination being paid by either the borrower or UBS AG. The IASB is expected to issue an exposure draft in April 2017, effective 1 January 2018 in line with IFRS 9's effective date. Based on the anticipated amendments, UBS AG expects that its private mortgages and corporate loans can continue to be measured at amortized cost.

Overall, the level of credit losses is expected to increase under IFRS 9 alongside additional income statement volatility due to the use of uncertain forward-looking assumptions and the application of the SICR approach. Initial ECL results calculated for key portfolios in a prototype environment with preliminary models and scenarios, indicate an increase in credit losses that should not have a significant impact on equity on adoption, due to the relatively short contractual maturities, the high quality of UBS AG's loan book and the current benign credit environment. Actual results on 1 January 2018 may differ significantly given the preliminary status of the models and data included in the prototype and the possibility of changes in the macroeconomic environment. UBS AG continues to monitor the potential effects of IFRS 9 on its regulatory capital requirements, but does not expect any impact to be material.

→ Refer to Note 1b for more information on own credit

Note 1 Summary of significant accounting policies (continued)

IFRS 15, Revenue from Contracts with Customers

In May 2014, the IASB issued IFRS 15, *Revenue from Contracts with Customers* replacing IAS 18 *Revenue*. IFRS 15 establishes principles for revenue recognition that apply to all contracts with customers except those relating to financial instruments, leases and insurance contracts and requires an entity to recognize revenue as performance obligations are satisfied. In particular, the standard now specifies that variable consideration is only recognized to the extent that it is highly probable that a significant reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved. This may affect when certain performance-based and asset-based fees can be recognized.

It also provides guidance on when revenues and expenses should be presented on a gross or net basis and establishes a cohesive set of disclosure requirements for information on the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers.

UBS AG will adopt the standard as of its mandatory effective date on 1 January 2018 and will apply it on a modified retrospective basis, recognizing the cumulative effect of initially applying the standard as an adjustment to the opening balance of retained earnings. UBS AG continues to assess the impact of the new standard on its financial statements, but currently does not expect any impact to be material.

IFRS 16, Leases

In January 2016, the IASB issued IFRS 16, *Leases*, which replaces IAS 17, *Leases*, and will come into effect on 1 January 2019. The standard substantially changes how lessees must account for operating lease commitments, requiring an on-balance sheet liability with a corresponding right-of-use asset to be recognized on the balance sheet, compared with the current off-balance sheet treatment of such leases. Early adoption is permitted for companies that also apply IFRS 15, *Revenue from Contracts with Customers*. UBS AG expects to report an increase in assets and liabilities from adoption in line with its operating lease commitments as at 1 January 2019.

→ Refer to Note 31 for more information

Amendments to IAS 12, Income Taxes

In January 2016, the IASB issued narrow-scope amendments to IAS 12, *Income Taxes*, clarifying how to account for deferred tax assets related to debt instruments measured at fair value.

Entities are required to apply the amendments for annual periods beginning on or after 1 January 2017. UBS AG expects that the adoption of these amendments will not have a material impact on its financial statements.

Amendments to IAS 7, Statement of Cash Flows

In January 2016, the IASB issued amendments to IAS 7, *Statement of Cash Flows*, which, among other things, require companies to provide information about changes in their financial liabilities arising from financing activities, including changes from cash flows and non-cash changes, such as foreign exchange gains or losses. UBS AG will adopt the amendments in the first quarter of 2017.

Amendments to IFRS 2, Share-based Payment

In June 2016, the IASB issued amendments to IFRS 2, *Share-based Payment*, which are mandatorily effective as of 1 January 2018, with early adoption permitted. The amendments require that the approach used to account for vesting and non-vesting conditions when measuring cash-settled share-based payments is consistent with that used for equity-settled share-based payments. The amendments also clarify the classification of share-based payments settled net of withholding tax as well as the accounting consequences resulting from a modification of share-based payments from cash-settled to equity-settled. UBS AG expects that the adoption of these amendments will not have a material impact on its financial statements.

IFRIC 22, Foreign Currency Transactions and Advance Consideration

In December 2016, the IFRS Interpretations Committee of the IASB issued IFRIC Interpretation 22, *Foreign Currency Transactions and Advance Consideration*, which clarifies that the date of the transaction for the purpose of determining the exchange rate to apply on initial recognition of the related asset, expense or income, is the date on which the entity initially recognizes the non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration. Entities are required to apply IFRIC 22 for annual periods beginning on or after 1 January 2018. UBS AG expects that the adoption of this IFRS Interpretation will not have a material impact on its financial statements.

Note 2a Segment reporting

The operational structure of UBS AG is comprised of Corporate Center and five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank.

Wealth Management

Wealth Management provides comprehensive advice and tailored financial services to wealthy private clients around the world, except those served by Wealth Management Americas. Its clients benefit from the full spectrum of resources that UBS AG as a global firm can offer, including banking and lending solutions, wealth planning, investment management solutions and corporate finance advice. Wealth Management's guided architecture model gives clients access to a wide range of products from the world's leading third-party institutions that complement its own products.

Wealth Management Americas

Wealth Management Americas provides advice-based solutions through financial advisors who deliver a fully integrated set of products and services specifically designed to address the needs of their clients. Its business is primarily domestic US but includes Canada and international business booked in the US.

Personal & Corporate Banking

Personal & Corporate Banking provides comprehensive financial products and services to private, corporate and institutional clients in Switzerland and is among the leading players in the private and corporate loan market in Switzerland, with a well-collateralized and conservatively managed lending portfolio.

Its business is a central element of UBS AG's universal bank delivery model in Switzerland. Personal & Corporate Banking works with the wealth management, investment bank and asset management businesses to ensure that clients receive the best products and solutions for their specific financial needs. Personal & Corporate Banking is also an important source of growth for other business divisions in Switzerland through client referrals. In addition, Personal & Corporate Banking manages a substantial part of UBS AG's Swiss infrastructure and banking products platform, both of which are leveraged across UBS AG.

Asset Management

Asset Management provides investment management products and services, platform solutions and advisory support to institutions, wholesale intermediaries and wealth management clients around the world, with an onshore presence in 22 countries. Asset management is a leading fund house in Europe, the largest mutual fund manager in Switzerland and one of the largest fund of hedge funds and real estate investment managers in the world. Its global investment capabilities include all major traditional and alternative asset classes.

Investment Bank

The Investment Bank is present in over 35 countries, with principal offices in all major financial centers, providing investment advice, financial solutions and capital markets access. It serves corporate, institutional and wealth management clients across the globe and forms a synergetic partnership with UBS AG's wealth management, personal and corporate banking and asset management businesses.

The business division is organized into Corporate Client Solutions and Investor Client Services and also includes UBS AG Securities Research.

Corporate Center

Corporate Center is comprised of Services, Group Asset and Liability Management (Group ALM) and Non-core and Legacy Portfolio.

Services consists of the Group Chief Operating Officer area (Group Corporate Services, Group Operations, Group Sourcing, Group Technology), Group Finance, Group Legal, Group Human Resources, Group Risk Control, Group Communications and Branding, Group Regulatory and Governance, and UBS and Society.

Group ALM manages the structural risks of UBS AG's balance sheet, including interest rate risk in the banking book, currency risk and collateral risk, as well as the risks associated with UBS AG's liquidity and funding portfolios. Group ALM also seeks to optimize UBS AG's financial performance by better matching assets and liabilities within the context of UBS AG's liquidity, funding and capital targets. Group ALM serves all business divisions and other Corporate Center units through three main risk management areas, and its risk management is fully integrated into UBS AG's risk governance framework.

Non-core and Legacy Portfolio is comprised of the positions from businesses that were part of the Investment Bank prior to its restructuring and is overseen by a committee chaired by the Chief Risk Officer.

Note 2a Segment reporting (continued)

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS AG
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
For the year ended 31 December 2016									
Net interest income	1,932	1,347	1,892	(33)	1,006	(322)	559	3	6,383
Non-interest income	4,975	6,320	1,768	1,957	6,951	250	(229)	84	22,075
Allocations from CC – Group ALM to business divisions and other CC units	389	118	332	7	(260)	36	(512)	(110)	0
Income ¹	7,296	7,785	3,990	1,931	7,697	(36)	(183)	(23)	28,458
Credit loss (expense) / recovery	(5)	(3)	(6)	0	(11)	0	0	(13)	(37)
Total operating income	7,291	7,782	3,984	1,931	7,686	(36)	(183)	(36)	28,421
Personnel expenses	2,348	4,819	843	727	3,081	3,674	31	66	15,591
General and administrative expenses	653	597	286	242	852	4,312	17	731	7,690
Services (to) / from Corporate Center and other business divisions	2,348	1,235	1,079	505	2,757	(8,156)	(49)	280	0
of which: services from CC – Services	2,256	1,221	1,186	530	2,667	(8,196)	110	225	0
Depreciation and impairment of property, equipment and software	2	2	15	1	21	938	0	0	980
Amortization and impairment of intangible assets ²	4	50	0	4	12	21	0	0	91
Total operating expenses ³	5,355	6,702	2,224	1,480	6,724	790	(1)	1,077	24,352
Operating profit / (loss) before tax	1,936	1,081	1,761	451	962	(826)	(182)	(1,113)	4,069
Tax expense / (benefit)									781
Net profit / (loss)									3,288
Additional Information									
Total assets	115,539	65,882	139,945	12,026	242,388	23,813	267,275	68,485	935,353
Additions to non-current assets	26	4	23	1	3	1,741	0	0	1,798

¹ Impairments of financial assets available for sale for the year ended 31 December 2016 totaled CHF 5 million, of which CHF 3 million was recorded in Asset Management. ² Refer to Note 15 for more information. ³ Refer to Note 30 for information on restructuring expenses.

Note 2a Segment reporting (continued)¹

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS AG
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
For the year ended 31 December 2015									
Net interest income	1,825	1,067	1,890	(34)	1,573	(337)	724	21	6,729
Non-interest income	5,859	6,213	1,603	2,077	7,525	434	383	(101)	23,993
Allocations from CC – Group ALM to business divisions and other CC units	471	104	421	15	(211)	145	(832)	(114)	0
Income ²	8,155	7,384	3,913	2,057	8,889	243	275	(195)	30,721
Credit loss (expense) / recovery	0	(4)	(37)	0	(68)	0	0	(8)	(117)
Total operating income	8,155	7,381	3,876	2,057	8,821	243	275	(203)	30,605
Personnel expenses	2,532	4,579	873	729	3,220	3,875	30	116	15,954
General and administrative expenses	650	848	264	233	882	4,517	21	804	8,219
Services (to) / from Corporate Center and other business divisions	2,289	1,209	1,077	502	2,816	(8,214)	(57)	379	0
of which: services from CC – Services	2,209	1,193	1,180	523	2,730	(8,243)	96	313	0
Depreciation and impairment of property, equipment and software	5	3	17	2	26	866	0	0	918
Amortization and impairment of intangible assets ³	3	51	0	8	24	21	0	0	107
Total operating expenses ⁴	5,478	6,689	2,231	1,475	6,969	1,065	(6)	1,298	25,198
Operating profit / (loss) before tax	2,676	692	1,646	583	1,852	(822)	281	(1,501)	5,407
Tax expense / (benefit)									(908)
Net profit / (loss)									6,314
Additional Information									
Total assets	119,850	60,993	141,174	12,874	253,571	22,866	237,560	94,369	943,256
Additions to non-current assets	6	4	14	1	18	1,844	0	1	1,888

¹ Figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. Refer to Note 1b for more information. ² Impairments of financial assets available for sale for the year ended 31 December 2015 totaled CHF 1 million, all in Wealth Management. ³ Refer to Note 15 for more information. ⁴ Refer to Note 30 for information on restructuring expenses.

Note 2a Segment reporting (continued)¹

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS AG
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
For the year ended 31 December 2014									
Net interest income	1,693	864	1,801	(39)	1,583	(338)	731	258	6,555
Non-interest income	5,726	6,004	1,575	1,914	6,823	157	101	(751)	21,549
Allocations from CC – Group ALM to business divisions and other CC units	481	116	461	27	(100)	217	(831)	(371)	0
Income ²	7,902	6,984	3,836	1,902	8,306	35	2	(863)	28,104
Credit loss (expense) / recovery	(1)	15	(95)	0	2	0	0	2	(78)
Total operating income	7,901	6,998	3,741	1,902	8,308	35	2	(862)	28,026
Personnel expenses	2,467	4,363	850	643	2,964	3,843	26	124	15,280
General and administrative expenses	918	550	293	305	2,671	4,113	22	505	9,377
Services (to) / from Corporate Center and other business divisions	2,180	1,137	1,074	478	2,711	(8,046)	(48)	514	0
of which: services from CC – Services	2,122	1,121	1,196	495	2,658	(8,084)	88	404	0
Depreciation and impairment of property, equipment and software	4	0	17	2	32	762	0	0	817
Amortization and impairment of intangible assets ³	5	48	0	9	15	6	0	0	83
Total operating expenses ⁴	5,574	6,099	2,235	1,435	8,392	679	0	1,144	25,557
Operating profit / (loss) before tax	2,326	900	1,506	467	(84)	(643)	2	(2,005)	2,469
Tax expense / (benefit)									(1,180)
Net profit / (loss)									3,649
Additional Information									
Total assets	127,588	56,026	143,711	15,207	292,347	19,720	237,901	169,826	1,062,327
Additions to non-current assets	7	6	9	2	7	1,677	0	0	1,708

¹ Figures in this table may differ from those originally published in quarterly and annual reports due to adjustments following organizational changes, restatements due to the retrospective adoption of new accounting standards or changes in accounting policies, and events after the reporting period. Refer to Note 1b for more information. ² Impairments of financial assets available for sale for the year ended 31 December 2014 totaled CHF 76 million, of which CHF 49 million was recorded in the Investment Bank and CHF 23 million in Corporate Center – Non-core and Legacy Portfolio. ³ Refer to Note 15 for more information. ⁴ Refer to Note 30 for information on restructuring expenses.

Note 2b Segment reporting by geographic location

The operating regions shown in the table below correspond to the regional management structure of UBS AG. The allocation of operating income to these regions reflects, and is consistent with, the basis on which the business is managed and its performance is evaluated. These allocations involve assumptions and judgments that management considers to be reasonable, and may be refined to reflect changes in estimates or management structure. The main principles of the allocation methodology are that client revenues are attributed to the

domicile of the client and trading and portfolio management revenues are attributed to the country where the risk is managed. This revenue attribution is consistent with the mandate of the regional Presidents. Certain revenues, such as those related to Corporate Center – Non-core and Legacy Portfolio, are managed at a global level. These revenues are included in the *Global* line.

The geographic analysis of non-current assets is based on the location of the entity in which the assets are recorded.

For the year ended 31 December 2016

	Total operating income		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	11.7	41	7.4	47
<i>of which: US</i>	11.1	39	7.0	44
Asia Pacific	4.1	14	0.6	4
Europe, Middle East and Africa	6.1	21	1.8	11
Switzerland	6.8	24	6.0	38
Global	(0.3)	(1)	0.0	0
Total	28.4	100	15.8	100

For the year ended 31 December 2015

	Total operating income		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	11.3	37	7.1	47
<i>of which: US</i>	10.7	35	6.7	44
Asia Pacific	5.0	16	0.5	3
Europe, Middle East and Africa	6.8	22	1.7	11
Switzerland	7.1	23	5.9	39
Global	0.5	2	0.0	0
Total	30.6	100	15.2	100

For the year ended 31 December 2014

	Total operating income		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	10.7	38	7.0	48
<i>of which: US</i>	10.1	36	6.6	45
Asia Pacific	4.6	16	0.4	3
Europe, Middle East and Africa	6.8	24	1.5	10
Switzerland	6.8	24	5.6	38
Global	(0.9)	(3)	0.0	0
Total	28.0	100	14.6	100

Income statement notes

Note 3 Net interest and trading income

CHF million	For the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Net interest and trading income				
Net interest income	6,383	6,729	6,555	(5)
Net trading income	4,943	5,696	3,841	(13)
Total net interest and trading income	11,326	12,425	10,396	(9)
Wealth Management	2,998	3,034	2,845	(1)
Wealth Management Americas	1,839	1,537	1,352	20
Personal & Corporate Banking	2,532	2,613	2,536	(3)
Asset Management	(29)	(5)	0	480
Investment Bank	4,275	5,186	4,517	(18)
of which: Corporate Client Solutions	822	1,001	1,030	(18)
of which: Investor Client Services	3,453	4,185	3,487	(17)
Corporate Center	(289)	61	(855)	
of which: Services	(92)	(1)	33	
of which: Group ALM	(134)	375	16	
of which: own credit on financial liabilities designated at fair value ¹		553	292	(100)
of which: Non-core and Legacy Portfolio	(62)	(313)	(904)	(80)
Total net interest and trading income	11,326	12,425	10,396	(9)
Net interest income				
Interest income				
Interest income from loans and deposits ² ³	9,566	8,626	8,722	11
Interest income from securities financing transactions ⁴	1,136	896	752	27
Interest income from trading portfolio ⁵	2,465	3,071	3,196	(20)
Interest income from financial assets and liabilities designated at fair value	361	194	208	86
Interest income from financial assets available for sale and held to maturity ⁶	253	391	315	(35)
Total	13,782	13,178	13,194	5
Interest expense				
Interest expense on loans and deposits ⁶	1,664	774	708	115
Interest expense on securities financing transactions ⁷	1,233	976	827	26
Interest expense on trading portfolio ⁸	1,614	1,670	1,804	(3)
Interest expense on financial assets and liabilities designated at fair value	841	730	919	15
Interest expense on debt issued	2,046	2,299	2,382	(11)
Total	7,399	6,449	6,639	15
Net interest income	6,383	6,729	6,555	(5)
Net trading income				
Investment Bank Corporate Client Solutions	188	321	276	(41)
Investment Bank Investor Client Services	3,330	3,494	2,760	(5)
Other business divisions and Corporate Center	1,425	1,882	806	(24)
Net trading income	4,943	5,696	3,841	(13)
of which: net gains / (losses) from financial assets designated at fair value	(186)	(119)	(81)	56
of which: net gains / (losses) from financial liabilities designated at fair value ⁹	(1,362)	3,701	(2,380)	

1 Refer to Note 1b for more information. 2 Includes interest income on impaired loans and advances of CHF 21 million for 2016, CHF 16 million for 2015 and CHF 15 million for 2014. 3 Consists of interest income from balances with central banks, amounts due from banks and loans, and negative interest on amounts due to banks and customers. 4 Includes interest income on securities borrowed and reverse repurchase agreements and negative interest, including fees, on securities lent and repurchase agreements. 5 Includes dividend income. 6 Consists of interest expense on amounts due to banks and customers, and negative interest on balances with central banks, amounts due from banks and loans. 7 Includes interest expense on securities lent and repurchase agreements and negative interest, including fees, on securities borrowed and reverse repurchase agreements. 8 Includes expense related to dividend payment obligations on trading liabilities. 9 Excludes fair value changes of hedges related to financial liabilities designated at fair value and foreign currency translation effects arising from translating foreign currency transactions into the respective functional currency, both of which are reported within net trading income.

Note 4 Net fee and commission income

	For the year ended			% change from
CHF million	31.12.16	31.12.15	31.12.14	31.12.15
Underwriting fees	994	1,290	1,470	(23)
of which: equity underwriting fees	516	836	947	(38)
of which: debt underwriting fees	478	455	522	5
M&A and corporate finance fees	733	737	731	(1)
Brokerage fees	3,544	3,930	3,918	(10)
Investment fund fees	3,155	3,567	3,717	(12)
Portfolio management and advisory fees	8,035	7,858	7,343	2
Other	1,747	1,678	1,760	4
Total fee and commission income	18,207	19,060	18,940	(4)
Brokerage fees paid	757	869	818	(13)
Other	1,003	1,007	1,045	0
Total fee and commission expense	1,760	1,876	1,863	(6)
Net fee and commission income	16,447	17,184	17,076	(4)
of which: net brokerage fees	2,786	3,060	3,100	(9)

Note 5 Other income

	For the year ended			% change from
CHF million	31.12.16	31.12.15	31.12.14	31.12.15
Associates and subsidiaries				
Net gains / (losses) from disposals of subsidiaries ¹	(150) ²	264 ²	56	
Net gains / (losses) from disposals of investments in associates	0	0	69	
Share of net profits of associates	106	169	94	(37)
Total	(44)	433	219	
Financial assets available for sale				
Net gains / (losses) from disposals	346	252	219	37
Impairment charges	(5)	(1)	(76)	400
Total	342	251	143	36
Net income from properties (excluding net gains / (losses) from disposals) ³	25	28	30	(11)
Net gains / (losses) from disposals of properties held for sale	125	378	44	(67)
Net gains / (losses) from disposals of loans and receivables	(3)	26	39	
Other	240	(5) ⁴	157	
Total other income	685	1,112	632	(38)

¹ Includes foreign exchange gains / (losses) reclassified from other comprehensive income related to disposed foreign subsidiaries and branches. ² 2016 includes a loss on sale of a subsidiary of CHF 23 million in Wealth Management. 2015 includes a net gain on sale of subsidiaries of CHF 113 million in Wealth Management and a net gain on sale of subsidiaries of CHF 56 million in Asset Management. Refer to Note 30 for more information. ³ Includes net rent received from third parties and net operating expenses. ⁴ Includes a net gain on sale of businesses of CHF 56 million in Wealth Management. Refer to Note 30 for more information.

Note 6 Personnel expenses

CHF million	For the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Salaries ¹	6,136	6,260	6,269	(2)
Variable compensation – performance awards ²	2,963	3,209	2,820	(8)
<i>of which: guarantees for new hires</i>	30	38	48	(21)
Variable compensation – other ²	418	346	466	21
<i>of which: replacement payments³</i>	86	76	81	13
<i>of which: forfeiture credits</i>	(73)	(86)	(70)	(15)
<i>of which: severance payments⁴</i>	217	157	162	38
<i>of which: retention plan and other payments</i>	188	198	292	(5)
Wealth Management Americas: Financial advisor compensation ² , ⁵	3,697	3,552	3,385	4
Contractors	420	365	234	15
Social security	734	817	791	(10)
Pension and other post-employment benefit plans ⁶	669	807	711	(17)
Other personnel expenses	554	597	605	(7)
Total personnel expenses⁷	15,591	15,954	15,280	(2)

¹ Includes role-based allowances. ² Refer to Note 27 for more information. ³ Replacement payments are payments made to compensate employees for deferred awards forfeited as a result of joining UBS AG. ⁴ Includes legally obligated and standard severance payments. ⁵ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. ⁶ Refer to Note 26 for more information. ⁷ Includes net restructuring expenses of CHF 731 million, CHF 458 million and CHF 327 million for the years ended 31 December 2016, 31 December 2015 and 31 December 2014, respectively. Refer to Note 30 for more information.

Note 7 General and administrative expenses

CHF million	For the year ended			% change from
	31.12.16	31.12.15	31.12.14	31.12.15
Occupancy	921	928	1,005	(1)
Rent and maintenance of IT and other equipment	511	510	479	0
Communication and market data services	624	610	608	2
Administration	1,069	855	608	25
Marketing and public relations	465	484	468	(4)
Travel and entertainment	411	456	458	(10)
Professional fees	1,225	1,351	1,306	(9)
Outsourcing of IT and other services	1,592	1,742	1,603	(9)
Provisions for litigation, regulatory and similar matters ¹	795	1,087	2,594	(27)
Other	78	195	248	(60)
Total general and administrative expenses²	7,690	8,219	9,377	(6)

¹ Reflects the net increase in provisions for litigation, regulatory and similar matters recognized in the income statement. Refer to Note 20 for more information. Also includes recoveries from third parties of CHF 13 million, CHF 10 million and CHF 10 million for the years ended 31 December 2016, 31 December 2015 and 31 December 2014, respectively. ² Includes net restructuring expenses of CHF 700 million, CHF 760 million and CHF 319 million for the years ended 31 December 2016, 31 December 2015 and 31 December 2014, respectively. Refer to Note 30 for more information.

Note 8 Income taxes

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Tax expense / (benefit)			
Swiss			
Current	429	230	46
Deferred	635	329	1,348
Non-Swiss			
Current	350	476	409
Deferred	(633)	(1,943)	(2,983)
Total income tax expense / (benefit) recognized in the income statement	781	(908)	(1,180)

Income tax recognized in the income statement

The Swiss current tax expense of CHF 429 million related to taxable profits, mainly earned by Swiss subsidiaries, against which no losses were available to offset. The Swiss deferred tax expense of CHF 635 million reflected a decrease of deferred tax assets previously recognized in relation to tax losses carried forward and temporary differences.

The non-Swiss current tax expense of CHF 350 million related to taxable profits earned by non-Swiss subsidiaries and branches, against which no losses were available to offset. The non-Swiss net deferred tax benefit of CHF 633 million was primarily due to

an increase in US deferred tax assets, reflecting updated profit forecasts.

UBS AG considers the performance of its businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of its deferred tax assets, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing deferred tax assets. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Operating profit / (loss) before tax	4,069	5,407	2,469
of which: Swiss	2,607	3,665	1,181
of which: Non-Swiss	1,462	1,742	1,288
Income taxes at Swiss tax rate of 21%	854	1,135	519
Increase / (decrease) resulting from:			
Non-Swiss tax rates differing from Swiss tax rate	71	(69)	68
Tax effects of losses not recognized	185	107	325
Previously unrecognized tax losses now utilized	(39)	(107)	(285)
Non-taxable and lower taxed income	(343)	(273)	(384)
Non-deductible expenses and additional taxable income	914	519	1,069
Adjustments related to prior years - current tax	22	29	5
Adjustments related to prior years - deferred tax	2	(48)	(9)
Change in deferred tax valuation allowances	(978)	(2,419)	(2,373)
Adjustments to deferred tax balances arising from changes in tax rates	19	191	(183)
Other items	72	26	69
Income tax expense / (benefit)	781	(908)	(1,180)

Note 8 Income taxes (continued)

The components of operating profit before tax, and the differences between income tax expense reflected in the financial statements and the amounts calculated at the Swiss tax rate, are provided in the table on the previous page and explained below.

Non-Swiss tax rates differing from Swiss tax rate

To the extent that UBS AG profits or losses arise outside Switzerland, the applicable local tax rate may differ from the Swiss tax rate. This item reflects, for such profits or losses, an adjustment from the tax expense / benefit that would arise at the Swiss tax rate and the tax expense / benefit that would arise at the applicable local tax rate. If an entity generates a profit, a tax expense arises where the local tax rate is in excess of the Swiss tax rate and a tax benefit arises where the local tax rate is below the Swiss tax rate. Conversely, if an entity incurs a loss, a tax benefit arises where the local tax rate is in excess of the Swiss tax rate and a tax expense arises where the local tax rate is less than the Swiss tax rate.

Tax effects of losses not recognized

This item relates to tax losses of entities arising in the year, which are not recognized as deferred tax assets. Consequently, no tax benefit arises in relation to those losses. Therefore, the tax benefit calculated by applying the local tax rate to those losses as described above is reversed.

Previously unrecognized tax losses now utilized

This item relates to taxable profits of the year, which are offset by tax losses of previous years, for which no deferred tax assets were previously recorded. Consequently, no current tax or

deferred tax expense arises in relation to those taxable profits. Therefore, the tax expense calculated by applying the local rate on those profits is reversed.

Non-taxable and lower taxed income

This item relates to profits for the year, which are either permanently not taxable or are taxable, but at a lower rate of tax than the local tax rate. It also includes any permanent deductions made for tax purposes, which are not reflected in the accounts, thereby effectively ensuring that profits covered by the deduction are not taxable.

Non-deductible expenses and additional taxable income

This item mainly relates to income for the year, which is imputed for tax purposes for an entity, but is not included in its operating profit. In addition, it includes expenses for the year that are permanently non-deductible.

Adjustments related to prior years – current tax

This item relates to adjustments to current tax expense for prior years, for example, if the tax payable for a year agreed with the tax authorities is expected to differ from the amount previously reflected in the financial statements.

Adjustments related to prior years – deferred tax

This item relates to adjustments to deferred tax positions recognized in prior years, for example, if a tax loss for a year is fully recognized and the amount of the tax loss agreed with the tax authorities is expected to differ from the amount previously recognized as deferred tax assets in the accounts.

Note 8 Income taxes (continued)

Change in deferred tax valuation allowances

This item includes revaluations of deferred tax assets previously recognized resulting from reassessments of expected future taxable profits. It also includes changes in temporary differences in the year, for which deferred tax is not recognized. The amount in the year mainly relates to the upward revaluation of deferred tax assets.

Adjustments to deferred tax balances arising from changes in tax rates

This item relates to remeasurements of deferred tax assets and liabilities recognized due to changes in tax rates. These have the effect of changing the future tax saving that is expected from tax losses or deductible tax differences and therefore the amount of deferred tax assets recognized or, alternatively, changing the tax cost of additional taxable income from taxable temporary differences and therefore the deferred tax liability.

Other items

Other items include other differences between profits or losses at the local tax rate and the actual local tax expense or benefit, including increases in provisions for uncertain positions in relation to the current year, interest accruals for such provisions in relation to prior years and other items.

Income tax recognized directly in equity

Certain tax expenses and benefits were recognized directly in equity. These included a tax benefit of CHF 170 million related to cash flow hedges (2015: benefit of CHF 131 million), a tax benefit of CHF 28 million related to financial assets classified as available for sale (2015: benefit of CHF 8 million), a tax expense of CHF 84 million related to foreign currency translation gains and losses (2015: expense of CHF 1 million), a tax benefit of CHF 52 million related to defined benefit plans (2015: expense of CHF 19 million) and a tax benefit of CHF 5 million (2015: CHF 0 million) related to own credit. In addition, they included a tax benefit of CHF 25 million recognized in share premium (2015: benefit of CHF 9 million). Furthermore, there were net foreign currency translation movements related to the effects of exchange rate changes on tax assets and liabilities denominated in currencies other than Swiss francs.

Deferred tax assets and liabilities

UBS AG has deferred tax assets related to tax loss carry-forwards and other items as shown in the table below. As of 31 December 2016, deferred tax assets of CHF 1,689 million (31 December 2015: CHF 2,094 million) were recognized by entities that incurred losses in either the current or preceding year based on projections of future taxable profits. The valuation allowance reflects deferred tax assets that were not recognized because it was not considered probable that future taxable profits will be available to utilize the related tax loss carry-forwards and deductible temporary differences.

CHF million	31.12.16			31.12.15		
	Gross	Valuation allowance	Recognized	Gross	Valuation allowance	Recognized
Deferred tax assets¹						
Tax loss carry-forwards	24,627	(16,430)	8,197	25,471	(18,378)	7,093
Temporary differences	6,335	(1,388)	4,947	7,023	(1,284)	5,739
<i>of which: related to compensation and benefits</i>	1,419	(208)	1,211	1,576	(267)	1,310
<i>of which: related to trading assets</i>	935	(118)	817	1,116	(77)	1,038
<i>of which: related to investments in subsidiaries and goodwill</i>	2,059	0	2,059	2,310	0	2,310
<i>of which: other</i>	1,922	(1,062)	859	2,021	(940)	1,081
Total deferred tax assets	30,962	(17,818)	13,144	32,494	(19,661)	12,833
Deferred tax liabilities						
Goodwill and intangible assets			24			28
Financial assets			2			1
Investments in associates and other			18			27
Total deferred tax liabilities			44			56

¹ Less deferred tax liabilities as applicable.

Note 8 Income taxes (continued)

As of 31 December 2016, tax loss carry-forwards totaling CHF 49,477 million (31 December 2015: CHF 56,973 million), which are not recognized as deferred tax assets, were available to be offset against future taxable profits. These tax losses expire as outlined in the table below.

Unrecognized tax loss carry-forwards

CHF million	31.12.16	31.12.15
Within 1 year	0	3,727
From 2 to 5 years	66	33
From 6 to 10 years	909	753
From 11 to 20 years	32,603	34,833
No expiry	15,899	17,627
Total	49,477	56,973

In general, Swiss tax losses can be carried forward for seven years, US federal tax losses for 20 years and UK and Jersey tax losses for an unlimited period.

UBS AG recognizes deferred tax liabilities on undistributed earnings of subsidiaries, except to the extent that those earnings are indefinitely invested. As of 31 December 2016, no such earnings were considered indefinitely invested.

The financial statements have been prepared on the basis that UBS Limited is able to offset part of its taxable profits against losses transferred from UBS AG. During 2016, the UK tax authorities indicated that they do not agree with this tax return filing position. If the authorities ultimately prevail on this point, UBS Limited would incur a further reduction in recognized deferred tax assets of approximately CHF 60 million, as well as additional current tax expenses for periods from 2014 onward of approximately CHF 70 million.

Note 9 Earnings per share (EPS) and shares outstanding

During 2015, UBS AG shares were delisted from the SIX and the NYSE. As of 31 December 2016, 100% of UBS AG's issued shares were held by UBS Group AG and therefore were not publicly traded. Accordingly, earnings per share information is not provided for UBS AG.

Balance sheet notes: assets

Note 10 Due from banks and loans (held at amortized cost)

CHF million	31.12.16	31.12.15
By type of exposure		
Due from banks, gross	13,128	11,869
Allowance for credit losses	(3)	(3)
Due from banks, net	13,125	11,866
Loans, gross		
Residential mortgages	142,197	141,608
Commercial mortgages	19,765	21,509
Lombard loans	104,999	107,084
Other loans ¹	37,160	39,321
Finance lease receivables ²	986	1,083
Securities	2,494	2,807
Subtotal	307,601	313,413
Allowance for credit losses	(596)	(689)
Loans, net	307,004	312,723
Total due from banks and loans, net³	320,129	324,590

¹ Includes corporate loans. ² Refer to Note 31 for more information. ³ Refer to Note 25b for more information on collateral and credit enhancements.

Note 11 Allowances and provisions for credit losses

CHF million

By movement	Specific allowances	Collective allowances	Total allowances	Provisions ¹	Total 31.12.16	Total 31.12.15
Balance at the beginning of the year	686	6	692	35	727	735
Write-offs / usage of provisions	(143)	(2)	(145)	0	(145)	(164)
Recoveries	21	0	22	0	22	48
Increase / (decrease) recognized in the income statement	21	6	28	9	37	117
Reclassifications	(10)	0	(10)	10	0	0
Foreign currency translation	(1)	0	0	0	0	(11)
Other	12	0	12	0	12	2
Balance at the end of the year	587	12	599	54	653	727

¹ Represents provisions for loan commitments and guarantees. Refer to Note 20 for more information. Refer to the "Treasury management" section of this report for the maximum irrevocable amount of loan commitments and guarantees.

By balance sheet line	Specific allowances	Collective allowances	Total allowances	Provisions	Total 31.12.16	Total 31.12.15
Due from banks	3	0	3		3	3
Loans	585	12	596		596	689
Provisions ¹				54	54	35
Balance at the end of the year	587	12	599	54	653	727

¹ Represents provisions for loan commitments and guarantees.

Note 12 Derivative instruments and hedge accounting

Derivatives: overview

A derivative is a financial instrument of which the value is derived from one or more variables (underlyings). Underlyings may be indices, foreign currency exchange or interest rates, or the value of shares, commodities, bonds or other financial instruments. A derivative commonly requires little or no initial net investment by either counterparty to the trade.

The majority of derivative contracts are negotiated with respect to notional amounts, tenor, price and settlement mechanisms, as is customary with other financial instruments.

Over-the-counter (OTC) derivative contracts are usually traded under a standardized International Swaps and Derivatives Association (ISDA) master agreement between UBS and its counterparties. Terms are negotiated directly with counterparties and the contracts will have industry-standard settlement mechanisms prescribed by ISDA. Recent rules, introduced by regulators in various jurisdictions, require or will soon require the payment and collection of initial and variation margin on certain OTC derivative contracts which may have a bearing on their price and other relevant terms.

The industry continues to promote the use of central counterparties (CCPs) to clear OTC trades. The trend toward CCP clearing and settlement will generally facilitate the reduction of systemic credit exposures.

Other derivative contracts are standardized in terms of their amounts and settlement dates, and are bought and sold on regulated exchanges. These are commonly referred to as exchange-traded derivatives (ETD) contracts. Exchanges offer the benefits of pricing transparency, standardized daily settlement of changes in value and consequently reduced credit risk.

For presentation purposes, UBS AG's derivative contracts are subject to IFRS netting provisions. Derivative instruments are measured at fair value and generally classified as *Positive replacement values* and *Negative replacement values* on the balance sheet. However, ETD that are economically settled on a daily basis and OTC derivatives that are either legally settled or in substance net settled on a daily basis are classified as *Cash collateral receivables on derivative instruments* or *Cash collateral payables on derivative instruments*. Changes in the replacement values of derivatives are recorded in *Net trading income* unless the derivatives are designated and effective as hedging instruments in certain types of hedge accounting relationships.

→ Refer to Note 1a item 3j for more information

→ Refer to Note 24 for more information on the values of positive and negative replacement values after consideration of netting potential allowed under enforceable netting arrangements

UBS AG uses various derivative instruments for both trading and hedging purposes. Derivative product types as well as valuation principles and techniques applied by UBS AG are described in Note 22. *Positive replacement values* represent the estimated amount UBS AG would receive if the derivative contract were sold on the balance sheet date. *Negative replacement values* indicate the estimated amount UBS AG would pay to transfer its obligations in respect of the underlying contract were it required or entitled to do so on the balance sheet date.

Derivatives embedded in other financial instruments are not included in the "Derivative instruments" table within this Note. Bifurcated embedded derivatives are presented on the same balance sheet line as the host contract. In cases where UBS applies the fair value option to hybrid instruments, bifurcation of an embedded derivative component is not required and as such this component is also not included in the "Derivative instruments" table.

→ Refer to Notes 18 and 22 for more information

Risks of derivative instruments

Derivative instruments are transacted in many trading portfolios, which generally include several types of instruments, not just derivatives. The market risk of derivatives is predominantly managed and controlled as an integral part of the market risk of these portfolios. UBS AG's approach to market risk is described in the audited sections of the "Risk management and control" section of this report.

Derivative instruments are also transacted with many different counterparties, most of whom are also counterparties for other types of business. The credit risk of derivatives is managed and controlled in the context of UBS AG's overall credit exposure to its counterparties. UBS AG's approach to credit risk is described in the audited portions of "Credit risk" in the "Risk management and control" section of this report. It should be noted that, although the positive replacement values shown on the balance sheet can be an important component of UBS AG's credit exposure, the positive replacement values related to a respective counterparty are rarely an adequate reflection of UBS AG's credit exposure in its derivatives business with that counterparty. This is generally the case because, on the one hand, replacement values can increase over time (potential future exposure), while on the other hand, exposure may be mitigated by entering into master netting agreements and bilateral collateral arrangements. Both the exposure measures used internally by UBS AG to control credit risk and the capital requirements imposed by regulators reflect these additional factors.

Note 12 Derivative instruments and hedge accounting (continued)

Derivative instruments¹

	31.12.16					31.12.15				
	PRV ²	Notional values related to PRV ³	NRV ⁴	Notional values related to NRV ³	Other notional values ³	PRV ²	Notional values related to PRV ³	NRV ⁴	Notional values related to NRV ³	Other notional values ³
<i>CHF billion</i>										
Interest rate contracts										
Over-the-counter (OTC) contracts										
Forward contracts ⁶	0.1	29.6	0.1	21.9	2,242.8	0.1	48.6	0.2	51.9	2,351.4
Swaps	45.2	599.3	38.3	552.6	7,064.2	57.0	840.1	48.2	782.0	5,904.7
Options	12.6	478.1	13.9	480.6		17.3	581.7	19.1	549.8	
Exchange-traded contracts										
Futures					326.4					346.0
Options	0.0	45.4	0.0	4.5	96.2	0.0	22.7	0.0	15.5	169.4
Agency transactions ⁷	0.2		0.2			0.1		0.1		
Total	58.0	1,152.4	52.5	1,059.6	9,729.6	74.5	1,493.1	67.6	1,399.3	8,771.4
Credit derivative contracts										
Over-the-counter (OTC) contracts										
Credit default swaps	3.7	116.9	3.9	135.2		6.1	152.7	6.0	165.7	
Total return swaps	0.2	3.3	0.9	4.3		0.6	5.0	0.6	4.1	
Options and warrants	0.0	2.9	0.0	0.1		0.0	4.2	0.0	0.1	
Total	3.9	123.1	4.8	139.6		6.7	161.9	6.7	169.8	
Foreign exchange contracts										
Over-the-counter (OTC) contracts										
Forward contracts	21.8	715.6	19.0	650.9		17.8	727.6	16.6	673.9	
Interest and currency swaps	43.2	1,220.8	42.0	1,115.0		38.3	1,429.9	37.6	1,330.1	
Options	11.1	530.3	11.0	513.7		9.5	496.8	9.3	478.0	
Exchange-traded contracts										
Futures					6.1					8.1
Options	0.0	2.9	0.1	6.0		0.0	3.4	0.0	4.6	
Agency transactions ⁷	0.0		0.0			0.0		0.0		
Total	76.1	2,469.6	72.1	2,285.6	6.1	65.7	2,657.7	63.5	2,486.6	8.1
Equity / index contracts										
Over-the-counter (OTC) contracts										
Forward contracts	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Swaps	3.6	76.5	4.8	69.0		2.9	64.1	4.3	87.0	
Options	3.7	49.6	5.8	92.8		4.8	59.1	6.7	92.6	
Exchange-traded contracts										
Futures					33.0					30.0
Options	3.8	142.5	4.6	155.8	21.6	4.3	107.2	5.2	126.0	13.4
Agency transactions ⁷	6.9		6.9			5.0		4.9		
Total	18.0	268.6	22.1	317.6	54.5	16.9	230.3	21.2	305.6	43.3

Table continues on the next page.

Note 12 Derivative instruments and hedge accounting (continued)

Derivative instruments¹ (continued)

Table continued from the previous page.

	31.12.16					31.12.15				
	PRV ²	Notional values related to PRV ³	NRV ⁴	Notional values related to NRV ³	Other notional values ⁵	PRV ²	Notional values related to PRV ³	NRV ⁴	Notional values related to NRV ³	Other notional values ⁵
<i>CHF billion</i>										
Commodity contracts										
Over-the-counter (OTC) contracts										
Forward contracts	0.3	4.8	0.1	2.7		0.3	2.8	0.3	2.3	
Swaps	0.4	10.9	0.5	13.4		0.7	9.9	0.5	9.4	
Options	0.5	14.1	0.2	9.9		0.9	11.8	0.6	7.5	
Exchange-traded contracts										
Futures					9.1					8.2
Forward contracts	0.1	5.9	0.0	4.6		0.0	4.4	0.2	3.7	
Options	0.0	3.2	0.1	5.3	0.0	0.0	1.0	0.1	1.9	0.1
Agency transactions ⁷	0.9		0.9			1.5		1.5		
Total	2.3	39.0	2.0	35.9	9.1	3.4	30.0	3.2	24.6	8.3
Unsettled purchases of non-derivative financial instruments⁸	0.1	18.4	0.1	9.7		0.1	9.6	0.2	16.7	
Unsettled sales of non-derivative financial instruments⁸	0.1	13.0	0.2	11.5		0.2	20.1	0.1	6.4	
Total derivative instruments, based on IFRS netting⁹	158.4	4,084.0	153.8	3,859.6	9,799.3	167.4	4,602.7	162.4	4,409.0	8,831.1

¹ Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. As of 31 December 2016, these derivatives amounted to a PRV of CHF 0.1 billion (related notional values of CHF 1.9 billion) and an NRV of CHF 0.0 billion (related notional values of CHF 3.1 billion). As of 31 December 2015, these derivatives amounted to a PRV of CHF 0.1 billion (related notional values of CHF 0.6 billion) and an NRV of CHF 0.2 billion (related notional values of CHF 3.4 billion). ² PRV: Positive replacement value. ³ In cases where replacement values are presented on a net basis on the balance sheet, the respective notional values of the netted replacement values are still presented on a gross basis. ⁴ NRV: Negative replacement value. ⁵ Other notional values relate to derivatives that are cleared through either a central clearing counterparty or an exchange. The fair value of these derivatives is presented on the balance sheet net of the corresponding cash margin under Cash collateral receivables on derivative instruments and Cash collateral payables on derivative instruments and was not material for the periods presented. ⁶ Negative replacement values as of 31 December 2016 include CHF 0.1 billion related to derivative loan commitments (31 December 2015: CHF 0.1 billion). No notional amounts related to these replacement values are included in the table. The maximum irrevocable amount related to these commitments was CHF 14.3 billion as of 31 December 2016 (31 December 2015: CHF 15.8 billion). ⁷ Notional values of exchange-traded agency transactions and OTC cleared transactions entered into on behalf of clients are not disclosed due to their significantly different risk profile. ⁸ Changes in the fair value of purchased and sold non-derivative financial instruments between trade date and settlement date are recognized as replacement values. ⁹ Refer to Note 24 for more information on netting arrangements.

The notional amount of a derivative is generally the quantity of the underlying instrument on which the derivative contract is based and is the reference against which changes in the value of the derivative are measured. Notional values in themselves are generally not a direct indication of the values that are exchanged between parties, and are therefore not a direct measure of risk or financial exposure but are viewed as an indication of the scale of the different types of derivatives entered into by UBS AG.

The maturity profile of OTC interest rate contracts held as of 31 December 2016, based on notional values, was: approximately 52% (31 December 2015: 53%) mature within one year, 29% (31 December 2015: 29%) within one to five years and 19% (31 December 2015: 18%) after five years. Notional values of interest rate contracts cleared with a clearing house that qualify for IFRS balance sheet netting or are legally settled on a daily basis are presented under *Other notional values* and are categorized into maturity buckets on the basis of contractual maturities of the cleared underlying derivative contracts.

Derivatives transacted for trading purposes

Most of UBS AG's derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Trading activities include market-making to directly support the facilitation and execution of client activity. Market-making involves quoting bid and offer prices to other market participants with the intention of generating revenues based on spread and volume.

Credit derivatives

UBS is an active dealer in the fixed income market, including credit default swaps (CDS) and related products, with respect to a large number of issuers' securities. The primary purposes of these activities are market-making, primarily on behalf of clients, and ongoing hedging of trading book exposures.

Note 12 Derivative instruments and hedge accounting (continued)

Market-making activity, which is undertaken within the Investment Bank, consists of buying and selling single-name CDS, index CDS, loan CDS and related referenced cash instruments to facilitate client trading activity. UBS also actively utilizes CDS to economically hedge specific counterparty credit risks in its accrual and traded loan portfolios (including off-balance sheet loan commitments) with the aim of reducing concentrations in individual names, sectors or specific portfolios.

In addition, UBS actively utilizes CDS to economically hedge specific counterparty credit risks in its OTC derivative portfolios, including financial instruments that are designated at fair value through profit or loss.

The tables below provide more information on credit protection bought and sold, including replacement and notional value information by instrument type and counterparty type. The value of protection bought and sold is not, in isolation, a measure of UBS's credit risk. Counterparty relationships are viewed in terms of the total outstanding credit risk, which relates to other instruments in addition to CDS, and in connection with collateral arrangements in place. On a notional value basis, approximately 29% of credit protection bought and sold as of 31 December 2016 matures within one year (31 December 2015: 22%), approximately 61% within one to five years (31 December 2015: 68%) and approximately 10% after five years (31 December 2015: 10%).

Credit derivatives by type of instrument

	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
<i>CHF billion</i>						
Single-name credit default swaps	1.6	1.3	91.4	1.3	1.4	81.3
Multi-name index-linked credit default swaps	0.2	0.8	38.4	0.5	0.4	38.3
Multi-name other credit default swaps	0.0	0.0	1.5	0.0	0.0	1.1
Total rate of return swaps	0.1	0.7	5.5	0.0	0.2	2.1
Options and warrants	0.0	0.0	2.9	0.0	0.0	0.1
Total 31 December 2016	2.0	2.8	139.7	1.9	2.0	122.9
<i>of which: credit derivatives related to economic hedges</i>	<i>1.4</i>	<i>2.4</i>	<i>111.7</i>	<i>1.5</i>	<i>1.5</i>	<i>96.2</i>
<i>of which: credit derivatives related to market-making</i>	<i>0.5</i>	<i>0.3</i>	<i>28.0</i>	<i>0.4</i>	<i>0.5</i>	<i>26.7</i>

	Protection bought			Protection sold		
	PRV	NRV	Notional values	PRV	NRV	Notional values
<i>CHF billion</i>						
Single-name credit default swaps	3.1	1.9	115.5	1.9	2.9	105.1
Multi-name index-linked credit default swaps	0.3	0.6	48.0	0.6	0.5	45.6
Multi-name other credit default swaps	0.1	0.1	2.4	0.0	0.1	1.8
Total rate of return swaps	0.5	0.2	6.3	0.1	0.4	2.8
Options and warrants	0.0	0.0	4.2	0.0	0.0	0.1
Total 31 December 2015	4.0	2.8	176.4	2.6	3.9	155.3
<i>of which: credit derivatives related to economic hedges</i>	<i>2.7</i>	<i>2.4</i>	<i>152.8</i>	<i>2.2</i>	<i>2.5</i>	<i>132.8</i>
<i>of which: credit derivatives related to market-making</i>	<i>1.4</i>	<i>0.4</i>	<i>23.6</i>	<i>0.4</i>	<i>1.3</i>	<i>22.5</i>

Note 12 Derivative instruments and hedge accounting (continued)

Credit derivatives by counterparty

	Protection bought			Protection sold		
<i>CHF billion</i>	PRV	NRV	Notional values	PRV	NRV	Notional values
Broker-dealers	0.4	0.2	20.9	0.2	0.3	16.1
Banks	0.9	1.0	60.8	0.8	1.0	52.6
Central clearing counterparties	0.3	0.9	47.2	0.8	0.4	47.1
Other	0.4	0.8	10.9	0.2	0.3	7.1
Total 31 December 2016	2.0	2.8	139.7	1.9	2.0	122.9

	Protection bought			Protection sold		
<i>CHF billion</i>	PRV	NRV	Notional values	PRV	NRV	Notional values
Broker-dealers	0.8	0.3	27.3	0.2	0.6	19.5
Banks	1.9	1.3	78.0	1.2	1.6	68.3
Central clearing counterparties	0.4	0.8	55.3	0.9	0.9	58.9
Other	0.8	0.4	15.8	0.3	0.8	8.7
Total 31 December 2015	4.0	2.8	176.4	2.6	3.9	155.3

UBS AG's CDS trades are documented using industry standard forms of documentation or equivalent terms documented in a bespoke agreement. The agreements that govern CDS generally do not contain recourse provisions that would enable UBS to recover from third parties any amounts paid out by UBS.

The types of credit events that would require UBS to perform under a CDS contract are subject to agreement between the parties at the time of the transaction. However, nearly all transactions are traded using credit events that are applicable under certain market conventions based on the type of reference entity to which the transaction relates. Applicable credit events by market conventions include bankruptcy, failure to pay, restructuring, obligation acceleration and repudiation / moratorium.

Contingent collateral features of derivative liabilities

Certain derivative instruments contain contingent collateral or termination features triggered upon a downgrade of the published credit ratings of UBS AG in the normal course of business. Based on UBS AG's credit ratings as of 31 December 2016, CHF 0.1 billion, CHF 0.3 billion and CHF 1.1 billion would have been required for contractual obligations related to OTC derivatives in the event of a one-notch, two-notch and three-notch reduction in long-term credit ratings, respectively. In evaluating UBS AG's liquidity requirements, UBS AG considers additional collateral or termination payments that would be required in the event of a reduction in UBS AG's long-term credit ratings, and a corresponding reduction in UBS AG's short-term ratings.

Derivatives transacted for hedging purposes

UBS AG enters into derivative transactions for the purposes of hedging risks inherent in assets, liabilities and forecasted transactions. The accounting treatment of hedge transactions varies according to the nature of the instrument hedged and whether the hedge qualifies as such for accounting purposes.

Derivative transactions that qualify and are designated as hedges for accounting purposes are described under the corresponding headings in this Note (fair value hedges, cash flow hedges and hedges of net investments in foreign operations). UBS AG's accounting policies for derivatives designated and accounted for as hedging instruments are described in Note 1a item 3k, where terms used in the following sections are explained.

UBS AG has also entered into various hedging strategies utilizing derivatives for which hedge accounting has not been applied. These include interest rate swaps and other interest rate derivatives (e.g., futures) for day-to-day economic interest rate risk management purposes. In addition, UBS AG has used equity futures, options and, to a lesser extent, swaps for economic hedging in a variety of equity trading strategies to offset underlying equity and equity volatility exposure. UBS AG has also entered into CDS that provide economic hedges for credit risk exposures (refer to "Credit derivatives" in this Note). Fair value changes of derivatives that are part of economic relationships, but do not qualify for hedge accounting treatment, are reported in *Net trading income*, except for the forward points on certain short duration foreign exchange contracts, which are reported in *Interest income*.

Effective 30 June 2016, UBS elected to convert its interest rate swaps transacted with the London Clearing House from the previous collateral model to a settlement model. As a result, the fair value of outstanding derivatives designated as hedging instruments decreased significantly compared with the prior-year comparatives.

Note 12 Derivative instruments and hedge accounting (continued)

Fair value hedges: interest rate risk related to debt instruments

UBS AG's fair value hedges principally consist of interest rate swaps that are used to protect against changes in the fair value of fixed-rate debt instruments, such as non-structured fixed-rate bonds, covered bonds and subordinated debt, due to

movements in market interest rates. The fair values of outstanding interest rate derivatives designated as fair value hedges were assets of CHF 152 million and liabilities of CHF 1 million as of 31 December 2016 and assets of CHF 1,656 million and liabilities of CHF 11 million as of 31 December 2015.

Fair value hedges of interest rate risk

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Gains / (losses) on hedging instruments	140	554	1,113
Gains / (losses) on hedged items attributable to the hedged risk	(144)	(552)	(1,111)
Net gains / (losses) representing ineffective portions of fair value hedges	(4)	2	2

Fair value hedges: portfolio interest rate risk related to loans

UBS AG also applies fair value hedge accounting to mortgage loan portfolio interest rate risk. The change in fair value of the hedged items is recorded separately from the hedged item and is included within *Other assets* on the balance sheet. The fair

values of outstanding interest rate derivatives designated for these hedges as of 31 December 2016 were liabilities of CHF 44 million (31 December 2015: assets of CHF 7 million and liabilities of CHF 327 million).

Fair value hedges of portfolio interest rate risk

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Gains / (losses) on hedging instruments	(128)	(176)	(694)
Gains / (losses) on hedged items attributable to the hedged risk	116	147	676
Net gains / (losses) representing ineffective portions of fair value hedges	(12)	(29)	(18)

Cash flow hedges of forecasted transactions

UBS AG is exposed to variability in future interest cash flows on non-trading financial assets and liabilities that bear interest at variable rates or are expected to be refinanced or reinvested in the future. The amounts and timing of future cash flows, representing both principal and interest flows, are projected on the basis of contractual terms and other relevant factors, including estimates of prepayments and defaults. The aggregate principal balances and interest cash flows across all portfolios over time form the basis for identifying the non-trading interest rate risk of UBS AG, which is hedged with interest rate swaps, the maximum maturity of which is 12 years. The table on the following page shows forecasted principal balances on which

expected interest cash flows arise as of 31 December 2016. Amounts shown represent, by time bucket, average assets and liabilities subject to forecasted cash flows designated as hedged items in cash flow hedge accounting relationships.

As of 31 December 2016, the fair values of outstanding derivatives designated as cash flow hedges of forecasted transactions were CHF 68 million assets and CHF 5 million liabilities (31 December 2015: CHF 2,176 million assets and CHF 195 million liabilities).

In 2016, a gain of CHF 11 million was recognized in *Net trading income* due to hedge ineffectiveness, compared with a gain of CHF 150 million in 2015 and a gain of CHF 87 million in 2014.

Note 12 Derivative instruments and hedge accounting (continued)

Principal balances subject to cash flow forecasts

CHF billion	Within 1 year	1–3 years	3–5 years	5–10 years	Over 10 years
Assets	57	75	48	51	0
Liabilities	4	5	3	4	0
Net balance	53	70	45	47	0

Hedges of net investments in foreign operations

UBS AG applies hedge accounting for certain net investments in foreign operations. As of 31 December 2016, the positive replacement values and negative replacement values of FX derivatives (mainly FX swaps) designated as hedging instruments in net investment hedge accounting relationships were CHF 122 million and CHF 79 million, respectively (31 December 2015: positive replacement values of CHF 170 million and negative replacement values of CHF 79 million). As of 31 December 2016, the underlying hedged structural exposures in several currencies amounted to CHF 7.5 billion (31 December 2015: CHF 5.5 billion).

Hedges of structural FX exposures in currencies other than the US dollar may be comprised of two jointly designated derivatives as the foreign currency risk may be hedged against the US dollar first and then converted into Swiss francs, the presentation currency of UBS AG, as part of a separate FX derivative transaction. The aggregated notional amount of designated hedging derivatives as of 31 December 2016 was CHF 12.5 billion in total (31 December 2015: CHF 11.2 billion), including CHF 7.5 billion notional values related to US dollar versus Swiss franc swaps and CHF 5.0 billion notional values related to derivatives hedging foreign currencies (other than the US dollar) versus the US dollar. The effective portion of gains and losses of these FX swaps is transferred directly to OCI to offset foreign currency translation (FCT) gains and losses on the net investments in foreign branches and subsidiaries. As such, these

FX swaps hedge the structural FX exposure resulting in the accumulation of FCT on the level of individual foreign branches and subsidiaries and hence on the total FCT OCI of UBS AG.

UBS designates certain non-derivative foreign currency financial assets and liabilities of foreign branches or subsidiaries as hedging instruments in net investment hedge accounting arrangements. The FX translation difference recorded in FCT OCI of the non-derivative hedging instrument of one foreign entity offsets the structural FX exposure of another foreign entity. Therefore, the aggregated FCT OCI of UBS AG is unchanged from this hedge designation. As of 31 December 2016, the nominal amount of non-derivative financial assets and liabilities designated as hedging instruments in such net investment hedges was CHF 1.5 billion and CHF 1.5 billion, respectively (31 December 2015: CHF 3.1 billion non-derivative financial assets and CHF 3.1 billion non-derivative financial liabilities).

Ineffectiveness of hedges of net investments in foreign operations was not material in 2016, 2015 and 2014.

Undiscounted cash flows

The table below provides undiscounted cash flow information for derivative instruments designated in hedge accounting relationships.

Derivatives designated in hedge accounting relationships (undiscounted cash flows)

CHF billion	On demand	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
Interest rate swaps¹							
FX swaps / forwards							
Cash inflows	0	2	10	0	0	0	11
Cash outflows	0	2	10	0	0	0	11
Net cash flows	0	0	0	0	0	0	0

¹ Undiscounted cash inflows and cash outflows of interest rate swaps as of 31 December 2016 were not material as the majority of interest rate swaps designated in hedge accounting relationships are legally settled on a daily basis.

Note 13 Financial assets available for sale and held to maturity

a) Financial assets available for sale

CHF million	31.12.16	31.12.15
Financial assets available for sale by issuer type¹		
Debt instruments		
Government and government agencies	11,650	47,245
of which: US	7,779	21,424
of which: Germany	1,774	8,583
of which: UK	373	2,782
of which: France	355	3,566
of which: Netherlands	319	2,934
Banks	1,845	12,268
Corporates and other	1,554	2,385
Total debt instruments	15,048	61,898
Equity instruments	628	645
Total financial assets available for sale	15,676	62,543
Unrealized gains – before tax	309	462
Unrealized (losses) – before tax	(117)	(171)
Net unrealized gains / (losses) – before tax	193	291
Net unrealized gains / (losses) – after tax	96	167

¹ Refer to Note 22c for more information on product type and fair value hierarchy categorization.

b) Financial assets held to maturity

CHF million	31.12.16	31.12.15
Financial assets held to maturity by issuer type		
Debt instruments		
Government and government agencies	7,416	0
of which: US	4,688	0
of which: Germany	1,708	0
of which: France	867	0
Banks	1,873	0
Total financial assets held to maturity	9,289	0

Note 14 Property, equipment and software

At historical cost less accumulated depreciation

CHF million	Own-used properties	Leasehold improvements	IT hardware and communication	Internally generated software	Purchased software	Other machines and equipment	Projects in progress	31.12.16	31.12.15
Historical cost									
Balance at the beginning of the year	7,863	3,169	1,872	2,375	411	862	1,270	17,823	17,442
Additions	58	34	198	3	99	32	1,347	1,770	1,846
Disposals / write-offs ¹	(71)	(276)	(568)	(16)	(89)	(83)	0	(1,102)	(1,322)
Reclassifications	(103)	522	57	711	0	39	(1,440)	(214) ⁶	(35)
Foreign currency translation	(15)	(9)	(47)	(36)	(14)	3	(53)	(171)	(108)
Balance at the end of the year	7,732	3,440	1,512	3,037	408	853	1,123	18,106	17,823
Accumulated depreciation									
Balance at the beginning of the year	4,356	2,206	1,420	1,275	276	606	0	10,140	10,593
Depreciation	164	191	200	286	49	64	0	954	901
Impairment ²	11	1	1	9	5	0	0	26	18
Disposals / write-offs ¹	(71)	(264)	(568)	(16)	(89)	(83)	0	(1,090)	(1,270)
Reclassifications	(152)	6	(1)	0	0	1	0	(147) ⁶	(25)
Foreign currency translation	(8)	(15)	(32)	(13)	(9)	2	0	(74)	(77)
Balance at the end of the year	4,300	2,124	1,021	1,542	233	589	0	9,809	10,140
Net book value at the end of the year^{3, 4}	3,432	1,316	492	1,495	175	264	1,123⁵	8,297	7,683

¹ Includes write-offs of fully depreciated assets. ² Impairment charges recorded in 2016 relate to assets for which the recoverable amount was determined based on value-in-use (recoverable amount of the impaired assets: CHF 31 million Own-used properties, CHF 2 million Leasehold improvements, CHF 28 million Internally generated software, CHF 3 million Purchased software). ³ As of 31 December 2016, contractual commitments to purchase property in the future amounted to approximately CHF 0.3 billion. ⁴ Includes CHF 21 million related to leased assets, mainly IT hardware and communication. ⁵ Includes CHF 994 million related to Internally generated software, CHF 110 million related to Own-used properties and CHF 19 million related to Leasehold improvements. ⁶ Reflects reclassifications to Properties held for sale (CHF 54 million on a net basis) reported within Other assets.

Note 15 Goodwill and intangible assets

Introduction

UBS AG performs an impairment test on its goodwill assets on an annual basis or when indicators of impairment exist. UBS AG considers the segments, as reported in Note 2a, as separate cash-generating units (CGUs). The impairment test is performed for each segment to which goodwill is allocated by comparing the recoverable amount, based on its value-in-use, with the carrying amount of the respective segment. An impairment charge is recognized if the carrying amount exceeds the recoverable amount. As of 31 December 2016, total goodwill recognized on the balance sheet was CHF 6.3 billion, of which CHF 1.3 billion, CHF 3.6 billion and CHF 1.4 billion was carried by Wealth Management, Wealth Management Americas and Asset Management, respectively. Based on the impairment testing methodology described below, UBS AG concluded that the goodwill balances as of 31 December 2016 allocated to these segments remain recoverable and thus were not impaired.

Methodology for goodwill impairment testing

The recoverable amounts are determined using a discounted cash flow model, which has been adapted to use inputs that consider features of the banking business and its regulatory environment. The recoverable amount of a segment is the sum of the discounted earnings attributable to shareholders from the first three forecasted years and the terminal value. The terminal value, which covers all periods beyond the third year, is calculated on the basis of the forecast of third-year profit, the discount rate and the long-term growth rate and is adjusted for the effect of the capital assumed to be needed to support the perpetual growth implied by the long-term growth rate.

The carrying amount for each segment is determined by reference to the Group's equity attribution framework. Within this framework, which is described in the "Capital management" section of this report, we attribute equity to the businesses on the basis of their risk-weighted assets and leverage ratio denominator, their goodwill and intangible assets as well as equity directly associated with activity that Group ALM manages centrally on behalf of the business divisions. The total amount of equity attributed to CGUs can differ from equity attributable to shareholders. The framework is primarily used for purposes of measuring the performance of the businesses and includes certain management assumptions. Attributed equity equals the capital that a segment requires to conduct its business and is considered an appropriate starting point from which to determine the carrying value of the segments. The

attributed equity methodology is aligned with the business planning process, the inputs from which are used in calculating the recoverable amounts of the respective CGU. The revision of the equity attribution methodology effective as of 1 January 2017 would have no impact on the outcome of the goodwill impairment test as of 31 December 2016.

→ **Refer to the "Capital management" section of this report for more information on the equity attribution framework**

Assumptions

Valuation parameters used within UBS AG's impairment test model are linked to external market information, where applicable. The model used to determine the recoverable amount is most sensitive to changes in the forecast earnings available to shareholders in years one to three, to changes in the discount rates and to changes in the long-term growth rate. The applied long-term growth rate is based on long-term economic growth rates for different regions worldwide. Earnings available to shareholders are estimated on the basis of forecast results, which are part of the business plan approved by the BoD.

The discount rates are determined by applying a capital asset pricing model-based approach, as well as considering quantitative and qualitative inputs from both internal and external analysts and the view of management. The discount rates were unchanged between 2015 and 2016.

Key assumptions used to determine the recoverable amounts of each segment are tested for sensitivity by applying a reasonably possible change to those assumptions. Forecast earnings available to shareholders were changed by 20%, the discount rates were changed by 1.5 percentage points and the long-term growth rates were changed by 0.75 percentage points, reflecting the current market environment. Under all scenarios, the recoverable amounts for each segment exceeded the respective carrying amount, such that the reasonably possible changes in key assumptions would not result in impairment.

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of goodwill may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce IFRS equity and net profit. It would not affect cash flows and, as goodwill is required to be deducted from capital under the Basel III capital framework, no effect would be expected on UBS AG's total capital ratios.

Note 15 Goodwill and intangible assets (continued)

Discount and growth rates

In %	Discount rates		Growth rates	
	31.12.16	31.12.15	31.12.16	31.12.15
Wealth Management	9.0	9.0	1.7	1.7
Wealth Management Americas	9.0	9.0	2.4	2.4
Asset Management	9.0	9.0	2.4	2.4
Investment Bank	11.0	11.0	2.4	2.4

CHF million	Goodwill		Intangible assets		31.12.16	31.12.15
	Total	Infrastructure	Customer relationships, contractual rights and other	Total		
Historical cost						
Balance at the beginning of the year	6,240	761	820	1,581	7,821	7,957
Additions	16		8	8	24	30
Disposals	(2)		(2)	(2)	(3)	(32)
Write-offs			(75)	(75)	(75)	(20)
Foreign currency translation	57	12	(12)	0	57	(114)
Balance at the end of the year	6,311	773	739	1,512	7,823	7,821
Accumulated amortization and impairment						
Balance at the beginning of the year		578	675	1,253	1,253	1,171
Amortization		38	53	91	91	94
Impairment ¹			0	0	0	13
Disposals			(1)	(1)	(1)	(1)
Write-offs			(75)	(75)	(75)	(20)
Foreign currency translation		10	(11)	(1)	(1)	(5)
Balance at the end of the year		626	641	1,267	1,267	1,253
Net book value at the end of the year	6,311	147	98	245	6,556	6,568

¹ Impairment charges recorded in 2016 and 2015 relate to assets for which the recoverable amount was determined based on value-in-use (recoverable amount of the impaired assets: CHF 3 million for 2016 and CHF 4 million for 2015).

The table below presents goodwill and intangible assets by segment for the year ended 31 December 2016.

CHF million	Wealth Management	Wealth Management Americas	Investment Bank	Asset Management	Corporate Center – Services	Total
Goodwill						
Balance at the beginning of the year	1,312	3,514	29	1,385		6,240
Additions	16					16
Disposals	(2)					(2)
Foreign currency translation	(23)	57	7	17		57
Balance at the end of the year	1,303	3,571	36	1,401		6,311
Intangible assets						
Balance at the beginning of the year	38	199	53	8	30	328
Additions / transfers	8	0				8
Disposals			0			0
Amortization	(4)	(49)	(12)	(4)	(21)	(91)
Impairment		0				0
Foreign currency translation	(1)	2				1
Balance at the end of the year	40	152	41	4	9	245

Note 15 Goodwill and intangible assets (continued)

The table below presents estimated, aggregated amortization expenses for intangible assets.

CHF million	Intangible assets
Estimated, aggregated amortization expenses for:	
2017	68
2018	58
2019	47
2020	38
2021	6
Thereafter	19
Not amortized due to indefinite useful life	9
Total	245

Note 16 Other assets

CHF million	31.12.16	31.12.15
Prime brokerage receivables ¹	9,828	11,341
Recruitment loans to financial advisors	3,087	3,184
Other loans to financial advisors	471	418
Bail deposit ²	1,213	1,221
Accrued interest income	526	462
Accrued income – other	822	844
Prepaid expenses	1,008	1,032
Net defined benefit pension and post-employment assets ³	0	50
Settlement and clearing accounts	516	402
VAT and other tax receivables	261	397
Properties and other non-current assets held for sale	111	134
Assets of disposal group held for sale ⁴	5,137	279
Other	2,433	2,485
Total other assets	25,412	22,249

¹ Prime brokerage services include clearance, settlement, custody, financing and portfolio reporting services for corporate clients trading across multiple asset classes. Prime brokerage receivables are mainly comprised of margin lending receivables. ² Refer to Note 20b item 1 for more information. ³ Refer to Note 26 for more information. ⁴ Refer to Note 30 for more information.

Balance sheet notes: liabilities

Note 17 Due to banks and customers

CHF million	31.12.16	31.12.15
Due to banks	10,645	11,836
Due to customers	450,199	402,522
of which: demand deposits	195,756	174,262
of which: retail savings / deposits	170,729	161,848
of which: time deposits	77,531	60,274
of which: fiduciary deposits	6,184	6,139
Total due to banks and customers	460,844	414,358

Note 18 Financial liabilities designated at fair value

CHF million	31.12.16	31.12.15
Issued debt instruments		
Equity-linked ¹	29,831	30,965
Rates-linked	10,150	16,587
Credit-linked	4,101	3,652
Fixed-rate	2,972	4,098
Other	2,875	1,231
Total issued debt instruments	49,930	56,534
of which: issued by UBS AG with original maturity greater than one year ² . ³	36,347	40,081
Over-the-counter debt instruments		
Equity-linked ¹	1,992	2,885
Other	2,671	2,608
Total over-the-counter debt instruments	4,663	5,493
of which: issued by UBS AG with original maturity greater than one year ² . ⁴	4,210	4,497
Repurchase agreements	395	849
Loan commitments and guarantees⁵	29	119
Total	55,017	62,995
of which: life-to-date own credit (gain) / loss	(141)	(287)

¹ Includes investment fund unit-linked instruments issued. ² Issued by the standalone legal entity UBS AG. Based on original contractual maturity without considering any early redemption features. ³ More than 99% of the balance as of 31 December 2016 was unsecured (31 December 2015: more than 98% of the balance was unsecured). ⁴ More than 35% of the balance as of 31 December 2016 was unsecured (31 December 2015: more than 35% of the balance was unsecured). ⁵ Loan commitments recognized as Financial liabilities designated at fair value until drawn and recognized as Loans. See Note 1a item 3o for more information.

As of 31 December 2016 and 31 December 2015, the contractual redemption amount at maturity of financial liabilities designated at fair value through profit or loss was not materially different from the carrying value.

The table on the following page shows the residual contractual maturity of the carrying value of financial liabilities designated at fair value, split between fixed-rate and floating-rate instruments based on the contractual terms, and does not consider any early redemption features. Interest rate ranges for

future interest payments related to these financial liabilities designated at fair value have not been included in the table on the following page as a majority of these liabilities are structured products, and therefore the future interest payments are highly dependent upon the embedded derivative and prevailing market conditions at the time each interest payment is made.

→ **Refer to Note 25d for maturity information on an undiscounted cash flow basis**

Note 18 Financial liabilities designated at fair value (continued)

Contractual maturity of carrying value

CHF million	2017	2018	2019	2020	2021	2022-2026	Thereafter	Total 31.12.16	Total 31.12.15
UBS AG¹									
Non-subordinated debt									
Fixed-rate	3,979	984	644	262	400	807	2,429	9,505	10,702
Floating-rate	17,904	4,136	3,739	3,363	1,653	4,156	7,805	42,757	49,824
Subtotal	21,884	5,120	4,383	3,625	2,053	4,963	10,234	52,262	60,526
Other subsidiaries²									
Non-subordinated debt									
Fixed-rate	197	171	842	31	67	68	390	1,768	993
Floating-rate	495	136	119	0	0	87	150	987	1,475
Subtotal	692	307	961	31	67	155	540	2,755	2,469
Total	22,576	5,427	5,345	3,656	2,121	5,118	10,774	55,017	62,995

¹ Comprises instruments issued by the standalone legal entity UBS AG. ² Comprises instruments issued by subsidiaries of UBS AG.

Note 19 Debt issued held at amortized cost

CHF million	31.12.16	31.12.15
Certificates of deposit	20,207	11,967
Commercial paper	1,653	3,824
Other short-term debt	4,318	5,424
Short-term debt¹	26,178	21,215
Senior fixed-rate bonds	27,008	31,240
of which: issued by UBS AG with original maturity greater than one year ²	26,850	31,078
Covered bonds	5,836	8,490
Subordinated debt	11,554	12,600
of which: low-trigger loss-absorbing tier 2 capital instruments	10,429	10,346
of which: non-Basel III-compliant tier 2 capital instruments	1,125	2,254
Debt issued through the central bond institutions of the Swiss regional or cantonal banks	8,302	8,237
Other long-term debt	121	577
of which: issued by UBS AG with original maturity greater than one year ²	94	278
Long-term debt³	52,820	61,144
Total debt issued held at amortized cost⁴	78,998	82,359

¹ Debt with an original maturity of less than one year. ² Issued by the standalone legal entity UBS AG. Based on original contractual maturity without considering any early redemption features. 100% of the balance as of 31 December 2016 was unsecured (31 December 2015: 100% of the balance was unsecured). ³ Debt with original maturity greater than or equal to one year. The classification of debt issued into short-term and long-term does not consider any early redemption features. ⁴ Net of bifurcated embedded derivatives with a net positive fair value of CHF 38 million as of 31 December 2016 (31 December 2015: net negative fair value of CHF 130 million).

UBS AG uses interest rate and foreign exchange derivatives to manage the risks inherent in certain debt instruments held at amortized cost. In certain cases, UBS AG applies hedge accounting for interest rate risk as discussed in Note 1a item 3k and Note 12. As a result of applying hedge accounting, the

carrying value of debt issued increased by CHF 821 million and by CHF 1,024 million as of 31 December 2016 and 2015, respectively, reflecting changes in fair value due to interest rate movements.

Note 19 Debt issued held at amortized cost (continued)

Subordinated debt consists of unsecured debt obligations that are contractually subordinated in right of payment to all other present and future non-subordinated obligations of the respective issuing entity. All of the subordinated debt instruments outstanding as of 31 December 2016 pay a fixed rate of interest.

The table below shows the residual contractual maturity of the carrying value of debt issued, split between fixed-rate and floating-rate based on the contractual terms, and does not consider any early redemption features. The effects from interest rate swaps, which are used to hedge various fixed-rate debt issuances by changing the repricing characteristics into those similar to floating-rate debt, are also not considered in the table below.

→ Refer to Note 25d for maturity information on an undiscounted cash flow basis

Contractual maturity of carrying value

CHF million, except where indicated	2017	2018	2019	2020	2021	2022-2026	Thereafter	Total 31.12.16	Total 31.12.15
UBS AG¹									
Non-subordinated debt									
Fixed-rate	22,624	7,662	4,026	4,356	2,779	1,550	3	42,999	40,153
Interest rates (range in %)	0-5.9	0.5-6.6	2.4-4.0	0-4.9	1.3-1.4	4.0-4.0	0		
Floating-rate	12,113	1,017	1,017	254	0	0	1,536	15,937	17,907
Subordinated debt									
Fixed-rate	418	0	0	0	0	11,136	0	11,554	12,600
Interest rates (range in %)	4.1-7.4					4.8-8.8			
Subtotal	35,154	8,679	5,043	4,610	2,779	12,686	1,539	70,490	70,659
Other subsidiaries²									
Non-subordinated debt									
Fixed-rate	736	793	745	731	975	3,537	990	8,507	11,692
Interest rates (range in %)	0-8.1	0-3.8	0-2.9	0-3.2	0-2.4	0-4.1	0-2.8		
Floating-rate	0	1	0	0	0	0	0	1	8
Subtotal	736	793	745	731	975	3,537	990	8,507	11,700
Total	35,890	9,473	5,788	5,342	3,754	16,223	2,529	78,998	82,359

¹ Comprises debt issued by the standalone legal entity UBS AG. ² Comprises debt issued by subsidiaries of UBS AG.

Note 20 Provisions and contingent liabilities

a) Provisions

CHF million	Operational risks ¹	Litigation, regulatory and similar matters ²	Restructuring	Loan commitments and guarantees	Real estate	Employee benefits ⁵	Other	Total 31.12.16	Total 31.12.15
Balance at the beginning of the year	47	2,983	624	35	157	198	120	4,163	4,366
Increase in provisions recognized in the income statement	34	906	408	18	11	5	48	1,430	1,778
Release of provisions recognized in the income statement	(3)	(98)	(113)	(9)	(5)	(30)	(29)	(288)	(337)
Provisions used in conformity with designated purpose	(26)	(554)	(415)	0	(23)	(85)	(49)	(1,152)	(1,660)
Capitalized reinstatement costs	0	0	(1)	0	0	0	0	(1)	5
Reclassifications	0	0	0	10	(2)	0	0	7	9
Foreign currency translation / unwind of discount	(1)	25	(5)	0	1	(11)	2	10	3
Balance at the end of the year	50	3,261	498³	54	138⁴	77	91	4,169	4,163

¹ Comprises provisions for losses resulting from security risks and transaction processing risks. ² Comprises provisions for losses resulting from legal, liability and compliance risks. ³ Includes personnel related restructuring provisions of CHF 150 million as of 31 December 2016 (31 December 2015: CHF 110 million) and provisions for onerous lease contracts of CHF 348 million as of 31 December 2016 (31 December 2015: CHF 514 million). ⁴ Includes reinstatement costs for leasehold improvements of CHF 85 million as of 31 December 2016 (31 December 2015: CHF 94 million) and provisions for onerous lease contracts of CHF 53 million as of 31 December 2016 (31 December 2015: CHF 62 million). ⁵ Includes provisions for sabbatical and anniversary awards as well as provisions for severance which are not part of restructuring provisions.

Restructuring provisions primarily relate to onerous lease contracts and severance payments. The use of onerous lease provisions is driven by the maturities of the underlying lease contracts. Severance-related provisions are used within a short time period, usually within six months, but potential changes in amount may be triggered when natural staff attrition reduces

the number of people affected by a restructuring and therefore the estimated costs.

Information on provisions and contingent liabilities in respect of litigation, regulatory and similar matters, as a class, is included in Note 20b. There are no material contingent liabilities associated with the other classes of provisions.

Note 20 Provisions and contingent liabilities (continued)

b) Litigation, regulatory and similar matters

UBS operates in a legal and regulatory environment that exposes it to significant litigation and similar risks arising from disputes and regulatory proceedings. As a result, UBS (which for purposes of this Note may refer to UBS AG and / or one or more of its subsidiaries, as applicable) is involved in various disputes and legal proceedings, including litigation, arbitration, and regulatory and criminal investigations.

Such matters are subject to many uncertainties, and the outcome and the timing of resolution are often difficult to predict, particularly in the earlier stages of a case. There are also situations where UBS may enter into a settlement agreement. This may occur in order to avoid the expense, management distraction or reputational implications of continuing to contest liability, even for those matters for which UBS believes it should be exonerated. The uncertainties inherent in all such matters affect the amount and timing of any potential outflows for both matters with respect to which provisions have been established and other contingent liabilities. UBS makes provisions for such matters brought against it when, in the opinion of management after seeking legal advice, it is more likely than not that UBS has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against UBS, but are nevertheless expected to be, based on UBS's experience with similar asserted claims. If any of those conditions is not met, such matters result in contingent liabilities. If the amount of an obligation cannot be reliably estimated, a liability exists that is not recognized even if an outflow of resources is probable. Accordingly, no provision is established even if the potential outflow of resources with respect to select matters could be significant.

Specific litigation, regulatory and other matters are described below, including all such matters that management considers to be material and others that management believes to be of significance due to potential financial, reputational and other effects. The amount of damages claimed, the size of a transaction or other information is provided where available and appropriate in order to assist users in considering the magnitude of potential exposures.

In the case of certain matters below, we state that we have established a provision, and for the other matters, we make no such statement. When we make this statement and we expect disclosure of the amount of a provision to prejudice seriously our position with other parties in the matter because it would reveal what UBS believes to be the probable and reliably estimable outflow, we do not disclose that amount. In some cases we are subject to confidentiality obligations that preclude such disclosure. With respect to the matters for which we do not state whether we have established a provision, either (a) we have not established a provision, in which case the matter is treated as a contingent liability under the applicable accounting standard or (b) we have established a provision but expect disclosure of that fact to prejudice seriously our position with other parties in the matter because it would reveal the fact that UBS believes an outflow of resources to be probable and reliably estimable.

With respect to certain litigation, regulatory and similar matters for which we have established provisions, we are able to estimate the expected timing of outflows. However, the aggregate amount of the expected outflows for those matters for which we are able to estimate expected timing is immaterial relative to our current and expected levels of liquidity over the relevant time periods.

Note 20 Provisions and contingent liabilities (continued)

The aggregate amount provisioned for litigation, regulatory and similar matters as a class is disclosed in Note 20a above. It is not practicable to provide an aggregate estimate of liability for our litigation, regulatory and similar matters as a class of contingent liabilities. Doing so would require us to provide speculative legal assessments as to claims and proceedings that involve unique fact patterns or novel legal theories, that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Although we therefore cannot provide a numerical estimate of the future losses that could arise from litigation, regulatory and similar matters, we believe that the aggregate amount of possible future losses from this class that are more than remote substantially exceeds the level of current provisions. Litigation, regulatory and similar matters may also result in non-monetary penalties and consequences. For example, the Non-Prosecution Agreement (NPA) described in item 5 of this Note, which we entered into with the US Department of Justice (DOJ), Criminal Division, Fraud Section in connection with our submissions of benchmark interest rates, including, among others, the British Bankers' Association London Interbank Offered Rate (LIBOR), was terminated by the DOJ based on its

determination that we had committed a US crime in relation to foreign exchange matters. As a consequence, UBS AG pleaded guilty to one count of wire fraud for conduct in the LIBOR matter, paid a USD 203 million fine and is subject to a three-year term of probation. A guilty plea to, or conviction of, a crime (including as a result of termination of the NPA) could have material consequences for UBS. Resolution of regulatory proceedings may require us to obtain waivers of regulatory disqualifications to maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations and may permit financial market utilities to limit, suspend or terminate our participation in such utilities. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material consequences for UBS.

The risk of loss associated with litigation, regulatory and similar matters is a component of operational risk for purposes of determining our capital requirements. Information concerning our capital requirements and the calculation of operational risk for this purpose is included in the "Capital management" section of this report.

Provisions for litigation, regulatory and similar matters by business division and Corporate Center unit¹,²

CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Total 31.12.16	Total 31.12.15
Balance at the beginning of the year	245	459	83	16	585	310	0	1,284	2,983	3,053
Increase in provisions recognized in the income statement	76	113	7	5	43	5	0	606	856	1,263
Release of provisions recognized in the income statement	(6)	(15)	(4)	(6)	(2)	(3)	0	(11)	(48)	(166)
Provisions used in conformity with designated purpose	(19)	(137)	(9)	(9)	(13)	(49)	0	(318)	(554)	(1,174)
Foreign currency translation / unwind of discount	(4)	6	0	0	3	(4)	0	24	25	7
Balance at the end of the year	292	425	78	5	616	259	0	1,585	3,261	2,983

¹ Provisions, if any, for the matters described in this disclosure are recorded in Wealth Management (item 3), Wealth Management Americas (item 4), the Investment Bank (item 8), CC – Services (item 7) and CC – Non-core and Legacy Portfolio (item 2). Provisions, if any, for the matters described in this disclosure in items 1 and 6 are allocated between Wealth Management and Personal & Corporate Banking, and provisions, if any, for the matters described in this disclosure in item 5 are allocated between the Investment Bank, CC – Services and CC – Non-core and Legacy Portfolio. ² Provision movements are grouped by item for purposes of this table and may therefore differ from those shown in the table in Note 20a.

Note 20 Provisions and contingent liabilities (continued)

1. Inquiries regarding cross-border wealth management businesses

Tax and regulatory authorities in a number of countries have made inquiries, served requests for information or examined employees located in their respective jurisdictions relating to the cross-border wealth management services provided by UBS and other financial institutions. It is possible that implementation of automatic tax information exchange and other measures relating to cross-border provision of financial services could give rise to further inquiries in the future. UBS has received disclosure orders from the Swiss Federal Tax Administration (FTA) to transfer information based on requests for international administrative assistance in tax matters. The requests concern a number of UBS account numbers pertaining to current and former clients and are based on data from 2006 and 2008. UBS has taken steps to inform affected clients about the administrative assistance proceedings and their procedural rights, including the right to appeal. The requests are based on data received from the German authorities, who seized certain data related to UBS clients booked in Switzerland during their investigations and have apparently shared this data with other European countries. UBS expects additional countries to file similar requests. In addition, the Swiss Federal Supreme Court ruled in September 2016 that the double taxation agreement between the Netherlands and Switzerland provides a sufficient legal basis for an administrative assistance group request without specifying the names of the targeted taxpayers, which makes it more likely that similar requests for administrative assistance will be granted by the FTA.

In 2013, as a result of investigations in France, UBS (France) S.A. and UBS AG were put under formal examination ("*mise en examen*") for complicity in having illicitly solicited clients on French territory and were declared witness with legal assistance ("*témoïn assisté*") regarding the laundering of proceeds of tax fraud and of banking and financial solicitation by unauthorized persons. In 2014, UBS AG was placed under formal examination with respect to the potential charges of laundering of proceeds of tax fraud, and the investigating judges ordered UBS AG to provide bail ("*caution*") of EUR 1.1 billion. UBS AG appealed the determination of the bail amount, but both the appeal court ("*Cour d'Appel*") and the French Supreme Court ("*Cour de Cassation*") upheld the bail amount and rejected the appeal in full in late 2014. UBS AG filed an application to the European Court of Human Rights (ECHR) to challenge various aspects of the French court's decision. In January 2017, the ECHR denied UBS's application. The Swiss Federal Administrative Court ruled in October 2016 that in the administrative assistance proceedings related to the French bulk request, UBS has the right to appeal all final FTA client data disclosure orders. In September 2015, the former CEO of UBS Wealth Management was placed under

formal examination in connection with these proceedings. In addition, the investigating judges have sought to issue arrest warrants against three Swiss-based former employees of UBS AG who did not appear when summoned by the investigating judge.

In 2015, UBS (France) S.A. was placed under formal examination for complicity regarding the laundering of proceeds of tax fraud and of banking and financial solicitation by unauthorized persons for the years 2004 until 2008 and declared witness with legal assistance for the years 2009 to 2012. A bail of EUR 40 million was imposed and subsequently reduced by the Court of Appeals to EUR 10 million.

In February 2016, the investigating judge notified UBS AG and UBS (France) S.A. that he has closed his investigation. In July 2016, UBS AG and UBS (France) S.A. received the National Financial Prosecutor's recommendation ("*réquisitoire*"). As permitted, the parties have commented on the recommendation. The next procedural step will be for the judge to issue his final decree ("*ordonnance de renvoi en correctionnelle*"), which would set out any charges for which UBS AG and UBS (France) S.A. will be tried, both legally and factually, and transfer the case to court.

UBS has been notified by the Belgian investigating judge that it is under formal investigation ("*inculpé*") regarding the laundering of proceeds of tax fraud and of banking, financial solicitation by unauthorized persons and serious tax fraud.

In 2015, UBS received inquiries from the US Attorney's Office for the Eastern District of New York and from the US Securities and Exchange Commission (SEC), which are investigating potential sales to US persons of bearer bonds and other unregistered securities in possible violation of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and the registration requirements of the US securities laws. UBS is cooperating with the authorities in these investigations.

UBS has, and reportedly numerous other financial institutions have, received inquiries from authorities concerning accounts relating to the Fédération Internationale de Football Association (FIFA) and other constituent soccer associations and related persons and entities. UBS is cooperating with authorities in these inquiries.

Our balance sheet at 31 December 2016 reflected provisions with respect to matters described in this item 1 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

Note 20 Provisions and contingent liabilities (continued)

2. Claims related to sales of residential mortgage-backed securities and mortgages

From 2002 through 2007, prior to the crisis in the US residential loan market, UBS was a substantial issuer and underwriter of US residential mortgage-backed securities (RMBS) and was a purchaser and seller of US residential mortgages. A subsidiary of UBS, UBS Real Estate Securities Inc. (UBS RESI), acquired pools of residential mortgage loans from originators and (through an affiliate) deposited them into securitization trusts. In this manner, from 2004 through 2007, UBS RESI sponsored approximately USD 80 billion in RMBS, based on the original principal balances of the securities issued.

UBS RESI also sold pools of loans acquired from originators to third-party purchasers. These whole loan sales during the period 2004 through 2007 totaled approximately USD 19 billion in original principal balance.

We were not a significant originator of US residential loans. A subsidiary of UBS originated approximately USD 1.5 billion in US residential mortgage loans during the period in which it was active from 2006 to 2008 and securitized less than half of these loans.

RMBS-related lawsuits concerning disclosures: UBS is named as a defendant relating to its role as underwriter and issuer of RMBS in lawsuits related to approximately USD 2.5 billion in original face amount of RMBS underwritten or issued by UBS. Of the USD 2.5 billion in original face amount of RMBS that remains at issue in these cases, approximately USD 1.2 billion was issued in offerings in which a UBS subsidiary transferred underlying loans (the majority of which were purchased from third-party originators) into a securitization trust and made representations and warranties about those loans (UBS-sponsored RMBS). The remaining USD 1.3 billion of RMBS to which these cases relate was issued by third parties in securitizations in which UBS acted as underwriter (third-party RMBS).

In connection with certain of these lawsuits, UBS has indemnification rights against surviving third-party issuers or originators for losses or liabilities incurred by UBS, but UBS cannot predict the extent to which it will succeed in enforcing those rights.

UBS is a defendant in a lawsuit brought by the National Credit Union Administration (NCUA) as conservator for certain failed credit unions, asserting misstatements and omissions in the offering documents for RMBS purchased by the credit unions. The lawsuit was filed in the US District Court for the District of Kansas. The original principal balance at issue in the case is approximately USD 1.15 billion. In March 2017, UBS and

NCUA reached an agreement in principle to resolve this matter. In the second quarter of 2016, UBS resolved a similar case brought by the NCUA in the US District Court for the Southern District of New York (SDNY) relating to RMBS with an original principal balance of approximately USD 400 million, for a total of approximately USD 69.8 million, in addition to reasonable attorneys' fees incurred by NCUA.

Lawsuits related to contractual representations and warranties concerning mortgages and RMBS: When UBS acted as an RMBS sponsor or mortgage seller, we generally made certain representations relating to the characteristics of the underlying loans. In the event of a material breach of these representations, we were in certain circumstances contractually obligated to repurchase the loans to which the representations related or to indemnify certain parties against losses. UBS has received demands to repurchase US residential mortgage loans as to which UBS made certain representations at the time the loans were transferred to the securitization trust aggregating approximately USD 4.1 billion in original principal balance. Of this amount, UBS considers claims relating to approximately USD 2 billion in original principal balance to be resolved, including claims barred by the statute of limitations. Substantially all of the remaining claims are in litigation, including the matters described in the next paragraph. UBS believes that new demands to repurchase US residential mortgage loans are time-barred under a decision rendered by the New York Court of Appeals.

In 2012, certain RMBS trusts filed an action (Trustee Suit) in the SDNY seeking to enforce UBS RESI's obligation to repurchase loans in the collateral pools for three RMBS securitizations with an original principal balance of approximately USD 2 billion, for which Assured Guaranty Municipal Corp., a financial guaranty insurance company, had previously demanded repurchase. A bench trial in the SDNY adjourned in May 2016. Approximately 9,000 loans were at issue in the trial. In September 2016, the court issued an order ruling on numerous legal and factual issues and applying those rulings to 20 exemplar loans. The court further ordered that a lead master be appointed to apply the court's rulings to the loans that remain at issue following the trial. With respect to the loans subject to the Trustee Suit that were originated by institutions still in existence, UBS intends to enforce its indemnity rights against those institutions.

We also have tolling agreements with certain institutional purchasers of RMBS concerning their potential claims related to substantial purchases of UBS-sponsored or third-party RMBS.

Note 20 Provisions and contingent liabilities (continued)

Provision for claims related to sales of residential mortgage-backed securities and mortgages

USD million	31.12.16	31.12.15
Balance at the beginning of the year	1,218	849
Increase in provision recognized in the income statement	589	662
Release of provision recognized in the income statement	0	(94)
Provision used in conformity with designated purpose	(307)	(199)
Balance at the end of the year	1,500	1,218

Mortgage-related regulatory matters: In 2014, UBS received a subpoena from the US Attorney's Office for the Eastern District of New York issued pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), which seeks documents and information related to UBS's RMBS business from 2005 through 2007. In 2015, the Eastern District of New York identified a number of transactions that are the focus of their inquiry, and has subsequently provided a revised list of transactions. We have provided and continue to provide information. UBS continues to respond to the FIRREA subpoena and to subpoenas from the New York State Attorney General and other state attorneys general relating to its RMBS business. In addition, UBS has also been responding to inquiries from both the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) (who is working in conjunction with the US

Attorney's Office for Connecticut and the DOJ) and the SEC relating to trading practices in connection with purchases and sales of mortgage-backed securities in the secondary market from 2009 through 2014. We are cooperating with the authorities in these matters.

As reflected in the table "Provision for claims related to sales of residential mortgage-backed securities and mortgages," our balance sheet at 31 December 2016 reflected a provision of USD 1,500 million with respect to matters described in this item 2. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of this matter cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

Note 20 Provisions and contingent liabilities (continued)

3. Madoff

In relation to the Bernard L. Madoff Investment Securities LLC (BMIS) investment fraud, UBS AG, UBS (Luxembourg) S.A. and certain other UBS subsidiaries have been subject to inquiries by a number of regulators, including the Swiss Financial Market Supervisory Authority (FINMA) and the Luxembourg Commission de Surveillance du Secteur Financier (CSSF). Those inquiries concerned two third-party funds established under Luxembourg law, substantially all assets of which were with BMIS, as well as certain funds established in offshore jurisdictions with either direct or indirect exposure to BMIS. These funds now face severe losses, and the Luxembourg funds are in liquidation. The last reported net asset value of the two Luxembourg funds before revelation of the Madoff scheme was approximately USD 1.7 billion in the aggregate although that figure likely includes fictitious profit reported by BMIS. The documentation establishing both funds identifies UBS entities in various roles, including custodian, administrator, manager, distributor and promoter, and indicates that UBS employees serve as board members. UBS (Luxembourg) S.A. and certain other UBS subsidiaries are responding to inquiries by Luxembourg investigating authorities, without, however, being named as parties in those investigations. In 2009 and 2010, the liquidators of the two Luxembourg funds filed claims on behalf of the funds against UBS entities, non-UBS entities and certain individuals, including current and former UBS employees. The amounts claimed are approximately EUR 890 million and EUR 305 million, respectively. The liquidators have filed supplementary claims for amounts that the funds may possibly be held liable to pay the BMIS Trustee. These amounts claimed by the liquidator are approximately EUR 564 million and EUR 370 million, respectively. In addition, a large number of alleged beneficiaries have filed claims against UBS entities (and non-UBS entities) for purported losses relating to the Madoff scheme. The majority of these cases are pending in Luxembourg, where appeals were filed by the claimants against the 2010 decisions of the court in which the claims in a number of test cases were held to be inadmissible. In 2014, the Luxembourg Court of Appeal

dismissed one test case appeal in its entirety, which decision was appealed by the investor. In 2015, the Luxembourg Supreme Court found in favor of UBS and dismissed the investor's appeal. In June 2016, the Luxembourg Court of Appeal dismissed the remaining test cases in their entirety. In the US, the BMIS Trustee filed claims in 2010 against UBS entities, among others, in relation to the two Luxembourg funds and one of the offshore funds. The total amount claimed against all defendants in these actions was not less than USD 2 billion. Following a motion by UBS, in 2011, the SDNY dismissed all of the BMIS Trustee's claims other than claims for recovery of fraudulent conveyances and preference payments that were allegedly transferred to UBS on the ground that the BMIS Trustee lacks standing to bring such claims. In 2013, the Second Circuit affirmed the District Court's decision and, in 2014, the US Supreme Court denied the BMIS Trustee's petition seeking review of the Second Circuit ruling. In November 2016, the bankruptcy court issued an opinion dismissing the remaining claims for recovery of subsequent transfers of fraudulent conveyances and preference payments on the ground that the US Bankruptcy Code does not apply to transfers that occurred outside the US. The BMIS Trustee has indicated that he will appeal. In 2014, several claims, including a purported class action, were filed in the US by BMIS customers against UBS entities, asserting claims similar to the ones made by the BMIS Trustee, seeking unspecified damages. One claim was voluntarily withdrawn by the plaintiff. In 2015, following a motion by UBS, the SDNY dismissed the two remaining claims on the basis that the New York courts did not have jurisdiction to hear the claims against the UBS entities. The plaintiff in one of those claims has appealed the dismissal. In Germany, certain clients of UBS are exposed to Madoff-managed positions through third-party funds and funds administered by UBS entities in Germany. A small number of claims have been filed with respect to such funds. In 2015, a court of appeal ordered UBS to pay EUR 49 million, plus interest of approximately EUR 15.3 million.

Note 20 Provisions and contingent liabilities (continued)

4. Puerto Rico

Declines since August 2013 in the market prices of Puerto Rico municipal bonds and of closed-end funds (the funds) that are sole-managed and co-managed by UBS Trust Company of Puerto Rico and distributed by UBS Financial Services Incorporated of Puerto Rico (UBS PR) have led to multiple regulatory inquiries, as well as customer complaints and arbitrations with aggregate claimed damages of approximately USD 2.0 billion, of which claims with aggregate claimed damages of approximately USD 861 million have been resolved through settlements, arbitration or withdrawal of the claim. The claims are filed by clients in Puerto Rico who own the funds or Puerto Rico municipal bonds and / or who used their UBS account assets as collateral for UBS non-purpose loans; customer complaint and arbitration allegations include fraud, misrepresentation and unsuitability of the funds and of the loans. A shareholder derivative action was filed in 2014 against various UBS entities and current and certain former directors of the funds, alleging hundreds of millions of US dollars in losses in the funds. In 2015, defendants' motion to dismiss was denied. Defendants' requests for permission to appeal that ruling were denied by the Puerto Rico Court of Appeals and the Puerto Rico Supreme Court. In 2014, a federal class action complaint also was filed against various UBS entities, certain members of UBS PR senior management, and the co-manager of certain of the funds seeking damages for investor losses in the funds during the period from May 2008 through May 2014. Defendants had moved to dismiss that complaint, and in December 2016, defendants' motion to dismiss was granted in part and denied in part. In 2015, a class action was filed in Puerto Rico state court against UBS PR seeking equitable relief in the form of a stay of any effort by UBS PR to collect on non-purpose loans it acquired from UBS Bank USA in December 2013 based on plaintiffs' allegation that the loans are not valid. The trial court denied defendants' motion to dismiss the action based on a forum selection clause in the loan agreements; the Puerto Rico Supreme Court has stayed the action pending its review of defendants' appeal from that ruling.

In 2014, UBS reached a settlement with the Office of the Commissioner of Financial Institutions for the Commonwealth of Puerto Rico (OCFI) in connection with OCFI's examination of UBS's operations from January 2006 through September 2013, pursuant to which UBS is paying up to an aggregate of USD 7.7 million in investor education contributions and restitution.

In 2015, the SEC and the Financial Industry Regulatory Authority (FINRA) announced settlements with UBS PR of their separate investigations stemming from the 2013 market events. Without admitting or denying the findings in either matter, UBS PR agreed in the SEC settlement to pay USD 15 million and USD 18.5 million in the FINRA matter. We also understand that the DOJ is conducting a criminal inquiry into the impermissible reinvestment of non-purpose loan proceeds. We are cooperating with the authorities in this inquiry.

In 2011, a purported derivative action was filed on behalf of

the Employee Retirement System of the Commonwealth of Puerto Rico (System) against over 40 defendants, including UBS PR, which was named in connection with its underwriting and consulting services. Plaintiffs alleged that defendants violated their purported fiduciary duties and contractual obligations in connection with the issuance and underwriting of approximately USD 3 billion of bonds by the System in 2008 and sought damages of over USD 800 million. Defendants' motion to dismiss is pending. In September 2016, the System announced its intention to join the action as a plaintiff, and the court has since ordered that plaintiffs must file an amended complaint.

Also, in 2013, an SEC Administrative Law Judge dismissed a case brought by the SEC against two UBS executives, finding no violations. The charges had stemmed from the SEC's investigation of UBS's sale of closed-end funds in 2008 and 2009, which UBS settled in 2012. Beginning in 2012, two federal class action complaints, which were subsequently consolidated, were filed against various UBS entities, certain of the funds, and certain members of UBS PR senior management, seeking damages for investor losses in the funds during the period from January 2008 through May 2012 based on allegations similar to those in the SEC action. In September 2016, the court denied plaintiffs' motion for class certification. In October 2016, plaintiffs filed a petition with the US Court of Appeals for the First Circuit seeking permission to bring an interlocutory appeal challenging the denial of their motion for class certification. Defendants have filed an opposition to plaintiffs' petition.

Beginning in 2015, agencies and public corporations of the Commonwealth have defaulted on certain interest payments, and in July 2016, the Commonwealth defaulted on payments on its general obligation debt. Executive orders of the Governor that have diverted funds to pay for essential services instead of debt payments and stayed any action to enforce creditors' rights on the Puerto Rico bonds continue to be in effect. In June 2016, US federal legislation created an oversight board with power to oversee Puerto Rico's finances and to restructure its debt. The oversight board is authorized to impose, and has imposed, a stay on exercise of creditors' rights. These events, further defaults, any further legislative action to create a legal means of restructuring Commonwealth obligations or to impose additional oversight on the Commonwealth's finances, or any restructuring of the Commonwealth's obligations, may increase the number of claims against UBS concerning Puerto Rico securities, as well as potential damages sought.

Our balance sheet at 31 December 2016 reflected provisions with respect to matters described in this item 4 in amounts that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provisions that we have recognized.

Note 20 Provisions and contingent liabilities (continued)

5. Foreign exchange, LIBOR, and benchmark rates, and other trading practices

Foreign exchange-related regulatory matters: Following an initial media report in 2013 of widespread irregularities in the foreign exchange markets, UBS immediately commenced an internal review of its foreign exchange business, which includes our precious metals and related structured products businesses. Since then, various authorities have commenced investigations concerning possible manipulation of foreign exchange markets, including FINMA, the Swiss Competition Commission (WEKO), the DOJ, the SEC, the US Commodity Futures Trading Commission (CFTC), the Board of Governors of the Federal Reserve System (Federal Reserve Board), the California State Attorney General, the UK Financial Conduct Authority (FCA) (to which certain responsibilities of the UK Financial Services Authority (FSA) have passed), the UK Serious Fraud Office (SFO), the Australian Securities and Investments Commission (ASIC), the Hong Kong Monetary Authority (HKMA), the Korea Fair Trade Commission (KFTC) and the Brazil Competition Authority (CADE). In addition, WEKO is, and a number of other authorities reportedly are, investigating potential manipulation of precious metals prices. UBS has taken and will continue to take appropriate action with respect to certain personnel as a result of its ongoing review.

In 2014, UBS reached settlements with the FCA and the CFTC in connection with their foreign exchange investigations, and FINMA issued an order concluding its formal proceedings with respect to UBS relating to its foreign exchange and precious metals businesses. UBS has paid a total of approximately CHF 774 million to these authorities, including GBP 234 million in fines to the FCA, USD 290 million in fines to the CFTC, and CHF 134 million to FINMA representing confiscation of costs avoided and profits. In 2015, the Federal Reserve Board and the Connecticut Department of Banking issued an Order to Cease and Desist and Order of Assessment of a Civil Monetary Penalty Issued upon Consent (Federal Reserve Order) to UBS AG. As part of the Federal Reserve Order, UBS AG paid a USD 342 million civil monetary penalty.

In 2015, the DOJ's Criminal Division (Criminal Division) terminated the December 2012 Non-Prosecution Agreement (NPA) with UBS AG related to UBS's submissions of benchmark interest rates. As a result, UBS AG entered into a plea agreement with the Criminal Division pursuant to which UBS AG pleaded guilty to a one-count criminal information filed in the US District Court for the District of Connecticut charging UBS AG with one count of wire fraud in violation of 18 USC Sections 1343 and 2. Sentencing occurred on 5 January 2017. Under the plea agreement, UBS AG has paid a USD 203 million fine and is subject to a three-year term of probation starting on the sentencing date. The criminal information charges that, between approximately 2001 and 2010, UBS AG engaged in a scheme to defraud counterparties to interest rate derivatives transactions by manipulating benchmark interest rates, including Yen LIBOR. The

Criminal Division terminated the NPA based on its determination, in its sole discretion, that certain UBS AG employees committed criminal conduct that violated the NPA, including fraudulent and deceptive currency trading and sales practices in conducting certain foreign exchange market transactions with clients and collusion with other participants in certain foreign exchange markets.

We have ongoing obligations to cooperate with these authorities and to undertake certain remediation, including actions to improve UBS's processes and controls.

UBS has been granted conditional leniency or conditional immunity by the Antitrust Division of the DOJ (Antitrust Division) from prosecution for EUR / USD collusion and entered into a non-prosecution agreement covering other currency pairs. As a result, UBS AG will not be subject to prosecutions, fines or other sanctions for antitrust law violations by the Antitrust Division, subject to UBS AG's continuing cooperation. However, the conditional leniency and conditional immunity grant does not bar government agencies from asserting other claims and imposing sanctions against UBS AG, as evidenced by the settlements and ongoing investigations referred to above. UBS has also been granted conditional immunity by authorities in certain jurisdictions, including WEKO, in connection with potential competition law violations relating to foreign exchange and precious metals businesses and, as a result, will not be subject to prosecutions, fines or other sanctions for antitrust or competition law violations in those jurisdictions, subject to UBS AG's continuing cooperation as the leniency applicant.

Investigations relating to foreign exchange and precious metals matters by numerous authorities, including the CFTC, remain ongoing notwithstanding these resolutions.

Foreign exchange-related civil litigation: Putative class actions have been filed since November 2013 in US federal courts and in other jurisdictions against UBS and other banks on behalf of putative classes of persons who engaged in foreign currency transactions with any of the defendant banks. They allege collusion by the defendants and assert claims under the antitrust laws and for unjust enrichment. In 2015, additional putative class actions were filed in federal court in New York against UBS and other banks on behalf of a putative class of persons who entered into or held any foreign exchange futures contracts and options on foreign exchange futures contracts since 1 January 2003. The complaints assert claims under the Commodity Exchange Act (CEA) and the US antitrust laws. In 2015, a consolidated complaint was filed on behalf of both putative classes of persons covered by the US federal court class actions described above. UBS has entered into a settlement agreement that would resolve all of these US federal court class actions. The agreement, which has been preliminarily approved by the court and is subject to final court approval, requires, among other things, that UBS pay an aggregate of USD 141 million and provide cooperation to the settlement classes.

Note 20 Provisions and contingent liabilities (continued)

A putative class action has been filed in federal court in New York against UBS and other banks on behalf of participants, beneficiaries, and named fiduciaries of plans qualified under the Employee Retirement Income Security Act of 1974 (ERISA) for whom a defendant bank provided foreign currency exchange transactional services, exercised discretionary authority or discretionary control over management of such ERISA plan, or authorized or permitted the execution of any foreign currency exchange transactional services involving such plan's assets. The complaint asserts claims under ERISA. The parties filed a stipulation to dismiss the case with prejudice. The plaintiffs have appealed the dismissal.

In 2015, a putative class action was filed in federal court against UBS and numerous other banks on behalf of a putative class of persons and businesses in the US who directly purchased foreign currency from the defendants and their co-conspirators for their own end use. That action has been transferred to federal court in New York. Motions to dismiss are pending.

In 2016, a putative class action was filed in federal court in New York against UBS and numerous other banks on behalf of a putative class of persons and entities who had indirectly purchased FX instruments from a defendant or co-conspirator in the US. The complaint asserts claims under federal and state antitrust laws. Motions to dismiss will be filed.

In 2015, UBS was added to putative class actions pending against other banks in federal court in New York and other jurisdictions on behalf of putative classes of persons who had bought or sold physical precious metals and various precious metal products and derivatives. The complaints in these lawsuits assert claims under the antitrust laws and the CEA, and other claims. In October 2016, the court in New York granted UBS's motions to dismiss the putative class actions relating to gold and silver. Plaintiffs in those cases are seeking to amend their complaints to add new allegations about UBS. UBS's motion to dismiss the putative class action relating to platinum and palladium remains pending.

LIBOR and other benchmark-related regulatory matters: Numerous government agencies, including the SEC, the CFTC, the DOJ, the FCA, the SFO, the Monetary Authority of Singapore (MAS), the HKMA, FINMA, the various state attorneys general in the US and competition authorities in various jurisdictions have conducted or are continuing to conduct investigations regarding submissions with respect to LIBOR and other benchmark rates. These investigations focus on whether there were improper attempts by UBS, among others, either acting on our own or together with others, to manipulate LIBOR and other benchmark rates at certain times.

In 2012, UBS reached settlements with the FSA, the CFTC and the Criminal Division of the DOJ in connection with their investigations of benchmark interest rates. At the same time, FINMA issued an order concluding its formal proceedings with respect to UBS relating to benchmark interest rates. UBS has paid a total of approximately CHF 1.4 billion in fines and disgorgement, including GBP 160 million in fines to the FSA, USD 700 million in fines to the CFTC, USD 500 million in fines to the DOJ, and CHF 59 million in disgorgement to FINMA. UBS Securities Japan Co. Ltd. (UBSSJ) entered into a plea agreement with the DOJ under which it entered a plea to one count of wire fraud relating to the manipulation of certain benchmark interest rates, including Yen LIBOR. UBS entered into an NPA with the DOJ, which (along with the plea agreement) covered conduct beyond the scope of the conditional leniency / immunity grants described below, required UBS to pay the USD 500 million fine to the DOJ after the sentencing of UBSSJ and provided that any criminal penalties imposed on UBSSJ at sentencing be deducted from the USD 500 million fine. Under the NPA, we agreed, among other things, that for two years from 18 December 2012 UBS would not commit any US crime and we would advise DOJ of any potentially criminal conduct by UBS or any of its employees relating to violations of US laws concerning fraud or securities and commodities markets. The term of the NPA was extended by one year to 18 December 2015. In 2015, the Criminal Division terminated the NPA based on its determination, in its sole discretion, that certain UBS AG employees committed criminal conduct that violated the NPA.

In 2014, UBS reached a settlement with the European Commission (EC) regarding its investigation of bid-ask spreads in connection with Swiss franc interest rate derivatives and paid a EUR 12.7 million fine, which was reduced to this level based in part on UBS's cooperation with the EC. In December 2016, UBS reached a settlement with WEKO regarding its investigation of bid-ask spreads in connection with Swiss franc interest rate derivatives and received full immunity from fines. The MAS, HKMA and the Japan Financial Services Agency have also resolved investigations of UBS (and in some cases, other banks). We have ongoing obligations to cooperate with the authorities with whom we have reached resolutions and to undertake certain remediation with respect to benchmark interest rate submissions.

Investigations by the CFTC, ASIC and other governmental authorities remain ongoing notwithstanding these resolutions.

Note 20 Provisions and contingent liabilities (continued)

UBS has been granted conditional leniency or conditional immunity from authorities in certain jurisdictions, including the Antitrust Division of the DOJ and WEKO, in connection with potential antitrust or competition law violations related to submissions for Yen LIBOR and Euroyen TIBOR. As a result of these conditional grants, UBS will not be subject to prosecutions, fines or other sanctions for antitrust or competition law violations in the jurisdictions where we have conditional immunity in connection with the matters covered by the conditional grants, subject to our continuing cooperation as leniency applicant. However, since the Secretariat of WEKO has asserted that UBS does not qualify for full immunity, UBS has been unable to reach a settlement with WEKO, and therefore the investigation will continue. Furthermore, the conditional leniency and conditional immunity grants we have received do not bar government agencies from asserting other claims and imposing sanctions against us, as evidenced by the settlements and ongoing investigations referred to above. In addition, as a result of the conditional leniency agreement with the DOJ, we are eligible for a limit on liability to actual rather than treble damages were damages to be awarded in any civil antitrust action under US law based on conduct covered by the agreement and for relief from potential joint and several liability in connection with such civil antitrust action, subject to our satisfying the DOJ and the court presiding over the civil litigation of our cooperation. The conditional leniency and conditional immunity grants do not otherwise affect the ability of private parties to assert civil claims against us.

LIBOR and other benchmark-related civil litigation: A number of putative class actions and other actions are pending in the federal courts in New York against UBS and numerous other banks on behalf of parties who transacted in certain interest rate benchmark-based derivatives. Also pending in the US and in other jurisdictions are actions asserting losses related to various products whose interest rates were linked to LIBOR and other benchmarks, including adjustable rate mortgages, preferred and debt securities, bonds pledged as collateral, loans, depository accounts, investments and other interest-bearing instruments. All of the complaints allege manipulation, through various means, of various benchmark interest rates, including USD LIBOR, Euroyen TIBOR, Yen LIBOR, EURIBOR, CHF LIBOR, GBP LIBOR, USD ISDAFIX rates and other benchmark rates, and seek unspecified compensatory and other damages under varying legal theories.

In 2013, the US district court in the USD LIBOR action dismissed the federal antitrust and racketeering claims of certain USD LIBOR plaintiffs and a portion of their claims brought under the CEA and state common law. Certain plaintiffs appealed the decision to the Second Circuit, which, in May 2016, vacated the district court's ruling finding no antitrust injury and remanded the case back to the district court for a further determination on

whether plaintiffs have antitrust standing. In December 2016, the district court again dismissed plaintiffs' antitrust claims, this time for lack of personal jurisdiction over UBS and other foreign banks. In 2014, the court in one of the Euroyen TIBOR lawsuits dismissed certain of the plaintiff's claims, including federal antitrust claims. In 2015, the same court dismissed plaintiff's federal racketeering claims and affirmed its previous dismissal of plaintiff's antitrust claims. UBS and other defendants in other lawsuits including those related to EURIBOR, CHF LIBOR, GBP LIBOR and SIBOR have filed motions to dismiss. UBS has entered into an agreement with representatives of a class of bondholders to settle their USD LIBOR class action. The agreement is subject to court approval.

Since September 2014, putative class actions have been filed in federal court in New York and New Jersey against UBS and other financial institutions, among others, on behalf of parties who entered into interest rate derivative transactions linked to ISDAFIX. The complaints, which have since been consolidated into an amended complaint, allege that the defendants conspired to manipulate ISDAFIX rates from 1 January 2006 through January 2014, in violation of US antitrust laws and certain state laws, and seek unspecified compensatory damages, including treble damages. In March 2016, the court in the ISDAFIX action denied in substantial part defendants' motion to dismiss, holding that plaintiffs have stated Sherman Act, breach-of-contract and unjust-enrichment claims against defendants, including UBS AG.

Government bonds: Putative class actions have been filed in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. The complaints generally allege that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction. They assert claims under the antitrust laws and the CEA and for unjust enrichment. The cases have been consolidated in the SDNY. Following filing of these complaints, UBS and reportedly other banks are responding to investigations and requests for information from various authorities regarding US Treasury securities and other government bond trading practices. As a result of its review to date, UBS has taken appropriate action.

With respect to additional matters and jurisdictions not encompassed by the settlements and order referred to above, our balance sheet at 31 December 2016 reflected a provision in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

Note 20 Provisions and contingent liabilities (continued)

6. Swiss retrocessions

The Federal Supreme Court of Switzerland ruled in 2012, in a test case against UBS, that distribution fees paid to a firm for distributing third-party and intra-group investment funds and structured products must be disclosed and surrendered to clients who have entered into a discretionary mandate agreement with the firm, absent a valid waiver.

FINMA has issued a supervisory note to all Swiss banks in response to the Supreme Court decision. UBS has met the FINMA requirements and has notified all potentially affected clients.

The Supreme Court decision has resulted, and may continue to result, in a number of client requests for UBS to disclose and potentially surrender retrocessions. Client requests are assessed on a case-by-case basis. Considerations taken into account when assessing these cases include, among others, the existence of a discretionary mandate and whether or not the client documentation contained a valid waiver with respect to distribution fees.

Our balance sheet at 31 December 2016 reflected a provision with respect to matters described in this item 6 in an amount that UBS believes to be appropriate under the applicable accounting standard. The ultimate exposure will depend on client requests and the resolution thereof, factors that are difficult to predict and assess. Hence, as in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

7. Banco UBS Pactual tax indemnity

Pursuant to the 2009 sale of Banco UBS Pactual S.A. (Pactual) by UBS to BTG Investments, LP (BTG), BTG has submitted contractual indemnification claims that UBS estimates amount to approximately BRL 2.6 billion, including interest and penalties,

which is net of liabilities retained by BTG. The claims pertain principally to several tax assessments issued by the Brazilian tax authorities against Pactual relating to the period from December 2006 through March 2009, when UBS owned Pactual. These assessments are being challenged in administrative and judicial proceedings. The majority of these assessments relate to the deductibility of goodwill amortization in connection with UBS's 2006 acquisition of Pactual and payments made to Pactual employees through various profit-sharing plans. In 2015, an intermediate administrative court issued a decision that was largely in favor of the tax authority with respect to the goodwill amortization assessment. In May 2016, the highest level of the administrative court agreed to review this decision on a number of the significant issues.

8. Investigation of UBS's role in initial public offerings in Hong Kong

The Hong Kong Securities and Futures Commission (SFC) has been conducting investigations into UBS's role as a sponsor of certain initial public offerings listed on the Hong Kong Stock Exchange. In October 2016, the SFC informed UBS that it intends to commence action against UBS and certain UBS employees with respect to sponsorship work in those offerings. If such action is taken, there may be financial ramifications for UBS, including fines and obligations to pay investor compensation, and suspension of UBS's ability to provide corporate finance advisory services in Hong Kong for a period of time. On 16 January 2017, a writ was filed by the SFC with Hong Kong's High Court in which UBS is named as one of six defendants from whom the SFC is seeking compensation in an unspecified amount for losses incurred by certain shareholders of China Forestry Holdings Company Limited, for whom UBS acted as a sponsor in connection with their 2009 listing application.

Note 21 Other liabilities

<i>CHF million</i>	31.12.16	31.12.15
Prime brokerage payables ¹	31,973	45,306
Amounts due under unit-linked investment contracts	9,286	15,718
Compensation-related liabilities	5,256	5,122
<i>of which: accrued expenses</i>	2,367	2,827
<i>of which: other deferred compensation plans</i>	1,623	1,559
<i>of which: net defined benefit pension and post-employment liabilities²</i>	1,266	736
Third-party interest in consolidated investment funds	751	594
Settlement and clearing accounts	1,011	893
Current and deferred tax liabilities ³	911	810
VAT and other tax payables	487	446
Deferred income	168	210
Accrued interest expenses	1,571	1,438
Other accrued expenses	2,427	2,492
Liabilities of disposal group held for sale ⁴	5,213	235
Other	1,390	1,343
Total other liabilities	60,443	74,606

¹ Prime brokerage services include clearance, settlement, custody, financing and portfolio reporting services for corporate clients trading across multiple asset classes. Prime brokerage payables are mainly comprised of client securities financing and deposits. ² Refer to Note 26 for more information. ³ Refer to Note 8 for more information. ⁴ Refer to Note 30 for more information.

Additional information

Note 22 Fair value measurement

This Note provides fair value measurement information for both financial and non-financial instruments and is structured as follows:

- a) Valuation principles
- b) Valuation governance
- c) Fair value hierarchy
- d) Valuation adjustments
- e) Transfers between Level 1 and Level 2
- f) Level 3 instruments: valuation techniques and inputs
- g) Level 3 instruments: sensitivity to changes in unobservable input assumptions
- h) Level 3 instruments: movements during the period
- i) Financial instruments not measured at fair value

a) Valuation principles

Fair value is defined as the price that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market (or most advantageous market, in the absence of a principal market) as of the measurement date. In measuring fair value, UBS AG uses various valuation approaches and applies a hierarchy for prices and inputs that maximizes the use of observable market data, if available.

All financial and non-financial assets and liabilities measured or disclosed at fair value are categorized into one of three fair value hierarchy levels. In certain cases, the inputs used to measure fair value may fall within different levels of the fair value hierarchy. For disclosure purposes, the level in the hierarchy within which the instrument is classified in its entirety is based on the lowest level input that is significant to the position's fair value measurement:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2 – valuation techniques for which all significant inputs are, or are based on, observable market data; or
- Level 3 – valuation techniques for which significant inputs are not based on observable market data.

If available, fair values are determined using quoted prices in active markets for identical assets or liabilities. An active market is one in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing data on an ongoing basis. Assets and liabilities that are quoted and traded in an active market are valued at the currently quoted price multiplied by the number of units of the instrument held.

Where the market for a financial instrument or non-financial asset or liability is not active, fair value is established using a valuation technique, including pricing models. Valuation techniques involve the use of estimates, the extent of which depends on the complexity of the instrument and the availability

of market-based data. Valuation adjustments may be made to allow for additional factors, including model, liquidity, credit and funding risks, which are not explicitly captured within the valuation technique, but which would nevertheless be considered by market participants when establishing a price. The limitations inherent in a particular valuation technique are considered in the determination of an asset or liability's classification within the fair value hierarchy.

Many cash instruments and over-the-counter (OTC) derivative contracts have bid and offer prices that can be observed in the marketplace. Bid prices reflect the highest price that a party is willing to pay for an asset. Offer prices represent the lowest price that a party is willing to accept for an asset. In general, long positions are measured at a bid price and short positions at an offer price, reflecting the prices at which the instruments could be transferred under normal market conditions. Offsetting positions in the same financial instrument are marked at the mid-price within the bid-offer spread.

Generally, the unit of account for a financial instrument is the individual instrument, and UBS AG applies valuation adjustments at an individual instrument level, consistent with that unit of account. However, if certain conditions are met, UBS AG may estimate the fair value of a portfolio of financial assets and liabilities with substantially similar and offsetting risk exposures on the basis of the net open risks.

For transactions where the valuation technique used to measure fair value requires significant inputs that are not based on observable market data, the financial instrument is initially recognized at the transaction price. This initial recognition amount may differ from the fair value obtained using the valuation technique. Any such difference is deferred and not recognized in the income statement and referred to as deferred day-1 profit or loss.

→ Refer to Note 22d for more information

Note 22 Fair value measurement (continued)

b) Valuation governance

UBS AG's fair value measurement and model governance framework includes numerous controls and other procedural safeguards that are intended to maximize the quality of fair value measurements reported in the financial statements. New products and valuation techniques must be reviewed and approved by key stakeholders from risk and finance control functions. Responsibility for the ongoing measurement of financial and non-financial instruments at fair value resides with the business divisions. In carrying out their valuation responsibilities, the businesses are required to consider the availability and quality of external market data and to provide justification and rationale for their fair value estimates.

Fair value estimates are validated by risk and finance control functions, which are independent of the business divisions.

Independent price verification is performed by finance through benchmarking the business divisions' fair value estimates with observable market prices and other independent sources. Controls and governance are in place to ensure the quality of third-party pricing sources where used. For instruments where valuation models are used to determine fair value, independent valuation and model control groups within finance and risk evaluate UBS AG's models on a regular basis, including valuation and model input parameters as well as pricing. As a result of the valuation controls employed, valuation adjustments may be made to the business divisions' estimates of fair value to align with independent market data and the relevant accounting standard.

→ **Refer to Note 22d for more information**

Note 22 Fair value measurement (continued)

c) Fair value hierarchy

The table below provides the fair value hierarchy classification of financial and non-financial assets and liabilities measured at fair value. The narrative that follows describes the different product types, valuation techniques used in measuring their fair value, including significant valuation inputs and assumptions used, and the factors determining their classification within the fair value hierarchy.

Determination of fair values from quoted market prices or valuation techniques¹

CHF million	31.12.16				31.12.15			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets measured at fair value on a recurring basis								
Financial assets held for trading ²	76,046	14,377	1,689	92,112	96,388	21,946	2,070	120,405
of which:								
Government bills / bonds	10,500	1,319	0	11,820	12,911	3,277	5	16,193
Corporate and municipal bonds	58	6,722	591	7,371	232	8,108	698	9,038
Loans	0	1,356	681	2,037	0	1,769	816	2,585
Investment fund units	6,114	3,521	63	9,698	6,062	5,697	168	11,928
Asset-backed securities	0	470	215	685	0	958	201	1,159
Equity instruments	50,916	397	65	51,378	62,420	1,475	89	63,984
Financial assets for unit-linked investment contracts	8,459	591	74	9,123	14,764	663	93	15,519
Positive replacement values	434	155,428	2,549	158,411	545	164,025	2,865	167,435
of which:								
Interest rate contracts	8	57,703	278	57,988	1	74,443	88	74,531
Credit derivative contracts	0	2,562	1,313	3,875	0	5,384	1,272	6,656
Foreign exchange contracts	263	75,607	222	76,092	304	64,886	484	65,675
Equity / index contracts	1	17,274	729	18,003	2	15,938	996	16,936
Commodity contracts	0	2,269	8	2,277	0	3,363	25	3,388
Financial assets designated at fair value	39,641	23,304	2,079	65,024	170	2,338	3,301	5,808
of which:								
Government bills / bonds	39,439	4,361	0	43,799	4	0	0	4
Corporate and municipal bonds	15	16,860	0	16,875	0	0	0	0
Loans (including structured loans)	0	2,043	1,195	3,238	0	2,311	1,677	3,988
Structured reverse repurchase and securities borrowing agreements	0	40	644	684	0	40	1,510	1,550
Other	187	0	240	427	165	12	113	266
Financial assets available for sale	6,299	8,891	486	15,676	34,204	27,653	686	62,543
of which:								
Government bills / bonds	5,444	450	0	5,894	31,108	1,986	0	33,094
Corporate and municipal bonds	646	4,939	12	5,596	2,992	22,186	27	25,205
Investment fund units	0	51	126	177	0	64	139	202
Asset-backed securities	0	3,381	0	3,381	0	3,396	0	3,396
Equity instruments	204	71	336	611	103	21	517	641
Non-financial assets								
Precious metals and other physical commodities	4,583	0	0	4,583	3,670	0	0	3,670
Assets measured at fair value on a non-recurring basis								
Other assets ³	5,060	131	56	5,248	266	69	78	413
Total assets measured at fair value	132,064	202,132	6,860	341,056	135,242	216,037	9,001	360,280

Note 22 Fair value measurement (continued)

Determination of fair values from quoted market prices or valuation techniques (continued)¹

CHF million	31.12.16				31.12.15			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Liabilities measured at fair value on a recurring basis								
Trading portfolio liabilities	18,808	3,898	119	22,825	25,476	3,504	158	29,137
of which:								
Government bills / bonds	5,573	648	0	6,221	5,997	845	0	6,842
Corporate and municipal bonds	12	2,927	37	2,976	12	2,370	90	2,471
Investment fund units	484	91	20	595	666	52	20	738
Asset-backed securities	0	5	0	5	0	2	0	2
Equity instruments	12,740	227	62	13,028	18,802	235	47	19,084
Negative replacement values	539	149,255	4,016	153,810	640	158,494	3,296	162,430
of which:								
Interest rate contracts	12	51,990	475	52,476	2	67,225	326	67,553
Credit derivative contracts	0	3,269	1,538	4,807	0	5,350	1,303	6,653
Foreign exchange contracts	274	71,668	148	72,089	286	62,965	233	63,484
Equity / index contracts	1	20,254	1,854	22,109	1	19,722	1,433	21,156
Commodity contracts	0	2,040	1	2,041	0	3,222	0	3,222
Financial liabilities designated at fair value	2	44,007	11,008	55,017	1	52,321	10,673	62,995
of which:								
Issued debt instruments	0	40,242	9,688	49,930	0	47,197	9,337	56,534
Over-the-counter debt instruments	2	3,611	1,050	4,663	2	4,719	773	5,493
Structured repurchase agreements	0	130	266	395	0	293	556	849
Loan commitments and guarantees	0	25	5	29	0	113	7	119
Other liabilities – amounts due under unit-linked investment contracts	0	9,286	0	9,286	0	15,718	0	15,718
Liabilities measured at fair value on a non-recurring basis								
Other liabilities ³	0	5,213	0	5,213	0	235	0	235
Total liabilities measured at fair value	19,349	211,660	15,143	246,152	26,117	230,272	14,127	270,515

¹ Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. As of 31 December 2016, net bifurcated embedded derivative assets held at fair value, totaling CHF 50 million (of which CHF 58 million were net Level 2 assets and CHF 8 million net Level 2 liabilities), were recognized on the balance sheet within Due to customers and Debt issued. As of 31 December 2015, net bifurcated embedded derivative liabilities held at fair value, totaling CHF 130 million (of which CHF 106 million were net Level 2 assets and CHF 236 million net Level 2 liabilities), were recognized on the balance sheet within Debt issued. ² Financial assets held for trading do not include precious metals and other physical commodities. ³ Other assets and other liabilities primarily consist of assets held for sale as well as assets and liabilities of a disposal group held for sale, which are measured at the lower of their net carrying amount or fair value less costs to sell. Refer to Note 30 for more information.

Note 22 Fair value measurement (continued)

Valuation techniques

Valuation techniques are used to value positions for which a market price is not available from market sources. This includes certain less liquid debt and equity instruments, certain exchange-traded derivatives and all derivatives transacted in the OTC market. UBS AG uses widely recognized valuation techniques for determining the fair value of financial and non-financial instruments that are not actively traded and quoted. The most frequently applied valuation techniques include discounted value of expected cash flows, relative value and option pricing methodologies.

Discounted value of expected cash flows is a valuation technique that measures fair value using estimated expected future cash flows from assets or liabilities and then discounts these cash flows using a discount rate or discount margin that reflects the credit and / or funding spreads required by the market for instruments with similar risk and liquidity profiles to produce a present value. When using such valuation techniques, expected future cash flows are estimated using an observed or implied market price for the future cash flows or by using industry standard cash flow projection models. The discount factors within the calculation are generated using industry standard yield curve modeling techniques and models.

Relative value models measure fair value based on the market prices of equivalent or comparable assets or liabilities, making adjustments for differences between the characteristics of the observed instrument and the instrument being valued.

Option pricing models incorporate assumptions regarding the behavior of future price movements of an underlying referenced asset or assets to generate a probability-weighted future expected payoff for the option. The resulting probability-weighted expected payoff is then discounted using discount factors generated from industry standard yield curve modeling techniques and models. The option pricing model may be implemented using a closed-form analytical formula or other mathematical techniques (e.g., binomial tree or Monte Carlo simulation).

Where available, valuation techniques use market-observable assumptions and inputs. If such data is not available, inputs may be derived by reference to similar assets in active markets, from recent prices for comparable transactions or from other observable market data. In such cases, the inputs selected are based on historical experience and practice for similar or analogous instruments, derivation of input levels based on similar products with observable price levels and knowledge of current market conditions and valuation approaches.

For more complex instruments and instruments not traded in an active market, fair values may be estimated using a combination of observed transaction prices, consensus pricing services and relevant quotes. Consideration is given to the nature of the quotes (e.g., indicative or firm) and the relationship of recently evidenced market activity to the prices provided by consensus pricing services. UBS AG also uses internally

developed models, which are typically based on valuation methods and techniques recognized as standard within the industry.

Assumptions and inputs used in valuation techniques include benchmark interest rate curves, credit and funding spreads used in estimating discount rates, bond and equity prices, equity index prices, foreign exchange rates, levels of market volatility and correlation. Refer to Note 22f for more information. The discount curves used by UBS AG incorporate the funding and credit characteristics of the instruments to which they are applied.

Financial instruments excluding derivatives: product description, valuation and classification in the fair value hierarchy

Government bills and bonds

Product description: government bills and bonds include fixed-rate, floating-rate and inflation-linked bills and bonds issued by sovereign governments.

Valuation: these instruments are generally valued using prices obtained directly from the market. Instruments that cannot be priced directly using active market data are valued using discounted cash flow valuation techniques that incorporate market data for similar government instruments.

Fair value hierarchy: government bills and bonds are generally traded in active markets with prices that can be obtained directly from these markets, resulting in classification as Level 1, while the remaining positions are classified as Level 2.

Corporate and municipal bonds

Product description: corporate bonds include senior, junior and subordinated debt issued by corporate entities. Municipal bonds are issued by state and local governments. While most instruments are standard fixed- or floating-rate securities, some may have more complex coupon or embedded option features.

Valuation: corporate and municipal bonds are generally valued using prices obtained directly from the market for the security, or similar securities, adjusted for seniority, maturity and liquidity. When prices are not available, instruments are valued using discounted cash flow valuation techniques incorporating the credit spread of the issuer or similar issuers. For convertible bonds where no directly comparable price is available, issuances may be priced using a convertible bond model.

Fair value hierarchy: corporate and municipal bonds are generally classified as Level 1 or Level 2 depending on the depth of trading activity behind price sources. Level 3 instruments have no suitable pricing information available and also cannot be referenced to other securities issued by the same issuer. Therefore, such instruments are measured based on price levels for similar issuers adjusted for relative tenor and issuer quality.

Note 22 Fair value measurement (continued)

Traded loans and loans designated at fair value

Product description: these instruments include fixed-rate loans, corporate loans, recently originated commercial real estate loans and contingent lending transactions.

Valuation: loans are valued directly using market prices that reflect recent transactions or quoted dealer prices where available. Where no market price data are available, loans are valued using relative value benchmarking using pricing derived from debt instruments in comparable entities or different products in the same entity, or by using a credit default swap valuation technique, which requires inputs for credit spreads, credit recovery rates and interest rates. Recently originated commercial real estate loans are measured using a securitization approach based on rating agency guidelines. The valuation of the contingent lending transactions is dependent on actuarial mortality levels and actuarial life insurance policy lapse rates. Mortality and lapse rate assumptions are based on external actuarial estimations for large homogeneous pools, and contingencies are derived from a range relative to the actuarially expected amount.

Fair value hierarchy: instruments with suitably deep and liquid pricing information are classified as Level 2, while any positions requiring the use of valuation techniques, or for which the price sources have insufficient trading depth, are classified as Level 3.

Investment fund units

Product description: investment fund units are pools of assets, generally equity instruments and bonds, broken down to redeemable units.

Valuation: investment fund units are predominantly exchange-traded, with readily available quoted prices in liquid markets. Where market prices are not available, fair value may be measured using net asset values (NAV), taking into account any restrictions imposed upon redemption.

Fair value hierarchy: listed units are classified as Level 1, provided there is sufficient trading activity to justify active market classification, while other positions are classified as Level 2. Positions for which NAV is not available or which are not redeemable at the measurement date or shortly thereafter are classified as Level 3.

Asset-backed securities (ABS)

Product description: ABS include residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), other asset-backed securities (ABS) and collateralized debt obligations (CDO) and are instruments generally issued through the process of securitization of underlying interest-bearing assets.

Valuation: for liquid securities, the valuation process will use trade and price data, updated for movements in market levels between the time of trading and the time of valuation. Less liquid instruments are measured using discounted expected cash flows incorporating price data for instruments or indices with

similar risk profiles. Inputs to discounted expected cash flow techniques include asset prepayment rates, discount margin or discount yields, asset default rates and asset loss on default severity.

Fair value hierarchy: RMBS, CMBS and ABS are generally classified as Level 2. However, if significant inputs are unobservable, or if market or fundamental data are not available, they are classified as Level 3.

Equity instruments

Product description: equity instruments include stocks and shares, private equity positions and units held in hedge funds.

Valuation: listed equity instruments are generally valued using prices obtained directly from the market. Unlisted equity holdings, including private equity positions, are initially marked at their transaction price and are revalued when reliable evidence of price movement becomes available or when the position is deemed to be impaired. Fair value for units held in hedge funds is measured based on their published NAV, taking into account any restrictions imposed upon redemption.

Fair value hierarchy: the majority of equity securities are actively traded on public stock exchanges where quoted prices are readily and regularly available, resulting in Level 1 classification. Units held in hedge funds are classified as Level 2, except for positions for which published NAV is not available or which are not redeemable at the measurement date or shortly thereafter, in which case such positions are classified as Level 3.

Financial assets for unit-linked investment contracts

Product description: unit-linked investment contracts allow investors to invest in a pool of assets through issued investment units.

Valuation: the majority of assets are listed on exchanges and fair values are determined using quoted prices.

Fair value hierarchy: most assets are classified as Level 1 if actively traded, or Level 2 if trading is not active. However, instruments for which prices are not readily available are classified as Level 3.

Structured (reverse) repurchase agreements

Product description: structured (reverse) repurchase agreements are securities purchased under resale agreements and securities sold under repurchase agreements.

Valuation: these instruments are valued using discounted expected cash flow techniques. The discount rate applied is based on funding curves that are specific to the collateral eligibility terms for the contract in question.

Fair value hierarchy: collateral terms for these positions are not standard and therefore funding spread levels used for valuation purposes cannot be observed in the market. As a result, these positions are mostly classified as Level 3.

Note 22 Fair value measurement (continued)

Financial liabilities designated at fair value

Product description: debt instruments, primarily comprised of equity-, rates- and credit-linked issued notes, which are held at fair value under the fair value option. These instruments are tailored specifically to the holder's risk or investment appetite with structured coupons or payoffs.

Valuation: the risk management and the valuation approaches for these instruments are closely aligned with the equivalent derivatives business and the underlying risk, and the valuation techniques used for this component are the same as the relevant valuation techniques described below. For example, equity-linked notes should be referenced to equity / index contracts and credit-linked notes should be referenced to credit derivative contracts.

Fair value hierarchy: observability is closely aligned with the equivalent derivatives business and the underlying risk.

- Refer to Note 18 for more information on financial liabilities designated at fair value
- Refer to Note 22d for more information on own credit adjustments related to financial liabilities designated at fair value

Amounts due under unit-linked investment contracts

Product description: the financial liability represents the amounts due to unit holders.

Valuation: the fair values of investment contract liabilities are determined by reference to the fair value of the corresponding assets.

Fair value hierarchy: the liabilities themselves are not actively traded, but are mainly referenced to instruments that are actively traded and are therefore classified as Level 2.

Derivative instruments: product description, valuation and classification in the fair value hierarchy

The curves used for discounting expected cash flows in the valuation of collateralized derivatives reflect the funding terms associated with the relevant collateral arrangement for the instrument being valued. These collateral arrangements differ across counterparties with respect to the eligible currency and interest terms of the collateral. The majority of collateralized derivatives are measured using a discount curve that is based on funding rates derived from overnight interest in the cheapest eligible currency for the respective counterparty collateral agreement.

Uncollateralized and partially collateralized derivatives are discounted using the LIBOR (or equivalent) curve for the currency of the instrument. As described in Note 22d, the fair value of uncollateralized and partially collateralized derivatives is then adjusted by CVA, DVA and FVA as applicable, to reflect an estimation of the effect of counterparty credit risk, UBS AG's own credit risk and funding costs and benefits.

Interest rate contracts

Product description: interest rate swap contracts include interest rate swaps, basis swaps, cross-currency swaps, inflation swaps and interest rate forwards, often referred to as forward-rate agreements (FRA). Interest rate option contracts include caps and floors, swaptions, swaps with complex payoff profiles and other more complex interest rate options.

Valuation: interest rate swap contracts are valued by estimating future interest cash flows and discounting those cash flows using a rate that reflects the appropriate funding rate for the position being measured. The yield curves used to estimate future index levels and discount rates are generated using market standard yield curve models using interest rates associated with current market activity. The key inputs to the models are interest rate swap rates, FRA rates, short-term interest rate futures prices, basis swap spreads and inflation swap rates. Interest rate option contracts are valued using various market standard option models, using inputs that include interest rate yield curves, inflation curves, volatilities and correlations. The volatility and correlation inputs within the models are implied from market data based on market observed prices for standard option instruments trading within the market. Option models used to value more exotic products have a number of model parameter inputs that require calibration to enable the exotic model to price standard option instruments to the price levels observed in the market. When the maturity of the interest rate swap or option contract exceeds the term for which standard market quotes are observable for a significant input parameter, the contracts are valued by extrapolation from the last observable point using standard assumptions or by reference to another observable comparable input parameter to represent a suitable proxy for that portion of the term.

Fair value hierarchy: the majority of interest rate swaps are classified as Level 2 as the standard market contracts that form the inputs for yield curve models are generally traded in active and observable markets. Options are generally treated as Level 2 as the calibration process enables the model output to be validated to active market levels. Models calibrated in this way are then used to revalue the portfolio of both standard options as well as more exotic products. In most cases, there are active and observable markets for the standard market instruments that form the inputs for yield curve models as well as the financial instruments from which volatility and correlation inputs are derived. Exotic options for which appropriate volatility or correlation input levels cannot be implied from observable market data are classified as Level 3. Interest rate swap or option contracts are classified as Level 3 when the term exceeds standard market observable quotes.

Note 22 Fair value measurement (continued)

Credit derivative contracts

Product description: a credit derivative is a financial instrument that transfers credit risk related to a single underlying entity, a portfolio of underlying entities or a pool of securitized referenced assets. Credit derivative products include credit default swaps (CDS) on single names, indices, bespoke portfolios and securitized products, plus first to default swaps and certain total return swaps (TRS).

Valuation: credit derivative contracts are valued using industry standard models based primarily on market credit spreads, upfront pricing points and implied recovery rates. Where a derivative credit spread is not directly available it may be derived from the price of the reference cash bond. Correlation is an additional input for certain portfolio credit derivatives. Asset-backed credit derivatives are valued using a similar valuation technique to the underlying security with an adjustment to reflect the funding differences between cash and synthetic form. Inputs include prepayment rates, default rates, loss severity, discount margin / rate.

Fair value hierarchy classification: single entity and portfolio credit derivative contracts are classified as Level 2 when credit spreads, recovery rates and correlations are determined from actively traded observable market data. Where the underlying reference name(s) are not actively traded and the correlation cannot be directly mapped to actively traded tranche instruments, these contracts are classified as Level 3. Asset-backed credit derivatives follow the characteristics of the underlying security and are therefore distributed across Level 2 and Level 3.

Foreign exchange contracts

Product description: this includes open spot and forward foreign exchange (FX) contracts and OTC FX option contracts. OTC FX option contracts include standard call and put options, options with multiple exercise dates, path-dependent options, options with averaging features, options with discontinuous payoff characteristics, options on a number of underlying FX rates and multi-dimensional FX option contracts, which have a dependency on multiple FX pairs.

Valuation: open spot FX contracts are valued using the FX spot rate observed in the market. Forward FX contracts are valued using the FX spot rate adjusted for forward pricing points observed from standard market-based sources. OTC FX option contracts are valued using market standard option valuation models. The models used for shorter-dated options (i.e., maturities of five years or less) tend to be different than those used for longer-dated options because the models needed for longer-dated OTC FX contracts require additional consideration of interest rate and FX rate interdependency. Inputs to the option valuation models include spot FX rates, FX forward

points, FX volatilities, interest rate yield curves, interest rate volatilities and correlations. The inputs for volatility and correlation are implied through the calibration of observed prices for standard option contracts trading within the market. The valuation for multiple-dimensional FX options uses a multi-local volatility model, which is calibrated to the observed FX volatilities for all relevant FX pairs.

Fair value hierarchy: the markets for both FX spot and FX forward pricing points are both actively traded and observable and therefore such FX contracts are generally classified as Level 2. A significant proportion of OTC FX option contracts are classified as Level 2 as inputs are derived mostly from standard market contracts traded in active and observable markets. OTC FX option contracts classified as Level 3 include multiple-dimensional FX options and long-dated FX exotic option contracts where there is no active market from which to derive volatility or correlation inputs. The inputs used to value these OTC FX option contracts are calculated using consensus pricing services without an underlying principal market, historical asset prices or by extrapolation.

Equity / index contracts

Product description: equity / index contracts are equity forward contracts and equity option contracts. Equity option contracts include market standard single or basket stock or index call and put options as well as equity option contracts with more complex features.

Valuation: equity forward contracts have a single stock or index underlying and are valued using market standard models. The key inputs to the models are stock prices, estimated dividend rates and equity funding rates (which are implied from prices of forward contracts observed in the market). Estimated cash flows are then discounted using market standard discounted cash flow models using a rate that reflects the appropriate funding rate for that portion of the portfolio. When no market data is available for the instrument maturity, they are valued by extrapolation of available data, use of historical dividend data, or use of data for a related equity. Equity option contracts are valued using market standard models that estimate the equity forward level as described for equity forward contracts and incorporate inputs for stock volatility and for correlation between stocks within a basket. The probability-weighted expected option payoff generated is then discounted using market standard discounted cash flow models using a rate that reflects the appropriate funding rate for that portion of the portfolio. When volatility, forward or correlation inputs are not available, they are valued using extrapolation of available data, historical dividend, correlation or volatility data, or the equivalent data for a related equity.

Note 22 Fair value measurement (continued)

Fair value hierarchy: as inputs are derived mostly from standard market contracts traded in active and observable markets, a significant proportion of equity forward contracts are classified as Level 2. Equity option positions for which inputs are derived from standard market contracts traded in active and observable markets are also classified as Level 2. Level 3 positions are those for which volatility, forward or correlation inputs are not observable.

Commodity contracts

Product description: commodity derivative contracts include forward, swap and option contracts on individual commodities and on commodity indices.

Valuation: commodity forward and swap contracts are measured using market standard models that use market

forward levels on standard instruments. Commodity option contracts are measured using market standard option models that estimate the commodity forward level as described for commodity forward and swap contracts, incorporating inputs for the volatility of the underlying index or commodity. For commodity options on baskets of commodities or bespoke commodity indices, the valuation technique also incorporates inputs for the correlation between different commodities or commodity indices.

Fair value hierarchy: individual commodity contracts are typically classified as Level 2 because active forward and volatility market data are available.

→ Refer to Note 12 for more information on derivative instruments

d) Valuation adjustments

The output of a valuation technique is always an estimate of a fair value that cannot be measured with complete certainty. As a result, valuations are adjusted, where appropriate and when such factors would be considered by market participants in estimating fair value, to reflect close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors. Valuation adjustments are an important component of fair value for assets and liabilities that are measured using valuation techniques. Such adjustments are applied to reflect uncertainties within the fair value measurement process, to adjust for an identified model simplification or to incorporate an aspect of fair value that requires an overall portfolio assessment rather than an evaluation based on an individual instrument level characteristic.

Day-1 reserves

For new transactions where the valuation technique used to measure fair value requires significant inputs that are not based on observable market data, the financial instrument is initially

recognized at the transaction price. The transaction price may differ from the fair value obtained using a valuation technique where any such difference is deferred and not initially recognized in the income statement. These day-1 profit or loss reserves are reflected, where appropriate, as valuation adjustments.

The table below summarizes the changes in deferred day-1 profit or loss reserves during the respective period.

Deferred day-1 profit or loss related to financial instruments other than financial assets available for sale is released into *Net trading income* when pricing of equivalent products or the underlying parameters become observable or when the transaction is closed out.

Deferred day-1 profit or loss related to financial assets available for sale is released into *Other comprehensive income* when pricing of equivalent products or the underlying parameters become observable and is released into *Other income* when the assets are sold.

Deferred day-1 profit or loss

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Balance at the beginning of the year	421	480	486
Profit / (loss) deferred on new transactions	254	268	344
(Profit) / loss recognized in the income statement	(290)	(321)	(384)
(Profit) / loss recognized in other comprehensive income	(23)		
Foreign currency translation	9	(6)	35
Balance at the end of the year	371	421	480

Note 22 Fair value measurement (continued)

Own credit

In addition to considering the valuation of the derivative risk component, the valuation of financial liabilities designated at fair value also requires consideration of the funded component and specifically the own credit component of fair value. Own credit risk is reflected in the valuation of UBS AG's fair value option liabilities where this component is considered relevant for valuation purposes by UBS AG's counterparties and other market participants. However, own credit risk is not reflected in the valuation of UBS AG's liabilities that are fully collateralized or for other obligations for which it is established market practice not to include an own credit component.

The own credit presentation requirements of IFRS 9, *Financial Instruments*, were adopted as of 1 January 2016. From this date onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained Earnings*. As UBS AG does not hedge changes in own credit arising on financial liabilities designated at fair value, presenting own credit within *Other comprehensive income* does not create or increase an accounting mismatch in the income statement. The unrealized and any realized own credit

recognized in *Other comprehensive income* will not be reclassified to the income statement in future periods. Comparative period information was not restated.

Own credit is estimated using an own credit adjustment curve (OCA), which incorporates observable market data, including market-observed secondary prices for UBS AG senior debt, UBS AG credit default swap (CDS) spreads and senior debt curves of peers. The table below summarizes the effects of own credit adjustments related to financial liabilities designated at fair value. The change in unrealized own credit for the period ended consists of changes in fair value that are attributable to the change in UBS AG's credit spreads, as well as the effect of changes in fair values attributable to factors other than credit spreads, such as redemptions, effects from time decay and changes in interest and other market rates. Realized own credit is recognized when an instrument with an associated unrealized own credit adjustment is repurchased prior to the contractual maturity date. Life-to-date amounts reflect the cumulative unrealized change since initial recognition.

→ Refer to Note 18 for more information on financial liabilities designated at fair value

Own credit adjustments on financial liabilities designated at fair value

	For the year ended		
	Included in Other comprehensive income	Included in Net trading income	
CHF million	31.12.16	31.12.15	31.12.14
Recognized during the year:			
Realized gain / (loss)	18		
Unrealized gain / (loss)	(138)	553	292
Total gain / (loss), before tax	(120)		
		As of	
CHF million	31.12.16	31.12.15	31.12.14
Recognized on the balance sheet as of the end of the year:			
Unrealized life-to-date gain / (loss)	141	287	(302)

Note 22 Fair value measurement (continued)

Credit valuation adjustments

In order to measure the fair value of OTC derivative instruments, including funded derivative instruments which are classified as *Financial assets designated at fair value*, credit valuation adjustments (CVA) are necessary to reflect the credit risk of the counterparty inherent in these instruments. This amount represents the estimated fair value of protection required to hedge the counterparty credit risk of such instruments. A CVA is determined for each counterparty, considering all exposures to that counterparty, and is dependent on the expected future value of exposures, default probabilities and recovery rates, applicable collateral or netting arrangements, break clauses and other contractual factors.

Funding valuation adjustments

Funding valuation adjustments (FVA) reflect the costs and benefits of funding associated with uncollateralized and partially collateralized derivative receivables and payables and are calculated as the valuation effect from moving the discounting of the uncollateralized derivative cash flows from LIBOR to OCA using the CVA framework.

An FVA is also applied to collateralized derivative assets in cases where the collateral cannot be sold or pledged.

Debit valuation adjustments

A debit valuation adjustment (DVA) is estimated to incorporate own credit in the valuation of derivatives, effectively consistent with the CVA framework. DVA is determined for each counterparty, considering all exposures with that counterparty

and taking into account collateral netting agreements, expected future mark-to-market movements and UBS AG's credit default spreads.

Other valuation adjustments

Instruments that are measured as part of a portfolio of combined long and short positions are valued at mid-market levels to ensure consistent valuation of the long and short component risks. A liquidity valuation adjustment is then made to the overall net long or short exposure to move the fair value to bid or offer as appropriate, reflecting current levels of market liquidity. The bid-offer spreads used in the calculation of this valuation adjustment are obtained from market transactions and other relevant sources and are updated periodically.

Uncertainties associated with the use of model-based valuations are incorporated into the measurement of fair value through the use of model reserves. These reserves reflect the amounts that UBS AG estimates should be deducted from valuations produced directly by models to incorporate uncertainties in the relevant modeling assumptions, in the model and market inputs used, or in the calibration of the model output to adjust for known model deficiencies. In arriving at these estimates, UBS AG considers a range of market practices, including how it believes market participants would assess these uncertainties. Model reserves are reassessed periodically in light of data from market transactions, consensus pricing services and other relevant sources.

Valuation adjustments on financial instruments

	As of	
<i>Life-to-date gain / (loss), CHF million</i>	31.12.16	31.12.15
Credit valuation adjustments¹	(216)	(309)
Funding valuation adjustments	(106)	(160)
Debit valuation adjustments	5	47
Other valuation adjustments	(713)	(810)
<i>of which: liquidity</i>	(439)	(491)
<i>of which: model uncertainty</i>	(274)	(319)

¹ Amounts do not include reserves against defaulted counterparties.

Note 22 Fair value measurement (continued)

e) Transfers between Level 1 and Level 2

The amounts provided below reflect transfers between Level 1 and Level 2 for instruments that were held for the entire reporting period.

Assets totaling approximately CHF 0.2 billion, which were mainly comprised of financial assets held for trading, and liabilities totaling approximately CHF 0.1 billion, which were primarily comprised of financial liabilities held for trading, were transferred from Level 2 to Level 1 during 2016, generally due to increased levels of trading activity observed within the market.

Assets totaling approximately CHF 0.4 billion, which were mainly comprised of financial assets available for sale, largely corporate and municipal bonds, and financial assets held for trading, predominantly equity instruments and corporate and municipal bonds, were transferred from Level 1 to Level 2 during 2016, generally due to diminished levels of trading activity observed within the market. Transfers of financial liabilities from Level 1 to Level 2 during 2016 were not significant.

f) Level 3 instruments: valuation techniques and inputs

The table below presents material Level 3 assets and liabilities together with the valuation techniques used to measure fair value, the significant inputs used in the valuation technique that are considered unobservable and a range of values for those unobservable inputs.

The range of values represents the highest and lowest level input used in the valuation techniques. Therefore, the range does not reflect the level of uncertainty regarding a particular

input, but rather the different underlying characteristics of the relevant assets and liabilities. The ranges will therefore vary from period to period and parameter to parameter based on characteristics of the instruments held at each balance sheet date. Further, the ranges of unobservable inputs may differ across other financial institutions due to the diversity of the products in each firm's inventory.

Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities

CHF billion	Fair value				Valuation technique(s)	Significant unobservable input(s) ¹	Range of inputs						unit ¹
	Assets		Liabilities				31.12.16			31.12.15			
	31.12.16	31.12.15	31.12.16	31.12.15			low	high	weighted average ²	low	high	weighted average ²	
Financial assets held for trading / Trading portfolio liabilities, Financial assets / liabilities designated at fair value and Financial assets available for sale													
Corporate and municipal bonds	0.6	0.7	0.0	0.1	Relative value to market comparable	Bond price equivalent	0	128	88	0	134	94	points
Traded loans, loans designated at fair value, loan commitments and guarantees	2.0	2.6	0.0	0.0	Relative value to market comparable	Loan price equivalent	39	103	94	65	100	93	points
					Discounted expected cash flows	Credit spread	71	554		30	252		basis points
					Market comparable and securitization model	Discount margin	0	16	2	1	14	2	%
Equity instruments ³	0.4	0.6	0.1	0.0	Relative value to market comparable	Price							
Structured (reverse) repurchase agreements	0.6	1.5	0.3	0.6	Discounted expected cash flows	Funding spread	15	195		18	183		basis points
Issued and OTC debt instruments ⁴			10.7	10.1									

Note 22 Fair value measurement (continued)

Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities (continued)

CHF billion	Fair value				Valuation technique(s)	Significant unobservable input(s) ¹	Range of inputs						unit ¹
	Assets		Liabilities				31.12.16			31.12.15			
	31.12.16	31.12.15	31.12.16	31.12.15			low	high	weighted average ²	low	high	weighted average ²	
Replacement values													
Interest rate contracts	0.3	0.1	0.5	0.3	Option model	Volatility of interest rates	26	176		16	130		%
						Rate-to-rate correlation	84	94		84	94		%
						Intra-curve correlation	36	94		36	94		%
					Discounted expected cash flows	Constant prepayment rate ⁵				0	3		%
					Discounted expected cash flow based on modeled defaults and recoveries								basis points
Credit derivative contracts	1.3	1.3	1.5	1.3		Credit spreads	0	791		1	1,163		%
						Upfront price points	1	13		8	25		%
						Recovery rates	0	50		0	95		%
						Credit index correlation	10	85		10	85		%
						Discount margin	(1)	68		1	72		%
						Credit pair correlation	59	100		57	94		%
					Discounted cash flow projection on underlying bond	Constant prepayment rate	1	15		0	15		%
						Constant default rate	1	8		0	9		%
						Loss severity	40	100		0	100		%
						Discount margin	0	11		1	15		%
						Bond price equivalent	3	100		0	104		points
Equity / index contracts	0.7	1.0	1.9	1.4	Option model	Equity dividend yields	0	15		0	57		%
						Volatility of equity stocks, equity and other indices	0	150		0	143		%
						Equity-to-FX correlation	(45)	82		(44)	82		%
						Equity-to-equity correlation	12	98		3	99		%

¹ The ranges of significant unobservable inputs are represented in points, percentages and basis points. Points are a percentage of par. For example, 100 points would be 100% of par. ² Weighted averages are provided for non-derivative financial instruments and were calculated by weighting inputs based on the fair values of the respective instruments. Weighted averages are not provided for inputs related to derivative contracts as this would not be meaningful. ³ The range of inputs is not disclosed due to the dispersion of possible values given the diverse nature of the investments. ⁴ Valuation techniques, significant unobservable inputs and the respective input ranges for issued debt instruments and OTC debt instruments are the same as the equivalent derivative or structured financing instruments presented elsewhere in this table. ⁵ The range of inputs is not disclosed as of 31 December 2016 because this unobservable input parameter was not significant to the respective valuation technique as of that date.

Note 22 Fair value measurement (continued)

Significant unobservable inputs in Level 3 positions

This section discusses the significant unobservable inputs used in the valuation of Level 3 instruments and assesses the potential effect that a change in each unobservable input in isolation may have on a fair value measurement, including information to facilitate an understanding of factors that give rise to the input ranges shown. Relationships between observable and unobservable inputs have not been included in the summary below.

Bond price equivalent

Where market prices are not available for a bond, fair value is measured by comparison with observable pricing data from similar instruments. Factors considered when selecting comparable instruments include credit quality, maturity and industry of the issuer. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield (either as an outright yield or as a spread to LIBOR). Bond prices are expressed as points of the nominal, where 100 represents a fair value equal to the nominal value (i.e., par).

For corporate and municipal bonds, the range represents the range of prices from reference issuances used in determining fair value. Bonds priced at 0 are distressed to the point that no recovery is expected, while prices significantly in excess of 100 or par relate to inflation-linked or structured issuances that pay a coupon in excess of the market benchmark as of the measurement date.

For credit derivatives, the bond price range represents the range of prices used for reference instruments that are typically converted to an equivalent yield or credit spread as part of the valuation process.

Loan price equivalent

Where market prices are not available for a traded loan, fair value is measured by comparison with observable pricing data for similar instruments. Factors considered when selecting comparable instruments include industry segment, collateral quality, maturity and issuer-specific covenants. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield. The range represents the range of prices derived from reference issuances of a similar credit quality used in measuring fair value for loans classified as Level 3. Loans priced at 0 are distressed to the point that no recovery is expected, while a current price of 100 represents a loan that is expected to be repaid in full.

Credit spread

Valuation models for many credit derivatives require an input for the credit spread, which is a reflection of the credit quality of the associated referenced underlying. The credit spread of a particular security is quoted in relation to the yield on a

benchmark security or reference rate, typically either US Treasury or LIBOR, and is generally expressed in terms of basis points. An increase / (decrease) in credit spread will increase / (decrease) the value of credit protection offered by CDS and other credit derivative products. The income statement effect from such changes depends on the nature and direction of the positions held. Credit spreads may be negative where the asset is more creditworthy than the benchmark against which the spread is calculated. A wider credit spread represents decreasing creditworthiness. The ranges represents a diverse set of underlyings, with the lower end of the range representing credits of the highest quality (e.g., approximating the risk of LIBOR) and the upper end of the range representing greater levels of credit risk.

Discount margin (DM)

The DM spread represents the discount rates used to present value cash flows of an asset to reflect the market return required for uncertainty in the estimated cash flows. DM spreads are a rate or rates applied on top of a floating index (e.g., LIBOR) to discount expected cash flows. Generally, a decrease / (increase) in the unobservable input in isolation would result in a significantly higher / (lower) fair value.

The different ranges represent the different discount rates across loans and credit derivatives. The high end of the range relates to securities that are priced very low within the market relative to the expected cash flow schedule. This indicates that the market is pricing an increased risk of credit loss into the security that is greater than what is being captured by the expected cash flow generation process. The low ends of the ranges are typical of funding rates on better quality instruments.

Funding spread

Structured financing transactions are valued using synthetic funding curves that best represent the assets that are pledged as collateral for the transactions. They are not representative of where UBS AG can fund itself on an unsecured basis, but provide an estimate of where UBS AG can source and deploy secured funding with counterparties for a given type of collateral. The funding spreads are expressed in terms of basis points over or under LIBOR, and if funding spreads widen, this increases the effect of discounting.

A small proportion of structured debt instruments and non-structured fixed-rate bonds within financial liabilities designated at fair value had an exposure to funding spreads that was longer in duration than the actively traded market.

Note 22 Fair value measurement (continued)

Volatility

Volatility measures the variability of future prices for a particular instrument and is generally expressed as a percentage, where a higher number reflects a more volatile instrument for which future price movements are more likely to occur. The minimum level of volatility is 0% and there is no theoretical maximum. Volatility is a key input into option models, where it is used to derive a probability-based distribution of future prices for the underlying instrument. The effect of volatility on individual positions within the portfolio is driven primarily by whether the option contract is a long or short position. In most cases, the fair value of an option increases as a result of an increase in volatility and is reduced by a decrease in volatility. Generally, volatility used in the measurement of fair value is derived from active market option prices (referred to as implied volatility). A key feature of implied volatility is the volatility “smile” or “skew,” which represents the effect of pricing options of different option strikes at different implied volatility levels.

Correlation

Correlation measures the inter-relationship between the movements of two variables. It is expressed as a percentage between –100% and +100%, where +100% represents perfectly correlated variables (meaning a movement of one variable is associated with a movement of the other variable in the same direction), and –100% implies the variables are inversely correlated (meaning a movement of one variable is associated with a movement of the other variable in the opposite direction). The effect of correlation on the measurement of fair value depends on the specific terms of the instruments being valued, due to the range of different payoff features within such instruments.

Rate-to-rate correlation is the correlation between interest rates of two separate currencies. Intra-curve correlation represents the correlation between different tenor points of the same yield curve. Credit index correlation reflects the implied correlation derived from different indices across different parts of the benchmark index capital structure. The input is particularly important for bespoke index tranches. Credit pair correlation is particularly important for first to default credit structures. Equity-to-FX correlation is important for equity options based on a currency different than the currency of the underlying stock. Equity-to-equity correlation is particularly important for complex options that incorporate, in some manner, different equities in the projected payoff. The closer the correlation is to 100%, the more related one equity is to another. For example, equities with a very high correlation could be from different parts of the same corporate structure.

Constant prepayment rate

A prepayment rate represents the amount of unscheduled principal repayment for a pool of loans. The prepayment estimate is based on a number of factors, such as historical prepayment rates for repaid and existing loans with similar characteristics and the future economic outlook, considering factors including, but not limited to, future interest rates. In general, a significant increase / (decrease) in this unobservable input in isolation would result in a significantly higher / (lower) fair value for bonds trading at a discount. For bonds trading at a premium the reverse would apply, with a decrease in fair value when the constant prepayment rate increases. However, in certain cases the effect of a change in prepayment speed on instrument price is more complicated and depends on both the precise terms of the securitization and the position of the instrument within the securitization capital structure.

The range represents the input assumption for credit derivatives on asset-backed securities. Securities with an input of 0% typically reflect no current prepayment behavior with respect to the underlying collateral, and with no expectation of this changing in the immediate future, while the high range relates to securities that are currently experiencing high prepayments. Different classes of asset-backed securities typically show different ranges of prepayment characteristics depending on a combination of factors, including the borrowers’ ability to refinance, prevailing refinancing rates, and the quality or characteristics of the underlying loan collateral pools.

Upfront price points

These are a component in the price quotation of credit derivative contracts, whereby the overall fair value price level is split between the credit spread and a component that is quoted and settled upfront on transacting a new contract. This latter component is referred to as upfront price points and represents the difference between the credit spread paid as protection premium on a current contract versus a small number of standard contracts defined by the market. Distressed credit names frequently trade and quote CDS protection only in upfront points rather than as a running credit spread. An increase / (decrease) in upfront points will increase / (decrease) the value of credit protection offered by CDS and other credit derivative products. The effect of increases or decreases in upfront price points depends on the nature and direction of the positions held. Upfront price points may be negative where a contract is quoting for a narrower premium than the market standard, but are generally positive, reflecting an increase in credit premium required by the market as creditworthiness deteriorates.

Note 22 Fair value measurement (continued)

Loss severity / recovery rate

The projected loss severity / recovery rate reflects the estimated loss that will be realized given expected defaults. Loss severity is generally applied to collateral within asset-backed securities while the recovery rate is the analogous pricing input for corporate or sovereign credits. Recovery is the reverse of loss severity, so a 100% recovery rate is the equivalent of a 0% loss severity. Increases in loss severity levels / decreases in recovery rates will result in lower expected cash flows into the structure upon the default of the instruments. In general, a significant decrease / (increase) in the loss severity in isolation would result in significantly higher / (lower) fair value for the respective asset-backed securities. The effect of a change in recovery rate on a credit derivative position will depend on whether credit protection has been bought or sold.

Loss severity is ultimately driven by the value recoverable from collateral held after foreclosure occurs relative to the loan principal and possibly unpaid interest accrued at that point. For credit derivatives, the loss severity range applies to derivatives on asset-backed securities. The recovery rate range represents the range of expected recovery levels on credit derivative contracts within the Level 3 portfolio.

The volatility of interest rates reflects the range of unobservable volatilities across different currencies and related underlying interest rate levels. Volatilities of low interest rates tend to be much higher than volatilities of high interest rates. In addition, different currencies may have significantly different implied volatilities. The volatility of equity stocks, equity and other indices reflects the range of underlying stock volatilities.

Constant default rate (CDR)

The CDR represents the percentage of outstanding principal balances in the pool that are projected to default and liquidate and is the annualized rate of default for a group of mortgages or loans. The CDR estimate is based on a number of factors, such as collateral delinquency rates in the pool and the future economic outlook. In general, a significant increase / (decrease) in this unobservable input in isolation would result in significantly lower / (higher) cash flows for the deal (and thus lower / (higher) valuations). However, different instruments within the capital structure can react differently to changes in the CDR. Generally, subordinated bonds will decrease in value as CDR increases, but for well protected senior bonds an increase in CDR may cause an increase in price. In addition, the presence of a guarantor wrap on the collateral pool of a security may result in notes at the junior end of the capital structure experiencing a price increase with an increase in the default rate.

The range represents the expected default percentage across the individual instruments' underlying collateral pools.

Equity dividend yields

The derivation of a forward price for an individual stock or index is important for measuring fair value for forward or swap contracts and for measuring fair value using option pricing models. The relationship between the current stock price and the forward price is based on a combination of expected future dividend levels and payment timings, and, to a lesser extent, the relevant funding rates applicable to the stock in question. Dividend yields are generally expressed as an annualized percentage of the share price with the lowest limit of 0% representing a stock that is not expected to pay any dividend. The dividend yield and timing represents the most significant parameter in determining fair value for instruments that are sensitive to an equity forward price.

Note 22 Fair value measurement (continued)

g) Level 3 instruments: sensitivity to changes in unobservable input assumptions

The table below summarizes those financial assets and liabilities classified as Level 3 for which a change in one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly, and the estimated effect thereof.

The table shown presents the favorable and unfavorable effects for each class of financial assets and liabilities for which the potential change in fair value is considered significant. The sensitivity data presented represent an estimation of valuation uncertainty based on reasonably possible alternative values for Level 3 inputs at the balance sheet date and do not represent the estimated effect of stress scenarios. Typically, these financial assets and liabilities are sensitive to a combination of inputs from Levels 1–3. Although well-defined interdependencies may exist between Levels 1–2 and Level 3 parameters (e.g., between interest rates, which are generally Level 1 or Level 2, and prepayments, which are generally Level 3), these have not been incorporated in the table. Further, direct inter-relationships between the Level 3 parameters discussed below are not a significant element of the valuation uncertainty.

Sensitivity data are estimated using a number of techniques, including the estimation of price dispersion among different market participants, variation in modeling approaches and

reasonably possible changes to assumptions used within the fair value measurement process. The sensitivity ranges are not always symmetrical around the fair values as the inputs used in valuations are not always precisely in the middle of the favorable and unfavorable range.

Sensitivity data are determined at a product or parameter level and then aggregated assuming no diversification benefit. The calculated sensitivity is applied to both the outright position and any related Level 3 hedge. The main interdependencies across different Level 3 products to a single unobservable input parameter have been included in the basis of netting exposures within the calculation. Aggregation without allowing for diversification involves the simple summation of individual results with the total sensitivity, therefore representing the effect of all unobservable inputs which, if moved to a reasonably possible favorable or unfavorable level at the same time, would result in a significant change in the valuation. Diversification would incorporate estimated correlations across different sensitivity results and, as such, would result in an overall sensitivity that would be less than the sum of the individual component sensitivities. UBS AG believes that, while there are diversification benefits within the portfolios representing these sensitivity numbers, they are not significant to this analysis.

Sensitivity of fair value measurements to changes in unobservable input assumptions

	31.12.16		31.12.15	
	Favorable changes ¹	Unfavorable changes ¹	Favorable changes ¹	Unfavorable changes ¹
<i>CHF million</i>				
Corporate and municipal bonds	34	(39)	24	(25)
Traded loans, loans designated at fair value, loan commitments and guarantees	82	(10)	88	(28)
Equity instruments	67	(47)	166	(74)
Interest rate derivative contracts, net	41	(42)	107	(67)
Credit derivative contracts, net	131	(183)	174	(196)
Foreign exchange derivative contracts, net	17	(8)	33	(28)
Equity / index derivative contracts, net	63	(63)	61	(57)
Issued debt instruments	96	(93)	136	(146)
Other	29	(31)	20	(20)
Total	560	(517)	809	(640)

¹ Of the total favorable changes, CHF 75 million as of 31 December 2016 (31 December 2015: CHF 164 million) related to financial assets available for sale. Of the total unfavorable changes, CHF 55 million as of 31 December 2016 (31 December 2015: CHF 71 million) related to financial assets available for sale.

Note 22 Fair value measurement (continued)

h) Level 3 instruments: movements during the period

Significant changes in Level 3 instruments

The table on the following pages presents additional information about Level 3 assets and liabilities measured at fair value on a recurring basis. Level 3 assets and liabilities may be hedged with instruments classified as Level 1 or Level 2 in the fair value hierarchy and, as a result, realized and unrealized gains and losses included in the table may not include the effect of related hedging activity. Furthermore, the realized and unrealized gains and losses presented within the table are not limited solely to those arising from Level 3 inputs, as valuations are generally derived from both observable and unobservable parameters.

Assets and liabilities transferred into or out of Level 3 are presented as if those assets or liabilities had been transferred at the beginning of the year.

Assets transferred into and out of Level 3 totaled CHF 3.5 billion and CHF 0.8 billion, respectively. Transfers into Level 3 were primarily comprised of traded loans and interest rate

contracts, due to decreased observability of the respective credit spread and rates volatility inputs. Transfers out of Level 3 were primarily comprised of traded loans and equity / index contracts, reflecting increased observability of the respective credit spread and equity volatility inputs.

Liabilities transferred into and out of Level 3 totaled CHF 2.2 billion and CHF 3.5 billion, respectively. Transfers into Level 3 were primarily comprised of equity-linked issued debt instruments and interest rate contracts, due to decreased observability of the respective equity and rates volatility inputs used to determine the fair value of the options embedded in these structures. Transfers out of Level 3 were primarily comprised of equity-linked issued debt instruments and fixed-rate issued debt instruments resulting from changes in the availability of the observable equity and rates volatility inputs used to determine the fair value of the options embedded in these structures.

Note 22 Fair value measurement (continued)

Movements of Level 3 instruments

CHF billion	Balance as of 31 December 2014	Total gains / losses included in comprehensive income			Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation
		Net interest income, net trading income and other income	of which: related to Level 3 instruments held at the end of the reporting period	Other compreh ensive income							
Financial assets held for trading	3.5	(0.2)	(0.4)		0.7	(7.6)	5.4	0.0	0.9	(0.5)	(0.1)
of which:											
Corporate and municipal bonds	1.4	0.0	0.0		0.5	(1.0)	0.0	0.0	0.1	(0.1)	(0.1)
Loans	1.1	(0.1)	(0.3)		0.1	(5.5)	5.4	0.0	0.2	(0.3)	0.0
Asset-backed securities	0.6	0.0	0.0		0.1	(0.6)	0.0	0.0	0.2	(0.1)	0.0
Other	0.5	(0.1)	(0.1)		0.1	(0.5)	0.0	0.0	0.4	0.0	0.0
Financial assets designated at fair value	3.5	0.0	0.0		0.0	0.0	0.8	(1.3)	0.8	(0.4)	(0.1)
of which:											
Loans (including structured loans)	1.0	(0.1)	(0.1)		0.0	0.0	0.7	(0.2)	0.8	(0.4)	0.0
Structured reverse repurchase and securities borrowing agreements	2.4	0.1	0.1		0.0	0.0	0.1	(1.0)	0.0	0.0	(0.1)
Other	0.1	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial assets available for sale	0.6	0.0	0.0	0.0	0.1	(0.1)	0.0	0.0	0.0	0.0	0.0
Positive replacement values	4.4	(0.4)	(0.1)		0.0	(0.1)	1.7	(2.9)	0.7	(0.5)	(0.1)
of which:											
Credit derivative contracts	1.7	(0.1)	0.2		0.0	0.0	0.9	(1.1)	0.1	(0.1)	(0.1)
Foreign exchange contracts	0.6	(0.1)	0.0		0.0	0.0	0.1	(0.1)	0.0	0.0	0.0
Equity / index contracts	1.9	0.0	(0.3)		0.0	(0.1)	0.7	(1.4)	0.2	(0.3)	0.0
Other	0.3	(0.1)	(0.1)		0.0	0.0	0.0	(0.3)	0.4	(0.1)	0.0
Negative replacement values	5.0	(0.4)	0.0		0.0	0.0	1.0	(2.2)	0.5	(0.5)	(0.1)
of which:											
Credit derivative contracts	1.7	0.3	0.6		0.0	0.0	0.0	(0.9)	0.3	(0.1)	0.0
Foreign exchange contracts	0.3	0.0	(0.1)		0.0	0.0	0.0	(0.1)	0.0	0.0	0.0
Equity / index contracts	2.4	(0.4)	(0.5)		0.0	0.0	0.9	(1.2)	0.1	(0.4)	(0.1)
Other	0.6	(0.2)	(0.1)		0.0	0.0	0.1	0.0	0.1	0.0	(0.1)
Financial liabilities designated at fair value	11.9	0.6	0.0		0.0	0.0	6.1	(6.7)	1.3	(2.2)	(0.3)
of which:											
Issued debt instruments	9.5	0.4	0.1		0.0	0.0	4.9	(4.4)	1.3	(2.2)	(0.2)
Over-the-counter debt instruments	1.5	0.2	(0.1)		0.0	0.0	1.2	(2.0)	0.0	0.0	(0.1)
Structured repurchase agreements	0.9	0.0	0.0		0.0	0.0	0.0	(0.3)	0.0	0.0	0.0

1 Total Level 3 assets as of 31 December 2016 were CHF 6.9 billion (31 December 2015: CHF 9.0 billion). Total Level 3 liabilities as of 31 December 2016 were CHF 15.1 billion (31 December 2015: CHF 14.1 billion).

Balance as of 31 December 2015	Total gains / losses included in comprehensive income			Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation	Balance as of 31 December 2016 ¹
	Net interest income, net trading income and other income	<i>of which: related to Level 3 instruments held at the end of the reporting period</i>	Other compreh ensive income								
2.1	0.1	0.0		0.9	(6.8)	4.1	0.0	1.7	(0.3)	(0.1)	1.7
0.7	0.2	0.1		0.6	(0.8)	0.0	0.0	0.1	(0.1)	(0.1)	0.6
0.8	(0.1)	(0.1)		0.1	(5.2)	4.1	0.0	1.1	(0.2)	0.0	0.7
0.2	0.0	0.0		0.0	(0.1)	0.0	0.0	0.2	0.0	0.0	0.2
0.4	0.0	0.0		0.2	(0.7)	0.0	0.0	0.4	0.0	0.0	0.2
3.3	(0.4)	(0.1)		0.1	0.0	0.7	(1.9)	0.5	(0.1)	0.0	2.1
1.7	(0.4)	(0.1)		0.0	0.0	0.6	(1.0)	0.4	(0.1)	0.0	1.2
1.5	0.0	0.0		0.0	0.0	0.0	(0.9)	0.0	0.0	0.0	0.6
0.1	0.0	0.0		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
0.7	0.0	0.0	0.0	0.1	(0.1)	0.0	0.0	0.0	(0.1)	0.0	0.5
2.9	(0.4)	(0.5)		0.0	0.0	1.0	(1.9)	1.3	(0.4)	0.0	2.5
1.3	(0.2)	(0.1)		0.0	0.0	0.6	(0.7)	0.4	(0.1)	0.0	1.3
0.5	0.0	0.0		0.0	0.0	0.1	(0.2)	0.0	(0.1)	0.0	0.2
1.0	(0.1)	0.0		0.0	0.0	0.4	(0.6)	0.2	(0.2)	0.0	0.7
0.1	(0.1)	(0.2)		0.0	0.0	0.0	(0.4)	0.7	0.0	0.0	0.3
3.3	0.6	0.5		0.0	0.0	1.5	(2.1)	1.2	(0.6)	0.0	4.0
1.3	0.5	0.6		0.0	0.0	0.2	(0.7)	0.3	(0.1)	0.0	1.5
0.2	0.0	0.0		0.0	0.0	0.0	(0.2)	0.1	0.0	0.0	0.1
1.4	0.3	0.1		0.0	0.0	1.0	(0.8)	0.2	(0.3)	0.0	1.9
0.3	(0.2)	(0.1)		0.0	0.0	0.2	(0.4)	0.7	(0.1)	0.0	0.5
10.7	1.0	0.6		0.0	0.0	5.0	(3.5)	0.9	(2.9)	(0.1)	11.0
9.3	0.9	0.6		0.0	0.0	4.1	(2.5)	0.8	(2.9)	(0.1)	9.7
0.8	0.1	0.0		0.0	0.0	0.8	(0.6)	0.1	0.0	0.0	1.1
0.6	0.0	0.0		0.0	0.0	0.1	(0.4)	0.0	0.0	0.0	0.3

Note 22 Fair value measurement (continued)

i) Financial instruments not measured at fair value

The table below provides the estimated fair values of financial instruments not measured at fair value.

Financial instruments not measured at fair value

CHF billion	31.12.16					31.12.15				
	Carrying value	Fair value				Carrying value	Fair value			
		Total	Level 1	Level 2	Level 3		Total	Level 1	Level 2	Level 3
Assets										
Cash and balances with central banks	107.8	107.8	107.8	0.0	0.0	91.3	91.3	91.3	0.0	0.0
Due from banks	13.1	13.1	12.5	0.7	0.0	11.9	11.9	11.4	0.5	0.0
Cash collateral on securities borrowed	15.1	15.1	0.0	15.1	0.0	25.6	25.6	0.0	25.6	0.0
Reverse repurchase agreements	66.2	66.2	0.0	62.5	3.7	67.9	67.9	0.0	65.8	2.1
Cash collateral receivables on derivative instruments	26.7	26.7	0.0	26.7	0.0	23.8	23.8	0.0	23.8	0.0
Loans	307.0	310.4	0.0	170.0	140.4	312.7	314.9	0.0	170.9	143.9
Financial assets held to maturity	9.3	9.1	6.3	2.8	0.0					
Other assets	18.5	18.5	0.0	18.5	0.0	20.1	20.1	0.0	20.1	0.0
Liabilities										
Due to banks	10.6	10.6	8.8	1.9	0.0	11.8	11.8	10.4	1.4	0.0
Cash collateral on securities lent	2.8	2.8	0.0	2.8	0.0	8.0	8.0	0.0	8.0	0.0
Repurchase agreements	6.6	6.6	0.0	6.6	0.0	9.7	9.7	0.0	9.6	0.0
Cash collateral payables on derivative instruments	35.5	35.5	0.0	35.5	0.0	38.3	38.3	0.0	38.3	0.0
Due to customers	450.2	450.6	0.0	450.6	0.0	402.5	402.8	0.0	402.8	0.0
Debt issued	79.0	81.1	0.0	78.5	2.6	82.2	84.4	0.0	78.4	6.0
Other liabilities	39.0	39.0	0.0	39.0	0.0	52.1	52.1	0.0	52.1	0.0

The fair values included in the table above were calculated for disclosure purposes only. The valuation techniques and assumptions described below relate only to the fair value of UBS AG's financial instruments not measured at fair value. Other institutions may use different methods and assumptions for their fair value estimation, and therefore such fair value disclosures cannot necessarily be compared from one financial institution to another. The following principles were applied when determining fair value estimates for financial instruments not measured at fair value:

- For financial instruments with remaining maturities greater than three months, the fair value was determined from quoted market prices, if available.
- Where quoted market prices were not available, the fair values were estimated by discounting contractual cash flows using current market interest rates or appropriate yield curves for instruments with similar credit risk and maturity. These estimates generally include adjustments for counterparty credit risk or UBS AG's own credit.
- For short-term financial instruments with remaining maturities of three months or less, the carrying amount, which is net of

credit loss allowances, is generally considered a reasonable estimate of fair value. The following financial instruments not measured at fair value had remaining maturities of three months or less as of 31 December 2016: 100% of cash and balances with central banks, 95% of amounts due from banks, 100% of cash collateral on securities borrowed, 83% of reverse repurchase agreements, 100% of cash collateral receivables on derivative instruments, 51% of loans, 4% of financial assets held to maturity, 82% of amounts due to banks, 100% of cash collateral on securities lent, 87% of repurchase agreements, 100% of cash collateral payables on derivative instruments, 99% of amounts due to customers and 15% of debt issued.

- The fair value estimates for repurchase and reverse repurchase agreements with variable and fixed interest rates, for all maturities, include the valuation of the interest rate component of these instruments. Credit and debit valuation adjustments have not been included in the valuation due to the short-term nature of these instruments.

Note 23 Restricted and transferred financial assets

This Note provides information on restricted financial assets (Note 23a), transfers of financial assets (Note 23b and 23c) and financial assets that are received as collateral with the right to resell or repledge these assets (Note 23d).

a) Restricted financial assets

Restricted financial assets consist of assets pledged as collateral against an existing liability or contingent liability and other assets that are otherwise explicitly restricted such that they cannot be used to secure funding.

Financial assets are mainly pledged as collateral in securities lending transactions, in repurchase transactions, against loans from Swiss mortgage institutions and in connection with the issuance of covered bonds. UBS AG generally enters into repurchase and securities lending arrangements under standard market agreements, with a market-based haircut applied to the collateral, which results in the associated liabilities having a carrying value below the carrying value of the assets. Pledged mortgage loans serve as collateral for existing liabilities against Swiss central mortgage institutions and for existing covered bond issuances of CHF 14,137 million as of 31 December 2016 (31 December 2015: CHF 16,727 million).

Other restricted financial assets include assets protected under client asset segregation rules, assets held by UBS AG's insurance entities to back related liabilities to the policy holders, assets held in certain jurisdictions to comply with explicit

minimum local asset maintenance requirements and assets held in consolidated bankruptcy remote entities such as certain investment funds and other structured entities. The carrying value of the liabilities associated with these other restricted financial assets is generally equal to the carrying value of the assets, with the exception of assets held to comply with local asset maintenance requirements for which the associated liabilities are greater.

UBS AG and its subsidiaries are generally not subject to significant restrictions that would prevent the transfer of dividends and capital within UBS AG. However, certain regulated subsidiaries are required to maintain capital and / or liquidity to comply with local regulations and may be subject to prudential limitations by regulators that limit the amount of funds that they can distribute or otherwise transfer. Non-regulated subsidiaries are generally not subject to such requirements and transfer restrictions. However, restrictions can also be the result of different legal, regulatory, contractual, entity or country-specific arrangements and / or requirements.

Restricted financial assets

<i>CHF million</i>	31.12.16	31.12.15
Financial assets pledged as collateral		
Trading portfolio assets	36,549	57,024
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	30,260	51,943
Loans ¹	19,887	24,980
Financial assets designated at fair value	776	0
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	636	0
Financial assets available for sale	0	632
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	0	6
Total financial assets pledged as collateral²	57,213	82,636
Other restricted financial assets		
Due from banks	2,625	3,285
Reverse repurchase agreements	658	1,099
Trading portfolio assets	12,129	24,388
Cash collateral receivables on derivative instruments	4,329	7,104
Loans	958	0
Financial assets available for sale	247	502
Other	5,195	480
Total other restricted financial assets	26,141	36,858
Total financial assets pledged and other restricted financial assets	83,354	119,494

¹ All related to mortgage loans that serve as collateral for existing liabilities against Swiss central mortgage institutions and for existing covered bond issuances. Of these pledged mortgage loans, approximately CHF 1.9 billion for 31 December 2016 (31 December 2015: approximately CHF 4.4 billion) could be withdrawn or used for future liabilities or covered bond issuances without breaching existing collateral requirements.

² Does not include assets placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes (31 December 2016: CHF 4.7 billion; 31 December 2015: CHF 4.9 billion).

Note 23 Restricted and transferred financial assets (continued)

b) Transferred financial assets that are not derecognized in their entirety

The table below presents information for financial assets that have been transferred but are subject to continued recognition in full as well as recognized liabilities associated with those transferred assets.

Transferred financial assets subject to continued recognition in full

CHF million	31.12.16		31.12.15	
	Carrying value of transferred assets	Carrying value of associated liabilities recognized on-balance sheet	Carrying value of transferred assets	Carrying value of associated liabilities recognized on-balance sheet
Trading portfolio assets which may be sold or repledged by counterparties	30,260	11,260	51,943	13,146
relating to securities lending and repurchase agreements in exchange for cash received	11,410	11,260	13,406	13,146
relating to securities lending agreements in exchange for securities received	17,341	0	37,097	0
relating to other financial asset transfers	1,509	0	1,440	0
Financial assets designated at fair value which may be sold or repledged by counterparties	636	630	0	0
Financial assets available for sale which may be sold or repledged by counterparties	0	0	6	6
Total financial assets transferred	30,896	11,890	51,950	13,152

Transactions in which financial assets are transferred, but continue to be recognized in their entirety on UBS AG's balance sheet include securities lending and repurchase agreements as well as other financial asset transfers. Repurchase and securities lending arrangements are, for the most part, conducted under standard market agreements and are undertaken with counterparties subject to UBS AG's normal credit risk control processes.

→ Refer to Note 1a item 3e for more information on repurchase agreements and securities lending agreements

As of 31 December 2016, approximately one-third of the transferred financial assets were trading portfolio assets transferred in exchange for cash, in which case the associated recognized liability represents the amount to be repaid to counterparties. For securities lending and repurchase agreements, a haircut between 0% and 15% is generally applied to the transferred assets, which results in associated liabilities having a carrying value below the carrying value of the transferred assets. The counterparties to the associated liabilities presented in the table above have full recourse to UBS AG.

In securities lending arrangements entered into in exchange for the receipt of other securities as collateral, neither the securities received nor the obligation to return them are recognized on UBS AG's balance sheet, as the risks and rewards of ownership are not transferred to UBS AG. In cases where such financial assets received are subsequently sold or repledged in another transaction, this is not considered to be a transfer of financial assets.

Other financial asset transfers primarily include securities transferred to collateralize derivative transactions, for which the carrying value of associated liabilities is not provided in the table above because those replacement values are managed on a portfolio basis across counterparties and product types, and therefore there is no direct relationship between the specific collateral pledged and the associated liability.

Transferred financial assets that are not subject to derecognition in full, but which remain on the balance sheet to the extent of UBS AG's continuing involvement, were not material as of 31 December 2016 and as of 31 December 2015.

Note 23 Restricted and transferred financial assets (continued)

c) Transferred financial assets that are derecognized in their entirety with continuing involvement

Continuing involvement in a transferred and fully derecognized financial asset may result from contractual provisions in the transfer agreement or from a separate agreement with the counterparty or a third party entered into in connection with the transfer.

Purchased and retained interests in securitization vehicles

In cases where UBS AG has transferred assets into a securitization vehicle and retained or purchased interests therein, UBS AG has a continuing involvement in those transferred assets.

As of 31 December 2016, the majority of the retained continuing involvement related to securitization positions held in the trading portfolio, primarily collateralized debt obligations, US commercial mortgage-backed securities and residential mortgage-backed securities. The fair value and carrying amount of UBS AG's continuing involvement related to these purchased and retained interests was CHF 5 million as of 31 December 2016, and UBS AG recognized gains of CHF 11 million in 2016 related to these positions. As of 31 December 2016, life-to-date

losses of CHF 1,173 million have been recorded related to the positions held as of 31 December 2016.

As of 31 December 2015, the fair value and carrying amount of UBS AG's continuing involvement related to purchased and retained interests in securitization vehicles was CHF 15 million, and UBS AG recognized gains of CHF 16 million in 2015 related to these positions. As of 31 December 2015, life-to-date losses of CHF 1,566 million were recorded related to the positions held as of 31 December 2015.

The maximum exposure to loss related to purchased and retained interests in securitization structures was CHF 28 million as of 31 December 2016 compared with CHF 55 million as of 31 December 2015.

Undiscounted cash outflows of CHF 23 million may be payable to the transferee in future periods as a consequence of holding the purchased and retained interests. The earliest period in which payment may be required is less than one month.

d) Off-balance sheet assets received

The table below presents assets received from third parties that can be sold or repledged, that are not recognized on the balance sheet, but that are held as collateral, including amounts that have been sold or repledged.

Off-balance sheet assets received

CHF million	31.12.16	31.12.15
Fair value of assets received which can be sold or repledged	429,327	401,511
received as collateral under reverse repurchase, securities borrowing and lending arrangements, derivative transactions and other transactions ¹	423,524	393,839
received in unsecured borrowings	5,803	7,672
Thereof sold or repledged ²	316,324	286,757
in connection with financing activities	277,341	241,992
to satisfy commitments under short sale transactions	22,825	29,137
in connection with derivative and other transactions ¹	16,158	15,628

¹ Includes securities received as initial margin from its clients that UBS AG is required to remit to CCPs, brokers and deposit banks through its exchange-traded derivative (ETD) clearing and execution services. ² Does not include off-balance sheet securities (31 December 2016: CHF 30.9 billion; 31 December 2015: CHF 47.3 billion) placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes for which there are no associated liabilities or contingent liabilities.

Note 24 Offsetting financial assets and financial liabilities

UBS AG enters into netting agreements with counterparties to manage the credit risks associated primarily with repurchase and reverse repurchase transactions, securities borrowing and lending, and over-the-counter (OTC) and exchange-traded derivatives (ETD). These netting agreements and similar arrangements generally enable the counterparties to set off liabilities against available assets received in the ordinary course of business and / or in the event that the counterparty to the transaction is unable to fulfill its contractual obligations. The right of setoff is a legal right to settle or otherwise eliminate all or a portion of an amount due by applying an amount receivable from the same counterparty against it, thus reducing credit exposure.

The table below provides a summary of financial assets subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral received to mitigate credit exposures for these financial assets. The gross financial assets of UBS AG that are subject to offsetting, enforceable netting arrangements and similar agreements are reconciled to the net amounts presented within the associated balance sheet line, after giving effect to financial liabilities with the same counterparties that have been offset on the balance sheet and other financial assets not subject to an enforceable netting arrangement or similar agreement. Further, related amounts for financial liabilities and collateral received that are not offset on the balance sheet are shown to arrive at financial assets after consideration of netting potential.

UBS AG engages in a variety of counterparty credit mitigation strategies in addition to netting and collateral arrangements. Therefore, the net amounts presented in the tables on this and on the next page do not purport to represent UBS AG's actual credit exposure.

Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

Assets subject to netting arrangements									
	Netting recognized on the balance sheet			Netting potential not recognized on the balance sheet ⁴			Assets not subject to netting arrangements ⁵	Total assets	
	Gross assets before netting	Netting with gross liabilities ³	Net assets recognized on the balance sheet	Financial liabilities	Collateral received	Assets after consideration of netting potential		Assets recognized on the balance sheet	Total assets after consideration of netting potential
<i>As of 31.12.16, CHF billion</i>									
Cash collateral on securities borrowed	4.2	0.0	4.2	(0.9)	(3.3)	0.0	10.9	10.9	15.1
Reverse repurchase agreements	128.4	(71.5)	56.9	(2.1)	(54.8)	0.0	9.3	9.3	66.2
Positive replacement values	152.3	(2.5)	149.8	(113.1)	(26.7)	10.0	8.6	18.6	158.4
Cash collateral receivables on derivative instruments ¹	37.2	(15.1)	22.1	(14.2)	(1.0)	7.0	4.5	11.5	26.7
Financial assets designated at fair value	1.7	0.0	1.7	0.0	(0.6)	1.1	63.3	64.4	65.0
Total assets	323.8	(89.1)	234.7	(130.3)	(86.3)	18.1	96.7	114.8	331.5
<i>As of 31.12.15, CHF billion</i>									
Cash collateral on securities borrowed ²	8.2	0.0	8.2	(3.1)	(5.2)	0.0	17.3	17.3	25.6
Reverse repurchase agreements	117.9	(62.1)	55.8	(4.4)	(51.4)	0.0	12.1	12.1	67.9
Positive replacement values	161.9	(2.5)	159.3	(123.0)	(25.5)	10.8	8.1	18.9	167.4
Cash collateral receivables on derivative instruments ¹	85.9	(66.3)	19.6	(10.9)	(1.5)	7.2	4.1	11.3	23.8
Financial assets designated at fair value	2.4	0.0	2.4	0.0	(1.8)	0.6	3.4	4.0	5.8
Total assets	376.4	(131.0)	245.4	(141.3)	(85.4)	18.7	45.0	63.7	290.5

¹ The net amount of Cash collateral receivables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and ETD that are economically settled on a daily basis. In 2016 UBS AG elected to convert its IRS transacted with the London Clearing House and Japan Securities Clearing Corporation from the previous collateral model to a settlement model. As a result, gross assets and liabilities and corresponding netting decreased by CHF 64 billion as of 31 December 2016, with no change to net assets and liabilities recognized on the balance sheet. Refer to Note 1b for more information. ² In 2016, balances as of 31 December 2015 were revised to conform to the presentation for balances as of 31 December 2016. This resulted in a CHF 16 billion decrease in Assets subject to netting arrangements with a corresponding increase in Assets not subject to netting arrangements. This change did not impact amounts recognized on the balance sheet since IAS 32 netting was not applied under either presentation as the relevant netting criteria were not met. Furthermore, the level of collateralization for these assets did not change as result of this presentational change. ³ The logic of the table results in amounts presented in the "Netting with gross liabilities" column corresponding directly to the amounts presented in the "Netting with gross assets" column in the liabilities table presented on the following page. ⁴ For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped by the relevant netting agreement so as not to exceed the net amount of financial assets presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table. ⁵ Includes assets not subject to enforceable netting arrangements and other out-of-scope items.

Note 24 Offsetting financial assets and financial liabilities (continued)

The table below provides a summary of financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral pledged to mitigate credit exposures for these financial liabilities. The gross financial liabilities of UBS AG that are subject to offsetting, enforceable netting arrangements and similar agreements are reconciled to the net amounts presented within the associated

balance sheet line, after giving effect to financial assets with the same counterparties that have been offset on the balance sheet and other financial liabilities not subject to an enforceable netting arrangement or similar agreement. Further, related amounts for financial assets and collateral pledged that are not offset on the balance sheet are shown to arrive at financial liabilities after consideration of netting potential.

Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

Liabilities subject to netting arrangements						Liabilities not subject to netting arrangements ⁴			
Netting recognized on the balance sheet				Netting potential not recognized on the balance sheet ³				Total liabilities	
	Gross liabilities before netting	Netting with gross assets ²	Net liabilities recognized on the balance sheet	Financial assets	Collateral pledged	Liabilities after consideration of netting potential	Liabilities recognized on the balance sheet	Total liabilities after consideration of netting potential	Total liabilities recognized on the balance sheet
<i>As of 31.12.16, CHF billion</i>									
Cash collateral on securities lent	2.6	0.0	2.6	(0.9)	(1.7)	0.0	0.2	0.2	2.8
Repurchase agreements	76.7	(71.5)	5.2	(2.1)	(3.1)	0.0	1.4	1.4	6.6
Negative replacement values	146.3	(2.5)	143.9	(113.1)	(16.6)	14.2	10.0	24.2	153.8
Cash collateral payables on derivative instruments ¹	48.5	(15.1)	33.4	(20.8)	(1.4)	11.2	2.1	13.3	35.5
Financial liabilities designated at fair value	2.8	0.0	2.8	0.0	(0.2)	2.6	52.2	54.8	55.0
Total liabilities	276.9	(89.1)	187.9	(137.0)	(22.9)	28.0	65.9	93.9	253.7
<i>As of 31.12.15, CHF billion</i>									
Cash collateral on securities lent	7.9	0.0	7.9	(3.1)	(4.8)	0.0	0.1	0.1	8.0
Repurchase agreements	69.0	(62.1)	6.9	(4.4)	(2.5)	0.0	2.8	2.8	9.7
Negative replacement values	154.2	(2.5)	151.7	(123.0)	(17.4)	11.3	10.7	22.1	162.4
Cash collateral payables on derivative instruments ¹	99.9	(66.3)	33.6	(19.0)	(2.5)	12.1	4.7	16.8	38.3
Financial liabilities designated at fair value	3.9	0.0	3.9	0.0	(0.7)	3.1	59.1	62.3	63.0
Total liabilities	334.9	(131.0)	203.9	(149.4)	(28.0)	26.5	77.4	104.0	281.4

¹ The net amount of Cash collateral payables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and ETD that are economically settled on a daily basis. In 2016 UBS AG elected to convert its IRS transacted with the London Clearing House and Japan Securities Clearing Corporation from the previous collateral model to a settlement model. As a result, gross assets and liabilities and corresponding netting decreased by CHF 64 billion as of 31 December 2016, with no change to net assets and liabilities recognized on the balance sheet. Refer to Note 1b for more information.

² The logic of the table results in amounts presented in the "Netting with gross assets" column corresponding directly to the amounts presented in the "Netting with gross liabilities" column in the assets table presented on the previous page.

³ For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped by the relevant netting agreement so as not to exceed the net amount of financial liabilities presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table.

⁴ Includes liabilities not subject to enforceable netting arrangements and other out-of-scope items.

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments

a) Measurement categories of financial assets and liabilities

The table below provides information about the carrying amounts of individual classes of financial instruments within the measurement categories of financial assets and liabilities as defined in IAS 39 *Financial Instruments: Recognition and Measurement*. Only those assets and liabilities that are financial instruments as

defined in IAS 32 *Financial Instruments: Presentation* are included in the table below, which causes certain balances to differ from those presented on the balance sheet.

→ Refer to Note 22 for more information on how the fair value of financial instruments is determined

Measurement categories of financial assets and financial liabilities

CHF million	31.12.16	31.12.15
Financial assets¹		
Held for trading		
Trading portfolio assets	92,112	120,405
Due to customers ²	12	0
Debt issued ²	38	106
Positive replacement values	158,411	167,435
Total	250,572	287,946
Fair value through profit or loss		
Financial assets designated at fair value	65,024	5,808
Other assets	131	0
Total	65,155	5,808
Financial assets at amortized cost		
Cash and balances with central banks	107,767	91,306
Due from banks	13,125	11,866
Cash collateral on securities borrowed	15,111	25,584
Reverse repurchase agreements	66,246	67,893
Cash collateral receivables on derivative instruments	26,664	23,763
Loans ³	307,004	312,723
Financial assets held to maturity	9,289	0
Other assets	18,519	20,139
Total	563,727	553,275
Available for sale		
Financial assets available for sale	15,676	62,543
Total financial assets	895,131	909,572
Financial liabilities		
Held for trading		
Trading portfolio liabilities	22,825	29,137
Debt issued ²	0	236
Negative replacement values	153,810	162,430
Total	176,635	191,803
Fair value through profit or loss		
Financial liabilities designated at fair value	55,017	62,995
Amounts due under unit-linked investment contracts	9,286	15,718
Other liabilities	131	0
Total	64,434	78,713
Financial liabilities at amortized cost		
Due to banks	10,645	11,836
Cash collateral on securities lent	2,818	8,029
Repurchase agreements	6,612	9,653
Cash collateral payables on derivative instruments	35,472	38,282
Due to customers	450,211	402,522
Debt issued	79,036	82,230
Other liabilities	38,992	52,065
Total	623,786	604,617
Total financial liabilities	864,855	875,133

1 As of 31 December 2016, CHF 126 billion of Loans, CHF 0 billion of Due from banks, CHF 1 billion of Reverse repurchase agreements, CHF 10 billion of Financial assets available for sale, CHF 29 billion of Financial assets designated at fair value and CHF 8 billion of Financial assets held to maturity are expected to be recovered or settled after 12 months. As of 31 December 2015, CHF 123 billion of Loans, CHF 0 billion of Due from banks, CHF 1 billion of Reverse repurchase agreements, CHF 30 billion of Financial assets available for sale and CHF 3 billion of Financial assets designated at fair value are expected to be recovered or settled after 12 months. 2 Represents the embedded derivative component of structured financial instruments for which the fair value option has not been applied and that is presented within Due to customers and Debt issued on the balance sheet. 3 Includes finance lease receivables of CHF 1.0 billion as of 31 December 2016 (31 December 2015: CHF 1.1 billion). Refer to Notes 10 and 31 for more information.

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

b) Maximum exposure to credit risk

The tables on the following pages provide UBS AG's maximum exposure to credit risk by class of financial instrument and the respective collateral and other credit enhancements mitigating credit risk for these classes of financial instruments.

The maximum exposure to credit risk includes the carrying amounts of financial instruments recognized on the balance sheet subject to credit risk and the notional amounts for off-

balance sheet arrangements. Where information is available, collateral is presented at fair value. For other collateral such as real estate, a reasonable alternative value is used. Credit enhancements, such as credit derivative contracts and guarantees, are included at their notional amounts. Both are capped at the maximum exposure to credit risk for which they serve as security.

Maximum exposure to credit risk

	31.12.16							
	Maximum exposure to credit risk	Collateral				Credit enhancements		
		Cash collateral received	Collateralized by securities	Secured by real estate	Other collateral ¹	Netting	Credit derivative contracts	Guarantees
CHF billion								
Financial assets measured at amortized cost on the balance sheet								
Balances with central banks	107.1							
Due from banks ²	13.1							
Cash collateral on securities borrowed	15.1		14.8					
Reverse repurchase agreements	66.2		62.5		3.2			
Cash collateral receivables on derivative instruments ^{3, 4}	26.7					15.1		
Loans ⁵	307.0	17.9	99.6	158.2	14.6		0.1	1.8
Financial assets held to maturity	9.3							
Other assets	18.6		10.0					
Total financial assets measured at amortized cost	563.2	17.9	186.9	158.2	17.7	15.1	0.1	1.8
Financial assets measured at fair value on the balance sheet								
Positive replacement values ⁴	158.4		5.3			134.5		
Trading portfolio assets – debt instruments ^{6, 7}	21.9							
Financial assets designated at fair value – debt instruments ⁸	64.8		2.6				0.6	
Financial assets available for sale – debt instruments ⁸	14.9							
Total financial assets measured at fair value	260.0	0.0	7.9	0.0	0.0	134.5	0.6	0.0
Total maximum exposure to credit risk reflected on the balance sheet	823.2	17.9	194.9	158.2	17.7	149.6	0.7	1.8
Guarantees ⁹	16.7	1.4	2.0	0.2	1.2		0.1	3.0
Loan commitments ⁹	54.4	0.1	3.9	1.0	9.5		4.8	2.0
Forward starting transactions, reverse repurchase and securities borrowing agreements	10.2		10.2					
Total maximum exposure to credit risk not reflected on the balance sheet	81.3	1.5	16.1	1.1	10.6	0.0	4.9	5.1
Total	904.5	19.4	210.9	159.4	28.4	149.6	5.7	6.8

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

Maximum exposure to credit risk (continued)

	31.12.15							
		Collateral				Credit enhancements		
	Maximum exposure to credit risk	Cash collateral received	Collateralized by securities	Secured by real estate	Other collateral ¹	Netting	Credit derivative contracts	Guarantees
CHF billion								
Financial assets measured at amortized cost on the balance sheet								
Balances with central banks	89.8							
Due from banks ²	11.9		0.2					0.1
Cash collateral on securities borrowed	25.6		25.1					
Reverse repurchase agreements	67.9		62.8		4.6			
Cash collateral receivables on derivative instruments ^{3, 4}	23.8					12.4		
Loans	312.7	13.7	101.0	164.4	15.2		0.4	2.9
Other assets	20.1		11.1					
Total financial assets measured at amortized cost	551.7	13.7	200.1	164.4	19.8	12.4	0.4	3.0
Financial assets measured at fair value on the balance sheet								
Positive replacement values ⁴	167.4		5.8			142.7		
Trading portfolio assets - debt instruments ^{5, 7}	29.0							
Financial assets designated at fair value – debt instruments ⁸	5.6		3.5		0.1		0.6	
Financial assets available for sale – debt instruments ⁸	61.7							
Total financial assets measured at fair value	263.7	0.0	9.3	0.0	0.1	142.7	0.6	0.0
Total maximum exposure to credit risk reflected on the balance sheet								
	815.4	13.7	209.4	164.4	19.8	155.2	1.0	3.0
Guarantees ⁹	16.0	1.2	2.1	0.2	1.5		0.1	3.0
Loan commitments ⁹	56.1		1.8	1.7	8.7		6.9	2.0
Forward starting transactions, reverse repurchase and securities borrowing agreements	6.6		6.6					
Total maximum exposure to credit risk not reflected on the balance sheet								
	78.6	1.2	10.5	1.9	10.2	0.0	7.0	5.0
Total	894.1	14.9	220.0	166.3	30.1	155.2	8.1	8.0

¹ Includes but not limited to life insurance contracts, inventory, accounts receivable, mortgage loans, patents, and copyrights. ² Due from banks includes amounts held with third-party banks on behalf of clients. The credit risk associated with these balances may be borne by those clients. ³ Included within Cash collateral receivables on derivative instruments are margin balances due from exchanges or clearing houses. Some of these margin balances reflect amounts transferred on behalf of clients who retain the associated credit risk. ⁴ The amount shown in the netting column represents the netting potential not recognized on the balance sheet. Refer to Note 24 for more information. ⁵ In 2016, UBS AG aligned its collateral allocation processes across business divisions with a risk-based approach which prioritizes collateral mainly according to its liquidity profile. This resulted in increases in loans collateralized by cash of CHF 3.3 billion and increases in loans collateralized by securities of CHF 3.1 billion, while loans secured by real estate decreased by CHF 5.2 billion and loans secured by guarantees decreased by CHF 1.2 billion. ⁶ These positions are generally managed under the market risk framework. For the purpose of this disclosure, collateral and credit enhancements were not considered. ⁷ Does not include debt instruments held for unit-linked investment contracts and investment fund units. ⁸ Does not include investment fund units. Financial assets designated at fair value collateralized by securities consisted of structured loans and reverse repurchase and securities borrowing agreements. ⁹ The amount shown in the "Guarantees" column largely relates to sub-participations. Refer to the "Treasury management" section of this report for more information.

Maximum exposure to credit risk for financial assets designated at fair value

The maximum exposure to credit risk of loans, but not structured loans, designated at fair value is generally mitigated by credit derivatives or similar instruments. As of 31 December 2016, the credit risk of such loans with a total notional amount of CHF 609 million (31 December 2015: CHF 687 million) was mitigated by credit derivatives with a total notional amount of CHF 578 million (31 December 2015: CHF 630 million) and a fair value of negative CHF 7 million (31 December 2015: positive CHF 4 million).

Changes in the fair value of loans designated at fair value

attributable to changes in credit risk were not material for the years ended 31 December 2016 and 31 December 2015 and from inception until 31 December 2016 and 31 December 2015.

Similarly, changes in the fair value of credit derivatives mitigating the credit risk of loans designated at fair value were not material for the years ended 31 December 2016 and 31 December 2015 and from inception until 31 December 2016 and 31 December 2015.

→ **Refer to Note 22 for more information on financial assets designated at fair value**

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

c) Financial assets subject to credit risk by rating category

Financial assets subject to credit risk by rating category

CHF billion	31.12.16						
Rating category ¹	0–1	2–3	4–5	6–8	9–13	Defaulted	Total
Balances with central banks	106.2	0.9					107.1
Due from banks	0.6	9.7	2.0	0.5	0.3		13.1
Cash collateral on securities borrowed and reverse repurchase agreements	29.2	24.5	20.1	6.9	0.7		81.4
Positive replacement values	19.6	96.9	34.2	7.4	0.4		158.4
Cash collateral receivables on derivative instruments	6.4	12.2	6.4	1.6	0.2		26.7
Trading portfolio assets – debt instruments ²	9.0	6.9	2.9	1.7	1.3		21.9
Loans	31.7	127.8	63.2	63.6	19.1	1.6	307.0
Financial assets designated at fair value – debt instruments ³	48.4	12.6	1.0	1.6	1.3		64.8
Financial assets available for sale - debt instruments ³	12.7	1.8	0.2	0.1			14.9
Financial assets held to maturity	8.4	0.9					9.3
Other assets	0.1	2.1	6.2	7.7	2.2	0.3	18.6
Guarantees, commitments and forward starting transactions							
Guarantees	2.0	6.4	3.7	3.6	0.7	0.3	16.7
Loan commitments	2.4	19.5	17.1	8.7	6.5	0.1	54.4
Forward starting transactions, reverse repurchase and securities borrowing agreements	0.6	9.4	0.3				10.2
Total	277.4	331.6	157.2	103.5	32.7	2.2	904.5

CHF billion	31.12.15						
Rating category ¹	0–1	2–3	4–5	6–8	9–13	Defaulted	Total
Balances with central banks	87.9	1.3	0.6				89.8
Due from banks	1.3	8.8	1.1	0.6			11.9
Cash collateral on securities borrowed and reverse repurchase agreements	21.7	40.2	20.1	11.2	0.4		93.5
Positive replacement values	20.7	116.9	23.2	5.9	0.7		167.4
Cash collateral receivables on derivative instruments	8.4	10.2	4.7	0.4	0.1		23.8
Trading portfolio assets – debt instruments ²	14.2	8.6	3.1	1.9	1.2		29.0
Loans	31.9	132.1	68.2	61.4	17.7	1.4	312.7
Financial assets designated at fair value – debt instruments ³	0.0	0.5	1.0	3.0	0.9	0.1	5.6
Financial assets available for sale - debt instruments ³	52.4	9.2					61.7
Other assets	0.2	2.2	7.5	8.1	1.7	0.4	20.1
Guarantees, commitments and forward starting transactions							
Guarantees	2.2	7.1	3.6	2.2	0.7	0.3	16.0
Loan commitments	1.8	22.4	19.6	6.1	6.2	0.0	56.1
Forward starting transactions, reverse repurchase and securities borrowing agreements		6.5		0.0			6.6
Total	242.6	366.0	152.8	100.8	29.6	2.2	894.1

¹ Refer to the "Internal UBS rating scale and mapping of external ratings" table in the "Risk management and control" section of this report for more information on rating categories. ² Does not include debt instruments held for unit-linked investment contracts and investment fund units. ³ Does not include investment fund units.

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

d) Maturity analysis of financial liabilities

The contractual maturities for non-derivative and non-trading financial liabilities as of 31 December 2016 are based on the earliest date on which UBS could be contractually required to pay. The total amounts that contractually mature in each time band are also shown for 31 December 2015. Derivative positions

and trading liabilities, predominantly made up of short sale transactions, are assigned to the column *Due within 1 month*, as this provides a conservative reflection of the nature of these trading activities. The contractual maturities may extend over significantly longer periods.

Maturity analysis of financial liabilities¹

CHF billion	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
Financial liabilities recognized on-balance sheet²						
Due to banks	7.4	1.4	1.8	0.1	0.0	10.7
Cash collateral on securities lent	2.2	0.6				2.8
Repurchase agreements	4.7	1.0	0.7	0.1	0.0	6.6
Trading portfolio liabilities ^{3, 4}	22.8					22.8
Negative replacement values ³	153.8					153.8
Cash collateral payables on derivative instruments	35.5					35.5
Due to customers	408.5	13.8	3.3	9.1	20.9	455.6
Financial liabilities designated at fair value ⁵	16.8	14.7	11.1	8.4	5.9	57.0
Debt issued	7.8	7.8	23.3	28.2	18.7	85.8
Other liabilities	47.0					47.0
Total 31.12.16	706.7	39.2	40.2	45.9	45.6	877.7
Total 31.12.15	712.5	44.3	36.4	53.0	44.6	890.7
Guarantees, commitments and forward starting transactions⁶						
Loan commitments	54.0	0.2	0.2	0.0		54.4
Guarantees	16.7					16.7
Forward starting transactions						
Reverse repurchase agreements	10.2					10.2
Securities borrowing agreements	0.0					0.0
Total 31.12.16	81.0	0.2	0.2	0.0	0.0	81.4
Total 31.12.15	78.1	0.2	0.2	0.1	0.0	78.7

¹ Non-financial liabilities such as deferred income, deferred tax liabilities, provisions and liabilities on employee compensation plans are not included in this analysis. ² Except for trading portfolio liabilities and negative replacement values (see footnote 3), the amounts presented generally represent undiscounted cash flows of future interest and principal payments. ³ Carrying value is fair value. Management believes that this best represents the cash flows that would have to be paid if these positions had to be settled or closed out. Refer to Note 12 for undiscounted cash flows of derivatives designated in hedge accounting relationships. ⁴ Contractual maturities of trading portfolio liabilities are: CHF 21.8 billion due within one month (2015: CHF 27.2 billion), CHF 1.0 billion due between one month and one year (2015: CHF 1.2 billion), and CHF 0.1 billion due between 1 and 5 years (2015: CHF 0.8 billion). ⁵ Future interest payments on variable rate liabilities are determined by reference to the applicable interest rate prevailing as of the reporting date. Future principal payments that are variable are determined by reference to the conditions existing at the reporting date. ⁶ Comprises the maximum irrevocable amount of guarantees, commitments and forward starting transactions.

e) Reclassification of financial assets

In 2008 and 2009, certain financial assets were reclassified from *Trading portfolio assets* to *Loans*. On their reclassification date, these assets had fair values of CHF 26 billion and CHF 0.6 billion, respectively.

The reclassification of financial assets reflected UBS's change in intent and ability to hold these financial assets for the foreseeable future rather than for trading in the near term. The financial assets were reclassified using their fair value on the date of the reclassification, which became their new cost basis at that date.

As of 31 December 2016, the carrying value of the remaining

reclassified financial assets, which were entirely comprised of municipal auction rate securities, was CHF 0.2 billion (31 December 2015: CHF 0.2 billion), which was approximately equal to the fair value of these assets.

The overall effect on operating profit before tax from reclassified financial assets for the year ended 31 December 2016 was a profit of CHF 1 million (2015: CHF 23 million). If the financial assets had not been reclassified, the impact on operating profit before tax for the year ended 31 December 2016 would have been a profit of CHF 10 million.

Note 26 Pension and other post-employment benefit plans

The table below provides information about expenses for pension and other post-employment benefit plans. These expenses are part of *Personnel expenses*.

Income statement – expenses related to pension and other post-employment benefit plans

CHF million	31.12.16	31.12.15	31.12.14
Net periodic expenses for defined benefit plans	435	569	467
of which: related to major pension plans ¹	412	546	508
of which: Swiss plan ²	381	515	458
of which: UK plan	(2)	18	17
of which: US and German plans	33	12	33
of which: related to post-employment medical and life insurance plans ³	4	4	(36)
of which: UK plan	1	1	2
of which: US plans	3	2	(37)
of which: related to remaining plans and other expenses ⁴	19	19	(5)
Expenses for defined contribution plans ⁵	236	239	244
of which: UK plans	77	86	91
of which: US plan	106	100	91
of which: remaining plans	53	53	62
Total pension and other post-employment benefit plan expenses⁶	670	808	711

1 Refer to Note 26a for more information. 2 The reduction in net periodic pension expenses for the Swiss pension plan between 2016 and 2015 related primarily to changes in demographic and financial assumptions. 3 Refer to Note 26b for more information. The US post-employment life insurance policy was terminated in 2014. Only the amounts disclosed for 2014 include expenses with regard to life insurance benefits. 4 Other expenses include differences between actual and estimated performance award accruals and net accrued pension expenses related to restructuring. 5 Refer to Note 26c for more information. 6 Refer to Note 6.

The table below provides information relating to amounts recognized in *Other comprehensive income* for defined benefit plans.

Other comprehensive income – gains / (losses) on defined benefit plans

CHF million	31.12.16	31.12.15	31.12.14
Major pension plans ¹	(837)	339	(1,456)
of which: Swiss plan	(105)	58	(1,032)
of which: UK plan	(610)	317	(168)
of which: US and German plans	(122)	(35)	(256)
Post-employment medical and life insurance plans ²	(13)	(3)	(5)
of which: UK plan	(6)	6	(3)
of which: US plans	(7)	(9)	(2)
Remaining plans	(26)	(14)	7
Gains / (losses) recognized in other comprehensive income, before tax	(876)	322	(1,454)
Tax (expense) / benefit relating to defined benefit plans recognized in other comprehensive income	52	(19)	247
Gains / (losses) recognized in other comprehensive income, net of tax³	(824)	303	(1,208)

1 Refer to Note 26a for more information. 2 Refer to Note 26b for more information. The US post-employment life insurance policy was terminated in 2014. Amounts with regard to life insurance benefits are included only in the year ended on 31 December 2014. 3 Refer to the "Statement of comprehensive income".

Note 26 Pension and other post-employment benefit plans (continued)

UBS AG recognizes assets and liabilities with respect to defined benefit plans within *Other assets* and *Other liabilities*.

As of 31 December 2016 and 31 December 2015, the Swiss pension plan was in a surplus situation. However, a surplus is only recognized on the balance sheet to the extent that it does

not exceed the estimated future economic benefit. Since the estimated future economic benefit was zero as of 31 December 2016 and 31 December 2015, no net defined benefit pension asset was recognized on the balance sheet.

The tables below provide information on UBS AG's assets and liabilities with respect to defined benefit plans.

Balance sheet – net defined benefit pension and post-employment asset

CHF million	31.12.16	31.12.15
Major pension plans ¹	0	50
<i>of which: Swiss plan</i>	0	0
<i>of which: UK plan</i>	0	50
Total net defined benefit pension and post-employment asset²	0	50

¹ Refer to Note 26a for more information. ² Refer to Note 16.

Balance sheet – net defined benefit pension and post-employment liability

CHF million	31.12.16	31.12.15
Major pension plans ¹	1,140	622
<i>of which: Swiss plan</i>	0	0
<i>of which: UK plan</i>	529	0
<i>of which: US and German plans²</i>	611	622
Post-employment medical insurance plans ³	91	84
<i>of which: UK plan</i>	26	25
<i>of which: US plans</i>	65	59
Remaining plans	35	30
Total net defined benefit pension and post-employment liability⁴	1,266	736

¹ Refer to Note 26a for more information. ² Of the total liability as of 31 December 2016, CHF 265 million related to US plans and CHF 346 million related to German plans (31 December 2015: CHF 315 million related to US plans and CHF 307 million related to German plans). ³ Refer to Note 26b for more information. ⁴ Refer to Note 21.

Note 26 Pension and other post-employment benefit plans (continued)

a) Defined benefit pension plans

UBS AG has established defined benefit pension plans for its employees in various jurisdictions, with the major plans located in Switzerland, the UK, the US and Germany.

The overall investment policy and strategy for UBS AG's defined benefit pension plans is guided by the objective of achieving an investment return which, together with contributions, ensures that there will be sufficient assets to pay pension benefits as they fall due while also mitigating various risks. For the plans with assets (i.e., funded plans), the investment strategies are managed under local laws and regulations in each jurisdiction. The asset allocation is determined by the governance body with reference to the prevailing current and expected economic and market conditions and in consideration of specific asset class risk in the risk profile. Within this framework, UBS AG ensures that the fiduciaries consider how the asset investment strategy correlates with the maturity profile of the plan liabilities and the respective potential effect on the funded status of the plans, including potential short-term liquidity requirements.

The defined benefit obligations (DBOs) for all of UBS AG's defined benefit pension plans are directly affected by changes in yields of high-quality corporate bonds quoted in an active market in the currency of the respective pension plan, as the applicable discount rate used to determine the DBO is based on these yields. For the funded plans, the pension assets are invested in a diversified portfolio of financial assets, including real estate, bonds, investment funds and cash across geographic regions to ensure a balance of risk and return. Under IAS 19, volatility arises in each pension plan's net asset / liability position because the fair value of the plan's financial assets is not fully correlated to movements in the value of the plan's DBO. Specific asset-liability matching strategies for each pension plan are independently determined by the responsible governance body. The net asset / liability volatility for each plan is dependent on the specific financial assets chosen by each plan's governance body. For certain pension plans, a liability-driven investment approach is applied to a portion of the plan assets to reduce potential volatility.

Swiss pension plan

The Swiss pension plan covers employees of UBS AG and employees of companies having close economic or financial ties with UBS AG and exceeds the minimum benefit requirements under Swiss pension law.

Contributions to the pension plan are paid by both the employer and the employees. The Swiss pension plan allows employees to choose the level of contributions paid by them. Employee contributions are calculated as a percentage of the contributory salary and are deducted monthly. The percentages deducted from salary depend on age and choice of contribution category and vary between 1% and 13.5% of contributory base salary and between 0% and 9% of contributory variable compensation. Depending on the age of the employee, UBS AG pays a contribution that ranges between 6.5% and 27.5% of contributory base salary and between 3.6% and 9% of contributory variable compensation. UBS AG also pays risk contributions which are used to finance benefits paid out in the event of death and disability, as well as to finance bridging pensions.

The plan benefits include retirement benefits and disability, death and survivor pensions. The pension plan offers to members at the normal retirement age of 64 a choice between a lifetime pension with or without full restitution and a partial or full lump sum payment. Members can draw early retirement benefits starting from the age of 58. Since 2015, employees have the possibility to make additional purchases of benefits to fund early retirement benefits (Plan 58+).

The pension amount payable is a result of the conversion rate applied on the accumulated balance of the individual plan participant's pension account at the retirement date. The accumulated balance of each individual plan participant's pension account is based on credited vested benefits transferred from previous employers, purchases of benefits and the employee and employer contributions that have been made to the pension account of each individual plan participant, as well as the interest accrued on the accumulated balance. The interest rate accrued is defined annually by the Pension Foundation Board.

Although the Swiss pension plan is based on a defined contribution promise under Swiss pension law, it is accounted for as a defined benefit plan under IAS 19, primarily because of the obligation to accrue interest on the pension accounts and the payment of lifetime pension benefits.

Note 26 Pension and other post-employment benefit plans (continued)

The Swiss pension plan is governed by a Pension Foundation Board as required by Swiss pension law. The responsibilities of this board are defined by Swiss pension law and by the plan rules. An actuarial valuation under Swiss pension law is performed regularly. According to Swiss pension law, a temporary limited underfunding is permitted. However, should an underfunded situation occur, the Pension Foundation Board is required to take the necessary measures to ensure that full funding can be expected to be restored within a maximum period of 10 years. If a Swiss pension plan were to become significantly underfunded on a Swiss pension law basis, additional employer and employee contributions could be required. In these situations, the risk is shared between employer and employees, and the employer is not legally obliged to cover more than 50% of the additional contributions required. As of 31 December 2016, the Swiss pension plan had a technical funding ratio under Swiss pension law of 125.4% (31 December 2015: 123.3%).

The investment strategy of the Swiss plan is implemented on the basis of a multi-level investment and risk management process and is in line with Swiss pension law, including the rules and regulations relating to diversification of plan assets. These rules, among others, specify restrictions to the composition of plan assets, e.g., there is a limit of 50% for investments in equities. The investment strategy of the Swiss plan is aligned with the defined risk budget set out by the Pension Foundation Board. The risk budget is determined on the basis of regularly performed asset and liability management analyses. In order to implement the risk budget, the Swiss plan may use direct investments, investment funds and derivatives. To mitigate foreign currency risk, a specific currency hedging strategy is in place. The Pension Foundation Board strives for a medium- and long-term balance between assets and liabilities.

As of 31 December 2016, the Swiss pension plan was in a surplus situation on an International Financial Reporting Standards (IFRS) measurement basis, as the fair value of plan assets exceeded the DBO by CHF 1,749 million (31 December 2015: surplus of CHF 1,283 million). However, a surplus is only recognized on the balance sheet to the extent that it does not exceed the estimated future economic benefit, which equals the difference between the present value of the estimated future net service cost and the present value of the estimated future employer contributions. The maximum future economic benefit is highly variable based on changes in the discount rate. Both as of 31 December 2016 and 31 December 2015, the estimated future economic benefit was zero and hence no net defined benefit asset was recognized on the balance sheet. As of 31 December 2016, the difference between the pension plan surplus and the estimated future economic benefit, i.e., the asset ceiling effect, was CHF 1,749 million (31 December 2015: CHF 1,283 million). CHF 452 million out of the total movement of CHF 466 million was recognized in *Other comprehensive income* and CHF 14 million related to interest expense on the asset ceiling effect was recognized in the income statement. As of 31

December 2015, the total asset ceiling effect of CHF 1,283 million was recognized in *Other comprehensive income*. The employer contributions expected to be made to the Swiss pension plan in 2017 are estimated to be CHF 478 million.

Non-Swiss pension plans

UBS AG locations outside of Switzerland offer various defined benefit pension plans in accordance with local regulations and practices. The non-Swiss locations with major defined benefit pension plans are the UK, the US and Germany. Defined benefit pension plans in other locations are not material to the financial results of UBS AG and hence not separately disclosed.

The non-Swiss plans provide benefits in the event of retirement, death or disability. The level of benefits provided depends on the specific rate of benefit accrual and the level of employee compensation. UBS AG's general principle is to ensure that the plans are adequately funded on the basis of actuarial valuations. Local pension regulations and tax requirements are the primary drivers for determining when contributions are required.

UK pension plan

The UK plan is a career-average revalued earnings scheme, and benefits increase automatically based on UK price inflation. Normal retirement age for participants in the UK plan is 60. The UK defined benefit pension plan participants are no longer accruing benefits for current or future service. Active employees instead participate in the UK defined contribution plan.

The governance responsibility for the UK plan lies jointly with the Pension Trustee Board, which is required under local pension laws, and UBS AG. The employer contributions to the pension fund reflect agreed-upon deficit-funding contributions, which are determined on the basis of the most recent actuarial valuation using assumptions agreed by the Pension Trustee Board and UBS AG. In the event of underfunding, UBS AG and the Pension Trustee Board must agree on a deficit recovery plan within statutory deadlines. In 2016, UBS AG did not make any deficit-funding contributions (2015: CHF 316 million).

The plan assets are invested in a diversified portfolio of financial assets. A liability-driven investment approach is applied, as a portion of the plan assets is invested in inflation-indexed bonds which provide a partial hedge against price inflation. If price inflation increases, the DBO will likely increase more significantly than the change in the fair value of plan assets, which would result in an increase in the net defined benefit liability. Plan rules and local pension legislation cap the level of inflationary increase that can be applied to plan benefits.

As the plan is obligated to provide guaranteed lifetime pension benefits to plan participants upon retirement, increases in life expectancy will result in an increase in the plan's liabilities. The sensitivity to changes in life expectancy is particularly high in the UK plan as the pension benefits are indexed to price inflation.

Note 26 Pension and other post-employment benefit plans (continued)

As of 31 December 2016, the UK plan was in a deficit situation on an IFRS measurement basis as the DBO exceeded the fair value of plan assets by CHF 529 million (31 December 2015: surplus of CHF 50 million).

No employer contributions are currently scheduled to be made to the UK defined benefit pension plan in 2017.

US pension plans

There are two distinct major defined benefit pension plans in the US. Normal retirement age for participants in both US plans is 65. The plans are closed to new entrants, who instead can participate in defined contribution plans.

One of the major defined benefit pension plans is a contribution-based plan in which each participant accrues a percentage of salary in a pension account. The pension account is credited annually with interest based on a rate that is linked to the average yield on one-year US government bonds. For the other major defined benefit pension plan, retirement benefits accrue based on the career-average earnings of each individual plan participant. Upon retirement, the plans allow participants a choice between a lump sum payment and a lifetime pension.

As required under local state pension laws, both plans have fiduciaries who, together with UBS AG, are responsible for the governance of the plans. UBS AG regularly reviews the contribution strategy for these plans. In determining the contribution strategy, UBS AG considers the minimum funding requirements (i.e., 80% funded ratio on a basis determined under local pension regulations) and the cost of any premiums that must be paid to the Pension Benefit Guaranty Corporation for having an underfunded plan. In 2016, the contributions made by UBS AG were CHF 172 million (2015: CHF 50 million).

The plan assets for both plans are invested in a diversified portfolio of financial assets. Each pension plan's fiduciaries are responsible for the investment decisions with respect to the plan assets. A liability-driven investment approach is applied for one of the US plans to support the volatility management in the net asset / liability position. Derivative instruments may also be employed to manage volatility.

In 2015, the US pension plan rules were amended to the effect that former UBS AG employees with vested benefits in the

US defined benefit pension plans have the option to receive a lump sum payment (or early annuity payments) instead of a lifetime pension commencing at retirement age. This resulted in a reduction in the DBO of CHF 24 million and a corresponding gain recognized in the income statement in 2015, of which CHF 21 million was recorded in Wealth Management Americas.

The employer contributions expected to be made to the US defined benefit pension plans in 2017 are estimated to be CHF 20 million.

German pension plans

There are two different defined benefit pension plans in Germany, and both are contribution-based plans. No plan assets are set aside to fund these plans, and benefits are directly paid by UBS AG. Normal retirement age for the participants in the German plans is 65. Within the larger of the two pension plans, each participant accrues a percentage of salary in a pension account. The accumulated account balance of the plan participant is credited on an annual basis with guaranteed interest at a rate of 5%. In the other plan, amounts are accrued annually based on employee elections. For this plan, the accumulated account balance is credited on an annual basis with a guaranteed interest rate of 4% for amounts accrued after 2009. Both German plans are regulated under German pension law, under which the responsibility to pay pension benefits when they are due rests entirely with UBS AG. For the German plans, a portion of the pension payments is directly increased in line with price inflation.

The benefits expected to be paid by UBS AG to the participants of the German plans in 2017 are estimated to be CHF 9 million.

Financial information by plan

The table on the following pages provides an analysis of the movement in the net asset / liability recognized on the balance sheet for defined benefit pension plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

Note 26 Pension and other post-employment benefit plans (continued)

Defined benefit pension plans

CHF million	Swiss plan		UK plan		US and German plans		Total	
For the year ended	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Defined benefit obligation at the beginning of the year	22,636	23,956	3,350	3,949	1,619	1,693	27,605	29,598
Current service cost	471	589	0	0	9	10	480	599
Interest expense	240	270	116	137	62	57	419	463
Plan participant contributions	210	205	0	0	0	0	210	205
Remeasurements	477	(1,231)	922	(441)	125	(8)	1,524	(1,681)
of which: actuarial (gains) / losses due to changes in demographic assumptions	(659)	(1,038)	(63)	(122)	3	34	(719)	(1,125)
of which: actuarial (gains) / losses due to changes in financial assumptions	698	(237)	1,022	(201)	107	(71)	1,827	(509)
of which: experience (gains) / losses ¹	438	44	(37)	(119)	15	28	416	(47)
Past service cost related to plan amendments	0	0	0	0	0	(24)	0	(24)
Curtailments	(96)	(81)	0	0	0	0	(96)	(81)
Benefit payments	(1,074)	(1,071)	(135)	(128)	(98)	(83)	(1,307)	(1,283)
Termination benefits	0	1	0	0	0	0	0	1
Other movements	0	0	0	0	19	0	19	0
Foreign currency translation	0	0	(549)	(166)	20	(26)	(529)	(192)
Defined benefit obligation at the end of the year	22,865	22,636	3,704	3,350	1,755	1,619	28,325	27,605
of which: amounts owing to active members	10,419	10,359	290	255	258	267	10,967	10,881
of which: amounts owing to deferred members	0	0	2,210	1,864	584	523	2,794	2,388
of which: amounts owing to retirees	12,446	12,278	1,204	1,230	913	829	14,563	14,336
Fair value of plan assets at the beginning of the year	23,919	23,931	3,400	3,381	997	1,029	28,316	28,341
Return on plan assets excluding amounts included in interest income	824	109	312	(124)	2	(44)	1,139	(59)
Interest income	258	273	118	118	44	39	420	430
Employer contributions – excluding termination benefits	486	482	0	316	179	57	665	855
Employer contributions – termination benefits	0	1	0	0	0	0	0	1
Plan participant contributions	210	205	0	0	0	0	210	205
Benefit payments	(1,074)	(1,071)	(135)	(128)	(98)	(83)	(1,307)	(1,283)
Administration expenses, taxes and premiums paid	(10)	(10)	0	0	(6)	(8)	(16)	(18)
Foreign currency translation	0	0	(520)	(163)	26	7	(494)	(156)
Fair value of plan assets at the end of the year	24,614	23,919	3,175	3,400	1,144	997	28,934	28,316
Asset ceiling effect at the beginning of the year	1,283	0	0	0	0	0	1,283	0
Interest expense on asset ceiling effect	14	0	0	0	0	0	14	0
Asset ceiling effect excluding interest expense on asset ceiling effect	452	1,283	0	0	0	0	452	1,283
Asset ceiling effect at the end of the year	1,749	1,283	0	0	0	0	1,749	1,283
Net defined benefit asset / (liability)	0	0	(529)	50	(611)	(622)	(1,140)	(572)

Movement in the net asset / (liability) recognized on the balance sheet

Net asset / (liability) recognized on the balance sheet at the beginning of the year	0	(25)	50	(568)	(622)	(664)	(572)	(1,256)
Net periodic expenses	(381)	(515)	2	(18)	(33)	(12)	(412)	(546)
Amounts recognized in other comprehensive income	(105)	58	(610)	317	(122)	(35)	(837)	339
Employer contributions – excluding termination benefits	486	482	0	316	179	57	665	855
Employer contributions – termination benefits	0	1	0	0	0	0	0	1
Other movements	0	0	0	0	(19)	0	(19)	0
Foreign currency translation	0	0	29	3	6	33	35	36
Net asset / (liability) recognized on the balance sheet at the end of the year	0	0	(529)	50	(611)	(622)	(1,140)	(572)

Funded and unfunded plans

Defined benefit obligation from funded plans	22,865	22,636	3,704	3,350	1,316	1,288	27,885	27,274
Defined benefit obligation from unfunded plans	0	0	0	0	440	331	440	331
Plan assets	24,614	23,919	3,175	3,400	1,144	997	28,934	28,316
Surplus / (deficit)	1,749	1,283	(529)	50	(611)	(622)	609	711
Asset ceiling effect	1,749	1,283	0	0	0	0	1,749	1,283
Net defined benefit asset / (liability)	0	0	(529)	50	(611)	(622)	(1,140)	(572)

¹ Experience (gains) / losses are a component of actuarial remeasurements of the defined benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred.

Note 26 Pension and other post-employment benefit plans (continued)

Analysis of amounts recognized in net profit

CHF million	Swiss plan		UK plan		US and German plans		Total	
For the year ended	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Current service cost	471	589	0	0	9	10	480	599
Interest expense related to defined benefit obligation	240	270	116	137	62	57	419	463
Interest income related to plan assets	(258)	(273)	(118)	(118)	(44)	(39)	(420)	(430)
Interest expense on asset ceiling effect	14	0	0	0	0	0	14	0
Administration expenses, taxes and premiums paid	10	10	0	0	6	8	16	18
Plan amendments	0	0	0	0	0	(24)	0	(24)
Curtailments	(96)	(81)	0	0	0	0	(96)	(81)
Termination benefits	0	1	0	0	0	0	0	1
Net periodic expenses	381	515	(2)	18	33	12	412	546

Analysis of amounts recognized in other comprehensive income (OCI)

CHF million	Swiss plan		UK plan		US and German plans		Total	
For the year ended	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Remeasurement of defined benefit obligation	(477)	1,231	(922)	441	(125)	8	(1,524)	1,681
Return on plan assets excluding amounts included in interest income	824	109	312	(124)	2	(44)	1,139	(59)
Asset ceiling effect excluding interest expense on asset ceiling effect	(452)	(1,283)	0	0	0	0	(452)	(1,283)
Total gains / (losses) recognized in other comprehensive income, before tax	(105)	58	(610)	317	(122)	(35)	(837)	339

The table below provides information on the duration of the DBO and the timing for expected benefit payments.

	Swiss plan		UK plan		US and German plans ¹	
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Duration of the defined benefit obligation (in years)	15.1	15.1	22.6	19.7	10.6	11.3
Maturity analysis of benefits expected to be paid						
CHF million						
Benefits expected to be paid within 12 months	1,140	1,146	72	80	103	92
Benefits expected to be paid between 1 and 3 years	2,204	2,218	164	177	213	185
Benefits expected to be paid between 3 and 6 years	3,394	3,403	315	338	328	291
Benefits expected to be paid between 6 and 11 years	5,439	5,526	710	785	562	509
Benefits expected to be paid between 11 and 16 years	5,041	5,173	856	981	514	510
Benefits expected to be paid in more than 16 years	17,162	18,892	6,064	7,348	958	1,172

¹ The duration of the defined benefit obligation represents a weighted average across US and German plans.

Note 26 Pension and other post-employment benefit plans (continued)

Actuarial assumptions

The measurement of each pension plan's DBO considers different actuarial assumptions. Changes in those assumptions lead to volatility in the DBO. The following principal actuarial assumptions are applied:

- Discount rate: the discount rate is based on the yield of high-quality corporate bonds quoted in an active market in the currency of the respective pension plan. Consequently, a decrease in the yield of high-quality corporate bonds increases the DBO. Conversely, an increase in the yield of high-quality corporate bonds decreases the DBO.
- Rate of salary increase: an increase in the salary of plan participants generally increases the DBO, specifically for the Swiss and German plans. For the UK plan, as the plan is closed for future service, UBS AG employees no longer accrue future service benefits and thus salary increases have no effect on the DBO. For the US plans, only a small percentage of the total population continues to accrue benefits for future service, therefore the effect of a salary increase on the DBO is minimal.
- Rate of pension increase: for the Swiss plan, there is no automatic indexing of pensions. Any increase would be decided by the Pension Foundation Board. For the US plans, there is also no automatic indexing of pensions. For the UK plan, pensions are automatically indexed to price inflation as per plan rules and local pension legislation. The German plans are also automatically indexed and a portion of the pensions are directly increased by price inflation. An increase in price inflation in the UK and Germany increases the respective plan's DBO.
- Rate of interest credit on retirement savings: the Swiss plan and one of the US plans have retirement saving balances that are increased annually by an interest credit rate. For these plans, an increase in the interest credit rate increases the respective plan's DBO.
- Life expectancy: for most of UBS AG's defined benefit pension plans, the respective plan is obligated to provide guaranteed lifetime pension benefits. The DBO for all plans is calculated using an underlying best estimate of the life expectancy of plan participants. An increase in the life expectancy of plan participants increases the plan's DBO.

The actuarial assumptions used for the pension plans are based on the economic conditions prevailing in the jurisdiction in which they operate.

→ Refer to Note 1a item 7 for a description of the accounting policy for defined benefit pension plans

Changes in actuarial assumptions

UBS AG regularly reviews the actuarial assumptions used in calculating its DBO to determine their continuing relevance.

Swiss pension plan

In 2016, UBS AG continued to enhance its methodology for estimating the discount rate by improving the construction of the yield curve from Swiss high-quality corporate bonds. Furthermore, UBS AG refined its approach for estimating the life expectancy, the rate of employee disability and the rate of salary increases. These changes in estimates decreased the DBO of the Swiss pension plan by CHF 319 million, of which changes in demographic assumptions decreased the DBO by CHF 659 million and changes in financial assumptions increased the DBO by CHF 339 million. However, the effect from these changes in estimates was more than offset by experience losses and market-driven changes in the discount rate, resulting in a total upward remeasurement of the Swiss plan DBO of CHF 477 million, which was recognized in *Other comprehensive income*.

In 2015, the effect from an enhancement in methodology for estimating the discount rate and from the refinement of the approach to estimate the rate of salary increases, the rate of interest credit on retirement savings, the employee turnover rate, the rate of employee disabilities and the rate of marriage was a net decrease in the DBO of the Swiss pension plan of CHF 2,055 million, of which CHF 1,038 million related to demographic assumptions and CHF 1,017 million related to financial assumptions. The effect from these changes in estimates was partly offset by market-driven discount rate changes, resulting in an overall downward remeasurement of the Swiss plan DBO of CHF 1,231 million, which was recognized in *Other comprehensive income*.

Non-Swiss pension plans

In both 2016 and 2015, UBS AG also enhanced methodologies and refined approaches used to estimate various actuarial assumptions for its non-Swiss pension plans.

In 2016, these changes in estimates resulted in a total net decrease in the DBO of the UK pension plan of CHF 63 million, all related to demographic assumptions. However, the effect from these changes in estimates was more than offset mainly by market-driven discount rate changes, resulting in a total upward remeasurement of the UK plan DBO of CHF 922 million, which was recognized in *Other comprehensive income*.

In 2015, the changes in estimates resulted in a total net decrease in the DBO of the UK pension plan of CHF 192 million, of which CHF 122 million related to demographic assumptions and CHF 71 million related to financial assumptions. In addition, mainly market-driven discount rate changes reduced the DBO further, resulting in an overall downward remeasurement of the UK plan DBO of CHF 441 million, which was recognized in *Other comprehensive income*.

Note 26 Pension and other post-employment benefit plans (continued)

The tables below show the principal actuarial assumptions used in calculating the DBO at the end of the year.

Principal actuarial assumptions used

In %	Swiss plan		UK plan		US and German plans ¹	
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Discount rate	0.73	1.09	2.69	3.90	3.58	4.01
Rate of salary increase	1.30	1.75	0.00	0.00	2.86	2.89
Rate of pension increase	0.00	0.00	3.18	3.02	1.50	1.50
Rate of interest credit on retirement savings	0.73	1.09	0.00	0.00	1.74	1.48

¹ Represents weighted average assumptions across US and German plans.

Mortality tables and life expectancies for major plans

Country	Mortality table	Life expectancy at age 65 for a male member currently			
		aged 65		aged 45	
		31.12.16	31.12.15	31.12.16	31.12.15
Switzerland	BVG 2015 G CMI_2016 ¹	21.5	21.5	22.9	23.2
UK	S2PA CMI_2015, with projections	23.7	23.9	25.0	25.6
US	RP2014 WCHA, with MP2016 projection scale ²	22.9	23.0	24.4	24.5
Germany	Dr. K. Heubeck 2005 G	20.1	20.0	22.8	22.6

Country	Mortality table	Life expectancy at age 65 for a female member currently			
		aged 65		aged 45	
		31.12.16	31.12.15	31.12.16	31.12.15
Switzerland	BVG 2015 G CMI_2016 ¹	23.4	24.0	24.9	25.7
UK	S2PA CMI_2015, with projections	25.6	25.8	27.4	28.0
US	RP2014 WCHA, with MP2016 projection scale ²	24.5	24.6	26.1	26.2
Germany	Dr. K. Heubeck 2005 G	24.2	24.1	26.7	26.6

¹ In 2015, the mortality table BVG 2010 G was used. ² In 2015, the mortality table RP2014 WCHA, with MP2015 projection scale was used.

Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption, showing how the DBO would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the balance sheet date. Unforeseen

circumstances may arise, which could result in variations that are outside the range of alternatives deemed reasonably possible. Caution should be used in extrapolating the sensitivities below to the overall impact on the DBO as the sensitivities may not be linear.

Sensitivity analysis of significant actuarial assumptions¹

Increase / (decrease) in defined benefit obligation	Swiss plan		UK plan		US and German plans	
CHF million	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Discount rate						
Increase by 50 basis points	(1,435)	(1,416)	(388)	(308)	(86)	(84)
Decrease by 50 basis points	1,630	1,609	452	354	94	92
Rate of salary increase						
Increase by 50 basis points	86	82	— ²	— ²	1	1
Decrease by 50 basis points	(79)	(86)	— ²	— ²	(1)	(1)
Rate of pension increase						
Increase by 50 basis points	1,178	1,163	435	343	6	6
Decrease by 50 basis points	— ³	— ³	(377)	(300)	(6)	(5)
Rate of interest credit on retirement savings						
Increase by 50 basis points	264	263	— ⁴	— ⁴	9	8
Decrease by 50 basis points	(250)	(249)	— ⁴	— ⁴	(8)	(8)
Life expectancy						
Increase in longevity by one additional year	796	719	136	97	44	42

¹ The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded. ² As the plan is closed for future service, a change in assumption is not applicable. ³ As the assumed rate of pension increase was 0% as of 31 December 2016 and as of 31 December 2015, a downward change in assumption is not applicable. ⁴ As the plan does not provide interest credits on retirement savings, a change in assumption is not applicable.

Note 26 Pension and other post-employment benefit plans (continued)

Fair value of plan assets

The table below provides information on the composition and fair value of plan assets of the Swiss, the UK and the US pension plans.

Composition and fair value of plan assets

Swiss plan

	31.12.16				31.12.15			
	Fair value			Plan asset allocation %	Fair value			Plan asset allocation %
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<i>CHF million</i>								
Cash and cash equivalents	869	0	869	4	517	0	517	2
Real estate / property								
Domestic	0	2,689	2,689	11	0	2,647	2,647	11
Investment funds								
Equity								
Domestic	938	0	938	4	699	0	699	3
Foreign	6,558	1,170	7,728	31	6,948	1,085	8,033	34
Bonds ¹								
Domestic, AAA to BBB–	2,222	0	2,222	9	2,112	0	2,112	9
Foreign, AAA to BBB–	5,877	0	5,877	24	6,109	0	6,109	26
Foreign, below BBB–	1,176	0	1,176	5	1,056	0	1,056	4
Real estate								
Foreign	0	42	42	0	0	63	63	0
Other	283	2,776	3,059	12	1,064	1,605	2,669	11
Other investments	0	15	15	0	0	15	15	0
Total	17,923	6,691	24,614	100	18,505	5,414	23,919	100
	31.12.16				31.12.15			
Total fair value of plan assets	24,614				23,919			
<i>of which:²</i>								
Bank accounts at UBS AG	432				517			
UBS AG debt instruments	5				5			
UBS Group AG shares	47				38			
Securities lent to UBS AG ³	1,855				962			
Property occupied by UBS AG	83				82			
Derivative financial instruments, counterparty UBS AG ³	(220)				(170)			

¹ The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification. ² Bank accounts at UBS AG encompass accounts in the name of the Swiss pension fund. The other positions disclosed in the table encompass both direct investments in UBS AG instruments and indirect investments, i.e., those made through funds that the pension fund invests in. ³ Securities lent to UBS AG and derivative financial instruments are presented gross of any collateral. Securities lent to UBS AG were fully covered by collateral as of 31 December 2016 and 31 December 2015. Net of collateral, derivative financial instruments amounted to CHF 76 million as of 31 December 2016 (31 December 2015: negative CHF 90 million).

Note 26 Pension and other post-employment benefit plans (continued)

Composition and fair value of plan assets (continued)

UK plan

	31.12.16				31.12.15			
	Fair value			Plan asset allocation %	Fair value			Plan asset allocation %
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
<i>CHF million</i>								
Cash and cash equivalents	133	0	133	4	426	0	426	13
Bonds¹								
Domestic, AAA to BBB–	1,131	0	1,131	36	0	0	0	0
Domestic, below BBB–	1	0	1	0	0	0	0	0
Investment funds								
Equity								
Domestic	39	0	39	1	98	0	98	3
Foreign	984	0	984	31	1,080	0	1,080	32
Bonds ¹								
Domestic, AAA to BBB–	500	28	528	17	1,305	0	1,305	38
Domestic, below BBB–	23	0	23	1	53	0	53	2
Foreign, AAA to BBB–	245	0	245	8	189	0	189	6
Foreign, below BBB–	39	0	39	1	31	0	31	1
Real estate								
Domestic	39	72	111	4	46	68	115	3
Other	(35)	111	76	2	(32)	123	91	3
Other investments	(144)	10	(134)	(4)	6	7	13	0
Total fair value of plan assets	2,955	221	3,175	100	3,202	198	3,400	100

¹ The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification.

Note 26 Pension and other post-employment benefit plans (continued)

Composition and fair value of plan assets (continued)

US plans

CHF million	31.12.16				31.12.15			
	Fair value			Weighted average plan asset allocation %	Fair value			Weighted average plan asset allocation %
	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
Cash and cash equivalents	75	0	75	7	52	0	52	5
Bonds ¹								
Domestic, AAA to BBB–	158	0	158	14	56	0	56	6
Domestic, below BBB–	13	0	13	1	60	0	60	6
Foreign, AAA to BBB–	42	0	42	4	17	0	17	2
Foreign, below BBB–	1	0	1	0	6	0	6	1
Investment funds								
Equity								
Domestic	264	0	264	23	240	0	240	24
Foreign	248	0	248	22	240	0	240	24
Bonds ¹								
Domestic, AAA to BBB–	218	0	218	19	134	0	134	13
Domestic, below BBB–	18	0	18	2	13	0	13	1
Foreign, AAA to BBB–	42	0	42	4	31	0	31	3
Foreign, below BBB–	5	0	5	0	3	0	3	0
Real estate								
Domestic	0	11	11	1	0	12	12	1
Other	19	0	19	2	56	42	98	10
Insurance contracts	0	18	18	2	0	17	17	2
Asset-backed securities	8	0	8	1	14	0	14	1
Other investments	3	0	3	0	5	0	5	0
Total fair value of plan assets	1,115	29	1,144	100	926	70	997	100

¹ The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in the Standard & Poor's rating classification.

Note 26 Pension and other post-employment benefit plans (continued)

b) Post-employment medical insurance plans

In the US and the UK, UBS AG offers post-employment medical benefits that contribute to the health care coverage of certain employees and their beneficiaries after retirement.

The UK post-employment medical plan is closed to new entrants. The post-employment medical benefits in the UK and the US cover all types of medical expenses. These plans are not prefunded plans, and costs are recognized as incurred. In the US, the retirees also contribute to the cost of the post-employment medical benefits.

The benefits expected to be paid by UBS AG to the post-employment medical insurance plans in 2017 are estimated to be CHF 6 million.

The table below provides an analysis of the movement in the net asset / liability recognized on the balance sheet for post-employment medical plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

Post-employment medical insurance plans

CHF million	UK plan		US plans		Total	
For the year ended	31.12.16	31.12.15	31.12.16	31.12.15	31.12.16	31.12.15
Post-employment benefit obligation at the beginning of the year	25	32	59	53	84	85
Current service cost	0	0	0	0	0	0
Interest expense	1	1	3	2	3	3
Plan participant contributions	0	0	2	2	2	2
Remeasurements	6	(6)	7	9	13	3
of which: actuarial (gains) / losses due to changes in demographic assumptions	1	2	(1)	2	0	4
of which: actuarial (gains) / losses due to changes in financial assumptions	5	(1)	1	(2)	6	(3)
of which: experience (gains) / losses ¹	0	(7)	6	9	6	2
Benefit payments ²	(1)	(1)	(7)	(8)	(8)	(10)
Foreign currency translation	(4)	(2)	1	1	(3)	(1)
Post-employment benefit obligation at the end of the year	26	25	65	59	91	84
of which: amounts owing to active members	6	5	0	0	6	5
of which: amounts owing to deferred members	0	0	0	0	0	0
of which: amounts owing to retirees	21	20	65	59	86	79
Fair value of plan assets at the end of the year	0	0	0	0	0	0
Net post-employment benefit asset / (liability)	(26)	(25)	(65)	(59)	(91)	(84)

Analysis of amounts recognized in net profit

Current service cost	0	0	0	0	0	0
Interest expense related to post-employment benefit obligation	1	1	3	2	3	3
Net periodic expenses	1	1	3	2	4	4

Analysis of amounts recognized in other comprehensive income (OCI)

Remeasurement of post-employment benefit obligation	(6)	6	(7)	(9)	(13)	(3)
Total gains / (losses) recognized in other comprehensive income, before tax	(6)	6	(7)	(9)	(13)	(3)

¹ Experience (gains) / losses are a component of actuarial remeasurements of the post-employment benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred. ² Benefit payments are funded by employer contributions and plan participant contributions.

Note 26 Pension and other post-employment benefit plans (continued)

Actuarial assumptions

The measurement of each medical insurance plan's post-employment benefit obligation considers different actuarial assumptions. On a country-by-country basis, the same discount rate is used for the calculation of the post-employment benefit obligation from medical insurance plans as for the DBO arising from pension plans. Changes in assumptions lead to volatility in the post-employment benefit obligation. The following principal actuarial assumptions are applied:

- Discount rate: similar to defined benefit pension plans, a decrease in the yield of high-quality corporate bonds increases the post-employment benefit obligation. Conversely, an increase in the yield of high-quality corporate bonds decreases the post-employment benefit obligation.
- Average health care cost trend rate: an increase in health care costs generally increases the post-employment benefit obligation.

- Life expectancy: as some plan participants have lifetime benefits under these plans, an increase in life expectancy increases the post-employment benefit obligation.

Changes in actuarial assumptions

UBS AG regularly reviews the actuarial assumptions used in calculating its post-employment benefit obligations to determine their continuing relevance. In 2016 and in 2015, UBS AG enhanced methodologies and refined approaches used to estimate several actuarial assumptions. These improvements in estimates resulted in a net increase in the post-employment benefit obligation.

Principal actuarial assumptions used to determine post-employment benefit obligations at the end of the year were:

Principal actuarial assumptions used¹

In %	UK plan		US plans ²	
	31.12.16	31.12.15	31.12.16	31.12.15
Discount rate	2.69	3.90	3.97	4.23
Average health care cost trend rate – initial	5.10	5.10	7.03	6.75
Average health care cost trend rate – ultimate	5.10	5.10	4.50	5.00

¹ The assumptions for life expectancies are provided within Note 26a. ² Represents weighted average assumptions across US plans.

Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption showing how the post-employment benefit obligation would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the balance sheet date. Unforeseen circumstances may arise, which

could result in variations that are outside the range of alternatives deemed reasonably possible. Caution should be used in extrapolating the sensitivities below to the overall impact on the post-employment benefit obligation, as the sensitivities may not be linear.

Sensitivity analysis of significant actuarial assumptions¹

Increase / (decrease) in post-employment benefit obligation	UK plan		US plans	
CHF million	31.12.16	31.12.15	31.12.16	31.12.15
Discount rate				
Increase by 50 basis points	(2)	(1)	(3)	(3)
Decrease by 50 basis points	2	2	3	3
Average health care cost trend rate				
Increase by 100 basis points	4	3	2	1
Decrease by 100 basis points	(3)	(3)	(1)	(1)
Life expectancy				
Increase in longevity by one additional year	2	2	5	5

¹ The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded.

c) Defined contribution plans

UBS AG sponsors a number of defined contribution plans in locations outside Switzerland. The locations with significant defined contribution plans are the US and the UK. Certain plans allow employees to make contributions and earn matching or other contributions from UBS AG. Employer contributions to

defined contribution plans are recognized as an expense, which, for the years ended 31 December 2016, 2015 and 2014, amounted to CHF 236 million, CHF 239 million and CHF 244 million, respectively.

Note 26 Pension and other post-employment benefit plans (continued)

d) Related-party disclosure

UBS AG is the principal provider of banking services for the pension fund of UBS AG in Switzerland. In this function, UBS AG is engaged to execute most of the pension fund's banking activities. These activities can include, but are not limited to, trading, securities lending and borrowing and derivative transactions. The non-Swiss UBS AG pension funds do not have a similar banking relationship with UBS AG.

The bank leases certain properties that are owned by the Swiss pension fund. As of 31 December 2016, the minimum commitment toward the Swiss pension fund under the related

leases is approximately CHF 11 million (31 December 2015: CHF 11 million).

→ Refer to the "Composition and fair value of plan assets" table in Note 26a for more information on fair value of investments in UBS AG instruments held by the Swiss pension fund

The following amounts have been received or paid by UBS AG from and to the pension and other post-employment benefit plans located in Switzerland, the UK and the US in respect of these banking activities and arrangements.

Related-party disclosure

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Received by UBS AG			
Fees	36	33	33
Paid by UBS AG			
Rent	4	5	6
Interest	(1)	(1)	0
Dividends and capital repayments	15	14	4

The transaction volumes in UBS Group AG shares and UBS AG debt instruments and the balances of UBS Group AG shares held as of 31 December were:

Transaction volumes – UBS Group AG shares and UBS AG debt instruments

	For the year ended	
	31.12.16	31.12.15
Financial instruments bought by pension funds		
UBS Group AG shares (in thousands of shares)	2,427	1,544
UBS AG debt instruments (par values, CHF million)	0	3
Financial instruments sold by pension funds or matured		
UBS Group AG shares (in thousands of shares)	1,618	2,255
UBS AG debt instruments (par values, CHF million)	0	4

UBS Group AG shares held by pension and other post-employment benefit plans

	31.12.16	31.12.15
Number of shares (in thousands of shares)	18,363	17,737
Fair value (CHF million)	293	344

Note 27 Equity participation and other compensation plans

a) Plans offered

The UBS Group has several equity participation and other compensation plans to align the interests of Group Executive Board (GEB) members, Key Risk Takers and other employees with the interests of investors while continuously meeting regulatory requirements. This Note provides a description of the most significant plans offered by the Group which relate to the performance year 2016 (awards granted in 2017) and those from prior years that were partly expensed in 2016.

→ Refer to Note 1a item 6 for a description of the accounting policy related to equity participation and other compensation plans

Mandatory share-based compensation plans

Equity Ownership Plan (EOP):

The EOP is a mandatory share-based compensation plan for all employees with total compensation greater than CHF/USD 300,000. These employees receive a portion of their annual performance-related compensation above the threshold in the form of notional shares. Furthermore, notional shares granted to GEB members, Key Risk Takers, Group Managing Directors (GMDs) or employees whose incentive awards exceed a certain threshold, are subject to performance conditions. These performance conditions are based on the Group's return on tangible equity and the divisional return on attributed equity (for Corporate Center employees, the combined return on attributed equity of all business divisions). Certain awards, such as replacement awards issued outside the normal performance year cycle, may take the form of deferred cash under the EOP plan rules.

Notional shares represent a promise to receive UBS shares at vesting and do not carry voting rights during the vesting period. Notional shares granted before February 2014 have no rights to dividends, whereas awards granted since February 2014 carry a dividend equivalent which may be paid in notional shares or cash and which vests on the same terms and conditions as the awards. Awards are settled by delivering UBS shares at vesting, except in jurisdictions where this is not permitted for legal or tax reasons. EOP awards generally vest in equal installments after two and three years following grant (for GEB members, generally after three, four and five years). The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

Senior Executive Equity Ownership Plan (SEEOP):

Up to February 2012, GEB members and selected senior executives received a portion of their mandatory deferral in UBS shares or notional shares, which vested in equal installments

over a five-year vesting period and were forfeitable if certain conditions had not been met. The employee's business division or the Group as a whole had to be profitable in the financial year preceding scheduled vesting. Awards granted under SEEOP are settled by delivering UBS shares at vesting. No SEEOP awards have been granted since 2012.

Role-based allowances (RBAs):

Certain employees of EU regulated entities may receive an RBA in addition to their base salary. This allowance reflects the market value of a specific role and is only paid as long as the employee is within such a role. RBAs are offered in line with market practice and are generally paid in cash. In the UK, RBAs are partially awarded in cash and above a threshold in blocked UBS shares. Such shares will be unblocked in equal installments after two and three years. The compensation expense is recognized in the year of grant.

Mandatory deferred cash compensation plans

Deferred Contingent Capital Plan (DCCP):

The DCCP is a mandatory deferred cash compensation plan for all employees with total compensation greater than CHF/USD 300,000. DCCP awards granted up to January 2015 represent a right to receive a cash payment at vesting. For awards granted since February 2015, DCCP takes the form of notional additional tier 1 (AT1) capital instruments, which may be settled at the discretion of UBS in the form of a cash payment or a marketable AT1 capital instrument. Awards vest in full after five years unless there is a trigger or viability event. Awards granted under the DCCP are written down if UBS's common equity tier 1 capital ratio falls below 10% for GEB members and below 7% for all other employees. DCCP awards are also forfeited if a viability event occurs, that is, if FINMA provides a written notice to UBS that the DCCP awards must be written down to prevent an insolvency, bankruptcy or failure of UBS, or if UBS receives a commitment of extraordinary support from the public sector that is necessary to prevent such an event. Additionally, GEB members forfeit 20% of their award for each year during the vesting period in which UBS does not achieve an adjusted profit before tax. For awards granted up to January 2015, interest on the awards is paid annually, provided that UBS achieved an adjusted profit before tax in the preceding year. For awards granted since February 2015, interest payments are discretionary. The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

Note 27 Equity participation and other compensation plans (continued)

Long-Term Deferred Retention Senior Incentive Scheme (LTDRSIS):

Awards under the LTDRSIS were granted to employees in Australia up to and including 2014 and represent a profit share amount based on the profitability of the Australian business. Awards vest after three years and include an arrangement which allows for unpaid installments to be reduced if the business records a loss for the calendar year preceding vesting. The awards are generally forfeitable upon voluntary termination of employment with UBS.

Asset Management EOP:

In order to align deferred compensation of certain Asset Management employees with the performance of the funds they manage, EOP awards are granted to such employees in the form of cash-settled notional funds. The amount delivered depends on the value of the underlying investment funds at the time of vesting. The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

Wealth Management Americas financial advisor compensation

Financial advisor compensation plans generally provide for cash payments and deferred awards that are formula driven and fluctuate in proportion to the level of business activity.

UBS also may enter into compensation commitments with certain new financial advisors, primarily as a recruitment incentive and to incentivize certain eligible active financial advisors to achieve specified revenue production and other performance conditions. The compensation may be earned and paid to the employee during a period of continued employment and may be forfeited under certain circumstances.

GrowthPlus:

GrowthPlus is a program for selected financial advisors whose revenue production and length of service exceed defined thresholds from 2010 through 2017. Compensation arrangements were granted in 2010, 2011 and 2015, with additional arrangements expected to be issued in 2018. The awards are distributed over seven years, with the exception of 2018 arrangements which will be distributed over five years.

PartnerPlus:

PartnerPlus is a mandatory deferred cash compensation plan for certain eligible financial advisors. Awards (UBS AG company contributions) are based on a predefined formula during the

performance year. Participants are also allowed to voluntarily contribute additional amounts otherwise payable during the year, up to a certain percentage of their pay, which vest upon contribution. Company contributions and voluntary contributions are credited with interest in accordance with the terms of the plan. Rather than being credited with interest, a participant may elect to have voluntary contributions, along with vested company contributions, credited with notional earnings based on the performance of various mutual funds. Company contributions and interest on both company and voluntary contributions ratably vest in 20% installments six to ten years following grant date. Company contributions and interest on notional earnings on both company and voluntary contributions are forfeitable under certain circumstances.

Other share-based compensation plans

Equity Plus Plan (Equity Plus):

Equity Plus is a voluntary plan that provides eligible employees with the opportunity to purchase UBS shares at market value and receive one notional share for every three shares purchased, up to a maximum annual limit. Share purchases may be made annually from the performance award and / or monthly through deductions from salary. If the shares purchased are held for three years, and in general if the employee remains in employment, the notional shares vest. For notional shares granted since April 2014, employees are entitled to receive a dividend equivalent, which may be paid in notional shares and / or cash.

Key Employee Stock Appreciation Rights Plan (KESAP) and Key Employee Stock Option Plan (KESOP):

Until 2009, key and high-potential employees were granted discretionary share-settled stock appreciation rights (SARs) or options on UBS shares with a strike price not less than the market value of a UBS share on the date of grant. A SAR gives employees the right to receive a number of UBS shares equal to the value of any market price increase of a UBS share between the grant date and the exercise date. One option entitles the holder to acquire one registered UBS share at the option's strike price. SARs and options are settled by delivering UBS shares, except in jurisdictions where this is not permitted for legal reasons. These awards are generally forfeitable upon termination of employment with UBS. No options or SARs awards have been granted since 2009.

Note 27 Equity participation and other compensation plans (continued)

b) Effect on the income statement

Effect on the income statement for the financial year and future periods

The table below provides information on compensation expenses related to performance awards and other variable compensation, including financial advisor compensation in Wealth Management Americas, recognized for the financial year ended 31 December 2016 and deferred compensation expense that will be recognized in the income statement for 2017 and

later. The deferred compensation expense in the table also includes vested and unvested awards, which relate to the performance year 2016. The majority of them were granted in February 2017. The total compensation expense for unvested share-based awards granted up to 31 December 2016 will be recognized in future periods over a weighted average period of 2.0 years.

Personnel expenses – recognized and deferred¹

CHF million	Personnel expenses for the year ended 2016			Personnel expenses deferred to 2017 and later		
	Expenses relating to awards for 2016	Expenses relating to awards for prior years	Total	Relating to awards for 2016	Relating to awards for prior years	Total
Performance awards						
Cash performance awards	1,817	(42)	1,775	0	0	0
Deferred Contingent Capital Plan	133	295	428	266	468	735
Deferred cash plans	0	6	6	0	5	5
Equity Ownership Plan – UBS shares	214	485	699	372	356	727
Equity Ownership Plan – notional funds	26	39	65	34	27	60
Total performance awards	2,191	781	2,972	671	856	1,527
Variable compensation						
Variable compensation – other	266	151	418 ²	162 ³	301 ⁴	463
Financial advisor compensation – cash payments	2,506	0	2,506	0	0	0
Compensation commitments with recruited financial advisors	43	756	799	607	2,120	2,727
GrowthPlus and other deferral plans	112	199	311	139	773	912
UBS share plans	33	48	81	57	120	177
Wealth Management Americas: Financial advisor compensation ⁵	2,695	1,002	3,697	804	3,013	3,816
Total	5,152	1,935	7,087	1,637	4,169	5,806

¹ In 2016, total personnel expenses related to share-based compensation were CHF 910 million, which related to performance awards (CHF 699 million), other variable compensation (CHF 40 million), role-based allowances (CHF 39 million), Wealth Management Americas financial advisor compensation (CHF 81 million), the Equity Plus Plan (CHF 24 million) and social security costs (CHF 27 million). Total personnel expenses related to share-based equity-settled compensation excluding social security were CHF 861 million. ² Includes replacement payments of CHF 86 million (of which CHF 62 million related to prior years), forfeiture credits of CHF 73 million (all related to prior years), severance payments of CHF 217 million (all related to 2016) and retention plan and other payments of CHF 188 million (of which CHF 163 million related to prior years). ³ Includes DCCP interest expense of CHF 98 million for DCCP awards 2016 (granted in 2017). ⁴ Includes DCCP interest expense of CHF 243 million for DCCP awards 2015, 2014 and 2013 (granted in 2016, 2015 and 2014, respectively). ⁵ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes charges related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date.

Note 27 Equity participation and other compensation plans (continued)

Personnel expenses – recognized and deferred¹

CHF million	Personnel expenses for the year ended 2015			Personnel expenses deferred to 2016 and later		
	Expenses relating to awards for 2015	Expenses relating to awards for prior years	Total	Relating to awards for 2015	Relating to awards for prior years	Total
Performance awards						
Cash performance awards	2,073	(94)	1,980	0	0	0
Deferred Contingent Capital Plan	172	258	429	343	446	789
Deferred cash plans	0	12	12	0	3	3
Equity Ownership Plan – UBS shares	261	461	722	524	338	861
Equity Ownership Plan – notional funds	28	38	67	34	35	69
Total performance awards	2,535	675	3,210	900	822	1,722
Variable compensation						
Variable compensation – other	184	162	346 ²	248 ³	293 ⁴	541
Financial advisor compensation – cash payments	2,460	0	2,460	0	0	0
Compensation commitments with recruited financial advisors	43	692	735	940	1,899	2,839
GrowthPlus and other deferral plans	132	142	275	710	456	1,166
UBS share plans	37	45	82	66	115	182
Wealth Management Americas: Financial advisor compensation ⁵	2,673	879	3,552	1,716	2,470	4,186
Total	5,391	1,716	7,108	2,864	3,585	6,449

¹ In 2015, total personnel expenses related to share-based compensation were CHF 966 million, which related to performance awards (CHF 722 million), other variable compensation (CHF 54 million), role-based allowances (CHF 26 million), Wealth Management Americas financial advisor compensation (CHF 82 million), the Equity Plus Plan (CHF 21 million) and social security costs (CHF 61 million). Total personnel expenses related to share-based equity-settled compensation excluding social security were CHF 858 million. ² Includes replacement payments of CHF 76 million (of which CHF 65 million related to prior years), forfeiture credits of CHF 86 million (all related to prior years), severance payments of CHF 157 million (all related to 2015) and retention plan and other payments of CHF 198 million (of which CHF 183 million related to prior years). ³ Includes DCCP interest expense of CHF 160 million for DCCP awards 2015 (granted in 2016). ⁴ Includes DCCP interest expense of CHF 200 million for DCCP awards 2014, 2013 and 2012 (granted in 2015, 2014 and 2013, respectively). ⁵ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes charges related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date.

Note 27 Equity participation and other compensation plans (continued)

Personnel expenses – recognized and deferred¹

CHF million	Personnel expenses for the year ended 2014			Personnel expenses deferred to 2015 and later		
	Expenses relating to awards for 2014	Expenses relating to awards for prior years	Total	Relating to awards for 2014	Relating to awards for prior years	Total
Performance awards						
Cash performance awards	1,822	(108)	1,714	0	0	0
Deferred Contingent Capital Plan	155	194	349	312	386	698
Deferred cash plans	0	12	12	0	8	8
Equity Ownership Plan – UBS shares	215	444	659	459	367	826
Incentive Performance Plan	0	21	21	0	0	0
Total UBS share plans	215	465	680	459	367	826
Equity Ownership Plan – notional funds	24	41	65	36	33	69
Total performance awards	2,216	604	2,820	807	794	1,601
Variable compensation						
Variable compensation – other	260	206	466 ²	307 ³	340 ⁴	647
Financial advisor compensation – cash payments	2,396	0	2,396	0	0	0
Compensation commitments with recruited financial advisors	39	636	675	524	2,058	2,582
GrowthPlus and other deferral plans	81	153	234	189	528	717
UBS share plans	23	57	80	41	143	184
Wealth Management Americas: Financial advisor compensation ⁵	2,539	846	3,385	754	2,729	3,483
Total	5,015	1,656	6,671	1,868	3,863	5,731

¹ In 2014, total personnel expenses related to share-based compensation were CHF 942 million, which related to performance awards (CHF 680 million), other variable compensation (CHF 113 million), role-based allowances (CHF 9 million), Wealth Management Americas financial advisor compensation (CHF 80 million), the Equity Plus Plan (CHF 19 million) and social security costs (CHF 42 million). Total personnel expenses related to share-based equity-settled compensation excluding social security were CHF 909 million. ² Includes replacement payments of CHF 81 million (of which CHF 70 million related to prior years), forfeiture credits of CHF 70 million (all related to prior years), severance payments of CHF 162 million (all related to 2014) and retention plan and other payments of CHF 292 million (of which CHF 206 million related to prior years). ³ Includes DCCP interest expense of CHF 121 million for DCCP awards 2014 (granted in 2015). ⁴ Includes DCCP interest expense of CHF 161 million for DCCP awards 2013 and 2012 (granted in 2014 and 2013, respectively). ⁵ Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on financial advisor productivity, firm tenure, assets and other variables. It also includes charges related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date.

Note 27 Equity participation and other compensation plans (continued)

c) Movements during the year

UBS share and performance share awards

Movements in UBS share and notional share awards were:

UBS share awards

	Number of shares 2016	Weighted average grant date fair value (CHF)	Number of shares 2015	Weighted average grant date fair value (CHF)
Outstanding, at the beginning of the year	427,443	18	467,848	15
Shares awarded during the year	199,755	13	259,334	17
Distributions during the year	(115,014)	18	(279,415)	15
Forfeited during the year	0	0	(20,323)	19
Outstanding, at the end of the year	512,185	16	427,443	18
<i>of which: shares vested for accounting purposes</i>	<i>189,953</i>		<i>138,908</i>	

The fair value of shares that became legally vested, as all conditions had been met, and were distributed during the years ended 2016 and 2015 was CHF 2 million and CHF 5 million, respectively.

d) Valuation

UBS share awards

UBS AG measures compensation expense based on the average market price of the UBS share on the grant date as quoted on the SIX Swiss Exchange, taking into consideration post-vesting sale and hedge restrictions, non-vesting conditions and market conditions, where applicable. The fair value of the share awards subject to post-vesting sale and hedge restrictions is discounted on the basis of the duration of the post-vesting restriction and is referenced to the cost of purchasing an at-the-money European put option for the term of the transfer restriction. The grant date fair value of notional shares without dividend entitlements also includes a deduction for the present value of future expected dividends to be paid between the grant date and distribution.

Note 28 Interests in subsidiaries and other entities

a) Interests in subsidiaries

UBS AG defines its significant subsidiaries as those entities that, either individually or in aggregate, contribute significantly to UBS AG's financial position or results of operations, based on a number of criteria, including the subsidiaries' equity and their contribution to UBS AG's total assets and profit or loss before tax, in accordance with the requirements set by IFRS 12, Swiss regulations and the rules of the US Securities and Exchange Commission (SEC).

Individually significant subsidiaries

The two tables below list UBS AG's individually significant subsidiaries as of 31 December 2016. Unless otherwise stated, the subsidiaries listed below have share capital consisting solely of ordinary shares, which are held fully by UBS AG, and the proportion of ownership interest held is equal to the voting rights held by UBS AG.

The country where the respective registered office is located is also the principal place of business. UBS Europe SE has branches and offices in a number of EU member states, including branches in Germany, Italy, Luxembourg and Spain.

Individually significant subsidiaries as of 31 December 2016

Company	Registered office	Primary business division	Share capital in million	Equity interest accumulated in %
UBS Americas Holding LLC	Wilmington, Delaware, USA	Corporate Center	USD 2,250.0 ¹	100.0
UBS Asset Management AG	Zurich, Switzerland	Asset Management	CHF 43.2	100.0
UBS Bank USA	Salt Lake City, Utah, USA	Wealth Management Americas	USD 0.0	100.0
UBS Europe SE	Frankfurt, Germany	Wealth Management	EUR 176.0	100.0
UBS Financial Services Inc.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Limited	London, United Kingdom	Investment Bank	GBP 226.6	100.0
UBS Securities LLC	Wilmington, Delaware, USA	Investment Bank	USD 1,283.1 ²	100.0
UBS Switzerland AG	Zurich, Switzerland	Personal & Corporate Banking	CHF 10.0	100.0

¹ Comprised of common share capital of USD 1,000 and non-voting preferred share capital of USD 2,250,000,000. ² Comprised of common share capital of USD 100,000 and non-voting preferred share capital of USD 1,283,000,000.

During 2016, the majority of the operating subsidiaries of Asset Management were transferred to UBS Asset Management AG to create a holding structure spanning the division's global activities outside the US. Also in 2016, UBS AG's direct Wealth Management subsidiaries UBS (Italia) SpA, UBS (Luxembourg) S.A. (including its branches in Austria, Denmark and Sweden), UBS Bank S.A. (Madrid) and UBS Bank (Netherlands) B.V. were

merged into UBS Deutschland AG, which was renamed to UBS Europe SE and is headquartered in Frankfurt, Germany.

UBS Americas Holding LLC, UBS Asset Management AG, UBS Europe SE, UBS Limited and UBS Switzerland AG are fully held by UBS AG. UBS Bank USA, UBS Financial Services Inc. and UBS Securities LLC are fully held, directly or indirectly, by UBS Americas Holding LLC.

Note 28 Interests in subsidiaries and other entities (continued)

Other subsidiaries

The table below lists other subsidiaries of UBS AG that are not individually significant but that contribute to UBS AG's total assets and aggregated profit before tax thresholds and are thereby disclosed in accordance with the requirements set by the SEC.

Other subsidiaries as of 31 December 2016

Company	Registered office	Primary business division	Share capital in million	Equity interest accumulated in %
UBS Americas Inc.	Wilmington, Delaware, USA	Corporate Center	USD 0.0	100.0
UBS Asset Management (Americas) Inc.	Wilmington, Delaware, USA	Asset Management	USD 0.0	100.0
UBS Asset Management (Australia) Ltd	Sydney, Australia	Asset Management	AUD 20.1 ¹	100.0
UBS Asset Management (Deutschland) GmbH	Frankfurt, Germany	Asset Management	EUR 7.7	100.0
UBS Asset Management (Hong Kong) Limited	Hong Kong, Hong Kong	Asset Management	HKD 150.0	100.0
UBS Asset Management (Japan) Ltd	Tokyo, Japan	Asset Management	JPY 2,200.0	100.0
UBS Asset Management (Singapore) Ltd	Singapore, Singapore	Asset Management	SGD 4.0	100.0
UBS Asset Management (UK) Ltd	London, United Kingdom	Asset Management	GBP 125.0	100.0
UBS Business Solutions US LLC	Wilmington, Delaware, USA	Corporate Center	USD 0.0	100.0
UBS Card Center AG	Glattbrugg, Switzerland	Personal & Corporate Banking	CHF 0.1	100.0
UBS Credit Corp.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Fund Advisor, L.L.C.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Fund Management (Luxembourg) S.A.	Luxembourg, Luxembourg	Asset Management	EUR 13.0	100.0
UBS Fund Management (Switzerland) AG	Basel, Switzerland	Asset Management	CHF 1.0	100.0
UBS Hedge Fund Solutions LLC	Wilmington, Delaware, USA	Asset Management	USD 0.1	100.0
UBS O'Connor LLC	Dover, Delaware, USA	Asset Management	USD 1.0	100.0
UBS Real Estate Securities Inc.	Wilmington, Delaware, USA	Investment Bank	USD 0.0	100.0
UBS Realty Investors LLC	Boston, Massachusetts, USA	Asset Management	USD 9.0	100.0
UBS Securities (Thailand) Ltd	Bangkok, Thailand	Investment Bank	THB 500.0	100.0
UBS Securities Australia Ltd	Sydney, Australia	Investment Bank	AUD 0.3 ¹	100.0
UBS Securities India Private Limited	Mumbai, India	Investment Bank	INR 140.0	100.0
UBS Securities Japan Co., Ltd.	Tokyo, Japan	Investment Bank	JPY 56,450.0	100.0
UBS Securities Pte. Ltd.	Singapore, Singapore	Investment Bank	SGD 420.4	100.0
UBS Services LLC	Wilmington, Delaware, USA	Corporate Center	USD 0.0	100.0
UBS South Africa (Proprietary) Limited	Sandton, South Africa	Investment Bank	ZAR 0.0	100.0
UBS UK Properties Limited	London, United Kingdom	Corporate Center	GBP 132.0	100.0
OOO UBS Bank	Moscow, Russia	Investment Bank	RUB 3,450.0	100.0
Topcard Service AG	Glattbrugg, Switzerland	Personal & Corporate Banking	CHF 0.2	100.0

¹ Includes a nominal amount relating to redeemable preference shares.

In 2016, UBS Italia SIM SpA, a subsidiary conducting activities of the Investment Bank, was converted to a branch of UBS Limited, London, via a cross-border merger transaction.

Note 28 Interests in subsidiaries and other entities (continued)

Changes in consolidation scope

In 2016, no significant subsidiaries were added to or removed from the scope of consolidation as a result of acquisitions or disposals.

Non-controlling interests

As of 31 December 2016 and 31 December 2015, non-controlling interests were not material to UBS AG. In addition, as of these dates there were no significant restrictions on UBS AG's ability to access or use the assets and settle the liabilities of subsidiaries resulting from protective rights of non-controlling interests.

Consolidated structured entities

UBS AG consolidates a structured entity (SE) if it has power over the relevant activities of the entity, exposure to variable returns and the ability to use its power to affect its returns. Consolidated SEs include certain investment funds, securitization vehicles and client investment vehicles. UBS has no individually significant subsidiaries that are SEs.

Investment fund SEs are generally consolidated when UBS AG's aggregate exposure combined with its decision-making rights indicate the ability to use such power in a principal capacity. Typically UBS AG will have decision-making rights as

fund manager, earning a management fee, and will provide seed capital at the inception of the fund or hold a significant percentage of the fund units. Where other investors do not have the substantive ability to remove UBS as decision maker, UBS AG is deemed to have control and therefore consolidates the fund.

Securitization SEs are generally consolidated when UBS AG holds a significant percentage of the asset-backed securities issued by the SE and has the power to remove without cause the servicer of the asset portfolio.

Client investment SEs are generally consolidated when UBS AG has a substantive liquidation right over the SE or a decision right over the assets held by the SE and has exposure to variable returns through derivatives traded with the SE or holding notes issued by the SE.

In 2016 and 2015, UBS AG has not entered into any contractual obligation that could require UBS AG to provide financial support to consolidated SEs. In addition, UBS AG did not provide support, financial or otherwise, to a consolidated SE when UBS AG was not contractually obligated to do so, nor has UBS AG an intention to do so in the future. Further, UBS AG did not provide support, financial or otherwise, to a previously unconsolidated SE that resulted in UBS AG controlling the SE during the reporting period.

Note 28 Interests in subsidiaries and other entities (continued)

b) Interests in associates and joint ventures

As of 31 December 2016 and 2015, no associate or joint venture was individually material to UBS AG. In addition, there were no significant restrictions on the ability of associates or joint ventures to transfer funds to UBS AG or its subsidiaries in

the form of cash dividends or to repay loans or advances made. There were no quoted market prices for any associates or joint ventures of UBS AG.

Investments in associates and joint ventures

CHF million	31.12.16	31.12.15
Carrying amount at the beginning of the year	954	927
Additions	3	12
Disposals	(2)	(2)
Share of comprehensive income	82	151
<i>of which: share of net profit^{1, 2}</i>	106	169
<i>of which: share of other comprehensive income³</i>	(24)	(18)
Dividends received	(50)	(114)
Foreign currency translation	(23)	(20)
Carrying amount at the end of the year	963	954
<i>of which: associates</i>	<i>934</i>	<i>925</i>
<i>of which: UBS Securities Co. Limited, Beijing⁴</i>	<i>392</i>	<i>411</i>
<i>of which: SIX Group AG, Zurich⁵</i>	<i>426</i>	<i>413</i>
<i>of which: other associates</i>	<i>116</i>	<i>102</i>
<i>of which: joint ventures</i>	<i>29</i>	<i>29</i>

¹ For 2016, consists of CHF 94 million from associates and CHF 12 million from joint ventures. For 2015, consists of CHF 158 million from associates and CHF 11 million from joint ventures. ² In 2015, the SIX Group sold its stake in STOXX Ltd and Indexium Ltd. The UBS share of the resulting gain on sale was CHF 81 million. ³ For 2016, consists of negative CHF 25 million from associates and CHF 0 million from joint ventures. For 2015, consists of negative CHF 18 million from associates and CHF 0 million from joint ventures. ⁴ UBS AG's equity interest amounts to 24.99%. ⁵ UBS AG's equity interest amounts to 17.31%. UBS AG is represented on the Board of Directors.

Note 28 Interests in subsidiaries and other entities (continued)

c) Interests in unconsolidated structured entities

During 2016, UBS AG sponsored the creation of various SEs and interacted with a number of non-sponsored SEs, including securitization vehicles, client vehicles as well as certain investment funds, which UBS did not consolidate as of 31 December 2016 because it did not control these entities.

The table below presents UBS AG's interests in and maximum exposure to loss from unconsolidated SEs as well as the total assets held by the SEs in which UBS had an interest as of year-end, except for investment funds sponsored by third parties, for which the carrying value of UBS's interest as of year-end has been disclosed.

Interests in unconsolidated structured entities

	31.12.16				Maximum exposure to loss ¹
<i>CHF million, except where indicated</i>	Securitization vehicles	Client vehicles	Investment funds	Total	
Trading portfolio assets	634	394	6,215	7,243	7,243
Positive replacement values	40	76	101	217	217
Loans	0	0	79	79	79
Financial assets designated at fair value	103	83 ²	0	186	1,765
Financial assets available for sale	0	3,381	58	3,439	3,439
Other assets	289	37 ²	0	327	1,490
Total assets	1,066³	3,971	6,454	11,491	
Negative replacement values	33 ⁴	346	67	446	90
Total liabilities	33	346	67	446	
Assets held by the unconsolidated structured entities in which UBS had an interest (CHF billion)	72⁵	102⁶	334⁷		

	31.12.15				Maximum exposure to loss ¹
<i>CHF million, except where indicated</i>	Securitization vehicles	Client vehicles	Investment funds	Total	
Trading portfolio assets	1,060	463	6,102	7,624	7,624
Positive replacement values	41	101	57	200	200
Loans	0	0	101	101	101
Financial assets designated at fair value	0	97 ²	0	97	1,636
Financial assets available for sale	0	3,396	102	3,498	3,498
Other assets	0	45 ²	0	45	937
Total assets	1,101³	4,102	6,362	11,565	
Negative replacement values	30 ⁴	631	0	661	19
Total liabilities	30	631	0	661	
Assets held by the unconsolidated structured entities in which UBS had an interest (CHF billion)	141⁵	43⁶	320⁷		

¹ For purposes of this disclosure, maximum exposure to loss amounts do not consider the risk-reducing effects of collateral or other credit enhancements. ² Represents the carrying value of loan commitments, both designated at fair value and held at amortized cost. The maximum exposure to loss for these instruments is equal to the notional amount. ³ As of 31 December 2016, CHF 1.0 billion of the CHF 1.1 billion (31 December 2015: CHF 0.9 billion of the CHF 1.1 billion) was held in Corporate Center – Non-core and Legacy Portfolio. ⁴ Comprised of credit default swap (CDS) liabilities and other swap liabilities. The maximum exposure to loss for CDS is equal to the sum of the negative carrying value and the notional amount. For other swap liabilities, no maximum exposure to loss is reported. ⁵ Represents principal amount outstanding. ⁶ Represents the market value of total assets. ⁷ Represents the net asset value of the investment funds sponsored by UBS and the carrying value of UBS's interests in the investment funds not sponsored by UBS.

Note 28 Interests in subsidiaries and other entities (continued)

UBS AG retains or purchases interests in unconsolidated SEs in the form of direct investments, financing, guarantees, letters of credit, derivatives and through management contracts.

UBS AG's maximum exposure to loss is generally equal to the carrying value of UBS AG's interest in the SE, with the exception of guarantees, letters of credit and credit derivatives for which the contract's notional amount, adjusted for losses already incurred, represents the maximum loss that UBS AG is exposed to. In addition, the current fair value of derivative swap instruments with a positive replacement value only, such as total return swaps, is presented as the maximum exposure to loss. Risk exposure for these swap instruments could change over time with market movements.

The maximum exposure to loss disclosed in the table on the previous page does not reflect UBS AG's risk management activities, including effects from financial instruments that may be used to economically hedge the risks inherent in the unconsolidated SE or the risk-reducing effects of collateral or other credit enhancements.

In 2016 and 2015, UBS AG did not provide support, financial or otherwise, to an unconsolidated SE when not contractually obligated to do so, nor has UBS AG an intention to do so in the future.

In 2016 and 2015, income and expenses from interests in unconsolidated SEs primarily resulted from mark-to-market movements recognized in net trading income, which have generally been hedged with other financial instruments, as well as fee and commission income received from UBS sponsored funds.

Interests in securitization vehicles

As of 31 December 2016 and 31 December 2015, UBS AG held interests, both retained and acquired, in various securitization vehicles. As of 31 December 2016, a majority of UBS AG's interests in securitization vehicles related to a portfolio of asset-backed securities (ABS), which are held within Corporate Center – Non-core and Legacy Portfolio. The Investment Bank also retained interests in securitization vehicles related to financing, underwriting, secondary market and derivative trading activities.

In some cases UBS AG may be required to absorb losses from an unconsolidated SE before other parties because UBS AG's interest is subordinated to others in the ownership structure. An overview of UBS AG's interests in unconsolidated securitization vehicles and the relative ranking and external credit rating of those interests is presented in the table on the following page.

→ **Refer to Note 1a item 1 for more information on UBS AG's accounting policies regarding consolidation and sponsorship of securitization vehicles and other structured entities**

Interests in client vehicles

As of 31 December 2016 and 31 December 2015, UBS AG retained interests in client vehicles sponsored by UBS and third parties that relate to financing and derivative activities and to hedge structured product offerings. Included within these investments are securities guaranteed by US government agencies.

Interests in investment funds

UBS AG holds interests in a number of investment funds, primarily resulting from seed investments or to hedge structured product offerings. In addition to the interests disclosed in the table on the previous page, UBS AG manages the assets of various pooled investment funds and receives fees that are based, in whole or part, on the net asset value of the fund and / or the performance of the fund. The specific fee structure is determined on the basis of various market factors and considers the nature of the fund, the jurisdiction of incorporation as well as fee schedules negotiated with clients. These fee contracts represent an interest in the fund as they align UBS AG's exposure with investors, providing a variable return that is based on the performance of the entity. Depending on the structure of the fund, these fees may be collected directly from the fund assets and / or from the investors. Any amounts due are collected on a regular basis and are generally backed by the assets of the fund. UBS AG did not have any material exposure to loss from these interests as of 31 December 2016 or as of 31 December 2015.

Note 28 Interests in subsidiaries and other entities (continued)

Interests in unconsolidated securitization vehicles¹

	31.12.16				
	Residential mortgage- backed securities	Commercial mortgage- backed securities	Other asset- backed securities ²	Re-securiti- zation ³	Total
<i>CHF million, except where indicated</i>					
Sponsored by UBS					
Interests in senior tranches	103	34	0	14	151
<i>of which: rated investment grade</i>	0	34			34
<i>of which: rated sub-investment grade</i>	103				103
<i>of which: defaulted</i>				14	14
Interests in mezzanine tranches	1	0	0	0	1
<i>of which: rated sub-investment grade</i>	1				1
Total	104	34	0	14	152
<i>of which: Trading portfolio assets</i>	1	34	0	14	49
<i>of which: Financial assets designated at fair value</i>	103	0	0	0	103
Total assets held by the vehicles in which UBS had an interest (CHF billion)	2	13	0	1	16
Not sponsored by UBS					
Interests in senior tranches	165	4	241	125	535
<i>of which: rated investment grade</i>	165	4	241	125	535
Interests in mezzanine tranches	32	0	0	0	32
<i>of which: rated investment grade</i>	29				29
<i>of which: defaulted</i>	3				3
Interests in junior tranches	18	0	0	0	18
<i>of which: rated investment grade</i>	17				17
<i>of which: rated sub-investment grade</i>	1				1
Total	215	4	241	125	585
<i>of which: Trading portfolio assets</i>	215	4	241	125	585
Total assets held by the vehicles in which UBS had an interest (CHF billion)	41	8	5	1	56

¹ This table excludes receivables and derivative transactions with securitization vehicles. ² Includes credit card, auto and student loan structures. ³ Includes collateralized debt obligations.

Note 28 Interests in subsidiaries and other entities (continued)

Interests in unconsolidated securitization vehicles (continued)¹

	31.12.15				
	Residential mortgage-backed securities	Commercial mortgage-backed securities	Other asset-backed securities ²	Re-securitization ³	Total
<i>CHF million, except where indicated</i>					
Sponsored by UBS					
Interests in senior tranches	0	54	0	13	66
<i>of which: rated investment grade</i>		54	0		54
<i>of which: defaulted</i>				13	13
Interests in mezzanine tranches	3	7	0	0	10
<i>of which: rated investment grade</i>		7			7
<i>of which: rated sub-investment grade</i>	2				2
<i>of which: defaulted</i>	1				1
Total	3	61	0	13	77
<i>of which: Trading portfolio assets</i>	3	61	0	13	77
Total assets held by the vehicles in which UBS had an interest (CHF billion)	0	28	0	1	29
Not sponsored by UBS					
Interests in senior tranches	284	66	383	140	873
<i>of which: rated investment grade</i>	284	65	383	140	872
Interests in mezzanine tranches	61	17	17	0	95
<i>of which: rated investment grade</i>	58	17	17	0	92
<i>of which: defaulted</i>	3				3
Interests in junior tranches	11	3	0	0	14
<i>of which: rated investment grade</i>	11	0			11
<i>of which: not rated</i>	0	3			3
Total	356	86	400	140	983
<i>of which: Trading portfolio assets</i>	356	86	400	140	983
Total assets held by the vehicles in which UBS had an interest (CHF billion)	64	37	6	2	109

¹ This table excludes receivables and derivative transactions with securitization vehicles. ² Includes credit card, auto and student loan structures. ³ Includes collateralized debt obligations.

Note 28 Interests in subsidiaries and other entities (continued)

Sponsored unconsolidated structured entities in which UBS did not have an interest

For several sponsored SEs, no interest was held by UBS AG at year-end. However, during the respective reporting period UBS AG transferred assets, provided services and held instruments that did not qualify as an interest in these sponsored SEs, and accordingly earned income or incurred expenses from these entities. The table below presents the income earned and expenses incurred directly from these entities during the year as well as corresponding asset information. The table does not include income earned and expenses incurred from risk management activities, including income and expenses from financial instruments used to economically hedge instruments transacted with the unconsolidated SEs.

The majority of the fee income arose from investment funds that are sponsored and administrated by UBS AG, but managed by third parties. As UBS AG does not provide any active management services, UBS was not exposed to risk from the performance of these entities and was therefore deemed not to have an interest in them. In certain structures, the fees receivable

may be collected directly from the investors and have therefore not been included in the table below.

UBS AG also recorded net trading income from mark-to-market movements arising primarily from derivatives, such as interest rate and currency swaps as well as credit derivatives, through which UBS AG purchases protection, and financial liabilities designated at fair value, which do not qualify as interests because UBS AG does not absorb variability from the performance of the entity. Total income reported does not reflect economic hedges or other mitigating effects from UBS AG's risk management activities.

During 2016, UBS and third parties transferred assets totaling CHF 13 billion (2015: CHF 9 billion) into sponsored securitization and client vehicles created in 2016. For sponsored investment funds, transfers arose during the period as investors invested and redeemed positions, thereby changing the overall size of the funds, which, when combined with market movements, resulted in a total closing net asset value of CHF 14 billion (31 December 2015: CHF 12 billion).

Sponsored unconsolidated structured entities in which UBS did not have an interest at year-end¹

	As of or for the year ended			
	31.12.16			
<i>CHF million, except where indicated</i>	Securitization vehicles	Client vehicles	Investment funds	Total
Net interest income	3	(6)	0	(3)
Net fee and commission income	0	0	53	53
Net trading income	2	(158)	29	(128)
Total income	4	(165)	82	(78)
Asset information (CHF billion)	7²	6³	14⁴	

	As of or for the year ended			
	31.12.15			
<i>CHF million, except where indicated</i>	Securitization vehicles	Client vehicles	Investment funds	Total
Net interest income	2	(11)	0	(10)
Net fee and commission income	0	0	57	57
Net trading income	18	208	48	274
Total income	20	197	104	321
Asset information (CHF billion)	8²	1³	12⁴	

¹ These tables exclude profit attributable to preferred note holders of CHF 78 million for the year ended 31 December 2016 and CHF 77 million for the year ended 31 December 2015. ² Represents the amount of assets transferred to the respective securitization vehicles. Of the total amount transferred, CHF 2 billion was transferred by UBS (31 December 2015: CHF 3 billion) and CHF 5 billion was transferred by third parties (31 December 2015: CHF 5 billion). ³ Represents total assets transferred to the respective client vehicles. Of the total amount transferred, CHF 5 billion was transferred by UBS (31 December 2015: CHF 1 billion) and CHF 1 billion was transferred by third parties (31 December 2015: CHF 1 billion). ⁴ Represents the total net asset value of the respective investment funds.

Note 29 Business combinations

In 2016 and 2015, UBS AG did not complete any significant business combinations.

Note 30 Changes in organization and disposals

Measures to improve the resolvability of UBS Group in response to too big to fail requirements in Switzerland and other countries in which UBS Group operates

In December 2014, UBS Group AG completed an exchange offer for the shares of UBS AG and became the holding company of UBS Group. During 2015, UBS Group AG completed a court procedure under article 33 of the Swiss Stock Exchange Act (SESTA procedure) resulting in the cancellation of the shares of the remaining minority shareholders of UBS AG. As a result, UBS Group AG owns 100% of the outstanding shares of UBS AG.

In June 2015, UBS AG transferred its Personal & Corporate Banking and Wealth Management business booked in Switzerland to UBS Switzerland AG.

Also in 2015, a more self-sufficient business and operating model for UBS Limited was implemented. In the second half of 2015, the ownership of the majority of UBS AG's service subsidiaries outside the US was transferred to UBS Business Solutions AG, which was established to act as the UBS Group service company and is a direct subsidiary of UBS Group AG. The purpose of the service company structure is to improve the resolvability of UBS Group by enabling it to maintain operational continuity of critical services should a recovery or resolution event occur.

As of 1 January 2017, UBS AG completed the transfer of the shared service employees in the US to its US service company, UBS Business Solutions US LLC.

As of 1 July 2016, UBS Americas Holding LLC was designated as UBS AG's intermediate holding company for its US subsidiaries as required under the enhanced prudential standards regulations pursuant to the Dodd-Frank Act. UBS Americas Holding LLC holds all of UBS AG's US subsidiaries and is subject to US capital requirements, governance requirements and other prudential regulation.

In addition, UBS AG transferred the majority of the operating subsidiaries of Asset Management to UBS Asset Management AG during 2016. Furthermore, UBS AG merged its Wealth Management subsidiaries in Italy, Luxembourg (including its branches in Austria, Denmark and Sweden), the Netherlands and Spain into UBS Deutschland AG, which was renamed to UBS Europe SE, to establish UBS AG's new European legal entity which is headquartered in Frankfurt, Germany.

Sale of subsidiaries and businesses

In 2016, UBS AG agreed to sell a life insurance subsidiary within Wealth Management, which resulted in the recognition of a loss of CHF 23 million. This sale is currently expected to close in the first half of 2017 subject to customary closing conditions. As of 31 December 2016, the assets and liabilities of this business are presented as a disposal group held for sale within *Other assets* and *Other liabilities* and amounted to CHF 5,137 million and CHF 5,213 million, respectively.

In 2015, UBS AG sold its Alternative Fund Services (AFS) business to Mitsubishi UFJ Financial Group Investor Services. Upon completion of the sale, UBS AG recognized a gain on sale of CHF 56 million and reclassified an associated net foreign currency translation gain of CHF 119 million from *Other comprehensive income* to the income statement. Also during 2015, UBS AG completed the sale of certain subsidiaries and businesses within Wealth Management, which resulted in the recognition of a combined net gain of CHF 169 million.

Restructuring expenses

Restructuring expenses arise from programs that materially change either the scope of business that UBS AG engages in or the manner in which such business is conducted. Restructuring expenses are necessary to effect such programs and include items such as severance and other personnel-related expenses, duplicate headcount costs, impairment and accelerated depreciation of assets, contract termination costs, consulting fees, and related infrastructure and system costs. These costs are presented in the income statement according to the underlying nature of the expense.

Note 30 Changes in organization and disposals

Net restructuring expenses by business division and Corporate Center unit

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Wealth Management	447	323	185
Wealth Management Americas	139	137	55
Personal & Corporate Banking	117	101	64
Asset Management	100	82	50
Investment Bank	577	396	261
Corporate Center	62	194	61
of which: Services	41	138	30
of which: Non-core and Legacy Portfolio	21	56	31
Total net restructuring expenses	1,442	1,233	677
of which: personnel expenses	731	458	327
of which: general and administrative expenses	700	760	319
of which: depreciation and impairment of property, equipment and software	11	12	29
of which: amortization and impairment of intangible assets	0	2	2

Net restructuring expenses by personnel expense category

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Salaries	422	311	145
Variable compensation – performance awards	101	38	35
Variable compensation – other	208	108	138
Contractors	56	46	28
Social security	8	5	4
Pension and other post-employment benefit plans	(76)	(65)	(29)
Other personnel expenses	12	15	6
Total net restructuring expenses: personnel expenses	731	458	327

Net restructuring expenses by general and administrative expense category

CHF million	For the year ended		
	31.12.16	31.12.15	31.12.14
Occupancy	123	109	49
Rent and maintenance of IT and other equipment	93	31	23
Communication and market data services	1	0	0
Administration	28	7	3
Travel and entertainment	12	16	11
Professional fees	162	187	148
Outsourcing of IT and other services	287	316	82
Other ¹	(5)	95	2
Total net restructuring expenses: general and administrative expenses	700	760	319

¹ Mainly comprised of onerous real estate lease contracts.

Note 31 Operating leases and finance leases

Information on lease contracts classified as operating leases where UBS is the lessee is provided in Note 31a and information on finance leases where UBS acts as a lessor is provided in Note 31b.

a) Operating lease commitments

As of 31 December 2016, UBS was obligated under a number of non-cancelable operating leases for premises and equipment used primarily for banking purposes. The significant premises leases usually include renewal options and escalation clauses in line with general office rental market conditions, as well as rent

adjustments based on price indices. However, the lease agreements do not contain contingent rent payment clauses and purchase options, nor do they impose any restrictions on UBS's ability to pay dividends, engage in debt financing transactions or enter into further lease agreements.

<i>CHF million</i>	31.12.16
Expenses for operating leases to be recognized in:	
2017	708
2018	597
2019	516
2020	447
2021	385
2022 and thereafter	2,351
Subtotal commitments for minimum payments under operating leases	5,004
Less: Sublease rental income commitments	329
Net commitments for minimum payments under operating leases	4,675

<i>CHF million</i>	31.12.16	31.12.15	31.12.14
Gross operating lease expense recognized in the income statement	737	741	759
Sublease rental income	78	70	73
Net operating lease expense recognized in the income statement	659	671	686

b) Finance lease receivables

UBS leases a variety of assets to third parties under finance leases, such as commercial vehicles, production lines, medical equipment, construction equipment and aircraft. At the end of the respective lease term, assets may be sold to third parties or further leased. Lessees may participate in any sales proceeds achieved. Lease expenses cover the cost of the assets less their residual value as well as financing costs.

As of 31 December 2016, unguaranteed residual values of CHF 127 million had been accrued, and the accumulated allowance for uncollectible minimum lease payments receivable amounted to CHF 9 million. No contingent rents were received in 2016.

Lease receivables

<i>CHF million</i>	31.12.16		
	Total minimum lease payments	Unearned finance income	Present value
2017	327	21	306
2018–2021	601	32	568
Thereafter	115	3	112
Total	1,043	57	986

Note 32 Related parties

UBS AG defines related parties as associates (entities which are significantly influenced by UBS AG), joint ventures (entities in which UBS shares control with another party), post-employment benefit plans for UBS AG employees, key management personnel, close family members of key management personnel

and entities which are, directly or indirectly, controlled or jointly controlled by key management personnel or their close family members. Key management personnel is defined as members of the Board of Directors (BoD) and Executive Board (EB).

a) Remuneration of key management personnel

The non-independent members of the BoD have top management employment contracts and receive pension benefits upon retirement. Total remuneration of the non-independent members of the BoD and EB members, including those who stepped down during 2016, is provided in the table below.

Remuneration of key management personnel

CHF million	31.12.16	31.12.15	31.12.14
Base salaries and other cash payments ¹	24	21	22
Incentive awards – cash ²	10	9	8
Annual incentive award under DCCP	20	20	18
Employer's contributions to retirement benefit plans	2	1	2
Benefits in kind, fringe benefits (at market value)	2	2	1
Equity-based compensation ³	38	39	35
Total	97	92	86

¹ Includes role-based allowances that have been made in line with market practice in response to the EU Capital Requirements Directive of 2013 (CRD IV). ² Includes immediate and deferred cash. ³ Expenses for shares granted are calculated at grant date of the respective award and allocated over the vesting period, generally for 5 years. Refer to Note 27 for more information. In 2016, 2015 and 2014, equity-based compensation was entirely comprised of EOP awards.

The independent members of the BoD do not have employment or service contracts with UBS AG, and thus are not entitled to benefits upon termination of their service on the BoD. Payments

to these individuals for their services as external board members amounted to CHF 7.2 million in 2016, CHF 6.7 million in 2015 and CHF 7.1 million in 2014.

b) Equity holdings of key management personnel

Equity holdings of key management personnel

	31.12.16	31.12.15
Number of stock options from equity participation plans held by non-independent members of the BoD and the EB members ¹	620,950	1,401,686
Number of shares held by members of the BoD, EB and parties closely linked to them ²	3,267,911	3,324,650

¹ Refer to Note 27 for more information. ² Excludes shares granted under variable compensation plans with forfeiture provisions.

Of the share totals above, 95,597 shares were held by close family members of key management personnel on 31 December 2016 and 31 December 2015. No shares were held by entities that are directly or indirectly controlled or jointly controlled by key management personnel or their close family members on 31

December 2016 and 31 December 2015. Refer to Note 27 for more information. As of 31 December 2016, no member of the BoD or EB was the beneficial owner of more than 1% of UBS Group AG's shares.

Note 32 Related parties (continued)

c) Loans, advances and mortgages to key management personnel

Non-independent members of the BoD and EB members have been granted loans, fixed advances and mortgages on substantially the same terms and conditions that are available to other employees, which are based on terms and conditions granted to third parties but are adjusted for differing credit risk.

Independent BoD members are granted loans and mortgages under general market conditions.

Movements in the loan, advances and mortgage balances are as follows.

Loans, advances and mortgages to key management personnel¹

CHF million	2016	2015
Balance at the beginning of the year	33	27
Additions	13	6
Reductions	(13)	(1)
Balance at the end of the year	33 ²	33

¹ All loans are secured loans. ² Excludes CHF 2,684,498 of unused uncommitted credit facilities of one EB and one BoD member.

d) Other related party transactions with entities controlled by key management personnel

In 2016 and 2015, UBS AG did not enter into transactions with entities which are directly or indirectly controlled or jointly controlled by UBS AG's key management personnel or their close family members and as of 31 December 2016, 31 December 2015 and 31 December 2014, there were no outstanding balances related to such transactions. Furthermore,

in 2016 and 2015, entities controlled by key management personnel did not sell any goods or provide any services to UBS AG, and therefore did not receive any fees from UBS AG. UBS AG also did not provide services to such entities in 2015 and 2016, and therefore also received no fees.

Note 32 Related parties (continued)

e) Transactions with associates and joint ventures

Loans and outstanding receivables to associates and joint ventures

CHF million	2016	2015
Carrying value at the beginning of the year	476	552
Additions	4	9
Reductions	(8)	(85)
Foreign currency translation	0	0
Carrying value at the end of the year	472	476
<i>of which: unsecured loans</i>	<i>461</i>	<i>464</i>

Other transactions with associates and joint ventures

	As of or for the year ended	
CHF million	31.12.16	31.12.15
Payments to associates and joint ventures for goods and services received	153	149
Fees received for services provided to associates and joint ventures	3	7
Commitments and contingent liabilities to associates and joint ventures	4	4

→ Refer to Note 28 for an overview of investments in associates and joint ventures

f) Receivables and payables from / to UBS Group AG and other subsidiaries of UBS Group AG

CHF million	2016	2015
Receivables		
Loans	681	774
Trading portfolio assets	84	12
Other assets	35	93
Payables		
Due to customers	26,527	12,323
Other liabilities	1,111	943

Note 33 Invested assets and net new money

Invested assets

Invested assets include all client assets managed by or deposited with UBS AG for investment purposes. Invested assets include managed fund assets, managed institutional assets, discretionary and advisory wealth management portfolios, fiduciary deposits, time deposits, savings accounts and wealth management securities or brokerage accounts. All assets held for purely transactional purposes and custody-only assets, including corporate client assets held for cash management and transactional purposes, are excluded from invested assets as UBS AG only administers the assets and does not offer advice on how the assets should be invested. Also excluded are non-bankable assets (e.g., art collections) and deposits from third-party banks for funding or trading purposes.

Discretionary assets are defined as client assets that UBS AG decides how to invest. Other invested assets are those where the client ultimately decides how the assets are invested. When a single product is created in one business division and sold in another, it is counted in both the business division that manages the investment and the one that distributes it. This results in double counting within UBS AG's total invested assets, as both business divisions are independently providing a service to their respective clients, and both add value and generate revenue.

Net new money

Net new money in a reporting period is the amount of invested assets that are entrusted to UBS AG by new and existing clients, less those withdrawn by existing clients and clients who terminated their relationship with UBS AG.

Net new money is calculated using the direct method, under which inflows and outflows to / from invested assets are determined at the client level based on transactions. Interest and dividend income from invested assets are not counted as net new money inflows. Market and currency movements as well as fees, commissions and interest on loans charged are excluded from net new money, as are the effects resulting from any acquisition or divestment of a UBS AG subsidiary or business. Reclassifications between invested assets and custody-only assets as a result of a change in the service level delivered are generally treated as net new money flows; however, where such change in service level directly results from a new externally imposed regulation, the one-time net effect of the implementation is reported as an asset reclassification without net new money impact.

The Investment Bank does not track invested assets and net new money. However, when a client is transferred from the Investment Bank to another business division, this produces net new money even though client assets were already with UBS AG. There were no such transfers between the Investment Bank and other business divisions in 2016 and 2015.

Invested assets and net new money

	For the year ended	
CHF billion	31.12.16	31.12.15
Fund assets managed by UBS	275	282
Discretionary assets	885	830
Other invested assets	1,661	1,577
Total invested assets¹	2,821	2,689
<i>of which: double count</i>	<i>176</i>	<i>185</i>
Net new money¹	27.2	27.7

¹ Includes double counts.

Development of invested assets

	For the year ended	
CHF billion	31.12.16	31.12.15
Total invested assets at the beginning of the year ¹	2,689	2,734
Net new money	27	28
Market movements ²	98	(24)
Foreign currency translation	21	(31)
Other effects	(14)	(16)
<i>of which: acquisitions / (divestments)</i>	<i>(14)</i>	<i>(16)</i>
Total invested assets at the end of the year¹	2,821	2,689

¹ Includes double counts. ² Includes interest and dividend income.

Note 34 Currency translation rates

The following table shows the rates of the main currencies used to translate the financial information of foreign operations into Swiss francs.

	Spot rate		Average rate ¹		
	As of		For the year ended		
	31.12.16	31.12.15	31.12.16	31.12.15	31.12.14
1 USD	1.02	1.00	0.99	0.97	0.92
1 EUR	1.07	1.09	1.09	1.06	1.21
1 GBP	1.26	1.48	1.32	1.47	1.51
100 JPY	0.87	0.83	0.91	0.80	0.86

¹ Monthly income statement items of foreign operations with a functional currency other than the Swiss franc are translated with month-end rates into Swiss francs. Disclosed average rates for a year represent an average of 12 month-end rates, weighted according to the income and expense volumes of all foreign operations with the same functional currency for each month. Weighted average rates for individual business divisions may deviate from the weighted average rates for UBS AG.

Note 35 Events after the reporting period

Adjusting event subsequent to the publication of the unaudited fourth quarter 2016 report

The 2016 results and the balance sheet in this report differ from those presented in the unaudited fourth quarter 2016 report published on 27 January 2017 as a result of an adjusting event after the reporting period. Provisions for litigation, regulatory and similar matters increased reflecting an agreement in principle to resolve an RMBS matter related to the National Credit Union Association. This adjustment reduced 2016 net profit attributable to shareholders by CHF 102 million.

Sale of Fund Services units in Luxembourg and Switzerland

On 20 February 2017, UBS announced that it has entered into an agreement to sell Asset Management's fund administration servicing units in Luxembourg and Switzerland to Northern Trust. The transaction is expected to close in the second half of the year, subject to relevant approvals and other customary conditions. These units provide fund administration services for both UBS and third party funds with approximately CHF 420 billion in assets under administration.

Dividend payment from UBS AG to UBS Group AG

On 2 March 2017, the Annual General Meeting of Shareholders of UBS AG approved an ordinary dividend distribution of CHF 2,250 million out of its capital contribution reserve to its shareholder, UBS Group AG.

Note 36 Main differences between IFRS and Swiss GAAP

The consolidated financial statements of UBS AG are prepared in accordance with International Financial Reporting Standards (IFRS). The Swiss Financial Market Supervisory Authority (FINMA) requires financial groups that present their financial statements under IFRS to provide a narrative explanation of the main differences between IFRS and Swiss GAAP (FINMA Circular 2015 / 1 and the Banking Ordinance). Included in this Note are the significant differences in the recognition and measurement between IFRS and the provisions of the Banking Ordinance and the guidelines of FINMA governing true and fair view financial statement reporting pursuant to Article 25 through Article 42 of the Banking Ordinance.

1. Consolidation

Under IFRS, all entities that are controlled by the holding entity are consolidated.

Under Swiss GAAP, controlled entities that are deemed immaterial to UBS AG or that are held temporarily only are exempt from consolidation, but instead are recorded as participations or financial investments.

2. Financial assets available for sale

Under IFRS, financial assets available for sale are carried at fair value. Changes in fair value are recorded directly in equity until an asset is sold, collected or otherwise disposed of, or until an asset is determined to be impaired. At the time an available-for-sale asset is determined to be impaired, the cumulative unrealized loss previously recognized in equity is included in net profit or loss for the respective period. On disposal of a financial asset available for sale, the cumulative unrealized gain or loss previously recognized in equity is reclassified to the income statement.

Under Swiss GAAP, classification and measurement of financial assets designated as available for sale depend on the nature of the asset. Equity instruments with no permanent holding intent, as well as debt instruments, are classified as *Financial investments* and measured at the lower of (amortized) cost or market value. Market value adjustments up to the original cost amount and realized gains or losses upon disposal of the investment are recorded in the income statement as *Other*

income from ordinary activities. Equity instruments with a permanent holding intent are classified as participations in *Investments in subsidiaries and other participations* and measured at cost less impairment. Impairment losses are recorded in the income statement as *Impairment of investments in subsidiaries and other participations*. Reversal of impairments up to the original cost amount as well as realized gains or losses upon disposal of the investment are recorded as *Extraordinary income / Extraordinary expenses* in the income statement.

3. Cash flow hedges

Under IFRS, when hedge accounting is applied, the fair value gain or loss on the effective portion of the derivative designated as a cash flow hedge is recognized in equity. When the hedged cash flows materialize, the accumulated unrealized gain or loss is reclassified to the income statement.

Under Swiss GAAP, the effective portion of the fair value change of the derivative instrument used to hedge cash flow exposures is deferred on the balance sheet as *Other assets* or *Other liabilities*. The deferred amounts are released to the income statement when the hedged cash flows materialize.

4. Fair value option

Under IFRS, UBS AG applies the fair value option to certain financial assets and financial liabilities not held for trading. Instruments for which the fair value option is applied are accounted for at fair value with changes in fair value reflected in *Net trading income*. The fair value option is applied primarily to structured debt instruments, certain non-structured debt instruments, high-quality liquid debt securities, structured reverse repurchase and repurchase agreements and securities borrowing agreements, certain structured and non-structured loans as well as loan commitments.

Under Swiss GAAP, the fair value option can only be applied to structured debt instruments that consist of a debt host contract and one or more embedded derivatives that do not relate to own equity. Furthermore, changes in fair value attributable to changes in unrealized own credit are not recognized in the income statement and the balance sheet.

Note 36 Main differences between IFRS and Swiss GAAP (continued)

5. Goodwill and intangible assets

Under IFRS, goodwill acquired in a business combination is not amortized but tested annually for impairment. Intangible assets with an indefinite useful life are also not amortized but tested annually for impairment.

Under Swiss GAAP, goodwill and intangible assets with indefinite useful lives are amortized over a period not exceeding five years, unless a longer useful life, which may not exceed 10 years, can be justified.

6. Pension and other post-employment benefit plans

Swiss GAAP permits the use of IFRS or Swiss accounting standards for pension and other post-employment benefit plans, with the election made on a plan-by-plan basis.

UBS AG has elected to apply IFRS (IAS 19) for the non-Swiss defined benefit plans and Swiss GAAP (FER 16) for the Swiss pension plan in its standalone financial statements. The requirements of Swiss GAAP are better aligned with the specific nature of Swiss pension plans, which are hybrid in that they combine elements of defined contribution and defined benefit plans, but are treated as defined benefit plans under IFRS. Key differences between Swiss GAAP and IFRS include the treatment of dynamic elements, such as future salary increases and future interest credits on retirement savings, which are not considered under the static method used in accordance with Swiss GAAP. Also, the discount rate used to determine the defined benefit obligation in accordance with IFRS is based on the yield of high-quality corporate bonds of the market in the respective pension plan country. The discount rate used in accordance with Swiss GAAP, i.e., the technical interest rate, is determined by the Pension Foundation Board based on the expected returns of the Board's investment strategy.

For defined benefit plans, IFRS requires the full defined benefit obligation net of the plan assets to be recorded on the balance sheet, with changes resulting from remeasurements recognized directly in equity. However, for non-Swiss defined benefit plans for which IFRS accounting is elected, changes due to remeasurements are recognized in the income statement of UBS AG standalone under Swiss GAAP.

Swiss GAAP requires that employer contributions to the pension fund are recognized as personnel expenses in the income statement. Further, Swiss GAAP requires an assessment as to whether, based on the financial statements of the pension fund prepared in accordance with Swiss accounting standards (FER 26), an economic benefit to, or obligation of, the employer arises from the pension fund and is recognized in the balance sheet when conditions are met. Conditions for recording a pension asset or liability would be met if, for example, an employer contribution reserve is available or the employer is

required to contribute to the reduction of a pension deficit (on an FER 26 basis).

7. Netting of replacement values

Under IFRS, replacement values and related cash collateral are reported on a gross basis unless the restrictive IFRS netting requirements are met: i) existence of master netting agreements and related collateral arrangements that are unconditional and legally enforceable, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS AG and its counterparties, and ii) UBS AG's intention to either settle on a net basis or to realize the asset and settle the liability simultaneously.

Under Swiss GAAP, replacement values and related cash collateral are generally reported on a net basis, provided the master netting and the related collateral agreements are legally enforceable in the event of default, bankruptcy or insolvency of UBS AG's counterparties.

8. Negative interest

Under IFRS, negative interest income arising on a financial asset does not meet the definition of interest income and, therefore, negative interest on financial assets and negative interest on financial liabilities are presented within interest expense and interest income, respectively.

Under Swiss GAAP, negative interest on financial assets is presented within interest income and negative interest on financial liabilities is presented within interest expense.

9. Extraordinary income and expense

Certain non-recurring and non-operating income and expense items, such as realized gains or losses from the disposal of participations, fixed and intangible assets, as well as reversals of impairments of participations and fixed assets, are classified as extraordinary items under Swiss GAAP. This distinction is not available under IFRS.

10. Other presentational differences

Under IFRS, financial statements are comprised of an Income statement, Statement of comprehensive income, Balance sheet, Statement of changes in equity, Statement of cash flows and Notes to the financial statements. Under Swiss GAAP, the concept of other comprehensive income does not exist and consequently no Statement of comprehensive income is required. In addition, various other presentational differences exist.

Note 37 Supplemental guarantor information required under SEC regulations

Guarantee of PaineWebber securities

Prior to its acquisition by UBS in 2000, Paine Webber Group Inc. (PaineWebber) was an SEC registrant. Upon acquisition, PaineWebber was merged into UBS Americas Inc., a wholly owned subsidiary of UBS AG. Following the acquisition, UBS AG entered into a full and unconditional guarantee of the senior notes (Debt Securities) issued by PaineWebber. Under the guarantee, if UBS Americas Inc. fails to make any timely payment under the Debt Securities agreements, the holders of the Debt Securities or the Debt Securities trustee may demand payment from UBS AG without first proceeding against UBS Americas Inc.

As of 31 December 2016, CHF 137 million of these Debt Securities were outstanding. These remaining notes mature in 2017 and 2018.

Guarantee of other securities

Trust preferred securities, which were registered under the US Securities Act and were issued by UBS Preferred Funding Trust IV and UBS Preferred Funding Trust V, both of which are US-domiciled entities that are 100% legally owned by UBS AG, were redeemed in 2016. UBS AG had fully and unconditionally guaranteed these securities.

As of 31 December 2016, UBS Preferred Funding Trust IV and UBS Preferred Funding Trust V had no balances outstanding. These entities are presented in a separate column in the supplemental guarantor information provided in the following tables. Amounts presented in this column are eliminated in the Elimination entries column, as these entities are not consolidated by UBS AG, as UBS AG does not absorb any variability from the performance of these entities.

Joint liability of UBS Switzerland AG

In 2015, the Retail & Corporate and Wealth Management businesses booked in Switzerland were transferred from UBS AG to UBS Switzerland AG through an asset transfer in accordance with the Swiss Merger Act. Under the terms of the asset transfer agreement, UBS Switzerland AG assumed joint liability for contractual obligations of UBS AG existing on the asset transfer date, including the existing guarantee of aforementioned PaineWebber and other securities. To reflect this joint liability, UBS Switzerland AG is presented in a separate column as a subsidiary co-guarantor.

Hard revenue and cost transfers

In 2016, the presentation of hard revenue and cost transfers between legal entities was revised. These transfers relate to services provided from one entity to another and are settled in cash. Hard revenue transfers paid and received are now shown on various income statement line items within *Operating income* based on the nature of the revenue transferred. Previously, such transfers were presented in *Other income*. Furthermore, hard cost transfers received are now shown in *Other income*, whereas previously these were shown in *General and administrative expenses*. Prior period information for 2015 and 2014 was restated accordingly. This change in presentation did not affect operating profit before tax for any entity.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated income statement

CHF million	UBS AG (standalone) ¹	UBS Switzerland AG (standalone) ¹	UBS Americas Inc. ²	UBS Preferred Funding Trust IV & V	Other subsidiaries ²	Elimination entries	UBS AG (consolidated)
For the year ended 31 December 2016							
Operating income							
Interest income	8,500	4,151	2,227	25	1,148	(2,269)	13,782
Interest expense	(6,686)	(714)	(1,135)		(919)	2,054	(7,399)
Net interest income	1,815	3,438	1,092	25	229	(215)	6,383
Credit loss (expense) / recovery	(24)	(3)	(6)		(3)		(37)
Net interest income after credit loss expense	1,790	3,434	1,086	25	226	(215)	6,346
Net fee and commission income	1,500	3,782	7,873		3,332	(40)	16,447
Net trading income	3,717	780	454		310	(318)	4,943
Other income	8,113	346	576		1,677	(10,027)	685
Total operating income	15,120	8,343	9,988	25	5,545	(10,600)	28,421
Operating expenses							
Personnel expenses	5,691	2,044	6,243		1,613	0	15,591
General and administrative expenses	5,213	3,507	3,402		2,458	(6,891)	7,690
Depreciation and impairment of property, equipment and software	699	12	184		85	0	980
Amortization and impairment of intangible assets	22	0	60		9	0	91
Total operating expenses	11,625	5,563	9,889		4,165	(6,891)	24,352
Operating profit / (loss) before tax	3,495	2,780	99	25	1,380	(3,710)	4,069
Tax expense / (benefit)	892	589	(1,175)		482	(7)	781
Net profit / (loss)	2,603	2,191	1,274	25	898	(3,703)	3,288
Net profit / (loss) attributable to preferred noteholders	78	0	0	31	0	(31)	78
Net profit / (loss) attributable to non-controlling interests	0	0	0		4	0	4
Net profit / (loss) attributable to shareholders	2,525	2,191	1,274	(6)	894	(3,672)	3,207

¹ Amounts presented for UBS AG (standalone) and UBS Switzerland AG (standalone) represent IFRS-standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Disclosure for legal entities" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. ² Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of comprehensive income

CHF million	UBS AG (standalone) ¹	UBS Switzerland AG (standalone) ¹	UBS Americas Inc. ²	UBS Preferred Funding Trust IV & V	Other subsidiaries ²	Elimination entries	UBS AG (consolidated)
For the year ended 31 December 2016							
Comprehensive income attributable to shareholders							
Net profit / (loss)	2,525	2,191	1,274	(6)	894	(3,672)	3,207
Other comprehensive income							
Other comprehensive income that may be reclassified to the income statement							
Foreign currency translation, net of tax	335	0	285		(707)	379	293
Financial assets available for sale, net of tax	(22)	(33)	(8)		(18)	6	(73)
Cash flow hedges, net of tax	(805)	109	0		0	29	(666)
Total other comprehensive income that may be reclassified to the income statement, net of tax	(491)	77	277	0	(725)	415	(447)
Other comprehensive income that will not be reclassified to the income statement							
Defined benefit plans, net of tax	(651)	(54)	(59)		(36)	(25)	(824)
Own credit on financial liabilities designated at fair value, net of tax	(115)						(115)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(766)	(54)	(59)	0	(36)	(25)	(939)
Total other comprehensive income	(1,257)	23	218	0	(761)	390	(1,386)
Total comprehensive income attributable to shareholders	1,268	2,214	1,492	(6)	133	(3,282)	1,820
Total comprehensive income attributable to preferred noteholders	349						349
Total comprehensive income attributable to non-controlling interests	0				3		3
Total comprehensive income attributable to UBS Preferred Funding Trust IV & V							0
Total comprehensive income	1,617	2,214	1,492	(6)	137	(3,282)	2,173

¹ Amounts presented for UBS AG (standalone) and UBS Switzerland AG (standalone) represent IFRS-standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Disclosure for legal entities" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. ² Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated balance sheet

CHF million As of 31 December 2016	UBS AG (standalone) ¹	UBS Switzerland AG (standalone) ¹	UBS Americas Inc. ²	Other subsidiaries ²	Elimination entries	UBS AG (consolidated)
Assets						
Cash and balances with central banks	40,538	44,528	8,925	13,775	0	107,767
Due from banks	30,008	3,886	3,759	33,420	(57,948)	13,125
Cash collateral on securities borrowed	6,561	6,657	13,173	5,004	(16,284)	15,111
Reverse repurchase agreements	52,782	19,273	14,406	7,507	(27,722)	66,246
Trading portfolio assets	74,172	1,673	4,702	22,729	(6,615)	96,661
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	<i>39,596</i>	<i>0</i>	<i>1,960</i>	<i>5,850</i>	<i>(17,145)</i>	<i>30,260</i>
Positive replacement values	156,375	5,458	9,496	27,231	(40,149)	158,411
Cash collateral receivables on derivative instruments	22,117	913	2,701	12,068	(11,135)	26,664
Financial assets designated at fair value	35,498	16,416	5,371	41,199	(63,091)	65,024
Loans	94,506	184,241	50,150	11,589	(3,849)	307,004
Financial assets available for sale	8,104	2,046	6,593	3,469	(4,536)	15,676
Financial assets held to maturity	527	8,762	0	0	0	9,289
Investments in subsidiaries and associates	49,904	22	1	27	(48,991)	963
Property, equipment and software	6,961	19	1,075	241	0	8,297
Goodwill and intangible assets	297	0	5,130	1,161	(32)	6,556
Deferred tax assets	1,801	601	9,148	1,595	0	13,144
Other assets	10,645	1,526	9,071	7,241	(3,071)	25,412
Total assets	590,796	296,022	143,702	188,257	(283,424)	935,353
Liabilities						
Due to banks	27,992	13,204	5,288	32,733	(68,572)	10,645
Cash collateral on securities lent	13,193	1,518	2,549	1,841	(16,284)	2,818
Repurchase agreements	16,944	5,385	2,710	9,295	(27,722)	6,612
Trading portfolio liabilities	15,535	154	3,643	9,780	(6,287)	22,825
Negative replacement values	151,274	4,982	9,491	28,213	(40,149)	153,810
Cash collateral payables on derivative instruments	31,585	109	2,409	12,504	(11,135)	35,472
Due to customers	118,934	248,731	85,702	53,474	(56,641)	450,199
Financial liabilities designated at fair value	54,504	0	1	4,559	(4,047)	55,017
Debt issued	70,558	8,330	145	401	(437)	78,998
Provisions	1,483	186	2,168	312	21	4,169
Other liabilities	31,879	2,212	11,100	18,352	(3,099)	60,443
Total liabilities	533,881	284,811	125,206	171,464	(234,353)	881,009
Equity attributable to shareholders	56,273	11,211	18,496	16,754	(49,072)	53,662
Equity attributable to preferred noteholders	642	0	0	0	0	642
Equity attributable to non-controlling interests	0	0	0	40	0	40
Total equity	56,915	11,211	18,496	16,793	(49,072)	54,343
Total liabilities and equity	590,796	296,022	143,702	188,257	(283,424)	935,353

¹ Amounts presented for UBS AG (standalone) and UBS Switzerland AG (standalone) represent IFRS-standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Disclosure for legal entities" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. ² Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of cash flows

CHF million

For the year ended 31 December 2016

	UBS AG ¹	UBS Switzerland AG ¹	UBS Americas Inc. ¹	Other subsidiaries ¹	UBS AG (consolidated)
Net cash flow from / (used in) operating activities	(26,981)	(3,914)	8,979	4,503	(17,413)
Cash flow from / (used in) investing activities					
Purchase of subsidiaries, associates and intangible assets	0	(3)	0	(23)	(26)
Disposal of subsidiaries, associates and intangible assets ²	93	0	0	0	93
Purchase of property, equipment and software	(1,332)	(16)	(288)	(111)	(1,746)
Disposal of property, equipment and software	175	0	1	32	209
Purchase of financial assets available for sale	(694)	(998)	(2,792)	(2,788)	(7,271)
Disposal and redemption of financial assets available for sale	24,902	21,729	1,694	5,772	54,097
Net (purchase) / redemption of financial assets held to maturity	(527)	(8,468)	0	0	(8,996)
Net cash flow from / (used in) investing activities	22,616	12,245	(1,384)	2,882	36,359
Cash flow from / (used in) financing activities					
Net short-term debt issued / (repaid)	8,229	(7)	(2,975)	193	5,440
Distributions paid on UBS AG shares	(3,434)	0	0	0	(3,434)
Issuance of long-term debt, including financial liabilities designated at fair value	31,484	733	196	1,039	33,453
Repayment of long-term debt, including financial liabilities designated at fair value	(32,279)	(669)	(8)	(1,126)	(34,081)
Dividends paid and repayments of preferred notes	(1,366)	0	0	0	(1,366)
Net changes in non-controlling interests	0	0	0	(5)	(5)
Net activity related to group internal capital transactions and dividends	(1,333)	(2,000)	0	3,333	0
Net cash flow from / (used in) financing activities	1,300	(1,943)	(2,786)	3,435	6
Total cash flow					
Cash and cash equivalents at the beginning of the year	47,902	40,246	7,084	7,731	102,962
Net cash flow from / (used in) operating, investing and financing activities	(3,065)	6,388	4,808	10,821	18,952
Effects of exchange rate differences on cash and cash equivalents	(569)	(4)	0	(234)	(807)
Cash and cash equivalents at the end of the year³	44,269	46,629	11,892	18,317	121,107
<i>of which: cash and balances with central banks</i>	<i>40,486</i>	<i>44,528</i>	<i>8,925</i>	<i>13,775</i>	<i>107,715</i>
<i>of which: due from banks</i>	<i>2,836</i>	<i>2,095</i>	<i>2,931</i>	<i>4,065</i>	<i>11,927</i>
<i>of which: money market paper⁴</i>	<i>946</i>	<i>7</i>	<i>36</i>	<i>477</i>	<i>1,465</i>

¹ Cash flows generally represent a third-party view from a UBS AG (consolidated) perspective. As a consequence, the non-consolidated UBS Preferred Funding Trusts IV and V are not presented in this table. For the year ended 31 December 2016, these trusts had cash inflows of CHF 1,317 million from operating activities and an equivalent cash outflow for dividends paid to preferred note holders. ² Includes dividends received from associates. ³ CHF 2,662 million of cash and cash equivalents were restricted. ⁴ Money market paper is included in the balance sheet under Trading portfolio assets, Financial investments available for sale and Financial assets designated at fair value.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated income statement

CHF million							
For the year ended 31 December 2015	UBS AG (standalone) ¹	UBS Switzerland AG (standalone) ¹	UBS Americas Inc. ²	UBS Preferred Funding Trust IV & V	Other subsidiaries ²	Elimination entries	UBS AG (consolidated)
Operating income							
Interest income	9,102	3,039	1,367	63	1,626	(2,020)	13,178
Interest expense	(5,885)	(545)	(501)		(1,410)	1,892	(6,449)
Net interest income	3,218	2,494	866	63	217	(128)	6,729
Credit loss (expense) / recovery	(109)	(12)	0		4	0	(117)
Net interest income after credit loss expense	3,109	2,482	866	63	220	(128)	6,612
Net fee and commission income	2,738	3,001	7,940		3,586	(81)	17,184
Net trading income	5,031	735	355		331	(756)	5,696
Other income	15,371	120	774		89	(15,243)	1,112
Total operating income	26,249	6,338	9,935	63	4,227	(16,208)	30,605
Operating expenses							
Personnel expenses	6,800	1,607	6,281		1,265	0	15,954
General and administrative expenses	5,439	2,621	3,785		2,254	(5,880)	8,219
Depreciation and impairment of property, equipment and software	672	11	159		76	0	918
Amortization and impairment of intangible assets	22	0	73		12	0	107
Total operating expenses	12,934	4,239	10,298		3,607	(5,880)	25,198
Operating profit / (loss) before tax	13,315	2,099	(362)	63	619	(10,327)	5,407
Tax expense / (benefit)	1,136	489	(1,200)		(1,317)	(16)	(908)
Net profit / (loss)	12,180	1,610	837	63	1,936	(10,313)	6,314
Net profit / (loss) attributable to preferred noteholders	77	0	0	31	0	(31)	77
Net profit / (loss) attributable to non-controlling interests	0	0	0		3	0	3
Net profit / (loss) attributable to shareholders	12,103	1,610	837	32	1,933	(10,281)	6,235

¹ Amounts presented for UBS AG (standalone) and UBS Switzerland AG (standalone) represent IFRS-standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Disclosure for legal entities" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. ² Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of comprehensive income

CHF million For the year ended 31 December 2015	UBS AG (standalone) ¹	UBS Switzerland AG (standalone) ¹	UBS Americas Inc. ²	UBS Preferred Funding Trust IV & V	Other subsidiaries ²	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders							
Net profit / (loss)	12,103	1,610	837	32	1,933	(10,281)	6,235
Other comprehensive income							
Other comprehensive income that may be reclassified to the income statement							
Foreign currency translation, net of tax	(11)	0	121		(843)	467	(266)
Financial assets available for sale, net of tax	(51)	43	(21)		(16)	(19)	(64)
Cash flow hedges, net of tax	(503)	(72)	0		0	57	(518)
Total other comprehensive income that may be reclassified to the income statement, net of tax	(564)	(29)	100	0	(859)	504	(848)
Other comprehensive income that will not be reclassified to the income statement							
Defined benefit plans, net of tax	701	(337)	(71)		27	(15)	304
Total other comprehensive income that will not be reclassified to the income statement, net of tax	701	(337)	(71)	0	27	(15)	304
Total other comprehensive income	136	(366)	29	0	(832)	489	(545)
Total comprehensive income attributable to shareholders	12,239	1,244	866	32	1,101	(9,792)	5,690
Total comprehensive income attributable to preferred noteholders							
	18	0	0	0	0	0	18
Total comprehensive income attributable to non-controlling interests							
	0	0	0	0	1	0	1
Total comprehensive income attributable to UBS Preferred Funding Trust IV & V							
	0	0	0	40	0	(40)	0
Total comprehensive income	12,257	1,244	866	72	1,102	(9,832)	5,709

¹ Amounts presented for UBS AG (standalone) and UBS Switzerland AG (standalone) represent IFRS-standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Disclosure for legal entities" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. ² Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated balance sheet

CHF million							
As of 31 December 2015	UBS AG (standalone) ¹	UBS Switzerland AG (standalone) ¹	UBS Americas Inc. ²	UBS Preferred Funding Trust IV & V	Other subsidiaries ²	Elimination entries	UBS AG (consolidated)
Assets							
Cash and balances with central banks	45,125	38,701	4,971		2,509	0	91,306
Due from banks	29,225	3,224	12,776		27,510	(60,868)	11,866
Cash collateral on securities borrowed	27,925	7,414	38,007		6,506	(54,268)	25,584
Reverse repurchase agreements	61,253	16,258	21,039		14,586	(45,243)	67,893
Trading portfolio assets	94,132	1,736	5,931	1,310	30,132	(9,194)	124,047
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	<i>53,708</i>	<i>0</i>	<i>3,038</i>		<i>2,264</i>	<i>(7,066)</i>	<i>51,943</i>
Positive replacement values	175,943	6,033	21,463		28,921	(64,925)	167,435
Cash collateral receivables on derivative instruments	19,026	1,056	5,964		12,678	(14,962)	23,763
Loans	89,052	186,872	47,054		14,554	(24,809)	312,723
Financial assets designated at fair value	6,303	0	199		2,628	(3,322)	5,808
Financial assets available for sale	32,044	23,184	5,360		5,996	(4,042)	62,543
Investments in subsidiaries and associates	45,689	14	1		1	(44,751)	954
Property, equipment and software	6,499	15	972		197	0	7,683
Goodwill and intangible assets	347	0	5,112		1,139	(30)	6,568
Deferred tax assets	2,332	845	7,766		1,890	0	12,833
Other assets	12,108	1,255	10,041		3,111	(4,266)	22,249
Total assets	647,006	286,608	186,654	1,310	152,359	(330,680)	943,256
Liabilities							
Due to banks	31,725	18,948	26,320	4	5,782	(70,944)	11,836
Cash collateral on securities lent	34,094	2,493	23,437		2,274	(54,268)	8,029
Repurchase agreements	20,658	6,505	11,490		16,244	(45,243)	9,653
Trading portfolio liabilities	21,193	128	3,919		11,317	(7,420)	29,137
Negative replacement values	170,718	5,655	21,109		29,877	(64,928)	162,430
Cash collateral payables on derivative instruments	31,399	374	6,438		15,033	(14,962)	38,282
Due to customers	102,483	231,252	53,633		34,002	(18,848)	402,522
Financial liabilities designated at fair value	61,630	0	288		4,675	(3,598)	62,995
Debt issued	70,792	8,274	3,126		321	(153)	82,359
Provisions	1,680	179	1,969		319	17	4,163
Other liabilities	40,255	1,806	16,683	1	20,179	(4,318)	74,606
Total liabilities	586,628	275,611	168,411	4	140,023	(284,664)	886,013
Equity attributable to shareholders	58,423	10,997	18,243	4	12,296	(44,714)	55,248
Equity attributable to preferred noteholders	1,954	0	0	1,302	0	(1,302)	1,954
Equity attributable to non-controlling interests	0	0	0	0	41	0	41
Total equity	60,378	10,997	18,243	1,306	12,336	(46,016)	57,243
Total liabilities and equity	647,006	286,608	186,654	1,310	152,359	(330,680)	943,256

¹ Amounts presented for UBS AG (standalone) and UBS Switzerland AG (standalone) represent IFRS-standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Disclosure for legal entities" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. ² Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of cash flows

CHF million					
For the year ended 31 December 2015					
	UBS AG ¹	UBS Switzerland AG ¹	UBS Americas Inc. ¹	Other subsidiaries ¹	UBS AG (consolidated)
Net cash flow from / (used in) operating activities	(1,457)	2,681	(525)	1,298	1,997
Cash flow from / (used in) investing activities					
Purchase of subsidiaries, associates and intangible assets	(12)	0	1	0	(13)
Disposal of subsidiaries, associates and intangible assets ²	464	0	13	0	477
Purchase of property, equipment and software	(1,423)	(5)	(299)	(114)	(1,841)
Disposal of property, equipment and software	503	0	9	35	547
Purchase of financial assets available for sale	(66,659)	(18,686)	(2,722)	(13,123)	(101,189)
Disposal and redemption of financial assets available for sale	51,515	22,501	2,952	16,616	93,584
Net (purchase) / redemption of financial assets held to maturity					
Net cash flow from / (used in) investing activities	(15,613)	3,810	(47)	3,415	(8,434)
Cash flow from / (used in) financing activities					
Net short-term debt issued / (repaid)	(5,603)	24	(826)	0	(6,404)
Distributions paid on UBS AG shares	(2,626)	0	0	0	(2,626)
Issuance of long-term debt, including financial liabilities designated at fair value	46,882	772	7	129	47,790
Repayment of long-term debt, including financial liabilities designated at fair value	(42,415)	(402)	(129)	(1,274)	(44,221)
Dividends paid and repayments of preferred notes	(108)	0	0	0	(108)
Net changes in non-controlling interests	0	0	0	(5)	(5)
Net activity related to group internal capital transactions and dividends ³	(30,512)	33,293	(114)	(2,666)	0
Net cash flow from / (used in) financing activities	(34,382)	33,687	(1,062)	(3,817)	(5,573)
Total cash flow					
Cash and cash equivalents at the beginning of the year	100,662	0	8,960	7,093	116,715
Net cash flow from / (used in) operating, investing and financing activities	(51,451)	40,178	(1,634)	896	(12,010)
Effects of exchange rate differences on cash and cash equivalents	(1,309)	67	(241)	(259)	(1,742)
Cash and cash equivalents at the end of the year⁴	47,902	40,246	7,084	7,731	102,962
<i>of which: cash and balances with central banks</i>	45,125	38,701	4,971	2,509	91,306
<i>of which: due from banks</i>	2,072	1,438	2,009	5,213	10,732
<i>of which: money market paper⁵</i>	704	107	104	9	924

¹ Cash flows generally represent a third-party view from a UBS AG (consolidated) perspective. As a consequence, the non-consolidated UBS Preferred Funding Trusts IV and V are not presented in this table. For the year ended 31 December 2015, these trusts had cash inflows of CHF 77 million from operating activities and an equivalent cash outflow for dividends paid to preferred note holders. ² Includes dividends received from associates. ³ Includes a transfer of cash and cash equivalents from UBS AG to UBS Switzerland AG of CHF 33,283 million. Refer to "Establishment of UBS Switzerland AG" in the "Legal entity financial and regulatory information" section of the UBS Group AG Annual Report 2015 for more information on the business transfer from UBS AG to UBS Switzerland AG. ⁴ CHF 3,963 million of cash and cash equivalents were restricted. ⁵ Money market paper is included in the balance sheet under Trading portfolio assets and Financial investments available for sale.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated income statement

CHF million

For the year ended 31 December 2014

	UBS AG (standalone) ¹	UBS Americas Inc. ²	Other subsidiaries ²	Elimination entries	UBS AG (consolidated)
Operating income					
Interest income	11,585	1,591	1,160	(1,143)	13,194
Interest expense	(6,287)	(597)	(898)	1,143	(6,639)
Net interest income	5,298	995	262	0	6,555
Credit loss (expense) / recovery	(108)	9	9	13	(78)
Net interest income after credit loss expense	5,190	1,003	270	13	6,477
Net fee and commission income	6,111	7,288	3,799	(122)	17,076
Net trading income	2,750	438	237	416	3,841
Other income	7,967	438	580	(8,354)	632
Total operating income	22,019	9,168	4,887	(8,047)	28,026
Operating expenses					
Personnel expenses	7,991	5,806	1,483	0	15,280
General and administrative expenses	8,004	2,759	1,966	(3,352)	9,377
Depreciation and impairment of property, equipment and software	595	139	83	0	817
Amortization and impairment of intangible assets	7	59	16	0	83
Total operating expenses	16,597	8,764	3,548	(3,352)	25,557
Operating profit / (loss) before tax	5,421	404	1,339	(4,695)	2,469
Tax expense / (benefit)	949	(2,375)	248	(2)	(1,180)
Net profit / (loss)	4,472	2,779	1,091	(4,693)	3,649
Net profit / (loss) attributable to preferred noteholders	142	0	0	0	142
Net profit / (loss) attributable to non-controlling interests	0	0	5	0	5
Net profit / (loss) attributable to shareholders	4,330	2,779	1,086	(4,693)	3,502

¹ Amounts presented for UBS AG (standalone) represent IFRS-standalone information. Refer to the UBS AG standalone financial statements under "Disclosure for legal entities" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. ² Amounts presented in these columns serve as a basis for preparing UBS AG (consolidated) financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of comprehensive income

CHF million

For the year ended 31 December 2014

	UBS AG (standalone) ¹	UBS Americas Inc. ²	Other subsidiaries ²	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders					
Net profit / (loss)	4,330	2,779	1,086	(4,693)	3,502
Other comprehensive income					
Other comprehensive income that may be reclassified to the income statement					
Foreign currency translation, net of tax	325	928	1,500	(920)	1,834
Financial assets available for sale, net of tax	32	78	37	(6)	140
Cash flow hedges, net of tax	693	0	0	0	693
Total other comprehensive income that may be reclassified to the income statement, net of tax	1,050	1,006	1,537	(926)	2,667
Other comprehensive income that will not be reclassified to the income statement					
Defined benefit plans, net of tax	(999)	(167)	(56)	14	(1,208)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(999)	(167)	(56)	14	(1,208)
Total other comprehensive income	51	838	1,481	(912)	1,459
Total comprehensive income attributable to shareholders	4,381	3,617	2,567	(5,605)	4,961
Total comprehensive income attributable to preferred noteholders	260	0	0	0	260
Total comprehensive income attributable to non-controlling interests	0	0	7	0	7
Total comprehensive income	4,641	3,617	2,575	(5,605)	5,229

¹ Amounts presented for UBS AG (standalone) and UBS Switzerland AG (standalone) represent IFRS-standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Disclosure for legal entities" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. ² Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of cash flows

CHF million

For the year ended 31 December 2014

	UBS AG ¹	UBS Americas Inc. ¹	Other subsidiaries ¹	UBS AG (consolidated)
Net cash flow from / (used in) operating activities	7,438	(1,814)	1,608	7,231
Cash flow from / (used in) investing activities				
Purchase of subsidiaries, associates and intangible assets	(18)	0	0	(18)
Disposal of subsidiaries, associates and intangible assets ²	41	9	20	70
Purchase of property, equipment and software	(1,521)	(300)	(94)	(1,915)
Disposal of property, equipment and software	313	14	23	350
Purchase of financial assets available for sale	(115,807)	(1,965)	(18,559)	(136,330)
Disposal and redemption of financial assets available for sale	123,581	1,397	15,460	140,438
Net (purchase) / redemption of financial assets held to maturity				
Net cash flow from / (used in) investing activities	6,589	(845)	(3,149)	2,596
Cash flow from / (used in) financing activities				
Net short-term debt issued / (repaid)	(3,984)	0	1,064	(2,921)
Net movements in treasury shares and own equity derivative activity	(719)	0	0	(719)
Distributions paid on UBS AG shares	(938)	0	0	(938)
Issuance of long-term debt, including financial liabilities designated at fair value	40,272	24	686	40,982
Repayment of long-term debt, including financial liabilities designated at fair value	(32,083)	(494)	(1,632)	(34,210)
Dividends paid and repayments of preferred notes	(110)	0	0	(110)
Net changes in non-controlling interests	0	0	(3)	(3)
Net activity related to group internal capital transactions and dividends	(319)	0	319	0
Net cash flow from / (used in) financing activities	2,118	(470)	434	2,081
Total cash flow				
Cash and cash equivalents at the beginning of the year	77,123	11,249	7,911	96,284
Net cash flow from / (used in) operating, investing and financing activities	16,145	(3,129)	(1,107)	11,908
Effects of exchange rate differences on cash and cash equivalents	7,394	840	289	8,522
Cash and cash equivalents at the end of the year³	100,662	8,960	7,093	116,715
<i>of which: cash and balances with central banks</i>	<i>95,711</i>	<i>6,440</i>	<i>1,923</i>	<i>104,073</i>
<i>of which: due from banks</i>	<i>4,119</i>	<i>2,489</i>	<i>5,164</i>	<i>11,772</i>
<i>of which: money market paper⁴</i>	<i>832</i>	<i>31</i>	<i>6</i>	<i>869</i>

¹ Cash flow generally represent a third-party view from a UBS AG (consolidated) perspective. ² Includes dividends received from associates. ³ CHF 4,178 million of cash and cash equivalents were restricted. ⁴ Money market paper is included in the balance sheet under Trading portfolio assets and Financial investments available for sale.

Standalone financial statements

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UBS Group AG standalone financial statements

Audited I

Income statement

CHF million	Note	For the year ended		% change from
		31.12.16	31.12.15	31.12.15
Dividend income from the investment in UBS AG	3	5,684	2,869	98
Other operating income	4	44	49	(11)
Financial income	5	475	294	61
Operating income		6,202	3,213	93
Personnel expenses	6	23	9	146
Other operating expenses	7	35	171	(80)
Financial expenses	8	512	267	91
Operating expenses		569	447	27
Profit / (loss) before income taxes		5,633	2,765	104
Tax expense / (benefit)		27	9	201
Net profit / (loss)		5,606	2,756	103

Balance sheet

<i>CHF million</i>	Note	31.12.16	31.12.15	% change from 31.12.15
Assets				
Liquid assets	9	1,714	1,442	19
Marketable securities	10	78	85	(8)
Other short-term receivables	11	2,830	632	348
Accrued income and prepaid expenses	12	469	264	78
Total current assets		5,090	2,422	110
Investments in subsidiaries	13	40,451	40,431	0
<i>of which: investment in UBS AG</i>		<i>40,376</i>	<i>40,376</i>	<i>0</i>
Financial assets	14	8,162	5,475	49
Prepaid assets		27	54	(49)
Other intangible assets		21	0	
Total non-current assets		48,661	45,959	6
Total assets		53,751	48,381	11
<i>of which: amounts due from subsidiaries</i>		<i>12,762</i>	<i>7,503</i>	<i>70</i>
Liabilities				
Current interest-bearing liabilities		595	736	(19)
Accrued expenses and deferred income	15	1,487	1,006	48
Total short-term liabilities		2,082	1,741	20
Long-term interest-bearing liabilities	16	7,865	5,106	54
Compensation-related long-term liabilities	17	3,479	3,119	12
Total long-term liabilities		11,344	8,225	38
Total liabilities		13,427	9,966	35
<i>of which: amounts due to subsidiaries</i>		<i>612</i>	<i>750</i>	<i>(18)</i>
Equity				
Share capital	18	385	385	0
General reserves		34,886	37,006	(6)
<i>of which: statutory capital reserve</i>		<i>34,886</i>	<i>37,006</i>	<i>(6)</i>
<i>of which: capital contribution reserve</i>		<i>34,886</i>	<i>38,035</i>	<i>(8)</i>
<i>of which: other capital reserve</i>		<i>0</i>	<i>(1,029)</i>	<i>(100)</i>
Voluntary earnings reserve		1,716	(10)	
Treasury shares	19	(2,271)	(1,724)	32
Reserve for own shares held by subsidiaries		2	1	144
Net profit / (loss)		5,606	2,756	103
Equity attributable to shareholders		40,324	38,415	5
Total liabilities and equity		53,751	48,381	11

Statement of appropriation of retained earnings and proposed dividend distribution out of capital contribution reserve

The Board of Directors proposes that the Annual General Meeting of Shareholders (AGM) on 4 May 2017 approves the following appropriation of retained earnings.

Proposed appropriation of retained earnings

	For the year ended
<i>CHF million</i>	31.12.16
Net profit for the period	5,606
Retained earnings carried forward	0
Total retained earnings available for appropriation	5,606
Proposed appropriation of retained earnings	
Appropriation to voluntary earnings reserve	(5,606)
Retained earnings carried forward	0

Proposed dividend distribution out of capital contribution reserve

The Board of Directors proposes that the AGM on 4 May 2017 approves an ordinary dividend distribution of CHF 0.60 in cash per share of CHF 0.10 par value payable out of the capital contribution reserve. Provided that the proposed dividend distribution out of the capital contribution reserve is approved,

the payment of CHF 0.60 per share will be made on 10 May 2017 to holders of shares on the record date 9 May 2017. The shares will be traded ex-dividend as of 8 May 2017 and, accordingly, the last day on which the shares may be traded with entitlement to receive the dividend will be 5 May 2017.

<i>CHF million, except where indicated</i>	31.12.16
Total statutory capital reserve: capital contribution reserve before proposed distribution¹	34,886
Proposed ordinary distribution of capital contribution reserve within statutory capital reserve: CHF 0.60 per dividend-bearing share ²	(2,310)
Total statutory capital reserve: capital contribution reserve after proposed distribution	32,576

¹ The Swiss Federal Tax Administration confirmed that UBS Group AG would be able to repay to shareholders a maximum amount of CHF 23.4 billion of the disclosed capital contribution reserve (status as of 31 December 2015) without being subject to the withholding tax deduction that applies to dividends paid out of retained earnings. As of 31 December 2016, the amount decreased by CHF 3.2 billion as a consequence of the dividend distribution in 2016. ² Dividend-bearing shares are all shares issued except for treasury shares held by UBS Group AG as of the record date. The amount of CHF 2,310 million presented is based on the total number of shares issued as of 31 December 2016.

Note 1 Corporate information

UBS Group AG is incorporated and domiciled in Switzerland and its registered office is at Bahnhofstrasse 45, CH-8001 Zurich, Switzerland. UBS Group AG operates under the Swiss Code of Obligations as a corporation limited by shares (Aktiengesellschaft), a corporation that has issued shares of common stock to investors.

UBS Group AG is the ultimate holding company of the UBS Group, the grantor of the majority of UBS's deferred compensation plans, and also issues long-term capital instruments.

Establishment of UBS Group AG

UBS Group AG was incorporated on 10 June 2014 as a wholly owned subsidiary of UBS AG and on 29 September 2014, UBS Group AG launched an offer to acquire all issued ordinary shares of UBS AG. Following the exchange offer and subsequent private exchanges, UBS Group AG acquired 96.68% of UBS AG shares by 31 December 2014.

In March 2015, UBS Group AG initiated a procedure under article 33 of the Swiss Stock Exchange Act (SESTA procedure). After the successful completion of the SESTA procedure in August 2015, UBS Group AG owns 100% of the issued shares of UBS AG.

Transfer of deferred compensation plans

As part of the Group reorganization in 2014, UBS Group AG assumed obligations of UBS AG as grantor in connection with certain outstanding awards under employee share, option, notional fund and deferred cash compensation plans. At the same time, UBS Group AG acquired the beneficial ownership of the financial assets and 90.5 million treasury shares of UBS Group AG held to hedge the economic exposure arising from these plans. As a result of the transfer, UBS Group AG assumed all responsibilities and rights associated with the grantor role for these plans from UBS AG, including the right of recharge to its subsidiaries employing the personnel.

Obligations relating to deferred compensation plans which are required to be, and have been, granted by employing and / or sponsoring subsidiaries have not been assumed by UBS Group AG and continue on this basis. Furthermore, obligations related to other compensation awards, such as defined benefit pension plans and other local awards, have not been assumed by UBS Group AG and are retained by the relevant employing and / or sponsoring subsidiaries.

Issuance of additional tier 1 capital instruments

During 2016, UBS Group AG continued to issue perpetual capital notes, which qualify as Basel III additional tier 1 (AT1) capital on a consolidated UBS Group basis. The proceeds from the issuances of those instruments were on-lent to UBS AG for funding purposes.

→ **Refer to Note 16 for more information on the main terms and conditions of the perpetual capital notes issued during 2016 and 2015**

Furthermore, UBS Group AG granted Deferred Contingent Capital Plan (DCCP) awards to UBS Group employees during 2016 and 2015. These DCCP awards also qualify as Basel III AT1 capital on a consolidated UBS Group basis.

As of 31 December 2016, UBS Group AG's distributable items for the purpose of additional tier 1 capital instruments were CHF 39.9 billion (31 December 2015: CHF 38.0 billion). For this purpose, distributable items are defined in the terms and conditions of the relevant instruments as the aggregate of (i) net profits carried forward and (ii) freely distributable reserves, in each case, less any amounts that must be contributed to legal reserves under applicable law.

Note 2 Accounting policies

The UBS Group AG standalone financial statements are prepared in accordance with the principles of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations).

The functional currency of UBS Group AG is the Swiss franc. The significant accounting and valuation principles applied are described below.

Foreign currency translation

Transactions denominated in foreign currency are translated into Swiss francs at the spot exchange rate on the date of the transaction. At the balance sheet date, all current assets and short-term liabilities as well as *Financial assets* measured at fair value, which are denominated in a foreign currency, are translated into Swiss francs using the closing exchange rate. For other non-current assets and long-term liabilities, where the asset mirrors the terms of a corresponding liability or the asset and liability otherwise form an economic hedge relationship, the asset and liability are treated as one unit of account for foreign currency translation purposes, with offsetting unrealized foreign currency translation gains and losses based on the closing exchange rate presented net in the income statement. *Investments in subsidiaries* measured at historic cost are translated at the spot exchange rate on the date of the transaction. All currency translation effects are recognized in the income statement.

The main currency translation rates used by UBS Group AG are provided in Note 34 to the consolidated financial statements.

Marketable securities

Marketable securities include investments in alternative investment vehicles (AIVs) with a short-term holding period. The holding period is deemed short-term if the vesting of the awards hedged by the AIV is within 12 months after the balance sheet date. These are equity instruments and are measured at fair value based on quoted market prices or other observable market prices as of the balance sheet date. Gains and losses resulting from fair value changes are recognized in *Financial income* and *Financial expenses*, respectively.

Financial assets

Financial assets include investments in AIVs with a long-term holding period. The holding period is deemed long-term if the vesting of the awards hedged by the AIV is more than 12 months after the balance sheet date. These are equity instruments and are measured at fair value based on their

quoted market prices or other observable market prices as of the balance sheet date. Gains and losses resulting from fair value changes are recognized in *Financial income* and *Financial expenses*, respectively.

Investments in AIVs that have no quoted market price or no other observable market price are recognized as *Financial assets* and are measured at their acquisition cost adjusted for impairment losses.

Financial assets further include loans granted to UBS AG which substantially mirror the terms of additional tier 1 perpetual capital notes issued. The loans are measured at nominal value.

→ Refer to Note 14 for more information

Investments in subsidiaries

Investments in subsidiaries are equity interests that are held to carry on the business of UBS Group or for other strategic purposes. They include all subsidiaries directly held by UBS Group AG through which UBS conducts its business on a global basis. The investments are measured individually and carried at cost less impairment.

→ Refer to Note 13 for more information

→ Refer to Note 2 in the "Consolidated financial statements" section of this report for a description of businesses of the UBS Group

Treasury shares

Treasury shares acquired by UBS Group AG are recognized at acquisition cost and are presented as a deduction from shareholders' equity. Upon disposal or settlement of related share awards, the realized gain or loss is recognized through the income statement as *Financial income* and *Financial expenses*, respectively. For settlement of related share awards, the realized gains and losses on treasury shares represent the difference between the market price of the treasury shares at settlement and their acquisition cost.

For shares of UBS Group AG acquired by a direct or indirect subsidiary, a *Reserve for own shares held by subsidiaries* is generally created in UBS Group AG's equity. However, where UBS AG or UBS Switzerland AG acquire shares of UBS Group AG and hold them in their trading portfolios, no *Reserve for own shares held by subsidiaries* is created.

→ Refer to Note 19 for more information

Note 2 Accounting policies (continued)

Equity participation and other compensation plans

Transfer from UBS AG to UBS Group AG

The transfer of the deferred compensation plans and related hedging assets in 2014 was conducted on an arm's length basis, with a step-up of the plan obligation to fair value. This step-up resulted in a net liability that was recorded in the standalone financial statements of UBS AG and transferred to UBS Group AG (net liability related to deferred compensation plan transfer) in 2014. The fair value of this net liability is taken into account in the income statement over the average vesting period (for share awards) or upon exercise / expiry (for option awards) as *Other operating income*. Upon exercise of option awards that are settled using conditional capital, the fair value of this net liability is recorded in the *Statutory capital reserve* within *General reserves*. The difference between the fair value of the hedging assets and the fair value of the obligations on the plans transferred was compensated for with a loan from UBS AG to UBS Group AG.

Equity participation plans

The grant date fair value of equity-settled share-based compensation awards granted to employees is generally recognized over the vesting period of the awards. Awards granted in the form of UBS Group AG shares and notional shares are settled by delivering UBS Group AG shares at vesting and are recognized as *Compensation-related long-term liabilities* if vesting is more than 12 months after the balance sheet date or as *Accrued expenses and deferred income* if vesting is within 12 months from the balance sheet date. The amount recognized is adjusted for forfeiture assumptions, such that the amount ultimately recognized is based on the number of awards that meet the related service conditions at the vesting date. The grant date fair value is based on the UBS Group AG share price, taking into consideration post-vesting sale and hedge restrictions, non-vesting conditions and market conditions, where applicable.

Upon settlement of the share awards, any realized gain or loss is recognized in the income statement as *Other operating income* and *Other operating expenses*, respectively. Realized gains and losses on share awards represent the difference between the market price of the treasury shares at settlement and the grant date fair value of the share awards.

For certain awards, employees receive beneficial and legal ownership of the underlying UBS Group AG shares at the grant

date (prepaid awards). Such prepaid awards are recognized as *Prepaid assets* if vesting is more than 12 months after the balance sheet date or as *Accrued income and prepaid expenses* if vesting is within 12 months from the balance sheet date.

Shares awarded to employees that are settled using conditional capital are accounted for as follows at settlement: the amount paid by the employees for the nominal value of the shares awarded is recorded in *Share capital*, while any paid amount exceeding the nominal value is considered to be share premium and is recorded in the *Statutory capital reserve* within *General reserves*.

Other compensation plans

Deferred compensation plans that are not share-based, including DCCP awards and awards in the form of AIVs, are accounted for as cash-settled awards. The present value or fair value of the amount payable to employees that is settled in cash is recognized as a liability generally over the vesting period, as *Compensation-related long-term liabilities* if vesting is more than 12 months after the balance sheet date and as *Accrued expenses and deferred income* if vesting is within 12 months from the balance sheet date. The liabilities are remeasured at each balance sheet date at the present value of the corresponding DCCP award and the fair value of investments in AIVs, respectively. Gains and losses resulting from remeasurement of the liabilities are recognized in *Other operating income* and *Other operating expenses*, respectively.

Recharge of compensation expenses

Expenses related to deferred compensation plans are recharged by UBS Group AG to its subsidiaries employing the personnel. Upon recharge, UBS Group AG recognizes a receivable from its subsidiaries corresponding to a liability representing its obligation toward employees.

Dispensations in the standalone financial statements

As UBS Group AG prepares consolidated financial statements in accordance with IFRS, UBS Group AG is exempt from various disclosures in the standalone financial statements. The dispensations include the management report and the statement of cash flows, as well as certain note disclosures.

Income statement notes

Note 3 Dividend income from the investment in UBS AG

Dividend income received from UBS AG in 2016 consists of CHF 3,434 million related to the financial year ended 31 December 2015, which was approved by the Annual General Meeting of Shareholders of UBS AG on 4 May 2016, and CHF 2,250 million

related to the financial year ended 31 December 2016, which was approved by the Annual General Meeting of Shareholders of UBS AG on 2 March 2017.

Note 4 Other operating income

	For the year ended		% change from
CHF million	31.12.16	31.12.15	31.12.15
Fair value gains on alternative investment vehicles awards	6	13	(57)
Gains related to equity-settled awards	24	29	(18)
Amortization of net liability related to deferred compensation plan transfer	2	6	(64)
Commission income from guarantees issued	12	1	813
Total other operating income	44	49	(11)

Note 5 Financial income

	For the year ended		% change from
CHF million	31.12.16	31.12.15	31.12.15
Treasury share gains	0	32	(100)
Interest income on long-term receivables from UBS AG	470	253	86
Foreign currency translation gains	4	10	(58)
Total financial income	475	294	61

Note 6 Personnel expenses

Personnel expenses include recharges from UBS AG for personnel-related costs for activities performed by UBS AG personnel for the benefit of UBS Group AG.

UBS Group AG had no employees throughout 2016 and 2015. All employees of the UBS Group, including the members

of the Group Executive Board (GEB) of UBS Group AG, were employed by subsidiaries of UBS Group AG. As of 31 December 2016, the UBS Group employed 59,387 personnel (31 December 2015: 60,099) on a full-time equivalent basis.

Note 7 Other operating expenses

	For the year ended		% change from
CHF million	31.12.16	31.12.15	31.12.15
Losses related to equity-settled awards	3	147	(98)
Capital tax	13	13	(1)
Stamp tax	0	1	(75)
Other	18	11	71
Total other operating expenses	35	171	(80)

Note 8 Financial expenses

	For the year ended		% change from
CHF million	31.12.16	31.12.15	31.12.15
Fair value losses on marketable securities and financial assets	3	12	(77)
Impairment losses on financial assets	3	1	322
Treasury share losses	35	0	
Interest expense on interest-bearing liabilities	469	255	84
Brokerage fees paid	2	0	
Total financial expenses	512	267	91

Balance sheet notes

Note 9 Liquid assets

Liquid assets comprise current accounts held at UBS Switzerland AG.

Note 10 Marketable securities

Marketable securities include investments in AIVs related to compensation awards vesting within 12 months after the balance sheet date.

Note 11 Other short-term receivables

As of 31 December 2016, other short-term receivables were mainly comprised of a CHF 2,250 million dividend receivable from UBS AG related to the financial year ended 31 December 2016 and CHF 557 million in receivables from employing entities related to compensation awards. As of 31 December 2015, other short-term receivables were mainly comprised of CHF 632 million in receivables from employing entities related to compensation awards.

Note 12 Accrued income and prepaid expenses

			% change from
CHF million	31.12.16	31.12.15	31.12.15
Accrued interest income	375	257	46
Other prepaid expenses	93	7	
Total accrued income and prepaid expenses	469	264	78

Note 13 Investments in subsidiaries

Unless otherwise stated, the subsidiaries listed in the tables below have share capital consisting solely of ordinary shares, which are held by UBS Group AG or UBS AG, respectively. The proportion of ownership interest held is equal to the voting rights held by UBS Group AG or UBS AG, respectively. The country where the respective registered office is located is also

the principal place of business. UBS AG operates through a global network of branches and a significant proportion of its business activity is conducted outside Switzerland in the UK, US, Asia Pacific and other countries. UBS Europe SE has branches and offices in a number of EU member states, including branches in Germany, Italy, Luxembourg and Spain.

Subsidiaries of UBS Group AG as of 31 December 2016

Company	Registered office	Share capital in million	Equity interest accumulated in %
UBS AG	Zurich and Basel, Switzerland	CHF 385.8	100.0
UBS Business Solutions AG	Zurich, Switzerland	CHF 1.0	100.0
UBS Group Funding (Jersey) Ltd.	St. Helier, Jersey	CHF 0.0	100.0
UBS Group Funding (Switzerland) AG	Zurich, Switzerland	CHF 0.1	100.0

Individually significant subsidiaries of UBS AG as of 31 December 2016

Company	Registered office	Primary business division	Share capital in million	Equity interest accumulated in %
UBS Americas Holding LLC	Wilmington, Delaware, USA	Corporate Center	USD 2,250.0 ¹	100.0
UBS Asset Management AG	Zurich, Switzerland	Asset Management	CHF 43.2	100.0
UBS Bank USA	Salt Lake City, Utah, USA	Wealth Management Americas	USD 0.0	100.0
UBS Europe SE	Frankfurt, Germany	Wealth Management	EUR 176.0	100.0
UBS Financial Services Inc.	Wilmington, Delaware, USA	Wealth Management Americas	USD 0.0	100.0
UBS Limited	London, United Kingdom	Investment Bank	GBP 226.6	100.0
UBS Securities LLC	Wilmington, Delaware, USA	Investment Bank	USD 1,283.1 ²	100.0
UBS Switzerland AG	Zurich, Switzerland	Personal & Corporate Banking	CHF 10.0	100.0

¹ Comprised of common share capital of USD 1,000 and non-voting preferred share capital of USD 2,250,000,000. ² Comprised of common share capital of USD 100,000 and non-voting preferred share capital of USD 1,283,000,000.

Individually significant subsidiaries of UBS AG are those entities that contribute significantly to the Group's financial position or results of operations, based on a number of criteria, including the subsidiaries' equity and their contribution to the Group's total assets and profit or loss before tax, in accordance with Swiss regulations.

During 2016, the majority of the operating subsidiaries of Asset Management were transferred to UBS Asset Management AG to create a holding structure spanning the division's global activities outside the US. Also in 2016, UBS AG's direct Wealth Management subsidiaries UBS (Italia) SpA, UBS (Luxembourg)

S.A. (including its branches in Austria, Denmark and Sweden), UBS Bank S.A. (Madrid) and UBS Bank (Netherlands) B.V. were merged into UBS Deutschland AG, which was renamed to UBS Europe SE and is headquartered in Frankfurt, Germany.

UBS Americas Holding LLC, UBS Asset Management AG, UBS Europe SE, UBS Limited and UBS Switzerland AG are fully held by UBS AG. UBS Bank USA, UBS Financial Services Inc. and UBS Securities LLC are fully held, directly or indirectly, by UBS Americas Holding LLC.

→ Refer to Note 28 in the "Consolidated financial statements" section of this report for more information

Note 14 Financial assets

CHF million	31.12.16	31.12.15	% change from 31.12.15
Long-term receivables from UBS AG ¹	7,865	5,171	52
Investments in alternative investment vehicles at fair value related to awards vesting after 12 months	291	294	(1)
Investments in alternative investment vehicles at cost less impairment	6	9	(33)
Total financial assets	8,162	5,475	49

¹ Long-term receivables from UBS AG include the onward lending of the proceeds from the issuances of additional tier 1 perpetual capital notes.

Note 15 Accrued expenses and deferred income

			% change from
CHF million	31.12.16	31.12.15	31.12.15
Short-term portion of net liability related to deferred compensation plan transfer	1	2	(70)
Short-term portion of compensation liabilities	1,048	720	46
<i>of which: Deferred Contingent Capital Plan</i>	93	65	44
<i>of which: other deferred compensation plans</i>	955	655	46
Accrued interest expense	374	255	46
Other	65	29	126
Total accrued expenses and deferred income	1,487	1,006	48

Note 16 Long-term interest-bearing liabilities**Notes issued, overview by amount, maturity and coupon**

	31.12.16				31.12.15	
	Carrying value in transaction currency	Carrying value in CHF	Maturity ¹	Coupon ¹	Carrying value in transaction currency	Carrying value in CHF
<i>in million, except where indicated</i>						
Euro-denominated low-trigger loss-absorbing additional tier 1 perpetual capital notes	1,000	1,071	19.02.22	5.750%	988	1,075
US dollar-denominated low-trigger loss-absorbing additional tier 1 perpetual capital notes	1,250	1,272	19.02.25	7.000%	1,234	1,236
US dollar-denominated high-trigger loss-absorbing additional tier 1 perpetual capital notes	1,250	1,272	19.02.20	7.125%	1,234	1,236
US dollar-denominated high-trigger loss-absorbing additional tier 1 perpetual capital notes	1,575	1,603	07.08.25	6.875%	1,555	1,558
US dollar-denominated high-trigger loss-absorbing additional tier 1 perpetual capital notes	1,500	1,527	22.03.21	6.875%		
US dollar-denominated high-trigger loss-absorbing additional tier 1 perpetual capital notes	1,100	1,120	10.08.21	7.125%		
Total long-term interest-bearing liabilities		7,865				5,106

¹ The disclosed maturity refers to the optional first call date of the respective issuance and the disclosed coupon refers to the fixed coupon rate from the issue date up to, but excluding, the optional first call date.

Note 17 Compensation-related long-term liabilities

			% change from
CHF million	31.12.16	31.12.15	31.12.15
Long-term portion of net liability related to deferred compensation plan transfer	10	11	(11)
Long-term portion of compensation liabilities	3,469	3,107	12
<i>of which: Deferred Contingent Capital Plan</i>	1,532	1,109	38
<i>of which: other deferred compensation plans</i>	1,937	1,999	(3)
Total compensation-related long-term liabilities	3,479	3,119	12

Note 18 Share capital

On 31 December 2016, the issued share capital consisted of 3,850,766,389 (31 December 2015: 3,849,731,535) registered shares at a par value of CHF 0.10 each.

→ Refer to the "UBS shares" section of this report for more information on UBS Group AG shares

Note 19 Treasury shares

	Number of registered shares	Average price in CHF
Balance as of 31 December 2014	87,871,737	16.94
<i>of which: treasury shares held by UBS Group AG</i>	<i>90,176,988</i>	<i>16.95</i>
<i>of which: short sales of treasury shares by UBS AG and other subsidiaries</i>	<i>(2,305,251)</i>	<i>17.30</i>
Share-for-share exchange	(100,923)	19.90
Acquisitions	89,594,586	17.57
Disposals	(27,510,789)	17.08
Delivery of shares to settle equity-settled awards	(51,148,336)	17.29
Balance as of 31 December 2015	98,706,275	17.51
<i>of which: treasury shares held by UBS Group AG¹</i>	<i>98,465,708</i>	<i>17.50</i>
<i>of which: treasury shares held by UBS AG and other subsidiaries</i>	<i>240,567</i>	<i>19.51</i>
Acquisitions	90,448,847	15.49
Disposals	(2,721,710)	17.82
Delivery of shares to settle equity-settled awards	(47,991,640)	16.86
Balance as of 31 December 2016	138,441,772	16.41
<i>of which: treasury shares held by UBS Group AG¹</i>	<i>138,386,307</i>	<i>16.41</i>
<i>of which: treasury shares held by UBS AG and other subsidiaries</i>	<i>55,465</i>	<i>16.06</i>

¹ Treasury shares held by UBS Group AG had a carrying value of CHF 2,271 million as of 31 December 2016 (31 December 2015: CHF 1,724 million).

Additional information

Note 20 Guarantees

As of 31 December 2016, UBS Group AG had issued senior unsecured debt through its subsidiary UBS Group Funding (Jersey) Ltd for a nominal amount equivalent to CHF 17,281 million (31 December 2015: CHF 5,668 million). This debt

contributes to the total loss-absorbing capacity (TLAC) of the Group. UBS Group AG issued guarantees to the external investors against any default in payments of interest and principal by UBS Group Funding (Jersey) Ltd.

Note 21 Assets pledged to secure own liabilities

As of 31 December 2016, total pledged assets of UBS Group AG amounted to CHF 4,134 million. These assets consisted of certain liquid assets, marketable securities and financial assets and were pledged to UBS AG. As of 31 December 2015, total pledged assets of UBS Group AG amounted to CHF 41,835

million and primarily consisted of the investment in UBS AG. The associated liabilities secured by these pledged assets were CHF 524 million and CHF 581 million as of 31 December 2016 and 31 December 2015, respectively.

Note 22 Contingent liabilities

UBS Group AG is jointly and severally liable for the combined value added tax (VAT) liability of UBS entities that belong to the VAT group of UBS in Switzerland.

Note 23 Significant shareholders

Shareholders registered in the UBS Group AG share register with 3% or more of total share capital

<i>% of share capital</i>	31.12.16	31.12.15
Chase Nominees Ltd., London	9.43	9.14
GIC Private Limited, Singapore		6.38
DTC (Cede & Co.), New York ¹	6.62	6.14
Nortrust Nominees Ltd., London	3.88	3.60

¹ DTC (Cede & Co.), New York, "The Depository Trust Company," is a US securities clearing organization.

Under the Swiss Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading of 19 June 2015 (FMIA), anyone holding shares in a company listed in Switzerland, or holding derivative rights related to shares of such a company, must notify the company and the SIX Swiss Exchange (SIX) if the holding reaches, falls below or exceeds one of the following thresholds: 3, 5, 10, 15, 20, 25, 33⅓, 50, or 66⅔% of voting rights, regardless of whether or not such rights may be exercised. The detailed disclosure requirements and the methodology for calculating the thresholds are defined in the Swiss Financial Market Supervisory Authority Ordinance on Financial Market Infrastructure (FMIO-FINMA). In particular, the FMIO-FINMA sets forth that nominee companies that cannot autonomously decide how voting rights are exercised are not obligated to notify the company and SIX if they reach, exceed or fall below the threshold percentages.

In addition, pursuant to the Swiss Code of Obligations, UBS must disclose in the Notes to its financial statements the identity of any shareholder with a holding of more than 5% of the total share capital of UBS Group AG.

According to disclosure notifications filed with UBS Group AG and the SIX under the applicable Swiss rules, GIC Private Limited disclosed on 10 December 2014 a holding of 7.07% of the total share capital of UBS Group AG. The beneficial owner of this holding is the Government of Singapore. On 10 December 2014, Norges Bank, Oslo, the Central Bank of Norway, disclosed a holding of 3.30%. On 15 January 2015, BlackRock Inc., New

York, disclosed a holding of 4.89%. On 10 February 2016, MFS Investment Management, Boston, disclosed a holding of 3.05%, and on 16 November 2016, The Capital Group Companies, Inc., Los Angeles, disclosed a holding of 3.01%.

In accordance with the FMIA, the aforementioned percentages were holdings that are not necessarily also registered in the UBS share register and calculated in relation to the total share capital of UBS Group AG reflected in the AoA at the time of the respective disclosure notification. Information on disclosures under the FMIA is available at www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html.

According to the share register, the shareholders (acting in their own name or in their capacity as nominees for other investors or beneficial owners) listed in the table above were registered in the UBS share register with 3% or more of the total share capital of UBS Group AG as of 31 December 2016 or as of 31 December 2015.

Cross-shareholdings

We have no cross-shareholdings in excess of a reciprocal ownership of 5% of capital or voting rights with any other company.

Note 24 Share and option ownership of the members of the Board of Directors, the Group Executive Board and other employees**Shares awarded**

	For the year ended 31.12.16		For the year ended 31.12.15	
	Number of shares	Value of shares in CHF million	Number of shares	Value of shares in CHF million
Awarded to members of the BoD	411,962	6	425,258	7
Awarded to members of the GEB	2,572,329	39	2,230,800	37
Awarded to other UBS Group employees	79,900,730	1,107	64,213,472	1,042
Total	82,885,021	1,152	66,869,530	1,087

→ Refer to the “Corporate governance, responsibility and compensation” section in this report for more information on the terms and conditions of the shares and options awarded to the members of the Board of Directors and the Group Executive Board

Number of shares of BoD members¹

Name, function	on 31 December	Number of shares held	Voting rights in %
Axel A. Weber, Chairman	2016	635,751	0.038
	2015	488,889	0.026
Michel Demaré, Vice Chairman	2016	254,287	0.015
	2015	215,992	0.012
David Sidwell, Senior Independent Director	2016	205,540	0.012
	2015	163,317	0.009
Reto Francioni, member	2016	51,567	0.003
	2015	28,787	0.002
Ann F. Godbehere, member	2016	201,457	0.012
	2015	169,054	0.009
Axel P. Lehmann, former member ²	2016	–	–
	2015	252,761	0.014
William G. Parrett, member	2016	104,385	0.006
	2015	104,271	0.006
Isabelle Romy, member	2016	91,038	0.005
	2015	66,490	0.004
Robert W. Scully, member ²	2016	0	0.000
	2015	–	–
Beatrice Weder di Mauro, member	2016	99,737	0.006
	2015	71,261	0.004
Dieter Wemmer, member ²	2016	0	0.000
	2015	–	–
Joseph Yam, member	2016	109,938	0.007
	2015	87,354	0.005
Total	2016	1,753,700	0.104
	2015	1,648,176	0.088

¹ Includes blocked and unblocked shares held by BoD members, including those held by related parties. No options were granted in 2016 and 2015. ² Dieter Wemmer and Robert W. Scully were newly elected at the AGM on 10 May 2016 and Axel P. Lehmann stepped down from the BoD as of 31 December 2015 and joined the GEB on 1 January 2016.

Note 24 Share and option ownership of the members of the Board of Directors, the Group Executive Board and other employees (continued)

Share and option ownership / entitlements of GEB members¹

Name, function	on 31 December	Number of unvested shares / at risk ²	Number of vested shares	Total number of shares	Potentially conferred voting rights in %	Number of options ³	Potentially conferred voting rights in % ⁴
Sergio P. Ermotti, Group Chief Executive Officer	2016	1,365,537	265,515	1,631,052	0.097	0	0.000
	2015	947,964	155,736	1,103,700	0.059	0	0.000
Martin Blessing, President Personal & Corporate Banking and President UBS Switzerland	2016	0	0	0	0.000	0	0.000
	2015	—	—	—	—	—	—
Christian Bluhm, Group Chief Risk Officer	2016	0	0	0	0.000	0	0.000
	2015	—	—	—	—	—	—
Markus U. Diethelm, Group General Counsel	2016	538,520	154,820	693,340	0.041	0	0.000
	2015	447,694	61,797	509,491	0.027	0	0.000
Lukas Gähwiler, former President Personal & Corporate Banking and President UBS Switzerland	2016	—	—	—	—	—	—
	2015	558,657	1,515	560,172	0.030	0	0.000
Kirt Gardner, Group Chief Financial Officer	2016	142,646	38,581	181,227	0.011	0	0.000
	2015	—	—	—	—	—	—
Sabine Keller-Busse, Group Head Human Resources	2016	200,272	120,897	321,169	0.019	0	0.000
	2015	—	—	—	—	—	—
Ulrich Körner, President Asset Management and President UBS EMEA	2016	797,165	95,597	892,762	0.053	0	0.000
	2015	642,813	95,597	738,410	0.039	0	0.000
Axel P. Lehmann, Group Chief Operating Officer	2016	0	277,978	277,978	0.017	0	0.000
	2015	—	—	—	—	—	—
Tom Naratil, President Wealth Management Americas and President UBS Americas	2016	838,193	352,634	1,190,827	0.071	412,917	0.025
	2015	598,172	310,054	908,226	0.049	555,115	0.030
Andrea Orcel, President Investment Bank	2016	1,203,535	207,114	1,410,649	0.084	0	0.000
	2015	933,686	117,646	1,051,332	0.056	0	0.000
Kathryn Shih, President UBS Asia Pacific	2016	567,777	0	567,777	0.034	143,869	0.009
	2015	—	—	—	—	—	—
Jürg Zeltner, President Wealth Management	2016	881,976	1,075	883,051	0.053	64,164	0.004
	2015	683,767	3,721	687,488	0.037	86,279	0.005
Total	2016	6,535,621	1,514,211	8,049,832	0.479	620,950	0.037
	2015	6,747,010	1,677,989	8,424,999	0.450	1,401,686	0.075

¹ Includes all vested and unvested shares and options of GEB members, including those held by related parties. ² Includes shares granted under variable compensation plans with forfeiture provisions. The actual number of shares vesting in the future will be calculated under the terms of the plans. Refer to the "Our deferred variable compensation plans for 2016" in the "Compensation" section of this report for more information on the plans. ³ Refer to "Note 27 Equity participation and other compensation plans" in the "Consolidated financial statements" section of this report for more information. ⁴ No conversion rights outstanding.

Note 25 Related parties

Related parties are defined under the Swiss Code of Obligations as direct and indirect participants with voting rights of 20% or more, management bodies (BoD and GEB), external auditors and direct and indirect investments in subsidiaries. Payables due to

members of the GEB are provided in the table below. Amounts due from and due to subsidiaries are provided on the face of the balance sheet.

CHF million	31.12.16	31.12.15	% change from 31.12.15
Payables due to the members of the GEB	119	139	(14)
of which: <i>Deferred Contingent Capital Plan</i>	51	53	(4)
of which: <i>other deferred compensation plans</i>	68	86	(21)



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To the General Meeting of
UBS Group AG, Zurich

Basel, 9 March 2017

Report of the statutory auditor on the financial statements

As statutory auditor, we have audited the financial statements of UBS Group AG, which comprise the balance sheet, income statement and notes (pages 637 to 651), for the year ended 31 December 2016.



Board of Directors' responsibility

The Board of Directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law and the company's articles of incorporation. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.



Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



Opinion

In our opinion, the financial statements for the year ended 31 December 2016 comply with Swiss law and the company's articles of incorporation.



Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. We have determined that there are no key audit matters to communicate in our report.



Report on other legal requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a para. 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

Ernst & Young Ltd



Marie-Laure Delarue
Licensed audit expert
(Auditor in charge)



Bruno Patusi
Licensed audit expert



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**Independent Auditor's Report
to the Board of Directors of**

UBS Group AG, Zurich

As special auditors of UBS Group AG, we have audited the issue of new shares and the preconditions for the adjustment of the provisions regarding the conditional capital increase according to article 4a of the articles of association in the period from 1 January 2016 to 31 December 2016 in accordance with article 653f paragraph 1 of the Swiss code of obligations (CO).

According to article 4a of the articles of association, the following possibilities for the issue of conditional capital exist:

- Paragraph 1; employee stock option plans of UBS Group AG, based on the resolution of the extraordinary general meeting of 26 November 2014.
- Paragraph 2; conversion rights and/or warrants granted in connection with the issue of bonds or similar financial instruments, based on the resolution of the extraordinary general meeting of 26 November 2014.

Board of Directors' Responsibility

The Board of Directors is responsible for the new share issue in accordance with the legal requirements and the company's articles of association.

Auditor's Responsibility

Our responsibility is to express an opinion based on our audit as to whether the new share issue complies with Swiss law and the company's articles of incorporation. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the new share issue complies with the legal requirements and the company's articles of incorporation.

An audit involves performing procedures to obtain audit evidence so that significant breaches of the legal requirements and the company's articles of incorporation for the new share issue may be identified with reasonable assurance. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material breaches of the requirements concerning the new share issue, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion

- the issue of 1'034'854 new registered shares with a nominal value of CHF 0.10 per share relating to the employee stock option plans of UBS Group AG, according to article 4a paragraph 1 of the articles of association, was in accordance with the provisions of Swiss law and the company's articles of association;
- no new registered shares relating to the conversion rights and/or warrants granted in connection with the issue of bonds or similar financial instruments, according to article 4a paragraph 2 of the articles of association, were issued in the reporting period.

Zurich, 10 February 2017

BDO Ltd

Jürg Caspar
Auditor in charge
Licensed audit expert

Erik Dommach
Licensed audit expert

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UBS Group AG consolidated supplemental disclosures required under SEC regulations

A – Introduction

The following pages contain supplemental UBS Group AG disclosures that are required under SEC regulations. UBS Group AG's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and are denominated in Swiss francs (CHF), the reporting currency of the Group.

The consolidated financial statements of UBS Group AG were prepared as a continuation of the consolidated financial statements of UBS AG, applying the same accounting policies under International Financial Reporting Standards (IFRS). The comparative information for 2013, 2012 and 2011 reflects the consolidated financial statements of UBS AG and the comparative information for 2014 and 2015 reflects the consolidated financial statements of UBS Group AG.

B – Selected financial data

The tables below provide information about the noon purchase rates for the Swiss franc, expressed in United States dollars, or USD, per one Swiss franc. The noon purchase rate is the rate in New York City for cable transfers in foreign currencies as

certified for customs purposes by the Federal Reserve Bank of New York.

On 28 February 2017, the noon purchase rate was 0.9978 USD per 1 CHF.

For the year ended 31 December	High	Low	Average rate (USD per 1 CHF) ¹	At period end
2012	1.1174	1.0043	1.0724	1.0923
2013	1.1292	1.0190	1.0826	1.1231
2014	1.1478	1.0066	1.0893	1.0066
2015	1.1781	0.9704	1.0368	0.9983
2016	1.0487	0.9677	1.0128	0.9843
For the month ended	High	Low		
30 September 2016	1.0357	1.0200		
31 October 2016	1.0267	1.0049		
30 November 2016	1.0328	0.9816		
31 December 2016	0.9935	0.9677		
31 January 2017	1.0113	0.9741		
28 February 2017	1.0107	0.9892		

¹ Calculated using the average of the noon purchase rates on the last business day of each full month during the relevant period.

Key figures

CHF million, except where indicated	As of or for the year ended				
	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Group results					
Operating income	28,320	30,605	28,027	27,732	25,423
Operating expenses	24,230	25,116	25,567	24,461	27,216
Operating profit / (loss) from continuing operations before tax	4,090	5,489	2,461	3,272	(1,794)
Net profit / (loss) attributable to shareholders	3,204	6,203	3,466	3,172	(2,480)
Diluted earnings per share (CHF) ¹	0.84	1.64	0.91	0.83	(0.66)

Key performance indicators²

Profitability					
Return on tangible equity (%)	6.9	13.7	8.2	8.0	1.6
Return on assets, gross (%)	3.0	3.1	2.8	2.5	1.9
Cost / income ratio (%)	85.4	81.8	91.0	88.0	106.6
Growth					
Net profit growth (%)	(48.3)	79.0	9.3		
Net new money growth for combined wealth management businesses (%) ³	2.1	2.2	2.5	3.4	3.2
Resources					
Common equity tier 1 capital ratio (fully applied, %) ⁴	13.8	14.5	13.4	12.8	9.8
Going concern leverage ratio (phase-in, %) ⁵	6.4				
Leverage ratio (phase-in, %) ⁶		6.2	5.4	4.7	3.6

Additional information

Profitability					
Return on equity (RoE) (%)	5.9	11.8	7.0	6.7	(5.1)
Return on risk-weighted assets, gross (%) ⁷	13.2	14.4	12.6	11.6	12.0
Resources					
Total assets	935,016	942,819	1,062,478	1,013,355	1,259,797
Equity attributable to shareholders	53,621	55,313	50,608	48,002	45,949
Common equity tier 1 capital (fully applied) ⁴	30,693	30,044	28,941	28,908	25,182
Common equity tier 1 capital (phase-in) ⁴	37,788	40,378	42,863	42,179	40,032
Risk-weighted assets (fully applied) ⁴	222,677	207,530	216,462	225,153	258,113
Risk-weighted assets (phase-in) ⁴	225,412	212,302	220,877	228,557	261,800
Common equity tier 1 capital ratio (phase-in, %) ⁴	16.8	19.0	19.4	18.5	15.3
Going concern capital ratio (fully applied, %) ⁵	17.9				
Total capital ratio (fully applied, %) ⁴		22.9	18.9	15.4	11.4
Going concern capital ratio (phase-in, %) ⁵	24.7				
Total capital ratio (phase-in, %) ⁴		26.8	25.5	22.2	18.9
Common equity tier 1 leverage ratio (fully applied, %) ⁴	3.5	3.3	2.9	2.8	2.1
Going concern leverage ratio (fully applied, %) ⁵	4.6				
Leverage ratio (fully applied, %) ⁶		5.3	4.1	3.4	2.4
Leverage ratio denominator (fully applied) ⁶	870,470	897,607	997,822	1,015,306	1,206,214
Leverage ratio denominator (phase-in) ⁶	874,925	904,014	1,004,869	1,022,924	1,216,561
Average equity of average assets (%)	5.3	5.0	4.7	4.0	3.4

Key figures (continued)

	As of or for the year ended				
<i>CHF million, except where indicated</i>	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Other					
Invested assets (CHF billion) ⁸	2,821	2,689	2,734	2,390	2,230
Personnel (full-time equivalents)	59,387	60,099	60,155	60,205	62,628
Americas	20,522	20,816	20,951	21,317	21,995
<i>of which: US</i>	19,695	19,897	19,715	20,037	20,833
Asia Pacific	7,539	7,539	7,385	7,116	7,426
Europe, Middle East and Africa	10,746	10,505	10,254	10,052	10,829
<i>of which: UK</i>	5,206	5,373	5,425	5,595	6,459
<i>of which: rest of Europe</i>	5,373	4,957	4,663	4,303	4,202
<i>of which: Middle East and Africa</i>	167	176	166	153	167
Switzerland	20,581	21,238	21,564	21,720	22,378
Market capitalization ⁹	61,420	75,147	63,526	65,007	54,729
Total book value per share (CHF) ⁹	14.44	14.75	13.94	12.74	12.26
Tangible book value per share (CHF) ⁹	12.68	13.00	12.14	11.07	10.54
Registered ordinary shares (number) ¹⁰	3,850,766,389	3,849,731,535	3,717,128,324	3,842,002,069	3,835,250,233
Treasury shares (number) ⁹	138,441,772	98,706,275	87,871,737	73,800,252	87,879,601

1 Refer to "Note 9 Earnings per share (EPS) and shares outstanding" in the "Consolidated financial statements" section of this report for more information. 2 Refer to the "Measurement of performance" section of this report for the definition of our key performance indicators. 3 Based on adjusted net new money, which excludes the negative effect on net new money in 2015 of CHF 9.9 billion from our balance sheet and capital optimization program. 4 Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. 5 Based on revised Swiss SRB framework that became effective on 1 July 2016. 6 Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. 7 Based on fully applied risk-weighted assets for 2016, 2015, 2014 and 2013. Based on Basel 2.5 risk-weighted assets for 2012. 8 Includes invested assets for Personal & Corporate Banking. 9 Refer to the "UBS shares" section of this report for more information on UBS Group AG shares. 10 Registered ordinary shares as of 31 December 2016, 31 December 2015 and 31 December 2014 reflect UBS Group AG shares. Other comparative period information relates to UBS AG shares. Refer to the "UBS shares" section of this report for more information on UBS Group AG shares.

Income statement data

	For the year ended				
<i>CHF million, except where indicated</i>	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Interest income	13,787	13,177	13,194	13,137	15,968
Interest expense	(7,373)	(6,445)	(6,639)	(7,351)	(9,990)
Net interest income	6,413	6,732	6,555	5,786	5,978
Credit loss (expense) / recovery	(37)	(117)	(78)	(50)	(118)
Net interest income after credit loss expense	6,376	6,615	6,477	5,736	5,860
Net fee and commission income	16,397	17,140	17,076	16,287	15,396
Net trading income	4,948	5,742	3,842	5,130	3,526
Other income	599	1,107	632	580	641
Total operating income	28,320	30,605	28,027	27,732	25,423
Total operating expenses	24,230	25,116	25,567	24,461	27,216
Operating profit / (loss) before tax	4,090	5,489	2,461	3,272	(1,794)
Tax expense / (benefit)	805	(898)	(1,180)	(110)	461
Net profit / (loss)	3,286	6,386	3,640	3,381	(2,255)
Net profit / (loss) attributable to preferred noteholders			142	204	220
Net profit / (loss) attributable to non-controlling interests	82	183	32	5	5
Net profit / (loss) attributable to shareholders	3,204	6,203	3,466	3,172	(2,480)
Cost / income ratio (%) ¹	85.4	81.8	91.0	88.0	106.6
Per share data (CHF)					
Basic earnings per share ²	0.86	1.68	0.93	0.84	(0.66)
Diluted earnings per share ²	0.84	1.64	0.91	0.83	(0.66)
Ordinary cash dividends declared per share (CHF) ³ , ⁴	0.60	0.60	0.50	0.25	0.15
Ordinary cash dividends declared per share (USD) ³ , ⁴		0.62	0.54	0.28	0.16
Special cash dividends declared per share (CHF) ³ , ⁴		0.25	0.25		
Special cash dividends declared per share (USD) ³ , ⁴		0.26	0.26		
Dividend payout ratio (%)	71	52	55 ⁵	30	(23)
Rates of return (%)					
Return on equity attributable to shareholders	5.9	11.8	7.0	6.7	(5.1)
Return on average equity	5.9	11.8	7.0	6.7	(5.0)
Return on average assets	0.3	0.6	0.3	0.3	(0.2)

¹ Operating expenses / operating income before credit loss expense. ² Refer to "Note 9 Earnings per share (EPS) and shares outstanding" in the "Consolidated financial statements" section of this report for more information. ³ Dividends and / or distribution of the capital contribution reserve are normally approved and paid in the year subsequent to the reporting period. ⁴ Refer to the "Proposed dividend distribution out of capital contribution reserve" in the UBS Group AG standalone financial statements for more information. ⁵ The calculation of the dividend payout ratio for the year ended 31 December 2014 excludes the special cash dividend related to the one-time supplementary capital return paid after the successful completion of the SESTA procedure.

Dividend income from investments in subsidiaries

In 2016, UBS Group AG received a dividend of CHF 3,434 million (2015: CHF 2,869 million) from its subsidiary UBS AG.

Balance sheet data

<i>CHF million</i>	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Assets					
Total assets	935,016	942,819	1,062,478	1,013,355	1,259,797
Cash and balances with central banks	107,767	91,306	104,073	80,879	66,383
Due from banks	13,156	11,948	13,334	13,874	21,220
Cash collateral on securities borrowed	15,111	25,584	24,063	27,496	37,372
Reverse repurchase agreements	66,246	67,893	68,414	91,563	130,941
Trading portfolio assets	96,575	124,035	138,156	122,848	160,564
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	30,260	<i>51,943</i>	<i>56,018</i>	<i>42,449</i>	<i>44,698</i>
Positive replacement values	158,411	167,435	256,978	254,084	418,957
Cash collateral receivables on derivative instruments	26,664	23,763	30,979	26,548	30,413
Loans	306,325	311,954	315,757	286,959	279,901
Financial assets designated at fair value	65,353	6,146	4,951	7,364	9,106
Financial assets available for sale	15,676	62,543	57,159	59,525	66,230
Financial assets held to maturity	9,289				
Other assets	25,436	22,160	22,988	20,228	17,244
Liabilities					
Due to banks	10,645	11,836	10,492	12,862	23,024
Cash collateral on securities lent	2,818	8,029	9,180	9,491	9,203
Repurchase agreements	6,612	9,653	11,818	13,811	38,557
Trading portfolio liabilities	22,824	29,137	27,958	26,609	34,247
Negative replacement values	153,810	162,430	254,101	248,079	395,260
Cash collateral payables on derivative instruments	35,472	38,282	42,372	44,507	71,148
Due to customers	423,672	390,185	410,207	390,825	373,459
Financial liabilities designated at fair value	55,017	62,995	75,297	69,901	91,901
Debt issued	103,649	93,147	91,207	81,586	104,837
Other liabilities	62,020	75,652	71,112	62,777	66,523
Equity attributable to shareholders	53,621	55,313	50,608	48,002	45,949

C – Information on the company

Property, plant and equipment

As of 31 December 2016, UBS operated about 816 business and banking locations worldwide, of which approximately 42% were in Switzerland, 41% in the Americas, 10% in the rest of Europe, Middle East and Africa and 7% in Asia Pacific. Of the business and banking locations in Switzerland, 32% were owned directly

by UBS, with the remainder, along with most of UBS's offices outside Switzerland, being held under commercial leases. These premises are subject to continuous maintenance and upgrading and are considered suitable and adequate for current and anticipated operations.

D – Information required by industry guide 3

Selected statistical information

The following tables set forth select statistical information regarding the Group's banking operations extracted from the financial statements. Unless otherwise indicated, average balances for the years ended 31 December 2016, 31 December 2015 and 31 December 2014 are calculated from monthly data.

The distinction between domestic (Swiss) and foreign (non-Swiss) is generally based on the booking location. For loans, this method is not significantly different from an analysis based on the domicile of the borrower.

Average balances and interest rates

The following table sets forth average interest-earning assets and average interest-bearing liabilities, along with the average yield, for 2016, 2015 and 2014. Refer to "Note 3 Net interest and trading income" in the "Consolidated financial statements" section of this report for more information on interest income and interest expense.

	31.12.16			31.12.15			31.12.14		
<i>CHF million, except where indicated</i>	Average balance	Interest income	Average yield (%)	Average balance	Interest income	Average yield (%)	Average balance	Interest income	Average yield (%)
Assets									
Due from banks									
Domestic	3,353	20	0.6	3,524	5	0.1	3,269	8	0.2
Foreign	9,623	14	0.1	10,846	61	0.6	16,692	95	0.6
Cash collateral on securities borrowed and reverse repurchase agreements									
Domestic	10,301	(22)	(0.2)	6,415	14	0.2	7,374	4	0.1
Foreign	147,873	567	0.4	138,961	614	0.4	133,640	463	0.3
Trading portfolio assets									
Domestic	3,864	155	4.0	4,921	159	3.2	5,105	209	4.1
Foreign	100,701	2,310	2.3	121,542	2,912	2.4	118,038	2,988	2.5
of which: taxable	100,701	2,310	2.3	121,542	2,912	2.4	118,038	2,988	2.5
Cash collateral receivables on derivative instruments									
Domestic	487	0	0.0	249	3	1.2	113	1	0.9
Foreign	25,910	116	0.4	29,469	59	0.2	27,920	54	0.2
Loans									
Domestic	187,425	3,490	1.9	192,815	3,644	1.9	192,993	3,780	2.0
Foreign	120,518	2,694	2.2	120,692	2,510	2.1	109,137	2,520	2.3
Financial assets designated at fair value									
Domestic	10,934	12	0.1	710	1	0.1	729	1	0.1
Foreign	41,489	309	0.7	4,715	193	4.1	4,982	207	4.2
Financial assets available for sale									
Domestic	8,876	36	0.4	20,037	63	0.3	2,006	8	0.4
Foreign	17,368	164	0.9	43,131	328	0.8	52,642	307	0.6
of which: taxable	17,368	164	0.9	43,131	328	0.8	52,642	307	0.6
Financial assets held to maturity									
Domestic	4,581	52	1.1						
Foreign	65	1	1.5						
Other interest-earning assets									
Domestic	0	0	0.0	0	0	0.0	0	0	0.0
Foreign	12,134	593	4.9	12,749	526	4.1	12,024	477	4.0
Total interest-earning assets	705,502	10,514	1.5	710,777	11,092	1.6	686,662	11,123	1.6
Net interest income on swaps		2,214			1,630			1,613	
Interest income on off-balance sheet securities and other		423			455			458	
Interest income and average interest-earning assets	705,502	13,151¹	1.9	710,777	13,177	1.9	686,662	13,194	1.9
Non-interest-earning assets									
Positive replacement values	176,567			213,913			232,739		
Fixed assets	7,982			7,154			6,383		
Other	138,322			126,767			127,799		
Total average assets	1,028,373			1,058,611			1,053,584		

Average balances and interest rates (continued)

	31.12.16			31.12.15			31.12.14		
	Average balance	Interest expense	Average interest rate (%)	Average balance	Interest expense	Average interest rate (%)	Average balance	Interest expense	Average interest rate (%)
<i>CHF million, except where indicated</i>									
Liabilities and equity									
Due to banks									
Domestic	9,030	18	0.2	9,571	11	0.1	8,932	16	0.2
Foreign	2,516	13	0.5	2,480	11	0.4	3,691	14	0.4
Cash collateral on securities lent and repurchase agreements									
Domestic	2,366	2	0.1	3,413	2	0.1	5,328	1	0.0
Foreign	76,845	318	0.4	71,129	442	0.6	58,639	338	0.6
Trading portfolio liabilities									
Domestic	537	7	1.3	535	5	0.9	638	14	2.2
Foreign	30,041	1,608	5.4	31,418	1,665	5.3	28,733	1,789	6.2
Cash collateral payables on derivative instruments									
Domestic	968	4	0.4	993	1	0.1	612	0	0.0
Foreign	34,998	82	0.2	41,499	57	0.1	42,595	45	0.1
Due to customers									
Domestic	240,456	22	0.0	233,430	62	0.0	236,012	227	0.1
of which: demand deposits	129,407	(44)	0.0	124,210	(19)	0.0	130,593	43	0.0
of which: savings deposits	98,966	65	0.1	96,848	70	0.1	97,825	172	0.2
of which: time deposits	12,084	0	0.0	12,372	11	0.1	7,593	12	0.2
Foreign	167,722	304	0.2	157,496	264	0.2	159,170	340	0.2
Financial liabilities designated at fair value									
Domestic	1,632	6	0.4	2,055	6	0.3	1,747	13	0.7
Foreign	56,928	795	1.4	65,446	724	1.1	68,928	906	1.3
Short-term debt									
Domestic	613	1	0.2	873	4	0.5	1,270	2	0.2
Foreign	28,023	204	0.7	26,425	107	0.4	26,734	101	0.4
Long-term debt									
Domestic	21,788	910	4.2	18,717	720	3.8	14,937	447	3.0
Foreign	53,169	1,742	3.3	49,457	1,762	3.6	43,264	1,833	4.2
Other interest-bearing liabilities									
Domestic	0	0	0.0	0	0	0.0	0	0	0.0
Foreign	38,620	113	0.3	39,968	58	0.1	35,503	58	0.2
Total interest-bearing liabilities	766,252	6,150	0.8	754,904	5,899	0.8	736,733	6,145	0.8
Interest expense on off-balance sheet securities and other		588			546			495	
Interest expense and average interest-bearing liabilities	766,252	6,737²	0.9	754,904	6,445	0.9	736,733	6,640	0.9
Non-interest-bearing liabilities									
Negative replacement values	172,762			210,551			229,286		
Other	33,987			37,960			35,474		
Total liabilities	973,001			1,003,415			1,001,493		
Total equity	55,372			55,196			52,091		
Total average liabilities and equity	1,028,373			1,058,611			1,053,584		
Net interest income		6,413			6,732			6,555	
Net yield on interest-earning assets			0.9			0.9			1.0

¹ For the purpose of this disclosure, negative interest income on assets is presented as a reduction to interest income, while in the consolidated income statement negative interest income on assets is presented as interest expense. Total interest income presented in the consolidated income statement was CHF 13,787 million. ² For the purpose of this disclosure, negative interest expense on liabilities is presented as a reduction to interest expense, while in the consolidated income statement negative interest income on liabilities is presented as interest income. Total interest expense presented in the consolidated income statement was CHF 7,373 million.

Average balances and interest rates (continued)

The percentage of total average interest-earning assets attributable to foreign activities was 67% for 2016 (68% for 2015 and 69% for 2014). The percentage of total average interest-bearing liabilities attributable to foreign activities was 64% for 2016 (64% for 2015 and 63% for 2014). All assets and liabilities are translated into CHF at uniform month-end rates. Interest income and expense are translated at monthly average rates.

Average rates earned and paid on assets and liabilities can change from period to period based on the changes in interest rates in general, but are also affected by changes in the currency mix included in the assets and liabilities. This is especially true for foreign assets and liabilities. Tax-exempt income is not recorded on a tax-equivalent basis. For all three years presented, tax-exempt income is considered to be insignificant and the impact from such income is therefore negligible.

Analysis of changes in interest income and expense

The following tables allocate, by categories of interest-earning assets and interest-bearing liabilities, the changes in interest income and expense due to changes in volume and interest rates for the year ended 31 December 2016 compared with the year ended 31 December 2015, and for the year ended 31 December

2015 compared with the year ended 31 December 2014. Volume and rate variances have been calculated on movements in average balances and changes in interest rates. Changes due to a combination of volume and rates have been allocated proportionally.

	2016 compared with 2015			2015 compared with 2014		
	Increase / (decrease) due to changes in			Increase / (decrease) due to changes in		
	Average volume	Average interest rate	Net change	Average volume	Average interest rate	Net change
<i>CHF million</i>						
Interest income from interest-earning assets						
Due from banks						
Domestic	0	16	16	1	(5)	(4)
Foreign	(7)	(40)	(47)	(35)	2	(33)
Cash collateral on securities borrowed and reverse repurchase agreements						
Domestic	8	(44)	(36)	(1)	11	10
Foreign	36	(83)	(47)	16	135	151
Trading portfolio assets						
Domestic	(34)	30	(4)	(8)	(42)	(50)
Foreign	(500)	(102)	(602)	88	(164)	(76)
of which: taxable	(500)	(102)	(602)	88	(164)	(76)
Cash collateral receivables on derivative instruments						
Domestic	3	(6)	(3)	1	1	2
Foreign	(7)	64	57	3	2	5
Loans						
Domestic	(102)	(52)	(154)	(4)	(131)	(135)
Foreign	(4)	189	185	266	(276)	(10)
Financial assets designated at fair value						
Domestic	10	1	11	0	0	0
Foreign	1,508	(1,392)	116	(11)	(4)	(15)
Financial assets available for sale						
Domestic	(33)	6	(27)	72	(17)	55
Foreign	(206)	42	(164)	(57)	78	21
of which: taxable	(206)	42	(164)	(57)	78	21
Financial assets held to maturity						
Domestic	52	0	52			
Foreign	1	0	1			
Other interest-bearing assets						
Domestic	0	0	0			
Foreign	(25)	93	68	29	19	48
Interest income						
Domestic	(96)	(50)	(145)	61	(183)	(122)
Foreign	796	(1,229)	(433)	299	(208)	91
Total interest income from interest-earning assets	700	(1,279)	(578)	360	(391)	(31)
Net interest on swaps			584			17
Interest income on off-balance sheet securities and other			(32)			(4)
Total interest income			(26)			(17)

Analysis of changes in interest income and expense (continued)

	2016 compared with 2015			2015 compared with 2014		
	Increase / (decrease) due to changes in			Increase / (decrease) due to changes in		
	Average volume	Average interest rate	Net change	Average volume	Average interest rate	Net change
<i>CHF million</i>						
Interest expense on interest-bearing liabilities						
Due to banks						
Domestic	(1)	8	7	1	(6)	(5)
Foreign	0	2	2	(5)	2	(3)
Cash collateral on securities lent and repurchase agreements						
Domestic	(1)	2	1	0	0	0
Foreign	34	(159)	(125)	75	30	105
Trading portfolio liabilities						
Domestic	0	2	2	(2)	(8)	(10)
Foreign	(73)	15	(58)	166	(290)	(124)
Cash collateral payables on derivative instruments						
Domestic	0	4	4	0	1	1
Foreign	(7)	32	25	(1)	13	12
Due to customers						
Domestic	2	(42)	(40)	8	(173)	(165)
<i>of which: demand deposits</i>	0	(25)	(25)	0	(62)	(62)
<i>of which: savings deposits</i>	2	(7)	(5)	(2)	(100)	(102)
<i>of which: time deposits</i>	0	(10)	(10)	10	(11)	(1)
Foreign	20	20	40	(3)	(73)	(76)
Financial liabilities designated at fair value						
Domestic	(1)	1	0	2	(9)	(7)
Foreign	(94)	165	71	(45)	(137)	(182)
Short-term debt						
Domestic	(1)	(2)	(3)	(1)	3	2
Foreign	6	92	98	(1)	7	6
Long-term debt						
Domestic	117	73	190	113	160	273
Foreign	134	(153)	(19)	260	(332)	(72)
Other interest-bearing liabilities						
Domestic	0	0	0	0	0	0
Foreign	(1)	56	55	9	(9)	0
Interest expense						
Domestic	115	46	161	121	(32)	89
Foreign	19	71	90	455	(790)	(335)
Total interest expense on interest-bearing liabilities	134	117	251	576	(822)	(246)
Interest expense on off-balance sheet securities and other			42			51
Total interest expense			293			(195)

Deposits

The following table analyzes average deposits and average rates on each deposit category listed below for the years ended 31 December 2016, 2015 and 2014. The geographic allocation is based on the location of the office or branch where the deposit

is made. Deposits by foreign depositors in domestic offices were CHF 76,749 million, CHF 72,532 million and CHF 76,362 million at 31 December 2016, 31 December 2015 and 31 December 2014, respectively.

	31.12.16		31.12.15		31.12.14	
	Average deposits	Average rate (%)	Average deposits	Average rate (%)	Average deposits	Average rate (%)
<i>CHF million, except where indicated</i>						
Banks						
Domestic offices						
Demand deposits	5,046	(0.3)	5,261	(0.2)	5,149	(0.1)
Time deposits	3,984	0.8	4,310	0.5	3,783	0.6
Total domestic offices	9,030	0.2	9,571	0.1	8,932	0.2
Foreign offices						
Interest-bearing deposits	2,339	0.5	2,437	0.4	3,691	0.4
Total due to banks¹	11,369	0.3	12,007	0.2	12,624	0.2
Customer accounts						
Domestic offices						
Demand deposits	129,407	0.0	124,210	0.0	130,593	0.0
Savings deposits	98,966	0.1	96,848	0.1	97,825	0.2
Time deposits	12,084	0.0	12,372	0.1	7,593	0.2
Total domestic offices	240,456	0.0	233,430	0.0	236,012	0.1
Foreign offices						
Demand deposits	55,617	0.0	52,404	0.0	49,098	0.0
Time and savings deposits	112,105	0.3	105,091	0.2	110,072	0.3
Total foreign offices	167,722	0.2	157,496	0.2	159,170	0.2
Total due to customers	408,178	0.1	390,925	0.1	395,182	0.1

¹ Due to banks is considered to represent short-term borrowings to the extent that the total Due to banks exceeds total Due from banks, without differentiating between domestic and foreign offices. The remainder of total Due to banks is considered to represent deposits for the purpose of this disclosure.

As of 31 December 2016, the maturity of time deposits was as follows:

<i>CHF million</i>	Domestic	Foreign
Within 3 months	13,314	46,237
3 to 6 months	985	1,035
6 to 12 months	870	555
1 to 5 years	177	507
Over 5 years	61	24
Total time deposits	15,408	48,357

Short-term borrowings

The table below presents the period-end, average and maximum month-end outstanding amounts for short-term borrowings, along with average and period-end interest rates.

	Short-term debt			Due to banks ¹			Repurchase agreements ²		
<i>CHF million, except where indicated</i>	31.12.16	31.12.15	31.12.14	31.12.16	31.12.15	31.12.14	31.12.16	31.12.15	31.12.14
Period-end balance	26,178	21,215	27,363	0	0	0	78,083	71,775	54,625
Average balance	28,636	27,298	28,004	176	44	0	73,876	65,118	52,865
Maximum month-end balance	32,040	31,911	33,674	2,293	570	0	82,858	80,372	65,033
Average interest rate during the period (%)	0.7	0.4	0.4	0.3	0.2	0.0	0.0	0.3	0.2
Average interest rate at period-end (%)	0.9	0.5	0.2	0.0	0.0	0.0	(0.1)	0.2	0.2

¹ Amounts due to banks are presented net of amounts due from banks in order to reflect short-term borrowings. The difference between the gross Due to banks amount and the amount disclosed here is presented as deposits from banks on the preceding page. ² Repurchase agreements are presented on a gross basis, and therefore, for the purpose of this disclosure, do not reflect the effect of netting permitted under IFRS.

Debt instruments designated at fair value, available for sale and held to maturity

The table below presents the carrying value and yield of debt instruments designated at fair value, available for sale and held to maturity by contractual maturity bucket. The maturity information presented does not consider any early redemption features and debt instruments without fixed maturities are not included.

	Within 1 year		1 up to 5 years		5 to 10 years		Over 10 years		Total carrying value
<i>CHF million, except percentages</i>	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	
Financial assets designated at fair value									
Swiss national government and agencies	1,761	(0.23)							1,761
US Treasury and agencies	14,719	0.49	6,686	0.82	2	1.38			21,406
Foreign governments and official institutions	15,590	0.06	12,803	0.24	270	0.58			28,664
Corporate debt securities	2,287	0.56	6,213	0.82	320	0.29			8,820
Mortgage-backed securities							103	1.65	103
Subtotal as of 31 December 2016	34,356		25,702		592		103		60,754
Financial assets available for sale									
Swiss national government and agencies					1	4.00			1
US Treasury and agencies	1,616	0.31	2,782	0.94					4,398
Foreign governments and official institutions	2,230	1.21	1,624	0.66	15	0.32			3,869
Corporate debt securities	1,239	0.50	1,920	0.56	50	0.18	5	0.00	3,215
Mortgage-backed securities			0	5.52	0	1.96	3,380	1.65	3,381
Subtotal as of 31 December 2016	5,085		6,326		68		3,385		14,864
Financial assets held to maturity									
US Treasury and agencies	406	0.59	1,137	1.04	3,145	1.59			4,688
Foreign governments and official institutions	975	(0.54)	1,753	0.85					2,728
Corporate debt securities	245	0.89	1,629	1.15					1,873
Subtotal as of 31 December 2016	1,626		4,519		3,145		0		9,289
Total as of 31 December 2016¹	41,067		36,547		3,805		3,488		84,908

Debt instruments designated at fair value, available for sale and held to maturity (continued)

	Within 1 year		1 up to 5 years		5 to 10 years		Over 10 years		Total carrying value
<i>CHF million, except percentages</i>	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	
Financial assets available for sale									
Swiss national government and agencies	701	(0.83)			1	4.00			702
US Treasury and agencies	11,171	0.39	6,856	1.29					18,027
Foreign governments and official institutions	13,966	0.21	11,049	0.64	104	1.33			25,119
Corporate debt securities	6,062	0.42	8,118	0.87	264	1.27			14,443
Mortgage-backed securities			0	5.20			3,396	1.74	3,396
Total as of 31 December 2015¹	31,900		26,023		369		3,396		61,688

	Within 1 year		1 up to 5 years		5 to 10 years		Over 10 years		Total carrying value
<i>CHF million, except percentages</i>	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	
Financial assets available for sale									
Swiss national government and agencies	41	0.48			1	4.00			43
US Treasury and agencies	4,873	0.23	8,317	1.02					13,189
Foreign governments and official institutions	14,072	0.31	13,758	0.74	243	1.25			28,072
Corporate debt securities	2,089	0.45	8,489	0.84	280	1.33			10,858
Mortgage-backed securities			0	4.82	0	4.42	4,029	1.34	4,029
Total as of 31 December 2014¹	21,075		30,563		525		4,029		56,192

¹ Includes investments in debt instruments as of 31 December 2016 issued by US government and government agencies of CHF 33,873 million (31 December 2015: CHF 21,424 million, 31 December 2014: CHF 17,219 million), the German government of CHF 11,961 million (31 December 2015: CHF 8,583 million, 31 December 2014: CHF 10,145 million), the French government of CHF 4,019 million (31 December 2015: CHF 3,566 million, 31 December 2014: CHF 5,351 million) and the UK government of CHF 1,933 million (31 December 2015: CHF 2,782 million, 31 December 2014: CHF 2,348 million).

Due from banks and loans by industry (gross)

The Group's lending portfolio is widely diversified across industry sectors. CHF 186 billion (58% of the total) consists of loans to thousands of private households, predominantly in Switzerland, and mostly secured by mortgages, financial collateral or other assets. Exposure to banks and financial institutions amounted to CHF 69 billion (21% of the total). Exposure to banks includes money market deposits with highly rated institutions. Excluding banks and financial institutions, the largest industry sector exposure as of 31 December 2016 was CHF 25 billion (8% of the total) to Services. For further discussion of the loan portfolio,

refer to the "Risk management and control" section of this report.

The table below illustrates the diversification of the loan portfolio among industry sectors. The industry categories presented are consistent with the classification of loans for reporting to the Swiss Financial Market Supervisory Authority (FINMA) and the Swiss National Bank. Loans designated at fair value and loans held in the trading portfolio are excluded from the tables below.

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Domestic					
Banks	778	538	1,157	736	532
Chemicals	262	308	392	382	300
Construction	1,479	1,520	1,418	1,429	1,360
Electricity, gas and water supply	201	234	260	255	351
Financial services	5,140	5,325	6,466	4,643	4,265
Food and beverages	220	208	206	241	284
Hotels and restaurants	1,555	1,647	1,696	1,817	1,745
Manufacturing	2,000	2,012	2,319	2,512	2,976
Mining	19	23	34	36	45
Private households	123,745	123,967	125,461	124,569	123,167
Public authorities	1,364	1,609	2,098	2,415	2,708
Real estate and rentals	12,805	13,707	14,549	14,511	13,682
Retail and wholesale	4,008	3,687	4,169	3,784	4,345
Services	5,402	5,250	4,794	5,330	5,862
Transport, storage and communication	1,919	1,876	1,964	2,013	1,728
Other	708	697	732	753	830
Total domestic	161,603	162,609	167,713	165,426	164,180
Foreign					
Banks	12,381	11,413	12,190	13,201	20,711
Chemicals	141	113	75	178	254
Construction	550	635	645	1,132	1,731
Electricity, gas and water supply	587	706	1,100	1,337	1,205
Financial services	50,264	56,375	57,645	43,125	40,650
Food and beverages	69	65	56	63	45
Hotels and restaurants	171	148	120	181	347
Manufacturing	1,714	1,958	1,961	1,850	1,828
Mining	1,007	1,466	1,345	1,175	1,279
Private households	62,598	62,695	60,466	49,920	46,458
Public authorities	2,551	1,272	1,413	1,322	4,319
Real estate and rentals	2,066	2,213	2,517	2,995	2,721
Retail and wholesale	2,223	1,975	1,924	1,791	2,063
Services	19,498	17,929	17,470	14,733	10,735
Transport, storage and communication	2,440	2,858	3,017	2,809	3,021
Other	217	163	142	362	301
Total foreign	158,477	161,985	162,086	136,174	137,669
Total gross	320,080	324,594	329,800	301,601	301,849

Due from banks and loans – mortgages (gross)

The table below provides more information on the Group's mortgage portfolio by client domicile and type of mortgage. Mortgages are included in the industry categories in the table on the previous page.

<i>CHF million</i>	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Mortgages					
Domestic	142,040	144,230	146,637	144,852	142,143
Foreign	19,921	18,887	18,112	15,235	12,311
Total gross mortgages	161,961	163,117	164,748	160,086	154,454
Mortgages					
Residential	142,197	141,608	142,380	137,370	132,033
Commercial	19,765	21,509	22,368	22,716	22,421
Total gross mortgages	161,961	163,117	164,748	160,086	154,454

Due from banks and loans - maturity profile (gross)

The table below provides the maturity profile of loans and amounts due from banks. The maturity information presented does not consider any early redemption features.

<i>CHF million</i>	Within 1 year	1 to 5 years	Over 5 years	Total
Domestic				
Banks	778	0	0	778
Mortgages	57,099	50,989	33,952	142,040
Other loans	13,644	3,722	1,419	18,785
Total domestic	71,520	54,710	35,372	161,603
Foreign				
Banks	12,290	68	24	12,381
Mortgages	4,635	4,323	10,963	19,921
Other loans	105,183	17,357	3,635	126,175
Total foreign	122,108	21,748	14,621	158,477
Total gross	193,628	76,458	49,993	320,080

As of 31 December 2016, total loans and amounts due from banks granted at fixed and floating interest rates were as follows:

<i>CHF million</i>	Within 1 year	1 to 5 years	Over 5 years	Total
Fixed-rate loans	132,082	57,350	38,628	228,061
Adjustable or floating-rate loans	61,546	19,108	11,365	92,019
Total	193,628	76,458	49,993	320,080

Impaired and non-performing loans

A loan (included in Due from banks or Loans) is classified as non-performing: (i) when the payment of interest, principal or fees is overdue by more than 90 days, or more than 180 days for certain specified retail portfolios, (ii) when bankruptcy or insolvency proceedings have commenced or (iii) when obligations have been restructured on preferential terms. For IFRS reporting purposes, the definition of impaired loans is more comprehensive, covering both non-performing loans and other situations where objective evidence indicates that UBS may be

unable to collect all amounts due. Refer to "Impaired loans" in the "Risk management and control" section of this report for comprehensive information on UBS's impaired loans, of which non-performing loans are a component. Also, refer to Note 1 to the consolidated financial statements for more information on the various risk factors that are considered to be indicative of impairment.

The table below provides an analysis of the Group's non-performing loans.

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Non-performing loans:					
Domestic	1,524	1,174	1,293	1,113	1,121
Foreign	875	455	309	469	395
Total non-performing loans	2,399	1,630	1,602	1,582	1,516

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Gross interest income that would have been recorded on non-performing loans:					
Domestic	5	6	9	6	8
Foreign	22	7	6	4	3
Interest income included in Net profit for non-performing loans:					
Domestic	36	26	22	23	28
Foreign	10	5	7	7	6

UBS does not operate a general policy for restructuring claims in order to avoid counterparty default. Where restructuring does take place, we assess each case individually. Typical features of terms and conditions granted through restructuring to avoid default may include concessions of special interest rates, postponement of interest or principal payments, debt / equity swaps, modification of the schedule of repayments, subordination or amendment of loan maturity.

If a loan is restructured with preferential conditions (i.e., new terms and conditions are agreed which do not meet the normal

current market criteria for the quality of the obligor and the type of loan), the claim is still classified as non-performing. It will remain so until the loan is collected, written off or non-preferential conditions are granted that supersede the preferential conditions, and will be assessed for impairment on an individual basis.

Unrecognized interest related to restructured loans was not material to the results of operations in 2016, 2015, 2014, 2013 or 2012.

Cross-border outstandings

Cross-border outstandings consist of balances with central banks and other financial institutions, loans, reverse repurchase agreements and cash collateral on securities borrowed with counterparties domiciled outside Switzerland. Guarantees and commitments are provided separately in the table below.

The following tables list those countries for which cross-border outstandings exceeded 0.75% of total IFRS assets at 31 December 2016, 2015 and 2014. As of 31 December 2016, there were no outstandings that exceeded 0.75% of total IFRS assets in any country currently facing debt restructuring or

liquidity problems that the Group expects would materially impact the country's ability to service its obligations. Aggregate country risk exposures are monitored and reported on an ongoing basis. The internal risk view is not directly comparable to the cross-border outstandings in the table below due to different approaches to netting, differing trade populations and differing approach to allocation of exposures to countries. For more information on the country framework within risk control, refer to the "Risk management and control" section of this report.

31.12.16

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and Commitments ¹
US	19,652	78,947	22,859	121,458	13.0	36,017
UK	2,595	48,246	9,767	60,608	6.5	10,356
Japan	5,197	5,671	9,165	20,033	2.1	237
Germany	699	4,973	13,063	18,735	2.0	1,513
France	2,385	5,641	2,871	10,897	1.2	4,265
Hong Kong	417	8,171	349	8,937	1.0	154

31.12.15

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and Commitments ¹
US	8,633	90,201	27,807	126,641	13.4	42,286
UK	4,571	56,282	9,560	70,414	7.5	6,448
Japan	3,466	11,275	5,054	19,794	2.1	136
France	4,043	3,758	681	8,482	0.9	5,029
Hong Kong	347	7,692	121	8,160	0.9	79

31.12.14

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and Commitments ¹
US	9,287	84,629	59,103	153,019	14.4	34,967
UK	6,288	47,003	13,928	67,220	6.3	7,660
Japan	1,780	16,906	5,422	24,107	2.3	1,771
France	3,952	6,006	67	10,025	0.9	5,037

¹ Includes forward starting transactions (reverse repurchase agreements and securities borrowing agreements).

Summary of movements in allowances and provisions for credit losses

The following table provides more information on the movements in allowances and provisions for credit losses. Refer to "Credit risk" in the "Risk management and control" section of this report for more information.

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Balance at beginning of year	727	735	750	794	938
Domestic					
Write-offs					
Construction	(1)	(2)	(1)	(2)	(1)
Electricity, gas and water supply	0	(1)	0	0	(6)
Financial services	(3)	(3)	0	(6)	0
Hotels and restaurants	0	0	0	0	(1)
Manufacturing	(7)	(9)	(3)	(4)	(20)
Private households	(20)	(35)	(39)	(38)	(45)
Real estate and rentals	0	0	(1)	0	(2)
Retail and wholesale	(10)	(47)	(28)	(11)	(21)
Services	(3)	(3)	(15)	(4)	(6)
Transport, storage and communications	(4)	(9)	(3)	(1)	(11)
Total gross domestic write-offs	(49)	(110)	(90)	(67)	(112)
Foreign					
Write-offs					
Banks	0	(9)	(15)	(1)	0
Construction	0	0	(1)	(6)	0
Electricity, gas and water supply	0	0	(1)	0	0
Financial services	(5)	(3)	(12)	(44)	(106)
Manufacturing	(21)	0	(7)	0	0
Mining	(25)	(1)	0	0	0
Private households	(8)	(12)	(6)	(6)	(15)
Public authorities	0	0	0	(1)	(54)
Real estate and rentals	0	0	(2)	(1)	0
Retail and wholesale	0	(19)	(2)	(1)	0
Services	(16)	(10)	(14)	0	(19)
Transport, storage and communications	(21)	0	(1)	0	(5)
Total gross foreign write-offs	(96)	(54)	(63)	(61)	(201)
Total usage of provisions	0	0	(1)	0	0
Total write-offs / usage of provisions	(145)	(164)	(154)	(128)	(313)
Recoveries					
Domestic	11	41	29	35	43
Foreign	11	7	0	10	21
Total recoveries	22	48	29	45	63
Total net write-offs / usage of provisions	(123)	(116)	(124)	(83)	(250)
Increase / (decrease) in specific allowances and provisions recognized in the income statement	31	117	89	144	133
Increase / (decrease) in collective loan loss allowances recognized in the income statement	6	0	(11)	(93)	(15)
Foreign currency translation	0	(11)	21	(9)	(8)
Other	12	2	11	(3)	(3)
Balance at end of year¹	653	727	735	750	794

¹ Includes allowances for cash collateral on securities borrowed.

Allocation of the allowances and provisions for credit losses

The following table provides a breakdown of allowances and provisions for credit loss by industry sector and geographic location.

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Domestic					
Banks	3	3	2	3	3
Chemicals	0	0	0	1	0
Construction	17	13	14	16	16
Electricity, gas and water supply	1	2	1	1	0
Financial services	13	17	18	16	21
Food and beverages	0	3	4	2	3
Hotels and restaurants	10	13	16	12	9
Manufacturing	60	77	72	57	44
Private households	46	47	52	54	60
Real estate and rentals	11	13	18	9	10
Retail and wholesale	67	78	123	152	123
Services	28	23	25	23	24
Transport, storage and communication	15	32	29	19	12
Other ¹	0	0	0	0	1
Total domestic specific allowances	273	321	374	365	326
Foreign					
Banks	0	0	10	13	19
Chemicals	0	0	0	0	1
Construction	1	1	1	17	20
Electricity, gas and water supply	0	0	0	1	1
Financial services	65	90	35	37	37
Manufacturing	7	13	9	18	23
Mining	30	46	11	2	0
Private households	59	61	65	66	45
Public authorities	11	14	14	16	39
Real estate and rentals	2	1	1	2	4
Retail and wholesale	80	80	112	77	39
Services	17	19	29	35	35
Transport, storage and communication	41	40	43	19	27
Total foreign specific allowances	314	365	330	303	290
Collective loan loss allowances	12	6	8	20	114
Provisions for loan commitments and guarantees	54	35	23	61	64
Total allowances and provisions for credit losses	653	727	735	750	794

¹ Includes mining and public authorities.

Due from banks and loans by industry sector (gross)

The table below presents the percentage of loans in each industry sector and geographic location in relation to total loans.

In %	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Domestic					
Banks	0.2	0.2	0.4	0.2	0.2
Chemicals	0.1	0.1	0.1	0.1	0.1
Construction	0.5	0.5	0.4	0.5	0.5
Electricity, gas and water supply	0.1	0.1	0.1	0.1	0.1
Financial services	1.6	1.6	2.0	1.5	1.4
Food and beverages	0.1	0.1	0.1	0.1	0.1
Hotels and restaurants	0.5	0.5	0.5	0.6	0.6
Manufacturing	0.6	0.6	0.7	0.8	1.0
Private households	38.7	38.2	38.0	41.3	40.8
Public authorities	0.4	0.5	0.6	0.8	0.9
Real estate and rentals	4.0	4.2	4.4	4.8	4.5
Retail and wholesale	1.3	1.1	1.3	1.3	1.4
Services	1.7	1.6	1.5	1.8	1.9
Transport, storage and communication	0.6	0.6	0.6	0.7	0.6
Other ¹	0.2	0.2	0.2	0.2	0.3
Total domestic	50.5	50.1	50.9	54.8	54.4
Foreign					
Banks	3.9	3.5	3.7	4.4	6.9
Chemicals	0.0	0.0	0.0	0.1	0.1
Construction	0.2	0.2	0.2	0.4	0.6
Electricity, gas and water supply	0.2	0.2	0.3	0.4	0.4
Financial services	15.7	17.4	17.5	14.3	13.5
Hotels and restaurants	0.1	0.0	0.0	0.1	0.1
Manufacturing	0.5	0.6	0.6	0.6	0.6
Mining	0.3	0.5	0.4	0.4	0.4
Private households	19.6	19.3	18.3	16.6	15.4
Public authorities	0.8	0.4	0.4	0.4	1.4
Real estate and rentals	0.6	0.7	0.8	1.0	0.9
Retail and wholesale	0.7	0.6	0.6	0.6	0.7
Services	6.1	5.5	5.3	4.9	3.6
Transport, storage and communication	0.8	0.9	0.9	0.9	1.0
Other ²	0.1	0.1	0.0	0.1	0.1
Total foreign	49.5	49.9	49.1	45.2	45.6
Total gross	100.0	100.0	100.0	100.0	100.0

¹ Includes mining ² Includes food and beverages

UBS AG consolidated supplemental disclosures required under SEC regulations

A – Introduction

The following pages contain supplemental UBS AG disclosures that are required under SEC regulations. UBS AG's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and are denominated in Swiss francs (CHF), the reporting currency of UBS AG.

B – Selected financial data

The tables below provide information about the noon purchase rates for the Swiss franc, expressed in United States dollars, or USD, per one Swiss franc. The noon purchase rate is the rate in New York City for cable transfers in foreign currencies as

certified for customs purposes by the Federal Reserve Bank of New York.

On 28 February 2017, the noon purchase rate was 0.9978 USD per 1 CHF.

For the year ended 31 December	High	Low	Average rate (USD per 1 CHF) ¹	At period end
2012	1.1174	1.0043	1.0724	1.0923
2013	1.1292	1.0190	1.0826	1.1231
2014	1.1478	1.0066	1.0893	1.0066
2015	1.1781	0.9704	1.0368	0.9983
2016	1.0487	0.9677	1.0128	0.9843

For the month ended	High	Low
30 September 2016	1.0357	1.0200
31 October 2016	1.0267	1.0049
30 November 2016	1.0328	0.9816
31 December 2016	0.9935	0.9677
31 January 2017	1.0113	0.9741
28 February 2017	1.0107	0.9892

¹ Calculated using the average of the noon purchase rates on the last business day of each full month during the relevant period.

Key figures

CHF million, except where indicated	As of or for the year ended				
	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Results					
Operating income	28,421	30,605	28,026	27,732	25,423
Operating expenses	24,352	25,198	25,557	24,461	27,216
Operating profit / (loss) from continuing operations before tax	4,069	5,407	2,469	3,272	(1,794)
Net profit / (loss) attributable to shareholders	3,207	6,235	3,502	3,172	(2,480)
Key performance indicators¹					
Profitability					
Return on tangible equity (%)	6.9	13.5	8.2	8.0	1.6
Return on assets, gross (%)	3.0	3.1	2.8	2.5	1.9
Cost / income ratio (%)	85.6	82.0	90.9	88.0	106.6
Growth					
Net profit growth (%)	(48.6)	78.0	10.4		
Net new money growth for combined wealth management businesses (%) ²	2.1	2.2	2.5	3.4	3.2
Resources³					
Common equity tier 1 capital ratio (fully applied, %) ⁴	14.5	15.4	14.2	12.8	9.8
Going concern leverage ratio (phase-in, %) ⁵	5.8				
Leverage ratio (phase-in, %) ⁶		5.7	5.4	4.7	3.6
Additional information					
Profitability					
Return on equity (RoE) (%)	5.9	11.7	7.0	6.7	(5.1)
Return on risk-weighted assets, gross (%) ⁷	13.2	14.3	12.6	11.6	12.0
Resources³					
Total assets	935,353	943,256	1,062,327	1,013,355	1,259,797
Equity attributable to shareholders	53,662	55,248	52,108	48,002	45,949
Common equity tier 1 capital (fully applied) ⁴	32,447	32,042	30,805	28,908	25,182
Common equity tier 1 capital (phase-in) ⁴	39,474	41,516	44,090	42,179	40,032
Risk-weighted assets (fully applied) ⁴	223,232	208,186	217,158	225,153	258,113
Risk-weighted assets (phase-in) ⁴	225,743	212,609	221,150	228,557	261,800
Common equity tier 1 capital ratio (phase-in, %) ⁴	17.5	19.5	19.9	18.5	15.3
Going concern capital ratio (fully applied, %) ⁵	16.3				
Total capital ratio (fully applied, %) ⁴		21.0	19.0	15.4	11.4
Going concern capital ratio (phase-in, %) ⁵	22.6				
Total capital ratio (phase-in, %) ⁴		24.9	25.6	22.2	18.9
Common equity tier 1 leverage ratio (fully applied, %) ⁴	3.7	3.6	3.1	2.8	2.1
Going concern leverage ratio (fully applied, %) ⁵	4.2				
Leverage ratio (fully applied, %) ⁶		4.9	4.1	3.4	2.4
Leverage ratio denominator (fully applied) ⁶	870,942	898,251	999,124	1,015,306	1,206,214
Leverage ratio denominator (phase-in) ⁶	875,325	904,518	1,006,001	1,022,924	1,216,561
Average equity of average assets (%)	5.3	5.0	4.8	4.0	3.4

Key figures (continued)

CHF million, except where indicated	As of or for the year ended				
	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Other					
Invested assets (CHF billion) ⁸	2,821	2,689	2,734	2,390	2,230
Personnel (full-time equivalents)	56,208	58,131	60,155	60,205	62,628
Americas	20,522	20,816	20,951	21,317	21,995
of which: US	19,695	19,897	19,715	20,037	20,833
Asia Pacific	6,633	7,348	7,385	7,116	7,426
Europe, Middle East and Africa	8,473	8,730	10,254	10,052	10,829
of which: UK	5,206	5,373	5,425	5,595	6,459
of which: rest of Europe	3,100	3,181	4,663	4,303	4,202
of which: Middle East and Africa	167	176	166	153	167
Switzerland	20,581	21,238	21,564	21,720	22,378
Registered ordinary shares (number)	3,858,408,466	3,858,408,466	3,844,560,913	3,842,002,069	3,835,250,233
Treasury shares (number)	0	0	2,115,255	73,800,252	87,879,601

¹ Refer to the "Measurement of performance" section of this report for the definition of our key performance indicators. ² Based on adjusted net new money, which excludes the negative effect on net new money in 2015 of CHF 9.9 billion from our balance sheet and capital optimization program. ³ Subsequent to the publication of the fourth quarter 2016 report, the Annual General Meeting of shareholders of UBS AG approved the distribution of a CHF 2,250 million dividend from UBS AG to UBS Group AG, which was higher than the previously estimated amount. This, in combination with the adjusting event after the reporting period described in Note 35 in the "Consolidated financial statements" section of this report, resulted in a reduction of CET1 capital (CHF 607 million on a fully applied basis and CHF 585 million on a phase-in basis), a reduction in the leverage ratio denominator (CHF 45 million on a fully applied basis and CHF 27 million on a phase-in basis) and respective capital ratios of UBS AG consolidated as of 31 December 2016. ⁴ Based on the Basel III framework as applicable for Swiss systemically relevant banks (SRBs). Refer to the "Capital management" section of this report for more information. ⁵ Based on revised Swiss SRB framework that became effective on 1 July 2016. ⁶ Calculated in accordance with Swiss SRB rules. Refer to the "Capital management" section of this report for more information. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable. ⁷ Based on fully applied risk-weighted assets for 2016, 2015, 2014 and 2013. Based on Basel 2.5 risk-weighted assets for 2012. ⁸ Includes invested assets for Personal & Corporate Banking.

Income statement data

	For the year ended				
<i>CHF million, except where indicated</i>	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Interest income	13,782	13,178	13,194	13,137	15,968
Interest expense	(7,399)	(6,449)	(6,639)	(7,351)	(9,990)
Net interest income	6,383	6,729	6,555	5,786	5,978
Credit loss (expense) / recovery	(37)	(117)	(78)	(50)	(118)
Net interest income after credit loss expense	6,346	6,612	6,477	5,736	5,860
Net fee and commission income	16,447	17,184	17,076	16,287	15,396
Net trading income	4,943	5,696	3,841	5,130	3,526
Other income	685	1,112	632	580	641
Total operating income	28,421	30,605	28,026	27,732	25,423
Total operating expenses	24,352	25,198	25,557	24,461	27,216
Operating profit / (loss) before tax	4,069	5,407	2,469	3,272	(1,794)
Tax expense / (benefit)	781	(908)	(1,180)	(110)	461
Net profit / (loss)	3,288	6,314	3,649	3,381	(2,255)
Net profit / (loss) attributable to preferred noteholders	78	77	142	204	220
Net profit / (loss) attributable to non-controlling interests	4	3	5	5	5
Net profit / (loss) attributable to shareholders	3,207	6,235	3,502	3,172	(2,480)
Cost / income ratio (%) ¹	85.6	82.0	90.9	88.0	106.6
Rates of return (%)					
Return on equity attributable to shareholders	5.9	11.7	7.0	6.7	(5.1)
Return on average equity	5.9	11.7	7.0	6.7	(5.0)
Return on average assets	0.3	0.6	0.3	0.3	(0.2)

¹ Operating expenses / operating income before credit loss expense.

Dividend income from investments in subsidiaries

In 2016, UBS AG received dividends of CHF 3,041 million (2015: CHF 1,218 million) from its subsidiaries, primarily reflecting a dividend of CHF 2,000 million from UBS Switzerland AG.

Balance sheet data

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Assets					
Total assets	935,353	943,256	1,062,327	1,013,355	1,259,797
Cash and balances with central banks	107,767	91,306	104,073	80,879	66,383
Due from banks	13,125	11,866	13,334	13,874	21,220
Cash collateral on securities borrowed	15,111	25,584	24,063	27,496	37,372
Reverse repurchase agreements	66,246	67,893	68,414	91,563	130,941
Trading portfolio assets	96,661	124,047	138,156	122,848	160,564
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>	30,260	51,943	56,018	42,449	44,698
Positive replacement values	158,411	167,435	256,978	254,084	418,957
Cash collateral receivables on derivative instruments	26,664	23,763	30,979	26,548	30,413
Loans	307,004	312,723	315,984	286,959	279,901
Financial assets designated at fair value	65,024	5,808	4,493	7,364	9,106
Financial assets available for sale	15,676	62,543	57,159	59,525	66,230
Financial assets held to maturity	9,289				
Other assets	25,412	22,249	23,069	20,228	17,244
Liabilities					
Due to banks	10,645	11,836	10,492	12,862	23,024
Cash collateral on securities lent	2,818	8,029	9,180	9,491	9,203
Repurchase agreements	6,612	9,653	11,818	13,811	38,557
Trading portfolio liabilities	22,825	29,137	27,958	26,609	34,247
Negative replacement values	153,810	162,430	254,101	248,079	395,260
Cash collateral payables on derivative instruments	35,472	38,282	42,372	44,507	71,148
Due to customers	450,199	402,522	410,979	390,825	373,459
Financial liabilities designated at fair value	55,017	62,995	75,297	69,901	91,901
Debt issued	78,998	82,359	91,207	81,586	104,837
Other liabilities	60,443	74,606	70,392	62,777	66,523
Equity attributable to shareholders	53,662	55,248	52,108	48,002	45,949

Ratio of earnings to fixed charges

The following table sets forth UBS AG's ratio of earnings to fixed charges on an IFRS basis for the periods indicated. The ratios are calculated based on earnings from continuing operations. Ratios of earnings to fixed charges and preferred share dividends are not presented as there were no mandatory preferred share dividends in any of the periods indicated.

	For the year ended				
	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
	1.50	1.76	1.33	1.41	0.83

C – Information on the company

Property, plant and equipment

As of 31 December 2016, UBS AG operated about 816 business and banking locations worldwide, of which approximately 42% were in Switzerland, 41% in the Americas, 10% in the rest of Europe, Middle East and Africa and 7% in Asia Pacific. Of the business and banking locations in Switzerland, 32% were

owned directly by UBS AG, with the remainder, along with most of UBS AG's offices outside Switzerland, being held under commercial leases. These premises are subject to continuous maintenance and upgrading and are considered suitable and adequate for current and anticipated operations.

D – Information required by industry guide 3

Selected statistical information

The following tables set forth select statistical information regarding the UBS AG's banking operations extracted from the financial statements. Unless otherwise indicated, average balances for the years ended 31 December 2016, 31 December 2015 and 31 December 2014 are calculated from monthly data.

The distinction between domestic (Swiss) and foreign (non-Swiss) is generally based on the booking location. For loans, this method is not significantly different from an analysis based on the domicile of the borrower.

Average balances and interest rates

The following table sets forth average interest-earning assets and average interest-bearing liabilities, along with the average yield, for 2016, 2015 and 2014. Refer to "Note 3 Net interest and trading income" in the "Consolidated financial statements" section of this report for more information on interest income and interest expense.

	31.12.16			31.12.15			31.12.14		
	Average balance	Interest income	Average yield (%)	Average balance	Interest income	Average yield (%)	Average balance	Interest income	Average yield (%)
<i>CHF million, except where indicated</i>									
Assets									
Due from banks									
Domestic	3,353	20	0.6	3,525	5	0.1	3,269	8	0.2
Foreign	9,545	10	0.1	10,822	60	0.6	16,692	95	0.6
Cash collateral on securities borrowed and reverse repurchase agreements									
Domestic	10,301	(22)	(0.2)	6,415	14	0.2	7,374	4	0.1
Foreign	147,873	567	0.4	138,961	614	0.4	133,640	463	0.3
Trading portfolio assets									
Domestic	3,867	155	4.0	5,016	159	3.2	5,105	209	4.1
Foreign	100,764	2,310	2.3	121,558	2,912	2.4	118,038	2,988	2.5
of which: taxable	100,764	2,310	2.3	121,558	2,912	2.4	118,038	2,988	2.5
Cash collateral receivables on derivative instruments									
Domestic	487	0	0.0	249	3	1.2	113	1	0.9
Foreign	25,910	116	0.4	29,469	59	0.2	27,920	54	0.2
Loans									
Domestic	188,290	3,492	1.9	194,032	3,646	1.9	193,026	3,780	2.0
Foreign	120,572	2,693	2.2	120,664	2,510	2.1	109,137	2,520	2.3
Financial assets designated at fair value									
Domestic	10,614	12	0.1	377	1	0.3	672	1	0.1
Foreign	41,484	309	0.7	4,689	193	4.1	4,969	207	4.2
Financial assets available for sale									
Domestic	8,876	36	0.4	20,037	63	0.3	2,006	8	0.4
Foreign	17,368	164	0.9	43,131	328	0.8	52,642	307	0.6
of which: taxable	17,368	164	0.9	43,131	328	0.8	52,642	307	0.6
Financial assets held to maturity									
Domestic	4,581	52	1.1						
Foreign	65	1	1.5						
Other interest-earning assets									
Domestic	0	0	0.0	0	0	0.0	0	0	0.0
Foreign	12,134	593	4.9	12,749	526	4.1	12,024	477	4.0
Total interest-earning assets	706,083	10,509	1.5	711,695	11,093	1.6	686,626	11,123	1.6
Net interest income on swaps		2,214			1,630			1,613	
Interest income on off-balance sheet securities and other		423			455			458	
Interest income and average interest-earning assets	706,083	13,146¹	1.9	711,695	13,178	1.9	686,626	13,194	1.9
Non-interest-earning assets									
Positive replacement values	176,567			213,913			232,739		
Fixed assets	7,958			7,149			6,383		
Other	138,341			126,820			127,812		
Total average assets	1,028,949			1,059,576			1,053,561		

Average balances and interest rates (continued)

	31.12.16			31.12.15			31.12.14		
	Average balance	Interest expense	Average interest rate (%)	Average balance	Interest expense	Average interest rate (%)	Average balance	Interest expense	Average interest rate (%)
<i>CHF million, except where indicated</i>									
Liabilities and equity									
Due to banks									
Domestic	9,030	18	0.2	9,571	11	0.1	8,932	16	0.2
Foreign	2,516	13	0.5	2,480	11	0.4	3,691	14	0.4
Cash collateral on securities lent and repurchase agreements									
Domestic	2,366	3	0.1	3,413	2	0.1	5,328	1	0.0
Foreign	76,845	317	0.4	71,129	442	0.6	58,639	338	0.6
Trading portfolio liabilities									
Domestic	538	7	1.3	569	5	0.9	638	14	2.2
Foreign	30,041	1,608	5.4	31,426	1,665	5.3	28,737	1,789	6.2
Cash collateral payables on derivative instruments									
Domestic	968	4	0.4	993	1	0.1	612	0	0.0
Foreign	34,998	82	0.2	41,499	57	0.1	42,595	45	0.1
Due to customers									
Domestic	248,863	488	0.2	238,825	312	0.1	236,121	227	0.1
<i>of which: demand deposits</i>	130,996	(44)	0.0	126,048	(19)	0.0	130,703	43	0.0
<i>of which: savings deposits</i>	98,966	65	0.1	96,848	70	0.1	97,825	172	0.2
<i>of which: time deposits</i>	18,901	466	2.5	15,930	261	1.6	7,593	12	0.2
Foreign	179,466	676	0.4	159,027	312	0.2	159,170	340	0.2
Financial liabilities designated at fair value									
Domestic	1,632	6	0.4	2,057	6	0.3	1,747	13	0.7
Foreign	56,930	795	1.4	65,446	724	1.1	68,928	906	1.3
Short-term debt									
Domestic	613	1	0.2	873	4	0.5	1,270	2	0.2
Foreign	28,023	204	0.7	26,425	107	0.4	26,734	101	0.4
Long-term debt									
Domestic	15,011	448	3.0	15,182	471	3.1	14,937	447	3.0
Foreign	41,513	1,393	3.4	47,941	1,717	3.6	43,264	1,833	4.2
Other interest-bearing liabilities									
Domestic	0	0	0.0	0	0	0.0	0	0	0.0
Foreign	38,620	113	0.3	39,968	58	0.1	35,503	58	0.2
Total interest-bearing liabilities	767,974	6,176	0.8	756,824	5,904	0.8	736,847	6,145	0.8
Interest expense on off-balance sheet securities and other		588			546			495	
Interest expense and average interest-bearing liabilities	767,974	6,763²	0.9	756,824	6,449	0.9	736,847	6,640	0.9
Non-interest-bearing liabilities									
Negative replacement values	172,762			210,551			229,286		
Other	32,578			37,041			35,359		
Total liabilities	973,314			1,004,416			1,001,493		
Total equity	55,635			55,160			52,068		
Total average liabilities and equity	1,028,949			1,059,576			1,053,561		
Net interest income		6,383			6,729			6,555	
Net yield on interest-earning assets			0.9			0.9			1.0

1 For the purpose of this disclosure, negative interest income on assets is presented as a reduction to interest income, while in the consolidated income statement negative interest income on assets is presented as interest expense. Total interest income presented in the consolidated income statement was CHF 13,782 million. 2 For the purpose of this disclosure, negative interest expense on liabilities is presented as a reduction to interest expense, while in the consolidated income statement negative interest income on liabilities is presented as interest income. Total interest expense presented in the consolidated income statement was CHF 7,399 million.

Average balances and interest rates (continued)

The percentage of total average interest-earning assets attributable to foreign activities was 67% for 2016 (68% for 2015 and 69% for 2014). The percentage of total average interest-bearing liabilities attributable to foreign activities was 64% for 2016 (64% for 2015 and 63% for 2014). All assets and liabilities are translated into CHF at uniform month-end rates. Interest income and expense are translated at monthly average rates.

Average rates earned and paid on assets and liabilities can change from period to period based on the changes in interest rates in general, but are also affected by changes in the currency mix included in the assets and liabilities. This is especially true for foreign assets and liabilities. Tax-exempt income is not recorded on a tax-equivalent basis. For all three years presented, tax-exempt income is considered to be insignificant and the impact from such income is therefore negligible.

Analysis of changes in interest income and expense

The following tables allocate, by categories of interest-earning assets and interest-bearing liabilities, the changes in interest income and expense due to changes in volume and interest rates for the year ended 31 December 2016 compared with the year ended 31 December 2015, and for the year ended 31 December

2015 compared with the year ended 31 December 2014. Volume and rate variances have been calculated on movements in average balances and changes in interest rates. Changes due to a combination of volume and rates have been allocated proportionally.

	2016 compared with 2015			2015 compared with 2014		
	Increase / (decrease) due to changes in			Increase / (decrease) due to changes in		
	Average volume	Average interest rate	Net change	Average volume	Average interest rate	Net change
<i>CHF million</i>						
Interest income from interest-earning assets						
Due from banks						
Domestic	0	16	16	1	(5)	(4)
Foreign	(8)	(45)	(53)	(35)	1	(34)
Cash collateral on securities borrowed and reverse repurchase agreements						
Domestic	8	(44)	(36)	(1)	11	10
Foreign	36	(83)	(47)	16	135	151
Trading portfolio assets						
Domestic	(37)	33	(4)	(4)	(46)	(50)
Foreign	(499)	(103)	(602)	88	(164)	(76)
of which: taxable	(499)	(103)	(602)	88	(164)	(76)
Cash collateral receivables on derivative instruments						
Domestic	3	(6)	(3)	1	1	2
Foreign	(7)	64	57	3	2	5
Loans						
Domestic	(109)	(46)	(155)	20	(153)	(133)
Foreign	(2)	188	186	265	(275)	(10)
Financial assets designated at fair value						
Domestic	31	(20)	11	0	0	0
Foreign	1,509	(1,393)	116	(12)	(3)	(15)
Financial assets available for sale						
Domestic	(33)	6	(27)	72	(17)	55
Foreign	(206)	42	(164)	(57)	78	21
of which: taxable	(206)	42	(164)	(57)	78	21
Financial assets held to maturity						
Domestic	52	0	52			
Foreign	1	0	1			
Other interest-bearing assets						
Domestic	0	0	0	0	0	0
Foreign	(25)	93	68	29	19	48
Interest income						
Domestic	(85)	(62)	(146)	89	(209)	(120)
Foreign	799	(1,236)	(437)	297	(207)	90
Total interest income from interest-earning assets	714	(1,298)	(584)	386	(416)	(30)
Net interest on swaps			584			17
Interest income on off-balance sheet securities and other			(32)			(4)
Total interest income			(31)			(17)

Analysis of changes in interest income and expense (continued)

	2016 compared with 2015			2015 compared with 2014		
	Increase / (decrease) due to changes in			Increase / (decrease) due to changes in		
	Average volume	Average interest rate	Net change	Average volume	Average interest rate	Net change
<i>CHF million</i>						
Interest expense on interest-bearing liabilities						
Due to banks						
Domestic	(1)	8	7	1	(6)	(5)
Foreign	0	2	2	(5)	2	(3)
Cash collateral on securities lent and repurchase agreements						
Domestic	(1)	3	2	0	0	0
Foreign	34	(160)	(126)	75	30	105
Trading portfolio liabilities						
Domestic	0	2	2	(2)	(8)	(10)
Foreign	(73)	15	(58)	167	(291)	(124)
Cash collateral payables on derivative instruments						
Domestic	0	4	4	0	1	1
Foreign	(7)	32	25	(1)	13	12
Due to customers						
Domestic	(1)	1	0	15	70	85
<i>of which: demand deposits</i>	(94)	165	71	0	(62)	(62)
<i>of which: savings deposits</i>				(2)	(100)	(102)
<i>of which: time deposits</i>	50	126	176	17	232	249
Foreign	0	(25)	(25)	0	(29)	(29)
Financial liabilities designated at fair value	2	(7)	(5)			
Domestic	48	157	205	2	(9)	(7)
Foreign	41	324	365	(45)	(137)	(182)
Short-term debt						
Domestic	(1)	(2)	(3)	(1)	3	2
Foreign	6	92	98	(1)	7	6
Long-term debt						
Domestic	(5)	(18)	(23)	7	18	25
Foreign	(231)	(93)	(324)	196	(312)	(116)
Other interest-bearing liabilities						
Domestic	0	0	0	0	0	0
Foreign	(1)	56	55	9	(9)	0
Interest expense						
Domestic	41	123	164	22	68	90
Foreign	(325)	433	108	395	(727)	(332)
Total interest expense on interest-bearing liabilities	(284)	556	272	417	(658)	(241)
Interest expense on off-balance sheet securities and other			42			51
Total interest expense			314			(190)

Deposits

The following table analyzes average deposits and average rates on each deposit category listed below for the years ended 31 December 2016, 2015 and 2014. The geographic allocation is based on the location of the office or branch where the deposit

is made. Deposits by foreign depositors in domestic offices were CHF 76,759 million, CHF 72,544 million and CHF 76,391 million at 31 December 2016, 31 December 2015 and 31 December 2014, respectively.

	31.12.16		31.12.15		31.12.14	
	Average deposits	Average rate (%)	Average deposits	Average rate (%)	Average deposits	Average rate (%)
<i>CHF million, except where indicated</i>						
Banks						
Domestic offices						
Demand deposits	5,046	(0.3)	5,261	(0.2)	5,149	(0.1)
Time deposits	3,984	0.8	4,310	0.5	3,783	0.6
Total domestic offices	9,030	0.2	9,571	0.1	8,932	0.2
Foreign offices						
Interest-bearing deposits	2,516	0.5	2,437	0.4	3,691	0.4
Total due to banks¹	11,546	0.3	12,007	0.2	12,624	0.2
Customer accounts						
Domestic offices						
Demand deposits	130,996	0.0	126,048	0.0	130,703	0.0
Savings deposits	98,966	0.1	96,848	0.1	97,825	0.2
Time deposits	18,901	2.5	15,930	0.1	7,593	0.2
Total domestic offices	248,863	0.2	238,825	0.1	236,121	0.1
Foreign offices						
Demand deposits	55,617	0.0	52,406	0.0	49,098	0.0
Time and savings deposits	123,850	0.5	106,622	0.2	110,072	0.3
Total foreign offices	179,466	0.4	159,027	0.2	159,170	0.2
Total due to customers	428,329	0.3	397,853	0.2	395,292	0.1

¹ Due to banks is considered to represent short-term borrowings to the extent that the total Due to banks exceeds total Due from banks, without differentiating between domestic and foreign offices. The remainder of total Due to banks is considered to represent deposits for the purpose of this disclosure.

As of 31 December 2016, the maturity of time deposits was as follows:

<i>CHF million</i>	Domestic	Foreign
Within 3 months	13,314	46,237
3 to 6 months	985	1,035
6 to 12 months	870	555
1 to 5 years	177	5,329
Over 5 years	7,871	12,207
Total time deposits	23,217	65,363

Short-term borrowings

The table below presents the period-end, average and maximum month-end outstanding amounts for short-term borrowings, along with average and period-end interest rates.

	Short-term debt			Due to banks ¹			Repurchase agreements ²		
<i>CHF million, except where indicated</i>	31.12.16	31.12.15	31.12.14	31.12.16	31.12.15	31.12.14	31.12.16	31.12.15	31.12.14
Period-end balance	26,178	21,215	27,363	0	0	0	78,083	71,775	54,625
Average balance	28,636	27,298	28,004	184	44	0	73,876	65,118	52,865
Maximum month-end balance	32,040	31,911	33,674	2,386	570	0	82,858	80,372	65,033
Average interest rate during the period (%)	0.7	0.4	0.4	0.3	0.2	0.0	0.0	0.3	0.2
Average interest rate at period-end (%)	0.9	0.5	0.2	0.0	0.0	0.0	(0.1)	0.2	0.2

¹ Amounts due to banks are presented net of amounts due from banks in order to reflect short-term borrowings. The difference between the gross Due to banks amount and the amount disclosed here is presented as deposits from banks on the preceding page. ² Repurchase agreements are presented on a gross basis, and therefore, for the purpose of this disclosure, do not reflect the effect of netting permitted under IFRS.

Debt instruments designated at fair value, available for sale and held to maturity

The table below presents the carrying value and yield of debt instruments designated at fair value, available for sale and held to maturity by contractual maturity bucket. The maturity information presented does not consider any early redemption features and debt instruments without fixed maturities are not included.

	Within 1 year		1 up to 5 years		5 to 10 years		Over 10 years		Total carrying value
<i>CHF million, except percentages</i>	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	
Financial assets designated at fair value									
Swiss national government and agencies	1,761	(0.23)							1,761
US Treasury and agencies	14,719	0.49	6,686	0.82	2	1.38			21,406
Foreign governments and official institutions	15,590	0.06	12,803	0.24	270	0.58			28,664
Corporate debt securities	2,287	0.56	6,213	0.82	320	0.29			8,820
Mortgage-backed securities							103	1.65	103
Subtotal as of 31 December 2016	34,356		25,702		592		103		60,754
Financial assets available for sale									
Swiss national government and agencies					1	4.00			1
US Treasury and agencies	1,616	0.31	2,782	0.94					4,398
Foreign governments and official institutions	2,230	1.21	1,624	0.66	15	0.32			3,869
Corporate debt securities	1,239	0.50	1,920	0.56	50	0.18	5	0.00	3,215
Mortgage-backed securities			0	5.52	0	1.96	3,380	1.65	3,381
Subtotal as of 31 December 2016	5,085		6,326		68		3,385		14,864
Financial assets held to maturity									
US Treasury and agencies	406	0.59	1,137	1.04	3,145	1.59			4,688
Foreign governments and official institutions	975	(0.54)	1,753	0.85					2,728
Corporate debt securities	245	0.89	1,629	1.15					1,873
Subtotal as of 31 December 2016	1,626		4,519		3,145		0		9,289
Total as of 31 December 2016¹	41,067		36,547		3,805		3,488		84,908

Debt instruments designated at fair value, available for sale and held to maturity (continued)

	Within 1 year		1 up to 5 years		5 to 10 years		Over 10 years		Total carrying value
<i>CHF million, except percentages</i>	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	
Financial assets available for sale									
Swiss national government and agencies	701	(0.83)			1	4.00			702
US Treasury and agencies	11,171	0.39	6,856	1.29					18,027
Foreign governments and official institutions	13,966	0.21	11,049	0.64	104	1.33			25,119
Corporate debt securities	6,062	0.42	8,118	0.87	264	1.27			14,443
Mortgage-backed securities			0	5.20			3,396	1.74	3,396
Total as of 31 December 2015¹	31,900		26,023		369		3,396		61,688

	Within 1 year		1 up to 5 years		5 to 10 years		Over 10 years		Total carrying value
<i>CHF million, except percentages</i>	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	Carrying value	Yield (%)	
Financial assets available for sale									
Swiss national government and agencies	41	0.48			1	4.00			43
US Treasury and agencies	4,873	0.23	8,317	1.02					13,189
Foreign governments and official institutions	14,072	0.31	13,758	0.74	243	1.25			28,072
Corporate debt securities	2,089	0.45	8,489	0.84	280	1.33			10,858
Mortgage-backed securities			0	4.82	0	4.42	4,029	1.34	4,029
Total as of 31 December 2014¹	21,075		30,563		525		4,029		56,192

¹ Includes investments in debt instruments as of 31 December 2016 issued by US government and government agencies of CHF 33,873 million (31 December 2015: CHF 21,424 million, 31 December 2014: CHF 17,219 million), the German government of CHF 11,961 million (31 December 2015: CHF 8,583 million, 31 December 2014: CHF 10,145 million), the French government of CHF 4,019 million (31 December 2015: CHF 3,566 million, 31 December 2014: CHF 5,351 million) and the UK government of CHF 1,933 million (31 December 2015: CHF 2,782 million, 31 December 2014: CHF 2,348 million).

Due from banks and loans by industry (gross)

UBS AG's lending portfolio is widely diversified across industry sectors. CHF 186 billion (58% of the total) consists of loans to thousands of private households, predominantly in Switzerland, and mostly secured by mortgages, financial collateral or other assets. Exposure to banks and financial institutions amounted to CHF 69 billion (22% of the total). Exposure to banks includes money market deposits with highly rated institutions. Excluding banks and financial institutions, the largest industry sector exposure as of 31 December 2016 was CHF 25 billion (8% of the total) to Services. For further discussion of the loan portfolio,

refer to the "Risk management and control" section of this report.

The table below illustrates the diversification of the loan portfolio among industry sectors. The industry categories presented are consistent with the classification of loans for reporting to the Swiss Financial Market Supervisory Authority (FINMA) and the Swiss National Bank. Loans designated at fair value and loans held in the trading portfolio are excluded from the tables below.

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Domestic					
Banks	778	772	1,157	736	532
Chemicals	262	308	392	382	300
Construction	1,479	1,520	1,418	1,429	1,360
Electricity, gas and water supply	201	234	260	255	351
Financial services	5,719	6,061	6,693	4,643	4,265
Food and beverages	220	208	206	241	284
Hotels and restaurants	1,555	1,647	1,696	1,817	1,745
Manufacturing	2,000	2,012	2,319	2,512	2,976
Mining	19	23	34	36	45
Private households	123,745	123,967	125,461	124,569	123,167
Public authorities	1,364	1,609	2,098	2,415	2,708
Real estate and rentals	12,805	13,707	14,549	14,511	13,682
Retail and wholesale	4,008	3,687	4,169	3,784	4,345
Services	5,402	5,250	4,794	5,330	5,862
Transport, storage and communication	1,919	1,876	1,964	2,013	1,728
Other	708	697	732	752	830
Total domestic	162,181	163,578	167,940	165,426	164,180
Foreign					
Banks	12,350	11,097	12,190	13,201	20,711
Chemicals	141	113	75	178	254
Construction	550	635	645	1,132	1,731
Electricity, gas and water supply	587	706	1,100	1,337	1,205
Financial services	50,366	56,414	57,645	43,125	40,650
Food and beverages	69	65	56	63	45
Hotels and restaurants	171	148	120	181	347
Manufacturing	1,714	1,958	1,961	1,850	1,828
Mining	1,007	1,466	1,345	1,175	1,279
Private households	62,598	62,695	60,466	49,920	46,458
Public authorities	2,551	1,272	1,413	1,322	4,319
Real estate and rentals	2,066	2,213	2,517	2,995	2,721
Retail and wholesale	2,223	1,975	1,924	1,791	2,063
Services	19,498	17,924	17,470	14,733	10,735
Transport, storage and communication	2,440	2,858	3,017	2,809	3,021
Other	217	163	142	361	301
Total foreign	158,547	161,703	162,086	136,174	137,669
Total gross	320,728	325,281	330,027	301,601	301,849

Due from banks and loans – mortgages (gross)

The table below provides more information on UBS AG's mortgage portfolio by client domicile and type of mortgage. Mortgages are included in the industry categories in the table on the previous page.

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Mortgages					
Domestic	142,040	144,230	146,637	144,852	142,143
Foreign	19,921	18,887	18,112	15,235	12,311
Total gross mortgages	161,961	163,117	164,748	160,086	154,454
Mortgages					
Residential	142,197	141,608	142,380	137,370	132,033
Commercial	19,765	21,509	22,368	22,716	22,421
Total gross mortgages	161,961	163,117	164,748	160,086	154,454

Due from banks and loans - maturity profile (gross)

The table below provides the maturity profile of loans and amounts due from banks. The maturity information presented does not consider any early redemption features.

CHF million	Within 1 year	1 to 5 years	Over 5 years	Total
Domestic				
Banks	778	0	0	778
Mortgages	57,099	50,989	33,952	142,040
Other loans	14,222	3,722	1,419	19,363
Total domestic	72,099	54,710	35,372	162,181
Foreign				
Banks	12,259	68	24	12,350
Mortgages	4,635	4,323	10,963	19,921
Other loans	105,284	17,357	3,635	126,276
Total foreign	122,178	21,748	14,621	158,547
Total gross	194,277	76,458	49,993	320,728

As of 31 December 2016, total loans and amounts due from banks granted at fixed and floating interest rates were as follows:

CHF million	Within 1 year	1 to 5 years	Over 5 years	Total
Fixed-rate loans	132,059	57,350	38,628	228,038
Adjustable or floating-rate loans	62,217	19,108	11,365	92,690
Total	194,277	76,458	49,993	320,728

Impaired and non-performing loans

A loan (included in Due from banks or Loans) is classified as non-performing: (i) when the payment of interest, principal or fees is overdue by more than 90 days, or more than 180 days for certain specified retail portfolios, (ii) when bankruptcy or insolvency proceedings have commenced or (iii) when obligations have been restructured on preferential terms. For IFRS reporting purposes, the definition of impaired loans is more comprehensive, covering both non-performing loans and other situations where objective evidence indicates that UBS AG may

be unable to collect all amounts due. Refer to "Impaired loans" in the "Risk management and control" section of this report for comprehensive information on UBS AG's impaired loans, of which non-performing loans are a component. Also, refer to Note 1 to the consolidated financial statements for more information on the various risk factors that are considered to be indicative of impairment.

The table below provides an analysis of the UBS AG's non-performing loans.

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Non-performing loans:					
Domestic	1,524	1,174	1,293	1,113	1,121
Foreign	875	455	309	469	395
Total non-performing loans	2,399	1,630	1,602	1,582	1,516

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Gross interest income that would have been recorded on non-performing loans:					
Domestic	5	6	9	6	8
Foreign	22	7	6	4	3
Interest income included in Net profit for non-performing loans:					
Domestic	36	26	22	23	28
Foreign	10	5	7	7	6

UBS AG does not operate a general policy for restructuring claims in order to avoid counterparty default. Where restructuring does take place, we assess each case individually. Typical features of terms and conditions granted through restructuring to avoid default may include concessions of special interest rates, postponement of interest or principal payments, debt / equity swaps, modification of the schedule of repayments, subordination or amendment of loan maturity.

If a loan is restructured with preferential conditions (i.e., new terms and conditions are agreed which do not meet the normal

current market criteria for the quality of the obligor and the type of loan), the claim is still classified as non-performing. It will remain so until the loan is collected, written off or non-preferential conditions are granted that supersede the preferential conditions, and will be assessed for impairment on an individual basis.

Unrecognized interest related to restructured loans was not material to the results of operations in 2016, 2015, 2014, 2013 or 2012.

Cross-border outstandings

Cross-border outstandings consist of balances with central banks and other financial institutions, loans, reverse repurchase agreements and cash collateral on securities borrowed with counterparties domiciled outside Switzerland. Guarantees and commitments are provided separately in the table below.

The following tables list those countries for which cross-border outstandings exceeded 0.75% of total IFRS assets at 31 December 2016, 2015 and 2014. As of 31 December 2016, there were no outstandings that exceeded 0.75% of total IFRS assets in any country currently facing debt restructuring or

liquidity problems that UBS AG expects would materially impact the country's ability to service its obligations. Aggregate country risk exposures are monitored and reported on an ongoing basis. The internal risk view is not directly comparable to the cross-border outstandings in the table below due to different approaches to netting, differing trade populations and differing approach to allocation of exposures to countries. For more information on the country framework within risk control, refer to the "Risk management and control" section of this report.

31.12.16

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and Commitments ¹
US	19,652	78,947	22,859	121,458	13.0	36,017
UK	2,595	48,246	9,767	60,608	6.5	10,356
Japan	5,197	5,671	9,165	20,033	2.1	237
Germany	699	4,973	13,063	18,735	2.0	1,513
France	2,385	5,641	2,871	10,897	1.2	4,265
Hong Kong	410	8,171	349	8,930	1.0	154

31.12.15

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and Commitments ¹
US	8,633	90,201	27,807	126,641	13.4	42,286
UK	4,498	56,282	9,560	70,340	7.5	6,448
Japan	3,466	11,275	5,054	19,794	2.1	136
France	4,043	3,758	681	8,482	0.9	5,029
Hong Kong	344	7,692	121	8,157	0.9	79

31.12.14

<i>CHF million</i>	Banks	Private sector	Public sector	Total outstandings	% of total assets	Guarantees and Commitments ¹
US	9,287	84,629	59,103	153,019	14.4	34,967
UK	6,288	47,003	13,928	67,220	6.3	7,660
Japan	1,780	16,906	5,422	24,107	2.3	1,771
France	3,952	6,006	67	10,025	0.9	5,037

¹ Includes forward starting transactions (reverse repurchase agreements and securities borrowing agreements).

Summary of movements in allowances and provisions for credit losses

The following table provides more information on the movements in allowances and provisions for credit losses. Refer to "Credit risk" in the "Risk management and control" section of this report for more information.

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Balance at beginning of year	727	735	750	794	938
Domestic					
Write-offs					
Construction	(1)	(2)	(1)	(2)	(1)
Electricity, gas and water supply	0	(1)	0	0	(6)
Financial services	(3)	(3)	0	(6)	0
Hotels and restaurants	0	0	0	0	(1)
Manufacturing	(7)	(9)	(3)	(4)	(20)
Private households	(20)	(35)	(39)	(38)	(45)
Real estate and rentals	0	0	(1)	0	(2)
Retail and wholesale	(10)	(47)	(28)	(11)	(21)
Services	(3)	(3)	(15)	(4)	(6)
Transport, storage and communications	(4)	(9)	(3)	(1)	(11)
Total gross domestic write-offs	(49)	(110)	(90)	(67)	(112)
Foreign					
Write-offs					
Banks	0	(9)	(15)	(1)	0
Construction	0	0	(1)	(6)	0
Electricity, gas and water supply	0	0	(1)	0	0
Financial services	(5)	(3)	(12)	(44)	(106)
Manufacturing	(21)	0	(7)	0	0
Mining	(25)	(1)	0	0	0
Private households	(8)	(12)	(6)	(6)	(15)
Public authorities	0	0	0	(1)	(54)
Real estate and rentals	0	0	(2)	(1)	0
Retail and wholesale	0	(19)	(2)	(1)	0
Services	(16)	(10)	(14)	0	(19)
Transport, storage and communications	(21)	0	(1)	0	(5)
Total gross foreign write-offs	(96)	(54)	(63)	(61)	(201)
Total usage of provisions	0	0	(1)	0	0
Total write-offs / usage of provisions	(145)	(164)	(154)	(128)	(313)
Recoveries					
Domestic	11	41	29	35	43
Foreign	11	7	0	10	21
Total recoveries	22	48	29	45	63
Total net write-offs / usage of provisions	(123)	(116)	(124)	(83)	(250)
Increase / (decrease) in specific allowances and provisions recognized in the income statement	31	117	89	144	133
Increase / (decrease) in collective loan loss allowances recognized in the income statement	6	0	(11)	(93)	(15)
Foreign currency translation	0	(11)	21	(9)	(8)
Other	12	2	11	(3)	(3)
Balance at end of year¹	653	727	735	750	794

¹ Includes allowances for cash collateral on securities borrowed.

Allocation of the allowances and provisions for credit losses

The following table provides a breakdown of allowances and provisions for credit loss by industry sector and geographic location.

CHF million	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Domestic					
Banks	3	3	2	3	3
Chemicals	0	0	0	1	0
Construction	17	13	14	16	16
Electricity, gas and water supply	1	2	1	1	0
Financial services	13	17	18	16	21
Food and beverages	0	3	4	2	3
Hotels and restaurants	10	13	16	12	9
Manufacturing	60	77	72	57	44
Private households	46	47	52	54	60
Real estate and rentals	11	13	18	9	10
Retail and wholesale	67	78	123	152	123
Services	28	23	25	23	24
Transport, storage and communication	15	32	29	19	12
Other ¹	0	0	0	0	1
Total domestic specific allowances	273	321	374	365	326
Foreign					
Banks	0	0	10	13	19
Chemicals	0	0	0	0	1
Construction	1	1	1	17	20
Electricity, gas and water supply	0	0	0	1	1
Financial services	65	90	35	37	37
Manufacturing	7	13	9	18	23
Mining	30	46	11	2	0
Private households	59	61	65	66	45
Public authorities	11	14	14	16	39
Real estate and rentals	2	1	1	2	4
Retail and wholesale	80	80	112	77	39
Services	17	19	29	35	35
Transport, storage and communication	41	40	43	19	27
Total foreign specific allowances	314	365	330	303	290
Collective loan loss allowances	12	6	8	20	114
Provisions for loan commitments and guarantees	54	35	23	61	64
Total allowances and provisions for credit losses	653	727	735	750	794

¹ Includes mining and public authorities.

Due from banks and loans by industry sector (gross)

The table below presents the percentage of loans in each industry sector and geographic location in relation to total loans.

<i>In %</i>	31.12.16	31.12.15	31.12.14	31.12.13	31.12.12
Domestic					
Banks	0.2	0.2	0.4	0.2	0.2
Chemicals	0.1	0.1	0.1	0.1	0.1
Construction	0.5	0.5	0.4	0.5	0.5
Electricity, gas and water supply	0.1	0.1	0.1	0.1	0.1
Financial services	1.8	1.9	2.0	1.5	1.4
Food and beverages	0.1	0.1	0.1	0.1	0.1
Hotels and restaurants	0.5	0.5	0.5	0.6	0.6
Manufacturing	0.6	0.6	0.7	0.8	1.0
Private households	38.6	38.1	38.0	41.3	40.8
Public authorities	0.4	0.5	0.6	0.8	0.9
Real estate and rentals	4.0	4.2	4.4	4.8	4.5
Retail and wholesale	1.2	1.1	1.3	1.3	1.4
Services	1.7	1.6	1.5	1.8	1.9
Transport, storage and communication	0.6	0.6	0.6	0.7	0.6
Other ¹	0.2	0.2	0.2	0.1	0.3
Total domestic	50.6	50.3	50.9	54.8	54.4
Foreign					
Banks	3.9	3.4	3.7	4.4	6.9
Chemicals	0.0	0.0	0.0	0.1	0.1
Construction	0.2	0.2	0.2	0.4	0.6
Electricity, gas and water supply	0.2	0.2	0.3	0.4	0.4
Financial services	15.7	17.3	17.5	14.3	13.5
Hotels and restaurants	0.1	0.0	0.0	0.1	0.1
Manufacturing	0.5	0.6	0.6	0.6	0.6
Mining	0.3	0.5	0.4	0.4	0.4
Private households	19.5	19.3	18.3	16.6	15.4
Public authorities	0.8	0.4	0.4	0.4	1.4
Real estate and rentals	0.6	0.7	0.8	1.0	0.9
Retail and wholesale	0.7	0.6	0.6	0.6	0.7
Services	6.1	5.5	5.3	4.9	3.6
Transport, storage and communication	0.8	0.9	0.9	0.9	1.0
Other ²	0.1	0.1	0.0	0.2	0.1
Total foreign	49.4	49.7	49.1	45.2	45.6
Total gross	100.0	100.0	100.0	100.0	100.0

¹ Includes mining ² Includes food and beverages

Abbreviations frequently used in our financial reports

A		D		G	
ABS	asset-backed security	DBO	defined benefit obligation	GAAP	generally accepted accounting principles
AGM	annual general meeting of shareholders	DCCP	Deferred Contingent Capital Plan	GBP	British pound
AIV	alternative investment vehicle	DOJ	Department of Justice	GEB	Group Executive Board
AMA	advanced measurement approach	DTA	deferred tax asset	GIIPS	Greece, Italy, Ireland, Portugal and Spain
AT1	additional tier 1	DVA	debit valuation adjustment	Group ALM	Group Asset and Liability Management
B		E		H	
BCBS	Basel Committee on Banking Supervision	EAD	exposure at default	HQLA	high-quality liquid assets
BIS	Bank for International Settlements	EC	European Commission	I	
BoD	Board of Directors	ECB	European Central Bank	IAS	International Accounting Standards
C		EIR	effective interest rate	IASB	International Accounting Standards Board
CC	Corporate Center	EMEA	Europe, Middle East and Africa	IFRS	International Financial Reporting Standards
CCAR	Comprehensive Capital Analysis and Review	EOP	Equity Ownership Plan	IRB	internal ratings-based
CCF	credit conversion factor	EPS	earnings per share	IRC	incremental risk charge
CCP	central counterparty	ETD	exchange-traded derivative	ISDA	International Swaps and Derivatives Association
CDO	collateralized debt obligation	ETF	exchange-traded fund	K	
CDR	constant default rate	EU	European Union	KPI	key performance indicator
CDS	credit default swap	EUR	euro	L	
CEA	Commodity Exchange Act	EURIBOR	Euro Interbank Offered Rate	LAC	loss-absorbing capital
CEO	Chief Executive Officer	F		LAS	liquidity-adjusted stress
CET1	common equity tier 1	FCA	UK Financial Conduct Authority	LCR	liquidity coverage ratio
CFO	Chief Financial Officer	FCT	foreign currency translation	LGD	loss given default
CHF	Swiss franc	FDIC	Federal Deposit Insurance Corporation	LIBOR	London Interbank Offered Rate
CLN	credit-linked note	FINMA	Swiss Financial Market Supervisory Authority	LRD	leverage ratio denominator
CLO	collateralized loan obligation	FMIA	Swiss Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading	LTV	loan-to-value
CMBS	commercial mortgage-backed security	M		M	
CVA	credit valuation adjustment	FMIO	FINMA Ordinance on Financial Market Infrastructure	MTN	medium-term note
		FRA	forward rate agreement		
		FSA	UK Financial Services Authority		
		FSB	Financial Stability Board		
		FTD	first to default		
		FVA	funding valuation adjustment		
		FX	foreign exchange		

Abbreviations frequently used in our financial reports (continued)

N		R		T	
NAV	net asset value	RLN	reference-linked note	TBTF	too big to fail
NPA	non-prosecution agreement	RMBS	residential mortgage-backed security	TLAC	total loss-absorbing capacity
NRV	negative replacement value	RoAE	return on attributed equity	TRS	total return swap
NSFR	net stable funding ratio	RoE	return on equity	U	USD
O		RoTE	return on tangible equity		
		RV	replacement value		
		RWA	risk-weighted assets		
OCI	other comprehensive income	S		V	
OTC	over-the-counter			VaR	value-at-risk
P		SE	structured entity		
		SEC	US Securities and Exchange Commission		
PRA	UK Prudential Regulation Authority	SEEOP	Senior Executive Equity Ownership Plan		
PRV	positive replacement value	SESTA	Swiss Federal Act on Stock Exchanges and Securities Trading		
		SESTO	FINMA Ordinance on Stock Exchanges and Securities Trading		
		SFT	securities financing transaction		
		SNB	Swiss National Bank		
		SRB	systemically relevant bank		
		SRM	Single Resolution Mechanism		
		SVaR	stressed value-at-risk		

Information sources

Reporting publications

Annual publications: *Annual Report* (SAP-No. 80531): Published in both English and German, this single-volume report provides a description of our Group strategy and performance; the strategy and performance of the business divisions and Corporate Center; a description of risk, treasury, capital management, corporate governance, responsibility and senior management compensation, including compensation for the Board of Directors and the Group Executive Board members; and financial information, including the financial statements. *Annual Review* (SAP-No. 80530): The booklet contains key information on our strategy and financials. It is published in English, German, French and Italian. *Compensation Report* (SAP-No. 82307): The report discusses our compensation framework and provides information on compensation for the Board of Directors and the Group Executive Board members. It is published in English and German.

Quarterly publications: *Financial report* (SAP-No. 80834): The quarterly financial report provides an update on our strategy and performance for the respective quarter. It is mainly available in English.

How to order reports: The annual and quarterly publications are available in PDF at www.ubs.com/investors in the "UBS Group AG and UBS AG financial information" section. Printed copies can be ordered from the same website in the "Investor services" section, which can be accessed via the link on the left-hand side of the screen. Alternatively, they can be ordered by quoting the SAP number and the language preference, where applicable, from UBS AG, F4UK-AUL, P.O. Box, CH-8098 Zurich, Switzerland.

Other information

Website: The "Investor Relations" website at www.ubs.com/investors provides the following information on UBS: news releases, financial information, including results-related filings with the US Securities and Exchange Commission, information for shareholders, including UBS share price charts as well as data and dividend information, and for bondholders, the UBS corporate calendar and presentations by management for investors and financial analysts. Information on the internet is available in English, with some information also available in German.

Results presentations: Our quarterly results presentations are webcast live. A playback of most presentations is downloadable at www.ubs.com/presentations.

Messaging service / UBS news alert: On the www.ubs.com/newsalerts website, it is possible to subscribe to news alerts about UBS via SMS or email. Messages are sent in English, German, French or Italian, and it is possible to state theme preferences for the alerts received.

Form 20-F and other submissions to the US Securities and Exchange Commission: We file periodic reports and submit other information about UBS to the US Securities and Exchange Commission (SEC). Principal among these filings is the annual report on Form 20-F, filed pursuant to the US Securities Exchange Act of 1934. The filing of Form 20-F is structured as a "wrap-around" document. Most sections of the filing can be satisfied by referring to parts of the annual report. However, there is a small amount of additional information in Form 20-F that is not presented elsewhere and is particularly targeted at readers in the US. Readers are encouraged to refer to this additional disclosure. Any document that we file with the SEC is available to read and copy on the SEC's website, www.sec.gov, or at the SEC's public reference room at 100 F Street, N.E., Room 1580, Washington, DC, 20549. Please call the SEC on +1-800-SEC-0330 for further information on the operation of its public reference room. Refer to www.ubs.com/investors for more information.

Cautionary Statement Regarding Forward-Looking Statements | This report contains statements that constitute “forward-looking statements,” including but not limited to management’s outlook for UBS’s financial performance and statements relating to the anticipated effect of transactions and strategic initiatives on UBS’s business and future development. While these forward-looking statements represent UBS’s judgments and expectations concerning the matters described, a number of risks, uncertainties and other important factors could cause actual developments and results to differ materially from UBS’s expectations. These factors include, but are not limited to: (i) the degree to which UBS is successful in the ongoing execution of its strategic plans, including its cost reduction and efficiency initiatives and its ability to manage its levels of risk-weighted assets (RWA) and leverage ratio denominator, liquidity coverage ratio and other financial resources, and the degree to which UBS is successful in implementing changes to its wealth management businesses to meet changing market, regulatory and other conditions; (ii) continuing low or negative interest rate environment, developments in the macroeconomic climate and in the markets in which UBS operates or to which it is exposed, including movements in securities prices or liquidity, credit spreads, and currency exchange rates, and the effects of economic conditions, market developments, and geopolitical tensions on the financial position or creditworthiness of UBS’s clients and counterparties as well as on client sentiment and levels of activity; (iii) changes in the availability of capital and funding, including any changes in UBS’s credit spreads and ratings, as well as availability and cost of funding to meet requirements for debt eligible for total loss-absorbing capacity (TLAC); (iv) changes in or the implementation of financial legislation and regulation in Switzerland, the US, the UK and other financial centers that may impose, or result in, more stringent capital, TLAC, leverage ratio, liquidity and funding requirements, incremental tax requirements, additional levies, limitations on permitted activities, constraints on remuneration, constraints on transfers of capital and liquidity and sharing of operational costs across the Group or other measures, and the effect these would have on UBS’s business activities; (v) uncertainty as to when and to what degree the Swiss Financial Market Supervisory Authority (FINMA) will approve, or confirm, limited reductions of gone concern requirements due to measures to reduce resolvability risk; (vi) the degree to which UBS is successful in implementing further changes to its legal structure to improve its resolvability and meet related regulatory requirements, including changes in legal structure and reporting required to implement US enhanced prudential standards, completing the implementation of a service company model, and the potential need to make further changes to the legal structure or booking model of UBS Group in response to legal and regulatory requirements relating to capital requirements, resolvability requirements and proposals in Switzerland and other jurisdictions for mandatory structural reform of banks or systemically important institutions and the extent to which such changes will have the intended effects; (vii) the uncertainty arising from the timing and nature of the UK exit from the EU and the potential need to make changes in UBS’s legal structure and operations as a result of it; (viii) changes in UBS’s competitive position, including whether differences in regulatory capital and other requirements among the major financial centers will adversely affect UBS’s ability to compete in certain lines of business; (ix) changes in the standards of conduct applicable to our businesses that may result from new regulation or new enforcement of existing standards, including recently enacted and proposed measures to impose new and enhanced duties when interacting with customers and in the execution and handling of customer transactions; (x) the liability to which UBS may be exposed, or possible constraints or sanctions that regulatory authorities might impose on UBS, due to litigation, contractual claims and regulatory investigations, including the potential for disqualification from certain businesses or loss of licenses or privileges as a result of regulatory or other governmental sanctions, as well as the effect that litigation, regulatory and similar matters have on the operational risk component of our RWA; (xi) the effects on UBS’s cross-border banking business of tax or regulatory developments and of possible changes in UBS’s policies and practices relating to this business; (xii) UBS’s ability to retain and attract the employees necessary to generate revenues and to manage, support and control its businesses, which may be affected by competitive factors including differences in compensation practices; (xiii) changes in accounting or tax standards or policies, and determinations or interpretations affecting the recognition of gain or loss, the valuation of goodwill, the recognition of deferred tax assets and other matters; (xiv) limitations on the effectiveness of UBS’s internal processes for risk management, risk control, measurement and modeling, and of financial models generally; (xv) whether UBS will be successful in keeping pace with competitors in updating its technology, including by developing digital channels and tools and in our trading businesses; (xvi) the occurrence of operational failures, such as fraud, misconduct, unauthorized trading, financial crime, cyberattacks, and systems failures; (xvii) restrictions on the ability of UBS Group AG to make payments or distributions, including due to restrictions on the ability of its subsidiaries to make loans or distributions, directly or indirectly, or, in the case of financial difficulties, due to the exercise by FINMA or the regulators of UBS’s operations in other countries of their broad statutory powers in relation to protective measures, restructuring and liquidation proceedings; (xviii) the degree to which changes in regulation, capital or legal structure, financial results or other factors, including methodology, assumptions and stress scenarios, may affect UBS’s ability to maintain its stated capital return objective; and (xix) the effect that these or other factors or unanticipated events may have on our reputation and the additional consequences that this may have on our business and performance. The sequence in which the factors above are presented is not indicative of their likelihood of occurrence or the potential magnitude of their consequences. Our business and financial performance could be affected by other factors identified in our past and future filings and reports, including those filed with the SEC. More detailed information about those factors is set forth in documents furnished by UBS and filings made by UBS with the SEC, including UBS’s Annual Report on Form 20-F for the year ended 31 December 2016. UBS is not under any obligation to (and expressly disclaims any obligation to) update or alter its forward-looking statements, whether as a result of new information, future events, or otherwise.

Rounding | Numbers presented throughout this report may not add up precisely to the totals provided in the tables and text. Percentages, percent changes and absolute variances are calculated on the basis of rounded figures displayed in the tables and text and may not precisely reflect the percentages, percent changes and absolute variances that would be calculated on the basis of figures that are not rounded.

Tables | Within tables, blank fields generally indicate that the field is not applicable or not meaningful, or that information is not available as of the relevant date or for the relevant period. Zero values generally indicate that the respective figure is zero on an actual or rounded basis. Percentage changes are presented as a mathematical calculation of the change between periods.

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