

For New Zealand.



ABOUT THIS REPORT

For more than 150 years we have been creating opportunities for Kiwis to grow their personal wealth and helping businesses prosper. As New Zealand's Exchange, we are proud of our record in supporting the growth and global ambitions of local companies.

Our 2019 Annual Report "For New Zealand." recognises the importance of aligning the way we do business with the expectations of our key stakeholders to create sustainable value – for our shareholders, across the capital markets ecosystem, for Kiwis and New Zealand. This report includes our full Financial Statements for the year ended 31 December 2019, along with our management commentary on the company's financial results and operational performance.

The business overview (Who we are) and our business model (How we create value) provide information about NZX, our strategic goals and the pillars that are fundamental to sustaining and growing value into the future. The Corporate Governance section of this report describes how we set the objectives and direction for the business, and the framework for oversight. Our corporate governance policies are available online at: https://www.nzx.com/about-nzx/ investor-centre/governance/policies. NZX Limited is registered with the New Zealand Companies Office and our New Zealand Business Number (NZBN) is 9429036186358.

This report is dated 13 February 2020 and is signed on behalf of the Board of NZX Limited by Chair, James Miller, and Chair of the Audit and Risk Committee, Lindsay Wright.

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CORPORATE DIRECTORY)

OUR RESULTS

Our performance this year

OPERATING EARNINGS*

\$31.4

million

^ 9.8%

DIVIDEND

6.1

cents per share

(fully imputed)

NET PROFIT AFTER TAX**

\$14.6

million

^ 25.7%

Data highlighted on pages 4 to 7 is "for the financial year ended 31 December 2019", or "as at 31 December 2019" (as applicable). Percentage changes represent the movement from 2018 to 2019.

- * Operating earnings are from continuing operations and before net finance expense, income tax, depreciation, amortisation and impairment, adjustment to provision for earnout, gain and loss on disposal of business and property, plant and equipment.
- ** From continuing and discontinued operations.

The 2019 deliverable targets are detailed in the Management Commentary section on page 39 of this Report.

CAPITAL RAISED (TOTAL NEW CAPITAL AND SECONDARY CAPITAL RAISED)

\$18.7

billion



^ 95.7%

TOTAL VALUE TRADED

\$37.8

billion



1.0%

DAIRY DERIVATIVES

358,928

lots



^ 3.8%

DATA & INSIGHTS REVENUE

\$12.8

million



^ 10.4%

FUNDS UNDER MANAGEMENT

\$3.97

billion



^ 36.0%

FUNDS UNDER ADMINISTRATION

\$2.3

billion



15.6%

ABOUT NZX

Who we are

CORE MARKET



SMARTSHARES

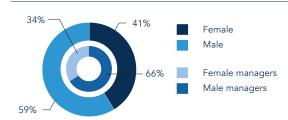


NZX WEALTH TECHNOLOGIES

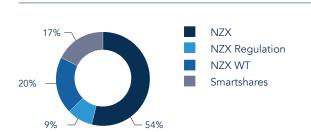




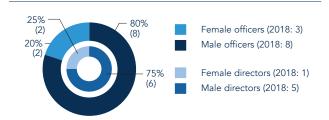
GENDER DIVERSITY ALL EMPLOYEES



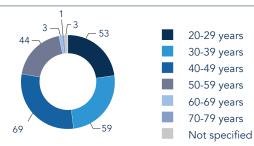
EMPLOYEES BY BUSINESS UNIT



GENDER DIVERSITY OFFICERS & BOARD



EMPLOYEES BY AGE (NUMBER)



LETTER FROM THE CHAIR

A milestone year of performance and purpose



This year, in which we celebrated our 150th milestone, was one of encouraging earnings growth for NZX, assisted by a stellar performance from our local market.

The S&P/NZX 50 (Gross) finished 2019 at 11,492 – up more than 30% for the year. This extends the excellent run of New Zealand's sharemarket over the past decade.

Against this backdrop it has been pleasing to have seen strong appreciation in the NZX share price, with a total shareholder return (TSR) of 42% for the year ended 31 December 2019.

¹The FY2020 guidance is subject to market outcomes, particularly with respect to market capitalisation, total capital raised, secondary market value and derivatives volumes traded, and funds under management and administration growth. Additionally, this guidance assumes no material adverse events, significant one-off expenses, major accounting adjustments, other unforeseeable circumstances, or future acquisitions or divestments.

I want to thank our shareholders for their support. This has been another year of delivery for NZX, with operating earnings at a record \$31.4 million – just above our guidance range.

Your Board has declared a final dividend of 3.1 cents per share fully imputed (to be paid on 20 March 2020), taking the FY2019 dividend to 6.1 cents per share, fully imputed.

Importantly, during 2019, we made significant progress on our long-term goal to become a more vibrant and diverse participant in New Zealand's capital markets ecosystem. NZX's Wealth Technologies platform and Smartshares funds management businesses both made strong strategic and financial progress in 2019.

At the same time, we have kept an unwavering focus on costs – in line with the commitment made to shareholders at last year's Annual Meeting. This has supported our positive lift in operating margins.

The benefits from the updated market structure and rule-set, that took full effect on 1 July, are already showing through in the listing of a broader range of financial products for investors. Simplifying the Listing Rules has provided an easier process to both list and raise capital, especially for bonds and funds. Capital raised was up more than 95% to \$18.7 billion with a strong increase in secondary equity raisings, along with primary retail and wholesale debt issuance. This is an exceptional outcome, helping drive revenue in our core business. A broader range of debt and fund offerings is assisting the portfolio investment and diversification requirements of KiwiSaver funds.

However, as we reflect on a strong result and focus on our plans for 2020, I am conscious that IPOs are a fundamental measure of the health of any stock exchange.

While New Zealand's capital markets have delivered strong returns for investors and performed well in supporting secondary capital raisings, new equity listings have remained subdued. Lack of new listings is a global phenomenon, along with the trend for a reduction in the number of listed companies (known as de-equitisation). The global low interest rate environment – with competition and availability of low-cost funding, from private equity in particular – has placed pressure on listed markets around the world.

This year's listings of Napier Port and Cannasouth provided a glimpse of the opportunity and breadth of potential listings, from local government infrastructure assets to emerging businesses seeking capital for growth.

NZX is more than a century and a half old. In commemorating the foundation of NZX at events across the country – and in engaging with contributors to produce our 150th anniversary commemorative book "Stories from the Marketplace" – it was clear to see the level of endorsement of the vital importance of capital formation in New Zealand and the role played by NZX.

In my foreword to the book I talk about why we need to be taking an inter-generational view of NZX. This extends well beyond our business operations to the many linked parts of our capital markets ecosystem. Healthy capital markets deliver mutual benefits for participants and investors, and for our country as an integral component of a well-functioning, sustainable economy.

With the release of the 10-year vision and purpose in the "Growing New Zealand's Capital Markets 2029" report, we now have an industry-developed blueprint that has the support of Government. My sincere appreciation to the Chair of the Steering Committee, Martin Stearne, for leading this work with a line-up of the very highest calibre, EY, the Ministers of Finance and Commerce for their engagement with us, and everyone who has put their voice behind the 42 recommendations. The crucial phase is to now ensure steady

"We have kept an unwavering focus on costs. This has supported our positive lift in operating margins"

progress in implementing the broad range of recommendations from the *Capital Markets 2029* report.

Our two new directors this year, Elaine Campbell and John McMahon, both have a deep understanding and passion for the crucial role we play within the New Zealand economy. We also welcome Hayley Buckley as our Future Director for 2020, replacing Anna Scott who has made a superb contribution in Board discussion over the past year. Sarah Minhinnick joins us as Head of Issuer Relationships to attract new listings and support our current issuers – a crucial role on our Senior Leadership Team.

Delivery of a broad platform of growth in FY2019 has provided a strong base for FY2020 guidance, with operating earnings expected to be in the range of \$30.0 million to \$33.5 million¹. We have widened the guidance at the lower end of the range, reflecting the current uncertain global environment.

No reference to our results would be complete without acknowledgement of the outstanding team at NZX. Our performance in this milestone 150th year is a tribute to our people, built on the heritage of our business and with a nod to our future potential.

My mile

James Miller Chair

GOVERNANCE & LEADERSHIP

Our Board









James Miller CHAIR

James was appointed as a director in August 2010 and NZX Chair in May 2015. He has spent 14 years working in the share-broking industry, with Craigs Investment Partners, ABN AMRO, Barclays de Zoete Wedd and ANZ Securities.

He is a qualified chartered accountant and is a Fellow of the New Zealand Institute of Chartered Accountants, a Certified Securities Analyst Professional, and a member of the Institute of Directors in New Zealand.

James is a director of the Accident Compensation Corporation, Mercury NZ and New Zealand Refining Company, and a former director of Auckland International Airport. He was an inaugural director of the Financial Markets Authority, and previously a member of the ABN AMRO Securities, INFINZ and Financial Reporting Standards Boards.

Frank Aldridge DIRECTOR

Frank was appointed as a director in May 2017. Frank has an extensive understanding of New Zealand's capital markets having spent more than 20 years working for Craigs Investments Partners where he is now Managing Director.

He is currently Chair of Australian-based Wilsons Advisory and Stockbroking, former member and Chair of New Zealand Securities Association, and sits on several of Craigs Investment Partners' subsidiary Boards.

Frank is an accredited NZX Adviser, Authorised Financial Adviser (AFA), and a Chartered Member of the Institute of Directors.

Nigel Babbage DIRECTOR

Nigel was appointed as a director in December 2017. Nigel has spent more than 30 years' working in financial and capital markets locally and globally, and brings to NZX extensive clearing and derivatives experience.

Nigel previously held executive roles with British Petroleum (now BP) and Citibank, managing the New York currency derivatives desk, and worked for BNP Paribas. where he took on the joint role of Global Head of Currency Derivatives Trading and Head of North American Foreign Exchange. He served on the Foreign Exchange Committee of the Federal Reserve Bank of New York for three years.

Nigel is currently CEO of Christchurch-based investment company Mohua Investments Limited.

Richard Bodman

Richard was appointed as a director in April 2017. Richard has spent more than 25 years working in the financial services sector, including 17 years at Jarden (previously First NZ Capital) where he held several executive roles, such as Managing Director, Head of Compliance. Prior to this Richard spent seven years as an inspector for the Securities & Futures Authority in London.

Richard is an independent director of Forsyth Barr Custodians
Limited, Forsyth Barr
Cash Management
Nominees Limited
and Te Ahumairangi
Investment Management
Limited, and a member
of the Governance Risk
Compliance (GRC) Institute
and the Institute of
Directors.

Richard has been a director of Jarden Securities and a NZX registered Compliance Manager.









Elaine Campbell DIRECTOR

Elaine was appointed as a director in February 2019. She has more than 20 years' legal experience, primarily focusing on financial and capital markets, IT and telecommunications law.

Elaine is currently General Counsel and Company Secretary for NZX-listed Chorus. During her time on the executive team at NZX from 2002 to 2008, Elaine led the legal workstream for the demutualisation and listing of NZX and was responsible for the insourcing of regulatory functions, along with chairing Smartshares. Elaine spent five years at the Financial Markets Authority as Director of Compliance before joining AMP as an executive director and General Counsel. She has previously worked in the UK and US for multinational Sun Microsystems.

Jon Macdonald DIRECTOR

Jon was appointed as a director in May 2013. He has a strong background in technology, and between 2008 and 2019 was CEO of Trade Me – recognised as one of New Zealand's bestloved brands. Over that time, Trade Me's revenue trebled to \$250 million, with a market capitalisation of \$2.5 billion.

In addition to NZX. Jon is on the boards of Contact Energy, Mitre 10, and Trade Me (through its parent company). Earlier in his career, Jon worked in London for HSBC Investment Bank, and for Deloitte Consulting with a focus on telecommunications and financial services. He has a Bachelor of Engineering (Hons) from the University of Canterbury, and is a Chartered Member of the NZ Institute of Directors.

John McMahon DIRECTOR

John was appointed a director in June 2019. He has spent more than 20 years in the Australasian equity markets, predominantly as an equity analyst covering a range of industries including telecommunications, media, gaming, transport, and industrials. He has held a wide range of roles in the financial sector including Head of Equities at ABN AMRO and Managing Director of ASB Securities. John has also worked for CS First Boston (now Jarden), BZW and Morgan Stanley.

Today John manages his own investment portfolio via Sydney-based Auro Investment Management, and is Chair of NZXlisted Solution Dynamics and Wellington Drive Technologies.

John has a Bachelor of Commerce (Honours), an MBA and is a CFA (Chartered Financial Analyst) charterholder.

Lindsay Wright DIRECTOR

Lindsay was appointed as a director in February 2018. She has more than 30 years' financial services and fund management experience locally and globally.

Lindsay is Head of Asia and Global Chief Operating Officer at Matthews Asia. She was Head of Distribution and Co-Head of APAC at BNY Mellon Investment Management, and prior to this was Regional Head Institutional, Alternatives and Investment Solutions Business, Asia Pacific with Invesco Hong Kong Limited, CEO of Harvest Alternatives Investment Group, and Co-CEO of Harvest Capital Management Limited. Lindsay started her career with Deutsche New Zealand where she became CFO/CIO before moving to Deutsche Asset Management. Lindsay was also Deputy Chair of the board of the Guardians of the New Zealand Superannuation Fund.

GOVERNANCE & LEADERSHIP

Our Leadership Team



Mark Peterson
CHIEF EXECUTIVE

Mark joined NZX in May 2015 and became Chief Executive in April 2017. He has 25 years' experience in financial services covering the capital markets, private wealth, institutional and retail banking, and insurance. Mark previously worked as the Managing Principal of ANZ Securities, and before that held senior management roles with First NZ Capital, ANZ and The National Bank of NZ.



Graham Law
CHIEF FINANCIAL OFFICER

Graham joined NZX in 2017. He has considerable experience working across the financial and professional service sectors in New Zealand and the United Kingdom. Graham previously worked as Head of Finance at ACC, and prior to this was Managing Director and Chief Financial Officer at AMP Capital Limited. Graham brings expertise in strategic leadership, corporate governance, and risk and financial management.



Joost van Amelsfort

HEAD OF MARKET SUPERVISION

Joost joined NZX in 2014. He has considerable experience providing complex legal and commercial advice to capital markets participants, operating both in New Zealand and overseas. Joost previously worked at Simpson Grierson and prior to that he was at Linklaters LLP, London and Dubai. Joost's areas of expertise include corporate governance, equity and debt capital markets, mergers and acquisitions, corporate and commercial contracts, and public private partnerships.



Jeremy Anderson

EXECUTIVE DIRECTOR, DATA & INSIGHTS

Jeremy joined NZX in March 2017. He has extensive experience working in agribusiness sectors across Australia and New Zealand. Prior to joining NZX, Jeremy led and executed Vodafone New Zealand's agribusiness strategy and has had experience working in a number of sales management roles for fertiliser and rural merchandise businesses.



Lisa Brock
CEO - WEALTH TECHNOLOGIES

Lisa joined NZX in November 2016. She has more than 25 years' experience in financial services covering investments, insurance and banking. Lisa previously worked for the ASB Bank and Sovereign Insurance holding leadership roles across finance, investments and operations. Prior to that Lisa started her career as an auditor with PwC. Lisa is a Chartered Accountant.

David Godfrey

CHIEF INFORMATION OFFICER

David joined NZX in 2009. He has more than 25 years of management experience in IT development – including product-based, enterprise-level, business-critical and 24/7 operations for a FTSE 100 Property company. He has other experience in UK publishing, telecommunications, IT consulting and software houses.



Hamish Macdonald

HEAD OF EXTERNAL RELATIONS AND GENERAL COUNSEL

Hamish joined NZX in July 2013 with extensive experience in financial regulation and policy development work including having worked for five years at the UK Listing Authority, the body that regulates issuers listed on the London Stock Exchange. Before joining NZX, Hamish held legal roles in New Zealand, Australia and the United Kingdom.



Benjamin Phillips

EXECUTIVE DIRECTOR, SECONDARY MARKETS & CLEARING

Benjamin joined NZX in 2014. He has a depth of experience across New Zealand and Australia's financial markets. He previously worked for Citi Australia as Senior Operations Manager within its retail investments division. Prior to this, Benjamin served 10 years at ANZ E*Trade Australia where he led its execution, clearing and settlement business, and held several senior positions including Head of Broking Services.



Lara Robertson

HEAD OF HUMAN RESOURCES

Lara joined NZX in 2019. She brings extensive experience in strategic and operational human resources management across a wide range of industries. Before joining NZX, Lara held HR roles in Contact Energy and Creative New Zealand. For 10 years prior, she advised NZ companies in executive search and leadership development with Korn Ferry International.



Hugh Stevens

CEO - SMARTSHARES

Hugh joined NZX in 2018 with extensive fund management industry experience. He is the former Head of Private Equity and Real Estate Fund Services for BNP Paribas based in Paris, and prior to that was Head of BNP Paribas Securities Services New Zealand. Hugh also worked for JP Morgan in London as Vice President, Applications Development Director and Vice President, Head of Analytics.



CHIEF EXECUTIVE'S UPDATE

Strengthening our core and growth potential



Our strategic reset in 2017 committed to creating a more robust NZX, to deliver improving results and shareholder value over the long-term – and in turn, greater value for our customers and for New Zealand.

Our results in FY2019 are evidence that our changes are delivering gains. These underline the benefit of refocusing on our core business, building deeper relationships with our customers, simplifying listing and capital-raising, and creating additional options for ongoing growth.

Encouraging earnings growth

Operating earnings from continuing activities of \$31.4 million was up 9.8% on FY2018 with operating margin improving to 45.1%.

Revenue growth has come from across our business – Core Markets, Funds Management and Wealth Technologies. Changes to our Funds Management business model in 2018 mean we now receive fund income net of fund costs. However, on a likefor-like basis, our revenues across the organisation have still lifted 7.9%.

Costs have been carefully managed and remain a key focus. Our Core Markets and Corporate costs grew in line with inflation, while we have chosen to invest more significantly in both our Funds Management and Wealth Technologies businesses to take advantage of new customer opportunities during the period.

Our net profit after tax for the period (NPAT) was \$14.6 million, up 25.7% on FY2018. On a continuing operations basis, NPAT was up 7.1% compared with 2018.

Capital expenditure has largely been directed into our upgrade of the NZX trading system and Wealth Technologies. The new trading system, scheduled to go live in mid-2020, will offer increased trading functionality and increased market liquidity. The investment in NZX Wealth Technologies is to transition new customers onto our platform.

We have detailed our financial results in the Management Commentary (on page 39).

Greater strength at the core

The total market capitalisation of all NZX-listed securities across equity, fixed income and fund asset classes now exceeds \$200 billion and sits at 67% of New Zealand GDP (Gross Domestic Product). The clear standout in this financial year was the total value of capital raised, up \$9.2 billion to \$18.7 billion, driven by growth in the number and value of debt listings, along with secondary equity issuance. The range of debt issuers touches every corner of the New Zealand economy – from tourism and banking to the electricity sector, telecommunications, property, primary sector, construction,

retirement care, social housing, and local government infrastructure. This uptake highlights the potential for public debt issuance with secure long-term funding at attractive rates as a credible alternative to bank debt.

Along with growth in fees from new issuance, listing fees were bolstered by the 24.7% lift in equity market capitalisation over the year to more than \$161 billion – outweighing the \$3.7 billion taken out of the market by a small number of de-listings, principally due to takeovers.

As noted by the Chair, we have seen a continuation of the factors contributing to the recent lack of new equity IPOs. However, it was pleasing for NZX to have the opportunity to support new listings from Cannasouth and Napier Port Holdings. We will be intensifying our focus around attracting new listings and supporting current listed companies accessing New Zealand's equity, debt and funds markets. Our new Head of Issuer Relationships, Sarah Minhinnick, joined us after balance date and will be spearheading this effort.

We see liquidity as a primary measure of market integrity and price transparency, so it was positive to see on-market trading up 5.3% for the year to 54.3%. This remains a key objective for secondary markets, with the improvement driven by strategic decisions including pricing changes introduced in 2018, broker trading policy amendments to incentivise on-market trading, and facilitation of automated algorithmic trading.

Greater on-market liquidity assists market efficiency and price discovery and has provided price improvement for small investors. A trading system upgrade in 2020 should further assist on-market liquidity with the delivery of NZX's mid-point order book.

With our objective to open up NZX's markets to a broader range of participants and investors, we welcomed Sharesies as a trading and clearing participant in the middle of the year – highlighting how technology is also breaking down some of the traditional barriers to investment and helping attract a new generation of investors.

Another key milestone of 2019 was welcoming BNP Paribas Securities as an accredited depository participant – the first global custodian to join NZX Clearing's Depository since it was founded in 2010. This is reflected in a 383% increase in our assets under custody in depository to nearly \$3.5 billion.

Our Dairy Derivatives business has been the fastest-growing globally of its type, setting records over 2019 for the highest volume trading day, week and month. A lack of price volatility in the underlying physical market saw a relatively soft second half limiting growth in the total volume of lots traded to 3.8% for the year. However, our NZ Milk Price (MKP), launched in 2016, has been a bright spot recording 65% growth to around 100 million kg milksolids.

Consulting and development revenue from energy projects increased to more than \$1 million with the completion of some significant one-off contracts for the New Zealand Electricity Authority. We have also announced a Co-operation Agreement with the European Energy Exchange (EEX) with the aim of securing new opportunities in the New Zealand carbon market.

Data & Insights revenue increased 10.4% to \$12.8 million, with an ongoing focus on complementing royalties from terminals with additional subscription and licence revenue. The provision of market information and data remains an important opportunity for us.

Structural growth opportunities

Smartshares had a very strong year. Funds Under Management (FUM) increased to \$3.97 billion – growth of 95.7% Increase in capital raised

\$161b Equity market capitalisation

5.3% Lift in on-market trading

\$3.5b
Assets under custody in depository

100m

kg of milksolids NZ Milk Price (MKP) lots traded

1 St
Te reo Māori offer document

36% over the year. Several product and customer initiatives contributed to the growth and will continue to contribute into future years. Eight new Exchange-Traded Funds (ETFs) were launched in the first half, enabling New Zealanders to invest in a broad range of global industry sectors, environmentally and socially responsible factors and global bonds for the first time. Further ETFs are planned and Smartshares is also building a presence in the Pacific with management of the Nauru Superannuation Scheme, along with two new funds established to support retirement savings in Tonga.

Smartshares also launched New Zealand's first ever dual-language offer document in te reo Māori for a financial product. A key component of the Ka Uruora programme of services supporting whānau to improve financial wellbeing and achieve financial independence, WhānauSaver, provides an investment product where individual contributions are matched by the iwi. Ka Uruora is currently available to approximately 20,000 registered members of the two participating iwi organisations, Te Kotahitanga o Te Atiawa Trust and Te Kāhui o Taranaki Iwi Trust.

The major trend globally towards low-cost, passive funds, plus growth in KiwiSaver, will remain positive for Smartshares' revenue outlook. We have previously signalled that this structural growth outlook for funds management requires ongoing investment for product development, distribution, and servicing growing member numbers, as well as in information technology to efficiently manage and service this expansion.

Funds Under Administration with our NZX Wealth Technologies business have also grown strongly to \$2.3 billion, up 15.6% for the year. We completed further product refinement and extended the core platform to now include Discretionary **Investment Management Services** (DIMS) functionality and pre- and post-trade compliance capability. In addition, we have announced important customer wins, with Hobson Wealth Partners and Saturn Advice selecting our market-leading scalable platform, which allows wealth managers to efficiently manage, maintain and report on their customers' investment portfolios. Transitioning these customers in 2020 will require additional capital investment and the timing for migration will be confirmed when contractual arrangements are finalised.

Unlocking capital markets potential

During the year we contributed extensively to reform discussions around the settings for capital markets. These included sustainable financing, the Overseas Investment Act, KiwiSaver default provider settings, and banking capital adequacy.

Alongside this we have enabled NZX Participant firms to support US investors into NZ by being recognised as a Designated Offshore Securities Market (DOSM) by the United States Securities Exchange Commission. This is further recognition of the high standards under which NZX operates its markets.

NZX actively supported the independent Capital Markets 2029 review, and we believe the resulting recommendations will assist market efficiency and result in better long-term investment outcomes. Implementing these recommendations is important to the future well-being of our capital markets and delivering sustainable long-term value for New Zealand.

At NZX we are working to grow our capital markets and make them more accessible and relevant to New Zealanders. Our performance this year – NZX's 150th anniversary – has been made possible by the many people, past and present, who have been part of developing and reshaping the business. Thank you to everyone who has contributed – it is a privilege to lead an organisation that plays a pivotal role within New Zealand's capital markets, for Kiwi investors and savers, and for our country.

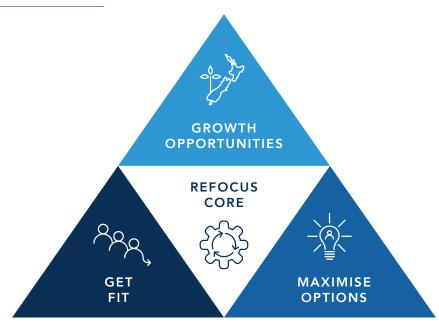
Our progress in 2019 gives me absolute confidence that we are succeeding in building a quality organisation, focused in the right areas and capable of delivering our future plans.

Mark Peterson Chief Executive

"At NZX we are working to grow our capital markets and make them more accessible and relevant to New Zealanders." OUR BUSINESS MODEL

How we create value

STRATEGIC GOALS



WHAT MATTERS MOST

As New Zealand's Exchange, we are proud of our record in supporting the growth and global ambitions of local companies over more than 150 years. We recognise that our future success, and delivering on our strategic goals, requires integrated thinking within our business and alignment with the expectations of our key stakeholders.

Consistent with the guiding principles of Integrated Reporting we have highlighted four pillars (Our customers, New Zealanders, Sustainability, Our People), which are of primary importance to creating sustainable value for our shareholders, across the capital markets ecosystem, for Kiwis and New Zealand as a whole.

OUR CUSTOMERS

We supply a wide range of quality financial services to our customers in New Zealand and around the world – from operating capital markets infrastructure to managing investors' assets, and providing unique insights.

NEW ZEALANDERS

At the core of the capital markets ecosystem, we offer businesses access to capital in order to prosper and future-proof the country's economy. That creates jobs and opportunities, alongside facilitating growth in personal wealth through investment and savings.

SUSTAINABILITY

The nature of NZX's business means our use of resources and emissions are relatively small, however we have a key role in supporting the growth of sustainable finance that is necessary to address climate change and deliver a step-change in environmental outcomes for New Zealand.

OUR PEOPLE

NZX has a strong brand in the employment market, reflected in the talent we have been able to attract to our organisation and also the positive engagement that drives performance and delivery of our strategic goals. OUR CUSTOMERS

Supporting growth and global ambitions

We supply a wide range of quality financial services to our customers in New Zealand and around the world – from operating capital markets infrastructure to managing investors' assets, and providing unique insights.

Every day, our customers access NZX markets and services. Ensuring we understand our customers, are close to their needs, and delivering to their expectations was a significant focus for the business in 2019.

In the equities area, a particular highlight of the year was working alongside our new issuers to help them prepare for the listed environment. The Napier Port IPO is an illustration of the value that can be unlocked from local government assets to help fuel regional growth. Another new entrant to the NZX Main Board was Cannasouth. The IPOs reflected the diversity of the equities market – one being a long-established infrastructure investment and the other a start-up in pre-revenue phase.

Along with promoting listings and celebrating issuer milestones in 2019, we had an ongoing educational focus on sharemarket investing and provided opportunities for our listed companies to build profile at our retail investor events in Auckland, Wellington, Christchurch, Hamilton and Tauranga.

At the end of the financial year, we announced that Sarah Minhinnick would be joining the company in early 2020 as Head of Issuer Relationships – continuing our core strategic focus on attracting new listings and supporting current listed companies in accessing New Zealand's equity, debt and funds markets.

The increase and diversity in capital raising during 2019 clearly shows our capital markets are serving our customers and helping fuel their growth.

One of the world's leading international banks, BNP Paribas, expanded its New Zealand credentials by becoming the first global custodian to join the NZX Clearing's Depository. Wellington-based Sharesies was also accredited as an NZX trading and clearing participant.

NZX's Dairy Derivatives market continued to grow in 2019 supported by client engagement and education programmes. In 2019, NZX's global dairy derivatives market traded 358,928 lots, up 3.8% on 2018. Participation of active users increased 11%. Milk price contracts grew 65% in annual volumes.

Most dairy derivative traders are based offshore, and NZX reaches many of our key customers at our annual Singapore Dairy Seminar, which this year drew more than 175 attendees. We also presented at the Dairy Industry News conference in London.

A first during 2019 was a dairy price risk-management roadshow to Cairo and Dubai to educate 20 significant wholesale dairy buyers in the region.

To increase the accessibility of dairy derivative data, we have improved the online functionality and data provision, including 30-day dairy

data sets. New video tutorials on nzx.com show how the Dairy Derivatives market works, and we have also added a derivative margin calculator to help our customers.

As the dairy derivatives market has grown, so have our dairy research and data services from our Data & Insights team, which are sold to a wide range of interested parties, from dairy farmers to some of the largest dairy producers and traders in the world.

In 2019 the Data & Insights team produced another Dairy Outlook report, focusing on the potential impacts of alternative proteins and other consumer trends shaping the future landscape for the traditional dairy industry.

Our data and insights on the NZX markets is sold through a range of channels to distributors, market participants, issuers, investors, fund managers and banks.

To strengthen our client relationships, Data & Insights has been working on simplified contracts, ensuring that clients are licenced appropriately and are complying with NZX terms and conditions.

An important internal development during the year was the implementation of Salesforce at NZX. The first phase of the implementation has been completed, with all customer-facing teams having access to the Customer Relationship Management (CRM) software to serve our customers better.

While continuing the progressive onboarding of existing clients, our NZX Wealth Technologies business has secured new customers for its "wrap" platform functionality that enables investment advisors to manage and seamlessly trade their clients' assets. During 2019 Hobson Wealth Partners and Saturn Advice agreed to move to the Wealth Technologies platform. Growth in funds under administration (FUA) was 15.6% in 2019 to \$2.3 billion.



An IPO showcase

A 150-year-old business with double-digit growth forecasts, supporting trade and tourism in heartland New Zealand, sounds like the perfect prospect for listing on the New Zealand Exchange.

And that's what it proved to be, with the start of trading in Napier Port Holdings' shares on 20 August 2019.

Tooting tug-boats heralded the arrival of "NPH" on the NZX Main Board – the culmination of a five-year journey and close partnership between the Port, Hawke's Bay Regional Council and the broader community working toward a shared goal.

For NZX's Regulatory and Issuer Relationships teams the fanfare of the listing ceremony at the Port's Breakwater Road site in Napier – including the presentation of a mere pounamu to Chairman Alasdair MacLeod – was a celebration of the success of a close working relationship forged in the weeks leading up to the initial public offer (IPO), tailored training and direct support to ensure a smooth transition to life as a listed company

A showcase example of the potential identified in the *Growing New Zealand's Capital Markets 2029* report for local government to access alternative funding options for infrastructure – the Napier Port IPO raised \$234 million of equity capital and freed up more than \$100 million of cash for the Hawke's Bay Regional Investment Company to support long-term economic growth.

Along with retaining majority community ownership and protecting ratepayers from the costs of port development, a priority share pool allowed more than 7,500 locals and 97% of Napier Port employees to take a direct stake in the iconic business.

NEW ZEALANDERS

Building enduring wealth for all

At the core of the capital markets ecosystem, we offer businesses access to capital to prosper, and to future-proof the country's economy. That creates jobs and opportunities, alongside facilitating growth in personal wealth through investment and savings.

One of our primary areas of focus is on broadening investment options, and making our capital markets more accessible and relevant to Kiwis. The benefits are not isolated to "investors", with around three million New Zealanders already participating in our capital markets through KiwiSaver - with this nest-egg expected to grow four-fold over the next 10 years to more than \$200 billion.

During the year we seized opportunities – such as the review of KiwiSaver default provider arrangements – to advocate for changes that we believe will deliver more choice, greater flexibility and also ensure members are not disadvantaged by investment predominantly in lower growth assets.

While New Zealand's capital markets have delivered strong returns for investors and savers, market development initiatives are an ongoing priority. One of the most significant initiatives in 2019 was simplifying the market structure and implementing the first new rule-set in 15 years. This has stimulated capital raising and led to much greater diversity, which aligns our product more closely with the investment requirements of KiwiSaver funds.

Alongside NZX's focus on delivering internal initiatives, the *Capital Markets 2029* report has brought the capital markets ecosystem together to deliver a common vision and purpose for New Zealand's capital markets.

The aim is to grow the market capitalisation of New Zealand's equity markets to a higher ratio of GDP and to maximise the opportunities in those areas where NZX's markets are performing well or have natural advantages – such as supporting the need for infrastructure investment, green finance, and continuing the momentum in our strongly performing debt market.

The report lists 42 recommendations to unlock stronger capital markets

for all New Zealanders, with 18 recommendations prioritised. The recommendations canvas topics such as KiwiSaver, regulation, public sector assets and infrastructure, promotion of public markets, tax, new products and the impact of technology. Key outcomes sought are:

- Raising the level of individual participation and engagement in capital markets
- Offering more choice of investment for individuals, both within KiwiSaver and more generally
- Creating greater wealth for New Zealanders.

We continue to see positive trends in confidence from retail investors. The UBS Evidence Lab NZ Consumer Survey published in late 2019 showed that there has been a statistically significant improvement in people's propensity to invest in stock markets, with 39% of respondents intending to invest savings in the stock markets. NZX also recorded a 15% increase in retail trading participation for 2019.

On-market trading activity, the key indicator of liquidity, reached a record in December 2019 at 61.5%, and was up over the full year. We have also seen pricing and policy amendments translate into tangible value for investors of about \$40 per trade, or more than \$250,000 for the year.

With Wellington-based investment platform, Sharesies, which actively targets retail investors, joining the exchange as a participant we have made further progress on our



A first for te reo Māori

When your aim is to improve the financial wellbeing of New Zealanders, it's important to be speaking the same language.

That was the intent of Ka Uruora WhānauSaver – to open up new conversations with a reo Māori version of the offer document tailored for Te Kotahitanga o Te Atiawa Trust and Te Kāhui o Taranaki Jwi Trust members.

Beyond the solutions to address significant linguistic and regulatory

challenges around this ground-breaking Product Disclosure
Statement, an indelible measure of the success for our Smartshares team were the kuia (female elders) listening keenly in the audience at the launch event at the Novotel Hotel in New Plymouth with a bunch of WhānauSaver sign-up forms – for their children and grandchildren.

This bespoke financial product was designed to ensure a deeper understanding of the offer to nurture inter-generational wealth, and is a celebration of partnership – that extended to Māori language experts, Te Taura Whiri i te Reo Māori, the Federation of Māori

Authorities, and the Financial Markets Authority.

As part of the wider Ka Uruora programme of services, WhānauSaver is currently available to about 20,000 registered members of the two participating iwi organisations. It allows for iwi contributions to each member's savings account, and withdrawals for tertiary education, first-home purchase, and retirement at the age of 55.

Through this project Smartshares has established a model for the financial services industry to actively support Māori customers' language needs, awakening a new domain for te reo in the modern era.

ambition of creating a more vibrant capital markets ecosystem.

In welcoming Sharesies as an NZX trading and clearing participant we have seen how technology and innovation can remove barriers and open up market access to a wider range of New Zealand investors.

We reported at the half-year, how the increased range of Exchange-Traded Funds (ETFs) is offering investors access to a broader range of sectors and asset classes. This has been led by our Smartshares business, which at year-end had nearly 120,000 New Zealanders invested in Smartshares'

products, either directly or through our SuperLife schemes.

Smartshares currently offers a range of more than 30 product choices – from New Zealand and global bonds, and exposure to the local cash market, to different geographies, along with environmentally and socially responsible global equities, megatrends and passive global bonds. This allows investors to easily create their own portfolios with a high level of diversification.

Through Smartshares we also manage the workplace-based saving schemes of employees of 120 large New Zealand companies. Operating outside of the KiwiSaver framework, these financial wellbeing schemes offer employees the ability to save for a range of short- or long-term goals. During the year Smartshares held 16 investment seminars on-site at our members' workplaces – including manufacturing sites, campuses and warehouses from Tokoroa to Invercargill.

SUSTAINABILITY

Financing a brighter future

The nature of NZX's business means our use of resources and emissions are relatively small. However, we have a key role in supporting the growth of sustainable finance that is necessary to address climate change and deliver a step-change in environmental outcomes for New Zealand.

Our primary environmental impacts arise from energy consumption (1.5%) in our offices and data centres in Auckland and Wellington, domestic land (0.8%) and domestic air travel (38.4%) and international flights (55.4%), with the balance indirectly from our supply chain and waste disposal.

A vital part of our role as New Zealand's Exchange is to enable a well-understood and viable flow of capital into investments that our country needs for sustainable growth, including projects that address climate change.

We consider that environmental, social and governance (ESG) reporting acts as a foundation for New Zealand's development of a sustainable and climate-resilient economy, by enabling investors to make informed investment decisions based on sustainability considerations – including an entity's climate-related risks and opportunities.

NZX is a partner exchange of the Sustainable Stock Exchange initiative, making a voluntary commitment to promote ESG disclosure to our issuers. We have released an ESG Guidance Note to assist issuers in understanding how to interpret recommendation 4.3 of the NZX Corporate Governance Code (Code), and the benefits and importance of ESG (including climate-related) reporting. This year we further promoted awareness among New Zealand issuers through the release of an assessment of current practice: Reporting Uptake in S&P/NZX 50 Index and Investor Perspective 2019.

As part of the World Federation of Exchanges (WFE), our team at NZX has also been contributing to a set of Sustainability Principles for derivative products, another way in which exchanges can contribute to advancing the sustainable finance agenda.

NZX is also a member of the Aotearoa Circle's Sustainable Finance Forum's Leadership Group, supporting the work undertaken by the Sustainable Finance Forum, and the recommendations from Capital Markets 2029, that will assist in creating a market environment to support sustainable environmental wellbeing in the long term. In our view, New Zealand has a unique

2019 Greenhouse gas inventory

Scope	Emissions sources	Tonnes C0 ₂ -e*
Scope 1	Rental cars (km travelled)	3.6
Scope 2	Electricity purchased (kWh)	6.5
Scope 3	Air travel	167.5 35.3 206.5 15.3 0.5 1.3
Total	_ tpro triplett	436.5

^{*} CO₂ – equivalent emissions calculated using Ministry for the Environment 2019 Emissions Factors. Air travel emissions calculated with radiative forcing.

opportunity to demonstrate global leadership, by developing a reporting regime that delivers competitive advantages for New Zealand entities, as well as broader environmental benefits.

Financial products, such as green bonds, and the environmentally and socially responsible Exchange-Traded Funds (ETFs) offered by Smartshares, are responding to the growing international trend towards sustainable investment and investors who are more conscious of where they put their money.

We welcomed our first green bond listing on the NZX Debt Market in June 2018. This has been followed by others, along with the first NZX-listed carbon fund – supporting the strategic commitment to grow our range of sustainable investment options for New Zealand investors.

Global issuance of green bonds has quadrupled since 2014, setting a record US\$200 billion in 2019. In New Zealand while the green debt market has risen year-on-year, it remains small and under-utilised – despite an abundance of potential issuers and strong investor interest.

In our 2019 submission to the Financial Markets Authority on Green Bonds and Other Responsible Investment Products we lent our support to initiatives that provide greater clarity around the conduct and disclosure practices for green, ethical and responsible investment products. We said that we considered these products to be crucial to New Zealand's ability to maintain its international standing through responsible investment practices.

To support the development and growth of the New Zealand carbon market, NZX announced in December 2019 a Co-operation Agreement with the European Energy Exchange (EEX), which has deep expertise in the European and North American emissions markets. Beyond the New Zealand carbon market, both NZX and EEX will be jointly exploring areas for co-operation in other regions or asset classes.



Driving green bonds

In a fast-growing
Auckland aspiring to
be "The World's Most
Liveable City" there is a
delicate balance between
economic, social and
environmental outcomes.

The acute challenge of reducing the dependence on private motor vehicles – and transport that contributes about 35% of the city's Greenhouse Gas (GHG) emissions – has been met with a strong commitment to transformative action, funded in part by New Zealand's first green bond.

The trail-blazing move by Auckland Council in June 2018 to raise \$200 million for funding projects that will benefit the environment, has been followed by another \$150 million green bond this year – earmarked for supporting sustainable development targets and goals, including cycleways and electric

trains. Further investment in electrification of the passenger rail network will build on the 25,000 tonnes of annual emissions already cut from this source, while helping grow patronage with an attractive and efficient transport choice.

Global issuance of green bonds is growing rapidly, topping US\$200 billion for the first time in 2019. With an abundance of potential issuers in New Zealand, and strong investor interest, a key focus for NZX is supporting the development of appropriate disclosure and conduct settings for green and responsible investment products.

We see these products as creating an international competitive advantage for New Zealand, given the opportunities to use the proceeds in renewable energy, green buildings, waste management, sustainable water management and landuse (including sustainable forestry and agriculture), clean transportation and biodiversity conservation and climate change adaptation.

OUR PEOPLE

Investing in a winning team

NZX has a strong brand in the employment market, reflected in the talent we attract to our organisation, and also in the positive engagement that drives performance and delivery of our strategic goals.

An important focus in 2019 was on ensuring we have the right people, structures and capacity to deliver on our priorities – including serving our customers.

We continued the momentum in lifting employee engagement to new heights – as shown in our Gallup Engagement Score in 2019 of 4.15 (on the 5-point scale).

With 94% of our people having their say, there is real substance to the voice behind initiatives we have underway, and planned, to ensure we offer a compelling employee experience.

We believe that by addressing these opportunities we will ensure everyone in our team understands how they can contribute and be their best at NZX – with a direct correlation to employee satisfaction, retention and advocacy, along with business outcomes. Our people say NZX has a caring culture, they know what is expected of them, they are appreciated by their colleagues and have opportunities to progress their careers.

We were able to validate that NZX provides an inclusive workplace for our employees by expanding our engagement survey questions and demographics.

Diversity and inclusiveness were the foremost of our attention during the year. We set three objectives for 2019: to ensure we have measures encouraging diversity in our recruitment pipeline; to explore engagement by ethnicity; and expand the reach of our unconscious-bias training.

During the year we invited all employees to an unconscious-bias workshop after running successful workshops for hiring managers the previous year. We place a strong emphasis on our place as

New Zealand's Exchange (Te Paehoko o Aotearoa) and recognised the importance of marking Te Wiki o te reo Māori (Māori Language Week) running te reo Māori workshops for our team.

We remain vigilant around health, safety and wellness – maintaining health and safety committees, safety initiatives and programmes to support our employees. We manage annual leave across the business in order to support the wellbeing of our people and mitigate the potential for work-related stress.

NZX provides proactive services including offering influenza vaccinations, access to EAP Employee Assistance Programme (EAP) counselling and workspace ergonomics assessments. In 2019 we implemented a Domestic Violence Leave Policy in line with the new legislation. Mental Health Awareness workshops were also offered to increase awareness and support for people experiencing mental health issues.

Through efficiency gains and automation in selected areas, we have been able to reinvest in new customer-facing roles and expand business development teams. Twelve new roles were added in NZX Wealth Technologies and four new roles in Smartshares. An additional 14 fixed-term project roles were added to support strategic initiatives.

We have strengthened organisational capability in a range of leadership roles around the company, particularly in senior customer-centric roles. We made a conscious decision to invest in adding high capability and more senior experience in key functional leadership roles to add depth and strength where it is needed most.

Our people have been focused on delivering against the business goals and making sure they have the capacity and clarity of purpose to do so. We have prioritised operational and financial delivery, and living our company values.

We have accelerated our performance culture through the implementation of a new management system and practices, which have a heightened focus on business goals and teamwork. We also successfully implemented the Salesforce CRM platform with training workshops, as part of a drive to align our people more closely with the needs of our customers.



Passionate people

There may be 8,230km and a stark difference between the Gore RSA and the opulence of the St Regis Hotel in Singapore but Julia Jones moves seamlessly between these worlds.

Only a week before presenting amid the glittering chandeliers and marble surroundings at NZX's Global Dairy Seminar, our Head of Analytics was in Gore at the Beef + Lamb winter seminar talking with local farmers about the changing landscape

and trends in food production and consumer demand.

Julia's passion for helping other Kiwis succeed, and a contagious positive energy, takes her to a calendar of events - sharing insights and engaging with a broad range of industry stakeholders and NZX customers. Along with the speaking roles and media commentary to spread the good word, there were points of particular pride for Julia this year with the release of two white papers with a sustainability focus: the 2019 New Zealand Dairy Outlook and another on the uptake of Environmental, Social and Governance (ESG) reporting among New Zealand

listed companies. She sees the reports as an opportunity for NZX to engage across the spectrum of sector interests and capital markets ecosystem – stimulating discussion and showcasing best practice.

In the year ahead, Julia has her eyes on the tech industry, and the potential to support early-stage companies with their ambitions and fuel growth in New Zealand's third-largest and fastest growing export industry. She will also be keeping up a strong voice on the importance of ESG and diversity as key ingredients to the long-term success of New Zealand businesses and the strength of our economy.

"Julia has her eyes on the tech industry, and the potential to support early-stage companies with their ambitions and fuel growth."





Corporate governance

NZX's shares are quoted on the NZX Main Board. NZX also has a subordinated note quoted on the NZX Debt Market. In this part of the annual report, we disclose the extent to which we have followed the recommendations set out in the NZX Corporate Governance Code 2020 (NZX Code). The information in this section is current as at 31 December 2019 and has been approved by the board of directors of NZX.

NZX's board is committed to maintaining the highest standards of governance by implementing a framework of structures, practices and processes that it considers reflect best practice. NZX's corporate governance policies and procedures, and its board and committee charters, document the framework and have been approved by the board.

The framework has been guided by the recommendations set out in the NZX Code and the requirements set out in the listing rules. The board's view is that NZX's corporate governance framework has followed these recommendations and requirements in the year to 31 December 2019 (reporting period).

The corporate governance framework is regularly reviewed by the board against the corporate governance standards set by NZX, any regulatory changes, and developments in corporate governance practices.

The key corporate governance documents referred to in this section are available from NZX's investor centre.

NZX Code

Principle 1 – code of ethical behaviour

Directors should set high standards of ethical behaviour, model this behaviour and hold management accountable for these standards being followed throughout the organisation.

Code of Conduct

NZX's Code of Conduct sets out the standards of conduct expected of directors (including members of committees) and employees (including secondees, contractors and consultants). The purpose of the code is to underpin and support the values that govern our individual and collective behaviour.

Training on the code is included as part of the induction process for new directors and employees.

The code requires directors and employees to promptly report material breaches of the code and sets out the procedure for doing so.

The code is reviewed at least every two years and was last reviewed in November 2019.

Financial Products Trading Policy

NZX's Financial Products Trading Policy sets out NZX's restrictions on its directors and employees buying or selling financial products. In particular:

- directors and employees may not buy or sell NZX's shares in the "blackout" periods set out in the policy (these periods occur prior to the release of NZX's financial results to the market); and
- outside of a blackout period, directors and employees must obtain consent to buy or sell NZX's shares.

Because NZX is a licensed market operator, NZX's senior managers and employees with access to market sensitive information must obtain consent to buy or sell financial products quoted on a market operated by NZX.

Training on the policy is included as part of the induction process for new directors and employees.

The policy is reviewed at least annually and was last reviewed in May 2019.

Principle 2 – board composition and performance

To ensure an effective board, there should be a balance of independence, skills, knowledge, experience and perspectives.

Board charter

NZX's board operates under a written charter, which sets out the responsibilities and framework for the operation of the board.

The charter is reviewed at least every two years and was last reviewed in May 2018.

Management of NZX on a day-to-day basis is undertaken by the Chief Executive Officer and senior managers through a set of delegated authorities that clearly define the Chief Executive Officer's and senior managers' responsibilities and those retained by the board. The delegated authorities are set out in NZX's Delegated Authority Policy. The policy is reviewed at

least annually and was last reviewed and updated in January 2020.

The board meets its responsibilities by receiving reports and plans from management and through its annual work programme. The board uses committees to address issues that require detailed consideration. Committee-work is undertaken by directors (and, in the case of the Conflicts Committee and Regulatory Governance Committee, non-director members who have specialist knowledge and experience). However, the board retains ultimate responsibility for the functions of its committees and determines their responsibilities.

Nomination and appointment of directors

NZX has a Nomination Committee, which is responsible for reviewing candidates for appointment and re-election to the board and committees, and making recommendations to the board. An independent recruitment consultant provides assistance in preparing a list of candidates for the committee's consideration. The committee meets with preferred candidates before making a recommendation to the board. Checks are done on candidates in accordance with NZX's Fit and Proper Policy. Key information about candidates is provided to shareholders in the notice of annual meeting.

At each annual meeting, current directors retire by rotation as required by the NZX Listing Rules and are eligible for re-election. Under the updated Listing Rules a director must seek re-election at least every three years. Any directors appointed since the previous annual meeting must also retire and are eligible for election.

Board Composition

Board Structure	Number of Directors	Gender Diversity	Average Director Tenure	Average Director Age	Diversity Characteristics
Single tier	8	6 men, 2 women	2 years, 9 months	53.1	Education qualifications, professional experience, personal achievements, geography, gender, age

NZX uses a skills matrix when selecting candidates for appointment and re-election to the board. The board developed the skills matrix in 2016 in conjunction with governance services firm Propero Consulting and it was last updated in 2019. The skills matrix outlines the ideal mix of skills, experience and diversity needed to ensure the board is equipped to provide the high standard of corporate governance required to lead NZX. If the board determines that new or additional skills are required, training is completed or a formal recruitment process is undertaken.

The matrix assesses directors against the following criteria:

- strategy and performance expertise in respect of stock exchanges, data information, media, technology and business operations;
- quality committee leadership skills to serve on NZX's committees; and
- connectivity to stakeholder groups connectivity to stakeholder groups such as regulators or government, the Electricity Authority, listed issuers, brokers or institutional and retail investors.

Based on these criteria, the board considers that its members currently have the balance of independence, skills, knowledge, experience and perspectives necessary to lead NZX.

Written agreement

NZX provides a letter of appointment to each newly appointed director setting out the terms of their appointment. The letter includes information regarding expected time commitments, the board's responsibilities, remuneration, independence requirements, disclosure requirements, confidentiality obligations, indemnity and insurance provisions, intellectual property rights and cessation of appointment.

Director information

The board currently comprises eight directors with diverse backgrounds, skills, knowledge, experience and perspectives. All directors are non-executive and independent.

Information in respect of directors' ownership interests is available on page 96. NZX's directors are not formally required to own NZX shares, but are encouraged to do so.

Lead independent director

Lindsay Wright is NZX's lead independent director in the event that James Miller is conflicted on any matters that arise.

Further information about NZX's directors are available on pages 10 to 11.

Diversity

NZX's Diversity and Inclusion Policy sets out how NZX will set measurable objectives for achieving diversity and inclusion, and how it will assess its progress towards achieving these objectives. The policy also sets out the diversity and inclusion initiatives NZX currently has in place, together with the initiatives it is currently implementing.

The policy is reviewed at least annually and was last reviewed in February 2019. Further details on NZX's diversity and inclusion are outlined on pages 7 and 24.

Director Training

Directors are expected to understand NZX's operations and undertake training and education to enable them to effectively perform their duties. This includes:

- attending management presentations in respect of NZX's operations
- attending presentations on changes in governance, legal and regulatory frameworks
- attending technical and professional development courses
- attending presentations from industry experts and key advisers
- attending the World Federation of Exchanges (WFE) conferences of which NZX is a member
- receiving regular educational materials

NZX continues to support the Institute of Directors' Future Director Programme with Hayley Buckley replacing Anna Scott as NZX's Future Director for 2020.

Assessment of Board Performance

A detailed board evaluation has been conducted in January 2020 to review the performance of the board and committees in 2019 across key areas, including strategy, risk management, board processes and monitoring organisational performance. This process was run by external and independent governance experts. The key findings of the process, including questionnaire responses were reviewed by the board and next steps are being considered.

The review found that NZX's board and management are aligned strategically, including with respect to growth businesses. The review also found that progress has been made since the 2018 review in a number of governance areas including board committees, stakeholder engagement and risk management. In addition a number of opportunities were also identified for the board to continue to develop and enhance performance.

Separation of the Chairperson and Chief Executive Officer

NZX's board chair is a different person to NZX's Chief Executive Officer.

Principle 3 – committees

The board should use committees where this will enhance its effectiveness in key areas, while still retaining board responsibility.

Committees and members

The board uses committees where specialist skills and experience is required. Six standing committees have been established to assist the board on matters falling within their areas of responsibility. Each committee has authority to undertake any activity set out in its charter or as authorised by a separate resolution of the board.

The board and six committees and the members of each as at 31 December 2019 are set below.

Board and committees (as at 31 December 2019)

Board of Directors

- James Miller (Chair)
- Frank Aldridge
- Nigel Babbage
- Richard Bodman
- Elaine Campbell
- Jonathan Macdonald
- John McMahon
- Lindsay Wright

Commitees

Core Committees			Regulatory Committees			
Audit & Risk Committee	HR and Remuneration Committee	Nomination Committee	Clearing Committee	Regulatory Governance Committee	Conflicts Committee	
Lindsay Wright (Chair)	Frank Aldridge (Chair)	James Miller (Chair)	Nigel Babbage (Chair)	David Flacks (Chair)	Jayshree Das (Chair)	
Richard Bodman	Jonathan Macdonald	Frank Aldridge	Richard Bodman	Nigel Babbage	Nigel Babbage	
Jonathan Macdonald	James Miller	Lindsay Wright	Elaine Campbell	Elaine Campbell	Richard Bodman	
John McMahon	John McMahon		John McMahon		Elaine Campbell	

Director meeting attendance

Core Committees			Regulatory Committees				
Director	Board	Audit and Risk Committee	Human Resources and Remuneration Committee	Nomination Committee	Clearing Committee	Regulatory Governance Committee	Conflicts Committee
Frank Aldridge ¹	7/7	2/2	3/3	1/1	-	-	_
Nigel Babbage	6/7	-	_	_	4/4	4/4	2/2
Richard Bodman	7/7	6/6	-	-	4/4	1/1	2/2
Elaine Campbell ³	6/6	-	-	-	3/3	3/3	1/1
Jon Macdonald ⁴	6/7	4/4	3/3	-	-	1/1	1/1
John McMahon ⁵	3/4	3/3	2/2	-	1/2	-	-
James Miller	7/7	6/6	3/3	1/1	-	-	_
Lindsay Wright ⁶	7/7	6/6	_	1/1	0/1	_	_

External committee member meeting attendance

Committee member	Board	Audit and Risk Committee	Human Resources and Remuneration Committee	Nomination Committee	Clearing Committee	Regulatory Governance Committee	Conflicts Committee
Jayshree Das	_	-	_	_	-	_	2/2
David Flacks	_	-	_	_	-	4/4	_

Frank Aldridge retired from the Audit and Risk Committee on 4 April 2019.

Richard Bodman retired from the Regulatory Governance Committee on 4 April 2019.

Elaine Campbell was appointed as a director effective 18 February 2019. Elaine Cambell joined the Regulatory Governance Committee, Clearing Committee and Conflicts Committee on 4 April 2019.

Jon Macdonald retired from the Regulatory Governance Committee, Conflicts Committee and Nomination Committee and was appointed to the Audit and Risk Committee on 4 April 2019.

A Spirit 2017.
 S John McMahon was appointed as a director effective 26 June 2019. John McMahon was appointed to the Audit and Risk Committee, Clearing Committee and HR and Remuneration Committee on 17 July 2019.
 Lindsay Wright retired from the Clearing Committee and was appointed to the Nomination Committee on 4 April 2019.

Audit and Risk Committee

NZX's Audit and Risk Committee assists the board to fulfil its responsibilities in relation to the NZX Group's financial practices and reporting, internal control environment, internal audit, external audit and risk management. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee. The charter is reviewed at least every two years and was last reviewed in May 2018.

The committee must be comprised solely of NZX directors, have a minimum of three members, have a majority of members that are independent directors and have at least one director with an accounting or financial background. The makeup of the current members of this committee complies with this recommendation.

The committee's chair, Lindsay Wright, holds a bachelor of commerce degree from the University of Auckland majoring in finance and accounting and has previously held the role of CFO of Deutsche New Zealand (Previously Bankers Trust) and was also formerly Chair of the Audit Committee for the New Zealand Superannuation Fund. Lindsay's full biography is on page 11.

The committee chair and the board chair are different people.

Management may only attend meetings at the invitation of the committee and the committee routinely has committee-only time and time with the external and internal auditors without management present.

Human Resources and Remuneration Committee

NZX's Human Resources and Remuneration Committee assists the board in overseeing the management of the human resources activities of NZX, including the remuneration of employees. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee. The charter is reviewed at least every two years and was last reviewed in May 2018. The committee must have a majority of members that are independent directors. The makeup of the current members of this committee complies with this recommendation.

Management may only attend meetings at the invitation of the committee.

Nomination Committee

NZX's Nomination Committee assists the board in identifying and recommending to the board individuals for nomination as directors and members of committees. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee. The charter is reviewed at least every two years and was last reviewed in May 2018.

The committee must have a majority of members that are independent directors. The makeup of the current members of this committee complies with this recommendation.

Management may only attend meetings at the invitation of the committee.

Other Committees Clearing Committee

The Clearing Committee assists the board in ensuring that New Zealand Clearing Limited has adequate risk capital to meet its obligations as the central counterparty clearing house for NZX Clearing. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee. The charter is reviewed at least every two years and was last reviewed in May 2018

The committee must have a minimum of three members. The committee may have a non-director as a member (who must have skills and experience relevant to the operation of the committee). The makeup of the current members of this committee complies with this recommendation.

Conflicts Committee

The Conflicts Committee assists the board in overseeing the effectiveness of NZX's policies and procedures for ensuring that any conflicts of interest within the NZX Group are appropriately managed, including any conflicts between NZX's regulatory responsibilities and its commercial interests. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee. The charter is reviewed at least every two years and was last reviewed in November 2019.

The committee must have a minimum of three members, have a minimum of two directors as members and must have one non-director as a member (who has skills and experience relevant to the operation of the committee). The makeup of the current members of this committee complies with this recommendation.

The committee's non-director member, Jayshree Das, is Craigs Investment Partners' Process Excellence & Governance Advisor.

Regulatory Governance Committee

The Regulatory Governance Committee assists the board in reviewing and providing feedback in respect of the governance of NZX's regulatory function. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee. The charter is reviewed at least every two years and was last reviewed in May 2018.

The committee must have a minimum of three members, have a minimum of two directors as members and must have a minimum of one non-director as a member (who has skills and experience relevant to the operation of the committee). The makeup of the current members of this committee complies with this recommendation.

The committee's non-director member, David Flacks, is a former Chair of the NZ Markets Disciplinary Tribunal chair.

Takeover protocol

NZX's Takeover Protocol sets out the procedure to be followed if there is a takeover offer for NZX.

The protocol is reviewed at least every two years and was adopted in February 2018.

Principle 4 – reporting and disclosure

The board should demand integrity in financial and non-financial reporting, and in the timeliness and balance of corporate disclosures.

Continuous disclosure

NZX's Continuous Disclosure Policy sets out NZX's arrangements to ensure material information is identified, reported, assessed and, where required, disclosed to the market in a timely manner.

NZX is committed to ensuring the timely disclosure of material information about the NZX Group and to ensuring that NZX complies with the NZX Listing Rules.

It is the responsibility of the board to monitor compliance with the Continuous Disclosure Policy. The board considers at each board meeting whether any information discussed at the meeting requires disclosure.

The policy is reviewed at least annually and was last reviewed and updated in November 2019.

Charters and policies

The key corporate governance documents referred to in this section, including policies and charters, are available from NZX's investor centre.

Financial reporting

NZX is committed to ensuring integrity and timeliness in its financial reporting and in providing information to the market and shareholders which reflects a considered view on its present and future prospects.

The Audit and Risk Committee oversees the quality and integrity of external financial reporting, including the accuracy, completeness, balance and timeliness of financial statements. It reviews NZX's full and halfyear financial statements and makes recommendations to the board concerning accounting policies, areas of judgement, compliance with accounting standards, stock exchange and legal requirements, and the results of the external audit. All matters required to be addressed and for which the committee has responsibility were addressed during the reporting period.

NZX has published its full and half-year financial statements that were prepared in accordance with relevant financial standards. The full year financial statements are set out on pages 46 to 89.

The Chief Executive and Chief Financial Officer have confirmed in writing to the board that NZX's external financial reports present a true and fair view in all material aspects.

Non-financial reporting

NZX releases data on its non-financial performance metrics each month through its monthly shareholder metrics publications. It also releases quarterly revenue and shareholder metrics, and regulation metrics representing the key features of NZX's activities in regulating its markets.

This year NZX has continued to integrate its non-financial reporting and disclosures to align with its financial performance and strategy.

To support this, and provide increased clarity for shareholders and the market on our financial performance and execution of strategy, a series of five year financial and non-financial targets are now being reported.

Further information is available from the NZX investor centre.

Principle 5 – remuneration

The remuneration of directors and executives should be transparent, fair and reasonable.

Directors' remuneration

Shareholders fix the total remuneration available for directors. The annual fee pool limit is \$435,000 and was approved by shareholders at the annual meeting in April 2012.

The current fees paid to NZX's directors are \$50,000 per annum for directors and \$100,000 for the chair. Directors are not paid additional fees for being members of committees. The number of NZX directors increased from 7 to 8 during the reporting period.

Jayshree Das and David Flacks, being non-director members of committees, are paid \$465 per hour for work on committee business.

Total remuneration received by each director in 2019 is set out in Note 5 of the Statutory Information section on page 97.

External committee member remuneration is set out below.

External committee member remuneration

Committee member	Committee member fees			
Jayshree Das	\$2,697			
David Flacks	\$17,670			

Directors do not receive any performance or equity based remuneration, or superannuation or retirement benefits. This reflects the differences in the role of the directors, which is to provide oversight and guide strategy, and the role of management, which is to operate the business and execute NZX's strategy.

Remuneration policy

NZX's Remuneration Policy sets out the principles, which apply to the remuneration of NZX's directors and employees. In particular, director remuneration is paid in the form of director fees, while employee remuneration will include a mix of the following components:

- fixed remuneration (which includes base salary and employer KiwiSaver contributions)
- short-term incentive plan (which is available to senior employees)
- long-term incentive plan (which is available to members of NZX's executive team and senior management)
- a one-off grant of \$1,000 of NZX shares when an employee starts at NZX to ensure that all employees are shareholders

The policy is reviewed at least annually and was last reviewed and updated in February 2020.

NZX's short-term incentive plan is performance based, with any short-term incentive plan payment being conditional on (1) NZX's financial performance and the employee's business unit's performance; and (2) the employee's individual performance.

Potential short-term incentive plan payments are generally between 15% and 25% of base salary, depending upon the employee's seniority and role.

Under NZX's long-term incentive plan, executive team members and senior managers may be awarded NZX shares based on NZX's long-term (generally three year) performance. The plan is designed to:

- align managers' rewards with improvement in shareholder value
- achieve business plans and corporate strategies
- reward performance improvement; and
- retain key skills and competencies.

Chief Executive Officer remuneration

Mark Peterson commenced his role as NZX's Chief Executive Officer on 10 April 2017.

Mark Peterson's remuneration is a mix of base salary and short term and long-term incentive plan components.

Mark Peterson's base salary for 2019 was \$500,000.

Mark Peterson's potential short-term incentive plan payment for 2019 was \$500,000 (\$250,000 for ontarget performance). Mark Peterson's actual short-term incentive plan payment for 2019 was \$340,000, this will be paid in February 2020. Mark Peterson's 2019 STI comprised two components. The first component was based on NZX's financial performance against target. The second component was based on delivery against the key elements of the five year strategic plan which included refocusing the business back on the core markets business, building on the growth opportunities, leading the business effectively and further developing our market engagement.

Mark Peterson is currently allocated a long-term incentive performance share rights plan to the value of \$250,000 each year. Vesting is dependent on NZX meeting performance hurdles in respect of NZX's total return to shareholders and its earnings per share for the prior five year period, and on Mark Peterson remaining an employee at the applicable vesting date.

Principle 6 – risk management

Directors should have a sound understanding of the material risks faced by the issuer and how to manage them. The board should regularly verify that the issuer has appropriate processes that identify and manage potential and material risks.

Risk management framework

The board is responsible for the establishment and oversight of NZX's risk management framework, together with setting NZX's overall risk tolerance.

Significant risks are discussed at each board meeting, or as required.

The board has established an Audit and Risk Committee with responsibility to:

- review and provide feedback in respect of the principal risks set out in NZX's risk register
- ensure that management has established a risk management framework which includes policies and procedures to effectively identify, manage and monitor NZX's principal risks; and
- monitor compliance with, and assess the effectiveness of, the risk management framework.

The committee reviews the risk register every quarter. The committee also reviews the risk management framework annually. The committee receives reports on the operation of risk management policies and procedures.

The executive team and senior management are required to regularly identify the major risks affecting the business, record them in the risk register and develop structures, practices and processes to manage and monitor these risks.

NZX maintains insurance policies that it considers adequate to meet its insurable risks.

The board is satisfied that NZX has in place a risk management framework to effectively identify, manage and monitor NZX's principal risks, including a Conflict Management Policy, Continuous Disclosure Policy, Delegated Authority Policy, Financial Products Trading Policy, Fit and Proper Policy, IT Acceptable Use Policy and Protected Disclosures Policy.

NZX engages EY to carry out internal audit functions on various parts of its operations, including assessing the effectiveness of NZX's risk management policies and procedures. Additionally, independent assurance is provided, and reviews are undertaken on matters such as risk capital, operational controls, IT/software security and anti-money laundering procedures.

Key risks

NZX's material issues for 2019 are outlined and discussed at pages 17 to 25.

Chief Executive Officer and Chief Financial Officer assurance

The Chief Executive Officer and Chief Financial Officer have provided the board with written confirmation that NZX's 2019 financial statements are founded on a sound system of risk management and internal compliance and control; and that all such systems are operating efficiently and effectively in all material respects.

Principle 7 – auditors

The board should ensure the quality and independence of the external audit process.

NZX's Audit and Risk Committee makes recommendations to the board on the appointment and removal of the external auditor. The committee also monitors the independence and effectiveness of the external auditor and reviews and approves any non-audit services performed by the external auditor. An External Auditor Independence Policy was approved by the NZX board in July 2018 setting out the services that may or may not be performed by the external auditor.

The committee regularly meets with the external auditor to approve their terms of engagement, audit partner rotation (at least every five years) and audit fee, and to review and provide feedback in respect of the annual audit plan. A comprehensive review and formal assessment of the independence and effectiveness of the external auditor is undertaken periodically. The committee routinely has time with NZX's external auditor, KPMG, without management present.

KPMG attends the annual meeting, and the lead audit partner is available to answer questions from shareholders at that meeting. KPMG attended the 2019 annual meeting.

KPMG has provided the Audit and Risk Committee with written confirmation that, in their view, they were able to operate independently during the year.

NZX has appointed EY to perform a number of internal audit functions. The Audit and Risk Committee is responsible for overseeing the independence and objectivity of the internal audit function and for reviewing and monitoring the internal audit work plan, reports from internal audit and management responses. The committee routinely has time with EY without management present.

Principle 8 – shareholder rights and relations

The board should respect the rights of shareholders and foster constructive relationships with shareholders that encourage them to engage with the issuer.

Information for shareholders

NZX seeks to ensure that investors understand its activities by communicating effectively with them and giving them access to clear and balanced information.

The key information channels are NZX's website, announcements and media releases, social media channels, the annual and interim report, and the annual meeting.

NZX's investor centre contains annual and interim reports, investor presentations, dividend information and other information relating to NZX (including key corporate governance documents).

Communicating with shareholders

NZX's investor centre sets out NZX's Chief Financial Officer's and Company Secretary's contact details for communications from shareholders. NZX responds to all shareholder communications within a reasonable timeframe.

NZX provides options for shareholders to receive and send communications electronically, to and from both NZX and its share registrar.

Shareholder voting rights

In accordance with the Companies Act 1993, NZX's Constitution, and NZX Listing Rules, NZX refers major decisions which may change the nature of NZX to shareholders for approval.

NZX conducts voting at its shareholder meetings by way of a poll and on the basis of one share, one vote. Further information on shareholder voting rights is set out in NZX's Constitution.

Notice of annual meeting

NZX's annual meeting was held on 5 April 2019. The notice of the meeting was released to the market on 7 March 2019 and was posted on NZX's investor centre. The 2020 meeting will be held on 31 March 2020 in Auckland. A webcast of the meeting will be made available to shareholders.

Management Commentary

Overview

A breakdown of NZX's financial results by business unit (adjusting 2018 fund expenses to be netted against revenue for comparability - refer to footnote 3 below) is summarised in the following table:

	Oper	ating Re	venue	Opera	ating Ex	penses	Opera	ating Ear	nings ¹		rating rgin	FT	Es
	2019	2018 ²	Change	2019	2018 ²	Change	2019	2018 ²	Change	2019	2018 ²	2019	2018
	\$000	\$000	%	\$000	\$000	%	\$000	\$000	%				
Issuer Relationships	26,221	23,567	11.3%	5,107	4,939	(3.4%)	21,114	18,628	13.3%	80.5%	79.0%	34.6	37.6
Secondary Markets	15,449	16,758	(7.8%)	6,424	5,682	(13.1%)	9,025	11,076	(18.5%)	58.4%	66.1%	28.4	28.6
Data & Insights	12,829	11,623	10.4%	1,816	1,831	0.8%	11,013	9,792	12.5%	85.8%	84.2%	9.8	8.0
Funds Management ³	12,881	11,443	12.6%	6,833	5,757	(18.7%)	6,048	5,686	6.4%	47.0%	49.7%	45.2	44.5
Wealth Technologies	1,693	1,073	57.8%	2,573	1,999	(28.7%)	(880)	(926)	5.0%	(52.0%)	(86.3%)	45.1	36.5
Corporate Services ⁴	475	-	N/A	15,431	15,694	1.7%	(14,956)	(15,694)	4.7%	N/A	N/A	63.2	61.7
Total Continuing Operations	69,548	64,464	7.9%	38,184	35,902	(6.4%)	31,364	28,562	9.8%	45.1%	44.3%	226.3	216.9
Agri (Discontinued Operations)	-	4,329	N/A	-	3,483	N/A	-	846	N/A	-	19.5%	-	18.5
Total	69,548	68,793	1.1%	38,184	39,385	3.0%	31,364	29,408	6.7%	45.1%	42.7%	226.3	235.4

Operating earnings are from continuing operations and before net finance expense, income tax, depreciation, amortisation and impairment, adjustment to provision for earnout, gain and loss on disposal of business and property, plant and equipment.

The 2018 financial results have been restated for the adoption of the new accounting standard NZ IFRS16 Leases (operating expense restated for Wealth Technologies \$0.113m and Coporate Services \$1.167m). Refer to Note 5 in the financials statements.

The funds management operating model for Smartshare changed (October 2018) to align with SuperLife; fund expenses (and audit fees) are now payable by the funds and FUM based revenue is now received net of fund expenses (and audit fees). Consequently 2018 has been restated in the table above to ensure comparability of operating revenue and operating expenses (both restated by \$3.029m).

operating expenses (both restated by \$3.029m).

4 Corporate Services provides accommodation, legal, accounting, IT, HR and communications and marketing support to the other business units. Related costs are currently not recharged to these businesses.

Operating Earnings from continuing operations has increased 9.8% to \$31.364 million, with:

- operating revenue increasing 7.9% to \$69.548 million; and
- operating expenses increasing 6.4% to \$38.184 million.

The operating revenue and operating expenses are discussed in the following pages.

The Investor Presentation (refer https://www.nzx.com/about-nzx/investor-centre/reports-and-disclosure) provides a detailed summary of the financial results by business unit.

Key Metrics

The key metrics for 2019 (as outlined in the Investor Presentation in February 2019) are summarised in the table below:

		External dependencies	2019 deliverables	2019 actual
NZX Group	Operating earnings ¹		\$28 - \$31 million	\$31.4 million (up 9.8%)
Core Markets				
Issuer Relationships	Capital raised (total primary and secondary capital issued or raised for Equity, Funds and Debt)	Listing ecosystem dependent on othersNo major market correction	\$9.1 billion (average of two prior years)	\$18.7 billion (up 95.7%)
Secondary Markets	Total value traded	 Participant activity levels drive value traded No major market correction 	\$41.0 billion	\$37.8 billion (down 1.0%)
	Dairy Derivatives lots traded	• Participant activity levels drive lots traded	0.45 million lots	358,928 lots (up 3.8%)
Data & Insights	Revenue growth (in subscriptions, licenses and dairy subscriptions changing revenue mix)	• Dependent on core markets growth	License growth: 10% Dairy subscription product growth: 24%	Subscriptions and license revenue growth: up 17.7% Dairy subscription revenue growth: down 1.4%
Funds Management	Total Funds Under Management	 Investment market returns impacts FUM (all asset classes) No major market correction 	Continue three year rolling average growth: 14%	\$3.97 billion (up 36.0%)
Wealth Technologies	Total Funds Under Administration	Investment market returns impacts FUA (all asset classes) No major market correction	Prepare for new client phase two migration and transition of current clients	\$2.30 billion (up 15.6%) Two new customers

¹ Operating earnings are from continuing operations and before net finance expense, income tax, depreciation, amortisation and impairment, adjustment to provision for earnout, gain and loss on disposal of business and property, plant and equipment.

Operating Revenue

Issuer Relationships

Annual listing fees paid by NZX's equity, debt and fund issuers are driven by the number of listed issuers and equity, debt and fund market capitalisations.

Annual listing fees have been positively impacted by the growth in number and value of debt instruments, and the growth in equity market capitalisation despite delistings.

Primary listing fees are paid by all issuers at the time of listing. The primary drivers of this revenue are the number of new listings and the value of capital listed. Primary listing fees in the period have been driven by strong debt listings (retail and wholesale); with total new capital listed of \$7.16 billion up 46.2% on last year.

Secondary issuance fees are paid by existing issuers when the company raises additional capital through placements, rights issues, the exercise of options, dividend reinvestment plans, or further debt issues. The primary drivers for this revenue are the number of secondary issuances and the value of secondary capital raised. Secondary issuance fees in the period have been driven by equity raised, with total additional capital raised of \$11.51 billion up 147.9% on last year.

Other issuer services revenue arises from time spent by NZX Regulation reviewing listing and secondary capital raising documents, requests for listing rule waivers, and other significant issuer matters.

Contractual and consulting and development revenue arises from the operation of New Zealand's electricity market (under a long term contract with the Electricity Authority) and the Fonterra Shareholders' Market (under a long term contract with Fonterra). Earning consulting and development revenue through systems enhancements has been a focus post completion of the electricity market operator upgrade program in late 2018.

Secondary Markets

Participant services revenue is charged to market participants (broking, clearing and advisory firms) that

are accredited for NZX's equity, debt and derivatives markets, and includes revenue that arises from market surveillance recoveries and time spent by NZX Regulation reviewing participant applications. The total number of market participants decreased to 35 (2018: 37), with BNP Paribas Securities Services Australia becoming accredited for cash market depository services, Sharesies being accredited as a cash trading and clearing participant, and the consolidation of markets (i.e. NZAX and NXT into the Main Board) resulting in the removal of NZAX Sponsors and NXT Advisors.

Securities trading revenue comes from the execution of trades on NZX's equity and debt markets. Securities clearing revenue relates to clearing and settlement activities, and related services such as stock lending undertaken by NZX's subsidiary New Zealand Clearing and Depository Corporation Limited. The largest component is clearing fees which are based on the value of settled transactions.

Securities trading and clearing revenue has, as anticipated, been impacted by the fee changes effective 1 October 2018, which were implemented to improve market liquidity and attract new participants, and will in time deliver growth. Additionally the total value traded and cleared (\$37.8 billion) is 1.0% lower than last year. Revenue was adversely impacted by trading patterns which have seen large peaks across index rebalance periods and lower turnover in-between relative to the comparative period, resulting in:

- The trading fees cap resulting in greater uncharged value traded; and
- The clearing fees tiered structure resulting in lower average clearing fees.

The fee structure was updated (from 1 July 2019) to address these issues (e.g. trading fee cap has been raised).

Dairy derivatives revenue relates to trading, clearing and settlement fees for trading NZX dairy futures and options. The fees are largely charged in USD (reflecting the global nature of the market) per lot traded. Dairy derivatives revenue increased in line

with the 3.8% growth in lots traded and was adversely impacted by low market volatility in the final quarter.

Data & Insights

Royalties from terminals relate to the provision of capital markets real time data for display on terminals (retail and professional). Royalties from terminals increased revenue relates to higher retail terminal numbers.

Subscription and licences relate to the provision of capital markets data to other participants in the capital markets (e.g. non-display applications). The subscriptions and licences revenue increase of 17.7% is driven by increased non-display usage. Audit and back dated licencing revenue increased from \$0.76 million to \$1.29 million.

Dairy data subscriptions relate to the sale of dairy data and analytical products. Dairy data subscription revenue has decreased 1.4% as a result of the divestment of NZX Agri business causing a churn of dairy subscriptions.

Funds Management

Funds management revenue is generated from:

- Funds under management based revenue which relates to variable funds under management (FUM) fees; these are now received net of fund expenses.
 Fund expenses include a combination of fixed costs (principally outsourced fund accounting and administration costs, registry fees and audit fees), and variable costs proportionate to FUM (principally custodian fees, trustee fees, index fees, settlement costs and third party manager fees).
- Member based revenue which includes fixed membership administration fees and other member services.

FUM based revenue has only been recognised net of fund expenses since the operating model change in October 2018 (to align the Smartshares and SuperLife operating models). The comparable funds FUM based revenue has increased 13.8% driven by:

- higher average FUM over the period, arising from a combination of market returns and positive net cash flows (\$476 million). FUM at 31 December 2019 has grown to \$3.97 billion up 36.0% on last year; offset by
- fund expense increases associated with 8 new Blackrock iShares ETFs, and the segregation and unitisation of SuperLife Invest providing access for wholesale clients; partially reduced by efficiencies from the changed operating model and improvements to supplier arrangements.

Investor numbers (ETFs and SuperLife) have increased 8.5% resulting in an increase in member based revenue.

Wealth Technologies

Wealth Technologies revenue is generated from administration services provided on both the original (OE) and new wealth management platforms, and development fees received for part of the new platform that is in production. The administration service fees are based on funds under administration (FUA) and have been driven by:

- New platform started earning fees in November 2018 when the foundation customer transitioned phase one to the new platform, with FUA continuing to increase through 2019; offset by
- OE platform the number of customers is unchanged, with FUA remaining stable.

FUA at 31 December 2019 has grown to \$2.30 billion up 15.6% on last year.

Corporate

Other corporate revenue primarily relates to the short term sub lease of part of the Wellington premises, NZX.com advertising revenue and sponsorship of NZX's 150th year celebrations.

Operating Expenses

Core markets and corporate costs increased in line with inflation, while we invested for customer growth in the Funds Management and Wealth Technologies businesses.

Personnel costs

Personnel costs are made up of:

- Salary costs (including bonuses, commissions, ACC levies and KiwiSaver contributions); plus
- Contractor and other personnel costs (including training, recruitment and staff benefits); less
- Capitalised labour (where employees or contractors are engaged on capital projects).

Personnel costs have increased due to a combination of wage inflation, short term contractor resources (e.g. assisting with the delivery of increased energy consulting activity) and the movement in average FTEs arising from:

- the full year impact from the additional strategic roles created through 2018, including the refocus to be client centric, plus additional FTEs to strengthen cyber security and marketing capabilities, and address recommendations set out in the Financial Markets Authority Annual Market Operator Obligations Review;
- Smartshares additional sales resources and to on board new business, in line with the strategic focus;
- Wealth Technologies additional resources planning for the migration of new clients in 2020; and
- the number of vacancies throughout the year.

Capitalisation of internal development resources (2019: \$4.29 million; 2018: \$4.38 million) primarily relates to Wealth Technologies' core platform and NZX's trading system upgrade.

Information Technology

Information Technology costs were made up of software licence fees, hardware support and maintenance fees, telecommunications and data network costs, and IT services provided by third parties.

Efficiency gains from prior year projects (e.g. through modernised and rationalised data centre hosting) have been used to support further business initiatives (e.g. increased cyber security) and produced lower costs in the current year.

Professional Fees

Professional fees, including legal expenses, assurance costs and advisory / consultancy fees, include those relating to:

- Smartshares investments for growth (approx. \$297k) e.g. costs associated with the SuperLife Invest unitisation, setting up the Blackrock iShare new ETFs, creating Ka Uruora WhānauSaver and the extension of the SuperLife Pacific Series;
- the assurance programme internal audits, energy audits and consulting obligations under the Electricity Authority contracts, annual conflicts review, funds conduct risk assessment review; and
- stock lending and borrowing (SLB) costs and terminal royalty audit fees; both vary in proportion to their related revenues, with costs and revenues recognised on a gross basis.

Marketing

Marketing costs relate primarily to Smartshares, and the NZX corporate centre (which supports the core exchange businesses). Smartshares has significantly increased its marketing campaigns to attract new investors/members and has undertaken a rebranding for launch in 2020. NZX increased its investor relations deliverables and broader communications and marketing efforts to support sales. Additionally marketing includings the costs of the NZX book and 150th year celebrations costs (related sponsorships have been recognised within corporate revenue).

Fund Expenditure

The fund expenses (e.g. custodian fees, trustee fees, index fees, settlement costs and third party manager fees) are now payable directly by the funds since the operating model change in October 2018.

Other Expenses

Other expenses relate to premises related costs, insurance, directors fees, travel, external audit costs, outsourced payroll system, corporate memberships, statutory/compliance costs and non recoverable GST (on the Funds Management and Wealth Technologies businesses). Other expenses have moved in line with inflation.

Capitalised overheads

The portion of all expense categories which relate to capital activities (e.g. Wealth Technologies core platform and NZX's trading system upgrade) has decreased slightly.

Non-operating Income and Expenses

Net finance expense comprises interest income (on cash balances, Clearing House risk capital and regulatory working capital), interest expenses (on the subordinated note, loans, overdrafts and lease liabilities), unrealised fair value gain on investment and foreign exchange gains/(losses). Increased net finance costs result from the subordinated notes issued on 20 June 2018.

Depreciation and amortisation expenses have increased due to the commencement of amortisation of:

- the Wealth Technologies core platform from November 2018 when the first customer migrated to the platform; and
- new lease of IT equipment from May 2019.

The effective tax rate is higher than the statutory rate of 28% due to non-deductible items.

Discontinued operations relate to the operating results (including impairment of goodwill and intangibles) of the non-dairy agri businesses (Farmers Weekly, AgriHQ and the Australian based Grain Information Unit).

Directors' Responsibility Statement

The directors are responsible for the preparation, in accordance with New Zealand law and generally accepted accounting practice, of financial statements which give a true and fair view of the financial position of NZX Limited and its subsidiaries (the NZX Group) as at 31 December 2019 and the results of their operations and cash flows for the year ended 31 December 2019.

The directors consider that the financial statements of the NZX Group have been prepared using accounting policies appropriate to the NZX Group's circumstances, consistently applied and supported by reasonable and prudent judgments and estimates, and that all applicable New Zealand Equivalents to International Financial Reporting Standards have been followed.

The directors are pleased to present the financial statements of the NZX Group for the year ended 31 December 2019.

The financial statements were authorised for issue for and on behalf of the directors on 13 February 2020.

James MillerChair of the Board

Lindsay Wright Chair of the Audit and Risk Committee



Income Statement

For the year ended 31 December 2019

		2019 \$000	2018 \$000
	Note		Restated*
Operating revenue	9	69,548	67,493
Operating expenses	10	(38,184)	(38,931)
Earnings before net finance expense, income tax, depreciation, amortisation and impairment, adjustment to provision for earnout, loss on disposal of businesses and property, plant and equipment		31,364	28,562
Net finance expense	11	(2,153)	(1,279)
Loss on disposal of businesses and property, plant and equipment	8	(83)	(1)
Depreciation and amortisation expense		(8,595)	(7,216)
Impairment expense	4/8	-	(352)
Adjustment to provision for earnout		-	15
Profit before income tax		20,533	19,729
Income tax expense	13	(5,888)	(6,056)
Profit from continuing operations		14,645	13,673
Loss from discontinued operations (net of tax)	7	-	(2,024)
Profit for the year		14,645	11,649
Earnings per share			
Basic (cents per share)	14	5.3	4.3
Diluted (cents per share)	14	5.3	4.3
Earnings per share - continuing operations			
Basic (cents per share)	14	5.3	5.1
Diluted (cents per share)	14	5.3	5.0

Statement of Comprehensive Income

For the year ended 31 December 2019

	2019 \$000	2018 \$000 Restated*
Profit for the year	14,645	11,649
Other comprehensive income recognised through equity		
Foreign currency translation differences	(1)	(170)
Total other comprehensive income	(1)	(170)
Total comprehensive income for the year	14,644	11,479

^{*} Restated for the adoption of the new accounting standard NZ IFRS 16 *Leases*, see Note 5.

Statement of Changes in Equity

For the year ended 31 December 2019

	Note	Share Capital \$000	Retained Earnings \$000	Translation Reserve \$000	Total Equity \$000
Balance at 1 January 2018, as previously reported		47,451	21,147	125	68,723
Impact of adoption of NZ IFRS 16 - Leases	5	=	(2,104)	-	(2,104)
Restated balance at 1 January 2018		47,451	19,043	125	66,619
Profit for the year		-	11,649	-	11,649
Foreign currency translation differences		=	-	(170)	(170)
Restated total comprehensive income for the year		-	11,649	(170)	11,479
Transactions with owners recorded directly in equity:					
Dividends paid	22	-	(20,426)	-	(20,426)
Issue of shares	21	3,201	-	-	3,201
Share based payments	21	534	-	-	534
Cancellation of non-vesting shares	21	(120)	120	-	-
Total transactions with owners recorded directly in equity		3,615	(20,306)	-	(16,691)
Restated balance at 31 December 2018		51,066	10,386	(45)	61,407
Profit for the year			14,645		14,645
Foreign currency translation differences				(1)	(1)
Total comprehensive income for the year		-	14,645	(1)	14,644
Transactions with owners recorded directly in equity:					
Dividends paid	22		(16,662)		(16,662)
Issue of shares	21	3,834	-	-	3,834
Share based payments	21	695			695
Cancellation of non-vesting shares	21	(72)	72		
Total transactions with owners recorded directly in equity		4,457	(16,590)		(12,133)
Balance at 31 December 2019		55,523	8,441	(46)	63,918

Statement of Financial Position

As at 31 December 2019

	Note	31 December 2019 \$000	31 December 2018 \$000 Restated*	1 January 2018 \$000 Restated*
Current assets				
Cash and cash equivalents	15	27,740	25,385	14,881
Cash and cash equivalents - restricted	15	20,000	20,000	20,000
Funds held on behalf of third parties	12	79,667	56,705	58,890
Receivables and prepayments	16	9,006	9,217	11,136
Total current assets		136,413	111,307	104,907
Non-current assets				
Property, plant & equipment	17	2,612	2,760	2,444
Right-of-use lease assets	5	5,826	6,277	7,068
Goodwill	3	30,222	30,222	33,929
Other intangible assets	2	37,498	36,505	36,290
Assets held for sale	8	-	-	2,415
Total non-current assets		76,158	75,764	82,146
Total assets		212,571	187,071	187,053
Current liabilities				
Funds held on behalf of third parties	12	79,667	56,705	58,890
Trade payables	18	3,782	3,798	3,810
Other liabilities - current	19	12,276	11,683	23,500
Lease liabilities	5	1,439	1,145	1,054
Current tax liability	13	1,776	2,222	666
Liabilities held for sale	8	-	20	-
Total current liabilities		98,940	75,573	87,920
Non-current liabilities				
Non-current other liabilities	19	323	161	-
Lease liabilities	5	7,172	8,067	9,212
Interest bearing liabilities	20	38,852	38,797	20,000
Deferred tax liability	13	3,366	3,066	3,302
Total non-current liabilities		49,713	50,091	32,514
Total liabilities		148,653	125,664	120,434
Net assets		63,918	61,407	66,619
Equity				
Share capital	21	55,523	51,066	47,451
Retained earnings		8,441	10,386	19,043
Translation reserve		(46)	(45)	125
Total equity attributable to shareholders		63,918	61,407	66,619

 $^{^{\}star}$ Restated for the adoption of the new accounting standard NZ IFRS 16 Leases, see Note 5.

Statement of Cash Flows

For the year ended 31 December 2019

	Note	31 December 2019 \$000	31 December 2018 \$000 Restated*
Cash flows from operating activities	Note		Restated
Receipts from customers		69,944	73,782
Net interest paid		(2,091)	(1,203)
Payments to suppliers and employees		(37,029)	(42,846)
Income tax paid	13	(6,034)	(4,800)
Net cash provided by operating activities	15	24,790	24,933
Cash flows from investing activities			
Lease payments received from finance leases		-	196
Net cash paid on disposal of businesses and acquisition		(4)	(5,449)
Cash received from short term investment		6	-
Payments for property, plant and equipment	17	(708)	(1,181)
Payments for intangible assets	2	(7,594)	(8,204)
Net cash used in investing activities		(8,300)	(14,638)
Cash flows from financing activities			
Payment of lease liabilities		(1,288)	(1,053)
Loan facility cancellation	20	-	(20,000)
Issue of subordinated note	20	-	40,000
Transaction costs relating to subordinated note		-	(1,230)
Dividends paid		(12,847)	(17,508)
Net cash (used in)/provided by financing activities		(14,135)	209
Net increase in cash and cash equivalents		2,355	10,504
Cash and cash equivalents at the beginning of the year		45,385	34,881
Cash and cash equivalents at the end of the year	15	47,740	45,385

^{*} Restated for the adoption of the new accounting standard NZ IFRS 16 *Leases*, see Note 5.

Notes to the Financial Statements

For the year ended 31 December 2019

1. Reporting entity and statutory base

Reporting entity

These consolidated financial statements are for NZX Limited (the Company) and its subsidiaries (together referred to as the Group) as at and for the year ended 31 December 2019.

The Group operates New Zealand securities, derivatives and energy markets, including maintaining the infrastructure on which they operate. It provides funds management services including superannuation and Exchange Traded Funds (ETFs), as well as developing and operating wealth management platforms for other providers. It also provides a range of information and data to support market growth and development in the securities and dairy sectors.

The Company is incorporated and domiciled in New Zealand, registered under the Companies Act 1993 and is an FMC reporting entity under the Financial Markets Conduct Act 2013 (FMCA). These financial statements have been prepared in accordance with the Companies Act 1993 and the Financial Reporting Act 2013. The Company is listed and its ordinary shares are quoted on the NZX Main Board. The company also has listed debt which is quoted on the NZX debt market.

Basis of preparation

The Group financial statements have been prepared in accordance with New Zealand Generally Accepted Accounting Practice (NZ GAAP). They comply with New Zealand equivalents to International Financial Reporting Standards (NZ IFRS) and other applicable Financial Reporting Standards, as appropriate for profit oriented entities. The financial statements also comply with International Financial Reporting Standards (IFRS).

The measurement basis adopted in the preparation of these financial statements is historical cost, modified by the revaluation of certain financial instruments as identified in the accompanying notes. These financial statements are presented in New Zealand Dollars (\$), which is the Company's functional currency. All financial information presented in New Zealand dollars has been rounded to the nearest thousand, except when otherwise indicated.

Basis of consolidation

The Group financial statements are prepared by consolidating the financial statements of all the entities that comprise the Group, being the Company and its subsidiaries. Consistent accounting policies across the parent and all subsidiaries are employed in the preparation and presentation of the Group financial statements.

i. Business combinations

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group. On acquisition, the assets, liabilities and contingent liabilities of a subsidiary are measured at their fair values at the date of acquisition. In determining the fair value of assets acquired, NZX assesses identifiable intangible assets including brands, intellectual property, software, management rights and any other identifiable intangible assets using recognised valuation methodologies and with reference to suitably qualified experts. Any excess of the cost of acquisition over the fair values of the identifiable net assets acquired is recognised as goodwill.

ii. Investments in subsidiaries

Subsidiaries are entities controlled by the Group. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

In preparing the Group financial statements all intercompany balances and transactions, and unrealised profits arising within the Group are eliminated in full.

Accounting policies

Accounting policies that summarise the measurement basis used and are relevant to the understanding of the financial statements are provided throughout the accompanying notes.

The accounting policies adopted have been applied consistently throughout the periods presented in these financial statements.

The Group has initially adopted NZ IFRS 16 *Leases* from 1 January 2019. As a result, the Group has changed its accounting policy for lease contracts as detailed in Note 5. The Group has elected to adopt the full retrospective approach, which means the 2018 comparative information has been restated. The impact of changes is disclosed in Note 5.

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning after 1 January 2020, and have not been applied in preparing these financial statements. The Group does not plan to adopt these standards early. None of these standards are expected to have a significant effect on the financial statements of the Group.

Presentational changes

Certain amounts in the comparative information have been reclassified to ensure consistency with the current period's presentation.

Accounting estimates and judgements

The preparation of the financial statements in conformity with NZ IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

The principal areas of judgement for the Group in preparing these financial statements that have a significant risk of resulting in a material adjustment within the next financial year, including information about assumptions and estimation uncertainties, are set out in:

- note 2 intangible assets
- note 3 goodwill
- note 23 share based payments

2. Intangible assets

Intangible assets are initially measured at cost. The direct costs associated with the development of software and website assets for internal use are capitalised where success is probable and the capitalisation criteria of NZX's accounting policy and NZ IFRS are met. The cost of intangible assets acquired in a business combination is their fair value at the date of the acquisition. Intangible assets with a finite life are amortised from the date the asset is ready for use on a straight-line basis over its estimated life which is as follows:

- Software and websites: 3 9 years
- Brands, Trademarks, and rights to use Brands: 10 years
- Data archives, customer lists, databases, and other IP: 10 years
- Management rights: 20 years

At each reporting date, the Group reviews the carrying amounts of its intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. This is outlined in note 4.

Where estimated useful lives or recoverable values have diminished due to technological change or market conditions, amortisation is accelerated.

	Software and websites	Brands, Trademarks and rights to use Brands	Data archives, customer lists,	Management rights	Intangible work in progress	Total
	\$000	\$000	databases, and other IP \$000	\$000	\$000	\$000
Gross carrying amount			4000			
Balance at 1 January 2018	39,785	2,570	3,387	18,116	4,636	68,494
Additions	2	-	-	_	8,202	8,204
Disposals	(1,138)	(2,388)	(1,929)	-	-	(5,455)
Transfer from WIP	10,168	-	-	-	(10,168)	-
Transfer to assets held for sale	(58)	-	-	-	-	(58)
Balance at 31 December 2018	48,759	182	1,458	18,116	2,670	71,185
Additions	13	-	-	-	7,581	7,594
Transfer from WIP	3,997				(3,997)	
Balance at 31 December 2019	52,769	182	1,458	18,116	6,254	78,779
Accumulated amortisation & impairment						
Balance at 1 January 2018	27,677	1,517	639	2,371	-	32,204
Amortisation expense	4,925	83	-	784	-	5,792
Impairment expense	-	136	-	-	-	136
Disposals	(1,074)	(1,681)	(639)	-	-	(3,394)
Transfer to assets held for sale	(58)	-	-	-	-	(58)
Balance at 31 December 2018	31,470	55	-	3,155	-	34,680
Amortisation expense	5,794	18	-	789	-	6,601
Balance at 31 December 2019	37,264	73	-	3,944	-	41,281
Net Book Value						
As at 1 January 2018	12,108	1,053	2,748	15,745	4,636	36,290
As at 31 December 2018	17,289	127	1,458	14,961	2,670	36,505
As at 31 December 2019	15,505	109	1,458	14,172	6,254	37,498

3. Goodwill

Carrying amount	2019 \$000	2018 \$000
Balance at beginning of the year	30,222	33,929
Agri impairment	-	(2,526)
Goodwill sold	-	(1,181)
Balance at end of the year	30,222	30,222

A cash generating unit (CGU) to which goodwill has been allocated is tested for impairment annually, and whenever there is an indicator of impairment based on the performance of the CGU relative to expected future performance and other relevant factors.

The directors have carried out impairment testing with the key assumptions set out in Note 4. No impairment was required in 2019. In 2018 the Group sold its remaining Agri businesses (AgriHQ and the Grain Information Unit), resulting in a goodwill impairment of \$2,526,000.

4. Impairment tests

Indefinite life intangible assets are reviewed for impairment annually. They are also reviewed for impairment whenever there are indicators of impairment, as are finite life intangible assets.

A summary of the CGUs to which intangible assets have been allocated as at 31 December 2019 is outlined below:

	Software & websites \$000	Other finite life intangible \$000	Indefinite life intangible \$000	Work in progress	Total other intangible \$000	Goodwill \$000	Total
Cash generating unit							
Clearing House	3,252	-	-	-	3,252	-	3,252
Funds management	271	11,828	2,344	317	14,760	20,730	35,490
Wealth Technologies	7,919			2,859	10,778	1,494	12,272
Energy	2,816			39	2,855	7,720	10,575
Direct data	-	109	1,458		1,567	278	1,845
Other							
Other intangible assets	359				359		359
Other computer software	888			3,039	3,927		3,927
	15,505	11,937	3,802	6,254	37,498	30,222	67,720

Impairment test

For the year ended 31 December 2019, the directors have reviewed all intangible assets for impairment using discounted cash flow analysis, comparable EBITDA multiple analysis and/or other factors as appropriate to the asset being tested. All impairment tests have been undertaken on a value in use basis.

Key assumptions used in the calculation of recoverable amounts in discounted cash flow analysis are consistent with those used and disclosed in the financial statements for the year ended 31 December 2018 unless indicated otherwise. Discounted cash flow analysis using a forecast period of five years was used for all CGUs, other than Energy where forecast periods of four and a half years (to match the remaining contractual period) and seven and a half years (to match the remaining contractual period plus three years potentially to be renewed) were both used. The analysis also uses an WACC of 8.8% (2018: 10.0%) and were stress tested at higher rates. The terminal growth rate used to extrapolate cash flow projections beyond five years was 1.75% (2018: 1.75%). Management has assessed the long term economic outlook data available, and assessed that the use of this terminal growth rate was appropriate, consistent with the prior year. Where relevant, EBITDA multiples were used to cross-check the discounted cash flow analysis for established businesses.

The review of the carrying values of goodwill and intangible assets has determined that all the CGUs have recoverable amounts exceeding their carrying values and no impairment is therefore required.

In 2018 the Agri businesses (Farmers Weekly, AgriHQ and the Grain Information Unit) were sold, resulting in goodwill and intangible assets impairment charges totalling \$2,662,000 on disposal. Additionally the

FundSource business which was sold effective 21 June 2019, within the Direct Data CGU, incurred an impairment charge of \$352,000.

Further information on specific assumptions (other than the general assumptions outlined above) underlying the CGU discounted cash flow analysis is set out below.

a. Clearing House

The principal assumption on which the discounted cash flows for this CGU are dependent is the future revenue growth rate. Future revenue growth is dependent on growth in equity and dairy derivatives markets. Growth in equity markets has been forecast based on historical growth rates, while dairy derivatives are expected to grow at 20% p.a. (2018: 33% p.a.). This assumption is based on trading statistics for similar derivative products in overseas markets and NZX's five year strategic plan.

b. Funds Management

Smartshares Limited acquired the management rights for the Smartshares NZ Mid Cap ETF, the Smartshares Australian Mid Cap ETF and the Smartshares Australian Top 20 ETF funds during 2004 - 2006 for a total value of \$2,344,000. These are held in the Group accounts with an indefinite life, as there is no expiry date for these rights and they are expected to apply indefinitely. Additionally the acquisition of SuperLife Limited, effective 1 January 2015 has resulted in additional management rights acquired of \$15,772,000, which are held in the Group accounts as a finite life asset amortised over 20 years and goodwill of \$20,730,000. The principal assumption on which the discounted cash flows are dependent is the future level of funds under management (FUM), which is assumed to grow through both net cash flows and market growth, driving FUM based revenue. FUM based revenue would have to reduce by 46% (2018: 46%) in the forecast period to potentially indicate an impairment in the intangibles carrying value. The company considers the FUM growth assumption reasonable based on historic experience and NZX's five year strategic plan.

c. Wealth Technologies

The principal assumptions on which the discounted cash flows for the Wealth Technologies CGU are dependent is the future level of funds under administration (FUA) which is assumed to grow through both bringing new clients on to the platforms and current client growth, driving FUA based revenue. FUA based revenue would have to reduce by 24% (2018: 21%) in the forecast period to potentially indicate an impairment in the intangibles carrying value. The Company considers the FUA growth assumptions reasonable given the start-up nature of Wealth Technologies and based on the continued interest from current, future and potential customers.

d. Energy

The carrying value of the Energy CGU includes a goodwill amount of \$7,720,000. This business has a significant reliance on service provider contracts it has in place with the Electricity Authority (EA) over the period to mid 2024, with the EA having an option to renew for a further 3 years. As a result of these service provider contracts, NZX has certainty of minimum cash flows to be received over the contract period which, along with additional contracted consulting revenue, supports the current carrying value of the CGU.

e. Direct data

The principal assumptions on which the discounted cash flows for the Direct Data CGU are dependent is the future revenue growth rate which is assumed to grow (through increased volumes and price increases) at 2.6% p.a. to 7.4% p.a. (2018: 4.2% p.a. to 4.5% p.a.) during the explicit forecast period. The Company considers the revenue growth assumption reasonable based on historical experience and NZX's five year strategic plan.

5. Leases

On entering into a contract, the Group determines whether the contract contains a lease that conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Determining whether there is a right of control involves the assessment of whether the contract involves the use of an identified asset, whether the Group has the right to obtain substantially all of the economic benefits from use of that asset through the period of use, and whether the Group has the right to direct the use of the asset.

As a lessee

The Group recognises a right-of-use asset and a lease liability at the lease commencement date.

The right-of-use asset is initially measured at cost net of any lease incentives received and is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted at the Group's incremental borrowing rate or the interest rate implicit in the lease, if this can be determined. The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate or if the Group changes its assessment of whether it will exercise a purchase, extension or termination option, with a corresponding adjustment made to the carrying value of the right-of-use asset.

The Group has elected not to recognise right-of-use assets and lease liabilities for short term leases (lease term less than 12 months) or leases of low-value assets.

Detail of leases for which the Group is a lessee is presented below:

Right-of-use assets

	Property leases \$000	Other leases \$000	Total \$000
Balance at 1 January 2018 (restated)	7,021	47	7,068
Depreciation expense for the year (restated)	(777)	(14)	(791)
Balance at 31 December 2018 (restated)	6,244	33	6,277
Additions during the year	14	673	687
Depreciation expense for the year	(974)	(164)	(1,138)
Balance at 31 December 2019	5,284	542	5,826

Other leases includes leases of IT and office equipment.

Lease liabilities

	31 December 2019 \$000	31 December 2018 Restated \$000	1 January 2018 Restated \$000
Maturity analysis - contractual undiscounted cash flows			
Up to one year	1,801	1,533	1,482
One to two years	1,379	1,562	1,531
Three to five years	3,591	3,461	3,829
More than five years	3,406	4,586	5,762
Total undiscounted lease liabilities	10,177	11,142	12,604
Lease liabilities included in the statement of financial position	8,611	9,212	10,266
Current	1,439	1,145	1,054
Non-current	7,172	8,067	9,212

Property leases for the Group's Wellington and Albany offices give the Group the right to renew the lease at the end of the current contracted period for a further 6 year term.

As a lessor

On entering into a lease as a lessor, the Group assesses whether the lease transfers to the lessee substantially all of the risk and rewards of ownership of the underlying asset. Where such a transfer is assessed to occur, the lease is recognised as a finance lease; otherwise it is recognised as an operating lease.

Where the Group is an intermediate lessor, its interest in the head lease and the sub-lease are accounted for separately, with the sub-lease classification assessed with reference to the right-to-use asset arising from the head lease.

The Group recognises lease payments received under operating leases as income on a straight-line basis over the lease term as part of other corporate revenue.

The Group sub-leases part of one of its property leases. The current sub-lease is for a short term period and therefore does not transfer substantially all of the risks and rewards of the underlying asset and has been classified as an operating lease accordingly. Income related to this short term sub-lease for the current year was \$278,000 (2018: nil). A maturity analysis of operating lease payments, showing the undiscounted lease payments to be received after the reporting date is set out below:

	31 December 2019 \$000	31 December 2018 Restated \$000	1 January 2018 Restated \$000
Maturity analysis - contractual undiscounted cash flows			
Up to one year	69	-	-
Total undiscounted lease liabilities at period end	69	-	-

Prior property sub-leases had longer terms, and were assessed as finance leases. The following table sets out a maturity analysis of finance lease receivables, showing the undiscounted lease payments to be received after the reporting period:

	31 December 2019 \$000	31 December 2018 Restated \$000	1 January 2018 Restated \$000
Maturity analysis - contractual undiscounted cash flows			
Up to one year	-	-	204
Total undiscounted lease payments receivable	-	-	204
Unearned finance income	-	-	(8)
Net investment in the lease	-	-	196

Impact of initial application on financial statements

The Group has undertaken an assessment of existing operating leases on initial application of NZ IFRS 16 *Leases* and determined that property leases and certain IT and office equipment leases meet the right-of-use definitions. The Group has elected to adopt the full retrospective approach, and the 2018 comparative information has therefore been restated. The Group has recognised the cumulative historic effect of initially applying the standard as an adjustment to equity as at 1 January 2018.

The Group has recognised leases subject to NZ IFRS 16 in the Statement of Financial Position through recognising a right-of-use asset and a corresponding lease liability. This has resulted in changes to the Income Statement, recognising an interest expense as the liability is unwound over the term of the lease and depreciation of the right-of-use asset (over the remaining term of the lease). These expenses replace the previous reported operating rental expense in the restated financial statements.

The following tables summarise the impacts of adopting IFRS 16 on the Group's consolidated financial statements:

Statement of Financial Position

	31	December 2018				
\$000	Previously reported	Adjustments	Restated	Previously reported	Adjustments	Restated
Right-of-use lease assets	-	6,277	6,277	-	7,068	7,068
Receivables and prepayments	9,217	-	9,217	10,940	196	11,136
Others assets	171,577	-	171,577	168,849	-	168,849
Total assets	180,794	6,277	187,071	179,789	7,264	187,053
Lease liabilities - current	-	1,145	1,145	-	1,054	1,054
Lease liabilities - non-current	-	8,067	8,067	-	9,212	9,212
Deferred tax liability	3,873	(807)	3,066	4,120	(818)	3,302
Other liabilities	113,439	(53)	113,386	106,946	(80)	106,866
Total liabilities	117,312	8,352	125,664	111,066	9,368	120,434
Net assets	63,482	(2,075)	61,407	68,723	(2,104)	66,619
Retained earnings	12,461	(2,075)	10,386	21,147	(2,104)	19,043
Other	51,021	-	51,021	47,576	-	47,576
Net equity attributable to shareholders	63,482	(2,075)	61,407	68,723	(2,104)	66,619

Income Statement and Other Comprehensive Income

For the year ended 31 December 2018 \$000	Previously reported	Adjustments	Restated
Operating revenue	67,493	-	67,493
Operating expenses	(40,210)	1,279	(38,931)
Earnings before net finance expense, income tax, depreciation, amortisation and impairment, adjustment to provision for earnout, loss on disposal of business and property, plant and equipment	27,283	1,279	28,562
	•	· · · · · · · · · · · · · · · · · · ·	•
Net finance expense	(831)	(448)	(1,279)
Loss on disposal of businesses and property, plant and equipment	(1)	-	(1)
Depreciation and amortisation expense	(6,425)	(791)	(7,216)
Impairment expense	(352)	-	(352)
Adjustment to provision for earnout	15	-	15
Profit before income tax	19,689	40	19,729
Income tax expense	(6,045)	(11)	(6,056)
Profit from continuing operation	13,644	29	13,673
Loss from discontinued operations (net of tax)	(2,024)	-	(2,024)
Profit for the Period	11,620	29	11,649
Total other comprehensive income	(170)	-	(170)
Total comprehensive income for the period	11,450	29	11,479

Statement of Cash Flows

For the year ended 31 December 2018 \$000	Previously reported	Adjustments	Restated
Cash flows from operating activities			
Net interest paid	(782)	(421)	(1,203)
Payments to suppliers and employees	(44,124)	1,278	(42,846)
Other cash flows from operating activities	68,982	-	68,982
Net cash provided by operating activities	24,076	857	24,933
Cash flows from investing activities			
Lease payments received from finance leases	-	196	196
Other cash flows from investing activities	(14,834)	-	(14,834)
Net cash used in investing activities	(14,834)	196	(14,638)
Cash flows from financing activities			
Payment of lease liabilities	-	(1,053)	(1,053)
Other cash flows from financing activities	1,262	-	1,262
Net cash provided by/(used in) financing activities	1,262	(1,053)	209
Net increase in cash and cash equivalents	10,504	-	10,504

There is no material impact on the Group's basic or diluted earnings per share for the year ended 31 December 2018.

6. Segment reporting

The Group has five revenue generating segments, as described below, which are the Group's strategic business areas, and a corporate segment which has limited revenue but includes all costs that are shared across the organisation. The reportable segments are:

- Issuer Relationships provider of issuer services for current and prospective customers and market operator for Fonterra Co-Operative Group and the Electricity Authority. For segmental reporting purposes regulatory services is also included in this division;
- Secondary Markets provider of trading and post-trade services for securities and derivatives markets operated by NZX, as well as the provider of a central securities depository;
- Data & Insights provider of data services for securities and derivatives markets and data and analysis for New Zealand's dairy sector;
- Funds Management provider of SuperLife superannuation and KiwiSaver and Smartshares exchange traded funds; and
- Wealth Technologies funds administration provider.

The following segment is presented as a discontinued operation (refer note 7):

• Agri - provider of information, news, data and analysis relating to the agriculture sectors (other than dairy) in New Zealand and Australia through printed publications and online services.

The Group's CEO (the chief operating decision maker) reviews internal management reports for each of these strategic areas on a regular basis. The Group's revenue is analysed into each of the reportable segments. Expenses incurred are allocated to the segments only if they are direct and specific expenses to one of the segments. The remaining expenses that relate to activities shared across the group are reported in the corporate segment.

The Group's assets and liabilities are analysed into each of the revenue generating segments, apart from those assets and liabilities that are utilised on a shared basis, which are allocated to the corporate segment.

Segmental information for the year ended 31 December 2019

	lssuer Relationships \$000		Data & Insights \$000	Funds \$000	Wealth Technologies \$000	Corporate \$000	Total continuing operations \$000	Agri \$000	Total including discontinued operations \$000
Operating revenue	26,221	15,449	12,829	12,881	1,693	475	69,548		69,548
Operating expenses	(5,107)	(6,424)	(1,816)	(6,833)	(2,573)	(15,431)	(38,184)		(38,184)
Total segment result	21,114	9,025	11,013	6,048	(880)	(14,956)	31,364		31,364
Segment assets	14,608	110,145	3,242	40,828	13,319	30,429	212,571		212,571
Segment liabilities	(8,570)	(79,756)	(1,315)	(5,656)	(885)	(52,471)	(148,653)		(148,653)
Net assets	6,038	30,389	1,927	35,172	12,434	(22,042)	63,918	-	63,918

Segmental information for the year ended 31 December 2018

Restated	Issuer Relationships \$000	Secondary Markets \$000	Data & Insights	Funds \$000	Wealth Technologies Restated \$000	Corporate Restated \$000	Total continuing operations Restated \$000	Agri \$000	Total including discontinued operations Restated \$000
Operating revenue	23,567	16,758	11,623	14,472	1,073	-	67,493	4,329	71,822
Operating expenses	(4,939)	(5,682)	(1,831)	(8,786)	(1,999)	(15,694)	(38,931)	(3,483)	(42,414)
Total segment result	18,628	11,076	9,792	5,686	(926)	(15,694)	28,562	846	29,408
Segment assets	15,104	86,248	3,968	40,954	11,268	29,439	186,981	90	187,071
Segment liabilities	(8,223)	(56,248)	(1,174)	(6,758)	(705)	(52,556)	(125,664)	-	(125,664)
Net assets	6,881	30,000	2,794	34,196	10,563	(23,117)	61,317	90	61,407

Geographical information

In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers. Segment non-current assets are based on the geographical location of the assets.

Revenue	2019 \$000	2018 \$000
New Zealand	53,781	55,174
Australia	4,135	3,109
Other	11,632	9,210
Total revenue from continuing operations	69,548	67,493
Non-current assets	2019 \$000	2018 \$000 Restated
New Zealand	76,158	75,764
Total non-current assets	76,158	75,764

7. Discontinued operations

A discontinued operation is a component of the Group's business that represents a single major line of business or geographical area of operations that has been disposed of or is held for sale. Classification as a discontinued operation occurs upon disposal or when the operation meets the criteria to be classified as held for sale, if earlier.

During 2018, management sold Farmers Weekly, AgriHQ and the Grain Information Unit, the combined operations of which represented the Agri reportable segment, with the results being presented as a discontinued operation separately from the Group's continuing operations.

The results of the discontinued operation are as follows:

No	ote	2019 \$000	2018 \$000
Operating revenue		-	4,329
Operating expenses		-	(3,483)
Earnings before net finance income, income tax, depreciation, amortisation and impairment, and gain on disposal of businesses and property, plant and equipment		-	846
Net finance expense		-	(32)
Gain on disposal of businesses and property, plant and equipment		-	9
Depreciation and amortisation expense		-	(185)
Impairment expense 4	/ 8	-	(2,662)
Loss before income tax			(2,024)
Income tax expense 1	3	-	-
Loss from discontinued operation (net of tax)		-	(2,024)

The cash flows of the discontinued operations for the years presented in the cash flow statement are as follows:

	2019 \$000	2018 \$000
Net cash used in operating activities	-	1,122
Net cash from investing activities	-	4,401
	-	5,523

8. Assets and liabilities held for sale and disposals

In prior periods management committed to a plan to sell, and have now sold, several non core business units. Accordingly, the assets and liabilities of the following business units had been recognised as held for sale in the period up until sale:

- Farmers Weekly sold effective 1 July 2018;
- AgriHQ sold effective 31 August 2018;
- Australian based Grain Information Unit (GIU) sold effective 31 August 2018; and
- FundSource sold effective 21 June 2019.
- a. Impairment losses relating to the disposal group

There were no impairment losses for the period ended 31 December 2019.

In 2018, the impairment losses recognised in continuing operations of \$352,000 related to FundSource for the write-down of the disposal group to the lower of its carrying amount and its fair value less estimated costs to sell (refer to Note 4). Impairment losses recognised in discontinued operations of \$2,662,000 in 2018 related to the disposal of the Agri businesses (Farmers Weekly, AgriHQ and the Grain Information Unit; refer to Note 4). The impairment losses were applied to reduce the carrying amount of goodwill and other intangible assets (presented as held for sale).

b. Loss on disposal of business and property, plant and equipment

	2019 \$000	2018 \$000
Gain/(loss) on disposal of property, plant, and equipment	2	(1)
Loss on disposal of business - Fundsouce	(85)	-
	(83)	(1)

During the period the Group disposed of the business and assets of FundSource.

c. Assets and liabilities of disposal group held for sale

As at 31 December 2019 no assets or liabilities were held for sale.

As at 31 December 2018, the disposal group was stated at fair value and comprised the following liabilities:

	Data Services \$000	31 December 2018 \$000
Other current liabilities	20	20
Liabilities held for sale (current)	20	20

As at 1 January 2018, the disposal group was stated at fair value and comprised the following assets:

	Farmers Weekly \$000	Data Services \$000	1 January 2018 \$000
Goodwill	1,436	323	1,759
Intangible assets	544	112	656
Assets held for sale (non-current)	1,980	435	2,415

9. Operating revenue

Revenue is recognised to the extent that it is probable that the economic benefit will flow to the Group and the revenue can be measured reliably, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable. The specific revenue recognition criteria for the classes of revenue are as follows:

i. Issuer Relationships

- Issuer fees consists of revenue from annual listing fees, initial listing fees and subsequent capital raisings. Initial and subsequent listing fees are recognised when the listing or subsequent capital raising event has taken place. Annual listing fees are billed on 30 June for the following 12 month period and are recognised on a straight line basis over this 12 month period.
- Other issuer services fees are for regulatory services which are recognised when the service is provided.
- Market Operations revenue arises from the provision of post-trade systems and technology services for both the energy and the Fonterra Shareholders markets, and energy advisory and development services which are recognised over the period the service is provided.

ii. Secondary Markets

Participant services consist of annual participant fees and initial participant fees. Initial participant fees
are recognised when the participant's application has been approved. Annual participant fees are billed
on 30 June for the following 12 month period and are recognised on a straight line basis over this 12
month period.

- Securities trading fees arise from the trading of debt and equities securities, which are recognised at trade date.
- Securities clearing fees relate to debt and equity clearing and settlement, which are recognised at settlement date (currently two days after initial trade date).
- Dairy Derivatives fees relate to the trading and clearing of derivatives and commodities, which are recognised at trade date. Fees for derivative market settlement are recognised at settlement date (currently one day after contract expiry date).

iii. Data & Insight

- Securities information revenue relates to the provision of securities and derivatives market data, which is recognised over the period the service is provided.
- Dairy data subscription revenue relates to the provision of data and analysis for New Zealand's dairy sector, which is recognised over the period the service is provided.

iv. Funds Management

• Funds management revenue relates to funds under management based fees and administration fees, which are recognised over the period the service is provided.

v. Wealth Technologies

• Wealth Technologies revenue relates to platform administration fees and development fees, which are recognised over the period the service is provided.

vi. Corporate

 Other Corporate revenue relates to miscellaneous services provided by the Group (including advertising on nzx.com and sublease of excess office space), which is recognised over the period the service is provided.

	2019 \$000	2018 \$000
Listing fees	15,942	13,720
Other issuer services	500	774
Market operations	9,779	9,073
Total Issuer Relationships revenue	26,221	23,567
Participant services	4,024	3,915
Securities trading	3,850	5,311
Securities clearing	6,045	6,032
Dairy derivatives	1,530	1,500
Total Secondary Markets revenue	15,449	16,758
Securities information	12,102	10,886
Dairy data subscriptions	727	737
Total Data & Insights revenue	12,829	11,623
Funds Management revenue	12,881	14,472
Wealth Technologies revenue	1,693	1,073
Other Corporate revenue	475	-
Total operating revenue	69,548	67,493

Effective 1 October 2018, the funds management operating model for Smartshares changed to align with SuperLife resulting in FUM based revenue now being received net of fund expenses (refer to Note 10).

10. Operating expenses

Operating expenses	2019 \$000	2018 \$000 Restated
Gross personnel costs	(28,927)	(27,321)
Less capitalised labour	4,288	4,376
Personnel costs	(24,639)	(22,945)
Information technology	(7,047)	(7,357)
Professional fees	(2,180)	(2,239)
Marketing	(1,308)	(642)
Funds expenditure	-	(2,934)
Directors' fees	(418)	(399)
Remuneration paid to Group auditors	(200)	(276)
Other operating expenses	(3,308)	(3,219)
Capitalised overheads	916	1,080
Total operating expenses	(38,184)	(38,931)

Effective 1 October 2018, the funds management operating model for Smartshares changed to align with SuperLife resulting in FUM based revenue now being recognised net of fund expenses (refer to Note 9).

The increase in directors' fees is due to an increase in the average number of directors. There has been no change to the annual fee per director.

Remuneration paid to Group auditors

	2019 \$000	2018 \$000
Audit and review of NZX Group and subsidiary statutory financial statements	(156)	(112)
Audit of statutory financial statements for funds managed by Smartshares Limited, an NZX subsidiary	-	(95)
Total audit fees	(156)	(207)
Annual operational audit of the Clearing House	(36)	(35)
Annual depository assurance engagement of New Zealand Depository Limited	(5)	(5)
Net Tangible Assets procedures engagement of Smartshares Limited	(3)	(3)
Total other audit related services	(44)	(43)
Disposal sell-side assistance	-	(26)
Total non-audit services	-	(26)
Total fees paid to the auditor	(200)	(276)

Due to the funds management operating model change noted above, fees for the audit of the statutory financial statements for Funds managed by Smartshares Limited are now paid directly by the Fund with FUM based revenue now recognised net of this expense (refer to Note 9).

11. Net finance expense

	2019 \$000	2018 \$000 Restated
Interest income	1,033	986
Interest on lease liabilities	(414)	(429)
Other interest expense	(2,572)	(1,829)
Amortised borrowing costs	(77)	(38)
Realised gain on investment	6	-
Net (loss)/gain on foreign exchange	(129)	31
Net finance expense	(2,153)	(1,279)

A subordinated note was issued in June 2018 resulting in an increase to interest expense (refer to Note 20).

12. Funds held on behalf of third parties

	31 December 2019 \$000	31 December 2018 \$000	1 January 2018 \$000
Bond deposits	1,385	1,586	1,486
Collateral deposits	62,519	40,080	41,902
Funds held on behalf of clients	15,763	15,039	15,502
	79,667	56,705	58,890

The bond deposits represent balances deposited by issuers, required as a condition of listing on NZX's markets. Funds lodged as bond deposits are interest bearing and are recognised at the amounts deposited which represent fair value. There is an equal and opposite amount disclosed under current liabilities for the total amount repayable to issuers.

The collateral deposits represent balances deposited by participants to cover margins on outstanding settlement obligations for cash market, stock lending transactions and derivative contracts, as well as mutualised default fund contributions. Funds lodged as margin collateral and mutualised default fund contributions are interest bearing and are recognised at the amounts deposited which represent fair value. Interest earned on collateral deposits and mutualised default fund contributions is returned to participants. A collateral management fee is charged for collateral deposits only. There is an equal and opposite amount disclosed under current liabilities for the total amount repayable to participants.

The funds held on behalf of clients represent balances deposited by participants in addition to their collateral deposits or mutualised default fund contributions. The funds are lodged in an interest bearing account and are recognised at the amount deposited which represents fair value. Interest earned on these funds is returned to participants. There is an equal and opposite amount disclosed under current liabilities for the total amount repayable to participants.

13. Taxation

a. Income tax expense recognised in profit or loss

	2019 \$000	2018 \$000 Restated
Tax expense comprises:		
Current tax expense	5,623	6,012
Prior period adjustment	5	328
Deferred tax relating to the origination and reversal of temporary differences	260	(284)
Total tax expense on continuing operations	5,888	6,056

The prima facie income tax expense on pre-tax accounting profit from continuing operations reconciles to the income tax expense in the financial statements as follows:

	2019 \$000	2018 \$000 Restated
Profit before income tax expense from continuing operations	20,533	19,729
Income tax calculated at 28%	(5,749)	(5,524)
Non-deductible expenses	(134)	(204)
	(5,883)	(5,728)
Under provision of income tax in prior year	(5)	(328)
	(5,888)	(6,056)

b. Current tax liabilities

	2019 \$000	2018 \$000 Restated
Balance at beginning of the year	(2,222)	(666)
Current year charge	(5,623)	(6,075)
Prior period adjustment	35	(281)
Tax paid	6,034	4,800
Balance at end of year	(1,776)	(2,222)

c. Deferred tax liability

	2019 \$000	2018 \$000 Restated
Balance at beginning of the year	(3,066)	(3,302)
Current year movement	(260)	229
Prior period adjustments	(40)	7
Balance at end of the year	(3,366)	(3,066)
Deferred tax balance comprises:		
Employee entitlements	734	619
Doubtful debts	74	88
Property, plant and equipment, and software	(2,878)	(4,735)
Leases	(1,441)	807
Other	145	155
	(3,366)	(3,066)

The balance at 1 January 2018 includes the effect of initially applying NZ IFRS 16 (refer to Note 5).

d. Imputation credit account

	2019 \$000	2018 \$000 Restated
Imputation credits available for use in subsequent reporting periods	9,942	10,959

14. Earnings per share and net tangible assets per share

i. Earnings per share

Basic earnings per share is calculated by dividing the profit for the year by the weighted average number of ordinary shares outstanding during the period. An adjustment to take into account the shares and rights issued under the various employee share plans (refer to Notes 21 and 23) is made to the weighted average number of shares used in the calculation of the diluted earnings per share.

a. Basic earnings per share

	2019				2018	
	Continuing operations	Discontinued operations	Total	Continuing operations Restated	Discontinued operations	Total Restated
Profit for the year (\$000)	14,645		14,645	13,673	(2,024)	11,649
Weighted average number of ordinary shares for the purpose of earnings per share (in thousands)	274,293	274,293	274,293	269,621	269,621	269,621
Basic earnings per share (cents per share)	5.3	-	5.3	5.1	(0.8)	4.3

b. Diluted earnings per share

	2019			2018		
	Continuing operations	Discontinued operations	Total	Continuing operations Restated	Discontinued operations	Total Restated
Profit for the year (\$000)	14,645		14,645	13,673	(2,024)	11,649
Weighted average number of ordinary shares for the purpose of earnings per share (in thousands)	277,313	277,313	277,313	272,906	272,906	272,906
Fully diluted earnings per share (cents per share)	5.3		5.3	5.0	(0.7)	4.3

ii. Net tangible assets per share

Basic net tangible assets per share is calculated by dividing the net tangible assets at year end by the weighted average number of ordinary shares outstanding during the period. An adjustment to take into account the shares and rights issued under the various employee share plans (refer to Notes 21 and 23) is made to the weighted average number of shares used in the calculation of the diluted net tangible assets per share.

a. Basic net tangible assets per share

	2019 \$000	2018 \$000 Restated
Net assets	63,918	61,407
Less:		
Goodwill	(30,222)	(30,222)
Intangible assets	(37,498)	(36,505)
Net tangible assets	(3,802)	(5,320)
Weighted average number of ordinary shares for the purpose of net tangible assets per share (in thousands)	274,293	269,621
Basic net tangible assets per share (cents per share)	(1.39)	(1.97)

b. Diluted net tangible assets per share

	2019 \$000	2018 \$000 Restated
Net assets	63,918	61,407
Less:		
Goodwill	(30,222)	(30,222)
Other intangible assets	(37,498)	(36,505)
Net tangible assets	(3,802)	(5,320)
Weighted average number of ordinary shares for the purpose of net tangible assets per share (in thousands)	277,313	272,906
Fully diluted net tangible assets per share (cents per share)	(1.37)	(1.95)

15. Cash and cash equivalents and cash flow reconciliation

a. Cash and cash equivalents

Cash comprises:	31 December 2019 \$000	31 December 2018 \$000	1 January 2018 \$000
Cash at bank	12,940	16,485	14,881
Bank deposits	14,800	8,900	-
Cash and cash equivalents	27,740	25,385	14,881
Cash at bank - restricted	10,000	10,000	10,000
Bank deposits - restricted	10,000	10,000	10,000
Cash and cash equivalents - restricted	20,000	20,000	20,000
Cash and cash equivalents - total	47,740	45,385	34,881

Restricted cash and cash equivalents relates to balances held for risk capital requirements by the Clearing House and is not available for general cash management use by the Group.

b. Reconciliation of profit for the year to net cash provided by operating activities

	31 December 2019 \$000	31 December 2018 \$000 Restated*
Profit for the year	14,645	11,649
Adjustments for:		
Share based payment arrangements	714	703
Depreciation and amortisation expense	8,595	6,610
Amortisation of borrowing costs	55	27
Impairment in intangible and goodwill	-	3,014
Disposal of business	77	(8)
Provision for earnout adjustment	-	(15)
Decrease in receivables and prepayments	161	1,540
Increase in trade payables and other liabilities	689	148
Increase/(Decrease) in current tax liability	(446)	1,514
Increase/(Decrease) in deferred tax liability	300	(249)
Net cash provided by operating activities	24,790	24,933

16. Receivables and prepayments

Receivables and prepayments are initially recognised at the fair value of the amounts to be received. They are subsequently measured at amortised cost (using the effective interest method) less impairment losses, if any.

	31 December 2019 \$000	31 December 2018 \$000	1 January 2018 \$000
Trade receivables	4,516	5,091	7,141
Provision for doubtful debts	(265)	(319)	(403)
	4,251	4,772	6,738
Prepayments	2,260	1,712	2,284
Accrued interest	236	92	66
Accrued income	2,259	2,641	2,048
Total current receivables and prepayments	9,006	9,217	11,136

a. Movement in provision for doubtful debts

The Group maintains a provision for doubtful debts when there is objective evidence of its customers being unable to make required payments and also makes a provision for doubtful debts on all balances greater than 60 days overdue which have not been subject to review.

	2019 \$000	2018 \$000
Balance at beginning of the year	(319)	(403)
Amounts written off during the year	116	18
(Increase)/decrease in provision recognised in profit or loss	(62)	66
Balance at end of the year	(265)	(319)

17. Property, plant and equipment

Property, plant and equipment is carried at cost less accumulated depreciation and impairment. The cost of the assets is the value of the consideration given to acquire the assets and the value of other directly attributable costs incurred in bringing the assets to the location and condition necessary for their intended use.

Depreciation is recognised in the Income Statement and is calculated on a straight line basis so as to write off the net cost of each asset over its expected useful life to its estimated residual value. Leasehold improvements are depreciated over the period of the lease or estimated useful life, whichever is the shorter, using the straight line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each annual reporting period.

The following estimated useful lives are used in the calculation of depreciation:

• Computer equipment: 3 - 7 years

• Furniture and equipment: 2 - 10 years

• Leasehold improvements: 5 - 10 years

• Motor vehicles: 3 years

	Computer equipment \$000	Furniture and in equipment \$000	Leasehold nprovements \$000	Motor Vehicles \$000	Capital work in progress \$000	Total \$000
Net book value at 1 January 2018	580	328	1,531	5	-	2,444
Additions during the year	268	26	31	-	856	1,181
Depreciation expense for the year	(387)	(184)	(242)	(5)	-	(818)
Disposals during the year	(26)	(21)	-	-	-	(47)
Net book value at 31 December 2018	435	149	1,320		856	2,760
Additions during the year	234	76		45	353	708
Transfers from WIP during the year	679		405		(1,084)	
Depreciation expense for the year	(453)	(92)	(296)	(15)		(856)
Net book value at 31 December 2019	895	133	1,429	30	125	2,612

18. Trade payables

Trade payables and accruals are initially recognised at fair value less transaction costs (if any). They are subsequently measured at amortised cost using the effective interest method.

	31 December 2019 \$000	31 December 2018 \$000	1 January 2018 \$000
Trade payables	586	1,434	556
Goods and services tax payable	534	393	586
Accrued expenses	2,585	1,900	2,663
Accrued interest	77	71	5
	3,782	3,798	3,810

19. Other liabilities

	31 December 2019 \$000	31 December 2018 \$000 Restated*	1 January 2018 \$000 Restated*
Employee benefits	4,277	3,953	5,050
Unearned income	7,899	7,730	8,480
Deferred consideration on SuperLife acquisition	-	-	9,970
Other current liabilities	100	-	-
Total current other liabilities	12,276	11,683	23,500
Non-current employee benefits	323	161	-
Total non-current other liabilities	323	161	-
Total other liabilities	12,599	11,844	23,500

20. Interest bearing liabilities

	31 December 2019 \$000	31 December 2018 \$000	1 January 2018 \$000
Term loans	-	-	20,000
Subordinated notes	40,000	40,000	-
Total drawn debt	40,000	40,000	20,000
Capitalised borrowing costs (net of amortisation)	(1,148)	(1,203)	-
Net interest bearing liabilities	38,852	38,797	20,000

a. Subordinated notes

On 20 June 2018 NZX raised \$40 million through a subordinated note issue. The purpose of the offer was to enable NZX to repay existing debt and provide funding for general corporate purposes.

The subordinated notes have a 15 year term, maturing 20 June 2033, with election dates at 5 yearly intervals from the issue date until maturity. The current interest rate (5.40%) is fixed until the first election date, at which point it may be reset. Investors will also have the option to redeem their subordinated notes on each election date.

NZX may defer the payment of interest at any time at its discretion, but will be subject to penalty interest of an additional 4.0% per annum until the next interest payment date at which unpaid and deferred interest is paid.

The terms of the subordinated notes offer include a financial covenant requiring that debt that ranks in priority to the subordinated notes, less unrestricted cash, may not exceed 1.5 times operating earnings (being EBITDA and non-cash items, and capital gains/losses). A breach of the financial covenant is not an event of default, but may prevent NZX paying dividends to shareholders, if it has failed on two consecutive test dates. The subordinated notes financial covenant has been met throughout the year.

The subordinated notes have been recognised initially at fair value less directly attributable transaction costs, and are subsequently measured at amortised cost using the effective interest method, as required by NZ IFRS 9

b. Bank overdraft and revolving credit facilities

The Group has access to an overdraft facility to allow the Group flexibility in its working capital management. The facility limit was reduced from \$5.0 million to \$3.0 million during the period (2018: \$5.0 million) and has an expiry date of 15 January 2022 (extendable by mutual agreement). The bank may require repayment by making a written demand. The effective interest rate of the facility at 31 December 2019 was 4.28% (2018: 4.28%). The overdraft facility was undrawn at 31 December 2018 and 2019.

The Group also has access to a revolving credit facility to provide the Group with additional flexibility in its working capital management. The facility limit was reduced from \$5.0 million to \$3.0 million during the period (2018: \$5.0 million) and has an expiry date of 15 January 2022 (extendable by mutual agreement). No amount was drawn down at 31 December 2018 and 2019.

The bank overdraft and revolving credit facilities are unsecured and contain two financial covenants which have been met throughout the year:

- The ratio of interest bearing debt to EBITDA shall not exceed 3.5 times; and
- The ratio of EBITDA to interest shall exceed 4.0 times.

21. Shares on issue

The Company had 275,684,278 fully paid ordinary shares as at 31 December 2019 (2018: 271,771,369 fully paid ordinary shares). The holders of ordinary shares are entitled to receive dividends as declared and are entitled to one vote per share at meetings.

At 31 December 2019 the Company has 796,938 restricted shares (2018: 2,331,908 restricted shares) on issue under the NZX Limited employee share plan - Team and Results held by entities within the Group. All shares issued under the employee share plan are subject to transfer conditions and eligibility criteria before they are able to vest as ordinary shares. Until those transfer conditions and/or eligibility criteria are met, none are quoted on the NZX Main Board. Refer Note 23 for further details.

The Company has issued performance rights to the members of its executive and management teams and to its CEO pursuant to its Long Term Incentive Plan, introduced during 2018. The performance rights give the holder options to acquire ordinary shares in the Company, which may be exercised if certain performance hurdles are met and the performance rights vest. Until the performance rights vest, there are no shares quoted on any market. As at 31 December 2019, the Company has 3,053,459 performance rights on issue under the Long Term Incentive Plan (2018: 2,011,933). Refer Note 23 for further details.

Movement in share capital

	Number	\$000
Balance at 1 January 2018	268,476,385	47,451
Issue of ordinary shares	3,294,984	3,201
Share based payments	-	534
Cancellation of non-vesting shares	-	(120)
Balance at 31 December 2018	271,771,369	51,066
Issue of ordinary shares	3,912,909	3,834
Share based payments	-	695
Cancellation of non-vesting shares	-	(72)
Balance at 31 December 2019	275,684,278	55,523

22. Dividends

		201	9	201	8
	For year ended	Cents per share	Total \$000	Cents per share	Total \$000
Dividends paid					
March 2018 - Final	31 Dec 17			3.1	8,323
September 2018 - Interim	31 Dec 18			3.0	8,069
September 2018 - Special	31 Dec 18			1.5	4,034
March 2019 - Final	31 Dec 18	3.1	8,425		
September 2019 - Interim	31 Dec 19	3.0	8,237		
Total dividends paid for the year		6.1	16,662	7.6	20,426

The Dividend Reinvestment Plan applied to all dividends (fully imputed) paid during the year (2018: applied to the interim and special dividends only).

Refer to Note 28 for details of the final 2019 dividend.

23. Share based payments

a. CEO Long Term Incentive Plan

During the period there were no changes in the CEO Long Term Incentive Plan.

In 2018, the CEO was issued 1,177,894 performance rights under a long term incentive plan (CEO Long Term Incentive Plan). Each of these performance rights will give the CEO an option to acquire one ordinary share in NZX. The CEO may exercise the options if the performance rights vest. Vesting of the performance rights is dependent on NZX meeting performance hurdles in respect of total shareholder return (TSR) growth and earnings per share (EPS) growth, and on the CEO remaining an employee of the NZX Group for the duration of the five year vesting period.

Vesting of half the performance rights is dependent on TSR growth over the vesting period of at least 9.29% per annum resulting in 50% of the performance rights being vested (with 100% being vested at 11.29% TSR growth and 50.1% to 99.9% being vested on a linear, pro-rata basis).

Vesting of the other half of the performance rights is dependent on EPS growth over the period from 1 January 2018 to 31 December 2021 of at least 8% per annum resulting in 50% of the performance rights being vested (with 100% vesting at 16% EPS growth and 50.1% to 99.9% being vested on a linear, pro-rata basis).

The five year vesting period is from 6 April 2017 to 6 April 2022.

There is a \$4,000,000 cap on the maximum value of performance rights that can vest.

The cost of the performance rights is measured based on the fair value at the date granted using an appropriate pricing model. The cost is recognised over the five year term, with a corresponding increase in equity. The cumulative expense at each reporting date reflects the extent to which the vesting period has expired and is the best estimate of the number of performance rights that will vest. The expense or credit in the reporting period is the movement in cumulative expense and is recognised in personnel costs.

b. Employee and other restricted shares

NZX Limited employee share plan - Team and Results

The NZX Limited employee share plan – team and results (Team and Results Plan) was implemented in May 2010 and was replaced in 2018 by the NZX Employee Longer Term Incentive Plan as explained below.

Under the terms of the Team and Results Plan, NZX offered selected employees (Participants) non-participating redeemable shares (Restricted Shares) which will be reclassified as NZX ordinary shares at the completion of the term of the Team and Results Plan, subject to certain eligibility and transfer conditions.

Both the Team and Results components of the Team and Results Plan were offered on terms of three years.

If the eligibility or transfer conditions are not met, the Restricted Shares are redeemed by NZX. The proceeds from the redemption of the Restricted Shares will be applied in repayment of the Loan, which will discharge any obligation on the Participant to repay the Loan. Following redemption, the Participant will not receive any entitlements, such as distributions or dividends, issued in respect of the Restricted Shares. The effect of this is that the Participant receives no shares or cash and the Loan is repaid.

Details of transfers of shares to NZX employees and redemptions of shares under the Team and Results Plan during the year are set out below:

	Number of shares 000	Average share price \$
Balance at 1 January 2018	2,546	1.05381
Shares transferred to NZX employees	(215)	1.16512
Balance at 31 December 2018	2,331	1.04354
Redemptions	(1,256)	1.06489
Shares transferred to NZX employees	(279)	1.02151
Balance at 31 December 2019	796	1.01759

During 2019 the Group reclassified within Equity \$72,000 fair value of the Restricted Shares issued under the Result Plan for 2016, which was recognised prior to 2019, as the performance target has not been met.

Total financial assistance provided by NZX under the Team and Results Plan as at 31 December 2019 was \$810,000 (2018: \$2,432,000).

NZX Employee Long Term Incentive Plan

A replacement NZX employee long term incentive plan was implemented in 2018 (NZX Employee Long Term Incentive Plan). Under the terms of the NZX Employee Long Term Incentive Plan, NZX offers selected employees performance rights, which are subject to certain entitlement criteria before performance rights may vest and the holder can acquire shares in NZX. Once vested and exercised the performance rights entitle the holder to receive one share for each performance right. If the vesting conditions are not met or waived, the performance rights will lapse.

NZX Employee Long Term Incentive Plan is offered on a three to five year term, with 1,041,526 performance rights issued to participants during 2019 (2018: 2,011,933).

The cost of the performance rights is measured based on the fair value at the date granted using an appropriate pricing model. The cost is recognised over the term of the scheme, with a corresponding increase in equity. The cumulative expense at each reporting date reflects the extent to which the vesting period has expired and is the best estimate of the number of performance rights that will vest. The expense or credit in the reporting period is the movement in cumulative expense and is recognised in personnel costs.

NZX Employee Shares

During the year \$1,000 (gross) worth of NZX ordinary shares were issued to each new employee to encourage staff engagement and shareholder alignment.

24. Financial instruments

The Group's activities expose it to a variety of financial risks including credit risk, liquidity risk and market risk (including foreign currency risk and interest rate risk).

The board of directors has overall responsibility for the establishment and oversight of the Group's risk management framework, including the management of financial risk. The board has established an Audit and Risk Committee (Committee), which is responsible for developing and monitoring the Group's financial risk management policies (except for those relating to clearing and settlement activities discussed below). The Committee reports regularly to the board of directors on its activities.

The Group undertakes securities clearing and settlement activities for the listed equities, debt and derivatives markets through its clearing house New Zealand Clearing and Depository Corporation Limited (NZCDC or the Clearing House). These activities expose NZCDC and the Group to several significant financial risks. Management of these risks is the responsibility of the Clearing Committee of the NZX Board as well as the board of directors of NZCDC. Regular reporting is provided to the NZX Board on the risk management activities.

The specific financial risks faced by the Group, the way in which they are managed and their impact on the financial statements are discussed below.

a. Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Credit risk arises from three principal sources:

- Receivables from customers arising in the normal course of business;
- Investment of surplus cash with financial institutions;
- The activities of the Clearing House, which is discussed separately in section (g).

Excluding Clearing House activities, NZX has no significant concentrations of credit risk from general customers, with receivable balances spread across a broad portfolio of customers. NZX does not require collateral to be provided against receivables incurred in the ordinary course of business, although listed issuers and participants in NZX's equity and debt markets are required to provide a bond that may be called upon in the event of default on financial obligations.

The status of trade receivables at the reporting date was as follows:

	31 December 2019 \$000	31 December 2018 \$000	1 January 2018 \$000
Not past due	3,944	2,796	4,706
Past due 0 - 30 days	157	1,016	984
Past due > 30 days	415	1,279	1,451
	4,516	5,091	7,141

In summary, trade receivables are determined to be impaired as follows:

	31 December 2019 \$000	31 December 2018 \$000	1 January 2018 \$000
Gross trade receivables	4,516	5,091	7,141
Individual impairment	(221)	(147)	(94)
Collective impairment	(44)	(172)	(309)
	4,251	4,772	6,738

The movement in the provision for doubtful debts in respect of trade and other receivables during the year is set out in note 16(a).

For investment of surplus cash balances, the Group follows treasury policies that requires investments to be held only with high credit quality counterparties and sets limits on the Group's exposure to individual counterparties. The individual counterparty limits are as follows:

- The greater of \$10 million or 60% of cash and cash equivalents for registered banks that operate in New Zealand with a minimum credit rating of AA-; and
- 30% of total cash and cash equivalents for other institutions with a minimum credit rating of A- (the total exposure for other institutions cannot exceed 50% of the total cash and cash equivalents).

b. Foreign exchange risk

NZX primarily derives revenues and incurs expenses in NZD. In a minority of cases, however, receipts and payments are in foreign currencies (principally USD). NZX utilises foreign currency receipts to offset purchases denominated in foreign currencies. The Company determines forward exposures, and considers these in line with internal policies and procedures. It may enter into forward exchange agreements to keep any exposure to an acceptable level, though no such contracts were considered necessary in the current or prior financial year. Monetary assets and liabilities are kept to an acceptable level by buying or selling foreign currencies at the spot rate.

In the prior year, foreign exchange risk also arose on the translation of NZX's investment in its Australian operations and intercompany balances between the parent and these entities. NZX did not attempt to hedge this risk.

c. Interest rate risk

NZX is exposed to interest rate risk in that future interest rate movements will affect the interest that it pays on interest bearing liabilities, the interest that it earns on investment assets and the market value of investment assets. NZX does not currently use any derivative products to manage interest rate risk.

The Group's investment assets, particularly those designated as risk capital, are generally required to be readily convertible into cash. These are therefore held as bank deposits at floating rates of interest or invested in short term interest bearing assets for up to 12 months. This reduces the risk of movements in the market value of financial investments, but increases the Group's exposure to changes in cash flows as a result of short term movements in interest rates.

The interest period for the Subordinated Note (\$40m) is fixed until the first election date (20 June 2023) at which point the interest rate may be rest (refer to note 20).

As at balance date, none of the Group's investments were subject to interest periods of greater than 12 months.

An analysis of the sensitivity of the Group's earnings to movements in interest rates is shown below. As at both 31 December 2019 and 2018 the Group's interest bearing assets exceeded its interest bearing liabilities, hence an increase in interest rates would have had a positive impact on earnings.

	2019 \$000	2018 \$000
Effect on net profit before income tax:		
1% increase in interest rate	403	310
1% decrease in interest rate	(403)	(310)

This above information is calculated using the Group's cash balances, the Group's interest bearing liabilities, and the bank balances of \$31.2 million (2018: \$24.0 million) held by the funds managed by the Group's subsidiary, Smartshares Limited. The funds' bank balances are included as Smartshares Limited, as the manager of these funds, is entitled to a fee equivalent to the interest on amounts held in respect of distributions received (including distributions in respect of securities on loan under any securities lending programme undertaken by the fund) and interest earned on application monies.

d. Liquidity risk management

Liquidity risk is the risk that the Group will be unable to realise its assets on a sufficiently timely basis to meet its financial liabilities as they fall due. Liquidity risk arises from the general activities of the Group as well as in specific situations in the operation of the Clearing House. Clearing House liquidity risk is discussed in section (g).

The Group manages its general liquidity risk by maintaining adequate cash reserves, maintaining a sufficient term to maturity for its interest bearing liabilities and maintaining adequate overdraft and working capital facilities to provide it the flexibility to absorb predicted variability in cash flows. It continuously monitors forecast and actual cash flows to assist with determining the appropriate levels of cash reserves and borrowing capacity.

The table below summarises the Group's exposure to liquidity risk based on the undiscounted contractual cash flows and maturities of term debt.

Interest bearing liabilities	Total contractual cash flows \$000	Less than 1 year \$000	1-2 years \$000	3-5 years \$000	More than 5 years \$000
31 December 2019	(69,160)	(2,160)	(2,160)	(6,480)	(58,360)
31 December 2018	(71,320)	(2,160)	(2,160)	(6,480)	(60,520)

e. Accounting classification and fair values

The fair value of the financial instruments, which comprise cash and cash equivalents, funds held on behalf of third parties, receivables, trade payables, other liabilities and interest bearing liabilities, approximates their carrying amounts in these accounts, with the exception of the subordinated notes, which have a fair value of \$42.41 million (2018: \$41.53 million).

f. Energy Clearing House

NZX, through its subsidiary Energy Clearing House Limited (ECH), is the electricity market operation service provider responsible for ensuring that market participants pay or are paid the correct amount for the electricity they generated or consumed during the previous month. ECH also manages the prudential security requirements of participants, intended to ensure payers can meet their obligations in the market.

At 31 December 2019, ECH has outstanding payables and receivables for the purchase and sale of electricity, and the settlement of transmission losses. These items are not recorded in the Group's statement of financial position, because the energy market participants have accepted the risks associated with electricity settlement.

In discharging its obligations under the Electricity Industry Participation Code, ECH is required to ensure that purchasers maintain adequate levels of prudential security. Participants can comply with this obligation in a number of ways, including third party guarantees, letters of credit and deposits of cash with the ECH.

ECH holds cash deposit security on trust, and does not recognise the security provided in its statement of financial position. There was \$9,593,377 cash held from such deposits at 31 December 2019 (2018: \$10,080,277).

g. Clearing House counterparty credit risk

The Clearing House acts as a central counterparty to trades undertaken on NZX's financial products markets. Trades that enter the Clearing House are immediately novated such that the Clearing House becomes the buyer to every sell trade and the seller to every buy trade. As buy and sell settlement transactions that are novated to the Clearing House offset each other, the Group is not directly exposed to price movements in the underlying equities or derivatives.

For the period between trade date and settlement date, the Clearing House is exposed to credit risk on the buy trade as participants could default on their obligations to deliver cash in exchange for the financial products acquired by the Clearing House on the buy side of the trade.

Should the buying participant fail to deliver cash, the Clearing House must still meet its obligation to buy the financial products from the selling participant. In this instance the Clearing House is subject to liquidity risk as it may be unable to realise sufficient cash to pay for the financial products it is acquiring.

If the buying participant defaults on its obligation to deliver cash and the Clearing House acquires the financial products, it then becomes exposed to market price risk on the financial products acquired. If the price of the financial products falls, the Clearing House may incur a loss on the disposal of those financial products.

Credit risk

Counterparty credit risk is primarily managed in two ways. Firstly, through imposing requirements on participants, including minimum capital adequacy requirements, that aim to ensure that participants maintain sufficient capital and liquidity to meet their obligations to the Clearing House on an ongoing basis. Secondly, through calculating margin requirements on participants' open positions and requiring participants to post this margin as collateral as security for the trades. Margin requirements are calculated for each participant based on that participant's unsettled transactions in each financial product. Margin rates for each financial product are based on the underlying characteristics of the financial product and its price volatility. Margin requirements are calculated on a daily basis using current market prices. Each day, margin requirements are compared to collateral held and a margin call made where necessary. Participants are then required to post additional eligible collateral. Eligible collateral includes cash and financial products (including S&P/NZX 50 listed securities). Financial products provided as collateral are subject to a prudential value discount, commonly referred to as a "haircut".

In addition, counterparty credit risk for the derivatives market is also managed through the mutualised default fund. Derivatives Clearing Participants are required to make contributions to the mutualised default fund based on the level of their uncovered stress losses. Contributions are recalculated on a quarterly basis, or as required. Contributions must be provided in NZD or USD. The mutualised default fund can be applied to meeting settlement obligations of a defaulting participant on the derivatives market.

The Group is also exposed to counterparty credit risk through New Zealand Clearing Limited (NZCL) by acting as central counterparty for securities lending transactions. As NZCL is exposed to the full principal value of

each loan, NZCL requires collateral to be posted equal to 105% of the loan. All loans are revalued on a daily basis and additional collateral required where appropriate.

The Clearing House is also subject to credit risk relating to the investment of cash with financial institutions, including the Clearing House's own surplus cash and risk capital as well as the collateral and mutualised default fund contributions. The Clearing House has its own treasury policy and investment policy to manage the credit risk, including limits on the Clearing Houses' exposure to individual counterparts as follows:

- Up to \$300 million and 50% of total exposure with registered banks with a minimum credit rating of AA
- Up to \$200 million and 40% of total exposure with registered banks with a minimum credit rating of AA-
- Up to \$75 million and 20% of total exposure with registered banks with a minimum credit rating of A+
- Up to \$50 million and 20% of total exposure with registered banks with a minimum credit rating of A

The Clearing House must only invest in New Zealand registered banks, except that foreign currency can be invested in foreign bank branches that are appointed as a settlement bank.

Liquidity risk

Liquidity risk is managed through a combination of the collateral held from participants, the Clearing House's own cash reserves, a mutalised default fund applicable to the derivatives market and a specific liquidity facility which provides short term liquidity in the event of a participant default.

Collateral from the defaulting participant would be applied towards meeting the settlement obligations on the other side of the trade. The Clearing House also holds risk capital in cash and highly liquid investments, which is available to meet the obligations of defaulted transactions. Additionally, derivatives Clearing Participants provide contributions to a mutualised default fund which can be applied to meeting settlement obligations of a defaulting participant on the derivatives market. As at 31 December 2019 the Clearing House held risk capital of \$20 million (31 December 2018: \$20 million). In addition, on 30 December 2014 the Clearing House entered into an agreement with a major New Zealand fund manager to provide liquidity support in the form of \$50 million of securities or cash. Use of this facility is limited to situations where a participant default has occurred. The Clearing House may access the facility to obtain liquidity in the form of securities or cash, collateralised against cash or eligible securities provided by the Clearing House to the Fund Manager. The facility has been extended until 30 December 2020.

Market risk

The risk that the Clearing House will realise a loss from liquidating securities that it becomes the owner of as a result of a participant default is managed by maintaining sufficient participant collateral and default capital (i.e. risk capital and mutualised default fund capital) to absorb projected losses. Any losses incurred are initially funded from the defaulting participant's margin collateral. Should this be insufficient to cover the losses, then these must be met from the Clearing House's own risk capital. For the derivatives market, the mutualised default fund will also be applied, with the defaulting participants contributions used first, followed by \$10m of the Clearing House's risk capital, then non-defaulting participants contributions, before the final amount of the Clearing House's risk capital will be applied. The Clearing House regularly stress tests clearing participant exposures against the total amount of margin collateral and default capital resources.

Clearing balances outstanding

As at 31 December 2019, NZCL has a right to receive \$18.294 million (2018: \$15.532 million) from Clearing Participants and an obligation to pay \$18.294 million (2018: \$15.532 million) to Clearing Participants for the settlement of cash market transactions. All of these outstanding transactions were settled subsequent to 31 December 2019. The aggregate absolute value of all net outstanding cash market settlement transactions at 31 December 2019 was \$64.243 million (2018: \$62.341 million). In addition, at 31 December 2019, the total value of outstanding securities loans was \$3.685 million (2018: \$1.515 million) and the absolute notional value of open derivative contracts was US\$73.127 million (2018: US\$150.810 million) and NZD \$440.553 million (2018: NZD\$236.330 million).

Cash collateral held to cover these outstanding settlement positions at 31 December 2019 was \$45.461 million (2018: \$35.403 million). In addition at 31 December 2019 no collateral (2018: \$nil) was held by way of performance bonds.

At 31 December 2019, cash held in the form of mutualised default fund contributions was \$3.692 million (2018: \$5.109 million).

25. Related party transactions

a. Transactions with key management personnel

Key management personnel comprises the Group's senior management team. Key management personnel compensation comprised the following:

	2019 \$000	2018 \$000
Short-term employee benefits	4,548	4,047
Long-term employee benefits	161	161
Share-based payments	416	239
	5,125	4,447

b. Transactions with directors and other entities NZX directors are associated with

The Company regularly enters into transactions under normal commercial terms and conditions with other entities that some of the directors may sit on the board of or are employed by.

Directors fees for the year were \$418,000 (2018: \$399,000) (refer Note 10).

c. Transactions with managed funds

Management fees are received from the funds managed by wholly owned subsidary Smartshares Limited and are shown in the Income Statement as funds management revenue.

26. Contingent liabilities

In the normal course of business the company may be subject to actual or possible claims and court proceedings. There are no contingent liabilities as at 31 December 2019 (none at 31 December 2018).

27. Capital commitments

	31 December 2019 \$000	2018
Capital expenditure commitments:		
Software development	21	617
Hardware development	964	-
	985	617

28. Subsequent events

Dividend

Subsequent to balance date the board declared a final 2019 dividend (fully imputed) of 3.1 cents per share, to be paid on 20 March 2020 (with a record date of 6 March 2020).



Independent Auditor's Report

To the shareholders of NZX Limited

Report on the audit of the consolidated financial statements

Opinion

In our opinion, the accompanying consolidated financial statements of NZX Limited (the 'company') and its subsidiaries (the 'group') on pages 48 to 89:

- i. present fairly in all material respects the Group's financial position as at 31 December 2019 and its financial performance and cash flows for the year ended on that date; and
- ii. comply with New Zealand Equivalents to International Financial Reporting Standards and International Financial Reporting Standards.

We have audited the accompanying consolidated financial statements which comprise:

- the consolidated statement of financial position as at 31 December 2019;
- the consolidated statements of comprehensive income, changes in equity and cash flows for the year then ended; and
- notes, including a summary of significant accounting policies and other explanatory information.



Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (New Zealand) ('ISAs (NZ)'). We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the group in accordance with Professional and Ethical Standard 1 (Revised) Code of Ethics for Assurance Practitioners issued by the New Zealand Auditing and Assurance Standards Board and the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants ('IESBA Code'), and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

Our responsibilities under ISAs (NZ) are further described in the auditor's responsibilities for the audit of the consolidated financial statements section of our report.

Our firm has also provided other services to the group in relation to regulatory assurance. Subject to certain restrictions, partners and employees of our firm may also deal with the group on normal terms within the ordinary course of trading activities of the business of the group. These matters have not impaired our independence as auditor of the group. The firm has no other relationship with, or interest in, the group.



Materiality

The scope of our audit was influenced by our application of materiality. Materiality helped us to determine the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and on the consolidated financial statements as a whole. The materiality for the consolidated financial statements as a whole was set at \$990,000 determined with reference to a benchmark of group profit before tax. We chose the benchmark because, in our view, this is a key measure of the group's performance.





Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements in the current period. We summarise below those matters and our key audit procedures to address those matters in order that the shareholders as a body may better understand the process by which we arrived at our audit opinion. Our procedures were undertaken in the context of and solely for the purpose of our statutory audit opinion on the consolidated financial statements as a whole and we do not express discrete opinions on separate elements of the consolidated financial statements

The key audit matter

How the matter was addressed in our audit

Goodwill and other intangible assets impairment assessment (\$68 million, note 4 of the financial statements)

NZX's goodwill and other intangible assets arise from acquisitions and subsequent IT investments and relate to a number of different cash generating units (CGU's) as described in note 4 of the financial statements.

The goodwill and other intangible assets are quantitatively significant and the valuation models used in the impairment tests include a range of subjective assumptions about the future performance of the cash generating units.

We are focussed on the impairment tests for the CGUs that we considered to have a higher risk of impairment. This assessment was primarily based on the level of judgment involved in the underlying valuation model and market conditions for the relevant CGU. The CGUs we considered to be higher risk were Energy, Funds Management and Wealth Technologies.

For the CGUs we determined to have a higher risk of impairment, we performed a combination of the following procedures. We compared the cash flow forecasts to budgets and assessed forecasting accuracy by comparing current year actual performance to prior year budgets. The assumptions applied both as part of and beyond the budgets were of particular focus for our additional procedures described below.

We reviewed and tested the significant assumptions applied to the revenue forecasts including comparing the forecasts to contractually receivable amounts or forecast inflation rates and performed stress-testing over the forecasts.

We assessed the cost forecasts against forecast inflation rates and managements business plans for the CGUs.

We also compared the discount rate used to our own independently determined rate and compared terminal growth rates to long term forecast inflation rates.

As a cross check we compared the valuations to the market, using comparable businesses (where available) and their earnings or funds under management multiples.

As an overall test we also compared the Group's net assets as at 31 December 2019 of \$64 million to its market capitalisation of \$375 million at 31 December 2019, and noted implied headroom of \$311 million.

Based on our analysis, the assumptions and judgements used by the Directors in the Group's impairment assessment were within acceptable ranges and in line with the current market views. We did not identify any material issues with the carrying value of the goodwill or intangible assets.



Other information

The Directors, on behalf of the group, are responsible for the other information included in the entity's Annual Report. Other information includes the 2019 Highlights, Chair report, CEO report, Sustainability, disclosures relating to corporate governance and statutory information. Our opinion on the consolidated financial statements does not cover any other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements our responsibility is to read the other information 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 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.





Use of this independent auditor's report

This independent auditor's report is made solely to the shareholders as a body. Our audit work has been undertaken so that we might state to the shareholders those matters we are required to state to them in the independent auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the shareholders as a body for our audit work, this independent auditor's report, or any of the opinions we have formed.



Responsibilities of the Directors for the consolidated financial statements

The Directors, on behalf of the company, are responsible for:

- the preparation and fair presentation of the consolidated financial statements in accordance with generally accepted
 accounting practice in New Zealand (being New Zealand Equivalents to International Financial Reporting Standards)
 and International Financial Reporting Standards;
- implementing necessary internal control to enable the preparation of a consolidated set of financial statements that is fairly presented and free from material misstatement, whether due to fraud or error; and
- assessing the ability to continue as a going concern. This includes disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they either intend to liquidate or to cease operations, or have no realistic alternative but to do so.



Auditor's responsibilities for the audit of the consolidated financial statements

Our objective is:

- 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 independent 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 ISAs NZ will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error. They 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 these consolidated financial statements is located at the External Reporting Board (XRB) website at:

http://www.xrb.govt.nz/standards-for-assurance-practitioners/auditors-responsibilities/audit-report-1/

This description forms part of our independent auditor's report.

The engagement partner on the audit resulting in this independent auditor's report is Graeme Edwards.

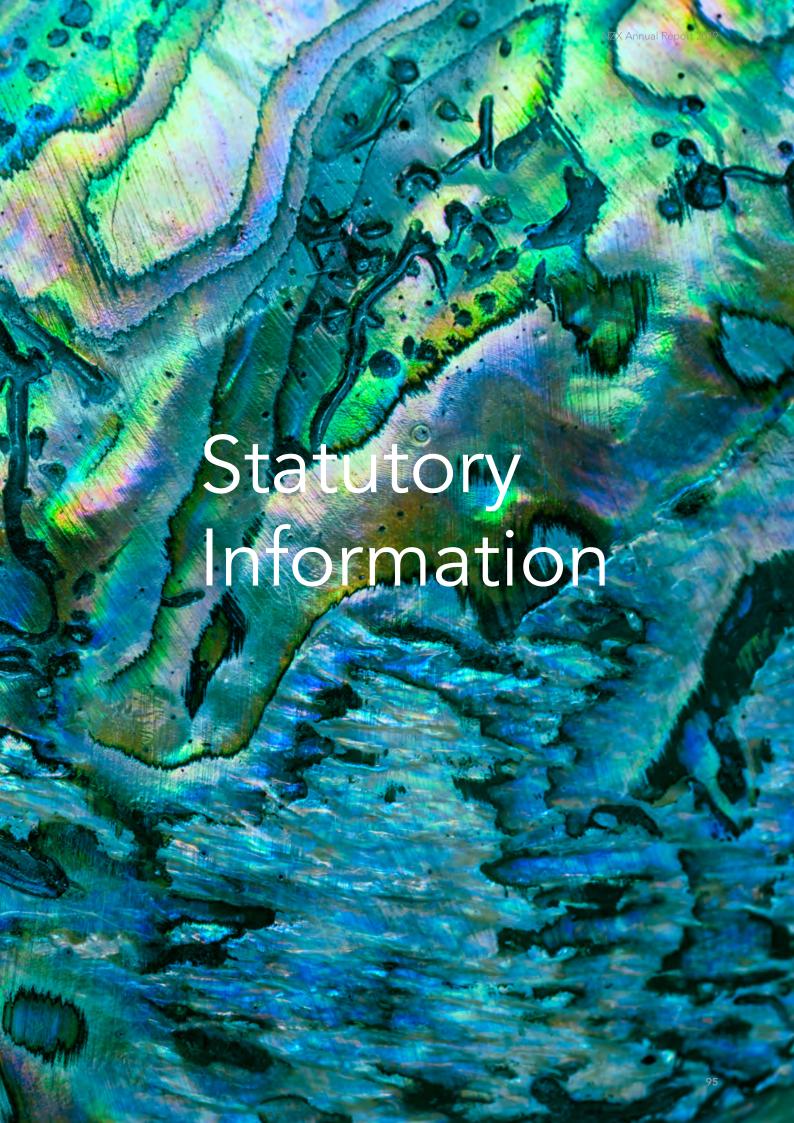
For and on behalf of

KPMG

KPMG Wellington

13 February 2020





1. Business operations

The Company's business undertakings changed during the year due to execution of the updated strategy with divestment of non-core businesses. During the year the Company disposed of its FundSource business. There have been no other changes in the core business undertakings of the Company or its subsidiaries during the year.

2. Interests register

NZX is required to maintain an interests register in which particulars of certain transactions and matters involving the directors must be recorded.

3. Directors' interests

NZX is required to maintain an interests register in which particulars of certain transactions and matters involving the directors must be recorded.

Director	Interest	Entity
Frank Aldridge	Director	Craigs Investment Partners Limited
		Related entities below
	Director	CIP Holdings Limited
	Director	CIP Nominees No 1 Limited
	Director	CIP Cash Management Nominees Limited
	Director	Craigs Investment Partners Portfolio Lending Limited
	Director	Craigs Investment Partners Superannuation Limited
	Director	DEL Management Limited
	Director	Deutsche Craigs Limited
	Director	Greenslades Limited
	Director	Hendry Nominees Limited
	Director	NZSIF Management Limited
	Director	Pohutukawa Nominees Limited
	Director	Quay Street Asset Management Limited
	Chairman	Wilsons Holding Co Pty Limited
Nigel Babbage	Director	Orbell Vineyards Limited
	Chair and CEO	Mohua Investments Limited

Director	Interest	Entity
	Director	Mohua Limited
Richard Bodman	Director	Te Ahumairangi Investment Management Limited
	Director	Forsyth Barr Cash Management Nominees Limited
	Director	Forsyth Barr Custodians Limited
Elaine Campbell¹	General Counsel and Company Secretary	Chorus Limited
Jon Macdonald	Director	Contact Energy Limited
	Director	Mitre 10 Holdings Limited
	Director	Titan Parent New Zealand Limited (Ultimate Holding Company for Trade Me Group Limited)
	Director	Trade Me Group Limited (retired from)
	Director	Old Friends Limited (retired from)
	Director	Paystation Limited (retired from)
	Director	Trade Me Comparisons Limited (retired from)
	Director	TMG Trustee Limited (retired from
	Director	Titan Acquisitionco New Zealand Limited (retired from)
	Director	Titan HoldCo New Zealand Limite (retired from)
	Director	Titan MidCo New Zealand Limited (retired from)
John McMahon²	Director and Chair	Solutions Dynamics Limited
	Director and Acting Chair	Wellington Drive Technologies Limited
James Miller	Director	Accident Compensation Corporation
	Director	Mercury NZ Limited
	Director	The New Zealand Refining Company Limited
Lindsay Wright	Director and employee	Matthews International Capital Management (Hong Kong) LLC
	Director	Matthews International Capital Management (Shanghai) LLC
	Director	Matthews International Capital Management (Singapore) LLC

Elaine Campbell was appointed as a director of NZX Limited on 18 February 2019
 John McMahon was appointed as a director of NZX Limited on 26 June 2019

4. Information used by directors

There were no notices from directors of the Company requesting to disclose or use Company Information received in their capacity as directors that would not otherwise have been available by them.

5. Directors' remuneration

The total remuneration available for directors is fixed by shareholders. The annual fee pool limit is \$435,000 and has not been increased since it was approved by shareholders at the annual meeting in April 2012. In accordance with the Listing Rules, this amount may be proportionately increased to pay additional directors an amount that does not exceed the average amount paid to directors. The number of NZX directors increased from seven to eight during the year.

Director	Role	Board fees	Total
Frank Aldridge	Director	\$50,000	\$50,000
Nigel Babbage	Director	\$50,000	\$50,000
Richard Bodman	Director	\$50,000	\$50,000
Elaine Campbell ¹	Director	\$43,333	\$43,333
Jon Macdonald	Director	\$50,000	\$50,000
John McMahon ²	Director	\$25,000	\$25,000
James Miller	Chair	\$100,000	\$100,000
Lindsay Wright	Director	\$50,000	\$50,000
Total		\$418,333	\$418,333

Elaine Campbell was appointed as a director of NZX Limited on 18 February 2019
 John McMahon was appointed as a director of NZX Limited on 26 June 2019

6. Indemnification and insurance of directors and officers

NZX pays premiums in respect of directors' liability insurance. The policies do not specify a premium for individuals.

The insurance provides cover against costs and expenses involved in defending legal actions and any damages or judgments awarded or entered against the individual, settlements negotiated and any legal costs or expenses awarded against the individual arising from a liability to persons (other than the company or a related body corporate) incurred in their position as a director unless the conduct involves

a wilful breach of duty, improper use of inside information or position to gain any profit or advantage or any criminal, dishonest, fraudulent or malicious acts or omissions or any knowing or wilful violation of any statute or regulation.

NZX has granted indemnities to NZX directors and NZX-appointed directors of operating subsidiaries in relation to potential liabilities and costs they may incur for acts or omissions in their role as a director of NZX or an NZX subsidiary. Similar exclusions to those described in the previous paragraph on insurance apply.

7. Subsidiary company directors

The directors of all NZX subsidiaries during the year are as follows

Clearing House entities

New Zealand Clearing and Depository Corporation Limited

- Mark Peterson
- Benjamin Phillips
- Graham Law

New Zealand Clearing Limited

• Mark Peterson

New Zealand Depository Limited

Mark Peterson

New Zealand Depository Nominee Limited

• Benjamin Phillips

Other NZX subsidiaries

Energy Clearing House Limited

• Benjamin Phillips

Smartshares Limited

- John Williams (independent director)
- Guy Elliffe (independent director)
- Mark Peterson
- Lindsay Wright

NZX Wealth Technologies Limited

- Richard Bodman
- Mark Peterson

- Graham Law
- John McMahon
- Kathryn Jaggard

NZX Rural Limited (subsidiary amalgamated with NZX Limited as at 31 May 2019)

• Jeremy Anderson

New Zealand Exchange Limited

• Hamish Macdonald

NZX Executive Share Plan Nominees Limited

• Mark Reese (independent director)

NZX Holding No. 4 Limited

Hamish Macdonald

NZX Executive Share Scheme Nominee Limited

• Mark Reese (independent director)

TZ1 Limited (subsidiary disposed of as at 30 January 2019)

• Shane Dinnan

The directors of NZX's subsidiary companies who are not NZX employees or directors of NZX Limited, have declared interests in the following entities:

Subsidiary director (Non- NZX directors)	Interest	Entity
Guy Elliffe	Corporate Governance	Accident Compensation Corporation
	Member of Investment Committee	Todd Corporation Limited
Kathryn Jaggard	Consultant	NZX Limited
Mark Reese	Partner	Chapman Tripp
John Williams	Investment Manager	Trusts Investments Management Limited

NZX employees and directors do not recieve additional renumeration for acting as directors of subsidiary companies.

The total amount of renumeration and other benefits to which independent directors of an NZX subsidiary was entitled during 2019 is as follows:

Subsidiary director (Non-NZX directors)	Remuneration
Guy Elliffe	\$45,000
Kathryn Jaggard¹	\$2,722
John Williams	\$45,000
Total	\$92,722

¹ Kathryn Jaggard was appointed as a director of NZX Wealth Technologies Limited on 12 November 2019

8. Donations

During the year NZX made donations to charitable organisations of \$8,000. NZX does not make political donations.

9. Employee remuneration

The table below sets out the number of NZX Group employees and former employees who received remuneration and other benefits, including non-cash benefits and share-based remuneration in excess of \$100,000 per annum. This information is based on all amounts received by the employees during the calendar year and therefore includes bonus payments that relate to the 2018 year (where applicable). Directors are not included in the table below. Their remuneration is set out separately in section 5.

Remuneration range	Employees
100,000 – 109,999	18
110,000 – 119,999	10
120,000 – 129,999	17
130,000 – 139,999	9
140,000 – 149,999	10
150,000 – 159,999	2
160,000 – 169,999	4
170,000 – 179,999	1
180,000 – 189,999	1
190,000 – 199,999	6
200,000 – 209,999	2
210,000 – 219,999	4
220,000 – 229,999	2
230,000 – 239,999	2
250,000 – 259,999	1
260,000 – 269,999	1

270,000 - 279,999	1
280,000 - 289,999	1
320,000 - 329,999	3
330,000 - 339,999	2
350,000 - 359,999	1
800,000 – 809,999	1

10. Director transactions in securities of the parent company

Director	Securities held (legally and beneficially) at 31 December 2019 (Subordinated Notes)	Securities held (legally and beneficially) at 31 December 2019 (Ordinary Shares)
Frank Aldridge	Nil	50,000
Nigel Babbage	Nil	11,700,000
Richard Bodman	15,000	10,297
Elaine Campbell	Nil	10,000
Jon Macdonald	47,000	75,000
John McMahon	Nil	Nil
James Miller	8,000	120,000
Lindsay Wright ¹	Nil	Nil

¹ As part of the conflict management arrangements in place for her role with Matthews International Capital Management (Hong Kong) LLC, Lindsay Wright does not hold securities in NZX.

11. Auditors

The external auditor of the parent company and the Group is KPMG. They provide audit and other services, for which their remuneration in 2019 was as follows:

	Group \$000
Audit of the financial statements	156
Other audit related fees	44
Total	200

Other audit-related fees relate to operational audit of NZCDC, the annual depository assurance engagement of New Zealand Depository Limited and the Net Tangible Assets procedures engagement of Smartshares Limited.

12. Top 20 security holders

The following table shows the names and holdings of the 20 largest holders of NZX ordinary shares as at 31 December 2019:

Investor name	Shares held	% of issued shares
HSBC Nominees (New Zealand) Limited	21,764,881	7.89
BNP Paribas Nominees (NZ) Limited	18,006,268	6.53
Accident Compensation Corporation	13,642,427	4.95
Citibank Nominees (New Zealand) Limited	12,765,084	4.63
Rome Partnership	12,396,695	4.5
Nigel Babbage & Philippa Babbage	11,700,000	4.24
Premier Nominees Limited	9,653,464	3.5
HSBC Nominees (New Zealand) Limited	9,445,880	3.43
FNZ Custodians Limited	8,105,172	2.94
David Mitchell Odlin	6,189,787	2.25
JPMORGAN Chase Bank	6,170,385	2.24
Mirrabooka Investments Limited	4,494,115	1.63
Michael Daniel & Nigel Burton & Michael Benjamin	3,900,000	1.41
Forsyth Barr Custodians Limited	3,710,842	1.35
BNP Paribas Nominees (NZ) Limited	3,452,900	1.25
New Zealand Depository Nominee Limited	3,367,700	1.22
Custodial Services Limited	3,010,275	1.09
Custodial Services Limited	2,843,517	1.03
Michael Daniel & Elizabeth Benjamin & Michael Benjamin	2,500,000	0.91
Cogent Nominees (NZ) Limited	2,134,714	0.77

The following table shows the names and holdings of the 20 largest holders of NZX Subordinated Notes as at 31 December 2019:

Investor Name	Notes held	% of issued notes
Forsyth Barr Custodians Limited	8,681,000	21.70
FNZ Custodians Limited	5,594,000	13.99
JBWere (NZ) Nominees Limited	2,751,000	6.88
New Zealand Permanent Trustees Limited	2,680,000	6.7

Investor Name	Notes held	% of issued notes
TEA Custodians Limited	1,400,000	3.5
Investment Custodial Services Limited	1,196,000	2.99
Custodial Services Limited	1,102,000	2.76
Custodial Services Limited	1,056,000	2.64
Graeme Beckett & Janine Beckett & Alan Paterson	917,000	2.29
Custodial Services Limited	802,000	2.01
Forsyth Barr Custodians Limited	423,000	1.06
Custodial Services Limited	359,000	0.9
Forsyth Barr Custodians Limited	258,000	0.65
Bank of New Zealand Wellington Treasury Operations	241,000	0.6
Rodney Callender	200,000	0.5
ENFT Limited	150,000	0.38
Custodial Services Limited	135,000	0.34
Forsyth Barr Custodians Limited	127,000	0.32
Custodial Services Limited	101,000	0.25
Craig Thompson	100,000	0.25

13. Spread of ordinary shareholders as at 31 December 2019

The following table shows the spread of NZX Ordinary Shares as at 31 December 2019:

	SHAREHOLDERS		SHARES	
Size of holding	Number %		Number	%
1 - 1.000	442	11.13	270,149 0.	.10
1,001 - 5,000	725	18.26	2,271,652 0.	.82
5,001 - 10,000	926	23.32	7,446,769 2.	.70
10,001 - 50,000	1,499	37.76	33,840,957 12.	.28
50,001 - 100 000	211	5.31	15,216,248 5.	.52
Greater than 100,000	167	4.21	216,638,503 78.	.58
Total	3,970	100	275,684,278 1	00

The following table shows the spread of NZX Subordinated Notes as at 31 December 2019:

	Noteholders		NOTES	
Size of holding	Number	%	Number	%
1 - 1,000	0	0	-	0
1,001 - 5,000	70	11.61	350,000	0.88
5,001 - 10,000	164	27.20	1,485,000	3.71
10,001 - 50,000	328	54.39	8,077,000	20.19
50,001 - 100 000	24	3.98	1,874,000	4.68
Greater than 100,000	17	2.82	28,214,000	70.54
Total	603	100	40,000,000	100

14. Substantial product holders

The following information is given pursuant to section 293 of the Financial Markets Conduct Act 2013 (FMCA). According to NZX's records and disclosures made pursuant to section 280 (1)(b) of the FMCA, the following were substantial product holders in NZX as at 31 December 2019. The total number of voting securities on issue as at 31 December 2019 was 275,684,278.

	Class	Relevant Interest	% of Issued shares
Aberdeen Standard Investments (Asia) Pty	Ordinary shares	24,378,860	9.1
Highclere International Investors LLP	Ordinary shares	16,183,718	6.03

15. Waivers from listing rules and independent director certificates

Not applicable.

16. Securities issued by NZX

NZX's ordinary shares are quoted on the NZX Main Board. Shares issued under the various employee share schemes, such as the NZX Employee Share Plan – Team and Results (implemented in May 2010), are subject to certain transfer conditions and entitlement criteria. For as long as shares issued under these schemes are subject to these restrictions they are not quoted on any market and will not be quoted on any market until such time as they vest in the relevant participants. In 2018 NZX introduced a replacement employee share scheme and CEO share scheme

based on the issue of performance rights, which are subject to certain entitlement criteria before performance rights may vest and the holder can acquire shares in NZX. For as long as performance rights issued under these schemes are subject to these restrictions they, and any shares which may be issued following the exercise of performance rights, are not quoted on any market and will not be quoted on any market until such time as they vest in the relevant participants.

In 2018 NZX issued \$40 million of unsecured, subordinated notes with a coupon rate of 5.4%. These notes are quoted and traded on the NZX Debt Market as NZX010.

This report is signed by and on behalf of the board of NZX Limited by:

James MillerChair of the Board

Lindsay WrightChair of the Audit and
Risk Committee

CORPORATE DIRECTORY

Getting in touch

Board of Directors

James Miller (Chair)

Frank Aldridge

Nigel Babbage

Richard Bodman

Elaine Campbell

Jon Macdonald

John McMahon

Lindsay Wright

Chief Executive Officer

Mark Peterson

Chief Financial Officer

Graham Law

General Counsel and Company Secretary

Hamish Macdonald

Registered Office

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Auditors

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Share Register

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