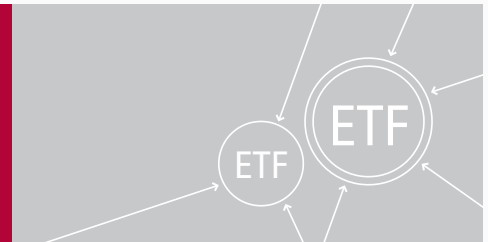




Vanguard®

US SEC Filing Announcement for the Vanguard® Exchange Traded Funds

1 September 2020



Vanguard Investments Australia Ltd announces the following:

| ETF | ASX CODE | ANNOUNCEMENT |
|--|-------------|------------------------------|
| Vanguard® US Total Market Shares Index ETF | VTX | US SEC Filing of Form N-CSRS |

The Vanguard Group, Inc. in the US has completed and filed Form N-CSRS (certified semi-annual shareholder report filed on Form N-CSRS) for Registered Investment Companies with the Securities and Exchange Commission (SEC) in the US as part of the regulatory requirements of the SEC.

Further details of the SEC requirements for this filing are available at:

- www.sec.gov/about/forms/formn-csr.pdf

Further Information

If you have any queries on Vanguard ETFs, please visit vanguard.com.au

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Vanguard Investments Australia Ltd, Level 13, 130 Lonsdale Street, Melbourne VIC 3000 vanguard.com.au 1300 655 888

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT
OF
REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number: **811-02652**

Name of Registrant: **Vanguard Index Funds**
Address of Registrant: **P.O. Box 2600**
Valley Forge, PA 19482

Name and address of agent for service: **Anne E. Robinson, Esquire**
P.O. Box 876
Valley Forge, PA 19482

Registrant's telephone number, including area code: **(610) 669-1000**

Date of fiscal year end: December 31

Date of reporting period: January 1, 2020—June 30, 2020



Semiannual Report | June 30, 2020

Vanguard Total Stock Market Index Fund

See the inside front cover for important information about access to your fund's annual and semiannual shareholder reports.

Important information about access to shareholder reports

Beginning on January 1, 2021, as permitted by regulations adopted by the Securities and Exchange Commission, paper copies of your fund’s annual and semiannual shareholder reports will no longer be sent to you by mail, unless you specifically request them. Instead, you will be notified by mail each time a report is posted on the website and will be provided with a link to access the report.

If you have already elected to receive shareholder reports electronically, you will not be affected by this change and do not need to take any action. You may elect to receive shareholder reports and other communications from the fund electronically by contacting your financial intermediary (such as a broker-dealer or bank) or, if you invest directly with the fund, by calling Vanguard at one of the phone numbers on the back cover of this report or by logging on to vanguard.com.

You may elect to receive paper copies of all future shareholder reports free of charge. If you invest through a financial intermediary, you can contact the intermediary to request that you continue to receive paper copies. If you invest directly with the fund, you can call Vanguard at one of the phone numbers on the back cover of this report or log on to vanguard.com. Your election to receive paper copies will apply to all the funds you hold through an intermediary or directly with Vanguard.

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About Your Fund’s Expenses

As a shareholder of the fund, you incur ongoing costs, which include costs for portfolio management, administrative services, and shareholder reports (like this one), among others. Operating expenses, which are deducted from a fund’s gross income, directly reduce the investment return of the fund.

A fund’s expenses are expressed as a percentage of its average net assets. This figure is known as the expense ratio. The following examples are intended to help you understand the ongoing costs (in dollars) of investing in your fund and to compare these costs with those of other mutual funds. The examples are based on an investment of \$1,000 made at the beginning of the period shown and held for the entire period.

The accompanying table illustrates your fund’s costs in two ways:

- **Based on actual fund return.** This section helps you to estimate the actual expenses that you paid over the period. The “Ending Account Value” shown is derived from the fund’s actual return, and the third column shows the dollar amount that would have been paid by an investor who started with \$1,000 in the fund. You may use the information here, together with the amount you invested, to estimate the expenses that you paid over the period.

To do so, simply divide your account value by \$1,000 (for example, an \$8,600 account value divided by \$1,000 = 8.6), then multiply the result by the number given for your fund under the heading “Expenses Paid During Period.”

- **Based on hypothetical 5% yearly return.** This section is intended to help you compare your fund’s costs with those of other mutual funds. It assumes that the fund had a yearly return of 5% before expenses, but that the expense ratio is unchanged. In this case—because the return used is not the fund’s actual return—the results do not apply to your investment. The example is useful in making comparisons because the Securities and Exchange Commission requires all mutual funds to calculate expenses based on a 5% return. You can assess your fund’s costs by comparing this hypothetical example with the hypothetical examples that appear in shareholder reports of other funds.

Note that the expenses shown in the table are meant to highlight and help you compare *ongoing* costs only and do not reflect transaction costs incurred by the fund for buying and selling securities. Further, the expenses do not include any purchase, redemption, or account service fees described in the fund prospectus. If such fees were applied to your account, your costs would be higher. Your fund does not carry a “sales load.”

The calculations assume no shares were bought or sold during the period. Your actual costs may have been higher or lower, depending on the amount of your investment and the timing of any purchases or redemptions.

You can find more information about the fund’s expenses, including annual expense ratios, in the Financial Statements section of this report. For additional information on operating expenses and other shareholder costs, please refer to your fund’s current prospectus.

Six Months Ended June 30, 2020

| | Beginning Account Value 12/31/2019 | Ending Account Value 6/30/2020 | Expenses Paid During Period |
|---|--|--------------------------------------|-----------------------------------|
| Based on Actual Fund Return | | | |
| Total Stock Market Index Fund | | | |
| Investor Shares | \$1,000.00 | \$ 965.60 | \$0.68 |
| ETF Shares | 1,000.00 | 965.90 | 0.15 |
| Admiral™ Shares | 1,000.00 | 966.00 | 0.20 |
| Institutional Shares | 1,000.00 | 966.20 | 0.15 |
| Institutional Plus Shares | 1,000.00 | 966.20 | 0.10 |
| Institutional Select Shares | 1,000.00 | 966.30 | 0.05 |
| Based on Hypothetical 5% Yearly Return | | | |
| Total Stock Market Index Fund | | | |
| Investor Shares | \$1,000.00 | \$1,024.17 | \$0.70 |
| ETF Shares | 1,000.00 | 1,024.71 | 0.15 |
| Admiral Shares | 1,000.00 | 1,024.66 | 0.20 |
| Institutional Shares | 1,000.00 | 1,024.71 | 0.15 |
| Institutional Plus Shares | 1,000.00 | 1,024.76 | 0.10 |
| Institutional Select Shares | 1,000.00 | 1,024.81 | 0.05 |

The calculations are based on expenses incurred in the most recent six-month period. The fund's annualized six-month expense ratios for that period are: 0.14% for Investor Shares, 0.03% for ETF Shares, 0.04% for Admiral Shares, 0.03% for Institutional Shares, 0.02% for Institutional Plus Shares, and 0.01% for Institutional Select Shares. The dollar amounts shown as "Expenses Paid" are equal to the annualized expense ratio multiplied by the average account value over the period, multiplied by the number of days in the most recent six-month period, then divided by the number of days in the most recent 12-month period (182/366).

Total Stock Market Index Fund

Fund Allocation

As of June 30, 2020

| | |
|--------------------|-------|
| Basic Materials | 2.1 % |
| Consumer Goods | 7.9 |
| Consumer Services | 14.1 |
| Financials | 16.3 |
| Health Care | 14.0 |
| Industrials | 11.7 |
| Oil & Gas | 2.7 |
| Other | 0.0 |
| Technology | 26.4 |
| Telecommunications | 1.8 |
| Utilities | 3.0 |

The table reflects the fund's investments, except for short-term investments and derivatives. Sector categories are based on the Industry Classification Benchmark ("ICB"), except for the "Other" category (if applicable), which includes securities that have not been provided an ICB classification as of the effective reporting period.

The fund may invest in derivatives (such as futures and swap contracts) for various reasons, including, but not limited to, attempting to remain fully invested and tracking its target index as closely as possible.

The Industry Classification Benchmark ("ICB") is owned by FTSE. FTSE does not accept any liability to any person for any loss or damage arising out of any error or omission in the ICB.

Financial Statements (unaudited)

Schedule of Investments—Investments Summary

As of June 30, 2020

This Statement summarizes the fund's holdings by asset type. Details are reported for each of the fund's 50 largest individual holdings and for investments that, in total for any issuer, represent more than 1% of the fund's net assets. The total value of smaller holdings is reported as a single amount within each category.

The fund files its complete schedule of portfolio holdings with the Securities and Exchange Commission (SEC) four times in each fiscal year. For the second and fourth quarters the complete list of the fund's holdings is available on vanguard.com and on Form N-CSR, or you can have it mailed to you without charge by calling 800-662-7447. For the first and third quarters of each fiscal year, the complete list of the fund's holdings is available as an exhibit to its reports on Form N-PORT. The fund's Form N-CSR and Form N-PORT reports are available on the SEC's website at www.sec.gov.

| | Shares | Market Value* (\$000) | Percentage of Net Assets |
|--|-------------|--------------------------|--------------------------------|
| Common Stocks | | | |
| †Basic Materials*, ¹ | | 18,216,496 | 2.1% |
| Consumer Goods | | | |
| Procter & Gamble Co. | 70,566,225 | 8,437,604 | 1.0% |
| PepsiCo Inc. | 39,549,628 | 5,230,834 | 0.6% |
| Coca-Cola Co. | 110,173,647 | 4,922,559 | 0.6% |
| Tesla Inc.* | 4,229,915 | 4,567,505 | 0.5% |
| NIKE Inc. Class B | 35,341,023 | 3,465,187 | 0.4% |
| Lifevantage Corp.* ² | 792,935 | 10,721 | 0.0% |
| † Consumer Goods—Other*, ¹ | | 42,271,075 | 4.8% |
| | | 68,905,485 | 7.9% |
| Consumer Services | | | |
| Amazon.com Inc.* | 12,084,402 | 33,338,690 | 3.8% |
| Home Depot Inc. | 30,655,371 | 7,679,477 | 0.9% |
| Walt Disney Co. | 51,482,023 | 5,740,760 | 0.7% |
| Netflix Inc.* | 12,536,027 | 5,704,394 | 0.7% |
| Comcast Corp. Class A | 129,812,324 | 5,060,084 | 0.6% |
| Walmart Inc. | 40,386,945 | 4,837,548 | 0.6% |
| McDonald's Corp. | 21,188,546 | 3,908,651 | 0.5% |
| Costco Wholesale Corp. | 12,586,759 | 3,816,431 | 0.5% |
| † Consumer Services—Other*, ^{1,3} | | 52,511,355 | 5.7% |
| | | 122,597,390 | 14.0% |
| Financials | | | |
| Berkshire Hathaway Inc. Class B* | 52,329,990 | 9,341,427 | 1.1% |
| Visa Inc. Class A | 47,860,095 | 9,245,135 | 1.1% |
| Mastercard Inc. Class A | 25,472,132 | 7,532,109 | 0.9% |
| JPMorgan Chase & Co. | 76,899,506 | 7,233,168 | 0.8% |
| Bank of America Corp. | 220,472,752 | 5,236,228 | 0.6% |
| American Tower Corp. | 12,635,323 | 3,266,736 | 0.4% |
| Berkshire Hathaway Inc. Class A* | 1,041 | 278,259 | 0.1% |

Total Stock Market Index Fund

| | Shares | Market Value* (\$000) | Percentage of Net Assets |
|--|-------------|--------------------------|--------------------------|
| Great Ajax Corp. ² | 1,760,884 | 16,200 | 0.0% |
| Bluerock Residential Growth REIT Inc. Class A ² | 1,556,389 | 12,576 | 0.0% |
| CTO Realty Growth Inc. ² | 278,409 | 10,997 | 0.0% |
| Safeguard Scientifics Inc. ^{1,2} | 1,052,202 | 7,365 | 0.0% |
| Condor Hospitality Trust Inc. ² | 832,909 | 3,415 | 0.0% |
| † Financials—Other ^{*,1,3} | | 99,143,031 | 11.2% |
| | | 141,326,646 | 16.2% |
| Health Care | | | |
| Johnson & Johnson | 75,101,148 | 10,561,475 | 1.2% |
| UnitedHealth Group Inc. | 27,031,264 | 7,972,871 | 0.9% |
| Merck & Co. Inc. | 71,955,249 | 5,564,299 | 0.7% |
| Pfizer Inc. | 158,351,663 | 5,178,099 | 0.6% |
| AbbVie Inc. | 50,231,155 | 4,931,695 | 0.6% |
| Abbott Laboratories | 50,417,978 | 4,609,716 | 0.5% |
| Thermo Fisher Scientific Inc. | 11,256,888 | 4,078,821 | 0.5% |
| Eli Lilly & Co. | 24,537,582 | 4,028,580 | 0.5% |
| Amgen Inc. | 16,766,820 | 3,954,622 | 0.5% |
| Bristol-Myers Squibb Co. | 64,501,569 | 3,792,692 | 0.5% |
| Medtronic plc | 38,197,899 | 3,502,747 | 0.4% |
| Electromed Inc. ^{*,2} | 492,829 | 7,585 | 0.0% |
| Pulmatrix Inc. ^{*,1,2} | 1,311,500 | 2,256 | 0.0% |
| † Health Care—Other ^{*,1,3} | | 63,637,567 | 7.1% |
| | | 121,823,025 | 14.0% |
| Industrials | | | |
| PayPal Holdings Inc.* | 33,465,397 | 5,830,676 | 0.7% |
| Accenture plc Class A | 18,155,518 | 3,898,353 | 0.5% |
| Union Pacific Corp. | 19,340,179 | 3,269,844 | 0.4% |
| Hurco Cos. Inc. ² | 432,678 | 12,102 | 0.0% |
| Transcat Inc. ^{*,2} | 417,984 | 10,809 | 0.0% |
| LSI Industries Inc. ² | 1,357,970 | 8,786 | 0.0% |
| Issuer Direct Corp. ^{*,2} | 276,424 | 2,806 | 0.0% |
| Perma-Pipe International Holdings Inc. ^{*,2} | 472,430 | 2,655 | 0.0% |
| † Industrials—Other ^{*,1,3,4} | | 88,231,465 | 10.0% |
| | | 101,267,496 | 11.6% |
| Oil & Gas | | | |
| Exxon Mobil Corp. | 120,495,109 | 5,388,541 | 0.6% |
| Chevron Corp. | 53,206,224 | 4,747,591 | 0.6% |
| † Oil & Gas—Other ^{*,1,3} | | 12,911,702 | 1.4% |
| | | 23,047,834 | 2.6% |
| †Other ^{*,1,3,5} | | 5,790 | 0.0% |
| Technology | | | |
| Microsoft Corp. | 216,149,784 | 43,988,643 | 5.1% |
| Apple Inc. | 111,188,667 | 40,561,626 | 4.7% |
| Facebook Inc. Class A* | 68,537,349 | 15,562,776 | 1.8% |
| Alphabet Inc. Class A* | 8,528,568 | 12,093,936 | 1.4% |
| Alphabet Inc. Class C* | 8,167,988 | 11,546,350 | 1.3% |
| Intel Corp. | 120,678,893 | 7,220,218 | 0.8% |
| NVIDIA Corp. | 16,651,446 | 6,326,051 | 0.7% |
| Adobe Inc.* | 13,730,115 | 5,976,856 | 0.7% |
| Cisco Systems Inc. | 108,307,955 | 5,051,483 | 0.6% |
| salesforce.com Inc.* | 24,337,193 | 4,559,086 | 0.5% |
| Broadcom Inc. | 10,825,581 | 3,416,662 | 0.4% |

Total Stock Market Index Fund

| | Shares | Market Value* (\$000) | Percentage of Net Assets |
|---|-------------|--------------------------|--------------------------------|
| Texas Instruments Inc. | 26,159,582 | 3,321,482 | 0.4% |
| Genasys Inc.*. ² | 2,025,454 | 9,844 | 0.0% |
| GlobalSCAPE Inc. ² | 967,139 | 9,430 | 0.0% |
| KVH Industries Inc.*. ² | 1,007,566 | 8,998 | 0.0% |
| Computer Task Group Inc.*. ² | 899,921 | 3,627 | 0.0% |
| † Technology—Other*. ^{1,3} | | 69,894,464 | 7.9% |
| | | 229,551,532 | 26.3% |
| Telecommunications | | | |
| Verizon Communications Inc. | 117,952,814 | 6,502,739 | 0.8% |
| AT&T Inc. | 203,087,768 | 6,139,343 | 0.7% |
| † Telecommunications—Other*. ¹ | | 2,757,180 | 0.3% |
| | | 15,399,262 | 1.8% |
| Utilities | | | |
| NextEra Energy Inc. | 13,949,175 | 3,350,172 | 0.4% |
| Pure Cycle Corp.*. ² | 1,775,084 | 16,313 | 0.0% |
| † Utilities—Other*. ¹ | | 22,418,551 | 2.6% |
| | | 25,785,036 | 3.0% |
| Total Common Stocks (Cost \$520,498,090) | | 867,925,992 | 99.5% |
| †Preferred Stocks (Cost \$3,291) | | 3,296 | 0.0% |

Coupon

Temporary Cash Investments

Money Market Fund

| | | | | |
|--|--------|------------|--------------------|---------------|
| Vanguard Market Liquidity Fund ^{6,7} | 0.227% | 81,668,287 | 8,166,829 | 1.0% |
| †U.S. Government and Agency Obligations ⁸ | | | 308,935 | 0.0% |
| Total Temporary Cash Investments (Cost \$8,474,914) | | | 8,475,764 | 1.0% |
| Total Investments (Cost \$528,976,295) | | | 876,405,052 | 100.5% |
| Other Assets and Liabilities—Net | | | (4,158,062) | (0.5%) |
| Net Assets | | | 872,246,990 | 100.0% |

Cost is in \$000.

• See Note A in Notes to Financial Statements.

† Represents the aggregate value, by category, of securities that are not among the 50 largest holdings and, in total for any issuer, represent 1% or less of net assets.

* Includes non-income producing security.

1 Includes partial security positions on loan to broker-dealers. The total value of securities on loan is \$4,711,200,000.

2 Considered an affiliated company of the fund as the fund owns more than 5% of the outstanding voting securities of such company.

3 Certain securities are valued using significant unobservable inputs.

4 Certain securities are exempt from registration under Rule 144A of the Securities Act of 1933. Such securities may be sold in transactions exempt from registration, normally to qualified institutional buyers. At June 30, 2020, the aggregate value of these securities was \$52,776,000, representing 0.0% of net assets.

5 "Other" represents securities that are not classified by the fund's benchmark index.

6 Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.

7 Collateral of \$5,021,389,000 was received for securities on loan, of which \$4,868,457,000 is held in Vanguard Market Liquidity Fund and \$152,932,000 is held in cash.

8 Securities with a value of \$273,719,000 have been segregated as initial margin for open futures contracts.

REIT—Real Estate Investment Trust.

Total Stock Market Index Fund

Derivative Financial Instruments Outstanding as of Period End

Futures Contracts

| | | | | (\$000) |
|------------------------------|----------------|----------------------------------|-----------------|--|
| | Expiration | Number of Long (Short) Contracts | Notional Amount | Value and Unrealized Appreciation (Depreciation) |
| Long Futures Contracts | | | | |
| E-mini Russell 2000 Index | September 2020 | 1,914 | 137,578 | 5,540 |
| E-mini S&P 500 Index | September 2020 | 22,248 | 3,437,539 | 59,707 |
| E-mini S&P Mid-Cap 400 Index | September 2020 | 240 | 42,698 | 611 |
| | | | | 65,858 |

Over-the-Counter Total Return Swaps

| Reference Entity | Termination Date | Counterparty | Notional Amount (\$000) | Floating Interest Rate Received (Paid) ¹ (%) | Value and Unrealized Appreciation (\$000) | Value and Unrealized Depreciation (\$000) |
|------------------------------|------------------|--------------|-------------------------|---|---|---|
| Bank of America Corp. | 2/2/21 | GSI | 50,300 | (0.194) | — | (2,451) |
| JPMorgan Chase & Co. | 9/2/21 | BOANA | 544,936 | (0.183) | — | (18,468) |
| Raymond James Financial Inc. | 9/2/20 | BOANA | 31,869 | (0.183) | — | (52) |
| VICI Properties Inc. | 2/2/21 | GSI | 22,830 | (0.194) | — | (2,344) |
| Visa Inc. | 9/2/20 | BOANA | 43,929 | (0.183) | — | (400) |
| Vistra Corp. | 9/2/20 | BOANA | 6,557 | (0.194) | — | (599) |
| Vistra Corp. | 9/2/20 | BOANA | 7,932 | (0.190) | — | (485) |
| Vistra Corp. | 9/2/20 | BOANA | 6,878 | (0.185) | — | (361) |
| | | | | | — | (25,160) |

1 Based on 1-month USD London Interbank Offered Rate (LIBOR) as of the most recent payment date. Floating interest payment received/paid monthly.

BOANA—Bank of America, N.A.

GSI—Goldman Sachs International.

Statement of Assets and Liabilities

As of June 30, 2020

| (\$000s, except shares and per-share amounts) | Amount |
|---|--------------------|
| Assets | |
| Investments in Securities, at Value | |
| Unaffiliated Issuers (Cost \$520,639,004) | 868,081,738 |
| Affiliated Issuers (Cost \$8,337,291) | 8,323,314 |
| Total Investments in Securities | 876,405,052 |
| Investment in Vanguard | 39,105 |
| Cash | 317,206 |
| Cash Collateral Pledged—Over-the-Counter Swap Contracts | 32,670 |
| Receivables for Investment Securities Sold | 15,413 |
| Receivables for Accrued Income | 697,433 |
| Receivables for Capital Shares Issued | 485,223 |
| Variation Margin Receivable—Futures Contracts | 46,276 |
| Total Assets | 878,038,378 |
| Liabilities | |
| Payables for Investment Securities Purchased | 241,010 |
| Collateral for Securities on Loan | 5,021,389 |
| Payables for Capital Shares Redeemed | 482,867 |
| Payables to Vanguard | 20,962 |
| Unrealized Depreciation—Over-the-Counter Swap Contracts | 25,160 |
| Total Liabilities | 5,791,388 |
| Net Assets | 872,246,990 |

Total Stock Market Index Fund

Statement of Assets and Liabilities (continued)

At June 30, 2020, net assets consisted of:

| (\$000s, except shares and per-share amounts) | Amount |
|---|--------------------|
| Paid-in Capital | 529,312,504 |
| Total Distributable Earnings (Loss) | 342,934,486 |
| Net Assets | 872,246,990 |

Investor Shares—Net Assets

| | |
|--|----------------|
| Applicable to 1,738,773,671 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) | 132,571,429 |
| Net Asset Value Per Share—Investor Shares | \$76.24 |

ETF Shares—Net Assets

| | |
|--|-----------------|
| Applicable to 915,187,085 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) | 143,380,318 |
| Net Asset Value Per Share—ETF Shares | \$156.67 |

Admiral Shares—Net Assets

| | |
|--|----------------|
| Applicable to 3,098,105,697 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) | 236,273,805 |
| Net Asset Value Per Share—Admiral Shares | \$76.26 |

Institutional Shares—Net Assets

| | |
|--|----------------|
| Applicable to 1,970,524,371 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) | 150,306,106 |
| Net Asset Value Per Share—Institutional Shares | \$76.28 |

Institutional Plus Shares—Net Assets

| | |
|--|-----------------|
| Applicable to 1,288,373,809 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) | 184,292,490 |
| Net Asset Value Per Share—Institutional Plus Shares | \$143.04 |

Institutional Select Shares—Net Assets

| | |
|--|-----------------|
| Applicable to 169,381,007 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) | 25,422,842 |
| Net Asset Value Per Share—Institutional Select Shares | \$150.09 |

See accompanying Notes, which are an integral part of the Financial Statements.

Statement of Operations

Six Months Ended
June 30, 2020

(\$000)

| | |
|--|------------------|
| Investment Income | |
| Income | |
| Dividends—Unaffiliated Issuers | 7,751,447 |
| Dividends—Affiliated Issuers | 848 |
| Interest—Unaffiliated Issuers | 1,021 |
| Interest—Affiliated Issuers | 17,163 |
| Securities Lending—Net | 84,199 |
| Total Income | 7,854,678 |
| Expenses | |
| The Vanguard Group—Note B | |
| Investment Advisory Services | 8,970 |
| Management and Administrative—Investor Shares | 82,681 |
| Management and Administrative—ETF Shares | 15,011 |
| Management and Administrative—Admiral Shares | 37,346 |
| Management and Administrative—Institutional Shares | 16,887 |
| Management and Administrative—Institutional Plus Shares | 14,296 |
| Management and Administrative—Institutional Select Shares | 919 |
| Marketing and Distribution—Investor Shares | 5,671 |
| Marketing and Distribution—ETF Shares | 2,632 |
| Marketing and Distribution—Admiral Shares | 5,359 |
| Marketing and Distribution—Institutional Shares | 1,915 |
| Marketing and Distribution—Institutional Plus Shares | 1,049 |
| Marketing and Distribution—Institutional Select Shares | — |
| Custodian Fees | 1,311 |
| Shareholders' Reports—Investor Shares | 1,171 |
| Shareholders' Reports—ETF Shares | 793 |
| Shareholders' Reports—Admiral Shares | 464 |
| Shareholders' Reports—Institutional Shares | 1,115 |
| Shareholders' Reports—Institutional Plus Shares | 21 |
| Shareholders' Reports—Institutional Select Shares | — |
| Trustees' Fees and Expenses | 290 |
| Total Expenses | 197,901 |
| Net Investment Income | 7,656,777 |
| Realized Net Gain (Loss) | |
| Investment Securities Sold—Unaffiliated Issuers ¹ | 1,751,551 |
| Investment Securities Sold—Affiliated Issuers | (10,743) |
| Futures Contracts | (448,740) |
| Swap Contracts | (73,790) |
| Realized Net Gain (Loss) | 1,218,278 |

Total Stock Market Index Fund

Statement of Operations (continued)

| | Six Months Ended June 30, 2020 |
|--|-----------------------------------|
| | (\$000) |
| Change in Unrealized Appreciation (Depreciation) | |
| Investment Securities—Unaffiliated Issuers | (38,786,652) |
| Investment Securities—Affiliated Issuers | (38,619) |
| Futures Contracts | 37,804 |
| Swap Contracts | (34,829) |
| Change in Unrealized Appreciation (Depreciation) | (38,822,296) |
| Net Increase (Decrease) in Net Assets Resulting from Operations | (29,947,241) |

1 Includes \$8,409,277,000 of the net gain (loss) resulting from in-kind redemptions.

Statement of Changes in Net Assets

| | Six Months Ended June 30, 2020 (\$000) | Year Ended December 31, 2019 (\$000) |
|---|---|---|
| Increase (Decrease) in Net Assets | | |
| Operations | | |
| Net Investment Income | 7,656,777 | 14,979,936 |
| Realized Net Gain (Loss) | 1,218,278 | 3,830,856 |
| Change in Unrealized Appreciation (Depreciation) | (38,822,296) | 191,293,521 |
| Net Increase (Decrease) in Net Assets Resulting from Operations | (29,947,241) | 210,104,313 |
| Distributions¹ | | |
| Investor Shares | (1,083,192) | (2,441,205) |
| ETF Shares | (1,193,816) | (2,314,799) |
| Admiral Shares | (1,975,879) | (4,371,014) |
| Institutional Shares | (1,280,938) | (2,694,343) |
| Institutional Plus Shares | (1,587,327) | (3,268,140) |
| Institutional Select Shares | (214,999) | (467,850) |
| Total Distributions | (7,336,151) | (15,557,351) |
| Capital Share Transactions | | |
| Investor Shares | (1,271,030) | (14,863,283) |
| ETF Shares | 10,889,097 | 15,039,487 |
| Admiral Shares | (5,245,718) | 13,652,300 |
| Institutional Shares | 3,779,243 | 4,263,716 |
| Institutional Plus Shares | 3,727,864 | 12,427,894 |
| Institutional Select Shares | 27,057 | 361,129 |
| Net Increase (Decrease) from Capital Share Transactions | 11,906,513 | 30,881,243 |
| Total Increase (Decrease) | (25,376,879) | 225,428,205 |
| Net Assets | | |
| Beginning of Period | 897,623,869 | 672,195,664 |
| End of Period | 872,246,990 | 897,623,869 |

¹ Certain prior period numbers have been reclassified to conform with current period presentation.

Financial Highlights

Investor Shares

| For a Share Outstanding Throughout Each Period | Six Months Ended June 30, 2020 | 2019 | 2018 | Year Ended December 31, | | |
|---|---|--------------------|--------------------|-------------------------|----------------|----------------|
| | | 2017 | 2016 | 2015 | | |
| Net Asset Value, Beginning of Period | \$79.66 | \$62.08 | \$66.70 | \$56.06 | \$50.78 | \$51.58 |
| Investment Operations | | | | | | |
| Net Investment Income | .632 ¹ | 1.279 ¹ | 1.275 ¹ | 1.086 ¹ | 1.022 | .954 |
| Net Realized and Unrealized Gain (Loss) on Investments | (3.453) | 17.634 | (4.703) | 10.630 | 5.282 | (.807) |
| Total from Investment Operations | (2.821) | 18.913 | (3.428) | 11.716 | 6.304 | .147 |
| Distributions | | | | | | |
| Dividends from Net Investment Income | (.599) | (1.333) | (1.192) | (1.076) | (1.024) | (.947) |
| Distributions from Realized Capital Gains | — | — | — | — | — | — |
| Total Distributions | (.599) | (1.333) | (1.192) | (1.076) | (1.024) | (.947) |
| Net Asset Value, End of Period | \$76.24 | \$79.66 | \$62.08 | \$66.70 | \$56.06 | \$50.78 |
| Total Return² | -3.44% | 30.65% | -5.26% | 21.05% | 12.53% | 0.29% |

Ratios/Supplemental Data

| | | | | | | |
|---|-----------|-----------|-----------|-----------|-----------|----------|
| Net Assets, End of Period (Millions) | \$132,571 | \$139,686 | \$121,266 | \$126,766 | \$103,932 | \$96,323 |
| Ratio of Total Expenses to Average Net Assets | 0.14% | 0.14% | 0.14% | 0.14% | 0.15% | 0.16% |
| Ratio of Net Investment Income to Average Net Assets | 1.74% | 1.78% | 1.86% | 1.77% | 1.98% | 1.85% |
| Portfolio Turnover Rate ³ | 5% | 4% | 3% | 3% | 4% | 3% |

The expense ratio and net investment income ratio for the current period have been annualized.

1 Calculated based on average shares outstanding.

2 Total returns do not include account service fees that may have applied in the periods shown. Fund prospectuses provide information about any applicable account service fees.

3 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

Financial Highlights

ETF Shares

| For a Share Outstanding Throughout Each Period | Six Months Ended June 30, 2020 | Year Ended December 31, | | | | |
|---|---|-------------------------|--------------------|--------------------|-----------------|-----------------|
| | | 2019 | 2018 | 2017 | 2016 | 2015 |
| Net Asset Value, Beginning of Period | \$163.70 | \$127.56 | \$137.06 | \$115.21 | \$104.34 | \$106.00 |
| Investment Operations | | | | | | |
| Net Investment Income | 1.381 ¹ | 2.809 ¹ | 2.781 ¹ | 2.361 ¹ | 2.214 | 2.082 |
| Net Realized and Unrealized Gain (Loss) on Investments | (7.097) | 36.236 | (9.676) | 21.832 | 10.871 | (1.675) |
| Total from Investment Operations | (5.716) | 39.045 | (6.895) | 24.193 | 13.085 | .407 |
| Distributions | | | | | | |
| Dividends from Net Investment Income | (1.314) | (2.905) | (2.605) | (2.343) | (2.215) | (2.067) |
| Distributions from Realized Capital Gains | — | — | — | — | — | — |
| Total Distributions | (1.314) | (2.905) | (2.605) | (2.343) | (2.215) | (2.067) |
| Net Asset Value, End of Period | \$156.67 | \$163.70 | \$127.56 | \$137.06 | \$115.21 | \$104.34 |
| Total Return | -3.41% | 30.80% | -5.13% | 21.16% | 12.68% | 0.40% |

Ratios/Supplemental Data

| | | | | | | |
|---|-----------|-----------|----------|----------|----------|----------|
| Net Assets, End of Period (Millions) | \$143,380 | \$138,067 | \$94,809 | \$91,862 | \$69,889 | \$57,434 |
| Ratio of Total Expenses to Average Net Assets | 0.03% | 0.03% | 0.03% | 0.04% | 0.04% | 0.05% |
| Ratio of Net Investment Income to Average Net Assets | 1.85% | 1.89% | 1.97% | 1.87% | 2.09% | 1.96% |
| Portfolio Turnover Rate ² | 5% | 4% | 3% | 3% | 4% | 3% |

The expense ratio and net investment income ratio for the current period have been annualized.

¹ Calculated based on average shares outstanding.

² Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

Financial Highlights

Admiral Shares

| For a Share Outstanding Throughout Each Period | Six Months Ended June 30, 2020 | Year Ended December 31, | | | | |
|---|---|-------------------------|--------------------|--------------------|----------------|----------------|
| | | 2019 | 2018 | 2017 | 2016 | 2015 |
| Net Asset Value, Beginning of Period | \$79.69 | \$62.09 | \$66.72 | \$56.08 | \$50.79 | \$51.60 |
| Investment Operations | | | | | | |
| Net Investment Income | .669 ¹ | 1.360 ¹ | 1.344 ¹ | 1.148 ¹ | 1.077 | 1.013 |
| Net Realized and Unrealized Gain (Loss) on Investments | (3.464) | 17.646 | (4.711) | 10.633 | 5.291 | (.818) |
| Total from Investment Operations | (2.795) | 19.006 | (3.367) | 11.781 | 6.368 | .195 |
| Distributions | | | | | | |
| Dividends from Net Investment Income | (.635) | (1.406) | (1.263) | (1.141) | (1.078) | (1.005) |
| Distributions from Realized Capital Gains | — | — | — | — | — | — |
| Total Distributions | (.635) | (1.406) | (1.263) | (1.141) | (1.078) | (1.005) |
| Net Asset Value, End of Period | \$76.26 | \$79.69 | \$62.09 | \$66.72 | \$56.08 | \$50.79 |
| Total Return² | -3.40% | 30.80% | -5.17% | 21.17% | 12.66% | 0.39% |
| Ratios/Supplemental Data | | | | | | |
| Net Assets, End of Period (Millions) | \$236,274 | \$252,536 | \$185,102 | \$190,099 | \$151,612 | \$126,363 |
| Ratio of Total Expenses to Average Net Assets | 0.04% | 0.04% | 0.04% | 0.04% | 0.04% | 0.05% |
| Ratio of Net Investment Income to Average Net Assets | 1.84% | 1.88% | 1.96% | 1.87% | 2.09% | 1.96% |
| Portfolio Turnover Rate ³ | 5% | 4% | 3% | 3% | 4% | 3% |

The expense ratio and net investment income ratio for the current period have been annualized.

1 Calculated based on average shares outstanding.

2 Total returns do not include account service fees that may have applied in the periods shown. Fund prospectuses provide information about any applicable account service fees.

3 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

Financial Highlights

Institutional Shares

| For a Share Outstanding Throughout Each Period | Six Months Ended June 30, 2020 | Year Ended December 31, | | | | |
|---|---|-------------------------|--------------------|--------------------|----------------|----------------|
| | | 2019 | 2018 | 2017 | 2016 | 2015 |
| Net Asset Value, Beginning of Period | \$79.70 | \$62.10 | \$66.73 | \$56.09 | \$50.80 | \$51.60 |
| Investment Operations | | | | | | |
| Net Investment Income | .672 ¹ | 1.365 ¹ | 1.354 ¹ | 1.153 ¹ | 1.082 | 1.017 |
| Net Realized and Unrealized Gain (Loss) on Investments | (3.453) | 17.649 | (4.715) | 10.630 | 5.291 | (.808) |
| Total from Investment Operations | (2.781) | 19.014 | (3.361) | 11.783 | 6.373 | .209 |
| Distributions | | | | | | |
| Dividends from Net Investment Income | (.639) | (1.414) | (1.269) | (1.143) | (1.083) | (1.009) |
| Distributions from Realized Capital Gains | — | — | — | — | — | — |
| Total Distributions | (.639) | (1.414) | (1.269) | (1.143) | (1.083) | (1.009) |
| Net Asset Value, End of Period | \$76.28 | \$79.70 | \$62.10 | \$66.73 | \$56.09 | \$50.80 |
| Total Return | -3.38% | 30.81% | -5.16% | 21.17% | 12.67% | 0.42% |

Ratios/Supplemental Data

| | | | | | | |
|---|-----------|-----------|-----------|-----------|----------|----------|
| Net Assets, End of Period (Millions) | \$150,306 | \$152,716 | \$115,115 | \$113,557 | \$79,443 | \$57,438 |
| Ratio of Total Expenses to Average Net Assets | 0.03% | 0.03% | 0.03% | 0.035% | 0.03% | 0.04% |
| Ratio of Net Investment Income to Average Net Assets | 1.85% | 1.89% | 1.97% | 1.87% | 2.10% | 1.97% |
| Portfolio Turnover Rate ² | 5% | 4% | 3% | 3% | 4% | 3% |

The expense ratio and net investment income ratio for the current period have been annualized.

1 Calculated based on average shares outstanding.

2 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

Financial Highlights

Institutional Plus Shares

| For a Share Outstanding Throughout Each Period | Six Months Ended June 30, | Year Ended December 31, | | | | April 28, 2015 ¹ to December 31, |
|--|---------------------------------|-------------------------|--------------------|--------------------|-----------------|---|
| | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 |
| Net Asset Value, Beginning of Period | \$149.47 | \$116.46 | \$125.14 | \$105.18 | \$95.26 | \$100.00 |
| Investment Operations | | | | | | |
| Net Investment Income | 1.268 ² | 2.575 ² | 2.555 ² | 2.182 ² | 2.042 | 1.335 |
| Net Realized and Unrealized Gain (Loss) on Investments | (6.492) | 33.100 | (8.842) | 19.938 | 9.924 | (4.631) |
| Total from Investment Operations | (5.224) | 35.675 | (6.287) | 22.120 | 11.966 | (3.296) |
| Distributions | | | | | | |
| Dividends from Net Investment Income | (1.206) | (2.665) | (2.393) | (2.160) | (2.046) | (1.444) |
| Distributions from Realized Capital Gains | — | — | — | — | — | — |
| Total Distributions | (1.206) | (2.665) | (2.393) | (2.160) | (2.046) | (1.444) |
| Net Asset Value, End of Period | \$143.04 | \$149.47 | \$116.46 | \$125.14 | \$105.18 | \$95.26 |
| Total Return | -3.38% | 30.82% | -5.15% | 21.19% | 12.69% | -3.28% |

Ratios/Supplemental Data

| | | | | | | |
|--|-----------|-----------|-----------|-----------|----------|--------------------|
| Net Assets, End of Period (Millions) | \$184,292 | \$188,188 | \$135,641 | \$126,130 | \$85,031 | \$63,093 |
| Ratio of Total Expenses to Average Net Assets | 0.02% | 0.02% | 0.02% | 0.02% | 0.02% | 0.02% ³ |
| Ratio of Net Investment Income to Average Net Assets | 1.86% | 1.90% | 1.98% | 1.89% | 2.11% | 1.99% ³ |
| Portfolio Turnover Rate ⁴ | 5% | 4% | 3% | 3% | 4% | 3% ⁵ |

The expense ratio and net investment income ratio for the current period have been annualized.

1 Inception.

2 Calculated based on average shares outstanding.

3 Annualized.

4 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

5 Reflects the fund's portfolio turnover for the fiscal year ended December 31, 2015.

Financial Highlights

Institutional Select Shares

| For a Share Outstanding Throughout Each Period | Six Months Ended June 30, 2020 | Year Ended December 31, | | | June 27, 2016 ¹ to December 31, 2016 |
|--|---|-------------------------|--------------------|--------------------|--|
| | 2019 | 2018 | 2017 | | |
| Net Asset Value, Beginning of Period | \$156.83 | \$122.20 | \$131.31 | \$110.37 | \$97.70 |
| Investment Operations | | | | | |
| Net Investment Income | 1.337 ² | 2.709 ² | 2.704 ² | 2.311 ² | 1.181 |
| Net Realized and Unrealized Gain (Loss) on Investments | (6.804) | 34.731 | (9.290) | 20.908 | 12.718 |
| Total from Investment Operations | (5.467) | 37.440 | (6.586) | 23.219 | 13.899 |
| Distributions | | | | | |
| Dividends from Net Investment Income | (1.273) | (2.810) | (2.524) | (2.279) | (1.229) |
| Distributions from Realized Capital Gains | — | — | — | — | — |
| Total Distributions | (1.273) | (2.810) | (2.524) | (2.279) | (1.229) |
| Net Asset Value, End of Period | \$150.09 | \$156.83 | \$122.20 | \$131.31 | \$110.37 |
| Total Return | -3.37% | 30.84% | -5.14% | 21.20% | 14.24% |
| Ratios/Supplemental Data | | | | | |
| Net Assets, End of Period (Millions) | \$25,423 | \$26,431 | \$20,262 | \$14,163 | \$8,545 |
| Ratio of Total Expenses to Average Net Assets | 0.01% | 0.01% | 0.01% | 0.01% | 0.01% ³ |
| Ratio of Net Investment Income to Average Net Assets | 1.87% | 1.91% | 1.99% | 1.90% | 2.15% ³ |
| Portfolio Turnover Rate ⁴ | 5% | 4% | 3% | 3% | 4% ⁵ |

The expense ratio and net investment income ratio for the current period have been annualized.

1 Inception.

2 Calculated based on average shares outstanding.

3 Annualized.

4 Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

5 Reflects the fund's portfolio turnover for the fiscal year ended December 31, 2016.

Notes to Financial Statements

Vanguard Total Stock Market Index Fund is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. The fund offers six classes of shares: Investor Shares, ETF Shares, Admiral Shares, Institutional Shares, Institutional Plus Shares, and Institutional Select Shares. Each of the share classes has different eligibility and minimum purchase requirements, and is designed for different types of investors. ETF Shares are listed for trading on NYSE Arca; they can be purchased and sold through a broker.

Market disruptions associated with the COVID-19 pandemic have had a global impact, and uncertainty exists as to the long-term implications. Such disruptions can adversely affect assets of the fund and thus fund performance.

A. The following significant accounting policies conform to generally accepted accounting principles for U.S. investment companies. The fund consistently follows such policies in preparing its financial statements.

1. **Security Valuation:** Securities are valued as of the close of trading on the New York Stock Exchange (generally 4 p.m., Eastern time) on the valuation date. Equity securities are valued at the latest quoted sales prices or official closing prices taken from the primary market in which each security trades; such securities not traded on the valuation date are valued at the mean of the latest quoted bid and asked prices. Securities for which market quotations are not readily available, or whose values have been materially affected by events occurring before the fund's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the board of trustees to represent fair value. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value. Temporary cash investments are valued using the latest bid prices or using valuations based on a matrix system (which considers such factors as security prices, yields, maturities, and ratings), both as furnished by independent pricing services.

2. **Futures Contracts:** The fund uses index futures contracts to a limited extent, with the objectives of maintaining full exposure to the stock market, maintaining liquidity, and minimizing transaction costs. The fund may purchase futures contracts to immediately invest incoming cash in the market, or sell futures in response to cash outflows, thereby simulating a fully invested position in the underlying index while maintaining a cash balance for liquidity. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks held by the fund and the prices of futures contracts, and the possibility of an illiquid market. Counterparty risk involving futures is mitigated because a regulated clearinghouse is the counterparty instead of the clearing broker. To further mitigate counterparty risk, the fund trades futures contracts on an exchange, monitors the financial strength of its clearing brokers and clearinghouse, and has entered into clearing agreements with its clearing brokers. The clearinghouse imposes initial margin requirements to secure the fund's performance and requires daily settlement of variation margin representing changes in the market value of each contract. Any assets pledged as initial margin for open contracts are noted in the Schedule of Investments.

Futures contracts are valued at their quoted daily settlement prices. The notional amounts of the contracts are not recorded in the Schedule of Investments. Fluctuations in the value of the contracts are recorded in the Statement of Assets and Liabilities as an asset (liability) and in the Statement of Operations as unrealized appreciation (depreciation) until the contracts are closed, when they are recorded as realized gains (losses) on futures contracts.

During the six months ended June 30, 2020, the fund's average investments in long and short futures contracts represented less than 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. Swap Contracts: The fund has entered into equity swap contracts to earn the total return on selected reference stocks in the fund's target index. Under the terms of the swaps, the fund receives the total return on the referenced stock (i.e., receiving the increase or paying the decrease in value of the selected reference stock and receiving the equivalent of any dividends in respect of the selected referenced stock) over a specified period of time, applied to a notional amount that represents the value of a designated number of shares of the selected reference stock at the beginning of the equity swap contract. The fund also pays a floating rate that is based on short-term interest rates, applied to the notional amount. At the same time, the fund generally invests an amount approximating the notional amount of the swap in high-quality temporary cash investments.

The notional amounts of swap contracts are not recorded in the Schedule of Investments. Swaps are valued daily based on market quotations received from independent pricing services or recognized dealers and the change in value is recorded in the Statement of Assets and Liabilities as an asset (liability) and in the Statement of Operations as unrealized appreciation (depreciation) until periodic payments are made or the termination of the swap, at which time realized gain (loss) is recorded.

A risk associated with all types of swaps is the possibility that a counterparty may default on its obligation to pay net amounts due to the fund. The fund's maximum amount subject to counterparty risk is the unrealized appreciation on the swap contract. The fund mitigates its counterparty risk by entering into swaps only with a diverse group of prequalified counterparties, monitoring their financial strength, entering into master netting arrangements with its counterparties, and requiring its counterparties to transfer collateral as security for their performance. In the absence of a default, the collateral pledged or received by the fund cannot be repledged, resold, or rehypothecated. In the event of a counterparty's default (including bankruptcy), the fund may terminate any swap contracts with that counterparty, determine the net amount owed by either party in accordance with its master netting arrangements, and sell or retain any collateral held up to the net amount owed to the fund under the master netting arrangements. The swap contracts contain provisions whereby a counterparty may terminate open contracts if the fund's net assets decline below a certain level, triggering a payment by the fund if the fund is in a net liability position at the time of the termination. The payment amount would be reduced by any collateral the fund has pledged. Any securities pledged as collateral for open contracts are noted in the Schedule of Investments. The value of collateral received or pledged is compared daily to the value of the swap contracts exposure with each counterparty, and any difference, if in excess of a specified minimum transfer amount, is adjusted and settled within two business days.

During the six months ended June 30, 2020, the fund's average amounts of investments in total return swaps represented less than 1% of net assets, based on the average of notional amounts at each quarter-end during the period.

4. **Federal Income Taxes:** The fund intends to continue to qualify as a regulated investment company and distribute all of its taxable income. Management has analyzed the fund's tax positions taken for all open federal income tax years (December 31, 2016–2019), and for the period ended June 30, 2020, and has concluded that no provision for federal income tax is required in the fund's financial statements.

5. **Distributions:** Distributions to shareholders are recorded on the ex-dividend date. Distributions are determined on a tax basis at the fiscal year-end and may differ from net investment income and realized capital gains for financial reporting purposes.

6. **Securities Lending:** To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund at any time, and are required to be secured at all times by collateral in an amount at least equal to the market value of securities loaned. Daily market fluctuations could cause the value of loaned securities to be more or less than the value of the collateral received. When this occurs, the collateral is adjusted and settled before the opening of the market on the next business day. The fund further mitigates its counterparty risk by entering into securities lending transactions only with a diverse group of prequalified counterparties, monitoring their financial strength, and entering into master securities lending agreements with its counterparties. The master securities lending agreements provide that, in the event of a counterparty's default (including bankruptcy), the fund may terminate any loans with that borrower, determine the net amount owed, and sell or retain the collateral up to the net amount owed to the fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund invests cash collateral received in Vanguard Market Liquidity Fund, and records a liability in the Statement of Assets and Liabilities for the return of the collateral, during the period the securities are on loan. Collateral investments in Vanguard Market Liquidity Fund are subject to market appreciation or depreciation. Securities lending income represents fees charged to borrowers plus income earned on invested cash collateral, less expenses associated with the loan. During the term of the loan, the fund is entitled to all distributions made on or in respect of the loaned securities.

7. **Credit Facilities and Interfund Lending Program:** The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.3 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement and an uncommitted credit facility provided by Vanguard. Both facilities may be renewed annually. Each fund is individually liable for its borrowings, if any, under the credit facilities. Borrowings may be utilized for temporary or emergency purposes, subject to the fund's regulatory and contractual borrowing restrictions. With respect to the committed credit facility, the participating funds are charged administrative fees and an annual commitment fee of 0.10% of the undrawn committed amount of the facility; these fees are allocated to the funds based on a method approved by the fund's board of trustees and included in Management and Administrative expenses on the fund's Statement of Operations. Any borrowings under either facility bear interest at a rate based upon the higher of the one-month London Interbank Offered Rate (or an acceptable alternate rate, if necessary), federal funds effective rate, or overnight bank funding rate plus an agreed-upon spread, except that borrowings under the uncommitted credit facility may bear interest based upon an alternative rate agreed to by the fund and Vanguard.

In accordance with an exemptive order (the "Order") from the SEC, the fund may participate in a joint lending and borrowing program that allows registered open-end Vanguard funds to borrow money from and lend money to each other for temporary or emergency purposes (the "Interfund

Lending Program”), subject to compliance with the terms and conditions of the Order, and to the extent permitted by the fund’s investment objective and investment policies. Interfund loans and borrowings normally extend overnight, but can have a maximum duration of seven days. Loans may be called on one business day’s notice. The interest rate to be charged is governed by the conditions of the Order and internal procedures adopted by the board of trustees. The board of trustees is responsible for overseeing the Interfund Lending Program.

For the six months ended June 30, 2020, the fund did not utilize the credit facilities or the Interfund Lending Program.

8. Other: Dividend income is recorded on the ex-dividend date. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Premiums and discounts on debt securities are amortized and accreted, respectively, to interest income over the lives of the respective securities, except for premiums on certain callable debt securities that are amortized to the earliest call date. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold.

Each class of shares has equal rights as to assets and earnings, except that each class separately bears certain class-specific expenses related to maintenance of shareholder accounts (included in Management and Administrative expenses) and shareholder reporting. Marketing and distribution expenses are allocated to each class of shares based on a method approved by the board of trustees. Income, other non-class-specific expenses, and gains and losses on investments are allocated to each class of shares based on its relative net assets.

B. In accordance with the terms of a Funds’ Service Agreement (the “FSA”) between Vanguard and the fund, Vanguard furnishes to the fund investment advisory, corporate management, administrative, marketing, and distribution services at Vanguard’s cost of operations (as defined by the FSA). These costs of operations are allocated to the fund based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the fund may invest up to 0.40% of its net assets as capital in Vanguard. At June 30, 2020, the fund had contributed to Vanguard capital in the amount of \$39,105,000, representing less than 0.01% of the fund’s net assets and 15.64% of Vanguard’s capital received pursuant to the FSA. The fund’s trustees and officers are also directors and employees, respectively, of Vanguard.

C. Various inputs may be used to determine the value of the fund’s investments. These inputs are summarized in three broad levels for financial statement purposes. The inputs or methodologies used to value securities are not necessarily an indication of the risk associated with investing in those securities.

Level 1—Quoted prices in active markets for identical securities.

Level 2—Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

Level 3—Significant unobservable inputs (including the fund’s own assumptions used to determine the fair value of investments). Any investments valued with significant unobservable inputs are noted on the Schedule of Investments.

Total Stock Market Index Fund

The following table summarizes the market value of the fund's investments and derivatives as of June 30, 2020, based on the inputs used to value them:

| | Level 1 (\$000) | Level 2 (\$000) | Level 3 (\$000) | Total (\$000) |
|---|--------------------|--------------------|--------------------|------------------|
| Investments | | | | |
| Assets | | | | |
| Common Stocks | 867,918,978 | 703 | 6,311 | 867,925,992 |
| Preferred Stocks | 3,296 | — | — | 3,296 |
| Temporary Cash Investments | 8,166,829 | 308,935 | — | 8,475,764 |
| Total | 876,089,103 | 309,638 | 6,311 | 876,405,052 |
| Derivative Financial Instruments | | | | |
| Assets | | | | |
| Futures Contracts ¹ | 46,276 | — | — | 46,276 |
| Liabilities | | | | |
| Swap Contracts | — | 25,160 | — | 25,160 |

1 Represents variation margin on the last day of the reporting period.

D. As of June 30, 2020, gross unrealized appreciation and depreciation for investments and derivatives based on cost for U.S. federal income tax purposes were as follows:

| | Amount (\$000) |
|--|-------------------|
| Tax Cost | 531,797,248 |
| Gross Unrealized Appreciation | 399,482,762 |
| Gross Unrealized Depreciation | (54,834,259) |
| Net Unrealized Appreciation (Depreciation) | 344,648,503 |

The fund's tax-basis capital gains and losses are determined only at the end of each fiscal year. For tax purposes, at December 31, 2019, the fund had available capital losses totaling \$6,156,034,000 that may be carried forward indefinitely to offset future net capital gains. The fund will use these capital losses to offset net taxable capital gains, if any, realized during the year ending December 31, 2020; should the fund realize net capital losses for the year, the losses will be added to the loss carryforward balance above.

E. During the six months ended June 30, 2020, the fund purchased \$65,378,414,000 of investment securities and sold \$54,891,717,000 of investment securities, other than temporary cash investments. Purchases and sales include \$14,504,946,000 and \$10,736,707,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

F. Capital share transactions for each class of shares were:

| | Six Months Ended June 30, 2020 | | Year Ended December 31, 2019 | |
|---|-----------------------------------|-----------------|---------------------------------|-----------------|
| | Amount (\$000) | Shares (000) | Amount (\$000) | Shares (000) |
| Investor Shares | | | | |
| Issued | 12,722,332 | 186,196 | 7,749,732 | 109,431 |
| Issued in Lieu of Cash Distributions | 1,083,192 | 16,193 | 2,435,264 | 33,011 |
| Redeemed ¹ | (15,076,554) | (217,077) | (25,048,279) | (342,517) |
| Net Increase (Decrease)—Investor Shares | (1,271,030) | (14,688) | (14,863,283) | (200,075) |
| ETF Shares | | | | |
| Issued | 21,671,791 | 142,879 | 25,747,266 | 171,544 |
| Issued in Lieu of Cash Distributions | — | — | — | — |
| Redeemed | (10,782,694) | (71,100) | (10,707,779) | (71,400) |
| Net Increase (Decrease)—ETF Shares | 10,889,097 | 71,779 | 15,039,487 | 100,144 |
| Admiral Shares | | | | |
| Issued ¹ | 19,029,935 | 269,397 | 37,798,017 | 521,571 |
| Issued in Lieu of Cash Distributions | 1,650,855 | 24,579 | 3,668,017 | 49,584 |
| Redeemed | (25,926,508) | (364,961) | (27,813,734) | (383,118) |
| Net Increase (Decrease)—Admiral Shares | (5,245,718) | (70,985) | 13,652,300 | 188,037 |
| Institutional Shares | | | | |
| Issued | 17,376,936 | 247,205 | 18,127,281 | 253,986 |
| Issued in Lieu of Cash Distributions | 1,207,638 | 18,011 | 2,526,249 | 34,162 |
| Redeemed | (14,805,331) | (210,801) | (16,389,814) | (225,625) |
| Net Increase (Decrease)—Institutional Shares | 3,779,243 | 54,415 | 4,263,716 | 62,523 |
| Institutional Plus Shares | | | | |
| Issued | 19,181,182 | 146,074 | 23,108,140 | 173,405 |
| Issued in Lieu of Cash Distributions | 1,565,312 | 12,457 | 3,223,646 | 23,230 |
| Redeemed | (17,018,630) | (129,224) | (13,903,892) | (102,224) |
| Net Increase (Decrease)—Institutional Plus Shares | 3,727,864 | 29,307 | 12,427,894 | 94,411 |
| Institutional Select Shares | | | | |
| Issued | 2,118,143 | 15,872 | 3,339,486 | 23,224 |
| Issued in Lieu of Cash Distributions | 214,999 | 1,626 | 467,850 | 3,217 |
| Redeemed | (2,306,085) | (16,644) | (3,446,207) | (23,715) |
| Net Increase (Decrease)—Institutional Select Shares | 27,057 | 854 | 361,129 | 2,726 |

¹ In November 2018, the fund announced changes to the availability and minimum investment criteria of the Investor and Admiral share classes. As a result, all of the outstanding Investor Shares automatically converted to Admiral Shares beginning in April 2019, with the exception of those held by Vanguard funds and certain other institutional investors. Investor Shares—Redeemed and Admiral Shares—Issued include 153,030,000 and 152,973,000 shares, respectively, in the amount of \$11,326,553,000 from the conversion during the year ended December 31, 2019.

Total Stock Market Index Fund

G. Certain of the fund's investments are in companies that are considered to be affiliated companies of the fund because the fund owns more than 5% of the outstanding voting securities of the company or the issuer is another member of The Vanguard Group. Transactions during the period in securities of these companies were as follows:

| | Dec. 31, 2019 Market Value (\$000) | Current Period Transactions | | | | | | Jun. 30, 2020 Market Value (\$000) |
|--|--|---------------------------------|--|---|---|-------------------|--|--|
| | | Purchases at Cost (\$000) | Proceeds from Securities Sold ¹ (\$000) | Realized Net Gain (Loss) (\$000) | Change in Unrealized App. (Dep.) (\$000) | Income (\$000) | Capital Gain Distributions Received (\$000) | |
| Atlantic Power Corp. | NA ² | 8,207 | (7,457) | (2,107) | (528) | — | — | NA ³ |
| Bluerock Residential Growth REIT Inc. | NA ² | 11,257 | (1,853) | (587) | (5,491) | — | — | 12,576 |
| ChannelAdvisor Corp. | NA ² | 3,607 | (8,526) | 843 | 8,560 | — | — | NA ³ |
| Cherry Hill Mortgage Investment Corp. | NA ² | 5,259 | (3,757) | (1,630) | (3,785) | 469 | — | NA ³ |
| Computer Task Group Inc. | 3,867 | 692 | (51) | (22) | (859) | — | — | 3,627 |
| Condor Hospitality Trust Inc. | NA ² | 6,680 | (129) | (42) | (5,596) | — | — | 3,415 |
| CTO Realty Growth Inc. | NA ² | 8,079 | (1,226) | (668) | (5,451) | 144 | — | 10,997 |
| Electromed Inc. | NA ² | 4,819 | (957) | (54) | 2,119 | — | — | 7,585 |
| Exantas Capital Corp. | NA ² | 2,845 | (1,687) | (3,246) | (5,390) | — | — | NA ³ |
| Genasys Inc. | NA ² | 4,018 | (657) | 66 | 3,116 | — | — | 9,844 |
| Gladstone Land Corp. | NA ² | 7,620 | (5,890) | 739 | 3,198 | — | — | NA ³ |
| GlobalSCAPE Inc. | NA ² | 6,702 | (793) | 30 | 112 | — | — | 9,430 |
| Great Ajax Corp. | 23,995 | 7,158 | (5,803) | (362) | (8,788) | — | — | 16,200 |
| Hurco Cos. Inc. | NA ² | 4,902 | (452) | (129) | (3,016) | 96 | — | 12,102 |
| Issuer Direct Corp. | NA ² | 2,051 | (16) | (4) | (180) | — | — | 2,806 |
| KVH Industries Inc. | NA ² | 6,707 | (1,870) | (354) | (1,027) | — | — | 8,998 |
| Lifevantage Corp. | NA ² | 6,630 | (711) | (117) | (1,448) | — | — | 10,721 |
| LSI Industries Inc. | NA ² | 3,892 | (1,596) | (70) | 1,427 | 139 | — | 8,786 |
| Perma-Pipe International Holdings Inc. | 4,362 | 114 | (106) | (30) | (1,685) | — | — | 2,655 |
| Pulmatrix Inc. | NA ² | 2,438 | — | — | (182) | — | — | 2,256 |
| Pure Cycle Corp. | NA ² | 16,154 | (3,185) | (1,368) | (4,292) | — | — | 16,313 |

Total Stock Market Index Fund

| | Dec. 31, 2019 Market Value (\$000) | Purchases at Cost (\$000) | Current Period Transactions | | | | | Jun. 30, 2020 Market Value (\$000) |
|-----------------------------------|--|---------------------------------|--|---|---|-------------------|--|--|
| | | | Proceeds from Securities Sold ¹ (\$000) | Realized Net Gain (Loss) (\$000) | Change in Unrealized App. (Dep.) (\$000) | Income (\$000) | Capital Gain Distributions Received (\$000) | |
| Rubicon Project Inc. | NA ² | 1,535 | (509) | (66) | (3,469) | — | — | NA ³ |
| Safeguard Scientifics Inc. | 11,504 | 455 | (268) | (187) | (4,139) | — | — | 7,365 |
| Spirit MTA REIT | 2,191 | — | (325) | 325 | — | — | — | NA ³ |
| Transcat Inc. | NA ² | 5,643 | (1,653) | (234) | (1,898) | — | — | 10,809 |
| Vanguard Market Liquidity Fund | 5,328,966 | NA ⁴ | NA ⁴ | (1,469) | 73 | 17,163 | — | 8,166,829 |
| Total | 5,374,885 | 127,464 | (49,477) | (10,743) | (38,619) | 18,011 | — | 8,323,314 |

1 Does not include adjustments related to return of capital.

2 Not applicable—at December 31, 2019, the issuer was not an affiliated company of the fund.

3 Not applicable—at June 30, 2020, the security was still held, but the issuer was no longer an affiliated company of the fund.

4 Not applicable—purchases and sales are for temporary cash investment purposes.

H. Management has determined that no events or transactions occurred subsequent to June 30, 2020, that would require recognition or disclosure in these financial statements.

Trustees Approve Advisory Arrangement

The board of trustees of Vanguard Total Stock Market Index Fund has renewed the fund's investment advisory arrangement with The Vanguard Group, Inc. (Vanguard), through its Equity Index Group. The board determined that continuing the fund's internalized management structure was in the best interests of the fund and its shareholders.

The board based its decision upon an evaluation of the advisor's investment staff, portfolio management process, and performance. This evaluation included information provided to the board by Vanguard's Portfolio Review Department, which is responsible for fund and advisor oversight and product management. The Portfolio Review Department met regularly with the advisor and made monthly presentations to the board during the fiscal year that directed the board's focus to relevant information and topics.

The board, or an investment committee made up of board members, also received information throughout the year during advisor presentations. For each advisor presentation, the board was provided with letters and reports that included information about, among other things, the advisory firm and the advisor's assessment of the investment environment, portfolio performance, and portfolio characteristics.

In addition, the board received monthly reports, which included a Market and Economic Report, a Fund Dashboard Monthly Summary, and a Fund Performance Report.

Prior to their meeting, the trustees were provided with a memo and materials that summarized the information they received over the course of the year. They also considered the factors discussed below, among others. However, no single factor determined whether the board approved the arrangement. Rather, it was the totality of the circumstances that drove the board's decision.

Nature, extent, and quality of services

The board reviewed the quality of the fund's investment management services over both the short and long term, and took into account the organizational depth and stability of the advisor. The board considered that Vanguard has been managing investments for more than four decades. The Equity Index Group adheres to a sound, disciplined investment management process; the team has considerable experience, stability, and depth.

The board concluded that Vanguard's experience, stability, depth, and performance, among other factors, warranted continuation of the advisory arrangement.

Investment performance

The board considered the short- and long-term performance of the fund, including any periods of outperformance or underperformance compared with its target index and peer group. The board concluded that the performance was such that the advisory arrangement should continue.

Cost

The board concluded that the fund's expense ratio was well below the average expense ratio charged by funds in its peer group and that the fund's advisory expenses were also well below the peer-group average.

The board does not conduct a profitability analysis of Vanguard because of Vanguard's unique structure. Unlike most other mutual fund management companies, Vanguard is owned by the funds it oversees.

The benefit of economies of scale

The board concluded that the fund's arrangement with Vanguard ensures that the fund will realize economies of scale as it grows, with the cost to shareholders declining as fund assets increase.

The board will consider whether to renew the advisory arrangement again after a one-year period.

Liquidity Risk Management

Vanguard funds (except for the money market funds) have adopted and implemented a written liquidity risk management program (the “Program”) as required by Rule 22e-4 under the Investment Company Act of 1940. Rule 22e-4 requires that each fund adopt a program that is reasonably designed to assess and manage the fund’s liquidity risk, which is the risk that the fund could not meet redemption requests without significant dilution of remaining investors’ interests in the fund.

Assessment and management of a fund’s liquidity risk under the Program take into consideration certain factors, such as the fund’s investment strategy and the liquidity of its portfolio investments during normal and reasonably foreseeable stressed conditions, its short- and long-term cash-flow projections during both normal and reasonably foreseeable stressed conditions, and its cash and cash-equivalent holdings and access to other funding sources. As required by the rule, the Program includes policies and procedures for classification of fund portfolio holdings in four liquidity categories, maintaining certain levels of highly liquid investments, and limiting holdings of illiquid investments.

The board of trustees of Vanguard Index Funds approved the appointment of liquidity risk management program administrators responsible for administering Vanguard Total Stock Market Index Fund’s Program and for carrying out the specific responsibilities set forth in the Program, including reporting to the board on at least an annual basis regarding the Program’s operation, its adequacy, and the effectiveness of its implementation for the past year (the “Program Administrator Report”). The board has reviewed the Program Administrator Report covering the period from December 1, 2018, through December 31, 2019 (the “Review Period”). The Program Administrator Report stated that during the Review Period the Program operated and was implemented effectively to manage the fund’s liquidity risk.



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Institutional Investor Services > 800-523-1036

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This material may be used in conjunction with the offering of shares of any Vanguard fund only if preceded or accompanied by the fund's current prospectus.

All comparative mutual fund data are from Lipper, a Thomson Reuters Company, or Morningstar, Inc., unless otherwise noted.

You can obtain a free copy of Vanguard's proxy voting guidelines by visiting vanguard.com/proxyreporting or by calling Vanguard at 800-662-2739. The guidelines are also available from the SEC's website, www.sec.gov. In addition, you may obtain a free report on how your fund voted the proxies for securities it owned during the 12 months ended June 30. To get the report, visit either vanguard.com/proxyreporting or www.sec.gov.

You can review information about your fund on the SEC's website, and you can receive copies of this information, for a fee, by sending a request via email addressed to publicinfo@sec.gov.

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U.S. Patent Nos. 6,879,964; 7,337,138; 7,720,749;
7,925,573; 8,090,646; 8,417,623; and 8,626,636.
Vanguard Marketing Corporation, Distributor.

Q852 082020

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

VANGUARD INDEX FUNDS

BY: /s/ MORTIMER J. BUCKLEY*
MORTIMER J. BUCKLEY
CHIEF EXECUTIVE OFFICER

Date: August 19, 2020

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

VANGUARD INDEX FUNDS

BY: /s/ MORTIMER J. BUCKLEY*
MORTIMER J. BUCKLEY
CHIEF EXECUTIVE OFFICER

Date: August 19, 2020

VANGUARD INDEX FUNDS

BY: /s/ JOHN BENDL*
JOHN BENDL
CHIEF FINANCIAL OFFICER

Date: August 19, 2020

* By: /s/ Anne E. Robinson

Anne E. Robinson, pursuant to a [Power of Attorney filed on January 18, 2018](#) (see file Number 33-32216) and a [Power of Attorney filed on October 30, 2019](#) (see file Number 811-02554), Incorporated by Reference.

Exhibit 99.CERT

CERTIFICATIONS

I, Mortimer J. Buckley, certify that:

1. I have reviewed this report on Form N-CSR of Vanguard Index Funds;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, changes in net assets, and cash flows (if the financial statements are required to include a statement of cash flows) of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940) and internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act of 1940) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of a date within 90 days prior to the filing date of this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 19, 2020

/s/ Mortimer J. Buckley
Mortimer J. Buckley
Chief Executive Officer

CERTIFICATIONS

I, John Bendl, certify that:

1. I have reviewed this report on Form N-CSR of Vanguard Index Funds;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, changes in net assets, and cash flows (if the financial statements are required to include a statement of cash flows) of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940) and internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act of 1940) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of a date within 90 days prior to the filing date of this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 19, 2020

/s/ John Bendl
John Bendl
Chief Financial Officer

Exhibit 99.906CERT

**Certification Pursuant to 18 U.S.C. Section 1350,
As Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

Name of Issuer: **Vanguard Index Funds**

In connection with the Report on Form N-CSR of the above-named issuer that is accompanied by this certification, the undersigned hereby certifies, to his knowledge, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the issuer.

Date: August 19, 2020

/s/ Mortimer J. Buckley
Mortimer J. Buckley
Chief Executive Officer

**Certification Pursuant to 18 U.S.C. Section 1350,
As Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

Name of Issuer: **Vanguard Index Funds**

In connection with the Report on Form N-CSR of the above-named issuer that is accompanied by this certification, the undersigned hereby certifies, to his knowledge, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the issuer.

Date: August 19, 2020

/s/ John Bendl
John Bendl
Chief Financial Officer
