

Eaton Vance Enhanced Equity Income Fund II
Form N-CSRS
August 27, 2018

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: 811-21670

Eaton Vance Enhanced Equity Income Fund II
(Exact Name of Registrant as Specified in Charter)

Two International Place, Boston, Massachusetts 02110
(Address of Principal Executive Offices)

Maureen A. Gemma

Two International Place, Boston, Massachusetts 02110

(Name and Address of Agent for Services)

(617) 482-8260

(Registrant's Telephone Number)

December 31

Date of Fiscal Year End

June 30, 2018

Date of Reporting Period

Item 1. Reports to Stockholders

Eaton Vance

Enhanced Equity Income Fund II (EOS)

Semiannual Report

June 30, 2018

Commodity Futures Trading Commission Registration. Effective December 31, 2012, the Commodity Futures Trading Commission (CFTC) adopted certain regulatory changes that subject registered investment companies and advisers to regulation by the CFTC if a fund invests more than a prescribed level of its assets in certain CFTC-regulated instruments (including futures, certain options and swap agreements) or markets itself as providing investment exposure to such instruments. The Fund has claimed an exclusion from the definition of the term commodity pool operator under the Commodity Exchange Act. Accordingly, neither the Fund nor the adviser with respect to the operation of the Fund is subject to CFTC regulation. Because of its management of other strategies, the Fund's adviser is registered with the CFTC as a commodity pool operator and a commodity trading advisor.

Managed Distribution Plan. Pursuant to an exemptive order issued by the Securities and Exchange Commission (Order), the Fund is authorized to distribute long-term capital gains to shareholders more frequently than once per year. Pursuant to the Order, the Fund's Board of Trustees approved a Managed Distribution Plan (MDP) pursuant to which the Fund makes monthly cash distributions to common shareholders, stated in terms of a fixed amount per common share.

The Fund currently distributes monthly cash distributions equal to \$0.0875 per share in accordance with the MDP. You should not draw any conclusions about the Fund's investment performance from the amount of these distributions or from the terms of the MDP. The MDP will be subject to regular periodic review by the Fund's Board of Trustees and the Board may amend or terminate the MDP at any time without prior notice to Fund shareholders. However, at this time there are no reasonably foreseeable circumstances that might cause the termination of the MDP.

The Fund may distribute more than its net investment income and net realized capital gains and, therefore, a distribution may include a return of capital. A return of capital distribution does not necessarily reflect the Fund's investment performance and should not be confused with yield or income. With each distribution, the Fund will issue a notice to shareholders and a press release containing information about the amount and sources of the distribution and other related information. The amounts and sources of distributions contained in the notice and press release are only estimates and are not provided for tax purposes. The amounts and sources of the Fund's distributions for tax purposes will be reported to shareholders on Form 1099-DIV for each calendar year.

Fund shares are not insured by the FDIC and are not deposits or other obligations of, or guaranteed by, any depository institution. Shares are subject to investment risks, including possible loss of principal invested.

Semiannual Report June 30, 2018

Eaton Vance

Enhanced Equity Income Fund II

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Eaton Vance

Enhanced Equity Income Fund II

June 30, 2018

Performance¹

Portfolio Managers Michael A. Allison, CFA, Lewis R. Piantedosi and Yana S. Barton, CFA

| % Average Annual Total Returns | Inception Date | Six Months | One Year | Five Years | Ten Years |
|---------------------------------------|-----------------------|-------------------|-----------------|-------------------|------------------|
| Fund at NAV | 01/31/2005 | 9.06% | 18.93% | 14.28% | 9.54% |
| Fund at Market Price | | 14.23 | 23.86 | 16.45 | 9.77 |
| Russell 1000® Growth Index | | 7.25% | 22.51% | 16.35% | 11.82% |
| CBOE S&P 500 BuyWrite Index | | 1.78 | 7.28 | 8.13 | 5.71 |
| CBOE NASDAQ 100 BuyWrite Index | | 4.10 | 12.98 | 10.05 | 6.68 |

| | |
|--|-------|
| % Premium/Discount to NAV² | 1.08% |
|--|-------|

| Distributions³ | |
|--|----------|
| Total Distributions per share for the period | \$ 0.525 |
| Distribution Rate at NAV | 6.31% |
| Distribution Rate at Market Price | 6.24% |

Fund Profile

Sector Allocation (% of total investments)⁴

Top 10 Holdings (% of total investments)⁴

| | |
|-------------------------|------|
| Alphabet, Inc., Class C | 7.5% |
| Amazon.com, Inc. | 7.4 |
| Visa, Inc., Class A | 4.9 |
| Facebook, Inc., Class A | 4.5 |
| salesforce.com, inc. | 3.0 |

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| | |
|---------------------|-------|
| Microsoft Corp. | 2.7 |
| Apple, Inc. | 2.5 |
| Adobe Systems, Inc. | 2.4 |
| Twitter, Inc. | 2.2 |
| Ecolab, Inc. | 2.1 |
| Total | 39.2% |

See Endnotes and Additional Disclosures in this report.

Past performance is no guarantee of future results. Returns are historical and are calculated by determining the percentage change in net asset value (NAV) or market price (as applicable) with all distributions reinvested and include management fees and other expenses. Fund performance at market price will differ from its results at NAV due to factors such as changing perceptions about the Fund, market conditions, fluctuations in supply and demand for Fund shares, or changes in Fund distributions. Investment return and principal value will fluctuate so that shares, when sold, may be worth more or less than their original cost. Performance less than or equal to one year is cumulative. Performance is for the stated time period only; due to market volatility, current Fund performance may be lower or higher than the quoted return. For performance as of the most recent month-end, please refer to eatonvance.com.

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Enhanced Equity Income Fund II

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Fund Snapshot

Objective The primary investment objective is to provide current income, with a secondary objective of capital appreciation.

Strategy The Fund invests in a portfolio of primarily large- and mid-cap securities that the investment adviser believes have above-average growth and financial strength and writes call options on individual securities to generate current earnings from the option premium.

| | |
|--|----------------------------------|
| Options Strategy | Write Single Stock Covered Calls |
| Equity Benchmark ¹ | Russell 1000® Growth Index |
| Morningstar Category | Option Writing |
| Distribution Frequency | Monthly |
| Common Stock Portfolio | |
| Positions Held | 62 |
| % US / Non-US | 99.2/0.8 |
| Average Market Cap | \$261.2 Billion |
| Call Options Written | |
| % of Stock Portfolio | 48% |
| Average Days to Expiration | 28 days |
| % Out of the Money | 6.2% |

The following terms as used in the Fund snapshot:

Average Market Cap: An indicator of the size of the companies in which the Fund invests and is the sum of each security's weight in the portfolio multiplied by its market cap. Market Cap is determined by multiplying the price of a share of a company's common stock by the number of shares outstanding.

Call Option: For a call option on a security, the option buyer has the right to purchase, and the option seller (or writer) has the obligation to sell, a specified security at a specified price (exercise price or strike price) on or before a specified date (option expiration date). The buyer of a call option makes a cash payment (premium) to the seller (writer) of the option upon entering into the option contract.

Covered Call Strategy: A strategy of owning a portfolio of common stocks and writing call options on all or a portion of such stocks to generate current earnings from option premium.

Out of the Money: For a call option on a common stock, the extent to which the exercise price of the option exceeds the current price of the stock.

See Endnotes and Additional Disclosures in this report.

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Endnotes and Additional Disclosures

¹ Russell 1000[®] Growth Index is an unmanaged index of U.S. large-cap growth stocks. CBOE S&P 500 BuyWrite Index measures the performance of a hypothetical buy-write strategy on the S&P 500 Index. CBOE NASDAQ 100 BuyWrite Index measures the performance of a theoretical portfolio that owns stocks included in the NASDAQ 100 Index and writes (sells) NASDAQ 100 Index covered call options. Source: Nasdaq, Inc. The information is provided by Nasdaq (with its affiliates, are referred to as the Corporations) and Nasdaq's third party licensors on an as is basis and the Corporations make no guarantees and bear no liability of any kind with respect to the information or the Fund. Unless otherwise stated, index returns do not reflect the effect of any applicable sales charges, commissions, expenses, taxes or leverage, as applicable. It is not possible to invest directly in an index. Performance since inception for an index, if presented, is the performance since the Fund's or oldest share class' inception, as applicable.

² The shares of the Fund often trade at a discount or premium from their net asset value. The discount or premium of the Fund may vary over time and may be higher or lower than what is quoted in this report. For up-to-date premium/discount information, please refer to <http://eatonvance.com/closedend>.

³ The Distribution Rate is based on the Fund's last regular distribution per share in the period (annualized) divided by the Fund's NAV or market price at the end of the period. The Fund's distributions may be comprised of amounts characterized for federal income tax purposes as qualified and non-qualified ordinary dividends, capital gains and nondividend distributions, also known as return of capital. For additional information about nondividend distributions, please refer to Eaton Vance Closed-End Fund Distribution Notices (19a) posted on our website, eatonvance.com. The Fund will determine the federal income tax character of distributions paid to a shareholder after the end of the calendar year. This is reported on the IRS form 1099-DIV and provided to the shareholder shortly after each year-end. For information about the tax character of distributions made in prior calendar years, please refer to Performance-Tax Character of Distributions on the Fund's webpage available at eatonvance.com. In recent years, a significant portion of the Fund's distributions has been characterized as a return of capital. The Fund's distributions are determined by the investment adviser based on its current assessment of the Fund's long-term return potential. Fund distributions may be affected by numerous factors including changes in Fund performance, the cost of financing for leverage, portfolio holdings, realized and projected returns, and other factors. As portfolio and market conditions change, the rate of distributions paid by the Fund could change.

⁴ Depictions do not reflect the Fund's option positions. Excludes cash and cash equivalents.

Fund snapshot and profile subject to change due to active management.

Eaton Vance

Enhanced Equity Income Fund II

June 30, 2018

Portfolio of Investments (Unaudited)

| | | | | |
|--|--------|--|---------------|----------------------|
| Common Stocks | 100.1% | | | |
| Security | | | Shares | Value |
| Aerospace & Defense | 2.7% | | | |
| Boeing Co. (The) | | | 16,985 | \$ 5,698,637 |
| Raytheon Co. | | | 82,209 | 15,881,135 |
| | | | | \$ 21,579,772 |
| Air Freight & Logistics | 1.7% | | | |
| FedEx Corp. | | | 59,350 | \$ 13,476,011 |
| | | | | \$ 13,476,011 |
| Auto Components | 1.5% | | | |
| Aptiv PLC | | | 126,812 | \$ 11,619,784 |
| | | | | \$ 11,619,784 |
| Banks | 2.3% | | | |
| JPMorgan Chase & Co. | | | 81,071 | \$ 8,447,598 |
| KeyCorp | | | 493,399 | 9,641,017 |
| | | | | \$ 18,088,615 |
| Beverages | 3.5% | | | |
| Coca-Cola Co. (The) | | | 366,195 | \$ 16,061,313 |
| Constellation Brands, Inc., Class A | | | 34,375 | 7,523,656 |
| PepsiCo, Inc. | | | 38,207 | 4,159,596 |
| | | | | \$ 27,744,565 |
| Biotechnology | 4.8% | | | |
| Alexion Pharmaceuticals, Inc. ⁽²⁾ | | | 95,585 | \$ 11,866,878 |
| Biogen, Inc. ⁽²⁾ | | | 28,866 | 8,378,068 |
| Celgene Corp. ⁽²⁾ | | | 62,205 | 4,940,321 |
| Vertex Pharmaceuticals, Inc. ⁽²⁾ | | | 77,099 | 13,103,746 |
| | | | | \$ 38,289,013 |
| Capital Markets | 2.6% | | | |
| Charles Schwab Corp. (The) | | | 221,168 | \$ 11,301,685 |
| Goldman Sachs Group, Inc. (The) | | | 43,054 | 9,496,421 |
| | | | | \$ 20,798,106 |
| Chemicals | 2.7% | | | |
| Ecolab, Inc. | | | 116,879 | \$ 16,401,630 |
| Sherwin-Williams Co. (The) | | | 12,419 | 5,061,612 |
| | | | | \$ 21,463,242 |
| Security | | | Shares | Value |
| Commercial Services & Supplies | 1.7% | | | |
| Waste Connections, Inc. | | | 78,779 | \$ 5,930,483 |
| Waste Management, Inc. | | | 97,363 | 7,919,507 |
| | | | | \$ 13,849,990 |

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| | |
|---|---|
| <p>Communications Equipment 1.9%</p> <p>Palo Alto Networks, Inc.⁽²⁾</p> | <p>72,535 \$ 14,903,767</p> <p>\$ 14,903,767</p> |
| <p>Electrical Equipment 1.5%</p> <p>Rockwell Automation, Inc.</p> | <p>72,087 \$ 11,983,022</p> <p>\$ 11,983,022</p> |
| <p>Energy Equipment & Services 0.7%</p> <p>Halliburton Co.</p> | <p>117,626 \$ 5,300,228</p> <p>\$ 5,300,228</p> |
| <p>Food Products 1.3%</p> <p>Conagra Brands, Inc.</p> <p>Pinnacle Foods, Inc.</p> | <p>111,227 \$ 3,974,141</p> <p>103,109 6,708,271</p> <p>\$ 10,682,412</p> |
| <p>Health Care Equipment & Supplies 3.1%</p> <p>Abbott Laboratories</p> <p>Danaher Corp.</p> <p>Intuitive Surgical, Inc.⁽²⁾</p> | <p>196,345 \$ 11,975,081</p> <p>81,195 8,012,323</p> <p>9,619 4,602,499</p> <p>\$ 24,589,903</p> |
| <p>Health Care Providers & Services 2.7%</p> <p>Anthem, Inc.</p> <p>UnitedHealth Group, Inc.</p> | <p>32,689 \$ 7,780,963</p> <p>55,524 13,622,258</p> <p>\$ 21,403,221</p> |
| <p>Hotels, Restaurants & Leisure 0.8%</p> <p>Starbucks Corp.</p> | <p>134,831 \$ 6,586,494</p> <p>\$ 6,586,494</p> |
| <p>Internet & Direct Marketing Retail 9.8%</p> <p>Amazon.com, Inc.⁽²⁾</p> <p>Booking Holdings, Inc.⁽²⁾</p> <p>Netflix, Inc.⁽²⁾</p> | <p>34,872 \$ 59,275,426</p> <p>3,847 7,798,215</p> <p>27,799 10,881,362</p> <p>\$ 77,955,003</p> |

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Enhanced Equity Income Fund II

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Portfolio of Investments (Unaudited) continued

| Security | Shares | Value |
|--|---------------|-----------------------|
| Internet Software & Services 18.2% | | |
| Alibaba Group Holding, Ltd. ADR ⁽²⁾ | 35,383 | \$ 6,564,608 |
| Alphabet, Inc., Class C ⁽²⁾ | 53,702 | 59,912,636 |
| Facebook, Inc., Class A ⁽²⁾ | 185,794 | 36,103,490 |
| GoDaddy, Inc., Class A ⁽²⁾ | 225,833 | 15,943,810 |
| IAC/InterActiveCorp ⁽²⁾ | 52,531 | 8,010,452 |
| Twitter, Inc. ⁽²⁾ | 403,774 | 17,632,811 |
| | | \$ 144,167,807 |
| IT Services 4.9% | | |
| Visa, Inc., Class A | 294,628 | \$ 39,023,479 |
| | | \$ 39,023,479 |
| Life Sciences Tools & Services 1.4% | | |
| Agilent Technologies, Inc. | 115,377 | \$ 7,134,913 |
| Illumina, Inc. ⁽²⁾ | 13,899 | 3,881,852 |
| | | \$ 11,016,765 |
| Machinery 0.5% | | |
| Xylem, Inc. | 57,997 | \$ 3,907,838 |
| | | \$ 3,907,838 |
| Media 1.8% | | |
| Walt Disney Co. (The) | 135,731 | \$ 14,225,966 |
| | | \$ 14,225,966 |
| Metals & Mining 0.7% | | |
| Freeport-McMoRan, Inc. | 313,385 | \$ 5,409,025 |
| | | \$ 5,409,025 |
| Oil, Gas & Consumable Fuels 0.9% | | |
| Devon Energy Corp. | 158,764 | \$ 6,979,265 |
| | | \$ 6,979,265 |
| Road & Rail 2.7% | | |
| CSX Corp. | 246,925 | \$ 15,748,876 |
| J.B. Hunt Transport Services, Inc. | 44,856 | 5,452,247 |
| | | \$ 21,201,123 |
| Semiconductors & Semiconductor Equipment 1.7% | | |
| Broadcom, Inc. | 15,455 | \$ 3,750,001 |
| Texas Instruments, Inc. | 88,994 | 9,811,589 |
| | | \$ 13,561,590 |
| Security | Shares | Value |
| Software 12.0% | | |
| Activision Blizzard, Inc. | 201,262 | \$ 15,360,316 |

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| | | |
|---|--------------|-----------------------|
| Adobe Systems, Inc. ⁽²⁾ | 77,589 | 18,916,974 |
| Intuit, Inc. | 57,084 | 11,662,547 |
| Microsoft Corp. | 220,860 | 21,779,005 |
| SailPoint Technologies Holding, Inc. ⁽²⁾ | 137,084 | 3,364,041 |
| salesforce.com, inc. ⁽²⁾ | 175,214 | 23,899,189 |
| | | \$ 94,982,072 |
| | | |
| Specialty Retail 4.5% | | |
| Home Depot, Inc. (The) | 62,027 | \$ 12,101,468 |
| TJX Cos., Inc. (The) | 125,560 | 11,950,801 |
| Ulta Beauty, Inc. ⁽²⁾ | 50,112 | 11,699,147 |
| | | \$ 35,751,416 |
| | | |
| Technology Hardware, Storage & Peripherals 3.9% | | |
| Apple, Inc. | 107,678 | \$ 19,932,274 |
| HP, Inc. | 501,620 | 11,381,758 |
| | | \$ 31,314,032 |
| | | |
| Textiles, Apparel & Luxury Goods 1.6% | | |
| NIKE, Inc., Class B | 161,356 | \$ 12,856,846 |
| | | \$ 12,856,846 |
| | | |
| Total Common Stocks 100.1% (identified cost \$497,531,071) | | \$ 794,710,372 |
| | | |
| Short-Term Investments 0.2% | | |
| Description | Units | Value |
| Eaton Vance Cash Reserves Fund, LLC, 2.09% ⁽³⁾ | 2,191,595 | \$ 2,191,595 |
| | | |
| Total Short-Term Investments (identified cost \$2,191,595) | | \$ 2,191,595 |
| | | |
| Total Investments 100.3% (identified cost \$499,722,666) | | \$ 796,901,967 |
| | | |
| Total Written Covered Call Options (0.4%) (premiums received \$5,741,990) | | \$ (3,300,307) |
| | | |
| Other Assets, Less Liabilities 0.1% | | \$ 469,959 |
| | | |
| Net Assets 100.0% | | \$ 794,071,619 |

The percentage shown for each investment category in the Portfolio of Investments is based on net assets.

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Enhanced Equity Income Fund II

June 30, 2018

Portfolio of Investments (Unaudited) continued

(1) A portion of each applicable common stock for which a written call option is outstanding at June 30, 2018 has been pledged as collateral for such written option.

(2) Non-income producing security.

(3) Affiliated investment company, available to Eaton Vance portfolios and funds, which invests in high quality, U.S. dollar denominated money market instruments. The rate shown is the annualized seven-day yield as of June 30, 2018.

Written Covered Call Options (0.4)%

Exchange-Traded Options (0.4)%

| Description | Number of | Notional | Exercise | Expiration | |
|-------------------------------------|-----------|--------------|----------|------------|-------------|
| | Contracts | Amount | Price | Date | Value |
| Abbott Laboratories | 980 | \$ 5,977,020 | \$ 64 | 8/10/18 | \$ (58,310) |
| Activision Blizzard, Inc. | 1,005 | 7,670,160 | 80 | 7/20/18 | (63,315) |
| Adobe Systems, Inc. | 420 | 10,240,020 | 260 | 7/20/18 | (40,740) |
| Agilent Technologies, Inc. | 575 | 3,555,800 | 70 | 7/20/18 | (1,437) |
| Alexion Pharmaceuticals, Inc. | 420 | 5,214,300 | 130 | 7/20/18 | (67,200) |
| Alibaba Group Holding, Ltd. ADR | 175 | 3,246,775 | 210 | 7/20/18 | (6,037) |
| Alphabet, Inc., Class C | 265 | 29,564,725 | 1,170 | 7/20/18 | (136,475) |
| Amazon.com, Inc. | 170 | 28,896,600 | 1,760 | 7/20/18 | (287,725) |
| Anthem, Inc. | 125 | 2,975,375 | 250 | 7/27/18 | (26,375) |
| Apple, Inc. | 535 | 9,903,385 | 195 | 7/20/18 | (21,668) |
| Aptiv PLC | 565 | 5,177,095 | 105 | 7/20/18 | (2,825) |
| Biogen, Inc. | 140 | 4,063,360 | 313 | 7/13/18 | (12,600) |
| Boeing Co. (The) | 80 | 2,684,080 | 360 | 7/27/18 | (27,400) |
| Booking Holdings, Inc. | 15 | 3,040,635 | 2,200 | 7/20/18 | (4,312) |
| Broadcom, Inc. | 75 | 1,819,800 | 270 | 7/20/18 | (1,500) |
| Celgene Corp. | 310 | 2,462,020 | 85 | 7/27/18 | (28,210) |
| Charles Schwab Corp. (The) | 1,105 | 5,646,550 | 59 | 7/27/18 | (5,525) |
| Coca-Cola Co. (The) | 1,785 | 7,829,010 | 45 | 8/17/18 | (91,035) |
| Constellation Brands, Inc., Class A | 170 | 3,720,790 | 235 | 7/20/18 | (5,525) |
| CSX Corp. | 1,230 | 7,844,940 | 68 | 7/27/18 | (62,730) |
| Danaher Corp. | 405 | 3,996,540 | 105 | 7/20/18 | (9,112) |
| Devon Energy Corp. | 790 | 3,472,840 | 47 | 7/27/18 | (60,040) |
| Ecolab, Inc. | 580 | 8,139,140 | 150 | 7/20/18 | (8,700) |
| Facebook, Inc., Class A | 925 | 17,974,600 | 200 | 7/20/18 | (214,600) |
| FedEx Corp. | 295 | 6,698,270 | 260 | 7/20/18 | (4,277) |
| Freeport-McMoRan, Inc. | 1,565 | 2,701,190 | 18 | 7/20/18 | (56,340) |
| GoDaddy, Inc., Class A | 1,125 | 7,942,500 | 75 | 7/20/18 | (33,750) |
| Goldman Sachs Group, Inc. (The) | 255 | 5,624,535 | 250 | 7/20/18 | (4,590) |
| Halliburton Co. | 585 | 2,636,010 | 50 | 7/20/18 | (7,605) |

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| | | | | | |
|------------------------------------|-------|-----------|-----|---------|----------|
| Home Depot, Inc. (The) | 310 | 6,048,100 | 200 | 7/20/18 | (43,555) |
| HP, Inc. | 2,505 | 5,683,845 | 25 | 8/17/18 | (26,303) |
| IAC/InterActiveCorp | 260 | 3,964,740 | 165 | 7/20/18 | (20,150) |
| Illumina, Inc. | 65 | 1,815,385 | 300 | 7/20/18 | (7,150) |
| Intuit, Inc. | 285 | 5,822,693 | 220 | 8/17/18 | (54,150) |
| Intuitive Surgical, Inc. | 45 | 2,153,160 | 500 | 7/20/18 | (28,575) |
| J.B. Hunt Transport Services, Inc. | 220 | 2,674,100 | 135 | 8/17/18 | (15,950) |
| JPMorgan Chase & Co. | 405 | 4,220,100 | 111 | 7/27/18 | (21,263) |
| KeyCorp | 2,465 | 4,816,610 | 22 | 8/17/18 | (23,418) |

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See Notes to Financial Statements.

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Enhanced Equity Income Fund II

June 30, 2018

Portfolio of Investments (Unaudited) continued

Written Covered Call Options (continued)

Exchange-Traded Options (continued)

| Description | Number of | Notional | Exercise | Expiration | |
|--------------------------------------|-----------|--------------|----------|------------|-----------------------|
| | Contracts | Amount | Price | Date | Value |
| Microsoft Corp. | 1,100 | \$10,847,100 | \$ 105 | 7/13/18 | \$ (9,900) |
| Netflix, Inc. | 135 | 5,284,305 | 395 | 7/20/18 | (290,588) |
| NIKE, Inc., Class B | 805 | 6,414,240 | 85 | 8/17/18 | (58,363) |
| Palo Alto Networks, Inc. | 360 | 7,396,920 | 220 | 8/17/18 | (122,400) |
| PepsiCo, Inc. | 190 | 2,068,530 | 110 | 8/17/18 | (46,075) |
| Raytheon Co. | 395 | 7,630,610 | 203 | 7/27/18 | (65,965) |
| Rockwell Automation, Inc. | 360 | 5,984,280 | 190 | 7/20/18 | (4,500) |
| SailPoint Technologies Holding, Inc. | 685 | 1,680,990 | 30 | 7/20/18 | (5,137) |
| salesforce.com, inc. | 875 | 11,935,000 | 145 | 8/17/18 | (199,063) |
| Sherwin-Williams Co. (The) | 60 | 2,445,420 | 405 | 7/13/18 | (45,600) |
| Starbucks Corp. | 670 | 3,272,950 | 60 | 7/20/18 | (1,005) |
| Texas Instruments, Inc. | 440 | 4,851,000 | 120 | 7/20/18 | (6,160) |
| TJX Cos., Inc. (The) | 630 | 5,996,340 | 100 | 8/17/18 | (74,025) |
| Twitter, Inc. | 2,015 | 8,799,505 | 50 | 8/17/18 | (316,354) |
| Ultra Beauty, Inc. | 215 | 5,019,390 | 270 | 8/17/18 | (29,025) |
| UnitedHealth Group, Inc. | 275 | 6,746,850 | 255 | 8/3/18 | (81,813) |
| Vertex Pharmaceuticals, Inc. | 370 | 6,288,520 | 170 | 7/20/18 | (205,350) |
| Visa, Inc., Class A | 1,470 | 19,470,150 | 140 | 7/20/18 | (40,425) |
| Walt Disney Co. (The) | 675 | 7,074,675 | 108 | 8/3/18 | (99,900) |
| Waste Connections, Inc. | 260 | 1,957,280 | 80 | 7/20/18 | (1,950) |
| Waste Management, Inc. | 385 | 3,131,590 | 85 | 7/20/18 | (4,812) |
| Xylem, Inc. | 285 | 1,920,330 | 75 | 7/20/18 | (1,425) |
| Total | | | | | \$ (3,300,307) |

Total
Abbreviations:

ADR American Depositary Receipt

Eaton Vance

Enhanced Equity Income Fund II

June 30, 2018

Statement of Assets and Liabilities (Unaudited)

| | June 30, 2018 |
|--|-----------------------|
| Assets | |
| Unaffiliated investments, at value (identified cost, \$497,531,071) | \$ 794,710,372 |
| Affiliated investment, at value (identified cost, \$2,191,595) | 2,191,595 |
| Cash | 1,142 |
| Dividends receivable | 374,709 |
| Dividends receivable from affiliated investment | 4,839 |
| Receivable for investments sold | 5,024,189 |
| Receivable for premiums on written options | 326,913 |
| Tax reclaims receivable | 123,136 |
| Total assets | \$ 802,756,895 |
| Liabilities | |
| Written options outstanding, at value (premiums received, \$5,741,990) | \$ 3,300,307 |
| Payable for investments purchased | 4,014,090 |
| Payable for closed written options | 452,344 |
| Payable to affiliates: | |
| Investment adviser fee | 664,222 |
| Trustees fees | 7,998 |
| Accrued expenses | 246,315 |
| Total liabilities | \$ 8,685,276 |
| Net Assets | \$ 794,071,619 |
| Sources of Net Assets | |
| Common shares, \$0.01 par value, unlimited number of shares authorized, 47,689,266 shares issued and outstanding | \$ 476,893 |
| Additional paid-in capital | 481,880,247 |
| Accumulated distributions in excess of net investment income | (25,875,656) |
| Accumulated net realized gain | 37,971,739 |
| Net unrealized appreciation | 299,618,396 |
| Net Assets | \$ 794,071,619 |
| Net Asset Value | |
| (\$794,071,619 ÷ 47,689,266 common shares issued and outstanding) | \$ 16.65 |

Eaton Vance

Enhanced Equity Income Fund II

June 30, 2018

Statement of Operations (Unaudited)

| | Six Months Ended |
|---|-------------------------|
| | June 30, 2018 |
| Investment Income | |
| Dividends | \$ 3,368,464 |
| Dividends from affiliated investment | 64,823 |
| Total investment income | \$ 3,433,287 |
| Expenses | |
| Investment adviser fee | \$ 3,881,389 |
| Trustees' fees and expenses | 14,191 |
| Custodian fee | 163,981 |
| Transfer and dividend disbursing agent fees | 9,369 |
| Legal and accounting services | 41,589 |
| Printing and postage | 150,326 |
| Miscellaneous | 22,008 |
| Total expenses | \$ 4,282,853 |
| Net investment loss | \$ (849,566) |
| Realized and Unrealized Gain (Loss) | |
| Net realized gain (loss) | |
| Investment transactions | \$ 49,097,370 |
| Investment transactions - affiliated investment | 63 |
| Written options | (10,128,206) |
| Foreign currency transactions | 6,578 |
| Net realized gain | \$ 38,975,805 |
| Change in unrealized appreciation (depreciation) | |
| Investments | \$ 28,924,570 |
| Investments - affiliated investment | 1,643 |
| Written options | 13,685 |
| Foreign currency | (7,435) |
| Net change in unrealized appreciation (depreciation) | \$ 28,932,463 |
| Net realized and unrealized gain | \$ 67,908,268 |
| Net increase in net assets from operations | \$ 67,058,702 |

Eaton Vance

Enhanced Equity Income Fund II

June 30, 2018

Statements of Changes in Net Assets

| | Six Months Ended | Year Ended |
|--|-------------------------|--------------------------|
| | June 30, 2018 | December 31, 2017 |
| | (Unaudited) | December 31, 2017 |
| Increase (Decrease) in Net Assets | | |
| From operations | | |
| Net investment loss | \$ (849,566) | \$ (1,073,737) |
| Net realized gain | 38,975,805 | 19,792,296 |
| Net change in unrealized appreciation (depreciation) | 28,932,463 | 131,729,829 |
| Net increase in net assets from operations | \$ 67,058,702 | \$ 150,448,388 |
| Distributions to shareholders | | |
| From net investment income | \$ (25,026,090)* | \$ |
| From net realized gain | | (20,135,578) |
| Tax return of capital | | (29,904,509) |
| Total distributions | \$ (25,026,090) | \$ (50,040,087) |
| Capital share transactions | | |
| Reinvestment of distributions | \$ 473,760 | \$ 76,699 |
| Net increase in net assets from capital share transactions | \$ 473,760 | \$ 76,699 |
| Net increase in net assets | \$ 42,506,372 | \$ 100,485,000 |
| Net Assets | | |
| At beginning of period | \$ 751,565,247 | \$ 651,080,247 |
| At end of period | \$ 794,071,619 | \$ 751,565,247 |
| Accumulated distributions in excess of net investment income included in net assets | | |
| At end of period | \$ (25,875,656) | \$ |

* A portion of the distributions may be deemed from net realized gain or a tax return of capital at year-end. See Note 2.

Eaton Vance

Enhanced Equity Income Fund II

June 30, 2018

Financial Highlights

| | Six Months Ended June 30, 2018 (Unaudited) | | Year Ended December 31, | | | |
|--|--|-----------------------------|-------------------------|-------------------|-------------------|-------------------|
| | | 2017 | 2016 | 2015 | 2014 | 2013 |
| Net asset value Beginning of period | \$ 15.770 | \$ 13.660 | \$ 14.410 | \$ 14.540 | \$ 14.170 | \$ 11.950 |
| Income (Loss) From Operations | | | | | | |
| Net investment income (loss) ⁽¹⁾ | \$ (0.018) | \$ (0.023) | \$ 0.025 | \$ 0.129 | \$ 0.024 | \$ 0.053 |
| Net realized and unrealized gain | 1.423 | 3.183 | 0.275 | 0.791 | 1.396 | 3.211 |
| Total income from operations | \$ 1.405 | \$ 3.160 | \$ 0.300 | \$ 0.920 | \$ 1.420 | \$ 3.264 |
| Less Distributions | | | | | | |
| From net investment income | \$ (0.525)* | \$ | \$ (0.054) | \$ (0.128) | \$ (0.205) | \$ (0.126) |
| From net realized gain | | (0.423) | (0.126) | (0.551) | (0.845) | (0.924) |
| Tax return of capital | | (0.627) | (0.870) | (0.371) | | |
| Total distributions | \$ (0.525) | \$ (1.050) | \$ (1.050) | \$ (1.050) | \$ (1.050) | \$ (1.050) |
| Anti-dilutive effect of share repurchase program (see Note 5)⁽¹⁾ | \$ | \$ | \$ | \$ | \$ | \$ 0.006 |
| Net asset value End of period | \$ 16.650 | \$ 15.770 | \$ 13.660 | \$ 14.410 | \$ 14.540 | \$ 14.170 |
| Market value End of period | \$ 16.830 | \$ 15.220 | \$ 12.800 | \$ 13.640 | \$ 13.830 | \$ 12.990 |
| Total Investment Return on Net Asset Value⁽²⁾ | 9.06%⁽³⁾ | 24.04%⁽⁴⁾ | 2.72% | 6.87% | 10.98% | 29.60% |
| Total Investment Return on Market Value⁽²⁾ | 14.23%⁽³⁾ | 27.76% | 1.68% | 6.43% | 15.07% | 35.99% |
| Ratios/Supplemental Data | | | | | | |
| Net assets, end of period (000 s omitted) | \$ 794,072 | \$ 751,565 | \$ 651,080 | \$ 686,627 | \$ 693,110 | \$ 675,297 |
| Ratios (as a percentage of average daily net assets): | | | | | | |
| Expenses ⁽⁵⁾ | 1.10% ⁽⁶⁾ | 1.10% | 1.11% | 1.10% | 1.11% | 1.13% |
| Net investment income (loss) | (0.22)% ⁽⁶⁾ | (0.15)% | 0.18% | 0.88% | 0.17% | 0.41% |
| Portfolio Turnover | 25% ⁽³⁾ | 48% | 58% | 52% | 77% | 121% |

(1) Computed using average shares outstanding.

(2) Returns are historical and are calculated by determining the percentage change in net asset value or market value with all distributions reinvested. Distributions are assumed to be reinvested at prices obtained under the Fund's dividend reinvestment plan.

(3) Not annualized.

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- (4) During the year ended December 31, 2017, the Fund received a payment from an affiliate as reimbursement for certain losses. Excluding this payment, total return at net asset value would have been 23.72%.
- (5) Excludes the effect of custody fee credits, if any, of less than 0.005%. Effective September 1, 2015, custody fee credits, which were earned on cash deposit balances, were discontinued by the custodian.
- (6) Annualized.
- * A portion of the distributions may be deemed from net realized gain or a tax return of capital at year-end. See Note 2.

Eaton Vance

Enhanced Equity Income Fund II

June 30, 2018

Notes to Financial Statements (Unaudited)

1 Significant Accounting Policies

Eaton Vance Enhanced Equity Income Fund II (the Fund) is a Massachusetts business trust registered under the Investment Company Act of 1940, as amended (the 1940 Act), as a diversified, closed-end management investment company. The Fund's primary investment objective is to provide current income, with a secondary objective of capital appreciation.

The following is a summary of significant accounting policies of the Fund. The policies are in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP). The Fund is an investment company and follows accounting and reporting guidance in the Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 946.

A Investment Valuation The following methodologies are used to determine the market value or fair value of investments.

Equity Securities. Equity securities listed on a U.S. securities exchange generally are valued at the last sale or closing price on the day of valuation or, if no sales took place on such date, at the mean between the closing bid and asked prices therefore on the exchange where such securities are principally traded. Equity securities listed on the NASDAQ Global or Global Select Market generally are valued at the NASDAQ official closing price. Unlisted or listed securities for which closing sales prices or closing quotations are not available are valued at the mean between the latest available bid and asked prices.

Derivatives. U.S. exchange-traded options are valued at the mean between the bid and asked prices at valuation time as reported by the Options Price Reporting Authority. Non U.S. exchange-traded options and over-the-counter options are valued by a third party pricing service using techniques that consider factors including the value of the underlying instrument, the volatility of the underlying instrument and the period of time until option expiration.

Foreign Securities and Currencies. Foreign securities and currencies are valued in U.S. dollars, based on foreign currency exchange rate quotations supplied by a third party pricing service. The pricing service uses a proprietary model to determine the exchange rate. Inputs to the model include reported trades and implied bid/ask spreads. The daily valuation of exchange-traded foreign securities generally is determined as of the close of trading on the principal exchange on which such securities trade. Events occurring after the close of trading on foreign exchanges may result in adjustments to the valuation of foreign securities to more accurately reflect their fair value as of the close of regular trading on the New York Stock Exchange. When valuing foreign equity securities that meet certain criteria, the Fund's Trustees have approved the use of a fair value service that values such securities to reflect market trading that occurs after the close of the applicable foreign markets of comparable securities or other instruments that have a strong correlation to the fair-valued securities.

Affiliated Fund. The Fund may invest in Eaton Vance Cash Reserves Fund, LLC (Cash Reserves Fund), an affiliated investment company managed by Eaton Vance Management (EVM). While Cash Reserves Fund is not a registered money market mutual fund, it conducts all of its investment activities in accordance with the requirements of Rule 2a-7 under the 1940 Act. Investments in Cash Reserves Fund are valued at the closing net asset value per unit on the valuation day. Cash Reserves Fund generally values its investment securities based on available market quotations provided by a third party pricing service.

Fair Valuation. Investments for which valuations or market quotations are not readily available or are deemed unreliable are valued at fair value using methods determined in good faith by or at the direction of the Trustees of the Fund in a manner that fairly reflects the security's value, or the amount that the Fund might reasonably expect to receive for the security upon its current sale in the ordinary course. Each such determination is based on a consideration of relevant factors, which are likely to vary from one pricing context to another. These factors may include, but are not limited to, the type of security, the existence of any contractual restrictions on the security's disposition, the price and extent of public trading in similar securities of the issuer or of comparable companies or entities, quotations or relevant information obtained from broker/dealers or other market participants, information obtained from the issuer, analysts, and/or the appropriate stock exchange (for exchange-traded securities), an analysis of the company's or entity's financial condition, and an evaluation of the forces that influence the issuer and the market(s) in which the security is purchased and sold.

B Investment Transactions Investment transactions for financial statement purposes are accounted for on a trade date basis. Realized gains and losses on investments sold are determined on the basis of identified cost.

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C Income Dividend income is recorded on the ex-dividend date for dividends received in cash and/or securities. However, if the ex-dividend date has passed, certain dividends from foreign securities are recorded as the Fund is informed of the ex-dividend date. Withholding taxes on foreign dividends and capital gains have been provided for in accordance with the Fund's understanding of the applicable countries' tax rules and rates.

D Federal Taxes The Fund's policy is to comply with the provisions of the Internal Revenue Code applicable to regulated investment companies and to distribute to shareholders each year substantially all of its net investment income, and all or substantially all of its net realized capital gains. Accordingly, no provision for federal income or excise tax is necessary.

As of June 30, 2018, the Fund had no uncertain tax positions that would require financial statement recognition, de-recognition, or disclosure. The Fund files a U.S. federal income tax return annually after its fiscal year-end, which is subject to examination by the Internal Revenue Service for a period of three years from the date of filing.

E Foreign Currency Translation Investment valuations, other assets, and liabilities initially expressed in foreign currencies are translated each business day into U.S. dollars based upon current exchange rates. Purchases and sales of foreign investment securities and income and expenses denominated in foreign currencies are translated into U.S. dollars based upon currency exchange rates in effect on the respective dates of such transactions. Recognized

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June 30, 2018

Notes to Financial Statements (Unaudited) continued

gains or losses on investment transactions attributable to changes in foreign currency exchange rates are recorded for financial statement purposes as net realized gains and losses on investments. That portion of unrealized gains and losses on investments that results from fluctuations in foreign currency exchange rates is not separately disclosed.

F Use of Estimates The preparation of the financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of income and expense during the reporting period. Actual results could differ from those estimates.

G Indemnifications Under the Fund's organizational documents, its officers and Trustees may be indemnified against certain liabilities and expenses arising out of the performance of their duties to the Fund. Under Massachusetts law, if certain conditions prevail, shareholders of a Massachusetts business trust (such as the Fund) could be deemed to have personal liability for the obligations of the Fund. However, the Fund's Declaration of Trust contains an express disclaimer of liability on the part of Fund shareholders and the By-laws provide that the Fund shall assume the defense on behalf of any Fund shareholders. Moreover, the By-laws also provide for indemnification out of Fund property of any shareholder held personally liable solely by reason of being or having been a shareholder for all loss or expense arising from such liability. Additionally, in the normal course of business, the Fund enters into agreements with service providers that may contain indemnification clauses. The Fund's maximum exposure under these arrangements is unknown as this would involve future claims that may be made against the Fund that have not yet occurred.

H Written Options Upon the writing of a call or a put option, the premium received by the Fund is included in the Statement of Assets and Liabilities as a liability. The amount of the liability is subsequently marked-to-market to reflect the current market value of the option written, in accordance with the Fund's policies on investment valuations discussed above. Premiums received from writing options which expire are treated as realized gains. Premiums received from writing options which are exercised or are closed are added to or offset against the proceeds or amount paid on the transaction to determine the realized gain or loss. When an index option is exercised, the Fund is required to deliver an amount of cash determined by the excess of the exercise price of the option over the value of the index (in the case of a put) or the excess of the value of the index over the exercise price of the option (in the case of a call) at contract termination. If a put option on a security is exercised, the premium reduces the cost basis of the securities purchased by the Fund. The Fund, as a writer of an option, may have no control over whether the underlying securities or other assets may be sold (call) or purchased (put) and, as a result, bears the market risk of an unfavorable change in the price of the securities or other assets underlying the written option. The Fund may also bear the risk of not being able to enter into a closing transaction if a liquid secondary market does not exist.

I Interim Financial Statements The interim financial statements relating to June 30, 2018 and for the six months then ended have not been audited by an independent registered public accounting firm, but in the opinion of the Fund's management, reflect all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of the financial statements.

2 Distributions to Shareholders and Income Tax Information

Subject to its Managed Distribution Plan, the Fund makes monthly distributions from its cash available for distribution, which consists of the Fund's dividends and interest income after payment of Fund expenses, net option premiums and net realized and unrealized gains on stock investments. The Fund intends to distribute all or substantially all of its net realized capital gains. Distributions are recorded on the ex-dividend date. Distributions to shareholders are determined in accordance with income tax regulations, which may differ from U.S. GAAP. As required by U.S. GAAP, only distributions in excess of tax basis earnings and profits are reported in the financial statements as a return of capital. Permanent differences between book and tax accounting relating to distributions are reclassified to paid-in capital. For tax purposes, distributions from short-term capital gains are considered to be from ordinary income. Distributions in any year may include a return of capital component. The final determination of tax characteristics of the Fund's distributions will occur at the end of the year, at which time it will be reported to the shareholders.

At December 31, 2017, the Fund had a net capital loss of \$1,023,694 attributable to security transactions incurred after October 31, 2017 that it has elected to defer. This net capital loss is treated as arising on the first day of the Fund's taxable year ending December 31, 2018.

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The cost and unrealized appreciation (depreciation) of investments, including open derivative contracts, of the Fund at June 30, 2018, as determined on a federal income tax basis, were as follows:

| | |
|------------------------------------|-----------------------|
| Aggregate cost | \$ 493,961,049 |
| Gross unrealized appreciation | \$ 305,577,596 |
| Gross unrealized depreciation | (5,936,985) |
| Net unrealized appreciation | \$ 299,640,611 |

Eaton Vance

Enhanced Equity Income Fund II

June 30, 2018

Notes to Financial Statements (Unaudited) continued

3 Investment Adviser Fee and Other Transactions with Affiliates

The investment adviser fee is earned by EVM as compensation for management and investment advisory services rendered to the Fund. The fee is computed at an annual rate of 1.00% of the Fund's average daily gross assets and is payable monthly. Gross assets as referred to herein represent net assets plus obligations attributable to investment leverage, if any. For the six months ended June 30, 2018, the Fund's investment adviser fee amounted to \$3,881,389. The Fund invests its cash in Cash Reserves Fund. EVM does not currently receive a fee for advisory services provided to Cash Reserves Fund. EVM also serves as administrator of the Fund, but receives no compensation.

Trustees and officers of the Fund who are members of EVM's organization receive remuneration for their services to the Fund out of the investment adviser fee. Trustees of the Fund who are not affiliated with EVM may elect to defer receipt of all or a percentage of their annual fees in accordance with the terms of the Trustees Deferred Compensation Plan. For the six months ended June 30, 2018, no significant amounts have been deferred. Certain officers and Trustees of the Fund are officers of EVM.

4 Purchases and Sales of Investments

Purchases and sales of investments, other than short-term obligations, aggregated \$195,177,951 and \$222,074,080, respectively, for the six months ended June 30, 2018.

5 Common Shares of Beneficial Interest

The Fund may issue common shares pursuant to its dividend reinvestment plan. Common shares issued by the Fund pursuant to its dividend reinvestment plan for the six months ended June 30, 2018 and the year ended December 31, 2017 were 29,097 and 5,046, respectively.

The Board of Trustees of the Fund approved the continuation of the Fund's share repurchase program that has been in effect since August 6, 2012. Pursuant to the terms of the reauthorization of the program, the Fund may repurchase up to 10% of its common shares outstanding as of September 30, 2013 in open market transactions at a discount to net asset value (NAV). The terms of the reauthorization increased the number of shares available for repurchase. The repurchase program does not obligate the Fund to purchase a specific amount of shares. There were no repurchases of common shares by the Fund for the six months ended June 30, 2018 and the year ended December 31, 2017.

6 Financial Instruments

The Fund may trade in financial instruments with off-balance sheet risk in the normal course of its investing activities. These financial instruments may include written options and may involve, to a varying degree, elements of risk in excess of the amounts recognized for financial statement purposes. The notional or contractual amounts of these instruments represent the investment the Fund has in particular classes of financial instruments and do not necessarily represent the amounts potentially subject to risk. The measurement of the risks associated with these instruments is meaningful only when all related and offsetting transactions are considered. A summary of obligations under these financial instruments at June 30, 2018 is included in the Portfolio of Investments. At June 30, 2018, the Fund had sufficient cash and/or securities to cover commitments under these contracts.

The Fund is subject to equity price risk in the normal course of pursuing its investment objectives. The Fund writes covered call options on individual stocks above the current value of the stock to generate premium income. In writing call options on individual stocks, the Fund in effect sells potential appreciation in the value of the applicable stock above the exercise price in exchange for the option premium received. The Fund retains the risk of loss, minus the premium received, should the price of the underlying stock decline.

The fair value of open derivative instruments (not considered to be hedging instruments for accounting disclosure purposes) and whose primary underlying risk exposure is equity price risk at June 30, 2018 was as follows:

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| Derivative | Fair Value | |
|-------------------|-------------------------|---|
| | Asset Derivative | Liability Derivative⁽¹⁾ |
| Written options | \$ | \$ (3,300,307) |

⁽¹⁾ Statement of Assets and Liabilities location: Written options outstanding, at value.

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Enhanced Equity Income Fund II

June 30, 2018

Notes to Financial Statements (Unaudited) continued

The effect of derivative instruments (not considered to be hedging instruments for accounting disclosure purposes) on the Statement of Operations and whose primary underlying risk exposure is equity price risk for the six months ended June 30, 2018 was as follows:

| Derivative | Realized Gain (Loss) on Derivatives Recognized in Income ⁽¹⁾ | Change in Unrealized Appreciation (Depreciation) on Derivatives Recognized in Income ⁽²⁾ |
|-----------------|---|---|
| Written options | \$ (10,128,206) | \$ 13,685 |

⁽¹⁾ Statement of Operations location: Net realized gain (loss) Written options.

⁽²⁾ Statement of Operations location: Change in unrealized appreciation (depreciation) Written options.

The average number of written options contracts outstanding during the six months ended June 30, 2018, which is indicative of the volume of this derivative type, was 35,974 contracts.

7 Fair Value Measurements

Under generally accepted accounting principles for fair value measurements, a three-tier hierarchy to prioritize the assumptions, referred to as inputs, is used in valuation techniques to measure fair value. The three-tier hierarchy of inputs is summarized in the three broad levels listed below.

Level 1 quoted prices in active markets for identical investments

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

Level 3 significant unobservable inputs (including a fund's own assumptions in determining the fair value of investments)

In cases where the inputs used to measure fair value fall in different levels of the fair value hierarchy, the level disclosed is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

At June 30, 2018, the hierarchy of inputs used in valuing the Fund's investments and open derivative instruments, which are carried at value, were as follows:

| Asset Description | Level 1 | Level 2 | Level 3 | Total |
|-------------------|---------|---------|---------|-------|
|-------------------|---------|---------|---------|-------|

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| | | | | |
|------------------------------|-----------------------|---------------------|-----------|-----------------------|
| Common Stocks | \$ 794,710,372* | \$ | \$ | \$ 794,710,372 |
| Short-Term Investments | | | | 2,191,595 |
| Total Investments | \$ 794,710,372 | \$ 2,191,595 | \$ | \$ 796,901,967 |
| Liability Description | | | | |
| Written Covered Call Options | \$ (3,300,307) | \$ | \$ | \$ (3,300,307) |
| Total | \$ (3,300,307) | \$ | \$ | \$ (3,300,307) |

* The level classification by major category of investments is the same as the category presentation in the Portfolio of Investments. At June 30, 2018, there were no investments transferred between Level 1 and Level 2 during the six months then ended.

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Enhanced Equity Income Fund II

June 30, 2018

Annual Meeting of Shareholders (Unaudited)

The Fund held its Annual Meeting of Shareholders on April 19, 2018. The following action was taken by the shareholders:

Item 1: The election of George J. Gorman, William H. Park, Helen Frame Peters and Susan J. Sutherland as Class II Trustees of the Fund for a three-year term expiring in 2021.

Nominee for Trustee

Number of Shares

Elected by All Shareholders

| | For | Withheld |
|---------------------|------------|-----------------|
| George J. Gorman | 43,925,794 | 907,450 |
| William H. Park | 43,889,841 | 943,403 |
| Helen Frame Peters | 43,743,432 | 1,089,812 |
| Susan J. Sutherland | 43,790,099 | 1,043,145 |

Eaton Vance

Enhanced Equity Income Fund II

June 30, 2018

Board of Trustees Contract Approval

Overview of the Contract Review Process

The Investment Company Act of 1940, as amended (the "1940 Act"), provides, in substance, that each investment advisory agreement between a fund and its investment adviser will continue in effect from year to year only if its continuation is approved at least annually by the fund's board of trustees, including by a vote of a majority of the trustees who are not interested persons of the fund (Independent Trustees), cast in person at a meeting called for the purpose of considering such approval.

At a meeting of the Boards of Trustees (each a "Board") of the registered investment companies advised by either Eaton Vance Management or its affiliate, Boston Management and Research, (the "Eaton Vance Funds") held on April 24, 2018, the Board, including a majority of the Independent Trustees, voted to approve continuation of existing investment advisory and sub-advisory agreements for the Eaton Vance Funds for an additional one-year period. In voting its approval, the Board relied upon the affirmative recommendation of its Contract Review Committee, which is a committee comprised exclusively of Independent Trustees. Prior to making its recommendation, the Contract Review Committee reviewed information furnished by each adviser to the Eaton Vance Funds (including information specifically requested by the Board) for a series of meetings of the Contract Review Committee held between February and April 2018. The Contract Review Committee also considered information received at prior meetings of the Board and its committees, as relevant to its annual evaluation of the investment advisory and sub-advisory agreements.

The information that the Board considered included, among other things, the following (for funds that invest through one or more underlying portfolio(s), references to "each fund" in this section may include information that was considered at the portfolio-level):

Information about Fees, Performance and Expenses

A report from an independent data provider comparing the advisory and related fees paid by each fund with fees paid by comparable funds as identified by the independent data provider ("comparable funds");

A report from an independent data provider comparing each fund's total expense ratio and its components to comparable funds;

A report from an independent data provider comparing the investment performance of each fund (including, where relevant, yield data, Sharpe ratios and information ratios) to the investment performance of comparable funds over various time periods;

Data regarding investment performance in comparison to benchmark indices, as well as customized groups of peer funds and blended indices identified by the adviser in consultation with the Board;

For each fund, comparative information concerning the fees charged and the services provided by each adviser in managing other accounts (including mutual funds, other collective investment funds and institutional accounts) using investment strategies and techniques similar to those used in managing such fund;

Profitability analyses for each adviser with respect to each fund;

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Information about Portfolio Management and Trading

Descriptions of the investment management services provided to each fund, including the fund's investment strategies and policies;

The procedures and processes used to determine the fair value of fund assets and actions taken to monitor and test the effectiveness of such procedures and processes;

Information about each adviser's policies and practices with respect to trading, including each adviser's processes for monitoring best execution of portfolio transactions;

Information about the allocation of brokerage transactions and the benefits received by each adviser as a result of brokerage allocation, including information concerning the acquisition of research through client commission arrangements and policies with respect to soft dollars ;

Data relating to portfolio turnover rates of each fund;

Information about each Adviser

Reports detailing the financial results and condition of each adviser;

Descriptions of the qualifications, education and experience of the individual investment professionals whose responsibilities include portfolio management and investment research for the funds, and information relating to their responsibilities with respect to managing other mutual funds and investment accounts;

The Code of Ethics of each adviser and its affiliates, together with information relating to compliance with and the administration of such codes;

Policies and procedures relating to proxy voting and the handling of corporate actions and class actions;

Information concerning the resources devoted to compliance efforts undertaken by each adviser and its affiliates (including descriptions of various compliance programs) and their record of compliance;

Information concerning the business continuity and disaster recovery plans of each adviser and its affiliates;

A description of Eaton Vance Management's procedures for overseeing third party advisers and sub-advisers, including with respect to regulatory and compliance issues, investment management and other matters;

Eaton Vance

Enhanced Equity Income Fund II

June 30, 2018

[Board of Trustees](#) [Contract Approval](#) [continued](#)

Other Relevant Information

Information concerning the nature, cost and character of the administrative and other non-investment advisory services provided by Eaton Vance Management and its affiliates;

Information concerning management of the relationship with the custodian, subcustodians and fund accountants by each adviser or the funds' administrator; and

The terms of each investment advisory agreement.

Over the course of the twelve-month period ended April 30, 2018, with respect to one or more funds, the Board met seven times and the Contract Review Committee, the Audit Committee, the Governance Committee, the Portfolio Management Committee and the Compliance Reports and Regulatory Matters Committee, each of which is a Committee comprised solely of Independent Trustees, met seven, thirteen, six, eight and nine times, respectively. At such meetings, the Trustees participated in investment and performance reviews with the portfolio managers and other investment professionals of each investment adviser relating to each fund, and considered various investment and trading strategies used in pursuing each fund's investment objective, such as the use of derivative instruments, as well as risk management techniques. The Board and its Committees also evaluated issues pertaining to industry and regulatory developments, compliance procedures, fund governance and other issues with respect to the funds, and received and participated in reports and presentations provided by Eaton Vance Management and other fund advisers with respect to such matters. In addition to the formal meetings of the Board and its Committees, the Independent Trustees hold regular teleconferences in between meetings to discuss, among other topics, matters relating to the continuation of investment advisory and sub-advisory agreements.

For funds that invest through one or more underlying portfolios, the Board considered similar information about the portfolio(s) when considering the approval of investment advisory agreements. In addition, in cases where the fund's investment adviser has engaged a sub-adviser, the Board considered similar information about the sub-adviser when considering the approval of any sub-advisory agreement.

The Contract Review Committee was assisted throughout the contract review process by Goodwin Procter LLP, independent legal counsel for the Independent Trustees. The members of the Contract Review Committee relied upon the advice of such counsel and their own business judgment in determining the material factors to be considered in evaluating each investment advisory and sub-advisory agreement and the weight to be given to each such factor. The conclusions reached with respect to each investment advisory and sub-advisory agreement were based on a comprehensive evaluation of all the information provided and not any single factor. Moreover, each member of the Contract Review Committee may have placed varying emphasis on particular factors in reaching conclusions with respect to each investment advisory and sub-advisory agreement. In evaluating each investment advisory and sub-advisory agreement, including the specific fee structures and other terms of the agreements, the Contract Review Committee was informed by multiple years of analysis and discussion among the Independent Trustees and the Eaton Vance Funds' advisers and sub-advisers.

[Results of the Process](#)

Based on its consideration of the foregoing, and such other information as it deemed relevant, including the factors and conclusions described below, the Contract Review Committee concluded that the continuation of the investment advisory agreement of Eaton Vance Enhanced Equity Income Fund II (the "Fund") with Eaton Vance Management (the "Adviser"), including its fee structure, is in the interests of shareholders and, therefore, the Contract Review Committee recommended to the Board approval of the agreement. The Board accepted the recommendation of the Contract Review Committee based on the material factors considered and conclusions reached by the Contract Review Committee with respect to the agreement. Accordingly, the Board, including a majority of the Independent Trustees, voted to approve continuation of the investment advisory agreement for the Fund.

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Nature, Extent and Quality of Services

In considering whether to approve the investment advisory agreement of the Fund, the Board evaluated the nature, extent and quality of services provided to the Fund by the Adviser.

The Board considered the Adviser's management capabilities and investment process with respect to the types of investments held by the Fund, including the education, experience and number of its investment professionals and other personnel who provide portfolio management, investment research, and similar services to the Fund. In particular, the Board considered the abilities and experience of the Adviser's investment professionals in analyzing special considerations relevant to investing in particular markets and implementing the Fund's options strategy. The Board considered that the Adviser has devoted extensive resources to in-house equity research and also draws upon independent research available from third-party sources. The Board also took into account the resources dedicated to portfolio management and other services, as well as the compensation methods of the Adviser and other factors, such as the reputation and resources of the Adviser to recruit and retain highly qualified research, advisory and supervisory investment professionals. In addition, the Board considered the time and attention devoted to the Eaton Vance Funds, including the Fund, by senior management, as well as the infrastructure, operational capabilities and support staff in place to assist in the portfolio management and operations of the Fund, including the provision of administrative services. The Board also considered the business-related and other risks to which the Adviser or its affiliates may be subject in managing the Fund.

The Board considered the compliance programs of the Adviser and relevant affiliates thereof. Among other matters, the Board considered compliance and reporting matters relating to personal trading by investment professionals, selective disclosure of portfolio holdings, late trading, frequent trading, portfolio

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Board of Trustees Contract Approval continued

valuation, business continuity and the allocation of investment opportunities. The Board also considered the responses of the Adviser and its affiliates to requests in recent years from regulatory authorities such as the Securities and Exchange Commission and the Financial Industry Regulatory Authority.

The Board considered shareholder and other administrative services provided or managed by Eaton Vance Management and its affiliates, including transfer agency and accounting services. The Board evaluated the benefits to shareholders of investing in a fund that is a part of a large fund complex offering exposure to a variety of asset classes and investment disciplines.

After consideration of the foregoing factors, among others, the Board concluded that the nature, extent and quality of services provided by the Adviser, taken as a whole, are appropriate and consistent with the terms of the investment advisory agreement.

Fund Performance

The Board compared the Fund's investment performance to that of comparable funds and appropriate benchmark indices, as well as a customized peer group of similarly managed funds. The Board's review included comparative performance data for the one-, three-, five- and ten-year periods ended September 30, 2017 for the Fund. In this regard, the Board noted that the performance of the Fund was higher than the median performance of the Fund's peer group and custom peer group for the three-year period. The Board also noted that the performance of the Fund was higher than its secondary benchmark indexes and lower than its primary benchmark index for the three-year period. The Board concluded that the performance of the Fund was satisfactory.

Management Fees and Expenses

The Board considered contractual fee rates payable by the Fund for advisory and administrative services (referred to collectively as "management fees"). As part of its review, the Board considered the Fund's management fees and total expense ratio for the one year period ended September 30, 2017, as compared to those of comparable funds, before and after giving effect to any undertaking to waive fees or reimburse expenses. The Board also considered factors that had an impact on Fund expense ratios relative to comparable funds.

After considering the foregoing information, and in light of the nature, extent and quality of the services provided by the Adviser, the Board concluded that the management fees charged for advisory and related services are reasonable.

Profitability and Other Fall-Out Benefits

The Board considered the level of profits realized by the Adviser and relevant affiliates thereof in providing investment advisory and administrative services to the Fund and to all Eaton Vance Funds as a group. The Board considered the level of profits realized without regard to marketing support or other payments by the Adviser and its affiliates to third parties in respect of distribution services. The Board also considered other direct or indirect fall-out benefits received by the Adviser and its affiliates in connection with their relationships with the Fund, including the benefits of research services that may be available to the Adviser as a result of securities transactions effected for the Fund and other investment advisory clients.

The Board concluded that, in light of the foregoing factors and the nature, extent and quality of the services rendered, the profits realized by the Adviser and its affiliates are deemed not to be excessive.

Economies of Scale

In reviewing management fees and profitability, the Board also considered the extent to which the Adviser and its affiliates, on the one hand, and the Fund, on the other hand, can expect to realize benefits from economies of scale as the assets of the Fund increase. The Board acknowledged the difficulty in accurately measuring the benefits resulting from economies of scale, if any, with respect to the management of any specific fund or group of funds. The Board reviewed data summarizing the increases and decreases in the assets of the Fund and of all Eaton Vance Funds as a group over various time periods, and evaluated the extent to

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which the total expense ratio of the Fund and the profitability of the Adviser and its affiliates may have been affected by such increases or decreases. Based upon the foregoing, the Board concluded that the Fund currently shares in any benefits from economies of scale. The Board also considered the fact that the Fund is not continuously offered and that the Fund's assets are not expected to increase materially in the foreseeable future. The Board concluded that, in light of the level of the Adviser's profits with respect to the Fund, the implementation of breakpoints in the advisory fee schedule is not warranted at this time.

Eaton Vance

Enhanced Equity Income Fund II

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Officers and Trustees

Officers of Eaton Vance Enhanced Equity Income Fund II

Edward J. Perkin

President

Maureen A. Gemma

Vice President, Secretary and

Chief Legal Officer

James F. Kirchner

Treasurer

Richard F. Froio

Chief Compliance Officer

Trustees of Eaton Vance Enhanced Equity Income Fund II

William H. Park

Chairperson

Thomas E. Faust Jr.*

Mark R. Fetting

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Cynthia E. Frost

George J. Gorman

Valerie A. Mosley

Helen Frame Peters

Susan J. Sutherland

Harriett Tee Taggart

Scott E. Wennerholm

* Interested Trustee

Eaton Vance Funds

IMPORTANT NOTICES

Privacy. The Eaton Vance organization is committed to ensuring your financial privacy. Each of the financial institutions identified below has in effect the following policy (Privacy Policy) with respect to nonpublic personal information about its customers:

Only such information received from you, through application forms or otherwise, and information about your Eaton Vance fund transactions will be collected. This may include information such as name, address, social security number, tax status, account balances and transactions.

None of such information about you (or former customers) will be disclosed to anyone, except as permitted by law (which includes disclosure to employees necessary to service your account). In the normal course of servicing a customer's account, Eaton Vance may share information with unaffiliated third parties that perform various required services such as transfer agents, custodians and broker-dealers.

Policies and procedures (including physical, electronic and procedural safeguards) are in place that are designed to protect the confidentiality of such information.

We reserve the right to change our Privacy Policy at any time upon proper notification to you. Customers may want to review our Privacy Policy periodically for changes by accessing the link on our homepage: www.eatonvance.com.

Our pledge of privacy applies to the following entities within the Eaton Vance organization: the Eaton Vance Family of Funds, Eaton Vance Management, Eaton Vance Investment Counsel, Eaton Vance Distributors, Inc., Eaton Vance Trust Company, Eaton Vance Management (International) Limited, Eaton Vance Advisers International Ltd., Eaton Vance Management's Real Estate Investment Group and Boston Management and Research. In addition, our Privacy Policy applies only to those Eaton Vance customers who are individuals and who have a direct relationship with us. If a customer's account (i.e., fund shares) is held in the name of a third-party financial advisor/broker-dealer, it is likely that only such advisor's privacy policies apply to the customer. This notice supersedes all previously issued privacy disclosures. For more information about Eaton Vance's Privacy Policy, please call 1-800-262-1122.

Delivery of Shareholder Documents. The Securities and Exchange Commission (SEC) permits funds to deliver only one copy of shareholder documents, including prospectuses, proxy statements and shareholder reports, to fund investors with multiple accounts at the same residential or post office box address. This practice is often called "householding" and it helps eliminate duplicate mailings to shareholders. *American Stock Transfer & Trust Company, LLC (AST), the closed-end funds transfer agent, or your financial advisor, may household the mailing of your documents indefinitely unless you instruct AST, or your financial advisor, otherwise.* If you would prefer that your Eaton Vance documents not be householded, please contact AST or your financial advisor. Your instructions that householding not apply to delivery of your Eaton Vance documents will typically be effective within 30 days of receipt by AST or your financial advisor.

Portfolio Holdings. Each Eaton Vance Fund and its underlying Portfolio(s) (if applicable) will file a schedule of portfolio holdings on Form N-Q with the SEC for the first and third quarters of each fiscal year. The Form N-Q will be available on the Eaton Vance website at www.eatonvance.com, by calling Eaton Vance at 1-800-262-1122 or in the EDGAR database on the SEC's website at www.sec.gov. Form N-Q may also be reviewed and copied at the SEC's public reference room in Washington, D.C. (call 1-800-732-0330 for information on the operation of the public reference room).

Proxy Voting. From time to time, funds are required to vote proxies related to the securities held by the funds. The Eaton Vance Funds or their underlying Portfolios (if applicable) vote proxies according to a set of policies and procedures approved by the Funds' and Portfolios' Boards. You may obtain a description of these policies and procedures and information on how the Funds or Portfolios voted proxies relating to portfolio securities during the most recent 12-month period ended June 30, without charge, upon request, by calling 1-800-262-1122 and by accessing the SEC's website at www.sec.gov.

Share Repurchase Program. The Fund's Board of Trustees has approved a share repurchase program authorizing the Fund to repurchase up to 10% of its outstanding common shares as of the approved date in open-market transactions at a discount to net asset value. The repurchase program does not obligate the Fund to purchase a specific amount of shares. The Fund's repurchase activity, including the number of shares purchased, average price and average discount to net asset value, is disclosed in the Fund's annual and semi-annual reports to shareholders.

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Additional Notice to Shareholders. If applicable, a Fund may also redeem or purchase its outstanding preferred shares in order to maintain compliance with regulatory requirements, borrowing or rating agency requirements or for other purposes as it deems appropriate or necessary.

Closed-End Fund Information. Eaton Vance closed-end funds make fund performance data and certain information about portfolio characteristics available on the Eaton Vance website shortly after the end of each month. Other information about the funds is available on the website. The funds' net asset value per share is readily accessible on the Eaton Vance website. Portfolio holdings for the most recent month-end are also posted to the website approximately 30 days following the end of the month. This information is available at www.eatonvance.com on the fund information pages under Individual Investors Closed-End Funds .

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Investment Adviser and Administrator

Eaton Vance Management

Two International Place

Boston, MA 02110

Custodian

State Street Bank and Trust Company

State Street Financial Center, One Lincoln Street

Boston, MA 02111

Transfer Agent

American Stock Transfer & Trust Company, LLC

6201 15th Avenue

Brooklyn, NY 11219

Fund Offices

Two International Place

Boston, MA 02110

7743 6.30.18

Item 2. Code of Ethics

Not required in this filing.

Item 3. Audit Committee Financial Expert

Not required in this filing.

Item 4. Principal Accountant Fees and Services

Not required in this filing.

Item 5. Audit Committee of Listed Registrants

Not required in this filing.

Item 6. Schedule of Investments

Please see schedule of investments contained in the Report to Stockholders included under Item 1 of this Form N-CSR.

Item 7. Disclosure of Proxy Voting Policies and Procedures for Closed-End Management Investment Companies

Not required in this filing.

Item 8. Portfolio Managers of Closed-End Management Investment Companies

Not required in this filing.

Item 9. Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers

No such purchases this period.

Item 10. Submission of Matters to a Vote of Security Holders

No material changes.

Item 11. Controls and Procedures

(a) It is the conclusion of the registrant's principal executive officer and principal financial officer that the effectiveness of the registrant's current disclosure controls and procedures (such disclosure controls and procedures having been evaluated within 90 days of the date of this filing) provide reasonable assurance that the information required to be disclosed by the registrant has been recorded, processed, summarized and reported within the time period specified in the Commission's rules and forms and that the information required to be disclosed by the registrant has been accumulated and communicated to the registrant's principal executive officer and principal financial officer in order to allow timely decisions regarding required disclosure.

(b) There have been no changes in the registrant's internal controls over financial reporting during the second fiscal quarter of 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.

Item 12. Disclosure of Securities Lending Activities for Closed-End Management Investment Companies

The registrant does not engage in securities lending.

Item 13. Exhibits

- (a)(1) Registrant's Code of Ethics Not applicable (please see Item 2).
- (a)(2)(i) Treasurer's Section 302 certification.
- (a)(2)(ii) President's Section 302 certification.
- (b) Combined Section 906 certification.
- (c) Registrant's notices to shareholders pursuant to Registrant's exemptive order granting an exemption from Section 19(b) of the 1940 Act and Rule 19b-1 thereunder regarding distributions paid pursuant to the Registrant's Managed Distribution Plan.

Signatures

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.

Eaton Vance Enhanced Equity Income Fund II

By: /s/ Edward J. Perkin
Edward J. Perkin
President

Date: August 21, 2018

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.

By: /s/ James F. Kirchner
James F. Kirchner
Treasurer

Date: August 21, 2018

By: /s/ Edward J. Perkin
Edward J. Perkin
President

Date: August 21, 2018