Eaton Vance Enhanced Equity Income Fund II Form N-CSRS August 28, 2013

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, 2013

Date of Reporting Period

Item 1. Reports to Stockholders

Enhanced Equity Income

Fund II (EOS)

Semiannual Report

June 30, 2013

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 and is not subject to the CFTC regulation. Because of its management of other strategies, the Fund—s adviser is registered with the CFTC as a commodity pool operator.

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, 2013

Eaton Vance

Enhanced Equity Income Fund II

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Enhanced Equity Income Fund II

June 30, 2013

Performance¹

Portfolio Managers Walter A. Row III, CFA, CMT and Michael A. Allison, CFA

					Since
% Average Annual Total Returns	Inception Date	Six Months	One Year	Five Years	Inception
Fund at NAV	01/31/2005	9.54%	13.15%	4.99%	5.51%
Fund at Market Price		15.35	19.00	3.47	4.47
Russell 1000 Growth Index	01/31/2005	11.80%	17.07%	7.47%	6.74%
CBOE S&P 500 BuyWrite Index	01/31/2005	4.87	5.29	3.34	4.11
CBOE NASDAQ-100 BuyWrite Index	01/31/2005	5.04	1.50	3.41	2.84

% Premium/Discount to NAV

8.00%

Distributions²

Total Distributions per share for the period	\$ 0.525
Distribution Rate at NAV	8.40%
Distribution Rate at Market Price	9.13%

Fund Profile

Sector Allocation (% of total investments)³

Top 10 Holdings (% of total investments)³

Google, Inc., Class A 4.5%

Microsoft Corp.	4.1
International Business Machines Corp.	3.5
Amazon.com, Inc.	3.2
Apple, Inc.	3.1
Coca-Cola Co. (The)	2.5
Danaher Corp.	2.1
Boeing Co. (The)	2.0
eBay, Inc.	2.0
United Technologies Corp.	1.9
Total	28.9%

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. 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 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 www.eatonvance.com.

Enhanced Equity Income Fund II

June 30, 2013

Fund Snapshot⁴

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 Equity Benchmark¹ Morningstar Category Distribution Frequency

Common Stock Portfolio

Positions Held % US / Non-US

Weighted Avg. Market Cap

Call Options

% Portfolio with Call Options Average Days to Expiration

Weighted Average % of Strike Prices

Write Single Stock Covered Calls Russell 1000 Growth Index Large Growth Monthly

> 78 97.6/2.4 \$100.5 Billion

45% 38 days 6.4% out-of-the-money

See Endnotes and Additional Disclosures in this report.

Enhanced Equity Income Fund II

June 30, 2013

Endnotes and Additional Disclosures

- 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. 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.
- 2 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 composed of ordinary income, tax-exempt income, net realized capital gains and return of capital. 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. As portfolio and market conditions change, the rate of distributions paid by the Fund could change.
- ³ Depictions do not reflect the Fund s option positions. Excludes cash and cash equivalents.
- ⁴ The following terms as used in the Fund snapshot:

Weighted 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 common stock, the extent to which the exercise price of the option exceeds the current price of the stock.

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

Information About Share Repurchase Program

On August 6, 2012, the Fund s Board of Trustees adopted a share repurchase program for the Fund and authorized it to repurchase up to 10% of its then currently outstanding common shares in open-market transactions at a discount to net asset value. From the date it began repurchasing shares until June 30, 2013, the Fund has purchased the number and percentage of its outstanding shares and seen the changes in its market price and discount to NAV as set forth in the table below. For more information on the Fund s share repurchase program, please see Note 5 in the Fund s Notes to Financial Statements.

					Beginning	6/30/13	
		Beginning Market	6/30/13 Market		NAV	NAV	
No. Shares	% Shares			% Market			Discount
Repurchased	Repurchased ¹	Price ²	Price	Return ³	Discount ²	Discount	Change
837,700	1.73%	\$10.97	\$11.50	12.79%	12.31%	8.00%	4.31%

Based on shares outstanding at repurchase program inception. Beginning Market Price and Beginning NAV Discount are as of the close of the market on the business day preceding the Fund s first share repurchase? Market Return reflects the change in the market price of the Fund shares plus any distributions paid during the period but not reflecting the reinvestment of distributions. Past performance is no guarantee of future results.

Enhanced Equity Income Fund II

June 30, 2013

Portfolio of Investments (Unaudited)

Common Stocks 98.0%)

Security	Shares	Value
Aerospace & Defense 3.9% Boeing Co. (The) United Technologies Corp.	116,744 121,805	\$ 11,959,255 11,320,557
		\$ 23,279,812
Air Freight & Logistics 1.0% United Parcel Service, Inc., Class B	71,449	\$ 6,178,910
		\$ 6,178,910
Auto Components 1.0% Dana Holding Corp. TRW Automotive Holdings Corp.(2)	180,543 36,516	\$ 3,477,258 2,426,123
		\$ 5,903,381
Beverages 4.0% Beam, Inc. Coca-Cola Co. (The)	139,256 371,615	\$ 8,788,446 14,905,478
		\$ 23,693,924
Biotechnology 3.7% Biogen Idec, Inc. ⁽²⁾ Celgene Corp. ⁽²⁾ Gilead Sciences, Inc. ⁽²⁾	17,315 76,343 189,087	\$ 3,726,188 8,925,260 9,683,145
		\$ 22,334,593
Capital Markets 0.8% Charles Schwab Corp. (The) Morgan Stanley	97,951 106,458	\$ 2,079,500 2,600,769

Chemicals 4.8% Air Products and Chemicals, Inc.	51,802	\$ 4,743,509
Cytec Industries, Inc. Ecolab, Inc. LyondellBasell Industries NV, Class A Monsanto Co. PPG Industries, Inc.	35,012 28,931 80,531 100,110 23,250	2,564,629 2,464,632 5,335,984 9,890,868 3,404,033
		\$ 28,403,655
Commercial Banks 0.9% PNC Financial Services Group, Inc. (The) Wells Fargo & Co.	36,483 65,669	\$ 2,660,340 2,710,160
		\$ 5,370,500
Security	Shares	Value
Communications Equipment 2.2% F5 Networks, Inc. ⁽²⁾ QUALCOMM, Inc.	40,046 172,653	\$ 2,755,165 10,545,645
		\$ 13,300,810
Computers & Peripherals 3.6% Apple, Inc.	45,910	\$ 18,184,033
NCR Corp. ⁽²⁾	101,829	3,359,339
		\$ 21,543,372
Consumer Finance 1.5% American Express Co.	117,185	\$ 8,760,751
		\$ 8,760,751
Diversified Telecommunication Services 1.9% Verizon Communications, Inc.	221,474	\$ 11,149,001
		\$ 11,149,001
Electrical Equipment 2.4%	160.570	¢ 0.757.024
Emerson Electric Co. Generac Holdings, Inc.	160,578 154,904	\$ 8,757,924 5,732,997
		\$ 14,490,921
Energy Equipment & Services 1.5% Cameron International Corp.(2)	46,291	\$ 2,831,158
Halliburton Co.	144,682	6,036,133 \$ 8,867,291
		ψ 0,007,271

\$ 4,680,269

Food	æ	Stan	es	Retailing	or 1	.1%

Costco Wholesale Corp. 57,039 \$ 6,306,802

\$ 6,306,802

Food Products 4.6%

 Green Mountain Coffee Roasters, Inc. (2)
 120,858
 \$ 9,071,602

 Hershey Co. (The)
 105,410
 9,411,005

 Mondelez International, Inc., Class A
 305,297
 8,710,123

\$ 27,192,730

Health Care Equipment & Supplies 2.5%

 Abbott Laboratories
 85,209
 \$ 2,972,090

 Covidien PLC
 94,881
 5,962,322

 Stryker Corp.
 91,419
 5,912,981

5

\$ 14,847,393

See Notes to Financial Statements.

Enhanced Equity Income Fund II

June 30, 2013

Portfolio of Investments (Unaudited) continued

Security	Shares	Value
Health Care Providers & Services 0.8% Express Scripts Holding Co. ⁽²⁾	80,874	\$ 4,989,117
Hotels, Restaurants & Leisure 2.6% Marriott International, Inc., Class A McDonald s Corp. Starbucks Corp.	57,676 90,641 68,800	\$ 4,989,117 \$ 2,328,380 8,973,459 4,505,712 \$ 15,807,551
Industrial Conglomerates 2.1% Danaher Corp.	198,638	\$ 12,573,785 \$ 12,573,785
Insurance 0.6% AmTrust Financial Services, Inc.	103,787	\$ 3,705,196 \$ 3,705,196
Internet & Catalog Retail 4.7% Amazon.com, Inc. ⁽²⁾ Netflix, Inc. ⁽²⁾	68,757 41,039	\$ 19,093,131 8,662,923 \$ 27,756,054
Internet Software & Services 6.9% eBay, Inc. ⁽²⁾ Google, Inc., Class A ⁽²⁾ VeriSign, Inc. ⁽²⁾	225,338 30,390 64,455	\$ 11,654,482 26,754,444 2,878,560 \$ 41,287,486

Accenture PLC, Class A International Business Machines Corp. Visa, Inc., Class A	149,846 108,750 51,956	\$ 10,782,918 20,783,213 9,494,959
		\$ 41,061,090
Machinery 1.5% Deere & Co.	110,010	\$ 8,938,313 \$ 8,938,313
Media 4.1%		4 0,200,612
Comcast Corp., Class A Lions Gate Entertainment Corp. (2) Walt Disney Co. (The)	254,107 135,000 163,117	\$ 10,642,001 3,708,450 10,300,839
		\$ 24,651,290
Security	Shares	Value
Multiline Retail 3.4% Dollar General Corp. ⁽²⁾ Macy s, Inc. Target Corp.	179,467 127,157 73,031	\$ 9,050,521 6,103,536 5,028,914
		\$ 20,182,971
Oil, Gas & Consumable Fuels 2.5% EOG Resources, Inc. Occidental Petroleum Corp. Phillips 66 Range Resources Corp.	27,831 50,044 61,057 41,553	\$ 3,664,786 4,465,426 3,596,868 3,212,878 \$ 14,939,958
Personal Products 1.5%		, - ,,
Estee Lauder Cos., Inc. (The), Class A	132,624	\$ 8,722,680 \$ 8,722,680
Pharmaceuticals 4.9% Perrigo Co.	62,924	\$ 7,613,804
Pfizer, Inc. Roche Holding AG PC Shire PLC ADR	267,298 24,995 84,087	7,487,017 6,203,687 7,997,515
		\$ 29,302,023
Real Estate Investment Trusts (REITs) 1.6% American Tower Corp. AvalonBay Communities, Inc. Public Storage, Inc.	46,913 13,100 27,040	\$ 3,432,624 1,767,321 4,146,043
		\$ 9,345,988

	Rail	2.3%	

 Kansas City Southern
 62,651
 \$ 6,638,500

 Union Pacific Corp.
 45,191
 6,972,067

\$ 13,610,567

Software 5.5%

 Microsoft Corp.
 701,007
 \$ 24,205,772

 Oracle Corp.
 278,480
 8,554,905

\$ 32,760,677

Specialty Retail 1.9%

 Home Depot, Inc. (The)
 86,909
 \$ 6,732,840

 Urban Outfitters, Inc. (2)
 107,328
 4,316,732

6

\$ 11,049,572

See Notes to Financial Statements.

Enhanced Equity Income Fund II

June 30, 2013

Portfolio of Investments (Unaudited) continued

Covered Call Options Written (0.5)%

Security

Abbott Laboratories

Amazon.com, Inc.

American Express Co. AvalonBay Communities, Inc.

Air Products and Chemicals, Inc.

Security		Shares		Value
Textiles, Apparel & Luxury Goods 1.0% NIKE, Inc., Class B		97,005	\$	6,177,278
			\$	6,177,278
Tobacco 1.8% Philip Morris International, Inc.		123,373	\$	10,686,569
			\$	10,686,569
Total Common Stocks (identified cost \$591,670,401)			\$:	583,852,280
Short-Term Investments 0.8%				
Description Eaton Vance Cash Reserves Fund, LLC, 0.11% ⁽³⁾	(000 \$	Interest s omitted) 4,806	\$	Value 4,806,229
Total Short-Term Investments (identified cost \$4,806,229)			\$	4,806,229
Total Investments 98.8% (identified cost \$596,476,630)			\$:	588,658,509

Value

(645)

(650)

(32,603)

(26,845)

(1,400)

Number of

Contracts

260

345

590

70

Strike Expiration

Date

7/20/13 \$

7/20/13

7/20/13

7/20/13

7/20/13

Price

100.00

295.00

77.50

145.00

430 \$ 39.00

Beam, Inc.	700	67.50	8/17/13	(38,500)
Boeing Co. (The)	585	110.00	8/17/13	(49,725)
Cameron International Corp.	235	65.00	8/17/13	(29,375)
Celgene Corp.	385	130.00	7/20/13	(20,597)
Charles Schwah Corp. (The)				