

EATON VANCE SENIOR FLOATING RATE TRUST
Form N-CSRS
June 25, 2010

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: 811-21411

Eaton Vance Senior Floating-Rate Trust

(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)

October 31

Date of Fiscal Year End

April 30, 2010

Date of Reporting Period

Item 1. Reports to Stockholders

Semi annual Report April 30,2010 EATON VANCE SENIOR FLOATING-RATE TRUST

**IMPORTANT NOTICES REGARDING PRIVACY,
DELIVERY OF SHAREHOLDER DOCUMENTS,
PORTFOLIO HOLDINGS AND PROXY VOTING**

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, Boston Management and Research, and Eaton Vance Distributors, Inc.

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 adviser/broker-dealer, it is likely that only such adviser'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 (the 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.

Eaton Vance, or your financial adviser, may household the mailing of your documents indefinitely unless you instruct Eaton Vance, or your financial adviser, otherwise.

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

If you would prefer that your Eaton Vance documents not be householded, please contact Eaton Vance at 1-800-262-1122, or contact your financial adviser.

Your instructions that householding not apply to delivery of your Eaton Vance documents will be effective within 30 days of receipt by Eaton Vance or your financial adviser.

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. This description is also available on the SEC's website at www.sec.gov.

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

INVESTMENT UPDATE

Economic and Market Conditions

Scott H. Page, CFA

Co-Portfolio Manager

Peter M. Campo, CFA

Co-Portfolio Manager

During the six months ending April 30, 2010, the U.S. economy continued to strengthen, building on the recovery that began in 2009. The economy grew at an annualized rate of 5.7% in the fourth quarter of 2009 and an estimated 3.2% in the first quarter of 2010, according to the U.S. Department of Commerce. Growth was driven by government stimulus, increased business activity and a recovery in consumer spending. During the period, the Federal Reserve (the Fed) left short-term interest rates near zero but began unwinding various emergency programs that were designed to stabilize the financial system during the crisis. Meanwhile, corporate profits rebounded as business activity improved and productivity rose. We also saw the mounting effects of the government's ongoing stimulus plan, which significantly increased the federal deficit and U.S. Treasury borrowing. Long-term interest rates were essentially unchanged during the period, while riskier assets continued to perform well as credit yield spreads tightened.

The floating-rate loan market, as measured by the S&P/LSTA Leveraged Loan Index (the Index), returned 9.57% during the six-month period ending April 30, 2010.¹ Performance was driven by a combination of technical and fundamental improvements, which strengthened both the supply/demand balance and the market outlook. From a technical standpoint, robust high-yield bond issuance and improving mergers and acquisitions and IPO markets had the effect of reducing loan supply. High-yield bond issuance alone was responsible for \$13 billion of loan repayments in the first quarter of 2010, according to Standard & Poor's Leveraged Commentary & Data. On the demand side, we saw steady inflows into the asset class, as investors sought more-favorable yields and protection from the anticipated rise in short-term interest rates. From a fundamental standpoint, earnings across the bank loan universe generally improved and default rates continued to decline.

Past performance is no guarantee of future results. Returns are historical and are calculated by determining the percentage change in net asset value or market price (as applicable) with all distributions reinvested. The Trust's performance at market price will differ from its results at NAV. Although market price performance generally reflects investment results over time, during shorter periods, returns at market price can also be affected by factors such as changing perceptions about the Trust, market conditions, fluctuations in supply and demand for the Trust's shares, or changes in Trust distributions. Investment return and principal value will fluctuate so that shares, when sold, may be worth more or less than their original cost. Performance is for the stated time period only; due to market volatility, the Trust's current 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.

Trust 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.

Management Discussion

Craig P. Russ

Co-Portfolio Manager

The Trust is a closed-end fund and trades on the New York Stock Exchange (NYSE) under the symbol EFR. The Trust's investment objective is to provide a high level of current income. As a secondary objective, it may also seek preservation of capital to the extent consistent with its primary goal of high current income. Under normal market conditions, the Trust invests at least 80% of its total assets in senior, secured floating-rate loans (senior loans). In managing the Trust, the investment adviser seeks to invest in a portfolio of senior loans that it believes will be less volatile over time than the general loan market. The Trust may also invest in second lien loans and high-yield bonds, and, as discussed below, employs leverage to acquire additional income-producing securities, which may increase risk.

Total Return Performance 10/31/09 4/30/10

NYSE Symbol	EFR
At Net Asset Value (NAV) ²	14.18%
At Market Price ²	34.40
S&P/LSTA Leveraged Loan Index ¹	9.57
Premium/(Discount) to NAV (4/30/10)	11.52%
Total Distributions per common share	\$0.594
Distribution Rate ³	<i>At NAV</i> 6.79% <i>At Market Price</i> 6.09%

See page 3 for more performance information.

¹ It is not possible to invest directly in an Index. The Index's total return reflects changes in value of the loans constituting the Index and accrual of interest and does not reflect the commissions or expenses that would have been incurred if an investor individually purchased or sold the loans represented in the Index. Unlike the Trust, the Index's return does not reflect the effect of leverage.

² Six-month returns are cumulative. Performance results reflect the effects of leverage.

³ The Distribution Rate is based on the Trust's last regular distribution per share (annualized) divided by the Trust's NAV or market price at the end of the period.

The Trust's distributions may be comprised of ordinary income, net realized capital gains and return of capital. Absent an expense waiver by the investment adviser, the returns would be lower.

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

INVESTMENT UPDATE

As of April 30, 2010, the Trust's investments included senior loans to 370 borrowers spanning 38 industries, with an average loan representing 0.24% of total investments, and no industry constituting more than 10.3% of total investments. Health care, business equipment and services, and cable and satellite television were among the top industry weightings.

Management's use of leverage was a factor in the Trust's outperformance of the Index, as its loans acquired with borrowings were bolstered by the continued rally in the credit markets. However, the Trust's slight underweight to the CCC ratings category in favor of higher quality issues was a headwind during the period, as lower-quality issues outperformed. The CCC rated loan category, which saw the largest declines in 2008 (down 45.8%), returned 88.6% in calendar 2009, and 20.4% during the six months ending April 30, 2010. Even defaulted loans outperformed the Index as a whole, posting a 21.6% return during the six-month period. However, we believe that the Trust's longstanding underweight to riskier loan issuers has benefited its relative performance over the longer-term with less volatility.

In terms of industry sectors, relative overweights to the business equipment and services, cable and satellite television and health care industries benefited relative performance. Underweight positions in the electronics, financial intermediaries and utilities industries detracted from performance relative to the Index.

While significant economic and business risks continue to exist throughout the world, we believe the loan market should remain relatively stable in the near term. The Trust primarily invests in floating-rate securities, which means that if the Fed should increase rates out of concern about inflation, the Trust's yield can be expected to rise. The reset of interest payable on floating-rate bank loans also helps to mitigate the effect of rising interest rates on bank loan funds, while fixed-income fund values generally fall in a rising interest rate environment.

As of April 30, 2010, the Trust employed leverage of 35.8% of total assets 16.7% auction preferred shares (APS) and 19.1% borrowings. Use of leverage creates an opportunity for income, but at the same time creates special risks (including the likelihood of greater volatility of net asset value and market price of common shares).

¹ APS percentage represents the liquidation value of the Trust's APS outstanding at 4/30/10 as a percentage of the Trust's net assets applicable to common shares plus APS and borrowings outstanding. In the event of a rise in long-term interest rates, the value of the Trust's

investment
portfolio could
decline, which
would reduce
the asset
coverage for its
APS and
borrowings.

The views expressed throughout this report are those of the portfolio managers and are current only through the end of the period of the report as stated on the cover. These views are subject to change at any time based upon market or other conditions, and the investment adviser disclaims any responsibility to update such views. These views may not be relied on as investment advice and, because investment decisions for a fund are based on many factors, may not be relied on as an indication of trading intent on behalf of any Eaton Vance fund. Portfolio information provided in the report may not be representative of the Trust's current or future investments and may change due to active management.

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

FUND PERFORMANCE

Trust Performance¹

NYSE Symbol	EFR
Average Annual Total Returns (by market price, NYSE)	
Six Months	34.40%
One Year	87.79
Five Years	6.00
Life of Trust (11/28/03)	5.99
Average Annual Total Returns (at net asset value)	
Six Months	14.18%
One Year	59.76
Five Years	4.10
Life of Trust (11/28/03)	4.20

¹ *Six-month returns are cumulative. Other returns are presented on an average annual basis. Performance results reflect the effects of leverage. Absent an expense waiver by the investment adviser, the returns would be lower.*

Past performance is no guarantee of future results. Returns are historical and are calculated by determining the percentage change in net asset value or market price (as applicable) with all distributions reinvested. The Trust's performance at market price will differ from its results at NAV. Although market price performance generally reflects investment results over time, during shorter periods, returns at market price can also be affected by factors such as changing perceptions about the Trust, market conditions, fluctuations in supply and demand for the Trust's shares, or changes in Trust distributions. Investment return and principal value will fluctuate so that shares, when sold, may be worth more or less than their original cost. Performance is for the stated time period only; due to market volatility, the Trust's current 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.

Portfolio Composition

Top 10 Holdings²

By total investments

Community Health Systems, Inc.	1.3%
--------------------------------	------

Rite Aid Corp.	1.2
Charter Communications Operating, Inc.	1.2
Georgia-Pacific Corp.	1.2
Aramark Corp.	1.1
SunGard Data Systems, Inc.	1.1
HCA, Inc.	1.1
Intelsat Corp.	0.9
Health Management Associates, Inc.	0.9
Calpine Corp.	0.8

² Top 10 Holdings represented 10.8% of the Trust's total investments as of 4/30/10.

Top Five Industries³

By total investments

Health Care	10.6%
Business Equipment and Services	7.9
Cable and Satellite Television	7.6
Leisure Goods/Activities/Movies	5.3
Chemicals and Plastics	4.3

³ Industries are shown as a percentage of the Trust's total investments as of 4/30/10.

Credit Quality Ratings for Total Loan Investments⁴

By total loan investments

Baa	1.8%
Ba	41.8
B	37.0
Ca	0.5
Caa	5.5
Defaulted	1.7
Non-Rated ⁵	11.7

⁴ Credit Quality ratings are those provided by Moody's Investor Services, Inc., a

nationally recognized bond rating service. Reflects the Trust's total loan investments as of 4/30/10. Credit ratings are based largely on the rating agency's investment analysis at the time of rating and the rating assigned to any particular security is not necessarily a reflection of the issuer's current financial condition. The rating assigned to a security by a rating agency does not necessarily reflect its assessment of the volatility of a security's market value or of the liquidity of an investment in the security. If securities are rated differently by the rating agencies, the higher rating is applied.

⁵ Certain loans in which the Trust invests are not rated by a rating agency. In management's opinion, such securities are

comparable to
securities rated
by a rating
agency in the
categories listed
above.

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited)

Senior Floating-Rate Interests 138.7%**Principal****Amount*****(000 s omitted)****Borrower/Tranche Description****Value**

Aerospace and Defense 2.9%

ACTS Aero Technical Support & Service, Inc.47 Term Loan, 11.25%, Maturing March 12,
2013 \$ 47,456118 Term Loan - Second Lien, 10.75%,
Maturing March 12, 2015⁽²⁾ 118,894**Booz Allen Hamilton, Inc.**499 Term Loan, 6.00%, Maturing July 31,
2015 500,870**DAE Aviation Holdings, Inc.**405 Term Loan, 4.09%, Maturing July 31,
2014 388,485416 Term Loan, 4.09%, Maturing July 31,
2014 399,136**Delos Aircraft, Inc.**625 Term Loan, 7.00%, Maturing March 15,
2016 633,906**Evergreen International Aviation**1,299 Term Loan, 10.50%, Maturing
October 31, 2011⁽²⁾ 1,221,359**Hawker Beechcraft Acquisition**4,309 Term Loan, 2.28%, Maturing March 26,
2014 3,710,453256 Term Loan, 2.29%, Maturing March 26,
2014 220,685**Hexcel Corp.**632 Term Loan, 6.50%, Maturing May 21,
2014 636,749**IAP Worldwide Services, Inc.**828 Term Loan, 9.25%, Maturing
December 30, 2012⁽²⁾ 790,524**International Lease Finance Co.**850 Term Loan, 6.75%, Maturing March 15,
2015 867,637**Spirit AeroSystems, Inc.**

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

1,573	Term Loan, 2.05%, Maturing December 31, 2011	1,558,030
TransDigm, Inc.		
1,625	Term Loan, 2.28%, Maturing June 23, 2013	1,604,010
Vought Aircraft Industries, Inc.		
899	Term Loan, 7.50%, Maturing December 17, 2011	902,274
213	Term Loan, 7.50%, Maturing December 22, 2011	213,218
Wesco Aircraft Hardware Corp.		
1,093	Term Loan, 2.53%, Maturing September 29, 2013	1,075,912
		\$ 14,889,598

Air Transport 0.6%

Airport Development and Investment, Ltd.

GBP	783	Term Loan - Second Lien, 4.85%, Maturing April 7, 2011	\$ 1,166,059
-----	-----	---	--------------

Delta Air Lines, Inc.

	742	Term Loan, 2.30%, Maturing April 30, 2012	727,036
	1,167	Term Loan - Second Lien, 3.55%, Maturing April 30, 2014	1,094,938

\$ 2,988,033

Automotive 5.5%

Accuride Corp.

	1,958	Term Loan, 9.75%, Maturing June 30, 2013	\$ 1,968,573
--	-------	---	--------------

Adesa, Inc.

	2,071	Term Loan, 3.03%, Maturing October 18, 2013	2,035,683
--	-------	--	-----------

Allison Transmission, Inc.

	1,883	Term Loan, 3.01%, Maturing September 30, 2014	1,804,497
--	-------	--	-----------

Dayco Products, LLC

	414	Term Loan, 10.50%, Maturing November 13, 2014	414,299
	61		56,402

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

	Term Loan, 12.50%, Maturing November 13, 2014 ⁽²⁾	
Federal-Mogul Corp.		
2,470	Term Loan, 2.19%, Maturing December 27, 2014	2,264,058
3,104	Term Loan, 2.20%, Maturing December 27, 2015	2,845,124
Ford Motor Co.		
4,192	Term Loan, 3.28%, Maturing December 15, 2013	4,055,203
Goodyear Tire & Rubber Co.		
5,400	Term Loan - Second Lien, 2.24%, Maturing April 30, 2014	5,173,200
HHI Holdings, LLC		
1,000	Term Loan, 10.50%, Maturing March 30, 2015	1,016,563
Keystone Automotive Operations, Inc.		
1,317	Term Loan, 3.78%, Maturing January 12, 2012	1,152,062
LKQ Corp.		
885	Term Loan, 2.50%, Maturing October 12, 2014	878,933
TriMas Corp.		
426	Term Loan, 6.00%, Maturing August 2, 2011	419,768
2,762	Term Loan, 6.00%, Maturing December 15, 2015	2,720,329
United Components, Inc.		
1,031	Term Loan, 2.25%, Maturing June 30, 2010	1,008,256
		\$ 27,812,950
Beverage and Tobacco 0.2%		
Southern Wine & Spirits of America, Inc.		
992	Term Loan, 5.50%, Maturing May 31, 2012	\$ 990,927
		\$ 990,927
Building and Development 2.6%		

Beacon Sales Acquisition, Inc.

1,110	Term Loan, 2.28%, Maturing September 30, 2013	\$ 1,093,532
-------	--	--------------

Brickman Group Holdings, Inc.

1,180	Term Loan, 2.29%, Maturing January 23, 2014	1,156,027
-------	--	-----------

Epco/Fantome, LLC

1,281	Term Loan, 2.89%, Maturing November 23, 2010	1,229,760
-------	---	-----------

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Borrower/Tranche Description	Value
Building and Development (continued)		
Forestar USA Real Estate Group, Inc.		
244	Revolving Loan, 0.53%, Maturing December 1, 2010 ⁽³⁾	\$ 233,389
2,240	Term Loan, 5.11%, Maturing December 1, 2010	2,206,517
Metroflag BP, LLC		
500	Term Loan - Second Lien, 0.00%, Maturing October 31, 2009 ⁽⁴⁾⁽⁵⁾	0
Mueller Water Products, Inc.		
944	Term Loan, 5.33%, Maturing May 24, 2014	948,098
NCI Building Systems, Inc.		
282	Term Loan, 8.00%, Maturing June 18, 2010	278,694
November 2005 Land Investors		
305	Term Loan, 5.75%, Maturing May 9, 2011	83,069
Panolam Industries Holdings, Inc.		
1,858	Term Loan, 8.25%, Maturing December 31, 2013	1,737,660
Re/Max International, Inc.		
1,900	Term Loan, 5.50%, Maturing April 16, 2016	1,904,750
Realogy Corp.		
672	Term Loan, 3.29%, Maturing October 10, 2013	610,565
318	Term Loan, 3.38%, Maturing October 10, 2013	289,073
South Edge, LLC		
1,588	Term Loan, 0.00%, Maturing October 31, 2009 ⁽⁴⁾	722,313
WCI Communities, Inc.		
623	Term Loan, 10.07%, Maturing September 3, 2014	622,134

\$ 13,115,581

Business Equipment and Services 12.0%

Activant Solutions, Inc.

1,098 Term Loan, 2.31%, Maturing May 1, 2013 \$ 1,052,329

Advantage Sales & Marketing

1,200 Term Loan, Maturing May 5, 2016⁽⁶⁾ 1,193,999

1,000 Term Loan - Second Lien, Maturing May 5, 2017⁽⁶⁾ 990,000

1,629 Term Loan, 2.26%, Maturing March 29, 2013 1,628,601

Affinion Group, Inc.

3,725 Term Loan, 5.00%, Maturing October 8, 2016 3,706,375

Allied Barton Security Service

983 Term Loan, 6.75%, Maturing February 21, 2015 991,883

Dealer Computer Services, Inc.

1,850 Term Loan, Maturing April 16, 2017⁽⁶⁾ 1,850,000

Education Management, LLC

4,605 Term Loan, 2.06%, Maturing June 1, 2013 4,514,881

First American Corp.

925 Term Loan, 4.75%, Maturing April 9, 2016 931,649

Info USA, Inc.

249 Term Loan, 2.05%, Maturing February 14, 2012 248,375

Intergraph Corp.

1,000 Term Loan, 4.50%, Maturing May 29, 2014 997,806

575 Term Loan, 6.00%, Maturing May 29, 2014 578,115

1,000 Term Loan - Second Lien, 6.25%, Maturing November 29, 2014 1,005,000

iPayment, Inc.

2,382 Term Loan, 2.28%, Maturing May 10, 2013 2,285,911

Kronos, Inc.

1,018 Term Loan, 2.29%, Maturing June 11, 2014 982,369

Language Line, Inc.

2,020 Term Loan, 5.50%, Maturing October 30, 2015 2,031,720

Mitchell International, Inc.

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

	1,000	Term Loan - Second Lien, 5.56%, Maturing March 28, 2015	852,500
NE Customer Service			
	1,775	Term Loan, 6.00%, Maturing March 5, 2016	1,770,378
Protection One, Inc.			
	123	Term Loan, 2.53%, Maturing March 31, 2012	122,881
	695	Term Loan, 6.25%, Maturing March 31, 2014	696,419
Quantum Corp.			
	198	Term Loan, 3.79%, Maturing July 12, 2014	192,629
Quintiles Transnational Corp.			
	990	Term Loan, 2.30%, Maturing March 31, 2013	973,996
	1,700	Term Loan - Second Lien, 4.30%, Maturing March 31, 2014	1,683,000
Sabre, Inc.			
	6,002	Term Loan, 2.30%, Maturing September 30, 2014	5,718,911
Safenet, Inc.			
	1,995	Term Loan, 2.76%, Maturing April 12, 2014	1,927,545
Serena Software, Inc.			
	474	Term Loan, 2.25%, Maturing March 10, 2013	459,385
Sitel (Client Logic)			
	1,567	Term Loan, 5.79%, Maturing January 29, 2014	1,551,035
Solera Holdings, LLC			
EUR	733	Term Loan, 2.44%, Maturing May 15, 2014	943,799
SunGard Data Systems, Inc.			
	2,226	Term Loan, 2.00%, Maturing February 28, 2014	2,157,211
	6,826	Term Loan, 3.88%, Maturing February 28, 2016	6,799,031
Ticketmaster			
	1,650	Term Loan, 7.00%, Maturing July 22, 2014	1,667,016
Travelport, LLC			
	437	Term Loan, 2.79%, Maturing August 23, 2013	425,434
	3,178	Term Loan, 2.79%, Maturing August 23, 2013	3,093,772
EUR	1,054	Term Loan, 3.14%, Maturing August 23, 2013	1,362,711
West Corp.			
	1,367	Term Loan, 2.64%, Maturing October 24, 2013	1,336,369

See notes to financial statements

5

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Borrower/Tranche Description	Value
Business Equipment and Services (continued)		
1,986	Term Loan, 4.14%, Maturing July 15, 2016	\$ 1,979,725
		\$ 60,702,760
Cable and Satellite Television 11.5%		
Atlantic Broadband Finance, LLC		
2,559	Term Loan, 6.75%, Maturing June 8, 2013	\$ 2,571,141
95	Term Loan, 2.55%, Maturing September 1, 2013	94,265
Bragg Communications, Inc.		
2,096	Term Loan, 2.75%, Maturing August 31, 2014	2,080,528
Bresnan Broadband Holdings, LLC		
495	Term Loan, 2.31%, Maturing March 29, 2014	489,431
600	Term Loan - Second Lien, 4.76%, Maturing March 29, 2014	600,000
Cequel Communications, LLC		
2,157	Term Loan, 2.29%, Maturing November 5, 2013	2,122,008
1,309	Term Loan, 6.29%, Maturing May 5, 2014	1,325,560
2,050	Term Loan - Second Lien, 4.75%, Maturing May 5, 2014	2,058,200
Charter Communications Operating, Inc.		
9,796	Term Loan, 2.30%, Maturing April 28, 2013	9,312,712
CSC Holdings, Inc.		

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

	2,907	Term Loan, 2.00%, Maturing March 29, 2016	2,901,273
CW Media Holdings, Inc.			
	578	Term Loan, 3.29%, Maturing February 15, 2015	549,751
Foxco Acquisition Sub., LLC			
	569	Term Loan, 7.50%, Maturing July 2, 2015	566,553
Insight Midwest Holdings, LLC			
	3,594	Term Loan, 2.27%, Maturing April 6, 2014	3,519,680
MCC Iowa, LLC			
	5,704	Term Loan, 2.01%, Maturing January 31, 2015	5,499,935
Mediacom Broadband, LLC			
	1,475	Term Loan, Maturing October 20, 2017 ⁽⁶⁾	1,476,106
Mediacom Illinois, LLC			
	3,674	Term Loan, 2.01%, Maturing January 31, 2015	3,533,157
	995	Term Loan, 5.50%, Maturing March 31, 2017	1,001,468
Mediacom, LLC			
	825	Term Loan, 4.50%, Maturing October 20, 2017	825,774
ProSiebenSat.1 Media AG			
EUR	907	Term Loan, 2.41%, Maturing June 26, 2014	1,083,574
EUR	93	Term Loan, 2.41%, Maturing July 2, 2014	110,927
EUR	410	Term Loan, 3.34%, Maturing March 2, 2015	439,153
EUR	97	Term Loan, 2.54%, Maturing June 26, 2015	118,695
EUR	2,187	Term Loan, 2.54%, Maturing June 26, 2015	2,670,761
EUR	410	Term Loan, 3.59%, Maturing March 2, 2016	439,153
EUR	371	Term Loan, 7.96%, Maturing March 2, 2017 ⁽²⁾	301,402
EUR	520	Term Loan - Second Lien, 4.71%, Maturing September 2, 2016	508,833
UPC Broadband Holding B.V.			
	1,264	Term Loan, 2.18%, Maturing December 31, 2014	1,234,138
	1,686	Term Loan, 3.93%, Maturing December 31, 2016	1,667,716
EUR	2,353	Term Loan, 4.15%, Maturing December 31, 2016	2,990,422
EUR	2,697	Term Loan, 4.99%, Maturing December 31, 2017	3,464,617
Virgin Media Investment Holding			

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

GBP	1,000	Term Loan, 4.41%, Maturing December 31, 2015	1,520,078
YPSO Holding SA			
EUR	210	Term Loan, 4.16%, Maturing July 28, 2014 ⁽²⁾	237,352
EUR	250	Term Loan, 4.16%, Maturing July 28, 2014 ⁽²⁾	283,157
EUR	544	Term Loan, 4.16%, Maturing July 28, 2014 ⁽²⁾	615,034
			\$ 58,212,554

Chemicals and Plastics 6.6%

Arizona Chemical, Inc.

500	Term Loan - Second Lien, 5.75%, Maturing February 28, 2014	\$ 488,750
-----	---	------------

Brenntag Holding GmbH and Co. KG

1,493	Term Loan, 4.03%, Maturing December 23, 2013	1,497,034
220	Term Loan, 4.07%, Maturing December 23, 2013	220,665
1,000	Term Loan - Second Lien, 6.47%, Maturing December 23, 2015	1,003,500

Celanese Holdings, LLC

2,109	Term Loan, 2.04%, Maturing April 2, 2014	2,070,170
-------	---	-----------

Hexion Specialty Chemicals, Inc.

486	Term Loan, 4.06%, Maturing May 5, 2015	461,938
772	Term Loan, 4.06%, Maturing May 5, 2015	745,639
1,744	Term Loan, 4.06%, Maturing May 5, 2015	1,683,325

Huntsman International, LLC

2,272	Term Loan, 2.06%, Maturing August 16, 2012	2,192,079
909	Term Loan, 2.52%, Maturing June 30, 2016	881,489

INEOS Group

2,766	Term Loan, 9.50%, Maturing December 14, 2013	2,766,692
2,672	Term Loan, 8.00%, Maturing December 14, 2014	2,672,607
EUR 1,250	Term Loan - Second Lien, 6.40%, Maturing December 14, 2012	1,653,494

ISP Chemco, Inc.

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

	1,549	Term Loan, 2.06%, Maturing June 4, 2014	1,511,219
Kraton Polymers, LLC			
	1,881	Term Loan, 2.31%, Maturing May 12, 2013	1,814,870
Lyondell Chemical Co.			
	675	Term Loan, 5.50%, Maturing March 14, 2016	678,249
MacDermid, Inc.			
EUR	693	Term Loan, 2.62%, Maturing April 12, 2014	844,011

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Borrower/Tranche Description	Value
Chemicals and Plastics (continued)		
Millenium Inorganic Chemicals		
311	Term Loan, 2.54%, Maturing April 30, 2014	\$ 293,306
975	Term Loan - Second Lien, 6.04%, Maturing October 31, 2014	912,437
Momentive Performance Material		
1,669	Term Loan, 2.56%, Maturing December 4, 2013	1,586,187
Nalco Co.		
496	Term Loan, 6.50%, Maturing May 6, 2016	501,109
Rockwood Specialties Group, Inc.		
3,194	Term Loan, 6.00%, Maturing May 15, 2014	3,221,328
Schoeller Arca Systems Holding		
EUR 145	Term Loan, 5.01%, Maturing November 16, 2015	127,000
EUR 412	Term Loan, 5.01%, Maturing November 16, 2015	362,101
EUR 443	Term Loan, 5.01%, Maturing November 16, 2015	389,656
Solutia, Inc.		
2,650	Term Loan, 4.75%, Maturing March 12, 2017	2,671,807
		\$ 33,250,662
Clothing / Textiles 0.2%		
Hanesbrands, Inc.		
1,036		\$ 1,049,357

Term Loan, 5.25%, Maturing
December 10, 2015

\$ 1,049,357

Conglomerates 3.2%

Blount, Inc.

244 Term Loan, 5.50%, Maturing February 9,
2012 \$ 243,517

Doncasters (Dunde HoldCo 4 Ltd.)

395 Term Loan, 4.27%, Maturing July 13,
2015 352,084

395 Term Loan, 4.77%, Maturing July 13,
2015 352,084

GBP 500 Term Loan - Second Lien, 6.56%,
Maturing January 13, 2016 573,769

Jarden Corp.

600 Term Loan, 2.04%, Maturing January 24,
2012 598,280

1,065 Term Loan, 2.04%, Maturing January 24,
2012 1,062,254

Manitowoc Company, Inc. (The)

2,263 Term Loan, 7.50%, Maturing August 21,
2014 2,271,499

Polymer Group, Inc.

1,923 Term Loan, 7.00%, Maturing
November 22, 2014 1,939,406

RBS Global, Inc.

780 Term Loan, 2.56%, Maturing July 19,
2013 753,551

3,785 Term Loan, 2.81%, Maturing July 19,
2013 3,704,408

RGIS Holdings, LLC

127 Term Loan, 2.79%, Maturing April 30,
2014 120,821

2,547 Term Loan, 2.79%, Maturing April 30,
2014 2,416,416

US Investigations Services, Inc.

992 Term Loan, 3.27%, Maturing
February 21, 2015 927,844

Vertrue, Inc.

804 Term Loan, 3.30%, Maturing August 16,
2014 685,782

\$ 16,001,715

Containers and Glass Products 4.1%

Berry Plastics Corp.

1,980	Term Loan, 2.26%, Maturing April 3, 2015	\$ 1,854,493
-------	--	--------------

Consolidated Container Co.

1,000	Term Loan - Second Lien, 5.75%, Maturing September 28, 2014	902,500
-------	---	---------

Crown Americas, Inc.

600	Term Loan, 2.00%, Maturing November 15, 2012	594,250
-----	--	---------

Graham Packaging Holdings Co.

2,019	Term Loan, 2.50%, Maturing October 7, 2011	2,007,982
-------	--	-----------

1,694	Term Loan, 6.75%, Maturing April 5, 2014	1,710,396
-------	--	-----------

Graphic Packaging International, Inc.

3,985	Term Loan, 2.30%, Maturing May 16, 2014	3,931,575
-------	---	-----------

426	Term Loan, 3.04%, Maturing May 16, 2014	424,275
-----	---	---------

JSG Acquisitions

1,189	Term Loan, 3.67%, Maturing December 31, 2013	1,184,195
-------	--	-----------

1,189	Term Loan, 3.92%, Maturing December 13, 2014	1,184,195
-------	--	-----------

Owens-Brockway Glass Container

1,540	Term Loan, 1.75%, Maturing June 14, 2013	1,527,370
-------	--	-----------

Reynolds Group Holdings, Inc.

1,963	Term Loan, 6.25%, Maturing November 5, 2015	1,975,414
-------	---	-----------

Smurfit-Stone Container Corp.

1,466	Revolving Loan, 2.90%, Maturing July 28, 2010	1,473,576
-------	---	-----------

487	Revolving Loan, 3.05%, Maturing July 28, 2010	489,913
-----	---	---------

191	Term Loan, 2.50%, Maturing November 1, 2011	190,841
-----	---	---------

336	Term Loan, 2.50%, Maturing November 1, 2011	334,047
-----	---	---------

633	Term Loan, 2.50%, Maturing November 1, 2011	631,206
-----	---	---------

295	Term Loan, 4.50%, Maturing November 1, 2011	293,532
-----	---	---------

\$ 20,709,760

Cosmetics / Toiletries 1.0%

Alliance Boots Holdings, Ltd.

EUR 1,000 Term Loan, Maturing July 5, 2015⁽⁶⁾ \$ 1,263,768

American Safety Razor Co.

470 Term Loan, 6.75%, Maturing July 31, 2013 436,140

900 Term Loan - Second Lien, 10.50%,
Maturing July 31, 2014 532,500

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Borrower/Tranche Description	Value
Cosmetics / Toiletries (continued)		
Bausch & Lomb, Inc.		
293	Term Loan, 3.54%, Maturing April 30, 2015	\$ 287,146
1,207	Term Loan, 3.54%, Maturing April 30, 2015	1,184,004
KIK Custom Products, Inc.		
975	Term Loan - Second Lien, 5.32%, Maturing November 30, 2014	643,500
Prestige Brands, Inc.		
850	Term Loan, 4.75%, Maturing March 17, 2016	858,500
		\$ 5,205,558
Drugs 0.8%		
Graceway Pharmaceuticals, LLC		
1,412	Term Loan, 3.02%, Maturing May 3, 2012	\$ 1,205,252
277	Term Loan, 8.52%, Maturing November 3, 2013 ⁽²⁾	58,851
1,500	Term Loan - Second Lien, 6.77%, Maturing May 3, 2013	858,750
Pharmaceutical Holdings Corp.		
173	Term Loan, 3.53%, Maturing January 30, 2012	170,698
Warner Chilcott Corp.		
732	Term Loan, 5.50%, Maturing October 30, 2014	734,018
337	Term Loan, 5.75%, Maturing April 30, 2015	337,959

561	Term Loan, 5.75%, Maturing April 30, 2015	562,763
		\$ 3,928,291
Ecological Services and Equipment 2.1%		
Blue Waste B.V. (AVR Acquisition)		
EUR	1,000 Term Loan, 2.66%, Maturing April 1, 2015	\$ 1,263,213
Cory Environmental Holdings		
GBP	500 Term Loan - Second Lien, 4.85%, Maturing September 30, 2014	592,895
Environmental Systems Products Holdings, Inc.		
	955 Term Loan - Second Lien, 13.50%, Maturing December 12, 2010	929,886
Kemble Water Structure, Ltd.		
GBP	4,250 Term Loan - Second Lien, 4.88%, Maturing October 13, 2013	5,844,316
Sensus Metering Systems, Inc.		
	2,058 Term Loan, 7.00%, Maturing June 3, 2013	2,060,932
		\$ 10,691,242

Electronics / Electrical 5.1%

Aspect Software, Inc.

	1,664 Term Loan, 3.31%, Maturing July 11, 2011	\$ 1,657,192
	1,800 Term Loan - Second Lien, 7.31%, Maturing July 11, 2013	1,784,624
Christie/Aix, Inc.		
	750 Term Loan, Maturing April 22, 2016 ⁽⁶⁾	751,875
FCI International S.A.S.		
	156 Term Loan, 3.67%, Maturing November 1, 2013	148,509
	162 Term Loan, 3.67%, Maturing November 1, 2013	154,259
	162 Term Loan, 3.67%, Maturing November 1, 2013	154,259
	156 Term Loan, 3.67%, Maturing November 1, 2013	148,509

Freescale Semiconductor, Inc.

2,802	Term Loan, 4.50%, Maturing December 1, 2016	2,698,041
-------	--	-----------

Infor Enterprise Solutions Holdings

2,872	Term Loan, 6.03%, Maturing December 1, 2013	2,789,326
-------	--	-----------

500	Term Loan, 5.77%, Maturing March 2, 2014	415,000
-----	---	---------

1,498	Term Loan, 6.03%, Maturing July 28, 2015	1,453,427
-------	---	-----------

183	Term Loan - Second Lien, 6.52%, Maturing March 2, 2014	148,958
-----	---	---------

317	Term Loan - Second Lien, 6.52%, Maturing March 2, 2014	263,625
-----	---	---------

Network Solutions, LLC

542	Term Loan, 2.55%, Maturing March 7, 2014	518,615
-----	---	---------

Open Solutions, Inc.

2,037	Term Loan, 2.45%, Maturing January 23, 2014	1,841,272
-------	--	-----------

Sensata Technologies Finance Co.

2,714	Term Loan, 2.08%, Maturing April 27, 2013	2,625,708
-------	--	-----------

Spectrum Brands, Inc.

255	Term Loan, 8.00%, Maturing March 30, 2013	255,498
-----	--	---------

3,982	Term Loan, 8.00%, Maturing March 30, 2013	3,982,880
-------	--	-----------

VeriFone, Inc.

2,036	Term Loan, 3.03%, Maturing October 31, 2013	2,005,583
-------	--	-----------

Vertafore, Inc.

2,195	Term Loan, 5.50%, Maturing July 31, 2014	2,134,929
-------	---	-----------

\$ 25,932,089

Equipment Leasing 0.6%

AWAS Capital, Inc.

475	Term Loan, 2.06%, Maturing March 22, 2013	\$ 448,224
-----	--	------------

1,582	Term Loan - Second Lien, 6.31%, Maturing March 22, 2013	1,324,711
-------	--	-----------

Hertz Corp.

1,070	Term Loan, 2.01%, Maturing December 21, 2012	1,058,501
-------	---	-----------

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

15	Term Loan, 2.02%, Maturing December 21, 2012	14,646
----	---	--------

\$ 2,846,082

Farming / Agriculture 0.8%

CF Industries, Inc.

2,350	Term Loan, 5.75%, Maturing April 16, 2015	2,368,213
-------	--	-----------

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount*	Borrower/Tranche Description	Value
(000 s omitted)		
Farming / Agriculture (continued)		
Wm. Bolthouse Farms, Inc.		
1,725	Term Loan, 5.50%, Maturing January 25, 2016	\$ 1,738,477
		\$ 4,106,690
Financial Intermediaries 2.8%		
Citco III, Ltd.		
2,868	Term Loan, 4.43%, Maturing June 30, 2014	\$ 2,781,709
First Data Corp.		
995	Term Loan, 3.01%, Maturing September 24, 2014	896,960
1,995	Term Loan, 3.03%, Maturing September 24, 2014	1,795,618
Grosvenor Capital Management		
1,358	Term Loan, 2.25%, Maturing December 5, 2013	1,248,960
Jupiter Asset Management Group		
GBP 405	Term Loan, 2.71%, Maturing June 30, 2015	591,562
LPL Holdings, Inc.		
3,970	Term Loan, 2.04%, Maturing December 18, 2014	3,873,054
Nuveen Investments, Inc.		
2,330	Term Loan, 3.32%, Maturing November 2, 2014	2,136,550
Oxford Acquisition III, Ltd.		
382	Term Loan, 2.31%, Maturing May 24, 2014	356,570

RJO Holdings Corp. (RJO Brien)

455	Term Loan, 5.26%, Maturing July 31, 2014 ⁽²⁾	307,627
-----	---	---------

\$ 13,988,610

Food Products 2.8%

Acosta, Inc.

2,986	Term Loan, 2.53%, Maturing July 28, 2013	\$ 2,950,727
-------	--	--------------

Dole Food Company, Inc.

108	Term Loan, 7.99%, Maturing April 12, 2013	109,017
982	Term Loan, 5.01%, Maturing February 1, 2017	993,593
395	Term Loan, 5.04%, Maturing February 1, 2017	400,038

Pinnacle Foods Finance, LLC

6,568	Term Loan, 3.00%, Maturing April 2, 2014	6,410,150
-------	--	-----------

Provimi Group SA

205	Term Loan, 2.52%, Maturing June 28, 2015	196,898
252	Term Loan, 2.52%, Maturing June 28, 2015	242,308
EUR 265	Term Loan, 2.66%, Maturing June 28, 2015	339,085
EUR 439	Term Loan, 2.66%, Maturing June 28, 2015	560,809
EUR 457	Term Loan, 2.66%, Maturing June 28, 2015	584,371
EUR 590	Term Loan, 2.66%, Maturing June 28, 2015	753,575
EUR 24	Term Loan - Second Lien, 4.66%, Maturing June 28, 2015	27,689
148	Term Loan - Second Lien, 4.52%, Maturing December 28, 2016	127,484
EUR 331	Term Loan - Second Lien, 4.66%, Maturing December 28, 2016	379,233

\$ 14,074,977

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

Food Service 3.6%

AFC Enterprises, Inc.

288 Term Loan, 7.00%, Maturing May 11, 2011 \$ 291,126

Aramark Corp.

2,566 Term Loan, 2.17%, Maturing January 26, 2014 2,524,781

169 Term Loan, 2.17%, Maturing January 26, 2014 166,259

GBP 968 Term Loan, 2.77%, Maturing January 27, 2014 1,421,111

4,621 Term Loan, 3.54%, Maturing July 26, 2016 4,600,936

304 Term Loan, 3.54%, Maturing July 26, 2016 302,580

Buffets, Inc.

105 Term Loan, 7.53%, Maturing November 1, 2013 102,234

1,250 Term Loan, Maturing April 21, 2015⁽⁶⁾ 1,235,548

8 Term Loan, 7.39%, Maturing April 22, 2015 7,707

CBRL Group, Inc.

963 Term Loan, 1.75%, Maturing April 27, 2013 957,665

582 Term Loan, 2.75%, Maturing April 27, 2016 581,947

NPC International, Inc.

308 Term Loan, 2.05%, Maturing May 3, 2013 299,327

OSI Restaurant Partners, LLC

264 Term Loan, 2.54%, Maturing May 9, 2013 239,802

2,881 Term Loan, 2.63%, Maturing May 9, 2014 2,617,011

QCE Finance, LLC

1,129 Term Loan, 5.06%, Maturing May 5, 2013 1,039,408

950 Term Loan - Second Lien, 6.04%, Maturing November 5, 2013 706,800

Sagittarius Restaurants, LLC

349 Term Loan, 9.50%, Maturing March 29, 2013 349,496

Selecta

EUR 741 Term Loan - Second Lien, 4.99%, Maturing December 28, 2015 720,460

\$ 18,164,198

Food / Drug Retailers 4.2%

General Nutrition Centers, Inc.

6,285	Term Loan, 2.54%, Maturing September 16, 2013	\$ 6,121,321
-------	--	--------------

Pantry, Inc. (The)

222	Term Loan, 2.03%, Maturing May 15, 2014	213,951
771	Term Loan, 2.03%, Maturing May 15, 2014	743,099

Rite Aid Corp.

8,259	Term Loan, 2.01%, Maturing June 1, 2014	7,664,955
-------	--	-----------

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Borrower/Tranche Description	Value
Food / Drug Retailers (continued)		
1,059	Term Loan, 6.00%, Maturing June 4, 2014	\$ 1,047,908
1,000	Term Loan, 9.50%, Maturing June 4, 2014	1,045,833
Roundy s Supermarkets, Inc.		
3,314	Term Loan, 6.25%, Maturing November 3, 2013	3,344,858
1,000	Term Loan - Second Lien, Maturing April 14, 2016 ⁽⁶⁾	1,018,750
		\$ 21,200,675

Forest Products 1.8%

Georgia-Pacific Corp.

5,945	Term Loan, 2.27%, Maturing December 20, 2012	\$ 5,918,940
1,778	Term Loan, 2.33%, Maturing December 20, 2012	1,770,198
1,559	Term Loan, 3.53%, Maturing December 23, 2014	1,563,996
		\$ 9,253,134

Health Care 16.3%

Alliance Healthcare Services

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

	1,222	Term Loan, 5.50%, Maturing June 1, 2016	\$ 1,222,955
American Medical Systems			
	324	Term Loan, 2.50%, Maturing July 20, 2012	319,245
Ardent Medical Services, Inc.			
	1,150	Term Loan, 6.50%, Maturing September 9, 2015	1,138,213
Aveta, Inc.			
	1,250	Term Loan, 7.50%, Maturing April 14, 2015	1,231,250
Biomet, Inc.			
	3,754	Term Loan, 3.28%, Maturing December 26, 2014	3,707,888
EUR	1,194	Term Loan, 3.50%, Maturing December 26, 2014	1,560,148
Bright Horizons Family Solutions, Inc.			
	932	Term Loan, 7.50%, Maturing May 15, 2015	936,891
Cardinal Health 409, Inc.			
	2,172	Term Loan, 2.51%, Maturing January 30, 2012	2,071,674
Carestream Health, Inc.			
	2,461	Term Loan, 2.27%, Maturing April 30, 2013	2,400,303
	1,000	Term Loan - Second Lien, 5.52%, Maturing October 30, 2013	949,167
Carl Zeiss Vision Holding GmbH			
	1,300	Term Loan, 2.77%, Maturing March 23, 2015	1,095,250
Community Health Systems, Inc.			
	524	Term Loan, 2.50%, Maturing July 25, 2014	509,877
	10,226	Term Loan, 2.50%, Maturing July 25, 2014	9,954,444
Concentra, Inc.			
	634	Term Loan - Second Lien, 5.80%, Maturing June 25, 2015	584,488
ConMed Corp.			
	456	Term Loan, 1.78%, Maturing April 13, 2013	433,094
ConvaTec Cidron Healthcare			
EUR	746	Term Loan, 4.65%, Maturing July 30, 2016	982,625
CRC Health Corp.			
	473	Term Loan, 2.54%, Maturing February 6, 2013	451,645
	475	Term Loan, 2.54%, Maturing February 6, 2013	453,915
Dako EQT Project Delphi			
	500		362,500

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

	Term Loan - Second Lien, 4.04%, Maturing December 12, 2016	
DaVita, Inc.		
548	Term Loan, 1.77%, Maturing October 5, 2012	542,974
DJO Finance, LLC		
704	Term Loan, 3.27%, Maturing May 15, 2014	687,134
Fenwal, Inc.		
500	Term Loan - Second Lien, 5.50%, Maturing August 28, 2014	435,000
Fresenius Medical Care Holdings		
489	Term Loan, 1.66%, Maturing March 31, 2013	482,591
Hanger Orthopedic Group, Inc.		
698	Term Loan, 2.27%, Maturing May 30, 2013	689,385
Harvard Drug Group, LLC		
121	Term Loan, Maturing April 8, 2016 ⁽⁶⁾	121,106
879	Term Loan, Maturing April 8, 2016 ⁽⁶⁾	880,769
HCA, Inc.		
2,572	Term Loan, 2.54%, Maturing November 18, 2013	2,506,387
6,168	Term Loan, 3.54%, Maturing March 17, 2017	6,136,368
Health Management Association, Inc.		
7,098	Term Loan, 2.04%, Maturing February 28, 2014	6,886,866
HealthSouth Corp.		
1,249	Term Loan, 2.51%, Maturing March 10, 2013	1,229,137
1,028	Term Loan, 4.01%, Maturing March 15, 2014	1,028,546
Iasis Healthcare, LLC		
78	Term Loan, 2.25%, Maturing March 14, 2014	75,857
287	Term Loan, 2.27%, Maturing March 14, 2014	279,484
829	Term Loan, 2.27%, Maturing March 14, 2014	807,550
Ikaria Acquisition, Inc.		
1,477	Term Loan, 2.52%, Maturing March 28, 2013	1,460,173
IM U.S. Holdings, LLC		
977	Term Loan, 2.27%, Maturing June 26, 2014	961,993
625	Term Loan - Second Lien, 4.50%, Maturing June 26, 2015	622,396
IMS Health, Inc.		
1,287	Term Loan, 5.25%, Maturing February 17, 2016	1,297,289

Lifepoint Hospitals, Inc.

2,022	Term Loan, 3.01%, Maturing April 15, 2015	2,016,923
-------	--	-----------

MultiPlan Merger Corp.

950	Term Loan, 3.56%, Maturing April 12, 2013	935,786
-----	--	---------

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Borrower/Tranche Description	Value
Health Care (continued)		
1,329	Term Loan, 3.56%, Maturing April 12, 2013	\$ 1,308,628
800	Term Loan, 6.00%, Maturing June 30, 2013	802,250
Mylan, Inc.		
3,545	Term Loan, 3.56%, Maturing October 2, 2014	3,546,292
National Mentor Holdings, Inc.		
62	Term Loan, 2.30%, Maturing June 29, 2013	56,877
999	Term Loan, 2.30%, Maturing June 29, 2013	922,835
National Renal Institutes, Inc.		
703	Term Loan, 9.00%, Maturing March 31, 2013 ⁽²⁾	691,027
Nyco Holdings		
EUR 495	Term Loan, 2.89%, Maturing December 29, 2014	623,514
EUR 495	Term Loan, 3.64%, Maturing December 29, 2015	623,514
Physiotherapy Associates, Inc.		
742	Term Loan, 7.50%, Maturing June 27, 2013	594,539
Prime Healthcare Services, Inc.		
2,325	Term Loan, Maturing April 22, 2015 ⁽⁶⁾	2,278,500
RadNet Management, Inc.		
1,100	Term Loan, 5.75%, Maturing April 6, 2016	1,101,146
ReAble Therapeutics Finance, LLC		
2,494	Term Loan, 2.30%, Maturing November 16, 2013	2,449,116
RehabCare Group, Inc.		
873	Term Loan, 6.00%, Maturing November 20, 2015	878,268
Renal Advantage, Inc.		

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

	1	Term Loan, 2.76%, Maturing October 5, 2012	780
Select Medical Holdings Corp.			
	2,353	Term Loan, 4.00%, Maturing August 5, 2014	2,314,295
Sunrise Medical Holdings, Inc.			
EUR	293	Term Loan, 8.00%, Maturing May 13, 2014	389,576
TZ Merger Sub., Inc. (TriZetto)			
	723	Term Loan, 7.50%, Maturing July 24, 2015	728,773
Vanguard Health Holding Co., LLC			
	1,600	Term Loan, 5.00%, Maturing January 29, 2016	1,608,333
VWR International, Inc.			
	980	Term Loan, 2.77%, Maturing June 28, 2013	936,552
			\$ 82,304,101

Home Furnishings 1.0%

Hunter Fan Co.

424 Term Loan, 2.76%, Maturing April 16, 2014 \$ 386,912

Interline Brands, Inc.

255 Term Loan, 2.01%, Maturing June 23, 2013 240,667

936 Term Loan, 2.04%, Maturing June 23, 2013 884,086

National Bedding Co., LLC

1,461 Term Loan, 2.31%, Maturing August 31, 2011 1,423,584

2,050 Term Loan - Second Lien, 5.31%, Maturing August 31, 2012 1,906,500

\$ 4,841,749

Industrial Equipment 3.8%

Brand Energy and Infrastructure Services, Inc.

688 Term Loan, 2.56%, Maturing February 7, 2014 \$ 667,147

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

737	Term Loan, 3.56%, Maturing February 7, 2014	721,433
Bucyrus International, Inc.		
1,300	Term Loan, 4.50%, Maturing February 21, 2016	1,310,442
CEVA Group PLC U.S.		
862	Term Loan, 3.26%, Maturing January 4, 2014	784,143
2,222	Term Loan, 3.26%, Maturing January 4, 2014	2,022,215
742	Term Loan, 3.29%, Maturing January 4, 2014	675,599
EPD Holdings, (Goodyear Engineering Products)		
145	Term Loan, 2.76%, Maturing July 13, 2014	130,346
1,013	Term Loan, 2.76%, Maturing July 13, 2014	910,088
775	Term Loan - Second Lien, 6.01%, Maturing July 13, 2015	655,521
Generac Acquisition Corp.		
1,401	Term Loan, 2.79%, Maturing November 7, 2013	1,325,179
Gleason Corp.		
707	Term Loan, 2.02%, Maturing June 30, 2013	696,209
Jason, Inc.		
395	Term Loan, 7.00%, Maturing July 30, 2010	296,603
John Maneely Co.		
2,173	Term Loan, 3.55%, Maturing December 8, 2013	2,095,018
KION Group GmbH		
1,005	Term Loan, 2.52%, Maturing December 23, 2014 ⁽²⁾	832,942
1,005	Term Loan, 2.77%, Maturing December 23, 2015 ⁽²⁾	832,942
Polypore, Inc.		
3,845	Term Loan, 2.53%, Maturing July 3, 2014	3,758,322
Sequa Corp.		
794	Term Loan, 3.55%, Maturing November 30, 2014	740,583
TFS Acquisition Corp.		
700	Term Loan, 14.00%, Maturing August 11, 2013 ⁽²⁾	680,865
		\$ 19,135,597

Insurance 3.7%

Alliant Holdings I, Inc.

2,494	Term Loan, 3.29%, Maturing August 21, 2014	2,390,745
-------	---	-----------

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount*	(000 s omitted) Borrower/Tranche Description	Value
Insurance (continued)		
AmWINS Group, Inc.		
980	Term Loan, 2.77%, Maturing June 8, 2013	\$ 919,425
500	Term Loan - Second Lien, 5.78%, Maturing June 8, 2014	412,500
Applied Systems, Inc.		
2,118	Term Loan, 2.77%, Maturing September 26, 2013	2,033,656
CCC Information Services Group, Inc.		
1,549	Term Loan, 2.53%, Maturing February 10, 2013	1,523,249
Conseco, Inc.		
3,627	Term Loan, 7.50%, Maturing October 10, 2013	3,540,547
Crawford & Company		
1,162	Term Loan, 5.25%, Maturing October 31, 2013	1,157,476
Crump Group, Inc.		
775	Term Loan, 3.28%, Maturing August 4, 2014	734,220
Hub International Holdings, Inc.		
494	Term Loan, 2.79%, Maturing June 13, 2014	468,980
2,200	Term Loan, 2.79%, Maturing June 13, 2014	2,086,928
572	Term Loan, 6.75%, Maturing June 30, 2014	573,198
U.S.I. Holdings Corp.		
3,022	Term Loan, 3.05%, Maturing May 4, 2014	2,821,877
		\$ 18,662,801

Leisure Goods / Activities / Movies 8.2%

24 Hour Fitness Worldwide, Inc.

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

1,000	Term Loan, Maturing December 30, 2015 ⁽⁶⁾	\$ 980,000
AMC Entertainment, Inc.		
3,767	Term Loan, 2.01%, Maturing January 26, 2013	3,684,969
AMF Bowling Worldwide, Inc.		
1,000	Term Loan - Second Lien, 6.50%, Maturing December 8, 2013	805,000
Bombardier Recreational Products		
1,823	Term Loan, 3.25%, Maturing June 28, 2013	1,618,482
Butterfly Wendel US, Inc.		
280	Term Loan, 4.00%, Maturing June 22, 2013	255,598
280	Term Loan, 3.75%, Maturing June 22, 2014	255,681
Carmike Cinemas, Inc.		
2,540	Term Loan, 5.50%, Maturing January 27, 2016	2,543,359
Cedar Fair, L.P.		
254	Term Loan, 2.27%, Maturing August 30, 2012	252,255
2,099	Term Loan, 4.27%, Maturing February 17, 2014	2,098,542
CFV I, LLC/Hicks Sports Group		
86	Term Loan, 9.33%, Maturing July 1, 2010 ⁽²⁾⁽³⁾	88,647
Cinemark, Inc.		
3,487	Term Loan, 3.54%, Maturing April 29, 2016	3,491,585
Deluxe Entertainment Services		
59	Term Loan, 2.54%, Maturing January 28, 2011	54,331
100	Term Loan, 6.25%, Maturing January 28, 2011	91,599
934	Term Loan, 6.25%, Maturing January 28, 2011	859,188
Fender Musical Instruments Corp.		
330	Term Loan, 2.50%, Maturing June 9, 2014	293,425
649	Term Loan, 2.55%, Maturing June 9, 2014	577,977
Formula One (Alpha D2, Ltd.)		
2,000	Term Loan - Second Lien, 3.82%, Maturing June 30, 2014	1,824,090
Metro-Goldwyn-Mayer Holdings, Inc.		
2,786	Term Loan, 0.00%, Maturing April 8, 2012 ⁽⁷⁾	1,293,813
National CineMedia, LLC		
2,750	Term Loan, 2.01%, Maturing February 13, 2015	2,687,437
Regal Cinemas Corp.		
5,136	Term Loan, 3.79%, Maturing November 10, 2010	5,146,715
Revolution Studios Distribution Co., LLC		
973	Term Loan, 4.03%, Maturing December 21, 2014	894,961

800	Term Loan - Second Lien, 7.28%, Maturing June 21, 2015	560,000
Six Flags Theme Parks, Inc.		
2,600	Term Loan, Maturing February 17, 2016 ⁽⁶⁾	2,574,000
Southwest Sports Group, LLC		
1,875	Term Loan, 6.75%, Maturing December 22, 2010	1,692,188
SW Acquisition Co., Inc.		
1,870	Term Loan, 5.75%, Maturing May 31, 2016	1,885,509
Universal City Development Partners, Ltd.		
2,618	Term Loan, 5.50%, Maturing November 6, 2014	2,636,418
Zuffa, LLC		
2,328	Term Loan, 2.31%, Maturing June 20, 2016	2,257,090
		\$ 41,402,859

Lodging and Casinos 2.5%

Ameristar Casinos, Inc.

1,053 Term Loan, 3.56%, Maturing November 10, 2012 \$ 1,052,807

Harrah s Operating Co.

1,223 Term Loan, 3.32%, Maturing January 28, 2015 1,078,436

2,993 Term Loan, 9.50%, Maturing October 31, 2016 3,112,822

LodgeNet Entertainment Corp.

1,683 Term Loan, 2.30%, Maturing April 4, 2014 1,615,854

New World Gaming Partners, Ltd.

1,003 Term Loan, 2.80%, Maturing June 30, 2014 969,537

203 Term Loan, 4.79%, Maturing June 30, 2014 196,374

Penn National Gaming, Inc.

354 Term Loan, 2.02%, Maturing October 3, 2012 350,685

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Borrower/Tranche Description	Value
Lodging and Casinos (continued)		
Tropicana Entertainment, Inc.		
184	Term Loan, 15.00%, Maturing December 29, 2012	\$ 206,013
Venetian Casino Resort/Las Vegas Sands, Inc.		
850	Term Loan, 2.05%, Maturing May 14, 2014	804,980
3,365	Term Loan, 2.05%, Maturing May 23, 2014	3,187,146
		\$ 12,574,654
Nonferrous Metals / Minerals 1.4%		
Euramax International, Inc.		
307	Term Loan, 10.00%, Maturing June 29, 2013	\$ 270,606
314	Term Loan, 14.00%, Maturing June 29, 2013 ⁽²⁾	277,203
Noranda Aluminum Acquisition		
1,980	Term Loan, 2.27%, Maturing May 18, 2014	1,950,571
Novelis, Inc.		
615	Term Loan, 2.28%, Maturing June 28, 2014	597,141
1,354	Term Loan, 2.29%, Maturing June 28, 2014	1,313,773
Oxbow Carbon and Mineral Holdings		
2,927	Term Loan, 2.29%, Maturing May 8, 2014	2,874,545

\$ 7,283,839

Oil and Gas 3.4%

Atlas Pipeline Partners, L.P.

903	Term Loan, 6.75%, Maturing July 27, 2014	\$ 902,978
-----	--	------------

Big West Oil, LLC

315	Term Loan, 4.50%, Maturing May 1, 2014	313,208
-----	--	---------

396	Term Loan, 4.50%, Maturing May 1, 2014	393,747
-----	--	---------

Dresser, Inc.

1,432	Term Loan, 2.50%, Maturing May 4, 2014	1,396,478
-------	--	-----------

1,000	Term Loan - Second Lien, 6.00%, Maturing May 4, 2015	973,000
-------	--	---------

Dynegy Holdings, Inc.

334	Term Loan, 4.03%, Maturing April 2, 2013	328,878
-----	--	---------

5,161	Term Loan, 4.03%, Maturing April 2, 2013	5,080,368
-------	--	-----------

Enterprise GP Holdings, L.P.

1,103	Term Loan, 2.53%, Maturing October 31, 2014	1,096,298
-------	---	-----------

Hercules Offshore, Inc.

1,596	Term Loan, 6.00%, Maturing July 11, 2013	1,553,637
-------	--	-----------

Precision Drilling Corp.

878	Term Loan, 4.26%, Maturing December 23, 2013	864,489
-----	--	---------

SemGroup Corp.

1,070	Term Loan, 7.50%, Maturing June 30, 2011	1,067,648
-------	--	-----------

832	Term Loan, 7.60%, Maturing November 27, 2013	831,535
-----	--	---------

Sheridan Production Partners I, LLC

108	Term Loan, 7.75%, Maturing April 20, 2017	108,371
-----	---	---------

177	Term Loan, 7.75%, Maturing April 20, 2017	177,422
-----	---	---------

1,339	Term Loan, 7.75%, Maturing April 20, 2017	1,338,954
-------	---	-----------

Targa Resources, Inc.

1,011	Term Loan, 6.00%, Maturing June 4, 2017	1,015,830
-------	---	-----------

\$ 17,442,841

Publishing 6.8%

American Media Operations, Inc.

2,182	Term Loan, 10.00%, Maturing January 31, 2013 ⁽²⁾	\$ 2,118,874
-------	--	--------------

Aster Zweite Beteiligungs GmbH

1,775	Term Loan, 2.59%, Maturing September 27, 2013	1,664,063
-------	--	-----------

GateHouse Media Operating, Inc.

870	Term Loan, 2.26%, Maturing August 28, 2014	430,603
2,074	Term Loan, 2.28%, Maturing August 28, 2014	1,026,576
674	Term Loan, 2.51%, Maturing August 28, 2014	333,422

Getty Images, Inc.

3,591	Term Loan, 6.25%, Maturing July 2, 2015	3,603,397
-------	--	-----------

Lamar Media Corp.

1,000	Term Loan, Maturing October 29, 2016 ⁽⁶⁾	1,004,167
-------	---	-----------

Laureate Education, Inc.

346	Term Loan, 3.57%, Maturing August 17, 2014	324,370
2,314	Term Loan, 3.57%, Maturing August 17, 2014	2,167,064
1,493	Term Loan, 7.00%, Maturing August 31, 2014	1,492,034

Local Insight Regatta Holdings, Inc.

1,578	Term Loan, 7.75%, Maturing April 23, 2015	1,396,210
-------	--	-----------

MediaNews Group, Inc.

181	Term Loan, 8.50%, Maturing March 19, 2014	170,444
-----	--	---------

Merrill Communications, LLC

1,225	Term Loan, 8.50%, Maturing December 24, 2012	1,144,132
1,012	Term Loan - Second Lien, 14.75%, Maturing November 15, 2013 ⁽²⁾	859,818

Nelson Education, Ltd.

488	Term Loan, 2.79%, Maturing July 5, 2014	453,375
-----	--	---------

Nielsen Finance, LLC

5,783	Term Loan, 2.25%, Maturing August 9, 2013	5,650,412
992	Term Loan, 4.00%, Maturing May 1, 2016	982,867

PagesJaunes Group, SA

EUR	500	Term Loan, 4.90%, Maturing April 10, 2016	480,986
-----	-----	---	---------

Philadelphia Newspapers, LLC

	708	Term Loan, 0.00%, Maturing June 29, 2013 ⁽⁷⁾	200,032
--	-----	---	---------

SGS International, Inc.

	536	Term Loan, 2.88%, Maturing December 30, 2011	518,840
--	-----	--	---------

Source Interlink Companies, Inc.

	909	Term Loan, 10.75%, Maturing June 18, 2013	913,636
--	-----	---	---------

	515	Term Loan, 15.00%, Maturing June 18, 2013 ⁽²⁾	257,349
--	-----	--	---------

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount*	(000 s omitted)	Borrower/Tranche Description	Value
Publishing (continued)			
Trader Media Corp.			
GBP	1,315	Term Loan, 2.68%, Maturing March 23, 2015	\$ 1,876,438
Tribune Co.			
	1,547	Term Loan, 0.00%, Maturing June 4, 2010 ⁽⁷⁾	1,017,989
	935	Term Loan, 0.00%, Maturing May 17, 2014 ⁽⁷⁾	629,383
	990	Term Loan, 0.00%, Maturing May 17, 2014 ⁽⁷⁾	658,317
Xsys, Inc.			
	1,509	Term Loan, 2.59%, Maturing September 27, 2013	1,415,140
	1,699	Term Loan, 2.59%, Maturing September 27, 2014	1,593,276
			\$ 34,383,214
Radio and Television 2.8%			
Block Communications, Inc.			
	814	Term Loan, 2.29%, Maturing December 22, 2011	\$ 770,129
CMP KC, LLC			
	956	Term Loan, 6.25%, Maturing May 5, 2013 ⁽⁵⁾	274,426
CMP Susquehanna Corp.			
	1,561	Term Loan, 2.31%, Maturing May 5, 2013	1,334,467
Discovery Communications, Inc.			
	990		1,000,054

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

	Term Loan, 5.25%, Maturing May 14, 2014	
Emmis Operating Co.		
756	Term Loan, 4.29%, Maturing November 2, 2013	697,249
Gray Television, Inc.		
668	Term Loan, 3.80%, Maturing January 19, 2015	657,622
HIT Entertainment, Inc.		
750	Term Loan, 5.50%, Maturing March 20, 2012	717,039
Mission Broadcasting, Inc.		
527	Term Loan, 5.00%, Maturing September 30, 2016	529,133
NEP II, Inc.		
584	Term Loan, 2.35%, Maturing February 16, 2014	568,361
Nexstar Broadcasting, Inc.		
824	Term Loan, 5.00%, Maturing September 30, 2016	827,617
Raycom TV Broadcasting, LLC		
871	Term Loan, 1.81%, Maturing June 25, 2014	809,681
SFX Entertainment		
866	Term Loan, 3.53%, Maturing June 21, 2013	859,974
Univision Communications, Inc.		
4,200	Term Loan, 2.54%, Maturing September 29, 2014	3,836,700
Weather Channel		
1,157	Term Loan, 5.00%, Maturing September 14, 2015	1,169,126
		\$ 14,051,578

Rail Industries 0.4%

Kansas City Southern Railway Co.

1,949	Term Loan, 2.05%, Maturing April 26, 2013	\$ 1,927,136
-------	---	--------------

\$ 1,927,136

Retailers (Except Food and Drug) 3.4%

American Achievement Corp.		
109	Term Loan, 6.26%, Maturing March 25, 2011	\$ 103,347
Amscan Holdings, Inc.		
455	Term Loan, 2.53%, Maturing May 25, 2013	437,997
Cumberland Farms, Inc.		
1,515	Term Loan, 2.78%, Maturing September 29, 2013	1,401,158
Educate, Inc.		
500	Term Loan - Second Lien, 5.55%, Maturing June 14, 2014	441,875
FTD, Inc.		
1,108	Term Loan, 6.75%, Maturing July 31, 2014	1,110,905
Harbor Freight Tools USA, Inc.		
873	Term Loan, 5.00%, Maturing February 24, 2016	875,581
Josten s Corp.		
1,510	Term Loan, 2.25%, Maturing October 4, 2011	1,501,249
Neiman Marcus Group, Inc.		
2,967	Term Loan, 2.25%, Maturing April 5, 2013	2,849,563
Orbitz Worldwide, Inc.		
1,108	Term Loan, 3.28%, Maturing July 25, 2014	1,074,830
Oriental Trading Co., Inc.		
1,125	Term Loan - Second Lien, 6.26%, Maturing January 31, 2013	298,125
Pilot Travel Centers, LLC		
1,225	Term Loan, Maturing November 24, 2015 ⁽⁶⁾	1,235,938
Rover Acquisition Corp.		
2,177	Term Loan, 2.53%, Maturing October 26, 2013	2,146,603
Savers, Inc.		
1,200	Term Loan, 5.75%, Maturing March 11, 2016	1,207,500
Yankee Candle Company, Inc. (The)		
2,421	Term Loan, 2.28%, Maturing February 6, 2014	2,380,709
		\$ 17,065,380

Steel 0.3%

Niagara Corp.

1,382	Term Loan, 10.50%, Maturing June 27, 2014 ⁽⁵⁾	\$ 1,381,854
		\$ 1,381,854

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Borrower/Tranche Description	Value
Surface Transport	0.3%	
Oshkosh Truck Corp.		
907	Term Loan, 6.26%, Maturing December 6, 2013	\$ 912,916
Swift Transportation Co., Inc.		
789	Term Loan, 6.31%, Maturing May 10, 2014	769,905
		\$ 1,682,821
Telecommunications	5.1%	
Alaska Communications Systems Holdings, Inc.		
985	Term Loan, 2.04%, Maturing February 1, 2012	\$ 967,400
Asurion Corp.		
3,880	Term Loan, 3.25%, Maturing July 13, 2012	3,841,963
1,000	Term Loan - Second Lien, 6.75%, Maturing January 13, 2013	992,000
CommScope, Inc.		
1,191	Term Loan, 2.79%, Maturing November 19, 2014	1,188,099
Intelsat Corp.		
2,428	Term Loan, 2.79%, Maturing January 3, 2014	2,384,824
2,428	Term Loan, 2.79%, Maturing January 3, 2014	2,384,824
2,429	Term Loan, 2.79%, Maturing January 3, 2014	2,385,556
Intelsat Subsidiary Holding Co.		
941		924,214

		Term Loan, 2.79%, Maturing July 3, 2013	
Iowa Telecommunications Services			
	1,615	Term Loan, 2.04%, Maturing November 23, 2011	1,611,023
Macquarie UK Broadcast Ventures, Ltd.			
GBP	755	Term Loan, 2.56%, Maturing December 26, 2014	985,743
NTelos, Inc.			
	1,493	Term Loan, 5.75%, Maturing August 13, 2015	1,502,761
Palm, Inc.			
	1,748	Term Loan, 3.80%, Maturing April 24, 2014	1,730,511
Stratos Global Corp.			
	966	Term Loan, 5.00%, Maturing February 13, 2012	960,566
TowerCo Finance, LLC			
	424	Term Loan, 6.00%, Maturing November 24, 2014	428,530
Trilogy International Partners			
	850	Term Loan, 3.79%, Maturing June 29, 2012	760,750
Windstream Corp.			
	3,005	Term Loan, 3.06%, Maturing December 17, 2015	3,009,038
			\$ 26,057,802

Utilities 4.3%

AEI Finance Holding, LLC

	270	Revolving Loan, 3.27%, Maturing March 30, 2012	\$ 256,376
	1,813	Term Loan, 3.29%, Maturing March 30, 2014	1,723,435

Astoria Generating Co.

	1,000	Term Loan - Second Lien, 4.03%, Maturing August 23, 2013	977,917
--	-------	---	---------

BRSP, LLC

	977	Term Loan, 7.50%, Maturing June 24, 2014	979,201
--	-----	---	---------

Calpine Corp.

	6,936	DIP Loan, 3.17%, Maturing March 29, 2014	6,699,836
--	-------	---	-----------

Electricinvest Holding Co.

GBP	480		620,589
-----	-----	--	---------

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

		Term Loan, 5.05%, Maturing October 24, 2012	
EUR	477	Term Loan - Second Lien, 4.90%, Maturing October 24, 2012	544,690
NRG Energy, Inc.			
	1,586	Term Loan, 2.00%, Maturing June 1, 2014	1,558,004
	2,046	Term Loan, 2.04%, Maturing June 1, 2014	2,009,646
Pike Electric, Inc.			
	146	Term Loan, 1.81%, Maturing July 1, 2012	139,659
	340	Term Loan, 1.81%, Maturing December 10, 2012	324,482
TXU Texas Competitive Electric Holdings Co., LLC			
	995	Term Loan, 3.75%, Maturing October 10, 2014	818,677
	1,325	Term Loan, 3.75%, Maturing October 10, 2014	1,082,949
	3,793	Term Loan, 3.75%, Maturing October 10, 2014	3,120,046
Vulcan Energy Corp.			
	1,090	Term Loan, 5.50%, Maturing December 31, 2015	1,103,480

\$ 21,958,987

Total Senior Floating-Rate Interests
(identified cost \$712,596,831) **\$ 701,272,656**

Corporate Bonds & Notes 10.6%

**Principal
Amount***

(000 s omitted) Security Value

Air Transport 0.0%

Continental Airlines

186 7.033%, 6/15/11 \$ 187,727

\$ 187,727

Automotive 0.2%

Allison Transmission, Inc.

665 11.25%, 11/1/15⁽²⁾⁽⁸⁾ \$ 721,525

American Axle & Manufacturing Holdings, Inc., Sr. Notes

115 9.25%, 1/15/17⁽⁸⁾ 122,762

25 7.875%, 3/1/17 23,937

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Security	Value
Automotive (continued)		
Commercial Vehicle Group, Inc., Sr. Notes		
100	8.00%, 7/1/13	\$ 83,250
		\$ 951,474
Broadcast Radio and Television 0.3%		
Clear Channel Communications, Inc., Sr. Notes		
1,000	6.25%, 3/15/11	\$ 982,500
XM Satellite Radio Holdings, Inc.		
485	13.00%, 8/1/13 ⁽⁸⁾	552,900
		\$ 1,535,400
Building and Development 0.5%		
Grohe Holding GmbH, Variable Rate		
EUR 2,000	3.519%, 1/15/14 ⁽⁹⁾	\$ 2,516,440
Texas Industries, Inc., Sr. Notes		
115	7.25%, 7/15/13	115,144
		\$ 2,631,584

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

Business Equipment and Services 0.5%

Brocade Communications Systems, Inc., Sr. Notes

30	6.625%, 1/15/18 ⁽⁸⁾	\$	31,050
30	6.875%, 1/15/20 ⁽⁸⁾		31,125

Education Management, LLC, Sr. Notes

390	8.75%, 6/1/14		403,162
-----	---------------	--	---------

MediMedia USA, Inc., Sr. Sub. Notes

170	11.375%, 11/15/14 ⁽⁸⁾		161,075
-----	----------------------------------	--	---------

RSC Equipment Rental, Inc., Sr. Notes

750	10.00%, 7/15/17 ⁽⁸⁾		823,125
-----	--------------------------------	--	---------

SunGard Data Systems, Inc., Sr. Notes

500	10.625%, 5/15/15		553,750
-----	------------------	--	---------

Ticketmaster Entertainment, Inc.

185	10.75%, 8/1/16		209,050
-----	----------------	--	---------

West Corp.

275	9.50%, 10/15/14		286,000
-----	-----------------	--	---------

\$ 2,498,337

Cable and Satellite Television 0.5%

Virgin Media Finance PLC, Sr. Notes

2,500	6.50%, 1/15/18 ⁽⁸⁾	\$	2,525,000
-------	-------------------------------	----	-----------

\$ 2,525,000

Chemicals and Plastics 0.2%

CII Carbon, LLC

185	11.125%, 11/15/15 ⁽⁸⁾	\$	190,087
-----	----------------------------------	----	---------

Reichhold Industries, Inc., Sr. Notes

350	9.00%, 8/15/14 ⁽⁸⁾		339,500
-----	-------------------------------	--	---------

Wellman Holdings, Inc., Sr. Sub. Notes

461	5.00%, 1/29/19 ⁽²⁾⁽⁵⁾		215,966
-----	----------------------------------	--	---------

\$ 745,553

Clothing / Textiles 0.1%

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

Levi Strauss & Co., Sr. Notes		
270	9.75%, 1/15/15	\$ 285,188
Perry Ellis International, Inc., Sr. Sub. Notes		
360	8.875%, 9/15/13	369,000
		\$ 654,188

Conglomerates 0.0%

RBS Global & Rexnord Corp.		
155	11.75%, 8/1/16	\$ 169,144
		\$ 169,144

Containers and Glass Products 0.5%

Berry Plastics Corp., Sr. Notes, Variable Rate		
2,000	5.053%, 2/15/15	\$ 1,965,000
Intertape Polymer US, Inc., Sr. Sub. Notes		
310	8.50%, 8/1/14	266,600
		\$ 2,231,600

Cosmetics / Toiletries 0.3%

Revlon Consumer Products Corp.		
1,415	9.75%, 11/15/15 ⁽⁸⁾	\$ 1,460,987
		\$ 1,460,987

Ecological Services and Equipment 0.2%

Environmental Systems Product Holdings, Inc., Jr. Notes		
437	18.00%, 3/31/15 ⁽²⁾⁽⁵⁾	\$ 349,262
Waste Services, Inc., Sr. Sub. Notes		

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

440 9.50%, 4/15/14 454,300

\$ 803,562

Electronics / Electrical 0.2%

Amkor Technologies, Inc., Sr. Notes

115 9.25%, 6/1/16 123,050

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Security	Value
Electronics / Electrical (continued)		
	NXP BV/NXP Funding, LLC, Variable Rate	
775	3.053%, 10/15/13	\$ 743,031
		\$ 866,081
Equipment Leasing 0.0%		
	Hertz Corp.	
10	8.875%, 1/1/14	\$ 10,375
		\$ 10,375
Financial Intermediaries 0.6%		
	Ford Motor Credit Co., Sr. Notes	
2,250	12.00%, 5/15/15	\$ 2,725,051
230	8.00%, 12/15/16	245,471
		\$ 2,970,522
Food Products 0.3%		
	ASG Consolidated, LLC/ASG Finance, Inc., Sr. Disc. Notes	

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

520	11.50%, 11/1/11	\$	540,150
Smithfield Foods, Inc., Sr. Notes			
1,000	10.00%, 7/15/14 ⁽⁸⁾		1,127,500
			\$ 1,667,650

Food Service 0.3%

El Pollo Loco, Inc.			
100	11.75%, 11/15/13	\$	89,500
NPC International, Inc., Sr. Sub. Notes			
245	9.50%, 5/1/14		249,288
U.S. Foodservice, Inc., Sr. Notes			
1,000	10.25%, 6/30/15 ⁽⁸⁾		1,040,000
			\$ 1,378,788

Food / Drug Retailers 0.2%

General Nutrition Center, Sr. Notes, Variable Rate			
665	5.75%, 3/15/14 ⁽²⁾	\$	636,737
General Nutrition Center, Sr. Sub. Notes			
385	10.75%, 3/15/15		394,144
			\$ 1,030,881

Forest Products 0.2%

NewPage Corp., Sr. Notes			
955	11.375%, 12/31/14	\$	986,037
Verso Paper Holdings, LLC/Verso Paper, Inc.			
225	11.375%, 8/1/16		216,563
			\$ 1,202,600

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

Health Care 0.5%

Accellent, Inc.		
285	10.50%, 12/1/13	\$ 288,563
Accellent, Inc., Sr. Notes		
135	8.375%, 2/1/17 ⁽⁸⁾	137,194
AMR HoldCo, Inc./EmCare HoldCo, Inc., Sr. Sub. Notes		
240	10.00%, 2/15/15	253,500
DJO Finance, LLC/DJO Finance Corp.		
190	10.875%, 11/15/14	209,000
DJO Finance, LLC/DJO Finance Corp., Sr. Notes		
15	10.875%, 11/15/14 ⁽⁸⁾	16,500
HCA, Inc.		
115	9.25%, 11/15/16	124,631
MultiPlan, Inc., Sr. Sub. Notes		
485	10.375%, 4/15/16 ⁽⁸⁾	504,400
National Mentor Holdings, Inc.		
290	11.25%, 7/1/14	291,450
Res-Care, Inc., Sr. Notes		
195	7.75%, 10/15/13	195,975
US Oncology, Inc.		
515	10.75%, 8/15/14	539,462
		\$ 2,560,675

Industrial Equipment 0.4%

CEVA Group PLC, Sr. Notes		
165	11.50%, 4/1/18 ⁽⁸⁾	\$ 178,406
Chart Industries, Inc., Sr. Sub. Notes		
195	9.125%, 10/15/15	197,438
ESCO Corp., Sr. Notes		
645	8.625%, 12/15/13 ⁽⁸⁾	670,800
Terex Corp., Sr. Notes		
1,000	10.875%, 6/1/16	1,127,500
		\$ 2,174,144

Insurance 0.0%

Alliant Holdings I, Inc.		
100	11.00%, 5/1/15 ⁽⁸⁾	\$ 103,750

\$ 103,750

See notes to financial statements

17

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount*	Security	Value
(000 s omitted)		
	Leisure Goods / Activities / Movies 0.2%	
	AMC Entertainment, Inc., Sr. Notes	
110	8.75%, 6/1/19	\$ 117,150
	HRP Myrtle Beach Operations, LLC/HRP Myrtle Beach Capital Corp.	
195	12.50%, 4/1/13 ⁽⁵⁾⁽⁷⁾⁽⁸⁾	0
	HRP Myrtle Beach Operations, LLC/HRP Myrtle Beach Capital Corp., Variable Rate	
360	0.00%, 4/1/12 ⁽⁵⁾⁽⁷⁾⁽⁸⁾	0
	Marquee Holdings, Inc., Sr. Disc. Notes	
500	12.00%, 8/15/14	418,750
	MU Finance PLC, Sr. Notes	
135	8.375%, 2/1/17 ⁽⁸⁾	132,975
	Royal Caribbean Cruises, Sr. Notes	
95	7.00%, 6/15/13	99,037
35	6.875%, 12/1/13	36,400
25	7.25%, 6/15/16	25,438
50	7.25%, 3/15/18	50,375
		\$ 880,125
	Lodging and Casinos 1.0%	
	Buffalo Thunder Development Authority	
480	9.375%, 12/15/49 ⁽⁷⁾⁽⁸⁾	\$ 82,800
	CCM Merger, Inc.	
140	8.00%, 8/1/13 ⁽⁸⁾	129,675
	Chukchansi EDA, Sr. Notes, Variable Rate	
280	4.024%, 11/15/12 ⁽⁸⁾	221,200
	Fontainebleau Las Vegas Casino, LLC	
485	10.25%, 6/15/49 ⁽⁷⁾⁽⁸⁾	9,094
	Galaxy Entertainment Finance	
300	9.875%, 12/15/12 ⁽⁸⁾	314,814

Greektown Holdings, LLC, Sr. Notes		
95	10.75%, 12/1/13 ⁽⁷⁾⁽⁸⁾	6,769
Harrah s Operating Co., Inc., Sr. Notes		
1,500	11.25%, 6/1/17	1,642,500
Inn of the Mountain Gods, Sr. Notes		
500	12.00%, 11/15/49 ⁽⁷⁾	248,125
Majestic HoldCo, LLC		
140	0.00%, 12/31/49 ⁽⁷⁾⁽⁸⁾	742
MGM Mirage, Inc.		
65	8.375%, 2/1/11	66,138
Mohegan Tribal Gaming Authority, Sr. Sub. Notes		
140	8.00%, 4/1/12	133,700
215	7.125%, 8/15/14	175,762
230	6.875%, 2/15/15	182,850
Peninsula Gaming, LLC		
1,000	10.75%, 8/15/17 ⁽⁸⁾	1,027,500
Pinnacle Entertainment, Inc., Sr. Sub. Notes		
60	7.50%, 6/15/15	58,050
Pokagon Gaming Authority, Sr. Notes		
102	10.375%, 6/15/14 ⁽⁸⁾	107,610
San Pasqual Casino		
110	8.00%, 9/15/13 ⁽⁸⁾	107,388
Seminole Hard Rock Entertainment, Variable Rate		
175	2.757%, 3/15/14 ⁽⁸⁾	157,281
Tunica-Biloxi Gaming Authority, Sr. Notes		
310	9.00%, 11/15/15 ⁽⁸⁾	296,437
Waterford Gaming, LLC, Sr. Notes		
259	8.625%, 9/15/14 ⁽⁵⁾⁽⁸⁾	206,734
		\$ 5,175,169

Nonferrous Metals / Minerals 0.5%

Cloud Peak Energy Resources, LLC/Cloud Peak Energy Finance Corp.		
1,000	8.25%, 12/15/17 ⁽⁸⁾	\$ 1,030,000
335	8.50%, 12/15/19 ⁽⁸⁾	346,725
FMG Finance PTY, Ltd.		
675	10.625%, 9/1/16 ⁽⁸⁾	796,500
Teck Resources, Ltd., Sr. Notes		
335	10.75%, 5/15/19	418,750
		\$ 2,591,975

Oil and Gas 0.5%

Antero Resources Finance Corp., Sr. Notes		
30	9.375%, 12/1/17 ⁽⁸⁾	\$ 31,200
Compton Pet Finance Corp.		
360	7.625%, 12/1/13	307,800
Denbury Resources, Inc., Sr. Sub. Notes		
50	7.50%, 12/15/15	51,625
El Paso Corp., Sr. Notes		
225	9.625%, 5/15/12	244,071
Forbes Energy Services, Sr. Notes		
310	11.00%, 2/15/15	290,625
McJunkin Red Man Corp., Sr. Notes		
1,000	9.50%, 12/15/16 ⁽⁸⁾	1,046,250
OPTI Canada, Inc., Sr. Notes		
95	7.875%, 12/15/14	90,962
175	8.25%, 12/15/14	168,875
Petroleum Development Corp., Sr. Notes		
115	12.00%, 2/15/18	124,200
Petroplus Finance, Ltd.		
145	7.00%, 5/1/17 ⁽⁸⁾	132,675

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Principal Amount* (000 s omitted)	Security	Value
Oil and Gas (continued)		
Quicksilver Resources, Inc.		
110	7.125%, 4/1/16	\$ 106,975
SemGroup Corp.		
540	8.75%, 11/15/15 ⁽⁵⁾⁽⁸⁾	0
SESI, LLC, Sr. Notes		
60	6.875%, 6/1/14	60,000
		\$ 2,655,258
Publishing 0.3%		
Laureate Education, Inc.		
1,000	10.00%, 8/15/15 ⁽⁸⁾	\$ 1,037,500
Local Insight Regatta Holdings, Inc.		
55	11.00%, 12/1/17	39,875
Nielsen Finance, LLC		
395	10.00%, 8/1/14	416,725
70	12.50%, (0.00% until 8/1/11), 8/1/16	68,250
Reader s Digest Association, Inc. (The), Sr. Sub. Notes		
455	9.00%, 2/15/17 ⁽⁵⁾⁽⁷⁾	45
		\$ 1,562,395
Rail Industries 0.3%		
American Railcar Industry, Sr. Notes		
175	7.50%, 3/1/14	\$ 171,500

Kansas City Southern Mexico, Sr. Notes

280	7.625%, 12/1/13	289,100
100	7.375%, 6/1/14	102,500
190	8.00%, 6/1/15	201,875
500	8.00%, 2/1/18 ⁽⁸⁾	523,750

\$ 1,288,725

Retailers (Except Food and Drug) 0.6%

Amscan Holdings, Inc., Sr. Sub. Notes

400	8.75%, 5/1/14	\$ 407,000
-----	---------------	------------

Neiman Marcus Group, Inc.

739	9.00%, 10/15/15	761,582
-----	-----------------	---------

Sally Holdings, LLC, Sr. Notes

665	9.25%, 11/15/14	707,394
-----	-----------------	---------

20	10.50%, 11/15/16	22,050
----	------------------	--------

Toys R Us

1,000	10.75%, 7/15/17 ⁽⁸⁾	1,140,000
-------	--------------------------------	-----------

\$ 3,038,026

Steel 0.0%

RathGibson, Inc., Sr. Notes

445	11.25%, 2/15/14 ⁽⁷⁾	\$ 111,806
-----	--------------------------------	------------

\$ 111,806

Surface Transport 0.0%

Teekay Corp., Sr. Notes

50	8.50%, 1/15/20	\$ 53,000
----	----------------	-----------

\$ 53,000

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

Telecommunications 1.1%

Avaya, Inc.

1,000 9.75%, 11/1/15 \$ 1,012,500

Clearwire Communications LLC/Clearwire Finance, Inc., Sr. Notes

500 12.00%, 12/1/15⁽⁸⁾ 523,750

Digicel Group, Ltd., Sr. Notes

757 9.125%, 1/15/15⁽²⁾⁽⁸⁾ 768,355

Intelsat Bermuda, Ltd.

900 11.25%, 6/15/16 978,750

NII Capital Corp.

335 10.00%, 8/15/16⁽⁸⁾ 373,525

Qwest Corp., Sr. Notes, Variable Rate

925 3.507%, 6/15/13 943,500

Telesat Canada/Telesat, LLC, Sr. Notes

590 11.00%, 11/1/15 663,750

\$ 5,264,130

Utilities 0.1%

AES Corp., Sr. Notes

55 8.00%, 10/15/17 \$ 56,925

NGC Corp.

390 7.625%, 10/15/26 271,050

Reliant Energy, Inc., Sr. Notes

20 7.625%, 6/15/14 19,975

\$ 347,950

Total Corporate Bonds & Notes

(identified cost \$54,778,844)

\$ 53,328,581

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Asset-Backed Securities 1.0%**Principal
Amount****(000 s omitted)****Security****Value**

\$	578	Alzette European CLO SA, Series 2004-1A, Class E2, 7.273%, 12/15/20 ⁽²⁾⁽¹⁰⁾	\$ 69,347
	589	Avalon Capital Ltd. 3, Series 1A, Class D, 2.202%, 2/24/19 ⁽⁸⁾⁽¹⁰⁾	390,356
	753	Babson Ltd., Series 2005-1A, Class C1, 2.253%, 4/15/19 ⁽⁸⁾⁽¹⁰⁾	487,582
	1,007	Bryant Park CDO Ltd., Series 2005-1A, Class C, 2.353%, 1/15/19 ⁽²⁾⁽⁸⁾⁽¹⁰⁾	393,256
	1,000	Carlyle High Yield Partners, Series 2004-6A, Class C, 2.70%, 8/11/16 ⁽⁸⁾⁽¹⁰⁾	510,000
	985	Centurion CDO 8 Ltd., Series 2005-8A, Class D, 5.752%, 3/8/17 ⁽¹⁰⁾	658,036
	750	Centurion CDO 9 Ltd., Series 2005-9A, Class D1, 5.054%, 7/17/19 ⁽¹⁰⁾	345,975
	789	Comstock Funding Ltd., Series 2006-1A, Class D, 4.502%, 5/30/20 ⁽²⁾⁽⁸⁾⁽¹⁰⁾	463,993
	1,539	Dryden Leveraged Loan, Series 2004-6A, Class C1, 2.799%, 7/30/16 ⁽⁸⁾⁽¹⁰⁾	630,316
	1,000	First CLO Ltd., Series 2004-1A1, Class C, 2.621%, 7/27/16 ⁽⁸⁾⁽¹⁰⁾	626,800
	1,000	Schiller Park CLO Ltd., Series 2007-1A, Class D, 2.066%, 4/25/21 ⁽⁸⁾⁽¹⁰⁾	556,700
		Total Asset-Backed Securities (identified cost \$9,762,924)	\$ 5,132,361

Common Stocks 1.5%**Shares****Security****Value**

Aerospace and Defense 0.1%

12,734	ACTS Aero Technical Support & Service, Inc. ⁽¹¹⁾	\$	226,026
		\$	226,026

Air Transport 0.0%

1,535	Delta Air Lines, Inc. ⁽¹¹⁾	\$	18,543
		\$	18,543

Automotive 0.2%

18,702	Dayco Products, LLC ⁽¹¹⁾	\$	801,848
44,747	Hayes Lemmerz International, Inc. ⁽⁵⁾⁽¹¹⁾		214,338
		\$	1,016,186

Building and Development 0.1%

253	Panolam Holdings Co. ⁽⁵⁾⁽¹¹⁾⁽¹²⁾	\$	139,024
508	United Subcontractors, Inc. ⁽⁵⁾⁽¹¹⁾		32,954
		\$	171,978

Chemicals and Plastics 0.0%

438	Wellman Holdings, Inc. ⁽⁵⁾⁽¹¹⁾	\$	130,345
		\$	130,345

Diversified Manufacturing 0.0%

323,008	MEGA Brands, Inc. ⁽¹¹⁾	\$	167,641
		\$	167,641

Ecological Services and Equipment 0.0%

6,211	Environmental Systems Products Holdings, Inc. ⁽⁵⁾⁽¹¹⁾⁽¹²⁾	\$	108,817
		\$	108,817

Food Service 0.0%

23,029	Buffets, Inc. ⁽¹¹⁾	\$	115,145
		\$	115,145

Lodging and Casinos 0.1%

35,670	Tropicana Entertainment, Inc. ⁽¹¹⁾	\$	624,225
		\$	624,225

Nonferrous Metals / Minerals 0.0%

701	Euramax International, Inc. ⁽⁵⁾⁽¹¹⁾	\$	73,857
		\$	73,857

Oil and Gas 0.0%

1,397	SemGroup Corp. ⁽¹¹⁾	\$	40,583
		\$	40,583

Publishing 1.0%

619	Dex One Corp. ⁽¹¹⁾	\$	18,762
3,990	Ion Media Networks, Inc. ⁽⁵⁾⁽¹¹⁾		1,140,661
10,718	MediaNews Group, Inc. ⁽¹¹⁾		171,486
112,921	Reader's Digest Association, Inc. (The) ⁽¹⁾		3,218,248
2,290	Source Interlink Companies, Inc. ⁽⁵⁾⁽¹¹⁾		16,557
9,554	SuperMedia, Inc. ⁽¹¹⁾		428,975
		\$	4,994,689

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

Shares	Security	Value
Steel 0.0%		
23,138	Niagara Corp. ⁽⁵⁾⁽¹¹⁾	\$ 34,707
		\$ 34,707
Total Common Stocks (identified cost \$5,891,030)		\$ 7,722,742

Preferred Stocks 0.1%

Shares	Security	Value
Ecological Services and Equipment 0.1%		
2,845	Environmental Systems Products Holdings, Inc., Series A ⁽⁵⁾⁽¹¹⁾⁽¹²⁾	\$ 227,600
		\$ 227,600

Telecommunications 0.0%

484	Crown Castle International Corp., Convertible, 6.25% ⁽²⁾	\$ 28,223
		\$ 28,223

Total Preferred Stocks (identified cost \$72,790)	\$ 255,823
--	------------

Warrants 0.0%

Shares	Security	Value
--------	----------	-------

Oil and Gas 0.0%

1,470	SemGroup Corp., Expires 11/30/14 ⁽⁵⁾⁽¹¹⁾	\$ 12,128
		\$ 12,128

Publishing 0.0%

1,450	Reader s Digest Association, Inc. (The), Expires 2/15/17 ⁽⁵⁾⁽¹¹⁾	\$ 0
		\$ 0

Total Warrants (identified cost \$15)	\$ 12,128
--	-----------

Miscellaneous 0.0%

Shares	Security	Value
--------	----------	-------

Air Transport 0.0%

1,000,000	Delta Air Lines, Inc., Escrow Certificate ⁽¹¹⁾	\$ 23,700
-----------	--	-----------

			\$ 23,700
Oil and Gas	0.0%		
105,000	VeraSun Energy Corp., Escrow Certificate ⁽⁵⁾⁽¹¹⁾		\$ 0
			\$ 0
Total Miscellaneous (identified cost \$0)			\$ 23,700

Short-Term Investments 6.0%

Interest/ Principal Amount (000 s omitted)	Description	Value
\$ 26,929	Eaton Vance Cash Reserves Fund, LLC, 0.19% ⁽¹³⁾	\$ 26,928,676
3,558	State Street Bank and Trust Euro Time Deposit, 0.01%, 5/1/10	3,557,667
Total Short-Term Investments (identified cost \$30,486,343)		\$ 30,486,343
Total Investments 157.9% (identified cost \$813,588,777)		\$ 798,234,334
Less Unfunded Loan Commitments (0.1)%		\$ (244,826)

Net Investments	157.8%	
(identified cost \$813,343,951)		\$ 797,989,508
Other Assets, Less Liabilities	(31.8)%	\$ (161,016,768)
Auction Preferred Shares Plus Cumulative Unpaid Dividends	(26.0)%	\$ (131,306,494)
Net Assets Applicable to Common Shares	100.0%	\$ 505,666,246

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

DIP - Debtor In Possession

EUR - Euro

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

PORTFOLIO OF INVESTMENTS (Unaudited) CONT D

GBP - British Pound Sterling

* In U.S. dollars unless otherwise indicated.

- (1) Senior floating-rate interests (Senior Loans) often require prepayments from excess cash flows or permit the borrowers to repay at their election. The degree to which borrowers repay, whether as a contractual requirement or at their election, cannot be predicted with accuracy. As a result, the actual remaining maturity may be substantially less than the stated maturities shown. However, Senior Loans will have an expected average life of approximately two to four years. The stated interest rate represents the weighted average interest rate of all contracts within the senior loan facility and includes commitment fees on unfunded loan commitments, if any. Senior Loans typically have rates of interest which are redetermined either daily, monthly, quarterly or semi-annually by reference to a base lending rate, plus a premium. These base lending rates are primarily the London Interbank Offered Rate (LIBOR) and secondarily, the prime rate offered by one or more major United States banks (the Prime Rate) and the certificate of deposit (CD) rate or other base lending rates used by commercial lenders.
- (2) Represents a payment-in-kind security which may pay all or a portion of interest/dividends in additional par/shares.
- (3) Unfunded or partially unfunded loan commitments. See Note 1G for description.
- (4) Defaulted matured security.
- (5) Security valued at fair value using methods determined in good faith by or at the direction of the Trustees.
- (6) This Senior Loan will settle after April 30, 2010, at which time the interest rate will be determined.
- (7) Currently the issuer is in default with respect to interest payments.
- (8) Security exempt from registration pursuant to Rule 144A under the Securities Act of 1933. These securities may be sold in certain transactions and remain exempt from registration, normally to qualified institutional buyers. At April 30, 2010, the aggregate value of these securities is \$25,347,938 or 5.0% of the Trust's net assets applicable to common shares.
- (9) Security exempt from registration under Regulation S of the Securities Act of 1933, which exempts from registration securities offered and sold outside the United States. Security may not be offered or sold in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act of 1933.
- (10) Variable rate security. The stated interest rate represents the rate in effect at April 30, 2010.
- (11) Non-income producing security.

- (12) Restricted security (See Note 8).
- (13) 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 April 30, 2010. Net income allocated from the investment in Eaton Vance Cash Reserves Fund, LLC and Cash Management Portfolio, an affiliated investment company, for the six months ended April 30, 2010 was \$7,186 and \$0, respectively.

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

FINANCIAL STATEMENTS (Unaudited)

Statement of Assets and Liabilities

As of April 30, 2010

Assets

Unaffiliated investments, at value (identified cost, \$786,415,275)	\$ 771,060,832
Affiliated investment, at value (identified cost, \$26,928,676)	26,928,676
Foreign currency, at value (identified cost, \$1,339,862)	1,337,688
Interest and dividends receivable	4,188,565
Receivable for investments sold	6,371,473
Receivable from the transfer agent	94,934
Prepaid expenses	216,449
Other assets	24,930

Total assets	\$ 810,223,547
---------------------	-----------------------

Liabilities

Notes payable	\$ 150,000,000
Payable for investments purchased	22,196,090
Payable for open forward foreign currency exchange contracts	276,725
Payable to affiliates:	
Investment adviser fee	418,564
Trustees fees	2,117
Accrued expenses	357,311

Total liabilities	\$ 173,250,807
--------------------------	-----------------------

Auction preferred shares (5,252 shares outstanding) at liquidation value plus cumulative unpaid dividends	\$ 131,306,494
--	-----------------------

Net assets applicable to common shares **\$ 505,666,246**

Sources of Net Assets

Common shares, \$0.01 par value, unlimited number of shares authorized, 33,677,846 shares issued and outstanding	\$ 336,778
Additional paid-in capital	642,911,277
Accumulated net realized loss	(123,487,654)
Accumulated undistributed net investment income	1,619,156
Net unrealized depreciation	(15,713,311)

Net assets applicable to common shares **\$ 505,666,246**

Net Asset Value Per Common Share

(\$505,666,246 , 33,677,846 common shares issued and outstanding) **\$ 15.01**

Statement of Operations

**For the Six Months Ended
April 30, 2010**

Investment Income

Interest	\$ 21,342,430
Dividends	217
Interest income allocated from affiliated investments	16,582
Expenses allocated from affiliated investments	(9,396)

Total investment income **\$ 21,349,833**

Expenses

Investment adviser fee	\$ 2,823,627
Trustees' fees and expenses	13,074
Custodian fee	148,373
Transfer and dividend disbursing agent fees	6,436
Legal and accounting services	114,944
Printing and postage	55,210
Interest expense and fees	1,147,715
Preferred shares service fee	99,136
Miscellaneous	68,539

Total expenses **\$ 4,477,054**

Deduct

Reduction of investment adviser fee	\$ 404,805
Reduction of custodian fee	8

Total expense reductions **\$ 404,813**

Net expenses **\$ 4,072,241**

Net investment income **\$ 17,277,592**

Realized and Unrealized Gain (Loss)

Net realized gain (loss)	
Investment transactions	\$ (16,208,579)
Investment transactions allocated from affiliated investments	(6,667)
Foreign currency and forward foreign currency exchange contract transactions	4,624,620

Net realized loss **\$ (11,590,626)**

Change in unrealized appreciation (depreciation)

Investments	\$ 59,060,567
-------------	---------------

Foreign currency and forward foreign currency exchange contracts	(338,547)
Net change in unrealized appreciation (depreciation)	\$ 58,722,020
Net realized and unrealized gain	\$ 47,131,394
Distributions to preferred shareholders	
From net investment income	\$ (151,951)
Net increase in net assets from operations	\$ 64,257,035

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

FINANCIAL STATEMENTS CONT D

Statements of Changes in Net Assets

Increase (Decrease) in Net Assets	Six Months Ended April 30, 2010 (Unaudited)	Year Ended October 31, 2009
From operations		
Net investment income	\$ 17,277,592	\$ 32,886,072
Net realized loss from investment transactions, foreign currency and forward foreign currency exchange contract transactions and extinguishment of debt	(11,590,626)	(51,904,952)
Net change in unrealized appreciation (depreciation) from investments, swap contracts, foreign currency and forward foreign currency exchange contracts	58,722,020	166,984,060
Distributions to preferred shareholders		
From net investment income	(151,951)	(947,100)
Net increase in net assets from operations	\$ 64,257,035	\$ 147,018,080
Distributions to common shareholders		
From net investment income	\$ (19,987,047)	\$ (29,016,435)
Total distributions to common shareholders	\$ (19,987,047)	\$ (29,016,435)
Capital share transactions		
Reinvestment of distributions to common shareholders	\$ 696,430	\$ 240,983

Net increase in net assets from capital share transactions	\$	696,430	\$	240,983
---	-----------	----------------	-----------	----------------

Net increase in net assets	\$	44,966,418	\$	118,242,628
-----------------------------------	-----------	-------------------	-----------	--------------------

Net Assets Applicable to Common Shares

At beginning of period	\$	460,699,828	\$	342,457,200
------------------------	----	-------------	----	-------------

At end of period	\$	505,666,246	\$	460,699,828
-------------------------	-----------	--------------------	-----------	--------------------

Accumulated undistributed net investment income included in net assets applicable to common shares

At end of period	\$	1,619,156	\$	4,480,562
-------------------------	-----------	------------------	-----------	------------------

Statement of Cash Flows

	Six Months Ended April 30, 2010 (Unaudited)	
Cash Flows From Operating Activities		
Net increase in net assets from operations	\$	64,257,035
Distributions to preferred shareholders		151,951
Net increase in net assets from operations excluding distributions to preferred shareholders	\$	64,408,986
Adjustments to reconcile net increase in net assets from operations to net cash provided by operating activities:		
Investments purchased	\$	(151,929,821)

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

Investments sold and principal repayments	169,976,695
Increase in short-term investments, net	(10,035,203)
Net amortization/accretion of premium (discount)	(4,371,827)
Amortization of structuring fee on notes payable	113,544
Increase in interest and dividends receivable	(582,719)
Increase in receivable for investments sold	(2,039,293)
Decrease in receivable for open forward foreign currency exchange contracts	128,469
Increase in receivable from the transfer agent	(94,934)
Decrease in prepaid expenses	8,147
Increase in other assets	(19,798)
Decrease in payable for investments purchased	(2,153,396)
Increase in payable for open forward foreign currency exchange contracts	195,305
Increase in payable to affiliate for investment adviser fee	74,332
Increase in payable to affiliate for Trustees' fees	394
Decrease in accrued expenses	(30,362)
Decrease in unfunded loan commitments	(1,783,614)
Net change in unrealized (appreciation) depreciation from investments	(59,060,567)
Net realized loss from investments	16,208,579

Net cash provided by operating activities \$ **19,012,917**

Cash Flows From Financing Activities

Distributions paid to common shareholders, net of reinvestments	\$ (19,290,617)
Cash distributions to preferred shareholders	(158,479)
Payment of structuring fee on notes payable	(225,000)

Net cash used in financing activities \$ **(19,674,096)**

Net decrease in cash* \$ **(661,179)**

Cash at beginning of period⁽¹⁾ \$ **1,998,867**

Cash at end of period⁽¹⁾ \$ **1,337,688**

Supplemental disclosure of cash flow
information:

Reinvestment of dividends and distributions	\$	696,430
Cash paid for interest and fees on borrowings		1,361,722

⁽¹⁾ Balance includes foreign currency, at value.

* Includes net change in unrealized appreciation (depreciation) on foreign currency of \$4,986.

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

FINANCIAL STATEMENTS CONT D

Financial Highlights

Selected data for a common share outstanding during the periods stated

	Six Months Ended April 30, 2010 (Unaudited)	2009	2008	Year Ended October 31,		
				2007	2006	2005
Net asset value Beginning of period (Common shares)	\$ 13.700	\$ 10.190	\$ 17.800	\$ 18.690	\$ 18.740	\$ 18.970
Income (Loss) From Operations						
Net investment income ⁽¹⁾	\$ 0.513	\$ 0.978	\$ 1.665	\$ 2.177	\$ 2.053	\$ 1.547
Net realized and unrealized gain (loss)	1.396	3.423	(7.647)	(0.861)	(0.026)	(0.193)
Distributions to preferred shareholders from net investment income ⁽¹⁾	(0.005)	(0.028)	(0.367)	(0.634)	(0.558)	(0.354)
Total income (loss) from operations	\$ 1.904	\$ 4.373	\$ (6.349)	\$ 0.682	\$ 1.469	\$ 1.000

Less Distributions to Common Shareholders

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

From net investment income	\$ (0.594)	\$ (0.863)	\$ (1.142)	\$ (1.542)	\$ (1.519)	\$ (1.230)
Tax return of capital			(0.119)	(0.030)		

Total distributions to common shareholders	\$ (0.594)	\$ (0.863)	\$ (1.261)	\$ (1.572)	\$ (1.519)	\$ (1.230)
---	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------

Net asset value End of period (Common shares)	\$ 15.010	\$ 13.700	\$ 10.190	\$ 17.800	\$ 18.690	\$ 18.740
--	------------------	------------------	------------------	------------------	------------------	------------------

Market value End of period (Common shares)	\$ 16.750	\$ 12.980	\$ 9.480	\$ 16.200	\$ 18.240	\$ 17.210
---	------------------	------------------	-----------------	------------------	------------------	------------------

Total Investment Return on Net Asset Value⁽²⁾	14.18%⁽⁷⁾	46.90%	(37.33)%	3.93%	8.47%	5.57%
---	-----------------------------	---------------	-----------------	--------------	--------------	--------------

Total Investment Return on Market Value⁽²⁾	34.40%⁽⁷⁾	49.61%	(35.90)%	(3.13)%	15.27%	(7.77)%
--	-----------------------------	---------------	-----------------	----------------	---------------	----------------

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

FINANCIAL STATEMENTS CONT D

Financial Highlights

Selected data for a common share outstanding during the periods stated

	Six Months Ended April 30, 2010 (Unaudited)	Year Ended October 31,				
		2009	2008	2007	2006	2005
Ratios/Supplemental Data						
Net assets applicable to common shares, end of period (000 s omitted)	\$ 505,666	\$ 460,700	\$ 342,457	\$ 598,214	\$ 625,925	\$ 627,586
Ratios (as a percentage of average daily net assets applicable to common shares): ⁽³⁾						
Expenses excluding interest and fees ⁽⁴⁾	1.23% ⁽⁵⁾	1.21%	1.18%	1.18%	1.17%	1.16%
Interest and fee expense ⁽⁶⁾	0.48% ⁽⁵⁾	1.15%	0.99%			
Total expenses	1.71% ⁽⁵⁾	2.36%	2.17%	1.18%	1.17%	1.16%
Net investment income	7.26% ⁽⁵⁾	9.21%	10.66%	11.79%	10.95%	8.18%
Portfolio Turnover	20% ⁽⁷⁾	42%	21%	58%	51%	64%

The ratios reported above are based on net assets applicable solely to common shares. The ratios based on net assets, including amounts related to preferred shares and borrowings, are as follows:

Ratios (as a percentage of average daily net assets applicable to common shares

plus preferred
shares and
borrowings):(3)

Expenses excluding interest and fees(4)	0.78%(5)	0.74%	0.68%	0.72%	0.72%	0.72%
Interest and fee expense(6)	0.30%(5)	0.70%	0.57%			
Total expenses	1.08%(5)	1.44%	1.25%	0.72%	0.72%	0.72%
Net investment income	4.58%(5)	5.63%	6.12%	7.21%	6.73%	5.04%

Senior Securities:

Total notes payable outstanding (in 000 s)	\$ 150,000	\$ 150,000	\$ 154,200	\$	\$	\$
Asset coverage per \$1,000 of notes payable(8)	\$ 5,246	\$ 4,947	\$ 4,074	\$	\$	\$
Total preferred shares outstanding	5,252	5,252	5,252	15,760	15,760	15,760
Asset coverage per preferred share	\$ 69,941(9)	\$ 65,945(9)	\$ 55,060(9)	\$ 63,001(10)	\$ 64,753(10)	\$ 64,853(10)
Involuntary liquidation preference per preferred share(11)	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Approximate market value per preferred share(11)	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000

- (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.
- (3) Ratios do not reflect the effect of dividend payments to preferred shareholders.
- (4) Excludes the effect of custody fee credits, if any, of less than 0.005%.
- (5) Annualized.
- (6) Interest and fee expense relates to the notes payable incurred to partially redeem the Trust's APS (see Note 10).
- (7) Not annualized.
- (8) Calculated by subtracting the Trust's total liabilities (not including the notes payable and preferred shares) from the Trust's total assets, and dividing the result by the notes payable balance in thousands.

- (9) Calculated by subtracting the Trust's total liabilities (not including the notes payables and preferred shares) from the Trust's total assets, dividing the result by the sum of the value of the notes payables and liquidation value of preferred shares, and multiplying the result by the liquidation value of one preferred share. Such amount equates to 280%, 264% and 220% at April 30, 2010, October 31, 2009 and October 31, 2008, respectively.
- (10) Calculated by subtracting the Trust's total liabilities (not including the preferred shares) from the Trust's total assets, and dividing the result by the number of preferred shares outstanding.
- (11) Plus accumulated and unpaid dividends.

See notes to financial statements

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

NOTES TO FINANCIAL STATEMENTS (Unaudited)

1 Significant Accounting Policies

Eaton Vance Senior Floating-Rate Trust (the Trust) 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 Trust's primary investment objective is to provide a high level of current income. The Trust may, as a secondary objective, also seek preservation of capital to the extent consistent with its primary objective.

The following is a summary of significant accounting policies of the Trust. The policies are in conformity with accounting principles generally accepted in the United States of America.

A Investment Valuation Interests in senior floating-rate loans (Senior Loans) for which reliable market quotations are readily available are valued generally at the average mean of bid and ask quotations obtained from a third party pricing service. Other Senior Loans are valued at fair value by the investment adviser under procedures approved by the Trustees. In fair valuing a Senior Loan, the investment adviser utilizes one or more of the valuation techniques described in (i) through (iii) below to assess the likelihood that the borrower will make a full repayment of the loan underlying such Senior Loan relative to yields on other Senior Loans issued by companies of comparable credit quality. If the investment adviser believes that there is a reasonable likelihood of full repayment, the investment adviser will determine fair value using a matrix pricing approach that considers the yield on the Senior Loan. If the investment adviser believes there is not a reasonable likelihood of full repayment, the investment adviser will determine fair value using analyses that include, but are not limited to: (i) a comparison of the value of the borrower's outstanding equity and debt to that of comparable public companies; (ii) a discounted cash flow analysis; or (iii) when the investment adviser believes it is likely that a borrower will be liquidated or sold, an analysis of the terms of such liquidation or sale. In certain cases, the investment adviser will use a combination of analytical methods to determine fair value, such as when only a portion of a borrower's assets are likely to be sold. In conducting its assessment and analyses for purposes of determining fair value of a Senior Loan, the investment adviser will use its discretion and judgment in considering and appraising relevant factors. Fair value determinations are made by the portfolio managers of the Trust based on information available to such managers. The portfolio managers of other funds managed by the investment adviser that invest in Senior Loans may not possess the same information about a Senior Loan borrower as the portfolio managers of the Trust. At times, the fair value of a Senior Loan determined by the portfolio managers of other funds managed by the investment adviser that invest in Senior Loans may vary from the fair value of the same Senior Loan determined by the portfolio managers of the Trust. The fair value of each Senior Loan is periodically reviewed and approved by the investment adviser's Valuation Committee and by the Trustees based upon procedures approved by the Trustees. Junior Loans are valued in the same manner as Senior Loans.

Debt obligations (including short-term obligations with a remaining maturity of more than sixty days) are generally valued on the basis of valuations provided by third party pricing services, as derived from such services' pricing models. Inputs to the models may include, but are not limited to, reported trades, executable bid and asked prices, broker/dealer quotations, prices or yields of securities with similar characteristics, benchmark curves or information pertaining to the issuer, as well as industry and economic events. The pricing services may use a matrix approach, which considers information regarding securities with similar characteristics to determine the valuation for a security. Short-term debt securities purchased with a remaining maturity of sixty days or less are generally valued at amortized cost, which approximates market value.

Equity securities (including common shares of closed-end investment companies) listed on a U.S. securities exchange generally are valued at the last sale 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 or, in the case of preferred equity securities that are not listed or traded in the over-the-counter market, by a third party pricing service that will use various techniques that consider factors including, but not limited to, prices or yields of securities with similar characteristics, benchmark yields, broker/dealer quotes, quotes of underlying common stock, issuer spreads, as well as industry and economic events. Forward foreign currency exchange contracts are generally valued at the mean of the average bid and average asked prices that are reported by currency dealers to a third party pricing service at the valuation time. Such third party pricing service valuations are supplied for specific settlement periods and the Trust's forward foreign currency exchange contracts are valued at an interpolated rate between the closest preceding and subsequent settlement period reported by the third party pricing service. Credit default swaps are normally valued using valuations provided by a third party pricing service. The pricing services employ electronic data processing techniques to determine the present value based on credit spread quotations obtained from broker/dealers and expected default recovery rates determined by the pricing service using proprietary models. Foreign securities and currencies are valued in

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

NOTES TO FINANCIAL STATEMENTS (Unaudited) CONT D

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. 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 Trust in a manner that most fairly reflects the security's value, or the amount that the Trust 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 all 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.

The Portfolio may invest in Eaton Vance Cash Reserves Fund, LLC (Cash Reserves Fund), an affiliated investment company managed by Eaton Vance Management (EVM). Cash Reserves Fund generally values its investment securities utilizing the amortized cost valuation technique in accordance with Rule 2a-7 under the 1940 Act. This technique involves initially valuing a portfolio security at its cost and thereafter assuming a constant amortization to maturity of any discount or premium. If amortized cost is determined not to approximate fair value, Cash Reserves Fund may value its investment securities in the same manner as debt obligations described above.

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.

C Income Interest income is recorded on the basis of interest accrued, adjusted for amortization of premium or accretion of discount. Fees associated with loan amendments are recognized immediately. Dividend income is recorded on the ex-dividend date for dividends received in cash and/or securities.

D Federal Taxes The Trust'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.

At October 31, 2009, the Trust, for federal income tax purposes, had a capital loss carryforward of \$111,382,710 which will reduce its taxable income arising from future net realized gains on investment transactions, if any, to the extent permitted by the Internal Revenue Code, and thus will reduce the amount of distributions to shareholders, which would otherwise be necessary to relieve the Trust of any liability for federal income or excise tax. Such capital loss carryforward will expire on October 31, 2012 (\$5,860,075), October 31, 2013 (\$4,807,956), October 31, 2014 (\$1,142,602), October 31, 2015 (\$2,782,217), October 31, 2016 (\$63,478,422) and October 31, 2017 (\$33,311,438).

As of April 30, 2010, the Trust had no uncertain tax positions that would require financial statement recognition, de-recognition, or disclosure. Each of the Trust's federal tax returns filed in the 3-year period ended October 31, 2009 remains subject to examination by the Internal Revenue Service.

E Expense Reduction State Street Bank and Trust Company (SSBT) serves as custodian of the Trust. Pursuant to the custodian agreement, SSBT receives a fee reduced by credits, which are determined based on the average daily cash balance the Trust maintains with SSBT. All credit balances, if any, used to reduce the Trust's custodian fees are reported as a reduction of expenses in the Statement of Operations.

F 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 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.

G Unfunded Loan Commitments The Trust may enter into certain credit agreements all or a portion of which may be unfunded. The Trust is obligated to fund these commitments at the borrower's discretion. The commitments are disclosed in the accompanying Portfolio of Investments.

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

NOTES TO FINANCIAL STATEMENTS (Unaudited) CONT D

H Use of Estimates The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America 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.

I Indemnifications Under the Trust'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 Trust. Under Massachusetts law, if certain conditions prevail, shareholders of a Massachusetts business trust, (such as the Trust) could be deemed to have personal liability for the obligations of the Trust. However, the Trust's Declaration of Trust contains an express disclaimer of liability on the part of Trust shareholders and the By-laws provide that the Trust shall assume the defense on behalf of any Trust shareholders. Moreover, the By-laws also provide for indemnification out of Trust 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 Trust enters into agreements with service providers that may contain indemnification clauses. The Trust's maximum exposure under these arrangements is unknown as this would involve future claims that may be made against the Trust that have not yet occurred.

J Forward Foreign Currency Exchange Contracts The Trust may enter into forward foreign currency exchange contracts for the purchase or sale of a specific foreign currency at a fixed price on a future date. The Trust enters into forward contracts for hedging purposes as well as non-hedging purposes. The forward foreign currency exchange contract is adjusted by the daily exchange rate of the underlying currency and any gains or losses are recorded as unrealized until such time as the contract has been closed or offset by another contract with the same broker for the same settlement date and currency. Risks may arise upon entering these contracts from the potential inability of counterparties to meet the terms of their contracts and from movements in the value of a foreign currency relative to the U.S. dollar.

K Credit Default Swaps When the Trust is the buyer of a credit default swap contract, the Trust is entitled to receive the par (or other agreed-upon) value of a referenced debt obligation (or basket of debt obligations) from the counterparty to the contract if a credit event by a third party, such as a U.S. or foreign corporate issuer or sovereign issuer, on the debt obligation occurs. In return, the Trust pays the counterparty a periodic stream of payments over the term of the contract provided that no credit event has occurred. If no credit event occurs, the Trust would have spent the stream of payments and received no benefits from the contract. When the Trust is the seller of a credit default swap contract, it receives the stream of payments, but is obligated to pay to the buyer of the protection an amount up to the notional amount of the swap and in certain instances take delivery of securities of the reference entity upon the occurrence of a credit event, as defined under the terms of that particular swap agreement. Credit events are contract specific but may include bankruptcy, failure to pay, restructuring, obligation acceleration and repudiation/moratorium. If the Trust is a seller of protection and a credit event occurs, the maximum potential amount of future payments that the Trust could be required to make would be an amount equal to the notional amount of the agreement. This potential amount would be partially offset by any recovery value of the respective referenced obligation, or net amount received from the settlement of a buy protection credit default swap agreement entered into by the Trust for the same referenced obligation. As the seller, the Trust effectively adds leverage to its portfolio because, in addition to its total net assets, the Trust is subject to investment exposure on the notional amount of the swap. The interest fee paid or received on the swap contract, which is based on a specified interest rate on a fixed notional amount, is accrued daily as a component of unrealized appreciation (depreciation) and is recorded as realized gain upon receipt or realized loss

upon payment. The Trust also records an increase or decrease to unrealized appreciation (depreciation) in an amount equal to the daily valuation. Upfront payments or receipts, if any, are recorded as other assets or other liabilities, respectively, and amortized over the life of the swap contract as realized gains or losses. The Trust segregates assets in the form of cash or liquid securities in an amount equal to the notional amount of the credit default swaps of which it is the seller. The Trust segregates assets in the form of cash or liquid securities in an amount equal to any unrealized depreciation of the credit default swaps of which it is the buyer, marked to market on a daily basis. These transactions involve certain risks, including the risk that the seller may be unable to fulfill the transaction.

L Statement of Cash Flows The cash amount shown in the Statement of Cash Flows of the Trust is the amount included in the Trust's Statement of Assets and Liabilities and represents the cash on hand at its custodian and does not include any short-term investments.

M Interim Financial Statements The interim financial statements relating to April 30, 2010 and for the six months then ended have not been audited by an independent registered public accounting firm, but in the opinion of the Trust's management, reflect all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of the financial statements.

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

NOTES TO FINANCIAL STATEMENTS (Unaudited) CONT D

2 Auction Preferred Shares

The Trust issued Auction Preferred Shares (APS) on January 26, 2004 in a public offering. The underwriting discount and other offering costs incurred in connection with the offering were recorded as a reduction of the paid-in capital of the common shares. Dividends on the APS, which accrue daily, are cumulative at rates which are reset weekly for Series A and Series B, and approximately monthly for Series C and Series D by an auction, unless a special dividend period has been set. Series of APS are identical in all respects except for the reset dates of the dividend rates. If the APS auctions do not successfully clear, the dividend payment rate over the next period for the APS holders is set at a specified maximum applicable rate until such time as the APS auctions are successful. Auctions have not cleared since February 13, 2008 and the rate since that date has been the maximum applicable rate (see Note 3). The maximum applicable rate on the APS is 150% of the AA Financial Composite Commercial Paper Rate at the date of the auction.

The number of APS issued and outstanding as of April 30, 2010 is as follows:

	APS Issued and Outstanding
Series A	1,313
Series B	1,313
Series C	1,313
Series D	1,313

The APS are redeemable at the option of the Trust at a redemption price equal to \$25,000 per share, plus accumulated and unpaid dividends, on any dividend payment date. The APS are also subject to mandatory redemption at a redemption price equal to \$25,000 per share, plus accumulated and unpaid dividends, if the Trust is in default for an extended period on its asset maintenance requirements with respect to the APS. If the dividends on the APS remain unpaid in an amount equal to two full years' dividends, the holders of the APS as a class have the right to elect a majority of the Board of Trustees. In general, the holders of the APS and the common shares have equal voting rights of one vote per share, except that the holders of the APS, as a separate class, have the right to elect at least two members of the Board of Trustees. The APS have a liquidation preference of \$25,000 per share, plus accumulated and unpaid dividends. The Trust is required to maintain certain asset coverage with respect to the APS as defined in the Trust's By-Laws and the 1940 Act. The Trust pays an annual fee up to 0.15% of the liquidation value of the APS to broker-dealers as a service fee if the auctions are unsuccessful; otherwise, the annual fee is 0.25%.

3 Distributions to Shareholders

The Trust intends to make monthly distributions of net investment income to common shareholders, after payment of any dividends on any outstanding APS. In addition, at least annually, the Trust intends to distribute all or substantially all of its net realized capital gains (reduced by available capital loss carryforwards from prior years, if any). Distributions to common shareholders are recorded on the ex-dividend date. Distributions to preferred shareholders are recorded daily and are payable at the end of each dividend period. The dividend rates for the APS at April 30, 2010, and the amount of dividends paid (including capital gains, if any) to APS shareholders, average APS dividend rates (annualized), and dividend rate ranges for the six months then ended were as follows:

	APS Dividend Rates at April 30, 2010	Dividends Paid to APS Shareholders	Average APS Dividend Rates	Dividend Rate Ranges
Series A	0.32%	\$ 38,401	0.24%	0.05% 0.39%
Series B	0.32%	\$ 38,401	0.24%	0.05% 0.39%
Series C	0.30%	\$ 38,608	0.24%	0.15% 0.33%
Series D	0.32%	\$ 36,541	0.22%	0.05% 0.32%

Beginning February 13, 2008 and consistent with the patterns in the broader market for auction-rate securities, the Trust's APS auctions were unsuccessful in clearing due to an imbalance of sell orders over bids to buy the APS. As a result, the dividend rates of the APS were reset to the maximum applicable rate. The table above reflects such maximum dividend rate for each series as of April 30, 2010.

The Trust distinguishes between distributions on a tax basis and a financial reporting basis. Accounting principles generally accepted in the United States of America require that only distributions in excess of tax basis earnings and profits be 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.

4 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 Trust. The fee is computed at an annual rate of 0.75% of the Trust's average daily gross assets and is payable monthly. Gross assets as referred to herein represent net assets plus obligations attributable to investment leverage. Prior to its liquidation in February 2010, the portion of the adviser fee payable by Cash Management Portfolio, an affiliated investment company, on the Trust's investment of cash therein was credited against the Trust's investment adviser fee. The Trust currently invests its cash in Cash Reserves Fund. EVM does not currently receive a fee for advisory

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

NOTES TO FINANCIAL STATEMENTS (Unaudited) CONT D

services provided to Cash Reserves Fund. For the six months ended April 30, 2010, the Trust's investment adviser fee totaled \$2,830,757 of which \$7,130 was allocated from Cash Management and \$2,823,627 was paid or accrued directly by the Trust. EVM also serves as administrator of the Trust, but receives no compensation.

In addition, EVM has contractually agreed to reimburse the Trust for fees and other expenses at an annual rate of 0.20% of the Trust's average daily gross assets during the first five full years of the Trust's operations, 0.15% of the Trust's average daily gross assets in year six, 0.10% in year seven and 0.05% in year eight. The Trust concluded its first six full years of operations on November 28, 2009. Pursuant to this agreement, EVM waived \$404,805 of its investment adviser fee for the six months ended April 30, 2010.

Except for Trustees of the Trust who are not members of EVM's organization, officers and Trustees receive remuneration for their services to the Trust out of the investment adviser fee. Trustees of the Trust 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 April 30, 2010, no significant amounts have been deferred. Certain officers and Trustees of the Trust are officers of EVM.

5 Purchases and Sales of Investments

Purchases and sales of investments, other than short-term obligations and including maturities and principal repayments on Senior Loans and including maturities and paydowns, aggregated \$151,929,821 and \$169,976,695, respectively, for the six months ended April 30, 2010.

6 Common Shares of Beneficial Interest

The Trust may issue common shares pursuant to its dividend reinvestment plan. Common shares issued pursuant to the Trust's dividend reinvestment plan for the six months ended April 30, 2010 and the year ended October 31, 2009 were 47,891 and 29,134, respectively.

7 Federal Income Tax Basis of Investments

The cost and unrealized appreciation (depreciation) of investments of the Trust at April 30, 2010, as determined on a federal income tax basis, were as follows:

Aggregate cost	\$ 812,570,891
Gross unrealized appreciation	\$ 19,030,605
Gross unrealized depreciation	(33,611,988)
Net unrealized depreciation	\$ (14,581,383)

8 Restricted Securities

At April 30, 2010, the Trust owned the following securities (representing less than 0.1% of net assets applicable to common shares) which were restricted as to public resale and not registered under the Securities Act of 1933 (excluding Rule 144A securities). The Trust has various registration rights (exercisable under a variety of circumstances) with respect to these securities. The value of these securities is determined based on valuations provided by brokers when available, or if not available, they are valued at fair value using methods determined in good faith by or at the direction of the Trustees.

Description	Date of Acquisition	Shares	Cost	Value
Common Stocks				
Environmental Systems Products Holdings, Inc.	10/25/07	6,211	\$ 0 ⁽¹⁾	\$ 108,817
Panolam Holdings Co.	12/30/09	253	139,024	139,024
Total Common Stocks			\$ 139,024	\$ 247,841
Preferred Stocks				
Environmental Systems Products Holdings, Inc., Series A	10/25/07	2,845	\$ 49,787	\$ 227,600
Total Restricted Stocks			\$ 188,811	\$ 475,441

(1) Less than \$0.50.

9 Financial Instruments

The Trust may trade in financial instruments with off-balance sheet risk in the normal course of its investing activities. These financial instruments may include forward foreign currency exchange contracts 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 Trust has in particular classes of financial instruments and does 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 April 30, 2010 is as follows:

Forward Foreign Currency Exchange Contracts

Sales

Settlement Date	Deliver	In Exchange For	Net Unrealized Depreciation
5/28/10	British Pound Sterling 9,934,220	United States Dollar 15,123,161	\$ (75,317)
5/28/10	Euro 24,161,476	United States Dollar 31,971,189	(201,408)
			\$ (276,725)

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

NOTES TO FINANCIAL STATEMENTS (Unaudited) CONT D

At April 30, 2010, the Trust had sufficient cash and/or securities to cover commitments under these contracts.

The Trust is subject to foreign exchange risk in the normal course of pursuing its investment objective. Because the Trust holds foreign currency denominated investments, the value of these investments and related receivables and payables may change due to future changes in foreign currency exchange rates. To hedge against this risk, the Trust may enter into forward foreign currency exchange contracts. The Trust may also enter into such contracts to hedge the currency risk of investments it anticipates purchasing.

The fair value of derivative instruments (not considered to be hedging instruments for accounting disclosure purposes) and whose primary underlying risk exposure is foreign exchange risk at April 30, 2010 was as follows:

	Asset Derivative	Fair Value Liability Derivative⁽¹⁾
Forward foreign currency exchange contracts	\$	\$ (276,725)

(1) Statement of Assets and Liabilities location: Payable for open forward foreign currency exchange contracts; Net unrealized depreciation.

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 foreign exchange risk for the six months ended April 30, 2010 was as follows:

Derivative	Realized Gain (Loss) on Derivatives Recognized in Income⁽¹⁾	Change in Unrealized Appreciation (Depreciation) on Derivatives Recognized in Income⁽²⁾
Forward foreign currency exchange contracts	\$ 5,082,612	\$ (323,774)

(1) Statement of Operations location: Net realized gain (loss) Foreign currency and forward foreign currency exchange contract transactions.

(2)

Statement of Operations location: Change in unrealized appreciation (depreciation) Foreign currency and forward foreign currency exchange contracts.

The average notional amount of forward foreign currency exchange contracts outstanding during the six months ended April 30, 2010 was approximately \$49,881,000.

10 Credit Agreement

The Trust has entered into a Credit Agreement (the Agreement) with a bank to borrow up to a limit of \$150 million pursuant to a 364-day revolving line of credit. Borrowings under the Agreement are secured by the assets of the Trust. Interest is charged at a rate above the London Interbank Offered Rate (LIBOR) and is payable monthly. Under the terms of the Agreement, the Trust pays a commitment fee of 0.15% on the borrowing limit. In connection with the renewal of the Agreement on March 30, 2010, the Trust paid an up-front fee of \$225,000, which is being amortized to interest expense through March 29, 2011, the termination date of the Agreement. The unamortized balance at April 30, 2010 is approximately \$205,000 and is included in prepaid expenses on the Statement of Assets and Liabilities. Also included in interest expense is \$94,000 of amortization of previously paid up-front fees related to the period from November 1, 2009 through March 30, 2010 when the Agreement was renewed. The Trust is required to maintain certain net asset levels during the term of the Agreement. At April 30, 2010, the Trust had borrowings outstanding under the Agreement of \$150,000,000 at an interest rate of 1.26%. The carrying amount of the borrowings at April 30, 2010 approximated its fair value. For the six months ended April 30, 2010, the average borrowings under the agreement and the average interest rate (annualized) were \$150,000,000 and 1.24%, respectively.

11 Risks Associated with Foreign Investments

Investing in securities issued by companies whose principal business activities are outside the United States may involve significant risks not present in domestic investments. For example, there is generally less publicly available information about foreign companies, particularly those not subject to the disclosure and reporting requirements of the U.S. securities laws. Certain foreign issuers are generally not bound by uniform accounting, auditing, and financial reporting requirements and standards of practice comparable to those applicable to domestic issuers. Investments in foreign securities also involve the risk of possible adverse changes in investment or exchange control regulations, expropriation or confiscatory taxation, limitation on the removal of funds or other assets of the Trust, political or financial instability or diplomatic and other developments which could affect such investments. Foreign securities markets, while growing in volume and sophistication, are generally not as developed as those in the United States, and securities of some foreign issuers (particularly those located in developing countries) may be less liquid and more volatile than securities of comparable U.S. companies. In general, there is less overall governmental supervision and regulation of foreign securities markets, broker-dealers and issuers than in the United States.

12 Concentration of Credit Risk

The Trust invests primarily in below investment grade floating-rate loans and floating-rate debt obligations, which are considered speculative because of the credit risk of their issuers. Changes in economic conditions or other circumstances are more likely to reduce the capacity of issuers of these securities to make principal and interest

Eaton Vance Senior Floating-Rate Trust as of April 30, 2010

NOTES TO FINANCIAL STATEMENTS (Unaudited) CONT D

payments. Such companies are more likely to default on their payments of interest and principal owed than issuers of investment grade bonds. An economic downturn generally leads to a higher non-payment rate, and a loan or other debt obligation may lose significant value before a default occurs. Lower rated investments also may be subject to greater price volatility than higher rated investments. Moreover, the specific collateral used to secure a loan may decline in value or become illiquid, which would adversely affect the loan's value.

13 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)

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

At April 30, 2010, the inputs used in valuing the Trust's investments, which are carried at value, were as follows:

Asset Description	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Senior Floating-Rate Interests (Less Unfunded Loan Commitments)	\$	\$ 699,371,550	\$ 1,656,280	\$ 701,027,830
Corporate Bonds & Notes		52,556,574	772,007	53,328,581
Asset-Backed Securities		5,132,361		5,132,361
Common Stocks	674,504	5,156,978	1,891,260	7,722,742
Preferred Stocks		28,223	227,600	255,823

Edgar Filing: EATON VANCE SENIOR FLOATING RATE TRUST - Form N-CSRS

Warrants			12,128	12,128
Miscellaneous		23,700	0	23,700
Short-Term Investments		30,486,343		30,486,343

Total Investments \$ **674,504** \$ **792,755,729** \$ **4,559,275** \$ **797,989,508**

Liability Description

Forward Foreign Currency Exchange Contracts	\$	\$	(276,725)	\$	\$	(276,725)
Total	\$	\$	(276,725)	\$	\$	(276,725)

The following is a reconciliation of Level 3 assets for which significant unobservable inputs were used to determine fair value:

	Investments in Senior Floating-Rate Interests	Investments in Corporate Bonds & Notes	Investments in Common Stocks	Investments in Preferred Stocks	Investments in Warrants and Miscellaneous	Total
Balance as of October 31, 2009	\$ 796,749	\$ 463,437	\$ 301,213	\$ 227,600	\$ 0	\$ 1,788,999
Realized gains (losses)	(204,502)					(204,502)
Change in net unrealized appreciation (depreciation)*	(198,350)	(13,163)	50,657		12,113	(148,743)
Net purchases (sales)	1,255,659	59,871	1,539,390		15	2,854,935
Accrued discount (premium)	1,474	36,330				37,804
Net transfers to (from) Level 3	5,250	225,532				230,782

Balance as of
April 30, 2010 \$ 1,656,280 \$ 772,007 \$ 1,891,260 \$ 227,600 \$ 12,128 \$ 4,559,275

Change in net
unrealized
appreciation
(depreciation)
on investments
still held as of
April 30,
2010* \$ (5,250) \$ (13,163) \$ 50,657 \$ \$ 12,113 \$ 44,357

* Amount is included in the related amount on investments in the Statement of Operations.

Eaton Vance Senior Floating-Rate Trust

BOARD OF TRUSTEES ANNUAL APPROVAL OF THE INVESTMENT ADVISORY AGREEMENT

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 continuance 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 Eaton Vance group of mutual funds (the Eaton Vance Funds) held on April 26, 2010, the Board, including a majority of the Independent Trustees, voted to approve continuation of existing 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 the Contract Review Committee of the Board, which is a committee comprised exclusively of Independent Trustees. Prior to making its recommendation, the Contract Review Committee reviewed information furnished for a series of meetings of the Contract Review Committee held between February and April 2010. Such information included, among other things, the following:

Information about Fees, Performance and Expenses

An independent report comparing the advisory and related fees paid by each fund with fees paid by comparable funds;

An independent report comparing each fund's total expense ratio and its components to comparable funds;

An independent report comparing the investment performance of each fund (including yield where relevant) to the investment performance of comparable funds over various time periods;

Data regarding investment performance in comparison to relevant peer groups of similarly managed funds and appropriate indices;

For each fund, comparative information concerning the fees charged and the services provided by each adviser in managing other mutual 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;

Information about Portfolio Management

Descriptions of the investment management services provided to each fund, including the investment strategies and processes employed, and any changes in portfolio management processes and personnel;

Information concerning the allocation of brokerage and the benefits received by each adviser as a result of brokerage allocation, including information concerning the acquisition of research through soft dollar benefits received in connection with the funds' brokerage, and the implementation of a soft dollar reimbursement program established with respect to the funds;

Data relating to portfolio turnover rates of each fund;

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

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 compensation and responsibilities with respect to managing other mutual funds and investment accounts;
Copies of the Codes of Ethics of each adviser and its affiliates, together with information relating to compliance with and the administration of such codes;
Copies of or descriptions of each adviser's policies and procedures relating to proxy voting, the handling of corporate actions and class actions;
Information concerning the resources devoted to compliance efforts undertaken by each adviser and its affiliates on behalf of the funds (including descriptions of various compliance programs) and their record of compliance with investment policies and restrictions, including policies with respect to market-timing, late trading and selective portfolio disclosure, and with policies on personal securities transactions;
Descriptions of 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;

Other Relevant Information

Information concerning the nature, cost and character of the administrative and other non-investment management 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 advisory agreement.

Eaton Vance Senior Floating-Rate Trust

BOARD OF TRUSTEES ANNUAL APPROVAL OF THE INVESTMENT ADVISORY AGREEMENT CONT D

In addition to the information identified above, the Contract Review Committee considered information provided from time to time by each adviser throughout the year at meetings of the Board and its committees. Over the course of the twelve-month period ended April 30, 2010, with respect to one or more Funds, the Board met ten 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 nine, thirteen, three, eight and fifteen times, respectively. At such meetings, the Trustees received, among other things, presentations by the portfolio managers and other investment professionals of each adviser relating to the investment performance of each fund and the investment strategies used in pursuing the fund's investment objective, as well as trading policies and procedures and risk management techniques.

For funds that invest through one or more underlying portfolios, the Board considered similar information about the portfolio(s) when considering the approval of 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, 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 advisory and sub-advisory agreement and the weight to be given to each such factor. The conclusions reached with respect to each 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 advisory and sub-advisory agreement.

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 continuance of the investment advisory agreement between Eaton Vance Senior Floating-Rate Trust (the Fund) and 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 as well as the 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.

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 evaluated the abilities and experience of such investment personnel in analyzing special considerations relevant to investing in senior secured floating rate loans. Specifically, the Board noted the experience of the Adviser's large group of bank loan investment professionals and other personnel who provide services to the Fund, including portfolio managers and analysts. The Board also took into account the resources dedicated to portfolio management and other services, including the compensation methods of the Adviser to recruit and retain investment personnel, and the time and attention devoted to the Fund by senior management.

The Board also reviewed 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 personnel, selective disclosure of portfolio holdings, late trading, frequent trading, portfolio valuation, business continuity and the allocation of investment opportunities. The Board also evaluated 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 family of funds.

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.

Eaton Vance Senior Floating-Rate Trust

BOARD OF TRUSTEES ANNUAL APPROVAL OF THE INVESTMENT ADVISORY AGREEMENT CONT D

Fund Performance

The Board compared the Fund's investment performance to a relevant universe of comparable funds identified by an independent data provider as well as a peer group of similarly managed funds and appropriate benchmark indices. The Board reviewed comparative performance data for the one-, three- and five-year periods ended September 30, 2009 for the Fund. The Board concluded that the performance of the Fund was satisfactory.

Management Fees and Expenses

The Board reviewed contractual investment advisory fee rates, payable by the Fund (referred to as management fees). As part of its review, the Board considered the management fees and the Fund's total expense ratio for the year ended September 30, 2009, as compared to a group of similarly managed funds selected by an independent data provider. The Board also considered factors that had an impact on Fund expense ratios, as identified by management in response to inquiries from the Contract Review Committee, as well as actions being taken to reduce expenses at the fund complex level. The Board considered the fact that the Adviser had waived fees and/or paid expenses for the Fund.

After reviewing 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

The Board reviewed 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 with and without regard to revenue sharing 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 benefits received by the Adviser and its affiliates in connection with its relationship 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 reasonable.

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 the economies of scale with respect to the management of any specific fund or group of funds. The Board also considered the fact that the Fund is not continuously offered and 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 appropriate at this time. Based upon the foregoing, the Board concluded that the benefits from economies of scale are currently being shared equitably by the Adviser and its affiliates and the Fund.

Eaton Vance Senior Floating-Rate Trust

OFFICERS AND TRUSTEES

Officers	Trustees
Scott H. Page President	Ralph F. Verni Chairman
Peter M. Campo Vice President	Benjamin C. Esty
Craig P. Russ Vice President	Thomas E. Faust Jr.
Michael W. Weilheimer Vice President	Allen R. Freedman
Barbara E. Campbell Treasurer	William H. Park
Maureen A. Gemma Secretary and Chief Legal Officer	Ronald A. Pearlman
Paul M. O Neil Chief Compliance Officer	Helen Frame Peters
	Heidi L. Steiger
	Lynn A. Stout

Number of Employees

The Trust is organized as a Massachusetts business trust and is registered under the Investment Company Act of 1940, as amended, as a diversified, closed-end management investment company and has no employees.

Number of Shareholders

As of April 30, 2010, our records indicate that there are 53 registered shareholders and approximately 24,942 shareholders owning the Trust shares in street name, such as through brokers, banks, and financial intermediaries.

If you are a street name shareholder and wish to receive our reports directly, which contain important information about the Trust, please write or call:

Eaton Vance Distributors, Inc.
Two International Place
Boston, MA 02110
1-800-262-1122

New York Stock Exchange symbol

The New York Stock Exchange symbol is EFR.

This Page Intentionally Left Blank

This Page Intentionally Left Blank

This Page Intentionally Left Blank

**Investment Adviser and Administrator of
Eaton Vance Senior Floating-Rate Trust
Eaton Vance Management**

Two International Place
Boston, MA 02110

Custodian

State Street Bank and Trust Company

200 Clarendon Street
Boston, MA 02116

Transfer Agent

American Stock Transfer & Trust Company

59 Maiden Lane
Plaza Level
New York, NY 10038

**Eaton Vance Senior Floating-Rate Trust
Two International Place
Boston, MA 02110**

2025-6/10

CE-FLRTSRC

Item 2. Code of Ethics

The registrant has adopted a code of ethics applicable to its Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer. The registrant undertakes to provide a copy of such code of ethics to any person upon request, without charge, by calling 1-800-262-1122.

Item 3. Audit Committee Financial Expert

The registrant's Board has designated William H. Park, an independent trustee, as its audit committee financial expert. Mr. Park is a certified public accountant who is the Vice Chairman of Commercial Industrial Finance Corp (specialty finance company). Previously, he served as President and Chief Executive Officer of Prizm Capital Management, LLC (investment management firm), as Executive Vice President and Chief Financial Officer of United Asset Management Corporation (an institutional investment management firm) and as a Senior Manager at Price Waterhouse (now PricewaterhouseCoopers) (an independent registered public accounting firm).

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

The Board of Trustees of the Trust has adopted a proxy voting policy and procedure (the Fund Policy), pursuant to which the Trustees have delegated proxy voting responsibility to the Fund's investment adviser and adopted the investment adviser's proxy voting policies and procedures (the Policies) which are described below. The Trustees will review the Fund's proxy voting records from time to time and will annually consider approving the Policies for the upcoming year. In the event that a conflict of interest arises between the Fund's shareholders and the investment adviser, the administrator, or any of their affiliates or any affiliate of the Fund, the investment adviser will generally refrain from voting the proxies related to the companies giving rise to such conflict until it consults with the Board's Contract Review Committee except as contemplated under the Fund Policy. The Board's Contract Review Committee will instruct the investment adviser on the appropriate course of action.

The Policies are designed to promote accountability of a company's management to its shareholders and to align the interests of management with those shareholders. An independent proxy voting service (Agent), currently Institutional Shareholder Services, Inc., has been retained to assist in the voting of proxies through the provision of vote analysis, implementation and recordkeeping and disclosure services. The investment adviser will generally vote proxies through the Agent. The Agent is required to vote all proxies and/or refer then back to the investment adviser pursuant to the Policies. It is generally the policy of the investment adviser to vote in accordance with the recommendation of the Agent. The Agent shall refer to the investment adviser proxies relating to mergers and restructurings, and the disposition of assets, termination, liquidation and mergers contained in mutual fund proxies. The investment adviser will normally vote against anti-takeover measures and other proposals designed to limit the ability of shareholders to act on possible transactions, except in the case of closed-end management investment companies. The investment adviser generally supports management on social and environmental proposals. The investment adviser may abstain from voting from time to time where it determines that the costs associated with voting a proxy outweighs the benefits derived from exercising the right to vote or the economic effect on shareholders interests or the value of the portfolio holding is indeterminable or insignificant.

In addition, the investment adviser will monitor situations that may result in a conflict of interest between the Fund's shareholders and the investment adviser, the administrator, or any of their affiliates or any affiliate of the Fund by maintaining a list of significant existing and prospective corporate clients. The investment adviser's personnel responsible for reviewing and voting proxies on behalf of

the Fund will report any proxy received or expected to be received from a company included on that list to the personal of the investment adviser identified in the Policies. If such personnel expects to instruct the Agent to vote such proxies in a manner inconsistent with the guidelines of the Policies or the recommendation of the Agent, the personnel will consult with members of senior management of the investment adviser to determine if a material conflict of interests exists. If it is determined that a material conflict does exist, the investment adviser will seek instruction on how to vote from the Contract Review Committee.

Information on how the Fund voted proxies relating to portfolio securities during the most recent 12 month period ended June 30 is available (1) without charge, upon request, by calling 1-800-262-1122, and (2) on the Securities and Exchange Commission's website at <http://www.sec.gov>.

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. 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.

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 Senior Floating-Rate Trust

By: /s/ Scott H. Page

Scott H. Page
President

Date: June 08, 2010

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/ Barbara E. Campbell

Barbara E. Campbell
Treasurer

Date: June 08, 2010

By: /s/ Scott H. Page

Scott H. Page
President

Date: June 08, 2010