Eaton Vance Floating-Rate Income Trust Form N-CSR July 31, 2006

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 811-21574

Eaton Vance Floating-Rate Income Trust (Exact name of registrant as specified in charter)

The Eaton Vance Building, 255 State Street, Boston, Massachusetts (Address of principal executive offices)

02109 (Zip code)

Alan R. Dynner

The Eaton Vance Building, 255 State Street, Boston, Massachusetts 02109 (Name and address of agent for service)

Registrant s telephone number, including area code: (617) 482-8260

Date of fiscal year May 31

end:

Date of reporting period: May 31, 2006

Item 1. Reports to Stockholders

Annual Report May 31, 2006

EATON VANCE FLOATING-RATE INCOME 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 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 only applies 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.

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 (if applicable) will file a schedule of its 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 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 Floating-Rate Income Trust as of May 31, 2006 |
|--|
| INVESTMENT UPDATE |
| |
| The Trust |
| |
| Performance for the Past Year |
| |
| Based on its May 2006 monthly dividend of \$0.129 and a closing share price of \$17.95, Eaton Vance Floating-Rate Income Trust, a closed-end fund traded on the New York Stock Exchange (The Trust) had a market yield of 8.62%.(1) |
| |
| Based on share price (traded on the New York Stock Exchange), the Trust had a total return of 7.38% for the year ended May 31, 2006. That return was the result of a decrease in share price from \$18.07 on May 31, 2005 to \$17.95 on May 31, 2006 and the reinvestment of \$1.387 in regular monthly dividends. |
| |
| Based on net asset value, the Trust had a total return of 8.50% for the year ended May 31, 2006. That return was the result of an increase in net asset value per share from \$18.84 on May 31, 2005 to \$18.91 on May 31, 2006, and the reinvestment of all distributions. |
| |
| For performance comparison, the S&P/LSTA Leveraged Loan Index an unmanaged loan market index had a total return of 6.36% for the year ended May 31, 2006.(2) |
| The Trust s Investments |
| |
| The Trust s portfolio of senior loans and other investments represented 435 borrowers and 38 industries as of May 31, 2006. The Trust s average loan size was 0.20% of total investments, and no industry constituted more than 7.0% of the Trust s total investments. Health care, chemicals & plastics, building & development (which includes companies that manage/own apartments, shopping malls and commercial office buildings, among others), leisure goods/activities/movies and automotive were the Trust s largest industry weightings. |

The loan market was characterized by higher interest rates, narrowing credit spreads and a soaring volume of new issues. The London

Inter-Bank Offered Rate (LIBOR) the benchmark over which loan interest rates are typically set rose in lockstep with the Federal Reserve s Federal Funds rate. Toward the end of the period, there were signs that spreads appeared to have bottomed, with lenders increasingly able to get

more favorable terms on loans.

The Trust also had an 8.5% (of total investments) position in high-yield bonds, which was additive to net asset value performance. The high-yield bond segment remained focused on B-rated bonds and on shorter maturities, which provided more flexibility in times of increasing market volatility.

The Trust s share price traded at a discount versus its NAV, as have many closed-end income funds that employ leverage. However, most of these funds buy fixed-rate investments and often use shorter and/or floating-rate borrowings, which, in a rising interest rate environment, can impair a closed-end fund s ability to earn and pay dividends. For this reason, closed-end bond funds may trade flat-to-lower in a rising-rate climate, such as the one we have recently experienced. In contrast, the Trust invests primarily in floating-rate instruments, which may add income in a rising-rate environment. While it is difficult to attribute the Trust s market share discount to NAV to one factor, we believe a likely cause was a market perception that rising rates impair the earning power of closed-end income funds. If this were the cause, management believes that the market failed to distinguish the floating-rate nature of most of the Trust s assets. Although there is no certainty that the Trust will continue to do so, the Trust raised its dividend during the year ended May 31, 2006.

At May 31, 2006, the Trust had leverage in the amount of approximately 38% of the Trust s total assets. The Trust employs leverage though the issuance of Auction Preferred Shares (APS). (B)se of financial leverage creates an opportunity for increased 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). The cost of the Trust s APS rises and falls with changes in short-term interest rates. Such increases/decreases in the cost of the Trust s APS may be offset by increased/decreased income from the Trust s senior loan investments.

(1) The Trust s market yield is calculated by dividing the most recent dividend per share by the share market price at the end of the period and annualizing the result. (2) It is not possible to invest directly in an Index. The Index s total return does not reflect the commissions or expenses that would have been incurred if an investor individually purchased or sold the securities represented in the Index. In addition, unlike the Trust, the Index does not employ leverage. (3) Performance results reflect the effect of leverage resulting from the Trust s Auction Preferred Shares. 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 Auction Preferred Shares.

Past performance is no guarantee of future results. Returns are historical and are calculated by determining the percentage change in net asset value or share price (as applicable) with all distributions reinvested. Investment return and principal value will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Performance is for the stated time period only; due to market volatility, the Trust scurrent 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.

Shares of the Trust 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. Yield will vary.

Eaton Vance Floating-Rate Income Trust as of May 31, 2006

Performance

Performance(1)

 Average Annual Total Return (by share price, NYSE)
 7.38%

 One Year
 3.49

 Average Annual Total Return (at net asset value)
 8.50%

 Life of Fund (6/29/04)
 6.34

Past performance is no guarantee of future results. Returns are historical and are calculated by determining the percentage change in net asset value or share price (as applicable) with all distributions reinvested. Investment return and principal value will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Performance is for the stated time period only; due to market volatility, the Fund 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.

Diversification by Industries(2)

By total investments

| Health Care | 6.9% |
|---------------------------------|------|
| Chemicals & Plastics | 6.5 |
| Building & Development | 5.7 |
| Leisure Goods/Activities/Movies | 5.1 |
| Automotive | 5.0 |
| Business Equip. & Services | 4.8 |
| Radio & Television | 4.7 |
| Cable & Satellite Television | 4.6 |
| Containers & Glass Products | 4.3 |
| Telecommunications | 4.2 |
| Retailers (Except Food & Drug) | 3.8 |
| Publishing | 3.7 |
| Lodging & Casinos | 2.9 |
| Financial Intermediaries | 2.8 |
| Oil & Gas | 2.8 |
| Electronics/Electrical | 2.7 |

⁽¹⁾ Performance results reflect the effect of leverage resulting from the Trust s issuance of Auction Preferred Shares. 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 Auction Preferred Shares.

| Forest Products | 2.5 |
|------------------------------|------|
| Aerospace & Defense | 2.5 |
| Conglomerates | 2.4 |
| Utilities | 2.2% |
| Food Service | 2.1 |
| Nonferrous Metals/Minerals | 1.7 |
| Food Products | 1.5 |
| Food/Drug Retailers | 1.3 |
| Beverage & Tobacco | 1.3 |
| Ecological Services & Equip. | 1.2 |
| Equipment Leasing | 1.1 |
| Home Furnishings | 0.9 |
| Industrial Equipment | 0.9 |
| Insurance | 0.7 |
| Drugs | 0.7 |
| Surface Transport | 0.7 |
| Rail Industries | 0.6 |
| Clothing/Textiles | 0.6 |
| Cosmetics/Toiletries | 0.5 |
| Farming/Agriculture | 0.2 |
| Steel | 0.2 |
| Air Transport | 0.2 |
| | |

⁽²⁾ Reflects the Trust s investments as of May 31, 2006. Industries are shown as a percentage of the Trust s total investments. Portfolio information may not be representative of current or future investments and are subject to change due to active management.

Trust Allocations (3)

³ Trust Allocations are shown as a percentage of the Trust s total investments as of May 31, 2006. Trust statistics may not be representative of the Trust s current or furture investments and are subject to change due to active management.

The views expressed in 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 Eaton Vance disclaims any responsibility to update such views. These views may not be relied on as investment advice and, because investment decisions for an Eaton Vance fund are based on many factors, may not be relied on as an indication of trading intent on behalf of any Eaton Vance fund.

Eaton Vance Floating-Rate Income Trust as of May 31, 2006

PORTFOLIO OF INVESTMENTS

| Senior, Floating Rate Interests 141.0% | | | |
|--|-----------|---|---------------|
| rincipal Amount | | Borrower/Tranche Description | Value |
| aerospace and Defense 3.7% | | | |
| Alliant Techsystems, Inc. | | | |
| \$ | 648,000 | Term Loan, 5.81%, Maturing March 31, 2009 | \$ 650,160 |
| was Capital Inc. | | | |
| | 2,875,000 | Term Loan, 11.00%, Maturing March 22, 2013 | 2,910,937 |
| CACI International, Inc. | | | |
| | 4,179,141 | Term Loan, 6.31%, Maturing May 3, 2011 | 4,209,181 |
| Delta Air Lines, Inc. | | | |
| | 1,925,000 | Term Loan, 12.77%, Maturing March 27, 2008 | 1,987,963 |
| Presser Rand Group, Inc. | | | |
| | 1,596,845 | Term Loan, 6.92%, Maturing October 29, 2011 | 1,613,062 |
| ORS Technologies, Inc. | | | |
| | 1,125,000 | Term Loan, 6.45%, Maturing January 31, 2013 | 1,130,625 |
| Hexcel Corp. | | | |
| | 785,111 | Term Loan, 6.81%, Maturing March 1, 2012 | 789,527 |
| AP Worldwide Services, Inc. | | | |
| | 1,072,313 | Term Loan, 8.00%, Maturing December 30, 2012 | 1,083,036 |
| C&F Industries, Inc. | | | |
| | 754,637 | Term Loan, 7.05%, Maturing November 18, 2012 | 761,948 |
| Mid-Western Aircraft Systems, Inc. | | | |
| | 1,529,694 | Term Loan, 7.32%, Maturing December 31, 2011 | 1,548,815 |
| Standard Aero Holdings, Inc. | | | |
| | 2,957,575 | Term Loan, 7.12%, Maturing August 24, 2012 | 2,957,575 |
| Fransdigm, Inc. | | | |
| | 2,947,399 | Term Loan, 7.33%, Maturing July 22, 2010 | 2,963,519 |
| Vought Aircraft Industries, Inc. | | | |
| | 1,304,471 | Term Loan, 7.60%, Maturing December 17, 2011 | 1,318,331 |
| Wam Aquisition, S.A. | | | |
| | 755,563 | Term Loan, 7.73%, Maturing April 8, 2013 | 766,365 |
| | 755,563 | Term Loan, 8.23%, Maturing April 8, 2014 | 769,906 |
| Vyle Laboratories, Inc. | | | |
| | 298,809 | Term Loan, 7.88%, Maturing January 28, 2011 | 303,665 |
| | | | \$ 25,764,615 |
| Air Transport 0.3% | | | |
| Jnited Airlines, Inc. | | | |

| \$ | 1,553,125 | Term Loan, 8.63%, Maturing February 1, 2012 | \$ 1,576,810 |
|--------------------------------------|-----------|---|--------------|
| | 221,875 | Term Loan, 8.88%, Maturing February 1, 2012 | 225,259 |
| | | | \$ 1,802,069 |
| Automotive 7.4% | | | |
| Accuride Corp. | | | |
| | 2.520.212 | Term Loan, 6.94%, Maturing | A 2551 025 |
| \$ | 2,529,212 | January 31, 2012 | \$ 2,551,027 |
| Principal | | | |
| Amount | | Borrower/Tranche Description | Value |
| Automotive (continued) | | | |
| AE Europe Group, LLC | | | |
| \$ | 854,643 | Term Loan, 8.00%, Maturing October 11, 2011 | \$ 863,723 |
| Affina Group, Inc. | 634,043 | October 11, 2011 | \$ 603,723 |
| Airina Group, inc. | | Term Loan, 8.13%, Maturing | |
| | 1,271,502 | November 30, 2011 | 1,276,270 |
| Axletech International Holding, Inc. | | T. 1. 11.50g M A | |
| | 1,950,000 | Term Loan, 11.52%, Maturing April 21, 2013 | 1,964,625 |
| Collins & Aikman Products Co. | ,,,,,,, | , | , , , , , |
| | | Term Loan, 11.50%, Maturing | |
| | 698,478 | August 31, 2011 | 686,130 |
| CSA Acquisition Corp. | | Term Loan, 7.50%, Maturing | |
| | 442,431 | December 23, 2011 | 445,086 |
| | 711,735 | Term Loan, 7.50%, Maturing December 23, 2011 | 716,006 |
| | /11,/33 | Term Loan, 7.50%, Maturing | /10,000 |
| | 498,750 | December 23, 2011 | 501,680 |
| Dana Corp. | | D1D1 | |
| | 1,175,000 | DIP Loan, 7.22%, Maturing April 13, 2008 | 1,179,406 |
| Dayco Products, LLC | 2,212,000 | | 2,272,100 |
| | | Term Loan, 8.03%, Maturing June | |
| | 1,517,441 | 23, 2011 | 1,536,884 |
| Dura Operating Corp. | | Term Loan, 8.83%, Maturing May 3, | |
| | 1,250,000 | 2011 | 1,268,750 |
| Exide Technologies, Inc. | | | |
| | 483,925 | Term Loan, 11.25%, Maturing May 5, 2010 | 508,122 |
| | 489,856 | Term Loan, 11.25%, Maturing May 5, 2010 | 514,348 |
| Federal-Mogul Corp. | , | ·, · · | - ',- '- |
| | 2,997,402 | Revolving Loan, 6.59%, Maturing December 9, 2006 ⁽²⁾ | 2,934,331 |
| | | | |