Pioneer Floating Rate Trust Form N-CSR July 29, 2011

OMB APPROVAL

OMB Number: 3235-0570 Expires: August 31, 2013 Estimated average burden hours per response.....18.9

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 811-21654

Pioneer Floating Rate Trust (Exact name of registrant as specified in charter)

60 State Street, Boston, MA 02109 (Address of principal executive offices) (ZIP code)

Terrence J. Cullen, Pioneer Investment Management, Inc., 60 State Street, Boston, MA 02109 (Name and address of agent for service)

Registrant's telephone number, including area code: (617) 742-7825

Date of fiscal year end: November 30

Date of reporting period: December 1, 2010 through May 31, 2011

Form N-CSR is to be used by management investment companies to file reports with the Commission not later than 10 days after the transmission to stockholders of any report that is required to be transmitted to stockholders under Rule 30e-1 under the Investment Company Act of 1940 (17 CFR 270.30e-1). The Commission may use the information provided on Form N-CSR in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-CSR, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-CSR unless the Form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. ss. 3507.

ITEM 1. REPORTS TO SHAREOWNERS.

Pioneer Floating Rate Trust

Semiannual Report | May 31, 2011

Ticker Symbol: PHD

[LOGO] PIONEER

Investments(R)

visit us: pioneerinvestments.com

Table of Contents

Letter to Shareowners	2
Portfolio Management Discussion	4
Portfolio Summary	9
Prices and Distributions	10
Performance Update	11
Schedule of Investments	12
Financial Statements	38
Financial Highlights	41
Notes to Financial Statements	43
Trustees, Officers and Service Providers	53

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 1

President's Letter

Dear Shareowner,

The U.S. economy is moving forward on a slow path to recovery. We believe the theme for the economy in 2011 may be modest but positive growth. The private

sector is showing signs of slow but steady improvement, led by higher capital investment, solid exports, improved consumption, and gradually rising demand for consumer auto loans and commercial loans. At the same time, the risks to a steady recovery remain substantial, including the continued delays in the housing sector's recovery, rising oil prices, and the fiscal drag of U.S. federal and state budget cuts. We are concerned about the long-term risk of inflation in an environment of accommodative Fed policy, continued low nominal and "real" interest rates and rising commodity prices.

The recovery process may occur more slowly than many would like, and will almost certainly be accompanied by short-term market swings. But our investment professionals are finding good opportunities to invest. Through the first quarter of 2011, although bonds remained popular with investors, we believed there was value in the equity market. In both equity and bond markets, we are finding good opportunities to invest using the same disciplined approach we have used at Pioneer since 1928, which is to focus on identifying undervalued individual securities with the greatest potential for success, carefully weighing risk against reward. Our teams of investment professionals continually monitor and analyze the relative valuations of different sectors and securities globally to help build portfolios that we believe can help you achieve your investment goals.

At Pioneer, we have long advocated the benefits of staying diversified and investing for the long term. The strategy has generally performed well for many investors. For instance, bond markets certainly rewarded investors for most of 2010, even though equity valuations seemed quite reasonable and were inexpensive relative to bonds and compared with historic levels -- conditions which represented potentially good value for long-term investors.

Our advice, as always, is to work closely with a trusted financial advisor to discuss your goals and work together to develop an investment strategy that meets your individual needs. There is no single best strategy that works for every investor.

2 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

We invite you to learn more about Pioneer and our time-tested approach to investing by consulting with your financial advisor or visiting us online at www.pioneerinvestments.com. We greatly appreciate your trust in us and we thank you for investing with Pioneer.

Sincerely,

/s/ Daniel K. Kingsbury

President and CEO Pioneer Investment Management USA, Inc.

Any information in this shareowner report regarding market or economic trends or the factors influencing the Trust's historical or future performance are statements of the opinion of Trust management as of the date of this report. These statements should not be relied upon for any other purposes. Past performance is no guarantee of future results, and there is no guarantee that market forecasts discussed will be realized.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 3

Portfolio Management Discussion | 5/31/11

Floating-rate securities delivered strong returns during the six months ended May 31, 2011, as new money entering the market drove up prices of floating-rate loans. In the following interview, Jonathan Sharkey, vice president and portfolio manager at Pioneer, discusses the factors that affected the performance of Pioneer Floating Rate Trust during the six months ended May 31, 2011. Mr. Sharkey, a member of Pioneer's fixed-income team, is responsible for the daily management of the Trust.

- Q How did the Trust perform over the six months ended May 31, 2011?
- A For the six-month period ended May 31, 2011, Pioneer Floating Rate Trust returned 10.50% at net asset value and 11.57% at market price, while the Trust's benchmark, the Barclays Capital U.S. High Yield Loans Index (the Barclays Index), returned 4.49 %. Unlike the Trust, the benchmark is not leveraged. Over the same six-month period ended May 31, 2011, the average return (at market price) of the 29 closed end funds in Lipper's Closed-End Loan Participation Funds (Leveraged) category was 6.30%.

As of May 31, 2011, the Trust was selling at a premium of market price to net asset value of 6.3%. Unlike open-ended funds, the market prices of closed end funds go up and down based on supply and demand, irrespective of a closed end fund's net asset value per share. It is not unusual to find closed-end funds trading at a discount or premium to their net asset value. In May 2011, the Trust increased the dividend rate 6.9%. The Trust was able to raise the dividend rate because the default rate on loans declined and because a number of lower-yielding loans in the portfolio were replaced with higher-yielding loans.

On May 31, 2011, the Trust's 30-day SEC yield was 8.98%.

- Q What was the investment environment like during the six-month period ended May 31, 2011?
- A Early in the period, amid reports of a strengthening economy and rising corporate profits, yield-conscious investors gained confidence in credit risk and the possibility of higher interest rates and poured record amounts of new money into the bank-loan market. In December 2010, a new record for money inflows into the market was set, with investors putting nearly \$3 billion worth of new funds into bank loans. The record did not stand for very long, however, as about \$6 billion of new money came into the market in January 2011 and another \$8 billion was invested in February. The large volume of the new money drove up prices in the secondary market. At the same time, new issues were offered to investors. Eventually, companies that
- 4 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

had obtained bank loans to finance their businesses began to refinance their debt to take advantage of the strong demand and to obtain new loans at lower interest rates, with more favorable terms. Between March and May 2011, the bank-loan market became slightly more volatile. In March, concerns about Europe's sovereign debt problems and uncertainty regarding the effects of the earthquake and tsunami in Japan on the global economy resulted in a slight pullback in bank loans, but the pullback quickly abated. The bank-loan market rallied again in April. In May, unease about Europe's debt problems, concerns about the potential for a softer U.S. economic recovery and surging loan supply caused the bank-loan market once again to moderate. In addition, slower inflows into high-yield funds and tighter loan spreads reduced the appetite for loans among high-yield

investors who cross over and invest in loans. In general, during the six months ended May 31, 2011, the average price on bank loans rose and spreads compressed as the "risk-on" demand from both loan and high-yield funds resulted in outperformance by lower-quality loans over higher-quality loans.

- Q How did you manage the Trust in that environment over the six months ended May 31, 2011?
- A We employed a barbell strategy in managing the Trust during the period, hedging more volatile investments in commodity companies with investments in more defensive securities, such as those in the health care and consumer staples industries. We reduced the Trust's exposure to broadcasting and increased its investments in finance and insurance companies, which included floating-rate catastrophe bonds. The Trust's position in CCC-rated securities declined during the six-month period as a result of refinancings, restructurings and upgrades.
- Q What factors most affected the Trust's performance over the six months ended May 31, 2011?
- A The average credit quality of the Trust's portfolio was in line with that of its benchmark the Barclays Index, but the Trust's heavier concentration in lower-quality securities provided the strongest results over the period. Investments in collateral loan obligations (CLOs) also helped boost the Trust's performance. Among individual securities, Infor Global, a software company, aided the Trust's return as the company refinanced portions of its outstanding loans and pursued a new acquisition. Spirit Finance, a diversified strip mall real estate investment trust (REIT), was a noteworthy contributor, as the firm's potential for an IPO increased in an improving commercial real estate market. Fenwal, a health care supply company, also figured prominently in the Trust's return, as did SMG H5, an Australian broadcasting company that made prepayments on its loans with proceeds from the addition of new equity holders. The effect of leverage also was instrumental in the Trust's outperformance relative to the Barclays Index.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 5

There were some disappointments in the Trust's portfolio during the six months ended May 31, 2011. Muteki's floating-rate catastrophe bonds lost value in the wake of the earthquake and tsunami in Japan. In health care, CCS Medical and TCD Pharma fared poorly. Broadstripe LLC, a regional cable company that remains in bankruptcy, saw its value diminish over the period as it became clear that potential suitors may offer a lower price than originally expected. In general, most of the Trust's holdings that declined during the six-month period ended May 31, 2011, were loans that had traded at a premium and were refinanced without call protection.

- Q Could you describe how leverage is used in managing the Trust?
- A Leverage is used in an effort to increase the yield of the Trust. Leverage was provided through the issuance of auction-rate preferred shares. The proceeds from the issuance of auction-rate preferred shares were used to increase the amount of assets available to be invested in additional portfolio securities. To the extent that dividend rates payable on auction-rate preferred shares are generally lower than the returns produced by investing in additional portfolio securities, the Trust's yield will be greater than what it would have been had the Trust's portfolio not been leveraged.

- ${\tt Q}$ How did the level of leverage employed by the Trust change over the six months ended May 31, 2011?
- A At the end of the Trust's fiscal year on May 31, 2011, 35.7% of the Trust's total managed assets were financed by leverage, compared with 37.3% of the Trust's total managed assets being financed by leverage at the start of the Trust's fiscal year (December 1, 2010).
- Q Did the Trust invest in any derivative securities over the six months ended May 31, 2011, and if so, did they have a material impact on the Trust's performance?
- A The Trust did not invest in any derivative securities over the six months ended May 31, 2011. However, on occasion, in times of currency volatility, the Trust may enter into foreign exchange derivatives (swaps) to mitigate foreign exchange risk for any future interest payments from an offshore borrower.
- Q What is your investment outlook?
- A We are two years into the economic recovery; and in May 2011, the default rate on floating-rate bank loans fell to a 38-month low. As the economy continues to recover, even though at a slower rate than originally thought, the default rate on bank loans should remain low. That scenario should provide a measure of net asset value (NAV) stability in the asset class. We believe the soft patch we have been experiencing with mixed economic indicators may push out any interest-rate increases by the U.S. Federal Reserve
- 6 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

System. Over the past 18 months in a low-interest-rate environment, dollar prices on loans have risen, fueling strong returns. We do not believe that investors should expect those types of returns in the future. While bank loans may provide some capital appreciation, we think the bulk of returns are likely to be generated by higher short-term interest rates, which would lift yields offered by floating-rate loans. Such a development could be a positive for the Trust.

Note to Shareowners: Effective March 1, 2011, the Trust's benchmark was changed from the Credit Suisse (CS) Leveraged Loan Index to the Barclays Capital U.S. High Yield Loans Index, because the Trust's adviser believes that the Barclays Capital U.S. High Yield Loans Index is a more appropriate floating-rate bank-loan index for the Trust. For comparison purposes, Pioneer will continue to report performance for the Trust's former benchmark, the CS Leveraged Loan Index, over a 1-year period (two reporting cycles), including this semiannual report and the Trust's November 30, 2011, annual report.

Please refer to the Schedule of Investments on pages 12-37 for a full listing of Trust securities.

The Trust may invest in derivative securities, which may include futures and options. These types of instruments can increase price fluctuation.

The Trust is not limited in the percentage of its assets that may be invested in floating-rate senior loans and other securities deemed to be illiquid. Illiquid securities may be difficult to sell at a fair price at times when the Trust believes it is desirable to do so and their market price is generally

more volatile than that of more liquid securities. Illiquid securities may be difficult to value, and investment of the Trust's assets in illiquid securities may restrict the Trust's ability to take advantage of market opportunities.

The Trust currently uses leverage through the issuance of preferred shares. The Trust also is authorized to borrow from banks and to issue debt securities, which are other forms of leverage. Leverage creates significant risks, including the risk that the Trust's income or capital appreciation will not be sufficient to cover the cost of leverage, which may adversely affect the return for the holders of common shares. Since February of 2008, regularly scheduled auctions for the Trust's preferred shares have failed and preferred shareowners have not been able to sell their shares at auction. The Board of Trustees of the Trust has considered, and continues to consider, this issue.

Investments in high-yield or lower-rated securities are subject to greater-than-average risk. The Trust may invest in securities of issuers that are in default or that are in bankruptcy.

Investing in foreign and/or emerging markets securities involves risks relating to interest rates, currency exchange rates and economic and political conditions.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 7

The Trust is required to maintain certain regulatory and rating agency asset coverage requirements in connection with its outstanding preferred shares. In order to maintain required asset coverage levels, the Trust may be required to alter the composition of its investment portfolio or take other actions, such as redeeming preferred shares with the proceeds from portfolio transactions, at what might be inopportune times in the market. Such actions could reduce the net earnings or returns to holders of the Trust's common shares over time.

These risks may increase share price volatility.

Past performance is no guarantee of future results, and there is no guarantee that market forecasts discussed will be realized.

Any information in this shareowner report regarding market or economic trends or the factors influencing the Trust's historical or future performance are statements of the opinion of the Trust's adviser as of the date of this report. These statements should not be relied upon for any other purposes.

8 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Portfolio Summary | 5/31/11

Portfolio Diversification

(As a percentage of total investment portfolio)

[THE FOLLOWING DATA WAS REPRESENTED AS A PIE CHART IN THE PRINTED MATERIAL]

Senior Secured Loans	85.2%
Common Stock 5.2% Corporate Bonds	7.4%
Collateralized Mortgage Obligations	1.4%
Rights/Warrants	0.6%

Convertible Preferred Stock

0.2%

Quality Distribution

(As a percentage of total investment portfolio; based on Standard & Poor's ratings (S&P).)

[THE FOLLOWING DATA WAS REPRESENTED AS A PIE CHART IN THE PRINTED MATERIAL]

BBB	3.3%
BB	32.3%
В	42.1%
CCC	3.0%
NR*	19.3%

Ratings are ordered highest to lowest in portfolio. Based on S&P's measures, AAA (highest possible rating) through BBB are considered investment grade; BB or lower ratings are considered noninvestment grade. Some bonds and loans may not be rated.

The portfolio is actively managed and current holdings may be different.

* These securities are judged to be similar but slightly lower in quality than the average of the total investment portfolio.

10 Largest Holdings

(As a percentage of long-term holdings)**

1. Delphi DIP Holdco LLP, Class B Subscription	3.97%
2. SMG H5 Pty, Ltd., Facility Term Loan A, 6.911%, 12/24/12	2.85
3. Univision Communications, Inc., Extended First Lien Term Loan, 4.441%, 3/31/1	7 1.84
4. Azithromycin Royalty Sub LLC, 16.0%, 5/15/19 (144A)	1.70
5. Broadstripe LLC, First Lien Term Loan, 0.0%, 6/30/11	1.67
6. Cequel Communications LLC, Term Loan, 2.209%, 11/5/13	1.50
7. Celtic Pharma Phinco B.V., 17.0%, 6/15/12 (144A)	1.32
8. Level 3 Financing, Inc., Tranche A Term Loan, 2.553%, 3/13/14	1.25
9. MetroPCS Wireless, Inc., Tranche B-2 Term Loan, 4.071%, 11/3/16	1.10
10. Ford Motor Co., Tranche B-1 Term Loan, 2.95%, 12/15/13	1.03

^{**} This list excludes derivative instruments. The portfolio is actively managed, and current holdings may be different. The holdings listed should not be considered recommendations to buy or sell any security listed.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 9

ket Value per Common Share			
	5/31/11	11/30/10	
	\$14.20	\$13.16	
emium	6.13%	5.11%	
Asset Value per Common Share			
	5/31/11	11/30/10	
	¢12 20	¢12 52	
	\$13.38	\$12.52	
		\$12.52	
stributions per Common Share: 12		\$12.52	
stributions per Common Share: 12		\$12.52	
		\$12.52	
Net	2/1/10-5/31/11	\$12.52	
Net Investment Sho	2/1/10-5/31/11	Long-Term	
Net Investment Sho	2/1/10-5/31/11 	Long-Term	
Net Investment Sho Income Capit	2/1/10-5/31/11 	Long-Term apital Gains	
Net Investment Sho Income Capit	2/1/10-5/31/11 	Long-Term apital Gains	
Investment Sho	2/1/10-5/31/11 	Long-Term apital Gains	
Net Investment Sho Income Capit	2/1/10-5/31/11 	Long-Term apital Gains	
Net Investment Sho Income Capit	2/1/10-5/31/11 	Long-Term Apital Gains \$	
Net Investment Sho Income Capit	2/1/10-5/31/11 ort-Term cal Gains Ca	Long-Term Apital Gains \$	
Net Investment Sho Income Capit	2/1/10-5/31/11 Ort-Term cal Gains Ca \$ 5/31/11	Long-Term Apital Gains \$	

30-day SEC Yield 8.98% 9.22%

Past performance data quoted represents past performance, which is no guarantee of future results.

10 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Performance Update | 5/31/11

Investment Returns

The mountain chart on the right shows the change in market value, including reinvestment of dividends and distributions, of a \$10,000 investment made in common shares of Pioneer Floating Rate Trust, compared to that of the Credit Suisse (CS) Leveraged Loan Index, an index of senior secured U.S. dollar denominated loans, and the Barclays Capital U.S. High Yield Loans Index, which measures the performance of high-yield loans.

Cumulative Total Returns (As of May 31, 2011)

	Net Asset Value (NAV)	Market Value
Life-of-Trust (12/28/04)	32.35%	33.86%
5 Years	17.68	31.66
1 Year	18.96	25.21

[THE FOLLOWING DATA WAS REPRESENTED AS A MOUNTAIN CHART IN THE PRINTED MATERIAL]

Value of \$10,000 Investment

	Pioneer Floating Rate Trust	CS Leveraged Loan Index	Barclays Capital U.S. High Yield Loans Index
12/04	10,000	10,000	10,000
5/05	8 , 945	10,126	10,000
5/06	10,167	10,829	10,214
5/07	12,330	11,656	10,998
5/08	10,156	11,279	10,777
5/09	6,852	10,023	9,860
5/10	10,691	12,283	12,162
5/11	13,386	13,486	13,314

Call 1-800-225-6292 or visit pioneerinvestments.com for the most recent month-end performance results. Current performance may be lower or higher than the performance data quoted.

Performance data shown represents past performance. Past performance is no guarantee of future results. Investment return and market price will fluctuate, and your shares may trade below NAV, due to such factors as interest rate changes, and the perceived credit quality of borrowers.

Total investment return does not reflect broker sales charges or commissions. All performance is for common shares of the Trust.

Closed-end funds, unlike open-end funds, are not continuously offered. There is a one-time public offering and, once issued, shares of closed-end funds are sold in the open market through a stock exchange and frequently trade at prices lower than their NAV. NAV per common share is total assets less total liabilities, which includes preferred shares, divided by the number of common shares outstanding.

When NAV is lower than market price, dividends are assumed to be reinvested at the greater of NAV or 95% of the market price. When NAV is higher, dividends are assumed to be reinvested at prices obtained under the Trust's dividend reinvestment plan.

The performance table and graph do not reflect the deduction of fees and taxes that a shareowner would pay on Trust distributions.

The CS Leveraged Loan Index is a representative index of tradeable, senior, secured U.S. dollar-denominated loans. The index began in January 1992. Comparisons for this index begin in 2004. The Barclays Capital U.S. High Yield Loans Index measures the performance of high-yield loans. Comparisons for this index begin in 2006. Index returns are calculated monthly, assume reinvestment of dividends and, unlike Trust returns, do not reflect any fees, expenses or sales charges. The indices do not employ leverage. You cannot invest directly in an index.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 11

Schedule of Investments | 5/31/11 (unaudited)

B+/B1

1,000,000(a)(b)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Va	lue
		COLLATERALIZED LOAN		
		OBLIGATIONS 2.2% of Net Assets		
		BANKS 2.2%		
1 000 000 (a) (b) (a)	DD /D1	Diversified Banks 0.7%		
1,000,000(a)(b)(c)	BB+/B1	Primus, Ltd., 2007-2A D,	\$	740 750
1,000,000(a)(b)	B+/B2	2.678%, 7/15/21 (144A) Rampart, Ltd., 2006-1A,	Ş	749 , 750
1,000,000(a)(b)	D+/DZ	3.826%, 4/18/21 (144A)		824,300
951,288(a)(b)	CCC-/Caa3	Stanfield McLaren, Ltd., 2007-1A B2L, 4.755%,		024,300
931,200 (a) (b)	CCC-/Caas	2/27/21 (144A)		735,165
		2/2//21 (144A)		733,103
			\$	2,309,215
		Thrifts & Mortgage Finance 1.5%		

ACA, Ltd., 2007-1A D, 2.628%, 6/15/22 (144A) \$ 818,430

1,000,000(a)(b)	BBB-/B2	Goldman Sachs Asset Management Plc, 2007-1A D, 3.023%, 8/1/22 (144A)	852 , 950
1,000,000(a)(b)	BBB/Ba2	Gulf Stream Sextant, Ltd., 2007-1A D,	
1,000,000(a)(b)	B/Caa3	2.709%, 6/17/21 (144A) Landmark CDO, Ltd., 2007-9A E,	841 , 590
1,000,000 (a) (b)	D/ Cdas	3.778%, 4/15/21 (144A)	855 , 590
2,000,000(a)(b)	BB+/Ba3	Stone Tower, Ltd., 2007-6A C, 1.623%, 4/17/21 (144A)	1,533,720
			 \$ 4,902,280
		Total Banks	 \$ 7,211,495
		TOTAL COLLATERALIZED LOAN OBLIGATIONS (Cost \$6,475,904)	\$ 7,211,495
1,000,000	NR/NR	SENIOR SECURED FLOATING RATE LOAN INTERESTS 132.4% of Net Assets* ENERGY 3.4% Coal & Consumable Fuels 0.3% PT Bumi Resources Tbk, Term Loan, 11.206%, 8/7/13	\$ 1,000,000
1,548,734	BBB/Baa2	Integrated Oil & Gas 0.5% Glenn Pool Oil & Gas Trust I, Term Loan, 0.0%, 5/12/16	\$ 1,552,606
1,100,000 987,517(a)(d)(e)	NR/B2 NR/NR	Oil & Gas Drilling 0.8% Big West Oil LLC, Term Loan, 7.0%, 3/31/16 TARH E&P Holdings LP, First Lien Second Out Term Loan, 5.83%, 6/29/12	\$ 1,114,666 987,517
441,456(a)(d)(e)	NR/NR	TARH E&P Holdings L.P., Second Lien Term Loan, 0.36%, 6/29/12	419,384
			 \$ 2,521,567

The accompanying notes are an integral part of these financial statements.

12 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
2,337,013 3,661,765	BB-/Ba3 B+/B2	Oil & Gas Equipment & Services 1.8% Aquilex Holdings LLC, Term Loan, 6.0%, 4/1/16 Frac Tech Services, Delayed Draw Term Loan, 2.5%, 5/16/16	\$ 2,33 3,67
			\$ 6,01
		Total Energy	\$ 11 , 08

MATERIALS -- 5.8% Aluminum -- 0.7%

238,399	B+/Ba2	Noranda Aluminum Acquisition Corp., Term Loan B, 1.941%, 5/18/14	\$ 23
2,244,375	BB-/NR	Novelis, Inc., Term Loan, 3.75%, 3/10/17	 2,25
			\$ 2,49
		Diversified Chemicals 1.5%	
522,680	BBB-/Ba1	Celanese US Holdings LLC, Dollar Term Loan C, 3.303%, 10/31/16	\$ 52
1,343,250	В/В1	General Chemical Corp., New Tranche B Term Loan, 5.002%, 10/6/15	1,35
156,281	BB-/NR	Huntsman International LLC, Extended Term Loan B, 2.773%, 4/19/17	15
57,318	BB-/Ba2	Huntsman International LLC, New Dollar Term Loan B, 1.742%, 4/19/14	5
1,219,853	BB+/Ba1	Solutia, Inc., Term Loan 1, 3.5%, 8/1/17	1,22
1,466,325	B/B2	Univar, Inc., Term Loan B, 5.0%, 6/30/17	1,46
			\$ 4 , 78
535,000	BB-/B1	Diversified Metals & Mining 0.2% Walter Energy, Inc., Term Loan B, 4.0%, 4/2/18	\$ 53
		Metal & Glass Containers 0.1%	
227,895	B/Ba3	Bway Holding Co., Replacement Term Loan B,	
00.000	- /- 0	4.503%, 2/23/18	\$ 22
20,233	B/Ba3	Bway Holding Co., Replacement Term Loan C, 4.503%, 2/23/18	2
			\$ 24
		Paper Packaging 1.1%	
768,901	B+/B1	Graham Packaging Co. LP, Term Loan C, 6.75%, 4/5/14	\$ 77
1,358,175	B+/B1	Graham Packaging Co. LP, Term Loan D, 6.0%, 9/23/16	1 , 36
1,537,213	BB+/Ba3	Graphic Packaging International, Inc., Incremental	-,00
•		Term Loan, 3.043%, 5/16/14	 1 , 53
			\$ 3,67

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 13

Schedule of Investments | 5/31/11 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
1,995,000	В/В1	Paper Products 0.6% Exopack LLC/Cello-Foil Products, Inc., Term Loan B, 0.0%, 5/31/17	\$ 1,98

Precious Metals & Minerals -- 0.2%

625,000	BB-/B1	Fairmount Minerals, Ltd., Tranche B Term Loan, 5.25%, 3/15/17	\$	62
4,000,000	NR/NR	Specialty Chemicals 1.4% Chemtura Corp., Facility Term Loan,		
700,000	BB+/Ba1	5.5%, 8/29/16 Nalco Co., Tranche B-1 Term Loan, 0.0%, 10/5/17	\$	4,03
			\$	4,73
		Total Materials	\$	19 , 09
		CAPITAL GOODS 8.2% Aerospace & Defense 3.4%		
757,268	B/B2	DAE Aviation Holdings, Inc., Tranche B-1 Term Loan, 5.28%, 7/31/14	\$	76
1,000,759	BB/Ba1	DynCorp International, Inc., Term Loan, 6.25%, 7/7/16		1,00
1,653,268	BB/B1	Hunter Defense Technologies, Inc., Term Loan, 3.560%, 8/22/14		1,62
1,753,206(d)	B/NR	IAP Worldwide Services, Inc., First Lien Term Loan, 8.25%, 12/30/12		1,75
1,496,250	B+/Ba3	SI Organization, Inc., New Tranche B Term Loan, 4.5%, 11/22/16		1,51
1,000,000	NR/B3	Sotera Defense Solutions, Inc., Term Loan B, 7.0%, 4/21/17		1,00
729,502	B/B2	Standard Aero, Ltd., Tranche B-2 Term Loan, 5.28%, 7/31/14		73
998,229(d)	BB/Ba2	TASC, Inc., New Tranche B Term Loan, 4.5%, 12/18/15		1,00
1,870,312	BB-/Ba2	TransDigm, Inc., First Lien Term Loan,		1,88
		4.0%, 2/14/17		
			\$ 	11 , 27
1,725,000	BB-/B1	Building Products 2.2% Armstrong World Industries, Inc., Term Loan B-1, 4.0%, 3/10/18	\$	1 , 73
1,995,000	B/B2	CPG International I, Inc., Term Loan, 6.0%, 2/18/17	т	2,00
1,055,085	B+/B1	Custom Building Products, Inc., Term Loan,		
1,318,375	BB-/B2	5.75%, 3/19/15 Excelitas Technologies Corp., Term Loan B, 6.0%, 11/29/16		1,06 1,32

The accompanying notes are an integral part of these financial statements.

14 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Principal	S&P/Moody's	
Amount	Ratings	
USD (\$)	(unaudited)	Value

Building Products -- (continued)

1,149,225	B+/B1	Goodman Global, Inc., Initial First Lien Term Loan, 5.75%, 10/28/16	\$	1,1
			\$	7,2
1,214,218	BBB-/Ba1	Construction & Engineering 0.4% URS Corp., Tranche B Term Loan, 2.441%, 5/15/13	\$	1,2
1,485,253 1,015,000	BB+/Ba2 BB/Ba2	Construction & Farm Machinery & Heavy Trucks 0.8% Bucyrus International, Inc., Tranche C U.S. Dollar Term Loan, 4.25%, 2/19/16 Manitowoc Co., Inc., Term Loan B,	\$	1,4
		4.25%, 11/13/17		1,0
			\$	2,5
2,049,863 891,000	B+/B1 B+/B1	Electrical Components & Equipment 0.9% Pelican Products, Inc., Term Loan, 5.0%, 3/7/17 Scotsman Industries, Inc., Term Loan, 5.758%, 4/30/16	\$	2 , 0
			\$	2,9
344,454	BB/Ba2	Industrial Conglomerates 0.1% Tomkins LLC, Term Loan B-1, 4.25%, 9/29/16	\$	3
1,297,895	B+/B1	Industrial Machinery 0.4% Alliance Laundry Systems LLC, Term Loan, 6.25%, 9/30/16	\$	1,3
		Total Capital Goods	\$	26 , 9
1,396,500	BB-/Caa1	COMMERCIAL & PROFESSIONAL SERVICES 5.3% Commercial Printing 0.4% Cenveo Corp., Facility Term Loan B, 6.25%, 12/21/16	\$	1,4
957,500 3,455,486	BB/Ba3 B/B2	Diversified Commercial & Professional Services 1. Aramark Canada, Ltd., Canadian Term Loan, 2.182%, 1/26/14 Cydcor, Inc., First Lien Tranche B Term Loan,	3%	9
		9.0%, 2/5/13		3,3
			\$ 	4,3
1,045,000	B+/Ba3	Diversified Support Services 1.6% Allied Security Holdings LLC, First Lien Term Loan, 5.0%, 2/3/17	\$	1,0
1,700,000 393,846	NR/NR BB+/Baa3	<pre>Infogroup, Inc., Term Loan B, 0.0%, 5/26/18 Iron Mountain, Inc., Initial Term Loan, 1.719%, 4/16/14</pre>		1,6 3

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 15

Schedule of Investments | 5/31/11 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		V	alue
1,960,531	B+/Ba3	Diversified Support Services (continued) Language Line LLC, Tranche B Term Loan, 6.25%, 6/20/16	\$	1 , 978
			\$	5,113
1,325,000	B+/B1	Environmental & Facilities Services 0.4% Waste Industries USA, Inc., Term Loan B, 4.75%, 3/17/17	\$	1,330
1,900,000	в/в1	Human Resources & Employment Services 0.6% Nexeo Solutions LLC, Initial Loan, 5.0%, 9/8/17	\$	1,905
2,439,985	BB/B1	Research & Consulting Services 0.7% Wyle Services Corp., First Lien Term Loan, 5.75%, 3/26/17	\$	2,452
915,577	вв/в1	Security & Alarm Services 0.3% Protection One, Inc., Term Loan, 6.0%, 6/4/16	\$	920
		Total Commercial & Professional Services	\$	17,459
850,000 550,000 1,200,000 3,550,000	BB-/Ba3 BB-/Ba2 BB-/Ba2 B+/B3	TRANSPORTATION 2.7% Airlines 1.8% Allegiant Travel Co., Term Loan, 5.75%, 3/10/17 Delta Airlines, Inc., New Term Loan, 4.25%, 3/7/16 Delta Airlines, Inc., Term Loan, 5.5%, 4/20/17 US Airways Group, Inc., Term Loan, 2.694%, 3/21/14	\$	857 548 1,191 3,272
			\$	5,870
2,840,592(d) 2,098,963	BB/Ba3 BB-/B1	Trucking 0.9% SIRVA Worldwide, Inc., Second Lien Term Loan, 12.0%, 5/12/15 Swift Transportation Co. LLC, Term Loan, 6.0%, 12/21/16	\$	781 2 , 114
		0.00, 11, 11, 11	 ¢	
			ب 	2,895
		Total Transportation	\$ 	8 , 765
2,851,274	B+/B1	AUTOMOBILES & COMPONENTS 5.9% Auto Parts & Equipment 3.3% Allison Transmission, Inc., Term Loan, 2.96%, 8/7/14	\$	2,838
715 , 819	B+/Ba3	Federal-Mogul Corp., Tranche B Term Loan, 2.146%, 12/29/14		690
365,214	B+/Ba3	Federal-Mogul Corp., Tranche C Term Loan, 2.139%, 12/28/15		352
1,500,000 3,838,259	B+/B2 B+/B1	HHI Holdings LLC, Term Loan, 7.012%, 3/21/17 Key Safety Systems, Inc., First Lien Term Loan, 2.442%, 3/8/14		1,500 3,662

The accompanying notes are an integral part of these financial statements.

16 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Valı	 ue
744,375 1,122,187	BBB-/Ba1 B/Ba2	Auto Parts & Equipment (continued) Tenneco, Inc., Tranche B Term Loan, 5.057%, 6/3/16 UCI International, Inc., Term Loan, 5.5%, 7/26/17	\$ \$ 10	1, 0,
3,175,000 5,268,844	NR/B2 BB+/Baa3	Automobile Manufacturers 2.6% Chrysler Group LLC, Tranche B Term Loan, 0.0%, 5/24/17 Ford Motor Co., Tranche B-1 Term Loan, 2.95%, 12/15/13		3, 5, 8,
		Total Automobiles & Components	\$ 19	9,
2,369,368(c)(d) 5,077,235(c)(d) 1,000,000(a)(c)(f) 4,500,000(a)(c)(f)	NR/NR NR/NR BB-/B1 BB-/Caa2	CONSUMER DURABLES & APPAREL 1.3% Homebuilding 0.3% Ginn LA Conduit Lender, Inc., First Lien Tranche A Credit-Linked Deposit Loan, 0.0%, 6/8/11 Ginn LA Conduit Lender, Inc., First Lien Tranche B Term Loan, 0.0%, 6/8/11 WAICCS Las Vegas 3 LLC, First Lien Term Loan, 7.75%, 7/30/09 WAICCS Las Vegas 3 LLC, Second Lien Term Loan, 13.25%, 7/30/09	\$	
			\$	
1,500,000 861,163	BB/Ba3 BB-/Ba2	Housewares & Specialties 0.7% Reynolds Group Holdings, Inc., U.S. Term Loan, 4.25%, 2/9/18 Yankee Candle Co., Inc., Term Loan, 2.2%, 2/6/14	\$ 1	1,
			\$:	 2,
886 , 379	BB-/Ba3	Leisure Products 0.3% SRAM LLC, Term Loan, 5.028%, 4/30/15	\$ 	
		Total Consumer Durables & Apparel	\$ 4 	4 ,
2,000,000	в/в3	CONSUMER SERVICES 8.0% Casinos & Gaming 1.2% Caesars Entertainment Operating Co., Inc., Term Loan B-1, 3.274%, 1/28/15	\$ 1	1,

1,185,000	B/B3	Caesars Entertainment Operating Co., Inc., Term Loan B-4, 9.5%, 10/31/16	1,
715,085	BB+/Ba2	Penn National Gaming, Inc., Term Loan B, 1.98%, 10/3/12	
			\$ 3,

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 17

Schedule of Investments | 5/31/11 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Va	lue
2,094,750 3,832,815 989,744	B/B1 BB-/Ba2 B+/B2	Education Services 2.1% Ascend Learning LLC, First Lien Term Loan, 7.75%, 12/6/16 Bright Horizons Family Solutions, Inc., Tranche B Term Loan, 4.2%, 5/28/15 Cengage Learning Acquisitions, Inc., Term Loan, 2.44%, 7/3/14	\$	2,097,367 3,860,764 925,101
1,138,363	в/в3	Hotels, Resorts & Cruise Lines 0.3% Yellowstone Mountain Club LLC, Senior First Lien Term Loan, 6.0%, 7/16/14	\$	1,132,671
1,745,625 1,336,673	BB-/Ba2 B+/Ba2	Leisure Facilities 0.9% Cedar Fair LP, U.S. Term Loan-1, 4.0%, 12/15/17 Universal City Development Partners, Ltd., Term Loan, 5.5%, 11/6/14		1,757,626 1,349,204 3,106,830
1,645,875 324,464 4,054,838 471,439	BB-/Ba3 BB-/Ba2 NR/NR BB/Ba2	Restaurants 2.0% Burger King Corp., Tranche B Term Loan, 4.5%, 10/19/16 DineEquity, Inc., Term Loan B-1, 4.25%, 10/19/17 Dunkin' Brands, Inc., Term Loan B-2, 4.25%, 11/23/17 Wendy's/Arby's Restaurants LLC, Term Loan, 5.0%, 5/24/17		1,644,693 326,028 4,064,974 474,238
1,175,000 3,860,527	BB-/Ba3 B+/B1	Specialized Consumer Services 1.5% KAR Auction Services, Inc., Term Loan, 0.0%, 5/19/17 Wash MultiFamily Laundry Services LLC,		1,180,875

		Term Loan, 7.0%, 8/28/14	3,870,178
			\$ 5,051,053
		Total Consumer Services	\$ 26,523,825
		MEDIA 23.4% Advertising 2.0%	
1,496,250	B+/NR	Advantage Sales & Marketing, Inc., First Lien Term Loan, 5.25%, 12/17/17	\$ 1,505,968
3,465,015	BB-/Ba3	Affinion Group, Inc., Tranche B Term Loan, 5.0%, 10/9/16	3,473,244
1,474,809	BB/Baa3	Lamar Media Corp., Term Loan B, 4.0%, 12/30/16	1,484,027
			\$ 6,463,239

The accompanying notes are an integral part of these financial statements.

18 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
	, _	Broadcasting 8.3%
1,309,788	NR/Caa2	FoxCo Acquisition Sub LLC, Term Loan,
	,	4.75%, 7/14/15
836,206	NR/NR	New Young Broadcasting Holding Co. Inc.,
10 015 511	- /- 0	Term Loan, 8.0%, 6/30/15
AUD 13,915,744	B-/B2	SMG H5 Pty, Ltd., Facility Term Loan A,
1 001 500	/- 0	6.911%, 12/24/12
1,301,738	BB-/Ba3	TWCC Holding Corp., Term Loan,
0 716 005	D L /D2	4.25%, 2/11/17
9,716,995	B+/B2	Univision Communications, Inc., Extended First
		Lien Term Loan, 4.441%, 3/31/17
19,591,675(a)(c)(d)(e)	NR/B3	Broadstripe LLC, First Lien Term Loan, 0.0%,
19,331,073 (a) (c) (d) (e)	NIX/ DO	6/30/11
1,428,203(a)(c)(d)(e)	CCC+/B3	Broadstripe LLC, Revolver Loan, 0.0%, 6/30/11
7,691,748	BB-/Ba3	Cequel Communications LLC, Term Loan,
7,001,740	DD /Da3	2.209%, 11/5/13
1,600	BB+/Ba1	Charter Communications Operating LLC,
1,000	DD 17 DQ1	Term Loan B-1, 2.19%, 3/6/14
4,340,576	BB+/Ba1	Charter Communications Operating LLC,
1,310,370	DD 17 DQ1	Term Loan C, 3.56%, 9/6/16
1,985,000	BB-/Ba3	MCC Iowa LLC, Tranche F Term Loan, 4.5%,
1,300,000	<i>DD</i> , D03	10/23/17
4,759,412	B-/B1	WideOpenWest Finance LLC, First Lien Term Loan,
1, 100, 112	2 , 51	2.698%, 6/30/14
		2.000, 0,00/11

0.000.605	D : (27)	Movies & Entertainment 3.7%
2,380,607	B+/NR	Alpha Topco, Ltd. (Formula One), Facility Term Loan B-1, 2.707%, 12/31/13
1,608,032	B+/NR	Alpha Topco, Ltd. (Formula One), Facility Term
		Loan B-2, 2.707%, 12/31/13
1,255,831	B-/B1	Carmike Cinemas, Inc., Initial Term Loan,
		5.5%, 1/27/16
1,679,412	NR/Ba1	Cinedigm Digital Funding I LLC, Term Loan,
		5.25%, 4/29/16
3,990,000	B-/B3	Knology, Inc., Term Loan B, 4.0%, 8/18/17
1,235,346	В/В3	Lodgenet Entertainment Corp., Closing Date Term
		Loan, 6.5%, 4/4/14

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 19

Schedule of Investments | 5/31/11 (unaudited) (continued)

2,841,135 BBB-/Ba2

Principal	S&P/Moody's				
Amount USD (\$)	Ratings (unaudited)		77:	alue	_
	(unaudiced)				=
		Publishing 1.0%			
880 , 575	B+/Ba3	<pre>Interactive Data Corp., Term Loan B, 4.75%, 2/11/18</pre>	\$		885
EURO 891,129	B/Ba3	Mediannuaire Holding, Term Loan B-3, 3.925%, 10/12/15			997
EURO 890,707	B/Ba3	Mediannuaire Holding, Term Loan C-2, 3.925%, 10/12/15			996
429,832	B/B1	R.H. Donnelley, Inc., Term Loan, 9.0%, 10/24/14	_		321
			\$	3,	, 200
		Total Media	\$	76,	,944
		RETAILING 5.1%			
2,493,750	B+/B1	Apparel Retail 0.9% Gymboree Corp., Term Loan, 5.0%, 2/23/18	\$	2.	,450
129,431 (d)	NR/NR	Johnny Appleseed's, Inc., Junior Loan, 1.0%, 4/25/17		-,	62
599,758(d)	NR/NR	Johnny Appleseed's, Inc., First Lien Second Out			
		Term Loan, 4.0%, 4/25/16			491
			\$	3,	,004
		Automotive Retail 0.1%			
399,000	BB+/Ba3	Autotrader.com, Inc., Tranche B Term Loan, 4.75%, 12/15/16	\$		400
		General Merchandise Stores 2.2%			

Dollar General Corp., Tranche B-1 Term Loan,

4,2	268,478	BB/Ba3	2.973%, 7/7/14 (144A) Dollar General Corp., Tranche B-2 Term Loan, 2.946%, 7/7/14 (144A)	\$ 2,840 4,267
				\$ 7,107
1,4	460,000	BB+/Ba2	Oil & Gas 0.4% Pilot Travel Centers LLC, Initial Tranche B Term Loan, 4.25%, 3/30/18	\$ 1,469
9	914,780	BBB-/Ba3	Specialty Stores 1.5% Sally Holdings LLC, Term Loan B,	 01.
,	990,000 915,000	B+/Ba3 B/NR	2.44%, 11/16/13 Savers, Inc., Term Loan, 4.25%, 3/14/17 Targus Group International, Inc., Term Loan, 0.0%, 5/24/16	\$ 916 2,002 1,876
			0.0%, 3/24/10	
				\$ 4 , 794
			Total Retailing	\$ 16,776
1,3	389 , 840	B+/B3	FOOD & STAPLES RETAILING 2.0% Drug Retail 0.4% Rite Aid Corp., Tranche 5 Term Loan, 4.5%, 3/3/18	\$ 1,376

The accompanying notes are an integral part of these financial statements.

20 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Va	lue
399,000 4,794,773	BB-/Ba3 B+/Ba3	Food Retail 1.6% NBTY, Inc., Term Loan B-1, 4.25%, 10/1/17 Pinnacle Foods Finance LLC, Term Loan, 2.711%, 4/2/14	\$	399,65 4,768,46
			\$	5,168,12
		Total Food & Staples Retailing	\$	6,544,93
1,419,813	В/В1	FOOD, BEVERAGE & TOBACCO 4.5% Agricultural Products 0.4% Wm. Bolthouse Farms, Inc., First Lien Term Loan, 5.502%, 2/11/16		1,429,13
244,610 495,835	BB+/Ba2 BB+/Ba2	Distillers & Vintners 0.2% Constellation Brands, Inc., Extending Tranche B Term Loan, 3.0%, 6/5/15 Constellation Brands, Inc., Non-Extending Tranche B Term Loan, 1.75%, 6/5/13	\$	244,63 499,67
			\$	744,31

	Packaged Foods & Meats 3.9%	
BB-/Ba3	Dean Foods Co., Tranche B Term Loan,	\$ 954,3
B+/Ba3	•	Ş 954,
Бт/ Баз	· · · · · · · · · · · · · · · · · · ·	1,847,
BB-/Ba2	Dole Food Co., Inc., Tranche B-1 Term Loan,	_, -, -, -,
	5.049%, 3/2/17	206,9
BB-/Ba2	Dole, Ltd., Tranche C-1 Term Loan,	
	5.085%, 3/2/17	514,3
BB-/NR	· · · · · · · · · · · · · · · · · · ·	470
ND/D1	·	470,9
NK/DI		1,600,3
B+/B1	,	1,000,
	9/30/16	3,613,3
NR/NR	Pierre Foods, Inc., Second Lien Term Loan,	
	11.25%, 9/29/17	2,548,4
BB-/B1		
	Loan, 5.0%, 2/16/17	975 , 2
		\$ 12,731,5
	Total Food, Beverage & Tobacco	\$ 14,904,9
	HOUSEHOLD & PERSONAL PRODUCTS 2.5%	
	Household Products 1.5%	
BB-/Ba2	JohnsonDiversey, Inc., Tranche B Dollar Term	
	Loan, 4.0%, 11/24/15	\$ 2,461,2
B/B2	Spectrum Brands, Inc., Term Loan, 5.0%, 6/17/16	2,572,2
		\$ 5,033,4
	B+/Ba3 BB-/Ba2 BB-/NR NR/B1 B+/B1 NR/NR BB-/B1	BB-/Ba3 Dean Foods Co., Tranche B Term Loan, 1.81%, 4/2/14 B+/Ba3 Del Monte Foods Co., Initial Term Loan, 4.5%, 3/8/18 BB-/Ba2 Dole Food Co., Inc., Tranche B-1 Term Loan, 5.049%, 3/2/17 BB-/Ba2 Dole, Ltd., Tranche C-1 Term Loan, 5.085%, 3/2/17 BB-/NR Green Mountain Coffee Roasters, Inc., Facility Term Loan B, 5.5%, 12/16/16 NR/B1 Michael Foods Group, Inc., Facility Term Loan B, 4.25%, 2/25/18 B+/B1 Pierre Foods, Inc., First Lien Term Loan, 7.0, 9/30/16 NR/NR Pierre Foods, Inc., Second Lien Term Loan, 11.25%, 9/29/17 BB-/B1 Windsor Quality Food Co., Ltd., Tranche B Term Loan, 5.0%, 2/16/17 Total Food, Beverage & Tobacco HOUSEHOLD & PERSONAL PRODUCTS 2.5% Household Products 1.5% BB-/Ba2 JohnsonDiversey, Inc., Tranche B Dollar Term Loan, 4.0%, 11/24/15

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 21

Schedule of Investments | 5/31/11 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Va	lue
		Personal Products 1.0%		
750,000	B+/B1	General Nutrition Center, Inc., Tranche B Term Loan, 4.25%, 3/2/18	\$	751 ,
2,475,000	BB-/Ba3	Revlon Consumer Products Corp., Term Loan B, 4.75%, 11/19/17		2,485,
			\$	3,237,
		Total Household & Personal Products	\$	8,270,

HEALTH CARE EQUIPMENT & SERVICES -- 18.6% Health Care Equipment & Services -- 2.0%

700,204	B/NR	Fenwal, Inc., First Lien Delayed Draw Term Loan, 2.504%, 2/28/14	\$	669,
4,084,225	B/NR	Fenwal, Inc., Initial First Lien Term Loan, 2.504%,		·
235,765	BBB-/Baa2	2/28/14 Fresenius SE, Tranche D-1 Dollar Term Loan,		3,907,
·	DDD / Ddd2	3.5%, 9/10/14		236,
134,675	BBB-/Baa2	Fresenius SE, Tranche D-2 Term Loan, 3.5%, 9/10/14		134,
1,725,000	BB-/B1	Onex Carestream Finance LP, Term Loan,		·
		5.0%, 2/25/17		1,644,
			\$	6,592,
		Health Care Facilities 5.2%		
2,376,000	B/B1	Ardent Medical Services, Inc., Term Loan, 6.5%, 9/15/15	\$	2 207
56,398	BB/Ba3	CHS/Community Health Systems, Inc., Delayed	Ą	2,387,
1 006 104	77 /7 0	Draw Term Loan, 2.504%, 7/25/14		54,
1,096,184	BB/Ba3	CHS/Community Health Systems, Inc., Term Loan, 2.504%, 7/25/14		1,061,
3,471,473	BB/Ba2	HCA, Inc., Tranche B-2 Term Loan, 3.557%,		
2,698,472	BB/Ba2	3/31/17 HCA, Inc., Tranche B-3 Term Loan, 3.557%,		3,457,
		11/18/13		2,689,
1,650,000 2,065,000	B/Ba3 BB-/Ba3	Iasis Healthcare LLC, Term B Loan, 5.0%, 5/3/18 Select Medical Corp., Tranche B Term Loan,		1,654,
2,003,000	DD / Da3	0.0%, 6/1/18		2,054,
2,737,778	B+/Ba2	Sun Healthcare Group, Inc., Term Loan,		2 720
1,163,009	BB+/NR	7.5%, 10/18/16 Universal Health Services, Inc., Tranche B Term		2,729,
		Loan, 4.0%, 11/15/16		1,170,
			\$	17 , 257 ,
		Health Care Services 8.7%		
824,813	NR/NR	AccentCare, Inc., Term Loan, 6.5%, 12/22/16	\$	824,
740,625	BB-/Ba3	Alliance HealthCare Services, Initial Term Loan, 5.5%, 6/1/16		741,
967,252	B+/B1	Aveta, Inc., NAMM Term Loan, 8.5%, 4/14/15		972,

The accompanying notes are an integral part of these financial statements.

22 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Valı	ue
		Health Care Services (continued)		ļ
600,000	BB-/B1	Butler Animal Health Supply LLC, Tranche B Term		
		Loan, 0.0%, 12/31/15	\$	600,
2,238,271	B-/B3	CCS Medical, Inc., First Lien Term Loan,		
		9.0%, 3/31/15		1,958,
814,582(d)	NR/NR	CCS Medical, Inc., Second Lien Term Loan,		•
,	,	3.0%, 3/31/16		521,
2,962,500	BB-/Ba2	Gentiva Health Services, Inc., Term Loan B-1,		~=-,

		4.75%, 8/17/16	2,981,
1,062,983	BB-/Ba3	Inventiv Health, Inc., Term Loan B, 4.75%,	1 067
128,013	BB-/Ba3	8/4/16 Inventiv Health, Inc., Term Loan B-1,	1,067,
120,013	DD-/Dd3	4.75%, 8/4/16	128,
2,030,918	CCC-/B2	LifeCare Holdings, Term Loan, 7.982%, 2/1/16	2,061,
2,545,000	B+/B1	National Mentor Holdings, Inc., Tranche B Term	, ,
		Loan, 7.0%, 2/9/17	2,549,
1,128,218	B/B2	National Specialty Hospitals, Inc., Initial Term	
		Loan, 8.25%, 2/3/17	1,132,
873 , 321	B/B2	Physician Oncology Services LP, Effective Date	0.70
2 070 000	ND/D1	Term Loan, 6.25%, 1/31/17	872,
2,970,000	NR/B1	Prime Healthcare Services, Inc., Term Loan B, 7.25%, 4/28/15	2,925,
1,469,333	BB/Ba3	RehabCare Group, Inc., Term Loan B,	2,323,
1,103,000	227 243	6.25%, 11/24/15	1,477,
374,063	B/Ba3	Renal Advantage, Inc., Tranche B Term Loan,	, ,
		5.75%, 12/17/16	376,
2,992,500	B+/B1	Rural/Metro Operating, Inc., Term Loan,	
		6.0%, 11/24/16	3,013,
1,365,000	B+/Ba3	Surgery Center Holdings, Inc., Term Loan,	
750 000	ND /D 2	6.5%, 2/6/17	1,376,
750 , 000	NR/Baa3	Valitas Health Services, Inc., Term Loan B, 0.0%, 6/2/17	751,
2,244,375	B+/B1	Virtual Radiologic Corp., Term Loan,	751,
2,244,373	D1/D1	7.75%, 12/22/16	2,233,
			\$ 28,565,
		Health Care Supplies 1.6%	
461,862	BB-/B1	Bausch & Lomb, Inc., Delayed Draw Term Loan,	
		3.441%, 4/24/15	\$ 461,
1,899,812	BB-/B1	Bausch & Lomb, Inc., Parent Term Loan,	
	/- :	3.441%, 4/24/15	1,897,
2,787,127	BB-/B1	Biomet, Inc., Dollar Term Loan,	2 776
		3.276%, 3/25/15	2,776,
			\$ 5,135,

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 23

Schedule of Investments | 5/31/11 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
1,437,195	BB-/Ba3	Health Care Technology 0.8% MedAssets, Inc., Term Loan, 5.25%, 11/16/16	\$ 1,447,97
1,185,000	В/В2	Medical Card System, Inc., Term Loan, 12.003%, 9/17/15	1,262,02
			\$ 2,709,99

967,252	B+/B1	Managed Health Care 0.3% Aveta, Inc., MMM Term Loan, 8.5%, 4/14/15	\$ 972,69
		Total Health Care Equipment & Services	\$ 61,233,85
		PHARMACEUTICALS & BIOTECHNOLOGY & LIFE SCIENCES 3.5% Biotechnology 2.9%	
3,077,288	BB/B1	Axcan Intermediate Holdings, Inc., Term Loan, 5.5%, 2/10/17	\$ 3,068,15
1,252,747	B+/B1	Generic Drug Holdings, Inc., Closing Date Term Loan, 6.5%, 4/8/16	1,252,74
172,253	B+/B1	Generic Drug Holdings, Inc., Delayed Draw Term Loan, 6.5%, 4/8/16	172,25
400,000	BB-/Ba3	Grifols, Inc., U.S. Tranche B Term Loan, 0.0%, 6/1/17	403,99
1,712,982	B+/B1	HGI Holding, Inc., Initial Term Loan,	
1,068,750	BB/B1	6.75%, 10/1/16 Ikaria Acquisition, Inc., Term Loan,	1,735,10
857,143	BBB-/Ba3	7.0%, 5/14/16 Warner Chilcott Corp., Term Loan B-1,	1,064,74
428,571	BBB-/Ba3	4.25%, 3/15/18 Warner Chilcott Corp., Term Loan B-2, 4.25%, 3/15/18	860,89 430,44
589,286	BBB-/Ba3	4.25%, 3/15/18 Warner Chilcott Corp., Term Loan B-3, 4.25%, 3/15/18	591,86
			\$ 9,580,19
2,250,703(d)	CCC+/NR	Pharmaceuticals 0.6% Graceway Pharmaceuticals LLC, Mezzanine Loan,	
1,929,449	BBB/Baa3	0.0%, 11/1/13 Mylan, Inc., U.S. Tranche B Term Loan,	\$ 11,30
		3.563%, 10/2/14	1,940,69
			\$ 1,952,00
		Total Pharmaceuticals & Biotechnology & Life Sciences	\$ 11,532,19
2,500,000	B+/B2	DIVERSIFIED FINANCIALS 2.3% Consumer Finance 0.8% Springleaf Financial Funding Co., Term Loan, 5.5%, 5/10/17	\$ 2,501,56

The accompanying notes are an integral part of these financial statements.

24 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Principal	S&P/Moody's	
Amount	Ratings	
USD (\$)	(unaudited)	Value

312,445	B+/Ba3	LPL Holdings, Inc., Term Loan, 5.25%, 6/28/17	\$ 315,277
369,473 880,527	B-/B2 B-/NR	Other Diversified Financial Services 0.4% BNY ConvergEX Group LLC, Second Lien (EZE) Term Loan, 8.75%, 12/18/17 BNY ConvergEX Group LLC, Second Lien (TOP) Term Loan, 8.75%, 12/18/17	\$ 379,172
		Term Loan, 6.75%, 12/16/17	 \$ 903,641 1,282,813
1,681,383 1,780,582	CCC+/B2 BB+/Ba1	Specialized Finance 1.0% Collect Acquisition Corp., Advance Term Loan B, 8.0%, 5/15/13 MSCI, Inc., Term Loan B-1, 3.75%, 3/14/17	 1,676,129 1,796,440
			 \$ 3,472,569
		Total Diversified Financials	 \$ 7 , 572 , 222
837,250	В/В2	INSURANCE 1.7% Insurance Brokers 1.6% HUB International, Ltd., Additional Term Loan,	
850,951	B/B2	6.75%, 6/13/14 HUB International, Ltd., Delayed Draw Term Loan, 2.807%, 6/13/14	\$ 841,122 840,740
3,085,857	B/B2	HUB International, Ltd., Initial Term Loan, 2.807%, 6/13/14	3,048,827
492,500	B-/B3	USI Holdings Corp., New Term Loan Series C, 7.0%, 5/5/14	 491 , 679
			\$ 5 , 222 , 368
230,528	B/B2	Multi-Line Insurance 0.1% AMWINS Group, Inc., Initial Term Loan, 2.781%, 6/8/13	\$ 228,511
		Total Insurance	\$ 5,450,879
2,500,000	CCC+/Ca	REAL ESTATE 0.9% Diversified Real Estate Investment Trust 0.7% Spirit Finance Corp., Term Loan, 3.454%, 8/1/13	\$ 2,419,270
594,000	B/Ba3	Real Estate Development 0.2% Ozburn-Hessey Holding Co. LLC, First Lien Term Loan, 7.5%, 4/8/16	\$ 599 , 198
		Total Real Estate	 \$ 3,018,468
1,000,000	BB-/Ba2	SOFTWARE & SERVICES 13.0% Application Software 3.7% Allen Systems Group, Inc., Term Loan B,	
1,385,000	BB-/Ba2	6.5%, 11/21/15 NDS Finance, Ltd., Tranche B Loan,	\$ 1,001,250
		4.0%, 3/12/18	1,389,328

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 25

Schedule of Investments | 5/31/11 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
		Application Software (continued)	
1,581,450	BB+/Ba2	Nuance Communications, Inc., Term Loan, 1.95%, 3/29/13	\$ 1,573,54
3,509,527	B+/B1	Serena Software, Inc., Extended Term Loan, 4.31%, 3/10/16	3 , 495 , 27
2,000,000	B+/B1	Verint Systems, Inc., Term Loan,	
1,591,013	B+/B1	4.5%, 10/27/17 Vertafore, Inc., First Lien Term Loan,	2,009,69
1,000,000	NR/Caa1	5.25%, 7/29/16 Vertafore, Inc., Second Lien Term Loan,	1,601,45
· ·	-	9.75%, 10/29/17	1,020,00
			\$ 12,090,53
		Data Processing & Outsourced Services 1.2%	
497,500	BBB-/Ba1	Fidelity National Information Services, Inc., Term Loan B, 5.25%, 7/18/16	\$ 498 , 74
1,475,000	BB-/NR	Fifth Third Processing, Inc., Second Lien Term	
802,493	B-/Caa1	Loan, 0.0%, 11/3/16 First Data Corp., Dollar Term Loan,	1,481,45
85 , 401	B+/B1	2.945%, 9/24/14 First Data Corp., Term Loan B-2,	752 , 79
		2.945%, 9/24/14	79 , 93
1,173,839	BBB/Baa3	Lender Processing Services, Inc., Term Loan B, 2.691%, 7/2/14	1,166,50
			\$ 3,979,43
		Internet Software & Services 0.6%	
1,990,000	В/В1	Savvis Communications Corp., Term Loan, 6.75%, 8/4/16	\$ 2,007,91
2,500,000	BB/Ba3	IT Consulting & Other Services 1.2% SunGard Data Systems, Inc., Incremental	
1,623,362	BB/Ba3	Term Loan B, 3.71%, 2/28/14 SunGard Data Systems, Inc., Tranche A U.S.	\$ 2,515,62
±, 020,002	רטח /חת	Term Loan, 1.955%, 2/28/14	1,610,02
			\$ 4,125,64
		Systems Software 6.3%	
1,496,250	NR/B1	Applied Systems, Inc., First Lien Term Loan, 5.5%, 12/8/16	\$ 1,506,84
1,300,000	NR/NR	Applied Systems, Inc., Second Lien Term Loan,	
1,800,000	BB+/Ba2	9.25%, 6/8/17 Dealer Computer Services, Inc., Tranche B Term	1,324,37
2,216,658	B+/B1	Loan, 3.75%, 4/21/18 Infor Enterprise Solutions Holdings, Inc., Delayed	1,808,62
, -, 500	, D±	Draw Term Loan, 3.95%, 7/28/12	2,199,80

The accompanying notes are an integral part of these financial statements.

26 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Va	lue
1,466,667	NR/NR	Systems Software (continued) Infor Enterprise Solutions Holdings, Inc., Delayed Draw Term Loan, 6.441%, 3/2/14	\$	1,327,
2,791,206	B+/B1	<pre>Infor Enterprise Solutions Holdings, Inc., Dollar Tranche B-1 First Lien Term Loan, 2.95%, 7/28/12</pre>		2,742,
4,248,855	B+/B1	Infor Enterprise Solutions Holdings, Inc., Initial U.S. Term Loan, 3.95%, 7/28/12		4,216,
2,533,333	CCC+/Caa2	Infor Enterprise Solutions Holdings, Inc., Second Lien Initial Dollar Term Loan, 6.441%, 3/2/14		2,274,
1,975,000	BB+/Ba1	Rovi Solutions Corp., Tranche B Loan, 4.0%, 2/7/18		1,988,
265,280	B+/B1	Telcordia Technologies, Inc., Term Loan, 6.75%, 4/30/16		266,
1,034,183	BB-/B1	Vangent, Inc., Term Loan, 2.26%, 2/14/13		1,021,
			\$	20,676,
		Total Software & Services	\$	42,879,
		TECHNOLOGY HARDWARE & EQUIPMENT 2.8% Communications Equipment 0.8%		_
1,000,000 1,485,000	BB/Ba3 BB-/Ba3	CommScope, Inc., Term Loan, 5.0%, 1/14/18 TowerCo Finance LLC, Term Loan, 5.25%, 2/2/17	\$	1,006, 1,496,
			\$	2,503,
35,822	BB-/Ba2	Electronic Components 0.5% Flextronics International, Ltd., Delayed Draw Loan A-1-B, 2.441%, 10/1/14	\$	35,
1,139,874	BB+/Ba2	Flextronics International, Ltd., Delayed Draw Loan A-3, 2.461%, 10/1/14	-	1,131,
432,375	B-/B2	Generac Acquisition Corp., First Lien Term Loan, 2.79%, 11/10/13		431,
			\$	1,598,
817,583 1,496,250	BB+/Ba1 B/B2	Electronic Equipment & Instruments 0.7% Itron, Inc., Dollar Term Loan, 3.7%, 4/18/14 Scitor Corp., Term Loan, 5.0%, 2/15/17	\$	823, 1,501,
			\$	2,325,
710.000	WD /D0	Electronic Manufacturing Services 0.4%		
749,889	NR/B2	FCI USA, Inc., Facility Term Loan B-1, 3.665%, 11/1/13	\$	747
749 , 889	NR/B2	FCI USA, Inc., Facility Term Loan B-5-B, 3.665%, 11/1/13		747,
			\$	1,494,

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 27

Schedule of Investments | 5/31/11 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Va	alue
1,211,685	B+/B1	Technology Distributors 0.4% Securus Technologies, Inc., First Lien Term Loan, 0.0%, 5/31/17	\$	1,199,
		Total Technology Hardware & Equipment	\$	9,121,
1,390,975 448,875	BB+/Ba2 NR/Ba1	SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT 1.2% Semiconductors 0.6% Intersil Corp., Term Loan, 4.75%, 4/27/16 Microsemi Corp., Term Loan, 4.0%, 11/2/17	\$	1,400, 451,
			 \$	1,852,
500,000	NR/B1 BB+/Ba3	4.25%, 5/9/18 BB+/Ba3 Sensata Technology BV/Sensata Technology	\$	501,
	Finance Co. LLC, Term Loan, 0.0%, 5/12/18	Finance Co. LLC, Term Loan, 0.0%, 5/12/18		1,504,
			\$	2,006,
		Total Semiconductors & Semiconductor Equipment	\$	3,858,
6,500,000 500,000	B+/B1 B/Ba3	TELECOMMUNICATION SERVICES 7.6% Alternative Carriers 2.1% Level 3 Financing, Inc., Tranche A Term Loan, 2.553%, 3/13/14 PAETEC Holding Corp., Initial Term Loan, 0.0%, 5/31/18	\$	6,374, 501,
			\$ 	6,875,
EURO 745,314 EURO 387,153	B/B2 NR/B2	Integrated Telecommunication Services 3.4% Amsterdamse Beheer-EN Consultingmaatschappij B.V., Casema Facility Term Loan B-3, 0.0%, 9/15/14 Amsterdamse Beheer-EN Consultingmaatschappij	\$	1,079,
EURO 849,351	В/В2	B.V., Casema Facility Term Loan B-4, 0.0%, 9/15/14 Amsterdamse Beheer-EN Consultingmaatschappij B.V., Kabelcom Facility Term Loan B-2,		561 ,
1,000,000	CCC+/Caa1	0.0%, 9/15/14 Hargray Acquisition Co., Second Lien Term Loan, 5.77%, 1/29/15		1,230, 945,

3,932,312	B+/B1	Telesat Canada, U.S. Term I Loan,	
		3.2%, 10/31/14	3,921,
337 , 774	B+/B1	Telesat Canada, U.S. Term II Loan,	
		3.2%, 10/31/14	336,
1,110,894	B+/Ba1	TW Telecom Holdings, Inc., Term Loan B-2,	
		3.45%, 12/30/16	1,115,
		3.45%, 12/30/16	

The accompanying notes are an integral part of these financial statements.

28 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
264,308 642,835 1,163,126	BB-/Ba3 BB-/Ba3 BB+/Baa3	Integrated Telecommunication Services (continued West Corp., Term Loan B-2, 2.732%, 10/24/13 West Corp., Term Loan B-5, 4.607%, 7/15/16 Windstream Corp., Tranche B-2 Term Loan, 3.013%, 12/17/15	1,
			\$ 11,
5,609,387 700,000	BB/Ba1 BB/NR	Wireless Telecommunication Services 2.1% MetroPCS Wireless, Inc., Tranche B-2 Term Loan, 4.071%, 11/3/16 MetroPCS Wireless, Inc., Tranche B-3 Term Loan, 4.0%, 3/19/18	\$ 5,
498,750	BB-/B1	Syniverse Holdings, Inc., Term Loan, 5.25%, 12/21/17	
			\$ 6,
		Total Telecommunication Services	\$ 24,
875,000 792,952(a)(d)(e) 327,347(a)(d)(e) 5,506,137	BB-/Ba3 CC/Ca CC/Ca CCC/B2	UTILITIES 2.7% Electric Utilities 1.6% Equipower Resources Holdings LLC, Facility Term B, 5.75%, 1/26/18 GBGH LLC (US Energy), First Lien Term Loan, 0.0%, 6/9/13 GBGH LLC (US Energy), Second Lien Term Loan, 0.0%, 6/9/14 Texas Competitive Electric Holdings Co., LLC, Term Loan, 4.738%, 10/10/17	\$ 4, \$ 5,
1,635,000 1,725,000 275,941	BB+/Ba1 B+/B1 BB-/Ba3	Independent Power Producers & Energy Traders AES Corp., Initial Term Loan, 0.0%, 5/28/18 Calpine Corp., Term Loan, 4.5%, 4/1/18 Mach Gen LLC, First Lien Synthetic LC Loan, 0.057%, 2/22/13	1.1% \$ 1, 1,

\$ 3,6

		Total Utilities	\$ 9,0
		FOTAL SENIOR SECURED FLOATING RATE	
		LOAN INTERESTS	
		(Cost \$457,907,775) 	\$435,4
The accompanying notes are	e an integral par	t of these financial statements.	
Pionee	r Floating Rate T	rust Semiannual Report 5/31/11 29	
Schedule of Investments	5/31/11 (unaudite	ed) (continued)	
Principal	 S&P/Moody's		
Amount	Ratings		
USD (\$)	(unaudited)		
		CLAIMS 0.0% of Net Assets	
		CAPITAL GOODS 0.0%	
		Aerospace & Defense 0.0%	
1,200,000(a)(e)(g)	B+/B1	Northwest Airlines, Inc., ALPA Claim-Escr	ow, 0.0%
2,500,000(a)(e)(g)	B+/B1	Northwest Airlines, Inc., Bell Atlantic Claim-Escrow, 0.0%	
2,500,000(a)(e)(g)	B+/B1	Northwest Airlines, Inc., EDC Claim-Escro	w. 0.0%
2,130,600(a)(e)(g)	B+/B1	Northwest Airlines, Inc., Flight Attendan	
•		Claim-Escrow, 0.0%	
1,500,000(a)(e)(g)	B+/B1	Northwest Airlines, Inc., GE Claim-Escrow	
1,264,500(a)(e)(g)	B+/B1	Northwest Airlines, Inc., IAM Claim-Escro	w, 0.0%
1,404,900(a)(e)(g)	CCC+/B1	Northwest Airlines, Inc., Retiree Claim-Escrow, 0.0%	
		Total Capital Goods	
		TOTAL CLAIMS (Cost \$0)	
		CORPORATE NOTES 11.4% of Net Assets	
		ENERGY 1.0%	
		Oil & Gas Drilling 0.2%	
600,000	B-/B3	Offshore Group Investments, Ltd., 11.5%,	8/1/15
2 400 000	DD /D1	Oil & Gas Exploration & Production 0.8	9
2,490,000	BB-/B1	Denbury Resources, Inc., 8.25%, 2/15/20	
		Total Energy	
		MATERIALS 1.1%	
		Paper Packaging 0.3%	
1,000,000(b)	B/B1 	Berry Plastics Corp., 5.028%, 2/15/15	
		Paper Products 0.8%	
1,750,000	B+/B1	Appleton Papers, Inc., 10.5%, 6/15/15 (14	4A)
650,000	В/В3	Exopack Holding Corp., 11.25%, 2/1/14	

		Total Materials		
550,000 1,850,000	BBB-/Ba3 BB-/Ba3	CAPITAL GOODS 1.1% Aerospace & Defense 0.8% Digitalglobe, Inc., 10.5%, 5/1/14 Spirit AeroSystems, Inc., 7.5%, 10/1/17		
1,000,000	B+/B3	Construction & Farm Machinery & Heavy Trucks Manitowoc Co., Inc., 9.5%, 2/15/18		0.3%
		Total Capital Goods		
The accompanying notes ar		t of these financial statements. ual Report 5/31/11		
Principal Amount JSD (\$)	S&P/Moody's Ratings (unaudited)		 Va	lue
1,000,000	BB-/Ba3	CONSUMER DURABLES & APPAREL 0.3% Housewares & Specialties 0.3% Jarden Corp., 8.0%, 5/1/16	\$	1,0
		Total Consumer Durables & Apparel	\$	1,0
936,000	B+/B2	MEDIA 0.3% Advertising 0.3% MDC Partners, Inc., 11.0%, 11/1/16	\$	1,0
		Total Media	\$	1,0
1,825,000	BB+/Ba2	RETAILING 0.6% Catalog Retail 0.6% QVC, Inc., 7.5%, 10/1/19 (144A)	\$	1,9
		Total Retailing	\$	1,9
9,429,000(a)	NR/NR	PHARMACEUTICALS & BIOTECHNOLOGY & LIFE SCIENCES 5.6% Pharmaceuticals 5.6% Azithromycin Royalty Sub LLC, 16.0%, 5/15/19 (144A)	\$	8,6
13,523,396(a)(d) 381,363(a)(b)(d) 1,330,248(a)(d) 1,496,355(a)(d)	NR/NR NR/NR NR/NR NR/NR	Celtic Pharma Phinco B.V., 17.0%, 6/15/12 (144A) Pharma VI, 5.559%, 10/15/14 (144A) Pharma X, 15.5%, 3/30/17 (144A) TCD Pharma, 16.0%, 4/15/24 (144A)		6,7 3 1,3
. , , , , , , , , , , , , , , ,		Total Pharmaceuticals & Biotechnology & Life Sciences	 \$	18,3

DIVERSIFIED FINANCIALS -- 0.4%

200,000	BBB/Baa1	Consumer Finance 0.1% Capital One Financial Corp., 7.375%, 5/23/14	\$ 2
500,000(b) 500,000(b)	BB+/NR BB/NR	Other Diversified Financial Services 0.3% Lodestone Re, Ltd., 6.045%, 1/8/14 (144A) Lodestone Re, Ltd., 8.28%, 5/17/13 (144A)	\$ 4
			\$ 9
		Total Diversified Financials	\$ 1,2
500,000(b) 600,000(b)	BB-/NR BB-/NR	INSURANCE 0.3% Reinsurance 0.3% Mystic Re, Ltd., 10.310%, 6/7/11 (144A) Residential Reinsurance 2008, Ltd., 7.060%, 6/6/11 (144A)	\$ 5
		Total Insurance	\$ 1,0
1,000,000(b)	NR/B3	REAL ESTATE 0.6% Real Estate Services 0.3% Valais Re, Ltd., 14.810%, 6/6/11 (144A)	\$ 9

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 31

Schedule of Investments | 5/31/11 (unaudited) (continued)

Principal Amount USD (\$)				lue
750 , 000	BBB-/Baa2	Specialized Real Estate Investment Trusts 0. Hospitality Properties Trust, 7.875%, 8/15/14	.3%	
		Total Real Estate	\$	1,827,787
300,000	BB/Ba2	TELECOMMUNICATION SERVICES 0.1% Integrated Telecommunication Services 0.1% Frontier Communications Corp., 8.25%, 5/1/14	\$	332,250
		Total Telecommunication Services	\$	332,250
		TOTAL CORPORATE NOTES (Cost \$43,497,270)	\$	37,582,750

COMMON STOCKS -- 8.0% of Net Assets ENERGY -- 0.0%

138(a)(e)(g) 130,056(a)(e)(g)	Oil & Gas Drilling 0.0% TARH E&P Holdings GP, LLP Class A Membership Interest TARH E&P Holdings LP, Class A	\$	1
130,030 (a) (e) (g)	Partnership Interest		1,301
		\$	1,302
213,605(e)(g)	Oil & Gas Equipment & Services 0.0% Value Creation, Inc.	\$	49,129
	Total Energy	\$	50,431
18,750 (g)	MATERIALS 0.2% Commodity Chemicals 0.2% Georgia Gulf Corp.	 \$	531,375
_0,.00(9)	Total Materials		531,375
3,514(g)	TRANSPORTATION 0.1% Airlines 0.0% Delta Airlines, Inc.	\$	35,421
12,887(g)	Trucking 0.1% SIRVA Worldwide, Inc.	\$ 	193,305
	Total Transportation	\$	228,726
829 (g)	AUTOMOBILES & COMPONENTS 6.1% Auto Parts & Equipment 6.1% Delphi DIP Holdco LLP, Class B Subscription	\$ 2	0,279,412
	Total Automobiles & Components	\$ 2	0,279,412
569 (g)	CONSUMER DURABLES & APPAREL 0.0% Apparel, Accessories & Luxury Goods 0.0% Orchard Brands Corp.	\$	1,280
	Total Consumer Durables & Apparel	\$	1,280

The accompanying notes are an integral part of these financial statements.

32 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Shares		Val	.ue
1,306(e)(g) 9(e)(g)	CONSUMER SERVICES 0.2% Leisure Facilities 0.2% Lake at Las Vegas A Shares Lake at Las Vegas B Shares	\$	610,6 4,2
	Total Consumer Services	\$ 	614,9

MEDIA -- 1.3% Broadcasting -- 0.3%

376(g)	New Young Broadcasting Holdings Co.	\$	1,081,
140,010(g)	Movies & Entertainment 1.0% Metro-Goldwyn-Mayer, Inc.	\$	3,185,
	Total Media	\$	4,266,
15,034(g)	HEALTH CARE EQUIPMENT & SERVICES 0.0% Health Care Services 0.0% CCS Medical, Inc.	\$	150 ,
	Total Health Care Equipment & Services	\$	150 ,
57,813(g)	TELECOMMUNICATION SERVICES 0.1% Alternative Carriers 0.1% Clearwire Corp.	\$	265 ,
	Total Telecommunication Services	\$	265 ,
1,589(a)(e)(g)	UTILITIES 0.0% Electric Utilities 0.0% GBGH, LLC Membership Interest Total Utilities	\$	
	TOTAL COMMON STOCKS (Cost \$11,933,741)	\$	26,388,
153,554(a)(g)	CONVERTIBLE PREFERRED STOCK 0.4% of Net Asset PHARMACEUTICALS, BIOTECHNOLOGY & LIFE SCIENCES - Biotechnology 0.4% Molecular Insight Pharmaceuticals, Inc.	- 0	.4% 1,305,
133,334 (a) (g)	Total Pharmaceuticals, Biotechnology & Life Sciences		1,305,
	TOTAL CONVERTIBLE PREFERRED STOCK (Cost \$1,305,209)	\$	1,305,
4,995,000(e)(g)	LIQUIDATING TRUSTS 0.0% of Net Assets ENERGY 0.0% Oil & Gas Drilling 0.0% Crusader Energy Group, Inc., Liquidating Trust	\$	
	Total Energy	 \$	

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 33

Schedule of Investments | 5/31/11 (unaudited) (continued)

Shares Value

3,377,886(e)(g)	Hotels, Resorts & Cruise Lines 0.0% Yellowstone Mountain Club LLC, Liquidating Trust	\$
	Total Consumer Services	\$
	TOTAL LIQUIDATING TRUSTS (Cost \$0)	\$
38 (e) (g) 52 (e) (g) 58 (e) (g) 66 (e) (g) 75 (e) (g)	RIGHTS/WARRANTS 0.9% of Net Assets CONSUMER SERVICES 0.0% Leisure Facilities 0.0% Lake at Las Vegas Series C, Expires 7/15/15 Lake at Las Vegas Series D, Expires 7/15/15 Lake at Las Vegas Series E, Expires 7/15/15 Lake at Las Vegas Series F, Expires 7/15/15 Lake at Las Vegas Series G, Expires 7/15/15	\$
	Total Consumer Services	\$ \$ \$
1,018(g)	MEDIA 0.9% Broadcasting 0.9% New Young Broadcasting Holdings Co., Expires 12/1/24	\$ 2,926,750
	Total Media TELECOMMUNICATION SERVICES 0.0% TOTAL RIGHTS/WARRANTS (Cost \$2,002,317)	\$ 2,926,750 \$ \$ 2,926,750
	TOTAL INVESTMENTS IN SECURITIES 155.3% (Cost \$523,122,216)(h)	\$ 510,865,685
	OTHER ASSETS AND LIABILITIES 0.2%	\$ 649,176
	PREFERRED SHARES AT REDEMPTION VALUE, INCLUDING DIVIDENDS PAYABLE (55.5)%	\$(182,478,644)
	NET ASSETS APPLICABLE TO COMMON SHAREOWNERS 100.0%	\$ 329,036,217

- NR Security not rated by S&P or Moody's.
- * Senior secured floating rate loan interests in which the Trust invests generally pay interest at rates that are periodically redetermined by reference to a base lending rate plus a premium. These base lending rates are generally (i) the lending rate offered by one or more major European banks, such as LIBOR (London InterBank Offered Rate), (ii) the prime rate offered by one or more major United States banks, (iii) the certificate of deposit or (iv) other base lending rates used by commercial lenders. The interest rate shown is the rate accruing at May 31, 2011.
- (144A) Security is exempt from registration under Rule 144A of the Securities Act of 1933. Such securities may be resold normally to qualified institutional buyers in a transaction exempt from registration. At May 31, 2011, the value of these securities amounted to \$39,573,459 or 12.0% of total net assets applicable to common shareowners.

The accompanying notes are an integral part of these financial statements.

- 34 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11
- (a) Indicates a security that has been deemed illiquid. The aggregate cost of illiquid securities is \$61,933,952. The aggregate fair value of \$37,897,269 represents 11.5% of the total net assets applicable to common shareowners.
- (b) Floating Rate Note. The rate shown is the coupon rate at May 31, 2011.
- (c) Security is in default and is non-income producing.
- (d) Payment-in-Kind (PIK) security which may pay interest in the form of additional principal.
- (e) Security is valued using fair value methods (other than prices supplied by independent pricing services). (See Note 1A)
- (f) The company and agent bank are in the process of negotiating forbearance.
- (g) Non-income producing.
- (h) At May 31, 2011, the net unrealized loss on investments based on cost for federal income tax purposes of \$523,526,264 was as follows:

Aggregate gross unrealized gain for all investments	
in which there is an excess of value over tax cost	\$ 30,347,482
Aggregate gross unrealized loss for all investments	
in which there is an excess of tax cost over value	(43,008,061)
Net unrealized loss	\$(12,660,579)
	=========

For financial reporting purposes net unrealized loss on investments was \$12,256,531 and cost of investments aggregated \$523,122,216.

Purchases and sales of securities (excluding temporary cash investments) for the period ended May 31, 2011, aggregated \$152,276,389 and \$147,193,076, respectively.

Glossary of Terms:

LC -- Letter of Credit

Principal amounts are denominated in U.S. dollars unless otherwise noted.

AUD -- Australian Dollar EURO -- Euro

Various inputs are used in determining the value of the Trust's investments. These inputs are summarized in the three broad levels listed below.

Highest priority is given to Level 1 inputs and lowest priority is given to Level 3.

Level 1 -- quoted prices in active markets for identical securities

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

Generally, equity securities are categorized as Level 1, fixed income securities and senior loans are categorized as Level 2 and securities valued using fair value methods (See Note 1A) are categorized as Level 3.

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 35

Schedule of Investments | 5/31/11 (unaudited) (continued)

The following is a summary of the inputs used as of May 31, 2011, in valuing the Trust's investments:

	Level 1	Level 2	Level 3	Total
Collateralized loan obligations	\$	\$	\$ 7,211,495	\$ 7,211,495
Senior secured floating rate loan				
interests (oil & gas drilling)		1,114,666	1,406,901	2,521,567
Senior secured floating rate loan				
interests (cable & satellite)		18,651,578	9,143,646	27,795,224
Senior secured floating rate loan		F 041 000	125 606	E 276 70E
interests (electric utilities)		5,241,029	135,696	5,376,725
Senior secured floating rate loan interests (other industries)		399,757,300		399,757,300
Claims		399, 131, 300		399, 131, 300
Corporate notes (pharmaceuticals)			18,381,754	18,381,754
Corporate notes (other industries)		19,200,996		19,200,996
Common stock (oil & gas drilling)			1,302	1,302
Common stock (oil & gas equipment			,	,
& services)			49,129	49,129
Common stock (leisure facilities)			614,918	614,918
Common stock (electric utilities)			16	16
Common stock (other industries)	832,736	24,890,564		25,723,300
Convertible preferred stock		1,305,209		1,305,209
Liquidating trust				
Rights/Warrants		2,926,750		2,926,750
Total	\$832 , 736	\$473,088,092	\$36,944,857	\$510,865,685
Other Financial Instruments*	\$ 2,305	\$ 9 , 594	\$	\$ 11 , 899

^{*} Other financial instruments include foreign exchange contracts and net unrealized appreciation on unfunded loan commitments.

The accompanying notes are an integral part of these financial statements.

36 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

The following is a reconciliation of assets valued using significant unobservable inputs (level 3):

	Balance as of 11/30/10		Change in unrealized appreciation (depreciation) (1)	purchases	Trans and o Level
					·- !
Collateralized loan					,
obligations	\$ 4,928,964	\$	\$ 2,282,531	\$	\$
Senior secured floating					,
rate loan interests			(5.460)		ļ
(oil & gas drilling)	1,360,984		(1,462)	47,379	ļ
Senior secured floating					,
rate loan interests	10 500 000		12 266 2021		ļ
(cable & satellite)	10,509,939		(1,366,293)		ļ
Senior secured floating					ļ
rate loan interests	222 042	20 604	(150 500)	(60.264)	ļ
	333,042	30,604	(158,586)	(69,364)	ļ
Claims					ļ
Corporate notes	4 201 A15	/1 71/ 226\	1 05/ 1/0	/	ļ
(biotechnology)	4,391,413	(1,/14,330)	1,954,140	(4,631,219)	ļ
Corporate notes	10 005 256	6 072	700 076	770 440	ļ
(pharmaceuticals)	16,805,356	0,013	799 , 876	770,449	I
Common stock (oil &	1,301		1		
gas drilling)	1,301		Τ	==	
Common stock (oil & gas equipment & services)	49,129				
Common stock (leisure	43 , 143				
facilities)	614,918				
Common stock	014, 210				
(broadcasting)	563,248		517,752		(1,
Common stock (electric	303,210		J±1,152		\ ± /
utilities)	16				
	1,524,964		1,401,786		(2,
Ending balance	\$41,083,276	\$ (1,677,659)	\$ 5,429,745	\$(3,882,755)	\$ (4,

⁽¹⁾ Unrealized appreciation (depreciation) on these securities is included in the change in unrealized gain (loss) from investments in the Statement of Operations.

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 37

Statement of Assets and Liabilities | 5/31/11 (unaudited)

ASSETS:

^{*} Transfers are calculated beginning of period.

Investments in securities, at value (cost \$523,122,216) Cash Foreign currencies, at value (cost \$3,355,211) Receivables	\$	510,865,685 16,651,418 3,385,128
Interest Reinvestment of distributions Forward foreign currency settlement hedge contracts net Appreciation on unfunded loan commitments net Bridge loan commitment fees Prepaid expenses		4,314,706 130,445 2,305 9,594 35,375 57,987
Total assets	\$	535,452,643
LIABILITIES: Payables		
Investment securities purchased Unamortized facility fees Due to affiliates Accrued expenses Other liabilities	\$	22,934,327 26,185 573,789 293,617 109,864
Total liabilities	\$	23,937,782
PREFERRED SHARES AT REDEMPTION VALUE: \$25,000 liquidation value per share applicable to 7,298 shares, including dividends payable of \$28,644	\$	182,478,644
NET ASSETS APPLICABLE TO COMMON SHAREOWNERS: Paid-in capital Undistributed net investment income	\$	463,679,405 5,639,742
Accumulated net realized loss on investments and foreign currency transactions Net unrealized loss on investments and unfunded loan commitments Net unrealized gain on foreign currency assets and liabilities		(128,068,215) (12,246,937)
denominated in foreign currencies		32,222 329,036,217
Net assets applicable to common shareowners	ې 	
NET ASSET VALUE PER COMMON SHARE: No par value, (unlimited number of shares authorized) Based on \$329,036,217/24,592,439 common shares	\$ =====	13.38

The accompanying notes are an integral part of these financial statements.

38 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Statement of Operations (unaudited)

For the Six Months Ended 5/31/11

INVESTMENT INCOME:

Interest \$ 17,562,854
Facility and other fees \$ 747,777

Total investment income \$ 18,310

EXPENSES: Management fees Administrative reimbursements Transfer agent fees and expenses Shareowner communication expenses Auction agent fees Custodian fees Registration fees Professional fees	\$	237,916 6,574		
Administrative reimbursements Transfer agent fees and expenses Shareowner communication expenses Auction agent fees Custodian fees Registration fees		237,916 6,574		
Shareowner communication expenses Auction agent fees Custodian fees Registration fees		•		
Auction agent fees Custodian fees Registration fees				
Custodian fees Registration fees		21,422		
Registration fees		242,903		
		19,826		
Professional fees		12,171		
1101633101141 1665		205,867		
Printing expenses		28,848		
Trustees' fees		8,341		
Pricing fees		38,728		
Miscellaneous		93,981		
Total expenses			\$	2,6
Net investment income				15 , 6
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS				
AND FOREIGN CURRENCY TRANSACTIONS:				
Net realized gain (loss) from:				
Investments	\$	(5,834,135)		
Forward foreign currency contracts and other assets and		(0,00,00		
liabilities denominated in foreign currencies		9,129	\$	(5,8
		~,= : 	· 	
Change in net unrealized gain (loss) on:				
Investments	\$	23,246,601		
Unfunded loan commitments	•	244,902		
Foreign currency contracts and other assets and liabilities		4 1 1 / 2		
denominated in foreign currencies		33,364	\$	23,5
Net gain on investments and foreign currency transactions			\$	17,
DIVIDENDS AND DISTRIBUTIONS TO PREFERRED SHAREOWNERS FROM NET INVESTMENT INCOME:			\$	(1,3
Net increase in net assets applicable to common shareowners				
resulting from operations			\$	31,
	======	=========	=====	:====
The accompanying notes are an integral part of these financial	stateme	ents.		
Pioneer Floating Rate Trust Semiannual Rep	port !	5/31/11 39		

FROM OPERATIONS:

Net investment income

Net realized loss on investments and foreign currency

\$ 15,635,362 \$ 28,54

transactions Change in net unrealized gain (loss) on investments, unfunded		(5,825,006)	(30,83
loan commitments and foreign currency transactions Distributions to preferred shareowners from net investment		23,524,867	53 , 94
income		(1,363,503)	 (2,78
Net increase in net assets applicable to common shareowners resulting from operations	\$	31,971,720	\$ 48 , 86
DISTRIBUTIONS TO COMMON SHAREOWNERS: Net investment income		410.005.000	401 60
(\$0.44 and \$0.883 per share, respectively)	Ş 	(10,806,323)	\$ (21,60
Total dividends and distributions to common shareowners	\$	(10,806,323)	\$ (21,60
FROM TRUST SHARE TRANSACTIONS: Reinvestment of distributions	\$	733,815	\$ 1,30
Net increase in net assets applicable to common shareowners resulting from Trust share transactions	\$	733,815	\$ 1,30
Net increase in net assets applicable to common shareowners NET ASSETS APPLICABLE TO COMMON SHAREOWNERS:	\$	21,899,212	\$ 28 , 57
Beginning of period	\$	307,137,005	\$ 278,56
End of period	\$	329,036,217	\$ 307,13
Undistributed net investment income	\$	5,639,742	\$ 2 , 17

The accompanying notes are an integral part of these financial statements.

40 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Financial Highlights

	Six Months Ended 5/31/11 (unaudited)			
Per Common Share Operating Performance Net asset value, beginning of period	\$	12.52	\$	11.40
<pre>Increase (decrease) from investment operations:(a)</pre>				
Net investment income	\$	0.64	\$	1.17
Net realized and unrealized gain (loss) on investments and foreign				
currency transactions		0.72		0.94
Dividends and distributions to preferred shareowners from:				
Net investment income		(0.06)		(0.11)
Net realized gains				
Net increase (decrease) from investment operations	\$	1.30	\$	2.00
Distributions to common shareowners from:				

Capital charge with respect to issuance of:				
Preferred shares				
Net increase (decrease) in net asset value	\$	0.86	\$	1.12
Net asset value, end of period(c)	\$	13.38	\$	12.52
Market value, end of period(c)	\$	14.20	\$	13.16
Total return at market value(d)	===	11.57%	==	23.63%
Ratios to average net assets of common shareowners Net expenses(e)		1.67%(f)		1.74%
Net investment income before preferred share dividends		9.76%(f)		9.66%
	Yea			 ear
		ded /30/08		ided ./30/07
Per Common Share Operating Performance Net asset value, beginning of period	\$	18.07	\$	19.66
Increase (decrease) from investment operations:(a)				
Net investment income Net realized and unrealized gain (loss) on investments and foreign	\$	1.88	\$	2.30
currency transactions Dividends and distributions to preferred shareowners from:		(8.88)		(1.47)
Net investment income		(0.37)		(0.51)
Net realized gains		(0.03)		0.00(
Net increase (decrease) from investment operations Distributions to common shareowners from:	\$	(7.40)	\$	0.32
Net investment income		(1.70)		(1.91)
Net realized gains		(0.35)		0.00(
Tax return of capital Capital charge with respect to issuance of:				
Preferred shares				
Net increase (decrease) in net asset value	\$	(9.45)	\$	(1.59)
Net asset value, end of period(c)	\$			18.07
Market value, end of period(c)	\$	6.90	\$	16.79
Total return at market value(d)		(52.10)%		(2.02)
Ratios to average net assets of common shareowners Net expenses(e)		1.60%		1.40%
Net investment income before preferred share dividends		12.61%		11.92%

The accompanying notes are an integral part of these financial statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 41

Financial Highlights (continued)

Net investment income

Net realized gains Tax return of capital (0.44)

(0.88)

	Six Months Ended 5/31/11 (unaudited)	
Preferred share dividends	0 85%(f)	0.94%
Net investment income available to common shareowners	, ,	8.72%
Portfolio turnover	29%(f)	
Net assets of common shareowners, end of period (in thousands)	\$329,036	\$307,137
Preferred shares outstanding (in thousands)	\$182,450	\$182,450
Asset coverage per preferred share, end of period	\$ 80,089	\$ 67 , 090
Average market value per preferred share(g)	\$ 25,000	\$ 25,000
Liquidation value, including dividends payable, per preferred share	\$ 25,004	\$ 25,005
Ratios to average net assets of common shareowners before waivers and reimbursement of expenses		
Net expenses(h)	1.67%(f)	1.74%
Net investment income before preferred share dividends	9.76%(f)	9.66%
Preferred share dividends	0.85%(f)	0.94%
Net investment income available to common shareowners	8.91%(f) =======	8.72%

	Year Ended 11/30/09	Year Ended 11/30/08
Preferred share dividends	1.26%	2.47%
Net investment income available to common shareowners	10.53%	10.14%
Portfolio turnover	32%	31%
Net assets of common shareowners, end of period (in thousands)	\$278 , 565	\$210,617
Preferred shares outstanding (in thousands)	\$182 , 450	\$204,475
Asset coverage per preferred share, end of period	\$ 63,175	\$ 50 , 758
Average market value per preferred share(g)	\$ 25,000	\$ 25,000
Liquidation value, including dividends payable, per preferred share	\$ 25,005	\$ 25 , 007
Ratios to average net assets of common shareowners before waivers and reimbursement of expenses		
Net expenses(h)	2.03%	1.60%
Net investment income before preferred share dividends	11.79%	12.61%
Preferred share dividends	1.26%	2.47%
Net investment income available to common shareowners	10.53%	10.14%

- (a) The per common share data presented above is based upon the average common shares outstanding for the periods presented.
- (b) Amount is less than \$0.01 per share.
- (c) Net asset value and market value are published in Barron's on Saturday, The Wall Street Journal on Monday and The New York Times on Monday and Saturday.
- (d) Total investment return is calculated assuming a purchase of common shares at the current market value on the first day and a sale at the current market value on the last day of the periods reported. Dividends and distributions, if any, are assumed for purposes of this calculation to be reinvested at prices obtained under the Trust's dividend reinvestment plan. Total investment return does not reflect brokerage commissions. Total investment returns covering less than a full period are not annualized.

- Past performance is not a guarantee of future results.
- (e) Expense ratios do not reflect the effect of dividend payments to preferred shareowners.
- (f) Annualized.
- (g) Expense ratios do not reflect the effect of dividend payments to preferred shareowners.
- (h) Market value is redemption value without an active market.

The information above represents the operating performance data for a share of common stock outstanding, total investment return, ratios to average net assets and other supplemental data for the periods indicated. This information has been determined based upon financial information provided in the financial statements and market value data for the Trust's common shares.

The accompanying notes are an integral part of these financial statements.

42 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Notes to Financial Statements | 5/31/11 (unaudited)

1. Organization and Significant Accounting Policies

Pioneer Floating Rate Trust (the "Trust") was organized as a Delaware statutory trust on October 6, 2004. Prior to commencing operations on December 28, 2004, the Trust had no operations other than matters relating to its organization and registration as a non-diversified, closed-end management investment company under the Investment Company Act of 1940, as amended. The Trust is a diversified fund. The investment objective of the Trust is to provide a high level of current income. The Trust will, as a secondary objective, also seek preservation of capital to the extent consistent with its primary objective of high current income.

Information regarding the Trust's principal risks is contained in the Trust's original offering prospectus with additional information included in the Trust's shareowner reports issued from time to time. Please refer to those documents when considering the Trust's principal risks. At times, the Trust's investments may represent industries or industry sectors that are interrelated or have common risks, making the Trust more susceptible to any economic, political, or regulatory developments or other risks affecting those industries and sectors.

The Trust invests primarily in senior floating rate loans (Senior Loans). The Trust may also invest in other floating and variable rate instruments, including second lien loans, investment grade fixed-income debt securities and high yield, high risk corporate bonds. The Trust may also invest in below investment grade securities. Below investment grade securities are commonly referred to as "junk bonds" and are considered speculative with respect to the issuer's capacity to pay interest and repay principal. These securities involve greater risk of loss, are subject to greater price volatility, and are less liquid, especially during periods of economic uncertainty or change, than higher rated debt securities. The Trust may invest in securities of issuers that are in default or that are in bankruptcy. Additionally, the Trust may invest in "event-linked" bonds, which sometimes are referred to as "insurance-linked" or "catastrophe" bonds. The return of principal and the payment of interest on event-linked bonds are contingent on the non-occurrence of a pre-defined "trigger" event, such as a hurricane or an earthquake of a specific magnitude. In addition to the specified trigger events, event-linked bonds may expose the Trust to other risks, including but not limited to issuer (credit) default, adverse regulatory or jurisdictional interpretations and adverse tax consequences.

The Trust's investments in certain foreign markets or countries with limited or developing markets may subject the Trust to a greater degree of risk than in a

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 43

developed market. These risks include disruptive political or economic conditions and the possible imposition of adverse governmental laws or currency exchange restrictions.

The Trust is not limited in the percentage of its assets that may be invested in Senior Loans and other securities deemed to be illiquid. Illiquid securities may be difficult to dispose of at a price reflective of their value at the times when the Trust believes it is desirable to do so and their market price is generally more volatile than that of more liquid securities. Illiquid securities are also more difficult to value and investment of the Trust's assets in illiquid securities may restrict the Trust's ability to take advantage of market opportunities.

The Trust's financial statements have been prepared in conformity with U.S. generally accepted accounting principles that require the management of the Trust to, among other things, make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of income, expenses and gains and losses on investments during the reporting period. Actual results could differ from those estimates.

The following is a summary of significant accounting policies followed by the Trust in preparation of its financial statements, which are consistent with those policies generally accepted in the investment company industry:

A. Security Valuation

Security transactions are recorded as of trade date. Senior floating rate loan interests (Senior Loans) are valued in accordance with guidelines established by the Board of Trustees at the mean between the last available bid and asked prices from one or more brokers or dealers as obtained from Loan Pricing Corporation. Senior loans for which no reliable price quotes are available will be valued by Loan Pricing Corporation through the use of pricing matrices to determine valuations. Fixed-income securities with remaining maturity of more than sixty days are valued at prices supplied by independent pricing services, which consider such factors as market prices, market events, quotations from one or more brokers, Treasury spreads, yields, maturities and ratings. Valuations may be supplemented by dealers and other sources, as required. Equity securities that have traded on an exchange are valued at the last sale price on the principal exchange where they are traded. Equity securities that have not traded on the date of valuation or securities for which sale prices are not available, generally are valued using the mean between the last bid and asked prices. Equity securities or loan interests for which independent pricing services are unable to supply prices or for which market prices and/or quotations are not readily available or are considered to be unreliable are valued using fair value methods pursuant to procedures adopted by the Board of Trustees.

44 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Trading in foreign securities is substantially completed each day at various times prior to the close of the NYSE. The values of such securities used in

computing the net asset value of the Trust's shares are determined as of such times.

The Trust may use fair value methods if it is determined that a significant event has occurred after the close of the exchange or market on which the security trades and prior to the determination of the Trust's net asset value. Thus, the valuation of the Trust's securities may differ from exchange prices.

At May 31, 2011, twenty-six securities were valued using fair value methods (in addition to securities valued using prices supplied by independent pricing services) representing 3.4% of net assets applicable to common shareowners. Inputs used when applying fair value methods to value a security may include credit ratings, the financial condition of the company, current market conditions and comparable securities. Short-term fixed income securities with remaining maturities of sixty days or less generally are valued at amortized cost. Money market mutual funds are valued at net asset value.

Discounts and premiums on debt securities are accreted or amortized, respectively, daily, into interest income on an effective yield to maturity basis with a corresponding increase or decrease in the cost basis of the security. Interest income, including income on interest bearing cash accounts, is recorded on an accrual basis, net of unrecoverable foreign taxes withheld at the applicable country rates.

Dividend income is recorded on the ex-dividend date, except that certain dividends from foreign securities where the ex-dividend date may have passed are recorded as soon as the Trust becomes aware of the ex-dividend data in the exercise of reasonable diligence.

Gains and losses on sales of investments are calculated on the identified cost method for both financial reporting and federal income tax purposes.

B. Foreign Currency Translation

The books and records of the Trust are maintained in U.S. dollars. Amounts denominated in foreign currencies are translated into U.S. dollars using current exchange rates.

Net realized gains and losses on foreign currency transactions, if any, represent, among other things, the net realized gains and losses on foreign currency contracts, disposition of foreign currencies and the difference between the amount of income accrued and the U.S. dollars actually received. Further, the effects of changes in foreign currency exchange rates on investments are not segregated in the Statement of Operations from the effects of changes in market prices of those securities but are included with the net realized and unrealized gain or loss on investments.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 45

C. Forward Foreign Currency Contracts

The Trust may enter into forward foreign currency contracts (contracts) for the purchase or sale of a specific foreign currency at a fixed price on a future date. All contracts are marked to market daily at the applicable exchange rates, and any resulting unrealized gains or losses are recorded in the Trust's financial statements. The Trust records realized gains and losses at the time a portfolio hedge is offset by entry into a closing transaction or extinguished by delivery of the currency. Risks may arise upon entering

into these contracts from the potential inability of counterparties to meet the terms of the contracts and from unanticipated movements in the value of foreign currencies relative to the U.S. dollar (see Note 5).

D. Federal Income Taxes

It is the Trust's policy to comply with the requirements of the Internal Revenue Code applicable to regulated investment companies and to distribute all of its taxable income and net realized capital gains, if any, to its shareowners. Therefore, no federal income tax provision is required. Tax returns for the prior three fiscal years remain subject to examination by tax authorities.

The amounts and characterizations of distributions to shareowners for financial reporting purposes are determined in accordance with federal income tax rules. Therefore, the sources of the Trust's distributions may be shown in the accompanying financial statements as from or in excess of net investment income or as from net realized gain (loss) on investments and foreign currency transactions, or as from paid-in capital, depending on the type of book/tax differences that may exist.

The tax character of current year distributions paid to common and preferred shareowners will be determined at the end of the fiscal year. Distributions paid during the year ended November 30, 2010 was as follows:

	2010
Distributions paid from: Ordinary income	\$24,387,676
Total distribution	\$24,387,676

The following shows the components of distributable earnings on a federal income tax basis at November 30, 2010:

46 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

	2010
Distributable earnings:	
Capital loss carryforward	\$(101,854,514)
Post-October loss deferred	(20,412,580)
Distributions payable	(37,997)
Unrealized depreciation	(35,813,786)
Total	\$(158,118,877)

The difference between book-basis and tax-basis unrealized depreciation is

primarily attributable to the difference between book and tax amortization methods for premiums and discounts on fixed-income securities, book/tax differences in the accrual of income on securities in default and the realization of unrealized gain on investments in passive foreign investment companies.

E. Repurchase Agreements

With respect to repurchase agreements entered into by the Trust, the value of the underlying securities (collateral), including accrued interest, is required to be equal to or in excess of the repurchase price. The collateral for all repurchase agreements is held in safekeeping in the customer-only account of the Trust's custodian or a subcustodian of the Trust. The Trust's investment adviser, Pioneer Investment Management, Inc. (PIM), is responsible for determining that the value of the collateral remains at least equal to the repurchase price.

F. Automatic Dividend Reinvestment Plan

All common shareowners whose shares are registered in their own names automatically participate in the Automatic Dividend Reinvestment Plan (the Plan), under which participants receive all dividends and capital gain distributions (collectively, dividends) in full and fractional common shares of the Trust in lieu of cash. Shareowners may elect not to participate in the Plan. Shareowners not participating in the Plan receive all dividends and capital gain distributions in cash. Participation in the Plan is completely voluntary and may be terminated or resumed at any time without penalty by notifying American Stock Transfer & Trust Company, the agent for shareowners in administering the Plan (the Plan Agent), in writing prior to any dividend record date; otherwise such termination or resumption will be effective with respect to any subsequently declared dividend or other distribution.

If a shareowner's shares are held in the name of a brokerage firm, bank or other nominee, the shareowner can ask the firm or nominee to participate in the Plan on the shareowner's behalf. If the firm or nominee does not offer the Plan, dividends will be paid in cash to the shareowner of record. A firm or nominee may reinvest a shareowner's cash dividend in common shares of the Trust on terms that differ from the terms of the plan.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 47

Whenever the Trust declares a dividend on common shares payable in cash, participants in the Plan will receive the equivalent in common shares acquired by the Plan Agent either (i) through receipt of additional unissued but authorized common shares from the Trust or (ii) by purchase of outstanding common shares on the New York Stock Exchange or elsewhere. If, on the payment date for any dividend the net asset value per common share is equal to or less than the market price per share plus estimated brokerage trading fees (market premium), the Plan Agent will invest the dividend amount in newly issued common shares. The number of newly issued common shares to be credited to each account will be determined by dividing the dollar amount of the dividend by the net asset value per common share on the date the shares are issued, provided that the maximum discount from the then current market price per share on the date of issuance does not exceed 5%. If, on the payment date for any dividend, the net asset value per common share is greater than the market value (market discount), the Plan Agent will invest the dividend amount in common shares acquired in open-market purchases. There are no brokerage charges with respect to newly issued common shares. However, each participant will pay a pro rata share of brokerage trading fees incurred with respect to the Plan Agent's open-market purchases. Participating in the

Plan does not relieve shareowners from any federal, state or local taxes which may be due on dividends paid in any taxable year. Shareowners holding Plan shares in a brokerage account may not be able to transfer the shares to another broker and continue to participate in the Plan.

2. Management Agreement

PIM, a wholly owned indirect subsidiary of UniCredit S.p.A. (UniCredit), manages the Trust's portfolio. Management fees payable under the Trust's Advisory Agreement with PIM are calculated daily at the annual rate of 0.70% of the Trust's average daily managed assets. "Managed assets" means (a) the total assets of the Trust, including any form of investment leverage, minus (b) all accrued liabilities incurred in the normal course of operations, which shall not include any liabilities or obligations attributable to investment leverage obtained through (i) indebtedness of any type (including, without limitation, borrowing through a credit facility of the issuance of debt securities), (ii) the issuance of preferred stock or other similar preference securities, and/or (iii) any other means. For the six months ended May 31, 2011, the net management fee was 0.70% of the Trust's average daily managed assets, which was equivalent to 1.10% of the Trust's average daily net assets attributable to the common shareowners.

In addition, under PIM's management and administration agreements, certain other services and costs are paid by PIM and reimbursed by the Trust. At May 31, 2011, \$573,789 was payable to PIM related to management costs,

48 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

administrative costs and certain other reimbursements and is included in "Due to affiliates" on the Statement of Assets and Liabilities.

Effective September 1, 2010, PIM has retained State Street Bank and Trust Company (State Street) to provide certain administrative and accounting services to the Trust on its behalf. For such services, PIM pays State Street a monthly fee at an annual rate of 0.07% of the Trust's average daily managed assets up to \$500 million and 0.03% for average daily managed assets in excess of \$500 million, subject to a minimum monthly fee of \$10,000. Previously, PIM had retained Princeton Administrators, LLC (Princeton) to provide such services. PIM paid Princeton a monthly fee at an annual rate of 0.07% of the Trust's average daily managed assets up to \$500 million and 0.03% for average daily managed assets in excess of \$500 million, subject to a minimum monthly fee of \$10,000. Neither State Street nor Princeton received compensation directly from the Trust for providing such services.

3. Transfer Agents

Pioneer Investment Management Shareholder Services, Inc. (PIMSS), a wholly owned indirect subsidiary of UniCredit, through a sub-transfer agency agreement with American Stock Transfer & Trust Company, provides substantially all transfer agent and shareowner services related to the Trust's common shares at negotiated rates. Deutsche Bank Trust Company Americas (Deutsche Bank) is the transfer agent, registrar, dividend paying agent and auction agent with respect to the Trust's Auction Market Preferred Shares (AMPS). The Trust pays Deutsche Bank an annual fee, as is agreed to from time to time by the Trust and Deutsche Bank, for providing such services.

In addition, the Trust reimburses PIMSS for out-of-pocket expenses incurred by PIMSS related to shareowner communications activities such as proxy and statement mailings and outgoing phone calls.

4. Expense Offset Arrangement

The Trust has entered into an arrangement with its custodian whereby credits realized as a result of uninvested cash balances are used to reduce a portion of the Trust's custodian expenses. For the six months ended May 31, 2011, the Trust expenses were not reduced under such arrangement.

5. Forward Foreign Currency Contracts

The Trust may enter into any forward foreign currency contracts that obligate the Trust to deliver or take delivery of currencies at specified future maturity dates. Alternatively, prior to the settlement date of a forward foreign currency contract, the Trust may close out such contract by entering into an offsetting contract.

There were no open portfolio hedges on May 31, 2011.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 49

6. Unfunded Loan Commitments

As of May 31, 2011, the Trust had unfunded loan commitments of \$4,041,174, (excluding unrealized appreciation on those commitments of \$9,594 as of May 31, 2011) which could be extended at the option of the borrower, pursuant to the following loan agreements:

Borrower	Unfunded Loan Commitment
CB Richard Ellis Services, Inc., Incremental Tranche Term Loan C	\$1,000,000
CB Richard Ellis Services, Inc., Incremental Tranche Term Loan D	\$1,000,000
Excelitas Technologies Corp., Delay Draw Term Loan	\$1,000,000
Frac Tech Service, Delay Draw Term Loan	\$ 488,235
Inventive Health, Inc., Term Loan B-2	\$ 256,667
National Specialty Hospitals, Inc., Delayed Draw Term Loan	\$ 196 , 782
Physician Oncology Service LP, Delayed Draw Term Loan	\$ 99,490

7. Trust Shares

There are an unlimited number of common shares of beneficial interest authorized.

Transactions in common shares of beneficial interest for the six months ended May 31, 2011 and year ended November 30, 2010 were as follows:

	5/31/11	11/30/10
Shares outstanding at beginning of period Reinvestment of distributions	24,536,526 55,913	24,428,148 108,378
Shares outstanding at end of period	24,592,439	24,536,526

The Trust may classify or reclassify any unissued shares of beneficial interest into one or more series of preferred shares of beneficial interest. As of May 31, 2011, there were 7,298 AMPS as follows: Series M7-2,434, Series W7-2,432 and Series TH7-2,432.

Dividends on Series M7, Series W7 and Series TH7 are cumulative at a rate which is to be reset every seven days based on the results of an auction. An auction fails if there are more AMPS offered for sale than there are buyers. When an auction fails, the dividend rate for the period will be the maximum rate on the auction dates described in the prospectus for the AMPS. Preferred shareowners are not able to sell their AMPS at an auction if the auction fails. Since February 2008, the Trust's auctions related to the AMPS have failed. The maximum rate for each series is the greater of 125% of the one week LIBOR rate or the LIBOR rate plus a spread of 1.25%. Dividend rates on AMPS ranged from 1.413% to 1.505% during the six months ended May 31, 2011.

50 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

The Trust may not declare dividends or make other distributions on its common shares or purchase any such shares if, at the time of the declaration, distribution or purchase, the Trust does not comply with the asset coverage ratios described in the prospectus for the AMPS.

The AMPS are redeemable at the option of the Trust, in whole or in part, on any dividend payment date at \$25,000 per share plus any accumulated or unpaid dividends, whether or not declared. The AMPS are also subject to mandatory redemption at \$25,000 per share plus any accumulated or unpaid dividends, whether or not declared, if certain requirements relating to the composition of the assets and liabilities of the Trust as set forth in the Statement of Preferences are not satisfied.

The holders of AMPS have voting rights equal to the holders of the Trust's common shares (one vote per share) and will vote together with holders of the common shares as a single class. Holders of AMPS are also entitled to elect two of the Trust's Trustees. In addition, the Investment Company Act of 1940, as amended, requires that along with approval by shareowners that might otherwise be required, the approval of the holders of a majority of any outstanding preferred shares, voting separately as a class, would be required to (a) adopt any plan of reorganization that would adversely affect the preferred shares and (b) take any action requiring a vote of security holders, including, among other things, changes in the Trust's subclassification as a closed-end investment company or changes in its fundamental investment restrictions.

8. Pending Litigation

The Trust is currently involved in litigation matters relating to Trust investments. The Trust believes these claims are without merit and is defending them vigorously. At May 31, 2011, it is reasonably possible that adverse outcomes may result. Currently, the amount of either judgment cannot be reasonably estimated.

9. Subsequent Events

The Board of Trustees of the Trust declared on June 3, 2011 a dividend from undistributed net investment income of \$0.08 per common share payable June 30, 2011 to common shareowners of record on June 15, 2011.

Subsequent to May 31, 2011, dividends declared and paid on preferred shares totaled \$333,850 in aggregate for the three outstanding preferred share series through July 22, 2011.

In preparing these financials statements, PIM has evaluated the impact of all events and transactions for potential recognition or disclosure, and has determined that other than disclosed above, there were no subsequent events requiring recognition or disclosure in the financials statements.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 51

ADDITIONAL INFORMATION (unaudited)

During the period, there have been no material changes in the Trust's investment objective or fundamental policies that have not been approved by the shareowners. There have been no changes in the Trust's charter or By-Laws that would delay or prevent a change in control of the Trust that have not been approved by the shareowners. During the period, there have been no changes in the principal risk factors associated with investment in the Trust. There were no changes in the persons who are primarily responsible for the day-to-day management of the Trust's portfolio.

Notice is hereby given in accordance with Section 23(c) of the Investment Company Act of 1940 that the Trust may purchase, from time to time, its common shares in the open market.

52 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

Trustees, Officers and Service Providers

Trustees

John F. Cogan, Jr., Chairman
David R. Bock
Mary K. Bush
Benjamin M. Friedman
Margaret B.W. Graham
Daniel K. Kingsbury
Thomas J. Perna
Marguerite A. Piret
Stephen K. West

Investment Adviser
Pioneer Investment Management, Inc.

Custodian
Brown Brothers Harriman & Co.

Legal Counsel Bingham McCutchen LLP

Transfer Agent

Officers

John F. Cogan, Jr., President
Daniel K. Kingsbury, Executive
Vice President
Mark E. Bradley, Treasurer
Christopher J. Kelley, Secretary

Pioneer Investment Management Shareholder Services, Inc.

Shareowner Services and Sub-Transfer Agent American Stock Transfer & Trust Company

Preferred Share Auction/Transfer Agent and Registrar Deutsche Bank Trust Company Americas

Sub-Administrator State Street Bank and Trust Company

Proxy Voting Policies and Procedures of the Trust are available without charge, upon request, by calling our toll free number (1-800-225-6292). Information regarding how the Trust voted proxies relating to portfolio securities during the most recent 12-month period ended June 30 is publicly available to shareowners at www.pioneerinvestments.com. This information is also available on the Securities and Exchange Commission's web site at http://www.sec.gov.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 53

This page for your notes.

54 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

This page for your notes.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 55

This page for your notes.

56 Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

This page for your notes.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 57

This page for your notes.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

This page for your notes.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11 59

This page for your notes.

Pioneer Floating Rate Trust | Semiannual Report | 5/31/11

How to Contact Pioneer

We are pleased to offer a variety of convenient ways for you to contact us for assistance or information.

You can call American Stock Transfer & Trust Company (AST) for:

1-800-710-0935 Account Information

Or write to AST:

Write to

General inquiries, lost dividend checks, American Stock change of address, lost stock certificates, Transfer & Trust stock transfer

Operations Center 6201 15th Ave. Brooklyn, NY 11219

Dividend reinvestment plan (DRIP)

American Stock Transfer & Trust Wall Street Station P.O. Box 922 New York, NY 10269-0560

Website

www.amstock.com

For additional information, please contact your investment advisor or visit our website at www.pioneerinvestments.com.

The Trust files a complete statement of investments with the Securities and Exchange Commission for the first and third quarters for each fiscal year on Form N-Q. Shareowners may view the filed Form N-Q by visiting the Commission's web site at http://www.sec.gov. The filed form may also be viewed and copied at the Commission's Public Reference Room in Washington, DC. Information regarding the operations of the Public Reference Room may be obtained by calling 1-800-SEC-0330.

ITEM 2. CODE OF ETHICS.

(a) Disclose whether, as of the end of the period covered by the report, the registrant has adopted a code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, regardless of whether these individuals are employed by the registrant or a third party. If the registrant has not adopted such a code of ethics, explain why it has not done so.

The registrant has adopted, as of the end of the period covered by this report, a code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer and controller.

- (b) For purposes of this Item, the term "code of ethics" means written standards that are reasonably designed to deter wrongdoing and to promote:
 - (1) Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
 - (2) Full, fair, accurate, timely, and understandable disclosure in reports and documents that a registrant files with, or submits to, the Commission and in other public communications made by the registrant;
 - (3) Compliance with applicable governmental laws, rules, and regulations;
 - (4) The prompt internal reporting of violations of the code to an appropriate person or persons identified in the code; and
 - (5) Accountability for adherence to the code.
- (c) The registrant must briefly describe the nature of any amendment, during the period covered by the report, to a provision of its code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, regardless of whether these individuals are employed by the registrant or a third party, and that relates to any element of the code of ethics definition enumerated in paragraph (b) of this Item. The registrant must file a copy of any such amendment as an exhibit pursuant to Item 10(a), unless

the registrant has elected to satisfy paragraph (f) of this Item by posting its code of ethics on its website pursuant to paragraph (f)(2) of this Item, or by undertaking to provide its code of ethics to any person without charge, upon request, pursuant to paragraph (f)(3) of this Item.

The registrant has made no amendments to the code of ethics during the period covered by this report.

(d) If the registrant has, during the period covered by the report, granted a waiver, including an implicit waiver, from a provision of the code of ethics to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, regardless of whether these individuals are employed by the registrant or a third party, that relates to one or more of the items set forth in paragraph (b) of this Item, the registrant must briefly describe the nature of the waiver, the name of the person to whom the waiver was granted, and the date of the waiver.

Not applicable.

(e) If the registrant intends to satisfy the disclosure requirement under paragraph (c) or (d) of this Item regarding an amendment to, or a waiver from, a provision of its code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and that relates to any element of the code of ethics definition enumerated in paragraph (b) of this Item by posting such information on its Internet website, disclose the registrant's Internet address and such intention.

Not applicable.

- (f) The registrant must:
 - (1) File with the Commission, pursuant to Item 10(a), a copy of its code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, as an exhibit to its annual report on this Form N-CSR;
 - (2) Post the text of such code of ethics on its Internet website and disclose, in its most recent report on this Form N-CSR, its Internet address and the fact that it has posted such code of ethics on its Internet website; or
 - (3) Undertake in its most recent report on this Form N-CSR to provide to any person without charge, upon request, a copy of such code of ethics and explain the manner in which such request may be made. See Item $10\,(2)$

ITEM 3. AUDIT COMMITTEE FINANCIAL EXPERT.

- (a) (1) Disclose that the registrant's board of trustees has determined that the registrant either:
 - (i) Has at least one audit committee financial expert serving on its audit committee; or
 - (ii) Does not have an audit committee financial expert serving on its audit committee.

The registrant's Board of Trustees has determined that the registrant has at least one audit committee financial expert.

- (2) If the registrant provides the disclosure required by paragraph (a)(1)(i) of this Item, it must disclose the name of the audit committee financial expert and whether that person is "independent." In order to be considered "independent" for purposes of this Item, a member of an audit committee may not, other than in his or her capacity as a member of the audit committee, the board of trustees, or any other board committee:
 - (i) Accept directly or indirectly any consulting, advisory, or other compensatory fee from the issuer; or
 - (ii) Be an "interested person" of the investment company as defined in Section 2(a)(19) of the Act (15 U.S.C. 80a-2(a)(19)).

Ms. Marguerite A. Piret, an independent trustee, is such an audit committee financial expert.

(3) If the registrant provides the disclosure required by paragraph (a)(1) (ii) of this Item, it must explain why it does not have an audit committee financial expert.

Not applicable.

ITEM 4. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

(a) Disclose, under the caption AUDIT FEES, the aggregate fees billed for each of the last two fiscal years for professional services rendered by the principal accountant for the audit of the registrant's annual financial statements or services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements for those fiscal years.

N/A

(b) Disclose, under the caption AUDIT-RELATED FEES, the aggregate fees billed in each of the last two fiscal years for assurance and related services by the principal accountant that are reasonably related to the performance of the audit of the registrant's financial statements and are not reported under paragraph (a) of this Item. Registrants shall describe the nature of the services comprising the fees disclosed under this category.

N/A

(c) Disclose, under the caption TAX FEES, the aggregate fees billed in each of the last two fiscal years for professional services rendered by the principal accountant for tax compliance, tax advice, and tax planning. Registrants shall describe the nature of the services comprising the fees disclosed under this category.

N/A

(d) Disclose, under the caption ALL OTHER FEES, the aggregate fees billed in each of the last two fiscal years for products and services provided by the principal accountant, other than the services reported in paragraphs (a) through(c) of this Item. Registrants shall describe the nature of the services comprising the fees disclosed under this category.

N/A

(e) (1) Disclose the audit committee's pre-approval policies and procedures described in paragraph (c) (7) of Rule 2-01 of Regulation S-X.

PIONEER FUNDS

APPROVAL OF AUDIT, AUDIT-RELATED, TAX AND OTHER SERVICES
PROVIDED BY THE INDEPENDENT AUDITOR

SECTION I - POLICY PURPOSE AND APPLICABILITY

The Pioneer Funds recognize the importance of maintaining the independence of their outside auditors. Maintaining independence is a shared responsibility involving Pioneer Investment Management, Inc ("PIM"), the audit committee and the independent auditors.

The Funds recognize that a Fund's independent auditors: 1) possess knowledge of the Funds, 2) are able to incorporate certain services into the scope of the audit, thereby avoiding redundant work, cost and disruption of Fund personnel and processes, and 3) have expertise that has value to the Funds. As a result, there are situations where it is desirable to use the Fund's independent auditors for services in addition to the annual audit and where the potential for conflicts of interests are minimal. Consequently, this policy, which is intended to comply with Rule 210.2-01(C)(7), sets forth guidelines and procedures to be followed by the Funds when retaining the independent audit firm to perform audit, audit-related tax and other services under those circumstances, while also maintaining independence.

Approval of a service in accordance with this policy for a Fund shall also constitute approval for any other Fund whose pre-approval is required pursuant to Rule 210.2-01(c) (7) (ii).

In addition to the procedures set forth in this policy, any non-audit services that may be provided consistently with Rule 210.2-01 may be approved by the Audit Committee itself and any pre-approval that may be waived in accordance with Rule 210.2-01(c)(7)(i)(C) is hereby waived.

Selection of a Fund's independent auditors and their compensation shall be determined by the Audit Committee and shall not be subject to this policy.

SECTION II - POLICY

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PRE-APPROVED SERVICE SUBCATEGORIES
I. AUDIT SERVICES	Services that are directly related to performing the independent audit of the Funds	
II. AUDIT-RELATED SERVICES	Services which are not prohibited under Rule 210.2-01(C)(4) (the "Rule")	o AICPA attest and agreed-upon procedures o Technology control assessments o Financial reporting control assessments

and are related extensions of o Enterprise security architecture

the audit services support the audit, or use the knowledge/expertise gained from the audit procedures as a foundation to complete the project. In most cases, if the Audit-Related Services are not performed by the Audit firm, the scope of the Audit Services would likely increase. The Services are typically well-defined and governed by accounting professional standards (AICPA, SEC, etc.)

assessment

AUDIT COMMITTEE APPROVAL POLICY

AUDIT COMMITTEE REPORTING POLICY

"One-time" pre-approval o A summary of all such for the audit period for all services and related fees pre-approved specific service reported at each regularly subcategories. Approval of the independent auditors as o "One-time" pre-approval independent auditors as auditors for a Fund shall constitute pre approval for these services.

- meeting.
- o "One-time" pre-approval o A summary of all such for the fund fiscal year within services and related fees a specified dollar limit (including comparison to for all pre-approved specified dollar limits) for all pre-approved specific service subcategories reported quarterly.
- o Specific approval is needed to exceed the pre-approved dollar limit for these services (see general Audit Committee approval policy below for details on obtaining
- o Specific approval is needed to use the Fund's auditors for Audit-Related Services not denoted as "pre-approved", or to add a specific service subcategory as "pre-approved"

specific approvals)

______ specified dollar limits)

._____

SECTION III - POLICY DETAIL, CONTINUED

DESCRIPTION

	DESCRIPTION	
III. TAX SERVICES	Services which are not prohibited by the Rule, if an officer of the Fund determines that using the Fund's auditor to provide these services creates significant synergy in the form of efficiency, minimized disruption, or the ability to maintain a desired level of confidentiality.	o Tax controversy assistance o Tax compliance, tax returns, excise tax returns and support
AUDIT COMMITTEE APP		 MTTTEE

REPORTING POLICY

______ o "One-time" pre-approval o A summary of for the fund fiscal year all such services and within a specified dollar limit related fees

- (including comparison to specified dollar limits) reported quarterly.
- o Specific approval is needed to exceed the pre-approved dollar limits for these services (see general Audit Committee approval policy below for details on obtaining specific approvals)
- o Specific approval is needed to use the Fund's auditors for tax services not denoted as pre-approved, or to add a specific service subcategory as "pre-approved"

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PRE-APPROVED SERVICE SUBCATEGORIES
IV. OTHER SERVICES	Services which are not prohibited by the Rule,	o Business Risk Management support o Other control and regulatory
A. SYNERGISTIC, UNIQUE QUALIFICATIONS	if an officer of the Fund determines that using the Fund's auditor to provide these services creates	compliance projects

significant synergy in the form of efficiency, minimized disruption, the ability to maintain a desired level of confidentiality, or where the Fund's auditors posses unique or superior qualifications to provide these services, resulting in superior value and results for the Fund.

AUDIT COMMITTEE APPROVAL POLICY

AUDIT COMMITTEE REPORTING POLICY

"One-time" pre-approval

for the fund fiscal year within
a specified dollar limit

O A summary of
all such services and o "One-time" pre-approval a specified dollar limit

- related fees (including comparison to specified dollar limits) reported quarterly.
- o Specific approval is needed to exceed the pre-approved dollar limits for these services (see general Audit Committee approval policy below for details on obtaining specific approvals)
- o Specific approval is needed to use the Fund's auditors for "Synergistic" or "Unique Qualifications" Other Services not denoted as pre-approved to the left, or to add a specific service subcategory as "pre-approved"

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PROHIBITED SERVICE SUBCATEGORIES
PROHIBITED SERVICES	Services which result in the auditors losing	1. Bookkeeping or other services related to the accounting records or

- independence status under the Rule.
- financial statements of the audit client*
- 2. Financial information systems design and implementation*
- 3. Appraisal or valuation services, fairness* opinions, or

- contribution-in-kind reports
- 4. Actuarial services (i.e., setting actuarial reserves versus actuarial audit work) *
- 5. Internal audit outsourcing services*
- 6. Management functions or human resources
- 7. Broker or dealer, investment advisor, or investment banking services
- 8. Legal services and expert services unrelated to the audit
- 9. Any other service that the Public Company Accounting Oversight Board determines, by regulation, is impermissible

AUDIT COMMITTEE APPROVAL POLICY

AUDIT COMMITTEE REPORTING POLICY

performed with the exception of the(*) services and related services that may be permitted fees reported at each if they would not be subject to audit regularly scheduled procedures at the audit client (as Audit Committee meeting defined in rule 2-01(f)(4)) level will serve as continual

the firm providing the service.

confirmation that has not provided any restricted services.

GENERAL AUDIT COMMITTEE APPROVAL POLICY:

- o For all projects, the officers of the Funds and the Fund's auditors will each make an assessment to determine that any proposed projects will not impair independence.
- o Potential services will be classified into the four non-restricted service categories and the "Approval of Audit, Audit-Related, Tax and Other Services" Policy above will be applied. Any services outside the specific pre-approved service subcategories set forth above must be specifically approved by the Audit Committee.
- o At least quarterly, the Audit Committee shall review a report summarizing the services by service category, including fees, provided by the Audit firm as set forth in the above policy.

._____

(2) Disclose the percentage of services described in each of paragraphs (b) through (d) of this Item that were approved by the audit committee pursuant to paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X.

N/A

(f) If greater than 50 percent, disclose the percentage of hours expended on the principal accountant's engagement to audit the registrant's financial statements for the most recent fiscal year that were attributed to work performed by persons other than the principal accountant's full-time, permanent employees.

N/A

(g) Disclose the aggregate non-audit fees billed by the registrant's accountant for services rendered to the registrant, and rendered to the registrant's investment adviser (not including any sub-adviser whose role is primarily portfolio management and is subcontracted with or overseen by another investment adviser), and any entity controlling, controlled by, or under common control with the adviser that provides ongoing services to the registrant for each of the last two fiscal years of the registrant.

N/A

(h) Disclose whether the registrant's audit committee of the board of trustees has considered whether the provision of non-audit services that were rendered to the registrant's investment adviser (not including any subadviser whose role is primarily portfolio management and is subcontracted with or overseen by another investment adviser), and any entity controlling, controlled by, or under common control with the investment adviser that provides ongoing services to the registrant that were not pre-approved pursuant to paragraph (c)(7)(ii) of Rule 2-01 of Regulation S-X is compatible with maintaining the principal accountant's independence.

The Fund's audit committee of the Board of Trustees has considered whether the provision of non-audit services that were rendered to the Affiliates (as defined) that were not pre- approved pursuant to paragraph (c) (7) (ii) of Rule 2-01 of Regulation S-X is compatible with maintaining the principal accountant's independence.

Item 5. Audit Committee of Listed Registrants

(a) If the registrant is a listed issuer as defined in Rule 10A-3 under the Exchange Act (17 CFR 240.10A-3), state whether or not the registrant has a separately-designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Exchange Act (15 U.S.C. 78c(a)(58)(A)). If the registrant has such a committee, however designated, identify each committee member. If the entire board of directors is acting as the registrants audit committee as specified in Section 3(a)(58)(B) of the Exchange Act (15 U.S.C. 78c(a)(58)(B)), so state.

The registrant has a separately-designated standing audit committe eestablished in accordance with Section 3(a) (58) (A) of the Exchange Act (15 U.s.c. 78c(a) (58) (A)).

(b) If applicable, provide the disclosure required by Rule 10A-3 (d) under the Exchange Act (17 CFR 240.10A-3 (d)) regarding an exemption from the listing standards for audit committees.

N/A

Item 6. Schedule of Investments.

File Schedule I Investments in securities of unaffiliated issuers as of the close of the reporting period as set forth in 210.12-12 of Regulation S-X [17 CFR 210.12-12], unless the schedule is included as part of the report to shareholders filed under Item 1 of this Form.

Included in Item 1

ITEM 7. DISCLOSURE OF PROXY VOTING POLICIES AND PROCEDURES FOR CLOSED-END MANAGEMENT INVESTMENT COMPANIES.

A closed-end management investment company that is filing an annual report on this Form N-CSR must, unless it invests exclusively in non-voting securities, describe the policies and procedures that it uses to determine how to vote proxies relating to portfolio securities, including the procedures that the company uses when a vote presents a conflict between the interests of its shareholders, on the one hand, and those of the company's investment adviser; principal underwriter; or any affiliated person (as defined in Section 2(a)(3) of the Investment Company Act of 1940 (15 U.S.C. 80a-2(a)(3)) and the rules thereunder) of the company, its investment adviser, or its principal underwriter, on the other. Include any policies and procedures of the company's investment adviser, or any other third party, that the company uses, or that are used on the company's behalf, to determine how to vote proxies relating to portfolio securities.

Information not required in semi annual reports on form NCSR.

- Item 8. Portfolio Managers of Closed-End Management Investment Companies.
- (a) If the registrant is a closed-end management investment company that is filing an annual report on this Form N-CSR, provide the following information:
- (1) State the name, title, and length of service of the person or persons employed by or associated with the registrant or an investment adviser of the registrant who are primarily responsible for the day-to-day management of the registrants portfolio (Portfolio Manager). Also state each Portfolio Managers business experience during the past 5 years.

Information not required in semi annual reports on form $\ensuremath{\mathsf{NCSR}}$.

- Item 9. Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers.
- (a) If the registrant is a closed-end management investment company, in the following tabular format, provide the information specified in paragraph (b) of this Item with respect to any purchase made by or on behalf of the registrant or any affiliated purchaser, as defined in Rule 10b-18(a)(3) under the Exchange Act (17 CFR 240.10b-18(a)(3)), of shares or other units of any class of the registrants equity securities that is registered by the registrant pursuant to Section 12 of the Exchange Act (15 U.S.C. 781). Instruction to paragraph (a). Disclose all purchases covered by this Item, including purchases that do not satisfy the conditions of the safe harbor of Rule 10b-18 under the Exchange Act (17 CFR 240.10b-18), made in the period covered by the report. Provide disclosures covering repurchases made on a monthly basis. For example, if the reporting period began on January 16 and ended on July 15, the chart would show repurchases for the months from January 16 through February 15, February 16 through March 15, March 16 through April 15, April 16 through May 15, May 16 through June 15, and June 16 through July 15.

During the period covered by this report, there were no purchases made by or on behalf of the registrant or any affiliated purchaser as defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934 (the Exchange Act), of shares of the registrants equity securities that are registered by the registrant pursuant to Section 12 of the Exchange Act.

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

Describe any material changes to the procedures by which shareholders may recommend nominees to the registrants board of directors, where those changes were implemented after the registrant last provided disclosure in response to the requirements of Item 7(d)(2)(ii)(G) of Schedule 14A (17 CFR 240.14a-101), or this Item.

There have been no material changes to the procedures by which the shareholders may recommend nominees to the registrants board of directors since the registrant last provided disclosure in response to the requirements of Item 7(d)(2)(ii)(G) of Schedule 14(A) in its definitive proxy statement, or this Item.

ITEM 11. CONTROLS AND PROCEDURES.

(a) Disclose the conclusions of the registrant's principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, about the effectiveness of the registrant's disclosure controls and procedures (as defined in Rule 30a-2(c) under the Act (17 CFR 270.30a-2(c))) based on their evaluation of these controls and procedures as of a date within 90 days of the filing date of the report that includes the disclosure required by this paragraph.

The registrant's principal executive officer and principal financial officer have concluded that the registrant's disclosure controls and procedures are effective based on their evaluation of these controls and procedures as of a date within 90 days of the filing date of this report.

(b) Disclose whether or not there were significant changes in the registrant's internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

There were no significant changes in the registrant's internal control over financial reporting that occurred during the second fiscal quarter of the period covered by this report that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

The registrant's principal executive officer and principal financial officer, however, voluntarily are reporting the following information:

In August of 2006 the registrant's investment adviser enhanced its internal procedures for reporting performance information required to be included in prospectuses. Those enhancements involved additional internal controls over the appropriateness of performance data generated for this purpose. Such enhancements were made following an internal review which identified prospectuses relating to certain classes of shares of a limited number of registrants where, inadvertently,

performance information not reflecting the deduction of applicable sales charges was included. Those prospectuses were revised, and the revised prospectuses were distributed to shareholders.

ITEM 12. EXHIBITS.

File the exhibits listed below as part of this Form. Letter or number the exhibits in the sequence indicated.

- (a) Any code of ethics, or amendment thereto, that is the subject of the disclosure required by Item 2, to the extent that the registrant intends to satisfy the Item 2 requirements through filing of an exhibit.
- (b) A separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2 under the Act (17 CFR 270.30a-2).

Filed herewith.

SIGNATURES

[See General Instruction F]

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.

(Registrant) Pioneer Floating Rate Trust

By (Signature and Title)* /s/ John F. Cogan, Jr. John F. Cogan, Jr, President

Date July 29, 2011

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 (Signature and Title)* /s/ John F. Cogan, Jr. John F. Cogan, Jr., President

Date July 29, 2011

By (Signature and Title)* /s/ Mark Bradley Mark Bradley, Treasurer

Date July 29, 2011

 \star Print the name and title of each signing officer under his or her signature.