

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Pioneer Diversified High Income Trust
Form N-CSR
June 29, 2009

OMB APPROVAL
OMB Number: 3235-0570
Expires: August 31, 2010
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 811-22014

Pioneer Diversified High Income Trust
(Exact name of registrant as specified in charter)

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

Dorothy E. Bourassa, 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: April 30

Date of reporting period: May 1, 2008 through April 30, 2009

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.

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

ITEM 1. REPORTS TO SHAREOWNERS.

Pioneer Diversified
High Income Trust

Annual Report | April 30, 2009

Ticker Symbol: HNW

[LOGO]PIONEER
Investments (R)

visit us: pioneerinvestments.com

Table of Contents

Letter to Shareowners	2
Portfolio Management Discussion	4
Portfolio Summary	8
Prices and Distributions	9
Performance Update	10
Schedule of Investments	11
Financial Statements	33
Financial Highlights	37
Notes to Financial Statements	38
Report of Independent Registered Public Accounting Firm	47
Approval of Investment Advisory Agreement	49
Trustees, Officers and Service Providers	52

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 1

President's Letter

Dear Shareowner,

Stock and bond markets around the globe have been experiencing one of their most tumultuous periods in history. Investors have witnessed volatility of a magnitude that many have never before seen. Distance often provides the best vantage point for perspective. Still, we believe that the benefits of basic investment principles that have stood the test of time -- even in the midst of market turmoil -- cannot be underestimated.

First, invest for the long term. The founder of Pioneer Investments, Philip L. Carret, began his investment career during the 1920s. One lesson he learned is that while great prosperity affords an advantageous time for selling stocks, extreme economic slumps can create opportunities for purchase. Indeed, many of our portfolio managers, who follow the value-conscious investing approach of our founder, are looking at recent market conditions as an opportunity to buy companies whose shares we believe have been unjustifiably beaten down by indiscriminate selling, but that we have identified as having strong prospects over time. While investors may be facing a sustained market downturn, we continue to believe that patience, along with staying invested in the market,

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

are important considerations for long-term investors.

A second principle is to stay diversified across different types of investments. The global scope of the current market weakness poses challenges for this basic investment axiom. But the turbulence makes now a good time to reassess your portfolio and make sure that your investments continue to meet your needs. We believe you should work closely with your financial advisor to find the mix of stocks, bonds and money market assets that is best aligned to your particular risk tolerance and investment objective.

As the investment markets sort through the continuing crisis in the financial industry, we are staying focused on the fundamentals and risk management. With more than 80 years of experience behind us, we have learned how to navigate turbulent markets. At Pioneer Investments, risk management has always been a critical part of our culture -- not just during periods of extraordinary volatility. Our investment process is based on fundamental research, quantitative analysis and active portfolio management. This three-pillared process, which we apply to each of our portfolios, is supported by an integrated team approach and is designed to carefully balance risk and reward. While we

2 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

see potential chances for making money in many corners of the market, it takes research and experience to separate solid investment opportunities from speculation.

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. Thank you for investing with Pioneer.

Respectfully,

/s/Daniel K. Kingsbury

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 Diversified High Income Trust | Annual Report | 4/30/09 3

Portfolio Management Discussion | 4/30/09

High-yield bond and bank loan investments struggled through the final eight months of 2008 in the face of a severe credit crisis before credit-related securities started to recover early in 2009. In the following discussion, Andrew Feltus, CFA, and Jonathan Sharkey discuss the factors affecting the performance of Pioneer Diversified High Income Trust during the 12 months ended April 30, 2009. Mr. Feltus and Mr. Sharkey are members of Pioneer's Fixed Income Department and leaders of the investment team responsible for the daily management of the Trust.

Q How did the Trust perform during the 12 months ended April 30, 2009?

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

A Pioneer Diversified High Income Trust had a total return of -24.69% at net asset value and a return of -23.11% at market price. As of April 30, 2009, the Trust was selling at a discount of market price to net asset value of -5.1%. Over the same period, the Trust's benchmark returned -14.78%. The benchmark's return is based on a 50% weighting of the Merrill Lynch Global High Yield and Emerging Market Plus Index (these indices are not leveraged) and a 50% weighting of the CSFB Leveraged Loan Index, which produced total returns of -14.23% and -15.32%, respectively. The Trust's 30-day SEC yield was 10.68% and the distribution rate based on market close on April 30, 2009, was 17.23%, based on the most recent monthly dividend.

Q What were the principal factors affecting the Trust's performance during the 12 months ended April 30, 2009?

A After a brief market rally in the early spring of 2008, the value of high-yield bond and bank-loan investments declined sharply over the remainder of the year in the face of mounting credit problems. The volatility in fixed-income markets peaked in late 2008 following the September bankruptcy of investment bank Lehman Brothers and the collapse or near-collapse of several other institutions, several of which required U.S. government assistance to survive. Market values for fixed-income securities exposed to credit risk plummeted in the fourth quarter of 2008, finishing a dismal year for such investments. However, early in 2009 investors started perceiving attractive values relative to the risks in investments such as high-yield bonds and floating-rate loans securities, leading to a rebound in those markets in the final months of the Trust's fiscal year.

In this environment, the Trust's allocation to catastrophe-linked bonds helped support performance results. Catastrophe-linked bonds are reinsurance securities issued against the possibility of significant losses incurred by

4 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

casualty insurers from natural catastrophes, such as earthquakes or storms. Bank loans did not hold up as well, as mounting questions about credit problems caused institutional investors such as hedge funds to sell-off their bank loan investments. The Trust's overweight position in U.S. high-yield corporate bonds also performed poorly, as they underperformed some other high-yield sectors, notably emerging-market sovereign securities. However, the decision to reduce the Trust's exposure to foreign currencies tended to help results, as did the decision to avoid, for most of the period, commercial mortgage-backed debt. As noted, the Trust's bank-loan investments also struggled, as an emphasis on B-rated and a de-emphasis on BB-rated securities tended to hold back results when lower-rated investments underperformed. The Trust's performance at net asset value ("NAV") lagged the overall market indices for the period, partially due to the effects of the Trust's use of leverage (borrowed funds) in the market. While leverage tends to amplify gains in bull markets, it also tends to magnify losses in poor markets. At the end of the fiscal year, the Trust's leverage ratio was 25%. The percentage of leverage stayed relatively unchanged for the year.

At the end of the 12-month period, bank loans represented 31.6% of the Trust's investment portfolio, while U.S. high-yield corporates accounted for 28.9% of the Trust's investment portfolio, and emerging market and international high-yield bonds represented 12% of the Trust's investment portfolio. Catastrophe-linked bonds accounted for 19.5% of the Trust's investment portfolio.

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Q What were some of the investments that supported the Trust's performance during the 12 months ended April 30, 2009?

A The Trust's position in high-yield bonds of Talecris did well. The health care company, which specializes in processing blood supplies, announced it was to be acquired by another company. Bonds of electric utility Jamaica Mirant helped performance, as did several securities tied to the telecommunication service sector. Also supporting the Trust's results were a loan to Stratos Global, which provides voice and data communication services to corporations and government agencies; GCI, another telecommunication service provider; and bonds of Intelsat, a satellite communications company. In addition, a loan to Metavante, which provides transaction-processing services to the banking industry, helped the Trust's performance.

Q What were some of the investments that produced disappointing results for the Trust over the 12 months ended April 30, 2009?

A Loans to steel companies, such as Aloma Steel and Niagara Steel, which fared poorly in a difficult year for the metals industry, was one area that hurt the Trust's results over the 12-month period. Also holding back results were loans to Ceva Group, a logistics company servicing the automotive industry. High-yield bonds performed poorly as a group, especially those of

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 5

commodity related corporations. Bonds of Aventine Renewable Energy Resources, an ethanol producer, lost most of their value when the company defaulted. The Trust's overweight position in chemical industry bonds also proved to be a detractor, with poor performance by bonds of ARCO, Georgia Gulf, Ineos and Kronos Worldwide.

Q What is your investment outlook?

A We think domestic high-yield corporate bonds have fallen to reflect a depression-style scenario, which we think is a worse outlook than is justified. As a consequence, we believe investors will continue to see value in high-yield bonds, which we believe are priced below their fundamental value. We think 2009 should show improvement in market conditions and believe that the Trust is well positioned to participate in a market rebound. However, we also can anticipate continued volatility in day-to-day trading.

Although they suffered minor collateral damage from the credit crunch, catastrophe-linked bonds have proven to be an island of calm within the high-yield markets. Their recent history supports the theory that the performance of this group is not highly correlated to other areas in the high-yield market. At current yields, we believe catastrophe-linked bonds are priced comparable to high-yield bonds and bank loans, and we see opportunities in the coming months, as new supply is expected to be low. We believe the best values are in U.S. hurricane bonds.

Bank loans, as an asset class, still face fundamental issues, especially in light of our projections that the economy is likely to contract for the second quarter of 2009 -- on the heels of the large contraction seen in the first quarter of the year -- before starting to recover in the final two quarters. We also expect that unemployment will remain high. On the plus side, the market's advance in early 2009 does offer evidence that many companies now can get financing, while the recovery value of loans in bankruptcy may improve. The market also has shown signs of stabilization as

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

buyers have stepped in to make investments. Liquidity has improved in the market and refinancing activity has increased, raising the potential for price appreciation by bank loans. At the same time, the new-issue market may begin to reopen.

Loans have continued to sell at very attractive discounts and we believe the bank loan market may continue to perform well, although we cannot predict when values will snap back significantly.

Please refer to the Schedule of Investments on pages 11-32 for a full listing of Trust securities.

6 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

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, economic, and political conditions.

When interest rates rise, the prices of fixed-income securities in the Trust will generally fall. Conversely, when interest rates fall the prices of fixed-income securities in the Trust generally will rise. Investments in the Trust are subject to possible loss due to the financial failure of underlying securities and their inability to meet their debt obligations.

The Trust may invest significantly in illiquid securities. Illiquid securities may be difficult to dispose of at a fair price 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 also are 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 is authorized to borrow from banks and issue debt securities, which are 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.

Risks of investing in the Trust are discussed in greater detail in the Trust's original offering prospectus relating to its common shares.

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 Trust management as of the date of this report. These statements should not be relied upon for any other purposes.

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 7

Portfolio Summary | 4/30/09

Portfolio Diversification

(As a percentage of total investment portfolio)

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

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Corporate Bonds & Notes	57.4%
Floating Rate Loan Interests	31.2%
Temporary Cash Investments	5.1%
Asset Backed Securities	2.4%
Convertible Bonds & Notes	1.9%
Collateralized Mortgage Obligations	1.4%
Fixed Rate Loan Interests	0.4%
Convertible Preferred Stock	0.2%
Common Stock*	0.0%
Warrants*	0.0%

* Amount is less than 0.1%.

Portfolio Quality

 (As a percentage of total investment portfolio; based on S&P ratings)

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

A & Higher	3.8%
BBB	0.9%
BB	30.4%
B	37.0%
CCC & Lower	10.0%
Cash Equivalents	5.1%
Not Rated	12.8%

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

10 Largest Holdings

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

1.	Calabash Re, Ltd., 9.749%, 6/1/09 (144A)	1.39%
2.	Green Valley, Ltd., 5.045%, 1/10/11 (144A)	1.31
3.	Muteki, Ltd., 5.638%, 5/24/11 (144A)	1.30
4.	Residential Reinsurance 2008, Ltd., 12.761%, 6/6/11 (144A)	1.30
5.	Atlas Reinsurance Plc, 11.77%, 1/10/11 (144A)	1.29
6.	Successor II, Ltd., 26.277%, 4/6/10 (144A)	1.27
7.	SunGard Data Systems, Inc., New U.S. Term Loan, 2.219%--2.991%, 2/28/14	1.23
8.	Blue Fin, Ltd., 5.557%, 4/10/12 (144A)	1.17
9.	Calpine Corp., First Priority Term Loan, 4.095%, 3/29/14	1.16
10.	Fhu-Jin, Ltd., 5.084%, 8/10/11 (144A)	1.15

** This list excludes temporary cash and derivative investments. 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.

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Prices and Distributions | 4/30/09

Market Value per Common Share

4/30/09	4/30/08
\$ 13.23	\$ 20.47

Net Asset Value per Common Share

4/30/09	4/30/08
\$ 13.94	\$ 22.02

Distributions per Common Share: 5/1/08-4/30/09

Net Investment Income	Tax Return of Capital	Short-Term Capital Gains	Long-Term Capital Gains
\$ 2.469	\$ 0.045	\$ --	\$ --

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 9

Performance Update | 4/30/09

Investment Returns

The mountain chart on the right shows the change in market value, plus reinvested dividends and distributions, of a \$10,000 investment made in common shares of Pioneer Diversified High Income Trust, compared to that of the combined (50%/50%) Merrill Lynch Global High Yield and Emerging Market Plus Index and CSFB Leveraged Loan Index.

Cumulative Total Returns
(As of April 30, 2009)

Period	Net Asset Value ("NAV")	Market Price
Life-of-Trust (5/30/07)	-24.22%	-31.32%
1 Year	-24.69	-23.11

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

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

Value of \$10,000 Investment

	Pioneer Diversified High Income Trust	50% ML Global HY and EM Plus Index 50% CSFB Leveraged Loan Index
5/07	\$10,000	\$10,000
4/08	8,933	10,246
4/09	6,868	9,281

Call 1-800-225-6292 or visit www.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 net asset value ("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 bank borrowing, 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 Merrill Lynch Global High Yield and Emerging Markets Plus Index tracks the performance of the below- and border-line investment-grade global debt markets denominated in the major developed market currencies. The Index includes sovereign issuers rated BBB1 and lower along with corporate issues rated BB1 and lower. There are no restrictions on issuer country of domicile. The CSFB Leveraged Loan Index is designed to mirror the investible universe of the U.S. dollar-denominated leveraged loan market. The CSFB Leveraged Loan Index consists of tradable term loans with at least one year to maturity and rated BBB or lower.

Index returns are calculated monthly, assume reinvestment of dividends and, unlike Trust returns, do not reflect any fees, expenses or sales charges. The indices are not leveraged. You cannot invest directly in an index.

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Schedule of Investments | 4/30/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Valu
		ASSET BACKED SECURITIES -- 3.3% of Net Assets	
		CONSUMER SERVICES -- 0.3%	
		Restaurants -- 0.3%	
500,000	BB/Ba3	DB Master Finance LLC, 8.285%, 6/20/31 (144A)	\$
		Total Consumer Services	\$

		BANKS -- 3.0%	
		Thrifths & Mortgage Finance -- 3.0%	
246,741 (a)	AA+/Aa1	Ace Securities Corp., 1.038%, 12/25/34	\$
1,058,010 (a)	AAA/Aaa	Bayview Financial Acquisition Trust, 0.825%, 8/28/44	
1,652,270 (a)	AAA/Aaa	Bayview Financial Acquisition Trust, 1.065%, 5/28/44	1
200,000 (a)	AAA/Baa3	Carrington Mortgage Loan Trust, 0.538%, 10/25/36	
699,000 (a)	AAA/B3	Carrington Mortgage Loan Trust, 0.638%, 2/25/37	
185,225 (a)	AAA/Ba2	Countrywide Asset-Backed Certificates, 0.618%, 7/25/36	
88,482 (a)	AAA/B1	First Franklin Mortgage Loan Asset-Backed Certificates, 0.628%, 3/25/36	
250,000 (a)	AAA/Ba2	GSAMP Trust, 0.568%, 1/25/37	
175,070 (a)	A/A2	GSAMP Trust, 0.868%, 3/25/35	
760,881 (a)	AAA/Caa2	Lehman XS Trust, 0.788%, 12/25/35	
172,549 (a)	AAA/B2	Residential Asset Mortgage Products, Inc., 0.638%, 3/25/36	
		Total Banks	\$ 3

		TOTAL ASSET BACKED SECURITIES (Cost \$5,041,877)	\$ 3

		COLLATERALIZED MORTGAGE OBLIGATIONS -- 1.9% of Net Assets	
		BANKS -- 1.9%	
		Thrifths & Mortgage Finance -- 1.9%	
500,000 (a)	AAA/Aaa	Adjustable Rate Mortgage Trust, 0.828%, 6/25/35	\$
285,722 (a)	AAA/B3	Countrywide Home Loans, 0.788%, 3/25/35	
666,569 (a)	AAA/Ca	Downey Savings and Loan Association Mortgage Loan Trust, 0.817%, 10/19/45	
458,266 (a)	AAA/Ca	Downey Savings and Loan Association Mortgage Loan Trust, 0.867%, 10/19/45	
1,361,643 (a)	AAA/Aa2	Impac CMB Trust, 1.198%, 1/25/35	
292,994 (a)	A/Caa2	Impac Secured Assets CMN Owner Trust, 0.528%, 11/25/36	
777,924 (a)	B/Ca	Luminent Mortgage Trust, 0.698%, 7/25/36	
464,619 (a)	AAA/Aa1	WaMu Mortgage Pass-Through Certificates, 0.668%, 4/25/45	
1,545,355 (a)	AAA/Baa1	WaMu Mortgage Pass-Through Certificates, 0.918%, 7/25/45	
		Total Banks	\$ 2

		TOTAL COLLATERALIZED MORTGAGE OBLIGATIONS	

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

(Cost \$4,130,686)

\$ 2

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 11

Schedule of Investments | 4/30/09 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		
		CORPORATE BONDS & NOTES -- 76.6% of Net Assets	
		ENERGY -- 4.9%	
		Oil & Gas Drilling -- 0.1%	
NOK 1,500,000	NR/NR	Petrolia Drilling ASA, 12.0%, 6/20/12 (144A)	\$
<hr/>			
300,000	NR/NR	Oil & Gas Equipment & Services -- 1.1%	
1,120,000	B/NR	Nexus 1 Pte, Ltd., 10.5%, 3/7/12 (144A)	\$
700,000 (a)	NR/NR	Oceanografia SA de CV, 11.25%, 7/15/15 (144A)	
NOK 3,000,000 (a)	NR/NR	Sevan Marine ASA, 5.525%, 5/14/13 (144A)	
300,000	NR/NR	Sevan Marine ASA, 8.31%, 10/24/12 (144A)	
		Skeie Drilling & Production ASA, 11.25%, 3/8/13 (144A)	\$
<hr/>			
125,000	BB/Ba3	Oil & Gas Exploration & Production -- 3.2%	
500,000	CCC+/Caal	Chesapeake Energy Corp., 9.5%, 2/15/15	\$
970,000	BB-/B3	Harvest Operations Corp., 7.875%, 10/15/11	
		Hilcorp Energy I L.P./Hilcorp Finance Co., 9.0%, 6/1/16 (144A)	
NOK 3,500,000	NR/NR	Norwegian Energy Co. AS, 11.0%, 7/13/10 (144A)	
NOK 2,000,000	NR/NR	PA Resources AB, 8.75%, 3/10/10	
530,000	B/Caa2	Parallel Petroleum Corp., 10.25%, 8/1/14	
225,000	B-/Caal	PetroQuest Energy, Inc., 10.375%, 5/15/12	
240,000	CCC+/B3	Quicksilver Resources, Inc., 7.125%, 4/1/16	
250,000 (a)	B-/B3	SandRidge Energy, Inc., 4.833%, 4/1/14	
335,000	B-/B3	SandRidge Energy, Inc., 8.0%, 6/1/18 (144A)	
670,000 (b)	B-/B3	SandRidge Energy, Inc., 8.625%, 4/1/15	\$
<hr/>			
755,000 (c)	D/NR	Oil & Gas Refining & Marketing -- 0.1%	
		Aventine Renewable Energy Holdings, Inc., 10.0%, 4/1/17	\$
460,000 (c)	NR/NR	VeraSun Energy Corp., 9.375%, 6/1/17	\$
<hr/>			
505,000	BB-/B2	Coal & Consumable Fuels -- 0.4%	
		Massey Energy Co., 6.875%, 12/15/13	\$
		Total Energy	\$
<hr/>			
		MATERIALS -- 7.1%	
		Commodity Chemicals -- 0.3%	

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

195,000 (c)	D/C	ARCO Chemical Co., 9.8%, 2/1/20	\$
1,530,000 (c) (m)	C/C	Georgia Gulf Corp., 10.75%, 10/15/16	
650,000 (c)	C/C	Montell Finance Co. BV, 8.1%, 3/15/27 (144A)	

EURO 1,275,000	CC/Ca	Diversified Chemicals -- 0.2% Ineos Group Holdings Plc, 7.875%, 2/15/16 (144A)	\$
----------------	-------	---	----

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

12 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		
EURO 200,000	CCC-/Caa2	Specialty Chemicals -- 0.1% Kronos International, Inc., 6.5%, 4/15/13	
500,000	B/B2	Construction Materials -- 0.6% AGY Holding Corp., 11.0%, 11/15/14	
300,000 (a) (d)	CCC/NR	C8 Capital SPV, Ltd., 6.64% (144A)	
500,000	CCC+/B3	U.S. Concrete, Inc., 8.375%, 4/1/14	
1,145,000	B-/B3	Metal & Glass Containers -- 1.3% AEP Industries, Inc., 7.875%, 3/15/13	
EURO 625,000	B-/B3	Impress Holdings BV, 9.25%, 9/15/14 (144A)	
700,000	CCC+/Caa1	Paper Packaging -- 1.3% Graham Packaging Co., Inc., 9.875%, 10/15/14	
500,000	B-/B3	Graphic Packaging International, Inc., 9.5%, 8/15/14	
750,000	B/NR	U.S. Corrugated, Inc., 10.0%, 6/1/13	
600,000 (c)	D/C	Aluminum -- 0.6% Asia Aluminum Holdings, Ltd., 8.0%, 12/23/11 (144A)	
300,000	CCC+/B3	CII Carbon LLC, 11.125%, 11/15/15 (144A)	
1,200,000 (a) (b)	D/Caa2	Noranda Aluminum Acquisition Corp., 6.595%, 5/15/15	
320,000	NR/NR	Diversified Metals & Mining -- 0.8% Blaze Recycling & Metals LLC, 10.875%, 7/15/12 (144A)	
195,000	B+/B1	FMG Finance Pty., Ltd., 10.625%, 9/1/16 (144A)	
750,000	BB/Ba2	Vedanta Resources Plc, 9.5%, 7/18/18 (144A)	

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

			Steel -- 1.1%
	1,245,000	B-/Caa2	Algoma Acquisition Corp., 9.875%, 6/15/15 (144A)
	250,000	BB-/B1	Evrax Group SA, 9.5%, 4/24/18 (144A)
	920,000 (a)	B/Caa1	Ryerson, Inc., 12.0%, 11/1/15
EURO	50,000	CCC/Caa3	Zlomrex International Finance SA, 8.5%, 2/1/14 (144A)

			Forest Products -- 0.4%
	46,490 (m)	B-/Caa3	Ainsworth Lumber Co., Ltd., 11.0%, 7/29/15 (144A)
	500,000 (e)	CC/Caa1	Mandra Forestry Holdings, Ltd., 12.0%, 5/15/13 (144A)
	250,000	BB/Ba2	Sino-Forest Corp., 9.125%, 8/17/11

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 13

Schedule of Investments | 4/30/09 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
600,000	B-/B3	Paper Products -- 0.4% Exopack Holding Corp., 11.25%, 2/1/14
		Total Materials
750,000	B-/NR	CAPITAL GOODS -- 4.7%
405,000	BB/Ba3	Aerospace & Defense -- 0.7% Aeroflex. Inc., 11.75%, 2/15/15 DigitalGlobe, Inc., 10.5%, 5/1/14 (144A)
350,000	BB-/Ba3	Construction & Engineering -- 0.6%
500,000	B/B2	Dycom Industries, Inc., 8.125%, 10/15/15 Esco Corp., 8.625%, 12/15/13 (144A)
671,898 (b) (f)	CCC-/NR	Industrial Conglomerates -- 0.6% American Achievement Group Holding Corp., 16.75%, 10/1/12
500,000	B-/NR	Cia Latinoamericana de Infraestructura & Servicios SA, 9.75%, 5/10/12
500,000 (c)	D/NR	Indalex Holding Corp., 11.5%, 2/1/14
740,000	CCC+/B3	Park-Ohio Industries, Inc., 8.375%, 11/15/14
720,000	BB-/B1	Construction & Farm Machinery & Heavy Trucks -- 1.3% American Railcar Industries, Inc., 7.5%, 3/1/14

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

	770,000	CCC+/Caa3	Commercial Vehicle Group, Inc., 8.0%, 7/1/13
	950,000	CCC/Caa1	Greenbrier Companies, Inc., 8.375%, 5/15/15
	400,000	B-/Caa1	Titan International, Inc., 8.0%, 1/15/12
<hr style="border-top: 1px dashed black;"/>			
	1,220,000	B-/NR	Industrial Machinery -- 0.9%
			Industrias Metalurgicas Pescarmona SA, 11.25%, 10/22/14 (144A)
	875,000	B/Caa1	Mueller Water Products, Inc., 7.375%, 6/1/17
<hr style="border-top: 1px dashed black;"/>			
	500,000	B-/B3	Trading Companies & Distributors -- 0.6%
	500,000	CCC/Caa1	Intcomex, Inc., 11.75%, 1/15/11
	300,000	B/B1	KAR Holdings, Inc., 10.0%, 5/1/15
			Wesco Distribution, Inc., 7.5%, 10/15/17
<hr style="border-top: 1px dashed black;"/>			
Total Capital Goods			
<hr style="border-top: 1px dashed black;"/>			
	250,000	B+/B2	COMMERCIAL & PROFESSIONAL SERVICES -- 0.4%
			Commercial Printing -- 0.1%
			Sheridan Group, Inc., 10.25%, 8/15/11
<hr style="border-top: 1px dashed black;"/>			
The accompanying notes are an integral part of these financial statements.			
14 Pioneer Diversified High Income Trust Annual Report 4/30/09			
Principal Amount USD (\$)		S&P/Moody's Ratings (unaudited)	
	700,000 (c) (m)	D/NR	Environmental & Facilities Services -- 0.1%
EURO	107,128	B/Caa1	Aleris International, Inc., 10.0%, 12/15/16
			New Reclamation Group Pty., Ltd., 8.125%, 2/1/13 (144A)
<hr style="border-top: 1px dashed black;"/>			
	400 (g)	NR/B3	Diversified Support Services -- 0.2%
	125,000	BB-/B2	MSX International, Ltd., UK, 12.5%, 4/1/12 (144A)
			United Rentals North America, Inc., 6.5%, 2/15/12
<hr style="border-top: 1px dashed black;"/>			
Total Commercial & Professional Services			
<hr style="border-top: 1px dashed black;"/>			
	775,000	CCC+/Caa2	TRANSPORTATION -- 0.5%
			Air Freight & Logistics -- 0.3%
			CEVA Group Plc, 10.0%, 9/1/14 (144A)
<hr style="border-top: 1px dashed black;"/>			
	240,000	B+/B2	Railroads -- 0.2%
			Kansas City Southern de Mexico, 7.625%, 12/1/13
<hr style="border-top: 1px dashed black;"/>			
Total Transportation			

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

			AUTOMOBILES & COMPONENTS -- 1.2%
			Auto Parts & Equipment -- 1.2%
980,000	CCC+/Caa2		Allison Transmission, Inc., 11.0%, 11/1/15 (144A)
1,140,000	CCC/Caa2		Lear Corp., 8.75%, 12/1/16
500,000 (f)	CCC+/Caa2		Stanadyne Corp., 0.0%, 2/15/15
160,000	B-/B3		Stanadyne Corp., 10.0%, 8/15/14
700,000	CCC/Caa2		Tenneco, Inc., 8.625%, 11/15/14
			Total Automobiles & Components
			CONSUMER DURABLES & APPAREL -- 1.1%
			Homebuilding -- 0.4%
695,000	B+/B1		Meritage Homes Corp., 6.25%, 3/15/15
			Housewares & Specialties -- 0.3%
500,000	CCC+/Caa1		Yankee Acquisition Corp., 9.75%, 2/15/17
			Textiles -- 0.4%
500,000	B/Ba3		Invista, 9.25%, 5/1/12 (144A)
			Total Consumer Durables & Apparel
			CONSUMER SERVICES -- 1.9%
			Casinos & Gaming -- 1.9%
500,000	NR/NR		Buffalo Thunder Development Authority, 9.375%, 12/15/14 (144A)
EURO 1,155,000	B+/B2		Codere Finance Luxembourg SA, 8.25%, 6/15/15 (144A)
395,000	B/B3		FireKeepers Development Authority, 13.875%, 5/1/15 (144A)

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 15

Schedule of Investments | 4/30/09 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
		Casinos & Gaming -- (continued)
550,000	CC/Ca	Fontainebleau Las Vegas Holdings LLC, 10.25%, 6/15/15 (144A)
95,000	B/B3	Galaxy Entertainment Finance Co., Ltd., 9.875%, 12/15/12 (144A)
275,000	CCC/Caa1	Little Traverse Bay Bands of Odawa Indians, 10.25%, 2/15/14 (144A)
1,615,000	B+/B2	Mashantucket Western Pequot Tribe, 8.5%, 11/15/15 (144A)
EURO 50,000	B/B3	Peermont Global, Ltd., 7.75%, 4/30/14 (144A)
750,000 (c)	D/C	Station Casinos, Inc., 6.625%, 3/15/18
750,000 (c)	D/NR	Trump Entertainment Resorts, Inc., 8.5%, 6/1/15
EURO 405,000	NR/NR	Unibet Group Plc, 9.7%, 12/21/10
		Total Consumer Services

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

			MEDIA -- 3.0%
			Broadcasting -- 2.6%
40,000 (c) (m)	D/NR		CCH I LLC, 11.0%, 10/1/15 (144A)
250,000 (c)	D/NR		CCH II LLC, 10.25%, 9/15/10
840,000	B/B1		Hughes Network Systems LLC, 9.5%, 4/15/14
800,000 (a) (b)	CCC+/Caa2		Intelsat Bermuda, Ltd., 11.5%, 2/4/17 (144A)
500,000	BB-/B3		Intelsat Subsidiary Holding Co., Ltd., 8.5%, 1/15/13 (144A)
400,000	B/B2		Kabel Deutschland GmbH, 10.625%, 7/1/14
430,000	B-/Caa1		Telesat Canada, 12.5%, 11/1/17 (144A)
1,245,000 (b) (m)	CCC/Caa2		Univision Communications, Inc., 9.75%, 3/15/15 (144A)
<hr/>			
600,000	CCC+/Caa2		Publishing -- 0.4%
			TL Acquisitions, Inc., 10.5%, 1/15/15 (144A)
			Total Media
<hr/>			
465,000	BB-/Ba3		RETAILING -- 1.0%
			Internet Retail -- 0.3%
			Ticketmaster Entertainment, Inc., 10.75%, 8/1/16 (144A)
<hr/>			
EURO 74,000 (a)	CCC+/Caa1		Apparel Retail -- 0.0%
			Edcon Holdings Pty., Ltd., 7.15%, 6/15/15 (144A)
<hr/>			
800,000 (m)	B-/Caa1		Specialty Stores -- 0.7%
			Sally Holdings LLC, 10.5%, 11/15/16
			Total Retailing
<hr/>			
EURO 330,000 (c) (h)	NR/Caa2		FOOD, BEVERAGE & TOBACCO -- 2.5%
			Distillers & Vintners -- 0.0%
			Belvedere SA, 8.106%, 5/15/13 (144A)

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

16 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
490,000 (c)	NR/NR	Packaged Foods & Meats -- 1.3%
400,000	B+/Ba3	Arantes International, Ltd., 10.25%, 6/19/13 (144A)
400,000 (c)	D/NR	Bertin Ltda, 10.25%, 10/5/16 (144A)
700,000	B+/B1	Independencia International, Ltd., 9.875%, 5/15/15 (144A)
1,175,000	B/NR	Marfrig Overseas, Ltd., 9.625%, 11/16/16 (144A)
275,000 (f)	NR/B2	Minerva Overseas, Ltd., 9.5%, 2/1/17 (144A)
		SA Fabrica de Produtos Alimenticios Vigor, 9.25%, 2/23/17 (144A)

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

			Tobacco -- 1.2%	
1,360,000	B+/B2		Alliance One International, Inc., 8.5%, 5/15/12	\$
125,000	B+/B2		Alliance One International, Inc., 11.0%, 5/15/12	\$
			Total Food, Beverage & Tobacco	\$

			HOUSEHOLD & PERSONAL PRODUCTS -- 0.2%	
			Household Products -- 0.2%	
205,000 (m)	CCC+/Caa1		Central Garden and Pet Co., 9.125%, 2/1/13	\$
			Total Household & Personal Products	\$

			HEALTH CARE EQUIPMENT & SERVICES -- 4.6%	
			Health Care Equipment & Services -- 0.5%	
750,000	CCC+/Caa3		Accellent, Inc., 10.5%, 12/1/13	\$

			Health Care Supplies -- 1.0%	
1,265,000 (b)	B-/B3		Biomet, Inc., 10.375%, 10/15/17	\$

			Health Care Services -- 2.5%	
1,385,000	BB-/NR		DASA Finance Corp., 8.75%, 5/29/18 (144A)	\$
500,000	B-/B2		Rural/Metro Corp., 9.875%, 3/15/15	\$
725,000 (b)	B-/B3		Surgical Care Affiliates, Inc., 8.875%, 7/15/15 (144A)	\$
1,170,000	CCC+/Caa1		Surgical Care Affiliates, Inc., 10.0%, 7/15/17 (144A)	\$

			Managed Health Care Facilities -- 0.2%	
225,000	BB/Ba3		HCA, Inc., 8.5%, 4/15/19 (144A)	\$

			Managed Health Care -- 0.4%	
500,000	B-/Caa1		Multiplan, Inc., 10.375%, 4/15/16 (144A)	\$
			Total Health Care Equipment & Services	\$

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 17

Schedule of Investments | 4/30/09 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
		PHARMACEUTICALS & BIOTECHNOLOGY & LIFE SCIENCES -- 0.4%
		Pharmaceuticals -- 0.4%
260,000	C/C	Angiotech Pharmaceuticals, Inc., 7.75%, 4/1/14
250,000	B/B2	Phibro Animal Health Corp., 10.0%, 8/1/13 (144A)
200,000	CCC+/Caa1	Phibro Animal Health Corp., 13.0%, 8/1/14 (144A)
		Total Pharmaceuticals & Biotechnology & Life Sciences

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

		BANKS -- 1.6%
		Diversified Banks -- 0.9%
250,000	NR/Ba1	ATF Capital BV, 9.25%, 2/21/14 (144A)
500,000 (a)	NR/B2	Banco Macro SA, 9.75%, 12/18/36
700,000 (a)	NR/Ba1	Banco Macro SA, 10.75%, 6/7/12
200,000	B+/Ca	JSC TemirBank, 9.5%, 5/21/14 (144A)
550,000	B+/Ba3	Russian Standard Finance SA, 7.5%, 10/7/10 (144A)
500,000	D/Ca	TuranAlem Finance BV, 8.5%, 2/10/15 (144A)
		Regional Banks -- 0.7%
600,000 (a) (d)	BBB/A3	PNC Financial Services Group, Inc., 8.25%
500,000 (a) (d) (m)	A/B2	Wells Fargo Capital XV, 9.75%
		Total Banks
		DIVERSIFIED FINANCIALS -- 1.7%
		Other Diversified Financial Services -- 0.4%
400,000 (a)	BB/NR	Ibis Re, Ltd., 11.257%, 5/10/12 (144A)
		Specialized Finance -- 0.8%
750,000	B-/Caa1	ACE Cash Express, Inc., 10.25%, 10/1/14 (144A)
425,000 (a)	CCC+/B3	NCO Group, Inc., 6.113%, 11/15/13
900,000	CCC+/Caa1	NCO Group, Inc., 11.875%, 11/15/14
		Asset Management & Custody Banks -- 0.3%
500,000	BB+/Baa3	Janus Capital Group, Inc., 6.95%, 6/15/17
		Investment Banking & Brokerage -- 0.2%
450,000 (a) (d)	BBB/A3	Goldman Sachs Capital II, 5.793%
		Total Diversified Financials

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

18 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
		INSURANCE -- 27.9%
		Insurance Brokers -- 1.1%
250,000	CCC/Caa1	Alliant Holdings I, Inc., 11.0%, 5/1/15 (144A)
1,050,000	CCC+/Caa1	HUB International Holdings, Inc., 10.25%, 6/15/15 (144A)
500,000 (a)	CCC/B3	USI Holdings Corp., 5.113%, 11/15/14 (144A)
500,000	CCC/Caa1	USI Holdings Corp., 9.75%, 5/15/15 (144A)

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

		Multi-Line Insurance -- 0.8%
1,000,000 (a)	NR/Baa3	Liberty Mutual Group, Inc., 7.0%, 3/15/37 (144A)
1,000,000 (a)	BB/Baa3	Liberty Mutual Group, Inc., 10.75%, 6/15/58 (144A)
65,000	B+/NR	Sul America Participacoes SA, 8.625%, 2/15/12 (144A)

		Reinsurance -- 26.0%
1,500,000 (a)	BB+/NR	AKIBARE, 4.201%, 5/22/12 (144A)
1,000,000 (a)	BB+/NR	AKIBARE, 4.401%, 5/22/12 (144A)
EURO 1,500,000 (a)	B-/NR	Atlas Reinsurance Plc, 11.77%, 1/10/11 (144A)
2,000,000 (a)	BB+/NR	Blue Fin, Ltd., 5.557%, 4/10/12 (144A)
1,000,000 (a)	BB+/NR	Caelus Re, Ltd., 7.511%, 6/7/11 (144A)
2,000,000 (a)	BB/NR	Calabash Re, Ltd., 9.749%, 6/1/09 (144A)
1,000,000 (a)	BB/NR	Calabash Re II, Ltd., 9.72%, 1/8/10 (144A)
1,500,000 (a)	BB-/NR	Calabash Re II, Ltd., 10.92%, 1/8/10 (144A)
1,000,000 (a)	B/NR	Carillon, Ltd., 16.57%, 1/10/11 (144A)
1,500,000 (a)	BB+/NR	East Lane Re, Ltd., 8.17%, 5/6/11 (144A)
1,750,000 (a)	BB+/NR	Fhu-Jin, Ltd., 5.084%, 8/10/11 (144A)
1,000,000 (a)	NR/B1	GlobeCat, Ltd., 7.192%, 1/2/13 (144A)
350,000 (a)	NR/B3	GlobeCat, Ltd., 10.442%, 1/2/13 (144A)
EURO 1,500,000 (a)	BB+/NR	Green Valley, Ltd., 5.045%, 1/10/11 (144A)
820,000 (a) (m)	BBB-/Caa2	MBIA Insurance Corp., 14.0%, 1/15/33 (144A)
2,000,000 (a)	NR/Ba2	Muteki, Ltd., 5.638%, 5/24/11 (144A)
250,000 (a)	BB/NR	Mystic Re, Ltd., 13.326%, 3/20/12 (144A)
1,000,000 (a)	NR/B1	Nelson Re, Ltd., 5.738%, 6/6/11 (144A)
1,000,000 (a)	BB+/NR	Newton Re, Ltd., 5.873%, 12/24/10 (144A)
1,000,000 (a)	BB/NR	Newton Re, Ltd., 8.173%, 12/24/10 (144A)
1,500,000 (a)	B+/NR	Residential Reinsurance 2006, Ltd., 11.261%, 6/5/09 (144A)
2,000,000 (a)	B/NR	Residential Reinsurance 2008, Ltd., 12.761%, 6/6/11 (144A)
440,000 (a)	NR/NR	Successor II, Ltd., 18.027%, 4/6/10 (144A)

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 19

Schedule of Investments | 4/30/09 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
		Reinsurance -- (continued)
2,000,000 (a)	NR/NR	Successor II, Ltd., 26.277%, 4/6/10 (144A)
500,000 (a) (c)	D/NR	Willow Re, Ltd., 6.295%, 6/16/10 (144A)

Total Insurance

		REAL ESTATE -- 0.2%
		Real Estate Operating Companies -- 0.2%
100,000 (a)	B-/NR	Alto Palermo SA, 11.0%, 6/11/12 (144A)
410,000 (m)	B-/NR	IRSA Inversiones y Representaciones SA, 8.5%, 2/2/17 (144A)

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

			Total Real Estate
			SOFTWARE & SERVICES -- 2.3%
405,000	CCC+/Caa1		IT Consulting & Other Services -- 0.2%
			Activant Solutions, Inc., 9.5%, 5/1/16
1,465,000 (m)	B-/B3		Data Processing & Outsourced Services -- 0.9%
			First Data Corp., 9.875%, 9/24/15
1,390,000	B-/Caa1		Application Software -- 0.9%
			Vangent, Inc., 9.625%, 2/15/15
1,110,000	NR/NR		Systems Software -- 0.3%
			Pegasus Solutions, Inc., 10.5%, 4/15/15 (144A)
			Total Software & Services
430,000	BB+/Ba1		TECHNOLOGY HARDWARE & EQUIPMENT -- 0.6%
			Computer Storage & Peripherals -- 0.4%
			Seagate Technology International, 10.0%, 5/1/14 (144A)
250,000	B/B1		Electronic Equipment & Instruments -- 0.2%
			Da-Lite Screen Co., Inc., 9.5%, 5/15/11
70,000 (m)	CCC/B3		Electronic Manufacturing Services -- 0.0%
			Sanmina-SCI Corp., 6.75%, 3/1/13
			Total Technology Hardware & Equipment
910,000	CCC+/B3		TELECOMMUNICATION SERVICES -- 5.8%
1,200,000	B-/B2		Integrated Telecommunication Services -- 3.6%
1,250,000	B/B3		Broadview Networks Holdings, Inc., 11.375%, 9/1/12
1,010,000 (m)	CCC+/Caa1		GC Impsat Holdings I Plc, 9.875%, 2/15/17 (144A)
142,000	NR/Baa3		GCI, Inc., 7.25%, 2/15/14
500,000	BB/Ba3		PAETEC Holding Corp., 9.5%, 7/15/15
			Tele Norte Leste Participacoes SA, 8.0%, 12/18/13
			Windstream Corp., 8.625%, 8/1/16

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

20 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
380,000	CCC/Caa2	Wireless Telecommunication Services -- 2.2%
500,000	B-/B3	Cell C Property, Ltd., 11.0%, 7/1/15 (144A)
400,000	NR/B1	Cricket Communications, Inc., 9.375%, 11/1/14
EURO 500,000 (a)	CCC/Caa3	Digicel, Ltd., 9.25%, 9/1/12 (144A)
		Hellas Telecommunications Luxembourg II, 7.435%, 1/15/15 (144A)
540,000 (m)	BB+/Ba2	OJSC Vimpel Communications, 9.125%,

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

		4/30/18 (144A)	
1,330,000	B-/B2		True Move Co., Ltd., 10.375%, 8/1/14 (144A)
Total Telecommunication Services			
UTILITIES -- 3.0% Electric Utilities -- 1.4%			
750,000	B-/NR		Cia de Transporte de Energia Electrica de Alta Tension SA, 8.875%, 12/15/16 (144A)
250,000	NR/NR		Mirant JPSCo. Finance, Ltd., 11.0%, 7/6/16 (144A)
930,000 (d)	NR/Caa3		Rede Empresas de Energia Eletrica SA, 11.125% (144A)
1,200,000	CCC/Caa1		Texas Competitive Electric Holdings Co. LLC, 10.25%, 11/1/15
Gas Utilities -- 1.0% Inergy, L.P., 8.25%, 3/1/16			
490,000	B+/B1		Transportadora de Gas del Sur SA, 7.875%, 5/14/17 (144A)
1,135,000	B-/B2		
Multi-Utilities -- 0.2% PNM Resources, Inc., 9.25%, 5/15/15			
225,000	BB-/Ba2		
Independent Power Producers & Energy Traders -- 0.4% Intergen NV, 9.0%, 6/30/17 (144A)			
500,000	BB-/Ba3		
Total Utilities			
TOTAL CORPORATE BONDS & NOTES (Cost \$129,924,152)			
CONVERTIBLE BONDS & NOTES -- 2.5% of Net Assets TRANSPORTATION -- 0.4% Marine -- 0.4%			
990,000	B-/Caa1		Horizon Lines, Inc., 4.25%, 8/15/12
Total Transportation			
HEALTH CARE EQUIPMENT & SERVICES -- 1.3% Health Care Services -- 0.9%			
1,550,000	B+/B3		Omnicare, Inc., 3.25%, 12/15/35

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 21

Schedule of Investments | 4/30/09 (continued)

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

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

120,000	B/B1	Health Care Facilities -- 0.4%	\$
405,000	B/NR	LifePoint Hospitals, Inc., 3.25%, 8/15/25	\$
		LifePoint Hospitals, Inc., 3.5%, 5/15/14	\$
		Total Health Care Equipment & Services	\$

850,000 (c) (m)	D/NR	TECHNOLOGY HARDWARE & EQUIPMENT -- 0.2%	\$
		Communications Equipment -- 0.2%	\$
		Nortel Networks Corp., 2.125%, 4/15/14	\$
		Total Technology Hardware & Equipment	\$

900,000	NR/NR	TELECOMMUNICATION SERVICES -- 0.6%	\$
		Wireless Telecommunication Services -- 0.6%	\$
		NII Holdings, Inc., 3.125%, 6/15/12	\$
		Total Telecommunication Services	\$

		TOTAL CONVERTIBLE BONDS & NOTES	\$
		(Cost \$3,679,240)	\$

338,300	BBB-/Ba2	FLOATING RATE LOAN INTERESTS -- 41.7% of Net Assets (i)	\$
		ENERGY -- 0.5%	\$
		Integrated Oil & Gas -- 0.3%	\$
		Hudson Products Holdings, Inc., Term Loan,	\$
		8.0%, 8/24/15	\$

395,588	B/B3	Oil & Gas Exploration & Production -- 0.2%	\$
		Venoco, Inc., Second Lien Term Loan, 5.25%, 5/8/14	\$
		Total Energy	\$

989,899	BB+/Ba1	MATERIALS -- 4.7%	\$
		Diversified Chemicals -- 0.7%	\$
		Huntsman International LLC, New Dollar Term Loan B,	\$
		2.178%, 4/21/14	\$

585,088	B+/B1	Paper Packaging -- 0.9%	\$
		Graham Packaging Co., L.P., New Term Loan,	\$
		2.687% - 2.812%, 10/7/11	\$
492,613	B-/B3	Graphic Packaging International, Inc., Incremental	\$
		Term Loan, 3.21% - 3.958%, 5/16/14	\$

1,300,999	BB-/B3	Steel -- 1.3%	\$
1,300,155	NR/B1	Essar Steel Algoma, Inc., Term Loan, 2.93%, 6/20/13	\$
		Niagara Corp., Term Loan, 5.428% - 7.25%, 6/29/14	\$

1,500,000	NR/Ba3	Forest Products -- 0.7%	\$
		Ainsworth Lumber Co., Ltd., Term Loan,	\$
		5.438%, 6/26/14	\$

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

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

22 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
1,318,355	BB+/NR	Paper Products -- 1.1% Georgia-Pacific LLC, Term Loan B, 2.428% - 3.293%, 12/20/12	\$ 1,233
		Total Materials	\$ 5,387
<hr/>			
738,482	B+/NR	CAPITAL GOODS -- 2.8% Aerospace & Defense -- 1.4% Aeroflex, Inc., Tranche B-2 Term Loan, 4.25% - 5.0%, 8/15/14	\$ 494
500,231	BB-/B1	DAE Aviation Holdings, Inc., Tranche B-1 Term Loan, 4.18% - 4.79%, 7/31/14	295
494,924	BB+/Ba3	Spirit Aerosystems, Inc., Term Loan B-1, 2.89%, 9/30/13	455
491,878	BB-/B1	Standard Aero, Ltd., Tranche B-2 Term Loan, 4.6% - 4.79%, 7/31/14	290
			\$ 1,535
<hr/>			
1,158,000	BB/Ba3	Construction & Engineering -- 0.9% Goodman Global, Inc., Term Loan, 6.5%, 2/13/14	\$ 1,021
<hr/>			
1,000,000	BB-/Ba3	Construction & Farm Machinery & Heavy Trucks -- 0.5% Accuride Corp., Term Loan, 8.0%, 1/31/12	\$ 611
		Total Capital Goods	\$ 3,168
<hr/>			
724,738	BB+/B1	COMMERCIAL & PROFESSIONAL SERVICES -- 1.8% Diversified Commercial & Professional Services -- 1.1% Asset Acceptance Capital Corp., Tranche B Term Loan, 2.94% - 4.5%, 6/12/13	\$ 605
1,000,000	BB-/B2	Rental Service Corp., Second Lien Initial Term Loan, 3.93% - 4.67%, 11/30/13	650
			\$ 1,255
<hr/>			
1,228,125	BB-/Ba3	Environmental & Facilities Services -- 0.7% Synagro Technologies, Inc., First Lien Term Loan, 2.43% - 2.57%, 4/2/14	\$ 826
		Total Commercial & Professional Services	\$ 2,082
<hr/>			
439,482	NR/Ba2	TRANSPORTATION -- 0.8% Air Freight & Logistics -- 0.8% Ceva Group Plc, Pre-Funded LC Loan, 3.10%, 11/4/13	\$ 223
1,316,508	NR/Ba2	Ceva Group Plc, U.S. Term Loan, 3.428%, 11/4/13	668
		Total Transportation	\$ 891
<hr/>			
1,000,000	BB/Ba1	AUTOMOBILES & COMPONENTS -- 0.8% Tires & Rubber -- 0.8% Goodyear Tire & Rubber Co., Second Lien Term Loan,	

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

2.19%, 4/30/14	\$	840
Total Automobiles & Components	\$	840

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 23

Schedule of Investments | 4/30/09 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
1,750,000 (c) (h)	BB/Ba3	CONSUMER DURABLES & APPAREL -- 1.1% Homebuilding -- 0.0% LandSource Communities Development LLC, Second Lien Facility Term Loan, 8.75%, 2/27/14	\$
876,651	BB-/Ba3	Housewares & Specialties -- 0.7% Yankee Candle Company, Inc., Term Loan, 2.44% - 3.22%, 2/6/14	\$
441,192	BB-/Ba2	Apparel, Accessories & Luxury Goods -- 0.4% Hanesbrands, Inc., Term Loan B, 5.198% - 5.842%, 9/5/13	\$
		Total Consumer Durables & Apparel	\$ 1,
500,000	B+/B1	CONSUMER SERVICES -- 0.4% Casinos & Gaming -- 0.4% Fontainebleau Las Vegas LLC, Delayed Draw Term Loan, 3.685%, 6/6/14	\$
1,000,000	B/NR	Fontainebleau Las Vegas LLC, Initial Term Loan, 4.527%, 6/6/14	
1,000,000	BB-/Caa1	Gateway Casinos & Entertainment, Inc., Second Lien Term Loan, 6.708%, 3/31/15	
		Total Consumer Services	\$
1,000,000	B+/Ba3	MEDIA -- 2.4% Broadcasting -- 1.2% Insight Midwest Holdings LLC, Term Loan B, 2.5%, 4/7/14	\$
675,000	B/Ba3	Univision Communications, Inc., Initial Term Loan, 2.677%, 9/29/14	
			\$ 1,
158,115	B-/B3	Cable & Satellite -- 0.1% Knology, Inc., Term Loan, 2.751%, 6/30/12	\$
927,880	B+/B1	Movies & Entertainment -- 0.6% Lodgenet Entertainment Corp., Closing Date Term Loan, 2.43% -- 3.22%, 4/4/14	\$
		Publishing -- 0.5%	

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

921,589	BB-/Ba1	RH Donnelley, Inc., Tranche D-1 Term Loan, 6.75%, 6/30/11	\$
		Total Media	\$ 2,
<hr/>			
		FOOD, BEVERAGE & TOBACCO -- 0.6%	
		Packaged Foods & Meats -- 0.6%	
740,554	BB/B1	Dean Foods Co., Tranche B Term Loan, 1.93% - 2.72%, 4/2/14	\$
		Total Food, Beverage & Tobacco	\$

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

24 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
		HOUSEHOLD & PERSONAL PRODUCTS -- 0.6%	
		Personal Products -- 0.6%	
780,228	B+/Ba3	Brickman Group Holdings, Inc., Tranche B Term Loan, 2.428%, 1/23/14	\$
		Total Household & Personal Products	\$
<hr/>			
		HEALTH CARE EQUIPMENT & SERVICES -- 6.2%	
		Health Care Equipment & Services -- 1.4%	
1,719,221	NR/B2	Talecris Biotherapeutics Holdings Corp., First Lien Term Loan, 4.74% - 5.5%, 12/6/13	\$ 1,
<hr/>			
		Health Care Supplies -- 1.2%	
67,500	BB-/B1	Bausch & Lomb, Inc., Delayed Draw Term Loan, 3.678% - 4.47%, 4/24/15	\$
355,499	BB-/B1	Bausch & Lomb, Inc., Parent Term Loan, 4.47%, 4/24/15	
491,250	B+/B2	IM US Holdings LLC, First Lien Term Loan, 2.428% - 3.232%, 6/26/14	
600,000	B+/B2	IM US Holdings LLC, Second Lien Term Loan, 4.739%, 6/26/15	\$ 1,
<hr/>			
		Health Care Services -- 1.6%	
1,358,666	BB-/Ba3	Catalent Pharma Solutions, Inc., Dollar Term Loan, 2.678%, 4/10/14	\$
957,177	B/B3	HealthSouth Corp., Term Loan, 2.93% - 2.96%, 3/10/13	\$ 1,
<hr/>			
		Health Care Facilities -- 2.0%	
45,458	NR/NR	Community Health Systems, Inc., Delayed Draw Term Loan, 2.678%, 7/25/14	\$
891,053	BB/Ba3	Community Health Systems, Inc., Term Loan, 2.678% - 3.506%, 7/25/14	

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

713,997	B+/B3	Hanger Orthopedic Group, Inc., Tranche B Term Loan, 2.44%, 5/26/13	----- \$ 2, -----
162,256	B+/B1	Sun Healthcare Group, Inc., Synthetic LC Loan, 2.10%, 4/19/14	
768,657	B+/B1	Sun Healthcare Group, Inc., Term Loan, 3.09% - 3.631%, 4/19/14	
Total Health Care Equipment & Services			\$ 7, -----

PHARMACEUTICALS & BIOTECHNOLOGY & LIFE SCIENCES -- 0.8%			
Pharmaceuticals -- 0.6%			
727,500	BB/Ba3	Mylan, Inc., U.S. Tranche B Term Loan, 3.688% - 6.75%, 10/2/14	\$ -----

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 25

Schedule of Investments | 4/30/09 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
248,750	BBB-/Baa3	Life Sciences Tools & Services -- 0.2% Life Technologies Corp., Facility Term Loan B, 5.25%, 11/20/15	\$ 248 -----
Total Pharmaceuticals & Biotechnology & Life Sciences			\$ 941 -----

DIVERSIFIED FINANCIALS -- 4.2%			
Diversified Financial Services -- 1.4%			
990,000	BB/Ba2	Metavante Corp., Term Loan, 2.92%, 11/1/14	\$ 952
796,000	BB-/Ba3	SRAM LLC., Term Loan, 7.0% - 8.0%, 9/30/14	692 ----- \$ 1,645

Specialized Finance -- 1.0%			
841,297	BB-/B3	Ace Cash Express, Inc., Term Loan, 4.22%, 10/5/13	\$ 461
947,343	B-/B2	Collect Acquisition Corp., Term Loan B, 7.5%, 5/15/13	667 ----- \$ 1,129

Consumer Finance -- 1.2%			
990,693	BB-/NR	Dollar Financial Corp., Canadian Borrower Term Loan, 3.97%, 10/30/12	\$ 777
728,451	BB-/NR	Dollar Financial Corp., Delayed Draw Term Loan, 3.97%, 10/30/12	571 ----- \$ 1,349

Investment Banking & Brokerage -- 0.6%			

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

691,250	NR/NR	MSCI, Inc., Term Loan B, 2.928% - 3.756%, 11/20/14	\$ 646
Total Diversified Financials			\$ 4,770

INSURANCE -- 3.3%			
Insurance Brokers -- 2.6%			
1,477,500	B-/B3	Alliant Holdings I, Inc., Term Loan, 4.232%, 8/17/14	\$ 1,159
108,336	B/B2	HUB International, Ltd., Delay Draw Term Loan, 3.72%, 6/13/14	84
481,987	B/B3	HUB International, Ltd., Initial Term Loan, 3.72%, 6/13/14	375
1,965,000	B-/B2	USI Holdings Corp., Tranche B Term Loan, 3.97%, 5/4/14	1,372

			\$ 2,992

Multi-Line Insurance -- 0.7%			
787,481	B-/B2	AmWins Group, Inc., Initial Term Loan, 3.76% - 3.79%, 6/8/13	\$ 474
1,000,000	B-/B2	AmWins Group, Inc., Second Lien Initial Term Loan, 6.79%, 6/9/14	255

			\$ 729

Total Insurance			\$ 3,721

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

26 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
SOFTWARE & SERVICES -- 3.4%			
IT Consulting & Other Services -- 1.5%			
1,959,900	B+/Ba3	SunGard Data Systems, Inc., New U.S. Term Loan, 2.219% - 2.991%, 2/28/14	\$ 1,769,

Application Software -- 0.8%			
987,277	B/B1	Nuance Communications, Inc., Term Loan, 2.43%, 3/31/13	\$ 896,

Systems Software -- 1.1%			
1,439,788	BB-/B3	Vangent, Inc., Term Loan, 3.5%, 2/14/13	\$ 1,216,
Total Software & Services			\$ 3,882,

TECHNOLOGY HARDWARE & EQUIPMENT -- 1.2%			
Electronic Equipment & Instruments -- 1.2%			
1,258,775	BB/Ba2	H3C Holdings, Ltd., Tranche B Term Loan, 4.794%, 9/28/12	\$ 981,
488,773	B/B3	Scitor Corp., Term Loan, 4.68%, 9/26/14	432,
Total Technology Hardware & Equipment			\$ 1,414,

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

		SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT -- 0.5%	
		Semiconductor Equipment -- 0.5%	
975,664	BB-/Ba3	Freescale Semiconductor, Inc., Term Loan, 2.259%, 11/29/13	\$ 574,

		Total Semiconductors & Semiconductor Equipment	\$ 574,

		TELECOMMUNICATION SERVICES -- 4.0%	
		Alternative Carriers -- 0.9%	
1,191,772	B-/Ba3	PAETEC Holding Corp., Replacement Term Loan, 2.927%, 2/28/13	\$ 1,026,

437,123	B+/B2	Integrated Telecommunication Services -- 0.4%	
		Telesat Canada, U.S. Term I Loan, 3.43% -- 4.27%, 10/31/14	\$ 404,
37,545	B+/B2	Telesat Canada, U.S. Term II Loan, 4.28%, 10/31/14	34,

			\$ 439,

982,323	B-/B1	Wireless Telecommunication Services -- 2.7%	
		Cricket Communications, Inc., Term Loan B, 5.75%, 6/16/13	\$ 940,
1,719,144	B/B1	MetroPCS Wireless, Inc., New Tranche B Term Loan, 2.688% - 3.438%, 11/3/13	1,609,
587,121	B+/B1	Stratos Global Corp., Facility Term Loan B, 3.72%, 2/13/12	560,

			\$ 3,111,

		Total Telecommunication Services	\$ 4,577,

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 27

Schedule of Investments | 4/30/09 (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
		UTILITIES -- 1.6%
1,960,188	NR/NR	Independent Power Producers & Energy Traders -- 1.6%
		Calpine Corp., First Priority Term Loan, 4.095%, 3/29/14
184,378	B/B2	Mach Gen LLC, First Lien Synthetic LC Loan, 0.982%, 2/22/13
		Total Utilities

		TOTAL FLOATING RATE LOAN INTERESTS (Cost \$62,889,218)

		FIXED RATE LOAN INTERESTS -- 0.5% of Net Assets
		SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT -- 0.5%
825,420 (m)	NR/NR	Semiconductor Equipment -- 0.5%
		Freescale Semiconductor, Inc., Incremental Term Loan,

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

12.5%, 12/15/14

	TOTAL FIXED RATE LOAN INTERESTS (Cost \$928,507)
Shares	COMMON STOCK -- 0.0% of Net Assets MATERIALS -- 0.0% Forest Products -- 0.0% Ainsworth Lumber Co., Ltd.
13,963 (j)	TOTAL COMMON STOCK (Cost \$97,187)
595	CONVERTIBLE PREFERRED STOCK -- 0.3% of Net Assets DIVERSIFIED FINANCIALS -- 0.3% Other Diversified Financial Services -- 0.3% Bank of America Corp.
	TOTAL CONVERTIBLE PREFERRED STOCK (Cost \$490,737)
750,000 (h) (j)	WARRANTS -- 0.0% of Net Assets REAL ESTATE -- 0.0% Real Estate Development -- 0.0% Neo-China Group Holdings, Ltd., Expires 7/22/12 (144A)
	TOTAL WARRANTS (Cost \$17,012)

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

28 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Principal Amount USD (\$)		Value
3,175,000	TEMPORARY CASH INVESTMENTS -- 6.8% of Net Assets Repurchase Agreements -- 2.8% Deutsche Bank AG, 0.16%, dated 4/30/09, repurchase price of \$3,175,000 plus accrued interest on 5/1/09 collateralized by the following: \$975,100 Freddie Mac Giant, 5.0% - 7.0%, 5/1/22 - 2/1/39 \$5,699 Federal Home Loan Mortgage Corp., 5.339%, 9/1/32 \$594,851 Federal National Mortgage Association (ARM), 4.358% - 6.053%, 5/1/36 - 5/1/38 \$799,768 Federal National Mortgage Association, 5.0% - 7.0%, 3/1/34 - 10/1/38 \$863,082 Government National Mortgage Association, 6.0% - 7.0%, 10/15/37 - 11/15/38	\$ 3,175,000
	Total Repurchase Agreements	\$ 3,175,000

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

	Securities Lending Collateral -- 4.0%(k)		
	Certificates of Deposit:		
104,944	Abbey National Plc, 1.58%, 8/13/09	\$	104,944
104,944	Bank of Nova Scotia, 1.58%, 5/5/09		104,944
167,865	Bank of Scotland NY, 1.45%, 6/5/09		167,865
188,900	Barclays Bank, 1.15%, 5/27/09		188,900
188,900	DnB NOR Bank ASA NY, 1.5%, 6/5/09		188,900
192,258	Intesa SanPaolo S.p.A., 1.05%, 5/22/09		192,258
157,417	Royal Bank of Canada NY, 1.44%, 8/7/09		157,417
188,900	Svenska Bank NY, 1.48%, 7/8/09		188,900

		\$	1,294,128

	Commercial Paper:		
206,111	American Honda Finance Corp., 1.27%, 7/14/09	\$	206,111
209,889	CBA, 1.35%, 7/16/09		209,889
104,944	CME Group, Inc., 1.44%, 8/6/09		104,944
209,889	HSBC Bank, Inc., 1.64%, 8/14/09		209,889
52,472	IBM, 1.47%, 9/25/09		52,472
188,900	MetLife Global Funding, 1.71%, 6/12/09		188,900
209,889	Monumental Global Funding, Ltd., 1.64%, 8/17/09		209,889
188,900	New York Life Global, 1.37%, 9/4/09		188,900
209,889	Societe Generale, 1.75%, 9/4/09		209,889
209,889	U.S. Bank NA, 1.35%, 8/24/09		209,889
178,406	Westpac Banking Corp., 0.96%, 6/1/09		178,406

		\$	1,969,178

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 29

Schedule of Investments | 4/30/09 (continued)

Principal Amount			
USD (\$)		Value	
	Tri-party Repurchase Agreements:		
221,534	Barclays Capital Markets, 0.15%, 5/1/09	\$	221,534
839,555	Deutsche Bank, 0.15%, 5/1/09		839,555

		\$	1,061,089

Shares	Money Market Mutual Fund:		
209,889	JPMorgan U.S. Government Money Market Fund	\$	209,889
	Total Securities Lending Collateral	\$	4,534,284

	TOTAL TEMPORARY CASH INVESTMENTS		
	(Cost \$7,709,284)	\$	7,709,284

	TOTAL INVESTMENTS IN SECURITIES -- 133.6%		
	(Cost \$214,907,900) (1)	\$	151,997,381

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

OTHER ASSETS AND LIABILITIES -- (33.6)%	\$(38,184,935)
NET ASSETS APPLICABLE TO COMMON	
SHAREOWNERS -- 100.0%	\$113,812,446

NR Security not rated by S&P or Moody's.

(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 April 30, 2009, the value of these securities amounted to \$57,308,457 or 50.4% of total net assets applicable to common shareowners.

(a) Floating rate note. The rate shown is the coupon rate at April 30, 2009.

(b) Represents a pay in kind security.

(c) Security is in default and is non-income producing.

(d) Security is a perpetual bond and has no definite maturity date.

(e) On April 30, 2009, the security was not in default but defaulted after the year end.

(f) Debt obligation initially issued at one coupon which converts to a higher coupon at a specific date. The rate shown is the coupon rate at April 30, 2009.

(g) Security is priced as a unit.

(h) Indicates a security that has been deemed illiquid. The aggregate cost of illiquid securities is \$2,208,409. The aggregate value of \$105,468 represents 0.1% of total net assets applicable to common shareowners.

(i) 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 coupon rate accruing at April 30, 2009.

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

30 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

(j) Non-income producing.

(k) Securities lending collateral is managed by Credit Suisse, New York Branch.

(l) At April 30, 2009, the net unrealized loss on investments based on cost for federal income tax purposes of \$216,120,745 was as follows:

Aggregate gross unrealized gain for all investments in which there is an excess of value over tax cost

\$ 597,914

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Aggregate gross unrealized loss for all investments in which there is an
excess of tax cost over value

(64,721,278)

Net unrealized loss

\$ (64,123,364)

For financial reporting purposes net unrealized loss was \$62,910,519 and
cost of investments aggregated \$214,907,900.

(m) At April 30, 2009, the following securities were out on loan:

Principal Amount USD (\$)	Description	Value
45,944	Ainsworth Lumber Co., Ltd., 11.0%, 7/29/15 (144A)	\$ 13,324
379,000	Aleris International, Inc., 10.0%, 12/15/16	7,580
39,000	CCH I LLC, 11.0%, 10/1/15 (144A)	3,022
202,000	Central Garden and Pet Co., 9.125%, 2/1/13	174,730
1,450,000	First Data Corp., 9.875%, 9/24/15	1,002,313
608,000	Freescall Semiconductor, Inc., Incremental Term Loan, 12.5%, 12/15/14	423,573
1,000,000	Georgia Gulf Corp., 10.75%, 10/15/16	90,000
210,000	IRSA Inversiones y Representaciones SA, 8.5%, 2/2/17 (144A)	107,100
610,000	MBIA Insurance Corp., 14.0%, 1/15/33 (144A)	231,800
841,000	Nortel Networks Corp., 2.125%, 4/15/14	193,430
534,000	OJSC Vimpel Communications, 9.125%, 4/30/18 (144A)	380,475
564,000	PAETEC Holding Corp., 9.5%, 7/15/15	423,000
785,000	Sally Holdings LLC, 10.5%, 11/15/16	757,525
67,000	Sanmina-SCI Corp., 6.75%, 3/1/13	37,855
1,000,000	Univision Communications, Inc., 9.75%, 3/15/15 (144A)	162,500
487,000	Wells Fargo Capital XV, 9.75%	413,950
		\$4,422,177

Glossary of Terms:

LC -- Letter of Credit

Note: Principal amounts are denominated in U.S. dollars unless otherwise denoted.

EURO Euro

NOK Norwegian Krone

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 31

Schedule of Investments | 4/30/09 (continued)

Purchases and sales of securities (excluding temporary cash investments) for the year ended April 30, 2009, aggregated \$46,984,570 and \$64,249,155, respectively.

Various inputs are used in determining the value of the Trust's investments.

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

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 2 -- other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.)
- Level 3 -- significant unobservable inputs (including the Trust's own assumptions in determining fair value of investments)

The following is a summary of the inputs used as of April 30, 2009, in valuing the Trust's investments:

Valuation Inputs	Investments in Securities	Other Financial Instruments*
Level 1 -- Quoted Prices	\$ 353,305	\$ (31,837)
Level 2 -- Other Significant Observable Inputs	151,644,076	(1,191)
Level 3 -- Significant Unobservable Inputs	--	--
<hr style="border-top: 1px dashed black;"/>		
Total	\$151,997,381	\$ (33,028)
<hr style="border-top: 1px dashed black;"/>		

* Other financial instruments include foreign exchange contracts and depreciation on unfunded corporate loans..

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

32 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Statement of Assets and Liabilities | 4/30/09

ASSETS:

Investments in securities, at value (including securities loaned of \$4,422,177) (cost \$214,907,900)	\$151,997,381
Cash	806,641
Foreign currencies, at value (cost \$1,982,131)	2,383,176
Receivables --	
Investment securities sold	710,823
Interest	3,322,892
Commitment fees	29
Prepaid expenses	13,332
<hr style="border-top: 1px dashed black;"/>	
Total assets	\$159,234,274
<hr style="border-top: 1px dashed black;"/>	

LIABILITIES:

Payables --	
Notes payable	\$ 38,000,000
Investment securities purchased	1,059,880
Upon return of securities loaned	4,534,284
Forward foreign currency portfolio hedge contracts -- net	31,837
Dividends to shareowners	1,551,526
Depreciation on unfunded corporate loans -- net	1,191
Unamortized facility fees	1,750

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Due to affiliates	58,058
Accrued interest expense	48,630
Accrued expenses and other liabilities	134,672
<hr style="border-top: 1px dashed black;"/>	
Total liabilities	\$ 45,421,828
<hr style="border-top: 1px dashed black;"/>	
NET ASSETS:	
Paid-in capital	\$194,062,558
Distributions in excess of net investment income	(2,535,262)
Accumulated net realized loss on investments and foreign currency transactions	(15,172,471)
Net unrealized loss on investments	(62,911,710)
Net unrealized gain on forward foreign currency contracts and other assets and liabilities denominated in foreign currencies	369,331
<hr style="border-top: 1px dashed black;"/>	
Net assets applicable to common shareowners	\$113,812,446
<hr style="border-top: 1px dashed black;"/>	
NET ASSET VALUE PER SHARE:	
No par value (unlimited number of shares authorized)	
Based on \$113,812,446/8,165,927 shares	\$ 13.94
<hr style="border-top: 1px dashed black;"/>	

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 33

Statement of Operations

For the Year Ended 4/30/09

INVESTMENT INCOME:	
Interest (net of foreign taxes withheld \$8,245)	\$ 20,370,945
Dividends	30,813
Facility and other fees	66,176
Income from securities loaned, net	145,890
<hr style="border-top: 1px dashed black;"/>	
Total investment income	\$ 20,613,824
<hr style="border-top: 1px dashed black;"/>	
EXPENSES:	
Management fees	\$ 1,645,472
Administrative fees	188,855
Transfer agent fees and expenses	61,243
Bank loan fees and expenses	143,103
Custodian fees	89,433
Registration fees	17,500
Professional fees	78,417
Printing expenses	47,442
Trustees' fees	7,876
Pricing fees	25,979
Miscellaneous	33,003
<hr style="border-top: 1px dashed black;"/>	
Net operating expenses	\$ 2,281,823
<hr style="border-top: 1px dashed black;"/>	
Interest expense	\$ 48,630
<hr style="border-top: 1px dashed black;"/>	
Net operating expenses and interest expense	\$ 2,330,453
Less management fees waived and expenses reimbursed by Pioneer Investment Management, Inc. ("PIM")	\$ 1,918,000

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Net expenses		\$
<hr/>		
Net investment income		\$ 1
<hr/>		
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS AND FOREIGN CURRENCY TRANSACTIONS:		
Net realized gain (loss) from:		
Investments	\$ (13,199,934)	
Forward foreign currency contracts and other assets and liabilities denominated in foreign currencies	604,540	\$ (1
<hr/>		
Change in net unrealized gain (loss) from:		
Investments	\$ (50,470,011)	
Unfunded corporate loans	84,901	
Forward foreign currency contracts and other assets and liabilities denominated in foreign currencies	525,433	\$ (4
<hr/>		
Net loss on investments and foreign currency transactions		\$ (6
<hr/>		
Net decrease in net assets resulting from operations		\$ (4
<hr/>		

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

34 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Statement of Changes in Net Assets

For the Year Ended 4/30/09 and for the period from 5/30/07 (Commencement of Operations) to 4/30/08

	Year Ended 4/30/09	5/30/07 to 4/30/08
FROM OPERATIONS:		
Net investment income	\$ 17,099,169	\$ 14,317,5
Net realized loss on investments and foreign currency transactions	(12,595,394)	(1,862,7
Change in net unrealized loss on investments and foreign currency transactions	(49,859,677)	(12,682,7
<hr/>		
Net decrease in net assets resulting from operations	\$ (45,355,902)	\$ (227,8
<hr/>		
DISTRIBUTIONS TO SHAREOWNERS:		
Net investment income (\$2.469 and \$1.780 per share, respectively)	\$ (20,135,595)	\$ (14,530,7
Tax return of capital (\$0.045 and \$0.000 per share, respectively)	(371,077)	
<hr/>		
Total distributions to common shareowners	\$ (20,506,672)	\$ (14,530,7
<hr/>		
FROM TRUST SHARE TRANSACTIONS:		
Net proceeds from the issuance of shares	\$ --	\$174,287,5
Net proceeds from the underwriters' over-allotment option exercised	--	20,293,7
Offering expenses charged to paid-in-capital	--	(407,5

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Reinvestment of distributions	159,885	
<hr/>		
Net increase in net assets resulting from Trust share transactions	\$ 159,885	\$194,173,7
<hr/>		
Net increase (decrease) in net assets	\$ (65,702,689)	\$179,415,1
<hr/>		
NET ASSETS:		
Beginning of period	179,515,135	100,0
<hr/>		
End of period	\$113,812,446	\$179,515,1
<hr/>		
Undistributed (distribution in excess of) net investment income	\$ (2,535,262)	\$ 269,8
<hr/>		

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 35

Statement of Cash Flows

For the year ended April 30, 2009

Cash Flows From Operating Activities		
Net investment income	\$	17,099,169
<hr/>		
Adjustment to Reconcile Net Investment Income to Net Cash and Foreign Currency Provided from Operating Activities		
Purchase of investment securities	\$ (1,172,082,404)	
Proceeds from disposition of investment securities	1,225,128,350	
Increase in receivable for investments sold	(255,578)	
Decrease in paydowns receivable	2,500	
Decrease in interest and foreign tax reclaim receivable	917,399	
Decrease in commitment fees receivable	940	
Increase in prepaid expenses	(435)	
Decrease in interest payable	(81,142)	
Decrease in payable for investments purchased	(6,332,230)	
Increase in accrued expenses and other liabilities	20,324	
Increase in unrealized appreciation on foreign currency transactions	571,424	
Net realized gain from foreign currency transactions	604,540	
Net amortization/(accretion) of premium/(discount)	(1,006,079)	
<hr/>		
Net adjustment to reconcile net investment income	47,487,609	
<hr/>		
Net cash and foreign currency provided from operating activities	\$	64,586,778
<hr/>		
Cash Flows Used in Financing Activities		
Decrease in notes payable	\$	(30,000,000)
Cash dividends paid to common shareowners	(20,409,790)	
Decrease in bank overdrafts	(10,987,171)	
<hr/>		
Net cash flow used in financing activities	\$	(61,396,961)
<hr/>		
Net increase in cash and foreign currency	\$	3,189,817
<hr/>		
Cash and Foreign Currency		

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Beginning of the period	\$	--

End of the period	\$	3,189,817
=====		

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

36 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Financial Highlights

	Year Ended 4/30/09	5/30/07 (b) to 4/30/08
Per Share Operating Performance		
Net asset value, beginning of period	\$ 22.02	\$ 23.88 (c)

Increase (decrease) from investment operations: (a)		
Net investment income	\$ 2.10	\$ 1.77
Net realized and unrealized loss on investments and foreign currency transactions	(7.67)	(1.80)

Net decrease from investment operations	\$ (5.57)	\$ (0.03)
Distributions from:		
Net investment income	(2.47)	(1.78)
Tax return of capital	(0.04)	--
Capital charge with respect to issuance of shares	--	(0.05)

Net decrease in net asset value	\$ (8.08)	\$ (1.86)

Net asset value, end of period (d)	\$ 13.94	\$ 22.02

Market value, end of period (d)	\$ 13.23	\$ 20.47
=====		
Total return at market value (e)	(23.11)%	(10.67)%
Ratios to average net assets		
Net operating expenses	1.38%	0.99%
Interest expense	1.14%	0.33%
Net expenses	2.52%	1.32%
Net investment income	12.27%	8.48%
Portfolio turnover	25%	21%
Net assets, end of period (in thousands)	\$113,812	\$ 179,515
Ratios to average net assets before waivers and reimbursements of expenses		
Net operating expenses	1.68%	1.29%
Interest expense	1.14%	0.33%
Net expenses	2.82%	1.62%
Net investment income	11.97%	8.18%
=====		

- (a) The per common share data presented above is based upon the average common shares outstanding for the periods presented.
- (b) Trust shares were first publicly offered on May 24, 2007 and commenced operations on May 30, 2007.
- (c) Net asset value immediately after the closing of the first public offering was \$23.83.

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

- (d) 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.
- (e) 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.
- (f) Annualized.

The information above represents the audited 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.

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 37

Notes to Financial Statements | 4/30/09

1. Organization and Significant Accounting Policies

Pioneer Diversified High Income Trust (the Trust) was organized as a Delaware statutory trust on January 30, 2007. Prior to commencing operations on May 30, 2007, the Trust had no operations other than matters relating to its organization and registration as a diversified, closed-end management investment company under the Investment Company Act of 1940, as amended, and the sale and issuance to Pioneer Investment Management, Inc. (PIM), the Trust's investment adviser, a wholly owned indirect subsidiary of UniCredit S.p.A. (UniCredit), of 4,188 shares of beneficial interest at an aggregate purchase price of \$100,000. PIM reimbursed all the Trust's organizational expenses and paid the amount by which the aggregate offering costs (other than the sales load) exceeded \$0.05 per share of the common share offering. The investment objective of the Trust is to provide a high level of current income and, as a secondary objective, the Trust may seek capital appreciation to the extent that it is consistent with its investment objective.

The Trust's investments in certain foreign markets or countries with limited developing markets may subject the Trust to a greater degree of risk than in a developed market. These risks include disruptive political or economic conditions and the possible imposition of adverse governmental laws or currency exchange restrictions.

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 from time to time. Please refer to those documents when considering the Trust's risks. At times, the Trust's investments may represent industries or industry sectors that are interrelated or have common risks, making it more susceptible to any economic, political, or regulatory developments or other risks affecting those industries and sectors.

The Trust invests in below investment grade (high yield) debt securities, floating rate loans and event-linked bonds sometimes referred to as "catastrophe" bonds or "insurance-linked" bonds. The Trust may invest in securities and other obligations of any credit quality, including those that are rated below investment grade, or are unrated but are determined by the

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

investment adviser to be of equivalent credit quality. 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

38 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

higher rated debt securities. The Trust may invest in securities of issuers that are in default or that are in bankruptcy.

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 year. 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 generally accepted in the investment company industry:

A. Security Valuation

Security transactions are recorded as of trade date. Investments in loan interests 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. For Loan Interests for which no reliable price quotes are available, such investments are valued by Loan Pricing Corporation through the use of pricing matrices to determine valuations.

Fixed-income securities are valued at prices supplied by independent pricing services, which consider such factors as Treasury spreads, yields, maturities and ratings. Valuations may be supplemented by values obtained from dealers and other sources, as required. Equity securities are valued at the last sale price on the principal exchange where they are traded. Securities or Loan Interests for which market prices and/or quotations are not readily available are valued using fair value methods pursuant to procedures adopted by the Board of Trustees ("board determined"). 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 also use fair value methods to value a security, including a non-U.S. security, when the closing market price on the primary exchange where the security is traded no longer accurately reflects the value of the security as of the close of the NYSE. As of April 30, 2009, there were no securities valuations that were board determined. Temporary cash investments are valued at amortized cost which approximates market value.

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. Discounts and premiums on

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 39

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

debt securities are accreted or amortized, respectively, daily, on an effective yield to maturity basis and are included in interest income. Premiums and discounts related to certain mortgage-backed securities are amortized or accreted in proportion to the monthly paydowns. Interest income, including income on interest bearing cash accounts, is recorded on an accrual basis. Dividend and interest income are reported net of unrecoverable foreign taxes withheld at the applicable country rates.

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 the appropriate 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.

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 as a hedge or cross-hedge against either specific investment transactions (settlement hedges) or portfolio positions (portfolio hedges). 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 4).

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 years for the prior two fiscal years remain subject to examination by tax authorities.

40 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

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 either from or in excess of net investment income or as from net realized gain on investments and foreign currency transactions, or as from paid-in capital, depending on the type of book/tax differences that may exist.

At April 30, 2009, the Trust reclassified \$231,317 to decrease

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

distributions in excess of net investment income and \$231,317 to increase accumulated net realized loss on investments. The reclassification has no impact on the net asset value of the Trust and presents the Trust's capital accounts on a tax basis.

The Trust has elected to defer approximately \$14,228,771 in capital losses realized and \$585,166 in currency losses realized between November 1, 2008 and April 30, 2009 to its fiscal year ending April 30, 2010.

At April 30, 2009, the Trust had a net capital loss carryforward of \$644,894 which is comprised of \$231,744 which will expire in 2016 and \$413,150 which will expire in 2017, if not utilized.

The tax character of current year distributions paid to shareowners during the year ended April 30, 2009 and the period ended April 30, 2008 were as follows:

	2009	2008
Distributions paid from:		
Ordinary income	\$20,135,595	\$14,530,763
Tax return of capital	371,077	--
Total	\$20,506,672	\$14,530,763

The following shows the components of distributable earnings on a federal income tax basis at April 30, 2009.

Distributable earnings:	
Capital loss carryforward	\$ (644,894)
Post-October loss deferred	(14,813,937)
Dividends payable	(1,551,526)
Unrealized depreciation	(63,239,755)
Total	\$ (80,250,112)

The difference between book-basis and tax-basis unrealized depreciation is primarily attributable to the tax deferral of losses on wash sales, the realization for tax purposes of unrealized losses on certain foreign currency contracts, the book/tax differences in the accrual of income on securities in

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 41

default, the difference between book and tax amortization methods for premiums and discounts on fixed income securities and other book/tax temporary differences.

E. Repurchase Agreements

With respect to repurchase agreements entered into by the Trust, the value of the underlying securities (collateral), including accrued interest, is

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

required to be at least equal to or in excess of the value of the repurchase agreement. The collateral for all repurchase agreements is held in safekeeping in the customer-only account of the Trust's custodian, or subcustodians. PIM is responsible for determining that the value of the collateral remains at least equal to the repurchase price.

F. Securities Lending

The Trust lends securities in its portfolio to certain broker-dealers or other institutional investors. When entering into a securities loan transaction, the Trust typically receives cash collateral from the borrower equal to at least the value of the securities loaned, which is invested in temporary cash investments. Credit Suisse, New York Branch, as the Trust's securities lending agent, manages the Trust's securities lending collateral. The income earned on the investment of collateral is shared with the borrower and the lending agent in payment of any rebate due to the borrower with respect to the securities loan, and in compensation for the lending agent's services to the Trust. The Trust also continues to receive interest or payments in lieu of dividends on the securities loaned. Gain or loss on the value of the loaned securities that may occur during the term of the loan will be for the account of the Trust. The amount of the collateral is required to be adjusted daily to reflect any price fluctuation in the value of the loaned securities. The Trust has the right, under the lending agreement, to terminate the loan and recover the securities from the borrower with prior notice. The Trust will be required to return the cash collateral to the borrower and could suffer a loss if the value of the collateral, as invested, has declined.

G. Automatic Dividend Reinvestment Plan

All common shareowners 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

42 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

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.

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 American 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

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

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 manages the Trust's portfolio. Management fees payable under the Trust's Advisory Agreement with PIM are calculated daily at the annual rate of 0.85% of the Trust's average daily managed assets. "Managed assets" means the total assets of the Trust, including any form of investment leverage, minus all accrued expenses incurred in the normal course of operations, but not excluding any liabilities or obligations attributable to investment leverage obtained through (i) indebtedness of any type (including, without limitation, borrowing through a credit facility or the issuance of debt securities), (ii) the issuance of preferred stock or other similar preference securities, (iii) the reinvestment of collateral received for securities loaned in accordance with the Funds investment objectives and policies, and/or (iv) any other means. For the year ended April 30, 2009, the net management fee was equivalent to 0.63% of the Trust's average daily managed assets, which was equivalent to 0.88% of the Trust's average daily net assets.

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 43

In addition, under PIM's management and administration agreements, certain other services and costs are paid by PIM and reimbursed by the Trust. Included in "Due to affiliates" reflected on the Statement of Assets and Liabilities is \$58,058 in management fees, administrative fees and certain other fees payable to PIM at April 30, 2009.

PIM has retained Princeton Administrators, LLC (Princeton) to provide certain administrative and accounting services to the Trust on its behalf. PIM pays Princeton a monthly fee at an annual rate of 0.07% of the average daily value of the Trust's managed assets up to \$500 million and 0.03% of average daily managed assets in excess of \$500 million, subject to a minimum monthly fee of \$10,000. Princeton receives no compensation directly from the Trust.

Effective October 1, 2008, PIM has entered into a Research Services Agreement with Montpelier Capital Advisors, Ltd. (Montpelier). Under the research services agreement, Montpelier will provide research services to PIM with regard to event-linked bonds. PIM pays Montpelier a flat fee of \$325,000 annually. Prior to October 1, 2008, PIM had engaged Montpelier to act as the Trust's investment sub-adviser with respect to the Trust's investments in event-linked bonds. PIM paid Montpelier a monthly fee at an annual rate of 0.80% of the average daily value of the Trust's sub-advised assets; however, the fee in no event was less than 0.15% of the Trust's average daily managed assets. The fee was paid quarterly in arrears. Montpelier received no compensation directly from the Trust.

Also, PIM has agreed for the first three years of the Trust's investment operations to limit the Trust's total annual expenses, excluding offering costs for common shares, interest expense, the cost of defending or prosecuting any claim or litigation to which the Trust is a party (together with any amount in judgment or settlement), indemnification expense or taxes incurred due to the failure of the Trust to qualify as a regulated investment company under the

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Code or any other non-recurring or non-operating expenses, to 0.90% of the Trust's average daily managed assets in year one, 0.95% of the Trust's average daily managed assets in year two and 1.00% of the Trust's average daily managed assets in year three. This is a contractual limit and may not be terminated by the adviser during the three year period ending on 2010. There can be no assurance that it will be continued after that time. For the year ended April 30, 2009, the expense reduction under such arrangement was \$418,949.

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.

44 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

4. Forward Foreign Currency Contracts

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

Open portfolio hedges at April 30, 2009 were as follows:

Currency	Net Contracts to Receive (Deliver)	In Exchange For US\$	Settlement Date	US\$ Value	Net Unrealized Gain/(Loss)
EURO	3,340,000	\$ 4,427,170	5/5/09	\$ 4,425,750	\$ (1,420)
EURO	(3,340,000)	\$ (4,393,904)	5/4/09	\$ (4,425,767)	\$ (31,863)
EURO	(3,340,000)	\$ (4,426,635)	6/5/09	\$ (4,425,189)	\$ 1,446

	Total				\$ (31,837)
=====					

At April 30, 2009, the Trust had no outstanding forward currency settlement contracts.

5. Unfunded Loan Commitments

As of April 30, 2009, the Trust had unfunded loan commitments of \$22,500 which could be extended at the option of the borrower, pursuant to the following loan agreements:

Borrower	Unfunded Loan Commitment
Bausch & Lomb, Inc., Delayed Draw Term Loan	\$22,500

6. Loan Agreement

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Effective February 6, 2009, the Trust entered into a \$55,000,000 Revolving Credit Facility (the Credit Agreement) with the Bank of Nova Scotia.

At April 30, 2009, the Trust had a borrowing outstanding under the Credit Agreement totaling \$38,000,000. The interest rate charged at April 30, 2009 was 2.71%. The average daily balance was \$54,191,781 at a weighted average interest rate of 2.90%. With respect to the loan, interest expense of \$1,595,281 is included in the Statement of Operations.

The Trust is required to maintain 300% asset coverage with respect to amounts outstanding under the Credit Agreement. Asset coverage is calculated by subtracting the Trust's total liabilities, not including any bank loans and senior securities, from the Trust's total assets and dividing such amount by the principal amount of the borrowings outstanding. As of the date indicated below, the Trust's debt outstanding and asset coverage were as follows:

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 45

Date	Total Amount Outstanding	Asset coverage per \$1,000 of Indebtedness
4/30/09	\$38,000,000	\$3,995

7. Trust Shares

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

Transactions in common shares of beneficial interest for the year ended April 30, 2009 and the period from May 30, 2007 (commencement of investment operations) to April 30, 2008 were as follows:

	2009	2008
Shares outstanding at beginning of period	8,154,188	4,188
Shares issued in connection with initial public offering	--	7,300,000
Shares issued from underwriters' over-allotment option exercised	--	850,000
Reinvestment of distributions	11,739	--

Shares outstanding at end of period	8,165,927	8,154,188
=====		

For the period ended April 30, 2008, offering costs of \$407,500 incurred in connection with the Trust's offering of common shares have been charged to paid-in capital.

8. New Pronouncement

In March 2008, Statement of Financial Accounting Standards No. 161, Disclosures about Derivative Instruments and Hedging Activities (SFAS 161), was issued and is effective for fiscal years beginning after November 15, 2008. SFAS 161

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

requires enhanced disclosures about an entity's derivative and hedging activities. Management currently is evaluating the impact the adoption of SFAS 161 will have on the Trust's financial statement disclosures.

9. Subsequent Event

Subsequent to April 30, 2009, the Board of Trustees of the Trust declared a dividend from undistributed net investment income of \$0.19 per common share payable May 29, 2009, to shareowners of record on May 15, 2009.

46 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Report of Independent Registered Public Accounting Firm

To the Board of Trustees and the Shareowners of
Pioneer Diversified High Income Trust:

We have audited the accompanying statement of assets and liabilities of Pioneer Diversified High Income Trust (the "Trust"), including the schedule of investments, as of April 30, 2009, and the related statements of operations and cash flows for the year then ended, and the statements of changes in net assets and the financial highlights for the periods indicated therein. These financial statements and financial highlights are the responsibility of the Trust's management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement. We were not engaged to perform an audit of the Trust's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Trust's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements and financial highlights, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our procedures included confirmation of securities owned as of April 30, 2009, by correspondence with the custodian, agent banks, and brokers or by other appropriate auditing procedures where replies from brokers were not received. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of Pioneer Diversified High Income Trust at April 30, 2009, the results of its operations and its cash flows for the year then ended, and the changes in its net assets and financial highlights for the periods indicated therein, in conformity with U.S. generally accepted accounting principles.

/s/Ernst & Young LLP

Boston, Massachusetts
June 23, 2009

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 47

During the period, there have been no material changes in the Trust's

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

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.

CEO CERTIFICATION DISCLOSURE (unaudited)

The Trust's Chief Executive Officer has submitted to the New York Stock Exchange the annual CEO certification as required by Section 303A.12(a) of the NYSE Listed Company Manual. In addition, the Trust has filed with the Securities and Exchange Commission the certification of its Chief Executive Officer and Chief Financial Officer required by Section 302 of the Sarbanes-Oxley Act.

Results of Shareowner Meeting (unaudited)

On September 22, 2008, Pioneer Diversified High Income Trust held its annual meeting of shareowners to elect Class I Trustees. All Class I Trustees were elected. Below are the detailed results of the votes.

Proposal 1 -- To elect Class I Trustees.

Nominee	Affirmative	Withheld	Abstained
Benjamin M. Friedman	7,070,011	0	158,826
Margaret B.W. Graham	7,073,638	0	155,199
Daniel K. Kingsbury, Jr.	7,074,860	0	153,977

IMPORTANT TAX INFORMATION (unaudited)

The following information is provided with respect to the ordinary income distributions paid by Pioneer Diversified High Income Trust for the fiscal year ended April 30, 2009:

Interest Related Dividends for Non-U.S. Residents 66.60%*

* Represents the portion of the taxable ordinary income dividends eligible for exemption from U.S. withholding tax for nonresident aliens and foreign corporations.

48 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Approval of Investment Advisory Agreement (unaudited)

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Pioneer Investment Management, Inc. (PIM) serves as the Trust's investment adviser pursuant to an investment advisory agreement between PIM and the Trust. The Trustees of the Trust, as required by law, determine annually whether to continue the investment advisory agreement for the Trust.

The contract renewal process began in March 2008 as the Trustees of the Trust agreed on, among other things, an overall approach and timeline for the process. In July, the Trustees approved the format of the contract renewal materials and submitted their formal request to PIM to furnish information necessary to evaluate the terms of the investment advisory agreement. The contract renewal materials were provided to the Trustees in August. After reviewing and discussing the materials, the Trustees submitted a request for additional information to PIM in September, and materials were provided in response to this request later that month. Meetings of the Independent Trustees of the Trust were held in September and October to review and discuss the contract renewal materials.

At a meeting held on November 11, 2008, based on their evaluation of the information provided by PIM, the Trustees of the Trust, including the independent Trustees voting separately, unanimously approved the continuation of the investment advisory agreement for another year. In considering the continuation of the investment advisory agreement, the Trustees considered various factors that they determined were relevant, including the factors described below. The Trustees did not identify any single factor as the controlling factor in determining to approve the continuation of the investment advisory agreement.

Nature, Extent and Quality of Services

The Trustees considered the nature, extent and quality of the services that were provided by PIM to the Trust, taking into account the investment objective and strategy of the Trust and the information related to the Trust provided to the Trustees at each regularly scheduled meeting. The Trustees reviewed the terms of the investment advisory agreement. The Trustees also reviewed PIM's investment approach for the Trust and its research process. The Trustees considered the resources of PIM and the personnel of PIM who provide investment management services to the Trust. They also considered PIM's compliance and legal resources and personnel.

The Trustees also considered that, as administrator, PIM is responsible for the administration of the Trust's business and other affairs. It was noted that PIM supervises and monitors the performance of the Trust's service providers and provides the Trust with personnel (including officers) as are necessary for the Trust's operations. The Trustees considered the fees paid to PIM for the provision of such services.

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 49

Based on these considerations, the Trustees concluded that the nature, extent and quality of services that were provided by PIM to the Trust were satisfactory and consistent with the terms of the investment advisory agreement.

Performance of the Trust

The Trustees considered the performance results of the Trust over various time periods. They reviewed information comparing the Trust's performance with the average performance of its peer group of funds as classified by Morningstar, Inc. (Morningstar), an independent provider of investment company data, and with the performance of the Trust's benchmark index. The Trustees noted that the Trust commenced operations on May 30, 2007. The Trustees considered that the Trust's annualized total return was in the first quintile of its Morningstar category for the one year period ended June 30, 2008. (In all

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

quintile rankings referred to throughout this disclosure, first quintile is most favorable to the Trust's shareowners. Thus, highest relative performance would be first quintile and lowest relative expenses also would be first quintile.) The Trustees noted that the yield (gross of expenses) to the Trust's common shareowners for the twelve months ended June 30, 2008 exceeded the yield of the Trust's benchmark index for the same period. The Trustees concluded that the investment performance of the Trust was satisfactory.

Management Fee and Expenses

The Trustees considered information on the fees and expenses of the Trust in comparison to the management fees and the expense ratios of a peer group of funds selected on the basis of criteria determined by the independent Trustees for this purpose using data provided by Strategic Insight Mutual Trust Research and Consulting, LLC (Strategic Insight), an independent third party.

The Trustees considered that the Trust's management fee for the twelve months ended June 30, 2008 was in the fourth quintile relative to the management fees paid by other funds in its Strategic Insight peer group for the comparable period. The Trustees considered that the Trust's management fee was 0.037% higher than the median management fee of the peer group. The Trustees also considered that the Trust's expense ratio for the twelve months ended June 30, 2008 was in the first quintile relative to its Strategic Insight peer group for the comparable period. The Trustees noted the challenge of selecting a comparable peer group for expense comparison purposes. It was noted that PIM did not currently manage any separate accounts with an investment objective and strategies that were similar to those of the Trust.

The Trustees concluded that the management fee payable by the Trust to PIM was reasonable in relation to the nature and quality of the services provided by PIM. The Trustees also concluded that the Trust's expense ratio was reasonable, taking into account the quality of services provided by PIM, the investment performance of the Trust and the contractual expense limitation agreed to by PIM with respect to the Trust.

50 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Profitability

The Trustees considered information provided by PIM regarding the profitability of PIM with respect to the advisory services provided by PIM to the Trust, including the methodology used by PIM in allocating certain of its costs to the management of the Trust. The Trustees also considered PIM's profit margin in connection with the overall operation of the Trust. They further reviewed the financial results realized by PIM and its affiliates from non-fund businesses. The Trustees considered PIM's profit margins with respect to the Trust in comparison to the limited industry data available and noted that the profitability of any adviser was affected by numerous factors, including its organizational structure and method for allocating expenses. The Trustees recognized that PIM should be entitled to earn a reasonable level of profit for the services provided to the Trust. The Trustees concluded that PIM's profitability with respect to the management of the Trust was not unreasonable.

Economies of Scale

The Trustees considered the extent to which PIM may realize economies of scale or other efficiencies in managing and supporting the Trust. Since the Trust is a closed-end fund and its size is relatively stable at an asset level that was anticipated when the management fee initially was set, the Trustees concluded that economies of scale were not a relevant consideration.

Other Benefits

The Trustees also considered the character and amount of fees paid by the Trust, other than under the investment advisory agreement, for services

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

provided by PIM and its affiliates. The Trustees further considered the revenues and profitability of PIM's businesses other than the fund business. The Trustees concluded that the receipt of these benefits was reasonable in the context of the overall relationship between PIM and the Trust.

Conclusion

After consideration of the factors described above as well as other factors, the Trustees, including all of the independent Trustees, concluded that the investment advisory agreement between PIM and the Trust, including the fees payable thereunder, was fair and reasonable and voted to approve the proposed continuation of the investment advisory agreement for the Trust.

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 51

Trustees, Officers and Service Providers

Investment Adviser

Pioneer Investment Management, Inc.

Custodian

Brown Brothers Harriman & Co.

Independent Registered Public Accounting Firm

Ernst & Young LLP

Legal Counsel

Bingham McCutchen LLP

Transfer Agent

Pioneer Investment Management Shareholder Services, Inc.

Shareowner Services and Sub-Transfer Agent

American Stock Transfer & Trust Company

Investment Sub-Adviser

Montpelier Capital Advisors, Ltd.

Sub-Administrator

Princeton Administrators, LLC

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>.

Trustees and Officers

The Board of Trustees provides broad supervision over the Trust's affairs. The officers of the Trust are responsible for the Trust's operations. The Trustees and officers are listed below, together with their principal occupations during the past five years. Trustees who are interested persons of the Trust within the meaning of the 1940 Act are referred to as Interested Trustees. Trustees who are not interested persons of the Trust are referred to as Independent Trustees. Each of the Trustees serves as a Trustee of each of the 67 U.S. registered investment portfolios for which Pioneer serves as investment adviser (the "Pioneer Funds"). The address for all Trustees and all officers of the Trust is 60 State Street, Boston, Massachusetts 02109.

52 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Interested Trustees

Name and Age	Position Held with the Trust	Length of Service and Term of Office
John F. Cogan, Jr. (82)*	Chairman of the Board, Trustee and President	Class III Trustee since 2007. Term expires in 2010.

Daniel K. Kingsbury (50)*	Trustee and Executive Vice President	Class I Trustee since 2007. Term expires in 2011.

Name and Age	Principal Occupation During Past Five Years
John F. Cogan, Jr. (82)*	Deputy Chairman and a Director of Pioneer Global Asset Management S.p.A. ("PGAM"); Non-Executive Chairman and a Director of Pioneer Investment Management USA Inc. ("PIM-USA"); Chairman and a Director of Pioneer; Chairman and Director of Pioneer Institutional Asset Management, Inc. (since 2006); Director of Pioneer Alternative Investment Management Limited (Dublin); President and a Director of Pioneer Alternative Investment Management (Bermuda) Limited and affiliated funds; Director of PIOGLOBAL Real Estate Investment Fund (Russia) (until June 2006); Director of Nano-C, Inc. (since 2003); Director of Cole Management Inc. (since 2004); Director of Fiduciary Counseling, Inc.; President and Director of Pioneer Funds Distributor, Inc. ("PFD") (until May 2006); President of all of the Pioneer Funds; and Of Counsel, Wilmer Cutler Pickering Hale and Dorr LLP
Daniel K. Kingsbury (50)*	Director, CEO and President of Pioneer Investment Management USA Inc. (since February 2007); Director and President of Pioneer Investment Management, Inc. and Pioneer Institutional Asset Management, Inc. (since February 2007); Executive Vice President of all of the Pioneer Funds (since March 2007); Director of Pioneer Global Asset Management S.p.A. (since April 2007); Head of New Markets Division, Pioneer Global Asset Management S.p.A. (2000 - 2007)

* Mr. Cogan and Mr. Kingsbury are Interested Trustees because they are officers or directors of the Trust's investment adviser and certain of its affiliates.

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 53

Independent Trustees

Name and Age	Position Held with the Trust	Length of Service and Term of Office
--------------	------------------------------	--------------------------------------

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

David R. Bock (65) Trustee Class III Trustee since 2007. Term expires in 2010.

Mary K. Bush (61) Trustee Class II Trustee since 2007. Term expires in 2009.

Name and Age	Principal Occupation During Past Five Years	Other Directorships Held by
--------------	---	-----------------------------

David R. Bock (65)	Managing Partner, Federal City Capital Advisors (boutique merchant bank) (1997 - 2004 and 2008 - present); and Executive Vice President and Chief Financial Officer, I-trax, Inc. (publicly traded health care services company) (2004 - 2007)	Director of Community (private housing) Director of Mortgage traded Inc. (public) and con
--------------------	--	---

Mary K. Bush (61)	President, Bush International, LLC (international financial advisory firm)	Director of tional, cover F (creditronic Director Co. (en Director (airline Director tional securit ligence and Mem Governo Company
-------------------	--	---

54 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Name and Age	Position Held with the Trust	Length of Service and Term of Office
Benjamin M. Friedman (64)	Trustee	Class I Trustee since 2008. Term expires in 2011.
Margaret B.W. Graham (61)	Trustee	Class I Trustee since 2007. Term expires in 2011.

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Thomas J. Perna (58)	Trustee	Class II Trustee since 2007. Term expires in 2009.
Marguerite A. Piret (60)	Trustee	Class II Trustee since 2007. Term expires in 2009.
Stephen K. West (80)	Trustee	Class III Trustee since 2007. Term expires in 2010.

Name and Age	Principal Occupation During Past Five Years
--------------	---

Benjamin M. Friedman (64)	Professor, Harvard University
---------------------------	-------------------------------

Margaret B.W. Graham (61)	Founding Director, Vice-President and Corporate Secretary, The Winthrop Group, Inc. (consulting firm); and Desautels Faculty of Management, McGill University
---------------------------	---

Thomas J. Perna (58)	Chief Executive Officer, Quadriserv, Inc. (technology products for securities lending industry) (2008 - present); Private investor (2004 - 2008); and Senior Executive Vice President, The Bank of New York (financial and securities services) (1986 - 2004)
----------------------	---

Marguerite A. Piret (60)	President and Chief Executive Officer, Newbury, Piret & Company, Inc. (investment banking firm)
--------------------------	---

Stephen K. West (80)	Senior Counsel, Sullivan & Cromwell LLP (law firm)
----------------------	--

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 55

Trust Officers

Name and Age	Position Held with the Trust	Length of Service and Term of Office
Dorothy E. Bourassa (61)	Secretary	Since 2007. Serves at the discretion of the Board
Christopher J. Kelley (44)	Assistant Secretary	Since 2007. Serves at the discretion of the

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Board		
Mark E. Bradley (49)	Treasurer	Since 2008. Serves at the discretion of the Board
Luis I. Presutti (44)	Assistant Treasurer	Since 2007. Serves at the discretion of the Board
Gary Sullivan (51)	Assistant Treasurer	Since 2007. Serves at the discretion of the Board

Name and Age	Principal Occupation During Past Five Years
Dorothy E. Bourassa (61)	Secretary of PIM-USA; Senior Vice President - Legal of Pioneer; Secretary/Clerk of most of PIM-USA's subsidiaries; and Secretary of all of the Pioneer Funds since September 2003 (Assistant Secretary from November 2000 to September 2003)
Christopher J. Kelley (44)	Associate General Counsel of Pioneer since January 2008 and Assistant Secretary of all of the Pioneer Funds since September 2003; Vice President and Senior Counsel of Pioneer from July 2002 to December 2007
Mark E. Bradley (49)	Vice President - Fund Accounting, Administration and Controllershship Services of Pioneer; and Treasurer of all of the Pioneer Funds since March 2008; Deputy Treasurer of Pioneer from March 2004 to February 2008; Assistant Treasurer of all of the Pioneer Funds from March 2004 to February 2008; and Treasurer and Senior Vice President, CDC IXIS Asset Management Services from 2002 to 2003
Luis I. Presutti (44)	Assistant Vice President - Fund Accounting, Administration and Controllershship Services of Pioneer; and Assistant Treasurer of all of the Pioneer Funds
Gary Sullivan (51)	Fund Accounting Manager - Fund Accounting, Administration and Controllershship Services of Pioneer; and Assistant Treasurer of all of the Pioneer Funds

56 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

Name and Age	Position Held with the Trust	Length of Service and Term of Office
David F. Johnson (29)	Assistant Treasurer	Since 2009. Serves at the discretion of the Board
Teri W. Anderholm (49)	Chief Compliance Officer	Since 2007. Serves at the discretion of the

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Board

Name and Age	Principal Occupation During Past Five Years	Other Held
David F. Johnson (29)	Fund Administration Manager - Fund Accounting, Administration and Controllership Services since November 2008 and Assistant Treasurer of all of the Pioneer Funds since January 2009; Client Service Manager - Institutional Investor Services at State Street Bank from March 2003 to March 2007	None
Teri W. Anderholm (49)	Chief Compliance Officer of Pioneer since December 2006 and of all the Pioneer Funds since January 2007; Vice President and Compliance Officer, MFS Investment Management (August 2005 to December 2006); Consultant, Fidelity Investments (February 2005 to July 2005); Independent Consultant (July 1997 to February 2005)	None

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 57

This page for your notes.

58 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

This page for your notes.

Pioneer Diversified High Income Trust | Annual Report | 4/30/09 59

This page for your notes.

60 Pioneer Diversified High Income Trust | Annual Report | 4/30/09

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:

Account Information 1-800-710-0935

Or write to AST:

For

General inquiries, lost dividend checks,
change of address, lost stock certificates,
stock transfer

Write to

American Stock
Transfer & Trust
Operations Center
6201 15th Ave.
Brooklyn, NY 11219

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

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 web site 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 also may 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.

The Trust has filed with the Securities and Exchange Commission the certification of its Chief Executive Officer and Chief Financial Officer required by Section 302 of the Sarbanes-Oxley Act.

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,

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

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

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

- (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.

Audit Fees

Fees for audit services provided to the Trust, including fees associated with the filings to update its Form N-2 and issuance of comfort letters, totaled approximately \$41,300 in 2009 and \$50,545 in 2008.

(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.

Audit-Related Fees

There were no audit-related fees for 2009 and 2008.

(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.

Tax Fees

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Fees for tax compliance services, primarily for tax returns, totaled approximately \$8,290 and \$7,820 for 2009 and 2008, respectively.

(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.

All Other Fees

There were no other fees for 2009 and 2008.

(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
---------------------	------------------------------	---

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

<p>I. AUDIT SERVICES</p>	<p>Services that are directly related to performing the independent audit of the Funds</p>	<ul style="list-style-type: none"> o Accounting research assistance o SEC consultation, registration statements, and reporting o Tax accrual related matters o Implementation of new accounting standards o Compliance letters (e.g. rating agency letters) o Regulatory reviews and assistance regarding financial matters o Semi-annual reviews (if requested) o Comfort letters for closed end offerings
<p>II. AUDIT-RELATED SERVICES</p>	<p>Services which are not prohibited under Rule 210.2-01(C)(4) (the "Rule") and are related extensions of 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.)</p>	<ul style="list-style-type: none"> o AICPA attest and agreed-upon procedures o Technology control assessments o Financial reporting control assessments o Enterprise security architecture assessment

AUDIT COMMITTEE APPROVAL POLICY

AUDIT COMMITTEE REPORTING POLICY

- o "One-time" pre-approval for the audit period for all pre-approved specific service subcategories. Approval of the independent auditors as auditors for a Fund shall constitute pre approval for these services.

- o A summary of all such services and related fees reported at each regularly scheduled Audit Committee meeting.

- o "One-time" pre-approval for the fund fiscal year within a specified dollar limit for all pre-approved specific service subcategories

- o A summary of all such services and related fees (including comparison to specified dollar limits) 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

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

specific approvals)

- 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"

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PRE-APPROVED SERVICE SUBCATEGORIES
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.	<ul style="list-style-type: none"> o Tax planning and support o Tax controversy assistance o Tax compliance, tax returns, excise tax returns and support o Tax opinions

AUDIT COMMITTEE APPROVAL POLICY	AUDIT COMMITTEE REPORTING POLICY
<ul style="list-style-type: none"> o "One-time" pre-approval for the fund fiscal year within a specified dollar limit 	<ul style="list-style-type: none"> o A summary of all such services and related fees (including comparison to specified dollar limits) reported quarterly.
<ul style="list-style-type: none"> 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) 	
<ul style="list-style-type: none"> 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 A. SYNERGISTIC, UNIQUE QUALIFICATIONS	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, the ability to maintain a desired level of confidentiality, or where the Fund's auditors possess unique or superior qualifications to provide these services, resulting in superior value and results for the Fund.	<ul style="list-style-type: none"> o Business Risk Management support o Other control and regulatory compliance projects

AUDIT COMMITTEE APPROVAL POLICY	AUDIT COMMITTEE REPORTING POLICY
<ul style="list-style-type: none"> o "One-time" pre-approval for the fund fiscal year within a specified dollar limit 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" 	<ul style="list-style-type: none"> o A summary of all such services and related fees (including comparison to specified dollar limits) reported quarterly.

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PROHIBITED SERVICE SUBCATEGORIES
PROHIBITED SERVICES	Services which result in the auditors losing independence status under the Rule.	<ol style="list-style-type: none"> 1. Bookkeeping or other services related to the accounting records or 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
<ul style="list-style-type: none"> o These services are not to be performed with the exception of the(*) services that may be permitted if they would not be subject to audit procedures at the audit client (as defined in rule 2-01(f)(4)) level the firm providing the service. 	<ul style="list-style-type: none"> o A summary of all services and related fees reported at each regularly scheduled Audit Committee meeting will serve as continual 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.

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

- 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.

Beginning with non-audit service contracts entered into on or after May 6, 2003, the effective date of the new SEC pre-approval rules, the Trust's audit committee is required to pre-approve services to affiliates defined by SEC rules to the extent that the services are determined to have a direct impact on the operations or financial reporting of the Trust. For the years ended April 30, 2009 and 2008, there were no services provided to an affiliate that required the Trust's audit committee pre-approval.

(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.

The aggregate non-audit fees for the Trust and affiliates, as previously defined, totaled approximately \$8,290 in 2009 and \$7,820 in 2008.

(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

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

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 registrant's 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 committee established 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.

Proxy Voting Policies and Procedures of
Pioneer Investment Management, Inc.

VERSION DATED July, 2004

Overview

Pioneer Investment Management, Inc. ("Pioneer") is a fiduciary that owes each of its client's duties of care and loyalty with respect to all services undertaken on the client's behalf, including proxy voting. When Pioneer has been delegated proxy-voting authority for a client, the duty of care requires Pioneer to monitor corporate events and to vote the proxies. To satisfy its duty of loyalty, Pioneer must place its client's interests ahead of its own and must cast proxy votes in a manner consistent with the best interest of its clients. Pioneer will vote all proxies presented in a timely manner.

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

The Proxy Voting Policies and Procedures are designed to complement Pioneer's investment policies and procedures regarding its general responsibility to monitor the performance and/or corporate events of companies that are issuers of securities held in accounts managed by Pioneer. Pioneer's Proxy Voting Policies summarize Pioneer's position on a number of issues solicited by companies held by Pioneer's clients. The policies are guidelines that provide a general indication on how Pioneer would vote but do not include all potential voting scenarios.

Pioneer's Proxy Voting Procedures detail monitoring of voting, exception votes, and review of conflicts of interest and ensure that case-by-case votes are handled within the context of the overall guidelines (i.e. best interest of client). The overriding goal is that all proxies for US and non-US companies that are received promptly will be voted in accordance with Pioneer's policies or specific client instructions. All shares in a company held by Pioneer-managed accounts will be voted alike, unless a client has given us specific voting instructions on an issue or has not delegated authority to us or the Proxy Voting Oversight Group determines that the circumstances justify a different approach.

Pioneer does not delegate the authority to vote proxies relating to its clients to any of its affiliates, which include other subsidiaries of UniCredito.

Any questions about these policies and procedures should be directed to the Proxy Coordinator.

1

Proxy Voting Procedures

Proxy Voting Service

Pioneer has engaged an independent proxy voting service to assist in the voting of proxies. The proxy voting service works with custodians to ensure that all proxy materials are received by the custodians and are processed in a timely fashion. To the extent applicable, the proxy voting service votes all proxies in accordance with the proxy voting policies established by Pioneer. The proxy voting service will refer proxy questions to the Proxy Coordinator (described below) for instructions under circumstances where: (1) the application of the proxy voting guidelines is unclear; (2) a particular proxy question is not covered by the guidelines; or (3) the guidelines call for specific instructions on a case-by-case basis. The proxy voting service is also requested to call to the Proxy Coordinator's attention specific proxy questions that, while governed by a guideline, appear to involve unusual or controversial issues. Pioneer reserves the right to attend a meeting in person and may do so when it determines that the company or the matters to be voted on at the meeting are strategically important to its clients.

Proxy Coordinator

Pioneer's Director of Investment Operations (the "Proxy Coordinator") coordinates the voting, procedures and reporting of proxies on behalf of Pioneer's clients. The Proxy Coordinator will deal directly with the proxy voting service and, in the case of proxy questions referred by the proxy voting service, will solicit voting recommendations and instructions from the Director of Portfolio Management US or, to the extent applicable, investment sub-advisers. The Proxy Coordinator is responsible for ensuring that these questions and referrals are responded to in a timely fashion and for transmitting appropriate voting instructions to the proxy voting service. The Proxy Coordinator is responsible for verifying with the

Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR

Compliance Department whether Pioneer's voting power is subject to any limitations or guidelines issued by the client (or in the case of an employee benefit plan, the plan's trustee or other fiduciaries).

Referral Items

From time to time, the proxy voting service will refer proxy questions to the Proxy Coordinator that are described by Pioneer's policy as to be voted on a case-by-case basis, that are not covered by Pioneer's guidelines or where Pioneer's guidelines may be unclear with respect to the matter to be voted on. Under such certain circumstances, the Proxy Coordinator will seek a written voting recommendation from the Director of Portfolio Management US. Any such recommendation will include: (i) the manner in which the proxies should be voted; (ii) the rationale underlying any such decision; and (iii) the disclosure of any contacts or communications made between Pioneer and any outside parties concerning the proxy proposal prior to the time that the voting instructions are provided. In addition, the Proxy Coordinator will ask the Compliance Department to review the question for any actual or apparent conflicts of interest as described below under "Conflicts of

2

Interest." The Compliance Department will provide a "Conflicts of Interest Report," applying the criteria set forth below under "Conflicts of Interest," to the Proxy Coordinator summarizing the results of its review. In the absence of a conflict of interest, the Proxy Coordinator will vote in accordance with the recommendation of the Director of Portfolio Management US.

If the matter presents a conflict of interest for Pioneer, then the Proxy Coordinator will refer the matter to the Proxy Voting Oversight Group for a decision. In general, when a conflict of interest is present, Pioneer will vote according to the recommendation of the Director of Portfolio Management US where such recommendation would go a