

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

Pioneer Diversified High Income Trust
Form N-CSR
December 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, 2009 through October 31, 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

Semiannual Report | October 31, 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	36
Financial Highlights	40
Notes to Financial Statements	41
Trustees, Officers and Service Providers	51

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 1

President's Letter

Dear Shareowner,

Stock and bond markets around the globe have begun to recover this year from one of their most tumultuous periods in history. This is a welcome relief, and we are generally optimistic about the prospects for the economy going forward. Still, challenges remain. Unemployment is high. Consumer demand and loan growth are weak. And housing has not yet returned to normal.

At Pioneer, we have long advocated the benefits of investing for the long term.

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

This strategy has generally performed well for many investors. Those who remained invested in the market during the downturn have most likely seen their portfolios start to recover this year as the Dow Jones Industrial Average climbed back towards the 10,000 level. Many bond investors have similarly seen a strong rebound, with a broad-based recovery across many different fixed-income asset classes. The riskiest asset classes, such as high-yield bonds, have outperformed other fixed-income asset classes for most of 2009.

At Pioneer, we are not changing the approach to investing that we have used for more than 80 years. We remain focused on company fundamentals and risk management. Our investment process is based on careful research into individual companies, 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 see potential opportunities for making money in many corners of the markets around the globe, it takes research and experience to separate solid investment opportunities from speculation.

Following this difficult period, many investors are rethinking their approach to investing and risk management. Some are questioning whether the basic investment principles they were taught in the past are still useful in today's markets. Complicating matters is that financial markets remain unpredictable. Our advice, as always, is to work closely with a trusted financial advisor to discuss your goals and work together to develop an investment strategy that meets your individual needs. There is no single best strategy that works for every investor.

2 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

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

Sincerely,

/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 | Semiannual Report | 10/31/09 3

Portfolio Management Discussion |10/31/09

Higher-yielding investments posted sharp price gains over the six months ended October 31, 2009, as fixed-income investors sought out the greater income and attractive prices offered by credit-sensitive securities after their prices had

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

been knocked down in the credit crisis of late 2008 and early 2009. In the following discussion, Andrew Feltus and Jonathan Sharkey discuss the factors affecting the performance of Pioneer Diversified High Income Trust during the six-month period ended October 31, 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 six months ended October 31, 2009?

A Pioneer Diversified High Income Trust generated a total return of 41.82% at net asset value during the six months ended October 31, 2009, and 36.32% at market price. Over the same period, the Trust's customized benchmark returned 25.38%. The custom benchmark is based on a 50% weighting of the Merrill Lynch Global High Yield and Emerging Markets Plus Index, which gained 29.23%, and a 50% weighting of the CSFB Leveraged Loan Index, which returned 21.53%.

Q What were the main factors affecting the Trust's performance during the six months ended October 31, 2009?

A The period provided an excellent environment for investing in the higher-yielding securities that the Trust emphasizes. The rally that began in March 2009 continued throughout the six-month period, as the markets gained new confidence that the economy would recover from recession. In the face of aggressive fiscal and monetary actions both in the United States and in major foreign markets, investor demand increased for higher-yielding, credit-sensitive securities. Lower-rated, high-yield corporate bonds turned in the strongest relative performance among domestic income securities, but floating-rate bank loans also delivered robust returns over the period. The third sector in which the Trust invests -- catastrophe-linked bonds -- delivered less impressive results, but still performed positively over the six months.

At the end of the period on October 31, 2009, the largest component in the Trust's portfolio was the allocation to domestic high-yield corporate bonds, which represented 33.3% of the Trust's total investment portfolio, an increase from the 28.9% allocation at the start of the period on May 1, 2009.

4 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Bank loans accounted for about 28.3% of the Trust's total investment portfolio at October 31, 2009, slightly down from the Trust's exposure at the start of the period. The Trust's commitments to catastrophe-linked bonds and emerging market and international bonds were both decreased during the six-month period, ending at 14.3% and 14.4% of the Trust's total investment portfolio, respectively. In addition, we maintained a relatively small commitment (3.2% of the Trust's total investment portfolio) in commercial mortgage-backed securities at the end of the six months. Approximately 25% of Trust assets were leveraged, or borrowed, at period end, and the average credit quality of the Trust's investments was B.

Q What types of investments most influenced the Trust's performance, either positively or negatively, during the six months ended October 31, 2009?

A The Trust's commitment to U.S. high-yield corporate bonds was the primary factor driving performance over the six-month period. As new liquidity poured into financial markets, corporations gained the ability to issue new equity and debt securities and to refinance existing debt, and lower-rated, high-yield bonds staged a robust recovery that benefited the Trust. The Trust's investments in floating-rate loans performed almost as well, adding

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

to performance results as demand for all risky assets rose. The performance benefits of the positions in higher-yielding corporate bonds and in floating-rate bank loans were amplified by the Trust's use of borrowed funds, or leverage, to fund some investments. Leverage tends to exaggerate market movements, both in positive and negative environments, and the Trust's leveraged position during the six months ended October 31, 2009 boosted results.

Holding back the Trust's performance results, somewhat, was the allocation to catastrophe-linked bonds. Catastrophe-linked bonds are reinsurance securities issued against the possibility of significant losses incurred by casualty insurers from natural catastrophes, such as hurricanes and earthquakes. While they produced positive returns, consistent with their role as a way to add diversification and reduce overall volatility in a high-yield oriented portfolio, the catastrophe-linked bonds' performance results trailed those of high-yield corporate bonds and bank loans. Catastrophe-linked bonds had outperformed high-yield bonds and floating-rate loans during the downturn prior to the start of the six-month period on May 1, 2009, but they trailed in the subsequent market recovery. We had reduced the Trust's exposure to catastrophe-linked securities during the six months ended October 31, 2009, but nevertheless retained an allocation for portfolio diversification reasons. The Trust's small position in commercial mortgage-backed securities did not help performance early in the six-month period, but those securities performed better over the final months of the period.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 5

Among individual high-yield bond securities, the Trust's investment in bonds of GC Impsat Holdings, a London-based corporation that provides fiber-optic telecommunication services in Latin America, aided performance results. Holding back results, however, was an investment in bonds issued by the Little Traverse Bay Casino, which operates on a Native American reservation in Michigan.

In the floating-rate portion of the portfolio, the Trust enjoyed good results from investments in loans to Custom Building Products, which produces building materials and tools; Central Garden, which distributes garden and pet care supplies; and LodgeNet Interactive, which supplies electronic movie rental services to hotels and motels. Two underperforming investments were loans to Hudson Products, which produces high-powered industrial fans for electric generating stations and refineries; and Niagara Steel.

While the Trust produced a solid total return that reflects both price change and current income to investors, its monthly dividend was lowered during the six months ended October 31, 2009, as two-thirds of the Trust's investments were in floating-rate securities and income fell as short-term interest rates, including the London Inter-Bank Offered Rate (LIBOR), declined.

Q What is your investment outlook?

A We think we should see a favorable environment for high-yield investing in the near term, as the effects of fiscal stimulus programs of the major economic powers begin to take hold. High-yielding corporate bonds still are trading at reasonable prices, as the global economy appears headed toward a period of renewed expansion. This is an environment that should support high-yield prices, although performance is not likely to match the results of the past six months (May 1, 2009 through October 31, 2009).

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

One question that will hang over the markets, however, will be whether monetary authorities may tighten their policies and limit liquidity if they see the potential for the emergence of inflationary pressures as growth trends strengthen. Market uncertainty over the direction of monetary policy could add volatility to the fixed-income markets.

In the weeks and months ahead, we may consider adding more floating-rate loans to the Trust's portfolio. Because their yields fluctuate with changes in interest rates, we believe floating-rate loans stand to present a good opportunity for solid performance when the Federal Reserve Board eventually starts raising short-term rates again. We also think catastrophe-linked bonds, which are also floating rate securities, should continue to be less volatile than the other sectors, while continuing to offer the benefits of diversification.

Please refer to the Schedule of Investments on pages 11-35 for a full listing of Trust securities.

6 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

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.

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 7

Portfolio Summary | 10/31/09

Portfolio Diversification

(As a percentage of total investment portfolio)

[The following data was represented as a pie chart in the printed material]

Corporate Bonds & Notes	62.0%
Floating Rate Loan Interests	27.8%
Temporary Cash Investments	3.2%
Convertible Bonds & Notes	2.9%
Asset Backed Securities	2.0%
Collateralized Mortgage Obligations	1.2%
Fixed Rate Loan Interests	0.5%
Convertible Preferred Stock	0.2%
Common Stock	0.2%
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 was represented as a pie chart in the printed material]

A & Higher	2.5%
BBB	0.8%
BB	29.9%
B	37.2%
CCC & Lower	14.0%
Not Rated	12.4%
Cash Equivalent	3.2%

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

10 Largest Holdings

(As a percentage of long-term holdings)*

1.	Muteki, Ltd., 4.84%, 5/24/11 (144A)	1.18%
2.	Atlas Reinsurance Plc, 11.0%, 1/10/11 (144A)	1.05
3.	Green Valley, Ltd., 4.343%, 1/10/11 (144A)	1.04
4.	Successor II, Ltd., 25.314%, 4/6/10 (144A)	0.98
5.	SunGard Data Systems, Inc., Tranche A U.S. Term Loan, 1.994%, 2/28/14	0.97

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

6.	Alliance One International, Inc., 10.0%, 7/15/16 (144A)	0.90
7.	Calpine Corp., First Priority Term Loan, 3.165%, 3/29/14	0.90
8.	Blue Fin, Ltd., 4.684%, 4/10/12 (144A)	0.88
9.	Fhu-Jin, Ltd., 4.383%, 8/10/11 (144A)	0.87
10.	U.S.I. Holdings Corp., Tranche B Term Loan, 3.04%, 5/5/14	0.85

* 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.

8 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Prices and Distributions | 10/31/09

Market Value per Common Share

10/31/09	4/30/09
\$ 16.94	\$ 13.23

Net Asset Value per Common Share

10/31/09	4/30/09
\$ 18.53	\$ 13.94

Distributions per Common Share: 5/1/09-10/31/09

Net Investment Income	Tax Return of Capital	Short-Term Capital Gains	Long-Term Capital Gains
\$ 1.0500	\$ --	\$ --	\$ --

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 9

Performance Update | 10/31/09

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 October 31, 2009)

Period	Net Asset Value	Market Price
Life-of-Trust (5/30/07)	7.23%	-6.38%
1 Year	43.08	52.25

[The following data was 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
10/07	8,661	10,095
10/08	6,149	8,066
10/09	9,362	10,659

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

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

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.

10 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Schedule of Investments | 10/31/09 (unaudited)

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

		ASSET BACKED SECURITIES -- 2.9% 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 -- 2.2%	
		Thriffs & Mortgage Finance -- 2.2%	
246,741 (a)	AA+/Aa1	Ace Securities Corp., 0.844%, 12/25/34	\$
911,942 (a)	AAA/Aaa	Bayview Financial Acquisition Trust, 0.829%, 8/28/44	
1,526,392 (a)	AAA/Aaa	Bayview Financial Acquisition Trust, 0.874%, 5/28/44	
200,000 (a)	AAA/Ba3	Carrington Mortgage Loan Trust, 0.344%, 10/25/36	
699,000 (a)	AA+/B3	Carrington Mortgage Loan Trust, 0.444%, 2/25/37	
165,810 (a)	AAA/Ba2	Countrywide Asset-Backed Certificates, 0.424%, 7/25/36	
75,533 (a)	A/B1	First Franklin Mortgage Loan Asset-Backed Certificates, 0.434%, 3/25/36	
250,000 (a)	B+/Ba2	GSAMP Trust, 0.374%, 1/25/37	

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

149,816 (a)	A/A2	GSAMP Trust, 0.674%, 3/25/35	
686,803 (a)	CCC/Caa2	Lehman XS Trust, 0.594%, 12/25/35	
146,625 (a)	B-/B2	Residential Asset Mortgage Products, Inc., 0.444%, 3/25/36	
Total Banks			\$

DIVERSIFIED FINANCIALS -- 0.4%			
Other Diversified Financial Services -- 0.4%			
946,748 (a)	B/Caa1	Aircraft Finance Trust, 0.725%, 5/15/24 (144A)	\$
216,523 (a)	BB-/Ba3	Aircraft Finance Trust, 0.745%, 5/15/24 (144A)	
Total Diversified Financials			\$

TOTAL ASSET BACKED SECURITIES			
(Cost \$5,114,781)			

COLLATERALIZED MORTGAGE OBLIGATIONS --			
1.6% of Net Assets			
BANKS -- 1.6%			
Thriffs & Mortgage Finance -- 1.6%			
276,759 (a)	CCC/B3	Countrywide Home Loans, 0.594%, 3/25/35	\$
572,160 (a)	CCC/Ca	Downey Savings and Loan Association Mortgage Loan Trust, 0.615%, 10/19/45	
393,360 (a)	CCC/Ca	Downey Savings and Loan Association Mortgage Loan Trust, 0.665%, 10/19/45	
1,271,689 (a)	AAA/A3	Impac CMB Trust, 1.004%, 1/25/35	
208,879 (a)	CCC/Caa2	Impac Secured Assets CMN Owner Trust, 0.334%, 11/25/36	
735,827 (a)	CCC/Ca	Luminent Mortgage Trust, 0.504%, 7/25/36	

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 11

Schedule of Investments | 10/31/09 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
438,538 (a)	AAA/Aa1	Thriffs & Mortgage Finance -- (continued) WaMu Mortgage Pass-Through Certificates, 0.474%, 4/25/45	\$ 3
1,453,254 (a)	AAA/Baa1	WaMu Mortgage Pass-Through Certificates, 0.724%, 7/25/45	7
Total Banks			\$ 2,4

TOTAL COLLATERALIZED MORTGAGE OBLIGATIONS			
(Cost \$3,446,933)			

CORPORATE BONDS & NOTES -- 86.2% of Net Assets			
ENERGY -- 8.9%			
Oil & Gas Drilling -- 0.1%			

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

NOK 1,500,000	NR/NR	Petrolia Drilling ASA, 12.0%, 6/20/12 (144A)	\$ 1

300,000 (b)	NR/NR	Oil & Gas Equipment & Services -- 1.1%	
1,120,000	CCC/NR	Nexus 1 Pte, Ltd., 10.5%, 3/7/12 (144A)	\$ 5
700,000 (a)	NR/NR	Oceanografia SA de CV, 11.25%, 7/15/15 (144A)	5
NOK 3,000,000 (a)	NR/NR	Sevan Marine ASA, 4.43%, 5/14/13 (144A)	4
154,800	NR/NR	Sevan Marine ASA, 7.61%, 10/24/12 (144A)	1
		Skeie Drilling & Production ASA, 11.25%, 3/8/13 (144A)	1

			\$ 1,7

505,000	B/B2	Oil & Gas Exploration & Production -- 4.4%	
125,000	BB/Ba3	Berry Petroleum Co., 10.25%, 6/1/14	\$ 5
500,000	CCC/Caa1	Chesapeake Energy Corp., 9.5%, 2/15/15	1
970,000	BB-/B3	Harvest Operations Corp., 7.875%, 10/15/11	5
685,000	B-/B3	Hilcorp Energy I LP, 9.0%, 6/1/16 (144A)	9
855,000	B+/B3	Linn Energy LLC, 11.75%, 5/15/17 (144A)	7
NOK 3,500,000	NR/NR	Mariner Energy, Inc., 11.75%, 6/30/16	9
NOK 2,500,000	NR/NR	Norwegian Energy Co. AS, 11.0%, 7/13/10 (144A)	6
NOK 2,000,000	NR/NR	Norwegian Energy Co. AS, 12.9%, 11/20/14	4
225,000	B/Caa1	PA Resources AB, 8.75%, 3/10/10	3
240,000	B-/B3	PetroQuest Energy, Inc., 10.375%, 5/15/12	2
335,000	B-/B3	Quicksilver Resources, Inc., 7.125%, 4/1/16	2
670,000 (c)	B-/B3	SandRidge Energy, Inc., 8.0%, 6/1/18 (144A)	3
		SandRidge Energy, Inc., 8.625%, 4/1/15	6

			\$ 6,7

1,310,000	BB-/B1	Oil & Gas Refining & Marketing -- 0.9%	
		Petroplus Finance, Ltd., 9.375%, 9/15/19 (144A)	\$ 1,3

500,000	B+/B1	Oil & Gas Storage & Transportation -- 1.0%	
1,245,000 (a)	BB/Ba1	Holly Energy Partners LP, 6.25%, 3/1/15	\$ 4
		Southern Union Co., 7.2%, 11/1/66	1,0

			\$ 1,4

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

12 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
738,000	BB-/B1	Coal & Consumable Fuels -- 1.4%
420,000	NR/B2	Drummond Co., Inc., 9.0%, 10/15/14 (144A)
505,000	BB-/B2	Indo Integrated Energy II BV, 9.75%, 11/5/16 (144A)
400,000	B+/Caa1	Massey Energy Co., 6.875%, 12/15/13
		Murray Energy Corp., 10.25%, 10/15/15 (144A)

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

			Total Energy
			MATERIALS -- 10.6%
195,000 (b)	NR/NR		Commodity Chemicals -- 0.3%
300,000 (b)	NR/NR		ARCO Chemical Co., 9.8%, 2/1/20
			Montell Finance Co. BV, 8.1%, 3/15/27 (144A)
			Diversified Chemicals -- 1.0%
380,000 (1)	BB-/Ba3		Ashland, Inc., 9.125%, 6/1/17 (144A)
EURO 1,275,000	CCC-/Caa3		Ineos Group Holdings Plc, 7.875%, 2/15/16 (144A)
			Construction Materials -- 0.6%
865,000	B/B3		AGY Holding Corp., 11.0%, 11/15/14
300,000 (a) (d)	B-/NR		C8 Capital SPV, Ltd., 6.64% (144A)
			Metal & Glass Containers -- 1.6%
1,145,000	CCC+/B2		AEP Industries, Inc., 7.875%, 3/15/13
EURO 255,000	BB/Ba3		Ardagh Glass Finance Plc, 9.25%, 7/1/16 (144A)
EURO 625,000	B-/B3		Impress Holdings BV, 9.25%, 9/15/14 (144A)
			Paper Packaging -- 1.2%
700,000	CCC+/Caa1		Graham Packaging Co., Inc., 9.875%, 10/15/14
500,000 (1)	B-/B3		Graphic Packaging International, Inc., 9.5%, 8/15/13
750,000	B/NR		U.S. Corrugated, Inc., 10.0%, 6/1/13
			Aluminum -- 0.8%
600,000 (b)	NR/NR		Asia Aluminum Holdings, Ltd., 8.0%, 12/23/11 (144A)
300,000	CCC+/B3		CII Carbon LLC, 11.125%, 11/15/15 (144A)
1,244,070 (a) (c)	D/Caa2		Noranda Aluminum Acquisition Corp., 5.413%, 5/15/15

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 13

Schedule of Investments | 10/31/09 (unaudited) (continued)

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

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

	320,000 (c)	NR/NR	Diversified Metals & Mining -- 1.9%
	195,000	B/B2	Blaze Recycling & Metals LLC, 13.0%, 7/16/12
	750,000	NR/Ba3	FMG Finance Pty., Ltd., 10.625%, 9/1/16 (144A)
	745,000	BB+/Ba2	Prime Dig Pte, Ltd., 11.75%, 11/3/14 (144A)
	750,000	BB/Ba2	Teck Resources, Ltd., 10.25%, 5/15/16
			Vedanta Resources Plc, 9.5%, 7/18/18 (144A)
<hr style="border-top: 1px dashed #000;"/>			
	500,000	NR/Ba3	Precious Metals & Minerals -- 0.3%
			ALROSA Finance SA, 8.875%, 11/17/14 (144A)
<hr style="border-top: 1px dashed #000;"/>			
	1,245,000	CCC+/Caa2	Steel -- 1.6%
	250,000	B+/B2	Algoma Acquisition Corp., 9.875%, 6/15/15 (144A)
	250,000	B+/B2	Evraz Group SA, 8.875%, 4/24/13 (144A)
	920,000	CCC+/Caa1	Evraz Group SA, 9.5%, 4/24/18 (144A)
EURO	50,000	CC/Ca	Ryerson, Inc., 12.0%, 11/1/15
			Zlomrex International Finance SA, 8.5%, 2/1/14 (144A)
<hr style="border-top: 1px dashed #000;"/>			
	47,651	B-/Caa3	Forest Products -- 0.4%
	500,000 (b)	D/Ca	Ainsworth Lumber Co., Ltd., 11.0%, 7/29/15 (144A)
			Mandra Forestry Holdings, Ltd., 12.0%, 5/15/13 (144A)
	250,000	BB/Ba2	Sino-Forest Corp., 10.25%, 7/28/14 (144A)
<hr style="border-top: 1px dashed #000;"/>			
	425,000	B/B2	Paper Products -- 0.9%
	260,000	BB/Ba3	Cellu Tissue Holdings, Inc., 11.5%, 6/1/14
	600,000	B-/B3	Clearwater Paper Corp., 10.625%, 6/15/16 (144A)
			Exopack Holding Corp., 11.25%, 2/1/14
<hr style="border-top: 1px dashed #000;"/>			
			Total Materials
<hr style="border-top: 1px dashed #000;"/>			
	750,000	B-/NR	CAPITAL GOODS -- 6.3%
	405,000	BB/Ba3	Aerospace & Defense -- 0.8%
	90,000	B/B1	Aeroflex. Inc., 11.75%, 2/15/15
			DigitalGlobe, Inc., 10.5%, 5/1/14 (144A)
			GeoEye, Inc., 9.625%, 10/1/15 (144A)
<hr style="border-top: 1px dashed #000;"/>			
EURO	200,000 (a) (d)	B-/NR	Building Products -- 0.4%
	365,000	BB/B1	C10 - EUR Capital SPV, Ltd., 6.277%
			USG Corp., 9.75%, 8/1/14 (144A)
<hr style="border-top: 1px dashed #000;"/>			

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

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

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
350,000	BB-/Ba3	Construction & Engineering -- 0.6% Dycom Industries, Inc., 8.125%, 10/15/15
100,000 (a)	B/B2	Esco Corp., 4.174%, 12/15/13 (144A)
500,000	B/B2	Esco Corp., 8.625%, 12/15/13 (144A)
500,000	B-/NR	Industrial Conglomerates -- 0.7% Cia Latinoamericana de Infraestructura & Servicios SA, 9.75%, 5/10/12
500,000 (b)	NR/NR	Indalex Holding Corp., 11.5%, 2/1/14
740,000	CCC+/Caa2	Park-Ohio Industries, Inc., 8.375%, 11/15/14
720,000	BB-/Caa1	Construction & Farm Machinery & Heavy Trucks -- 1.5% American Railcar Industries, Inc., 7.5%, 3/1/14
770,000	CCC/Caa3	Commercial Vehicle Group, Inc., 8.0%, 7/1/13
950,000	CCC/Caa2	Greenbrier Companies, Inc., 8.375%, 5/15/15
400,000	B-/Caa1	Titan International, Inc., 8.0%, 1/15/12
1,220,000	B-/NR	Industrial Machinery -- 1.1% Industrias Metalurgicas Pescarmona SA, 11.25%, 10/22/14 (144A)
875,000	B-/Caa1	Mueller Water Products, Inc., 7.375%, 6/1/17
500,000 (1)	CCC/B3	Trading Companies & Distributors -- 1.2% Intcomex, Inc., 11.75%, 1/15/11
500,000	CCC/Caa1	KAR Holdings, Inc., 10.0%, 5/1/15
1,000,000	B/B1	Wesco Distribution, Inc., 7.5%, 10/15/17
		Total Capital Goods
250,000	B/B2	COMMERCIAL & PROFESSIONAL SERVICES -- 0.7% Commercial Printing -- 0.1% Sheridan Group, Inc., 10.25%, 8/15/11
700,000 (b) (1)	D/NR	Environmental & Facilities Services -- 0.2% Aleris International, Inc., 10.0%, 12/15/16
210,000	B+/B2	Casella Waste Systems, Inc., 11.0%, 7/15/14 (144A)
EURO 107,128	B/Caa1	New Reclamation Group Pty., Ltd., 8.125%, 2/1/13 (144A)
225,000	BB/Ba1	Office Services & Supplies -- 0.2% Fibria Overseas Finance, Ltd., 9.25%, 10/30/19 (144A)

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

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 15

Schedule of Investments | 10/31/09 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
4,000 (e)	NR/B3	Diversified Support Services -- 0.2% MSX International, Ltd., UK, 12.5%, 4/1/12 (144A)	\$
		Total Commercial & Professional Services	\$ 1,
775,000	CCC/Caa2	TRANSPORTATION -- 0.8% Air Freight & Logistics -- 0.5% CEVA Group Plc, 10.0%, 9/1/14 (144A)	\$
305,000	BB-/Ba2	Airlines -- 0.2% Delta Air Lines, Inc., 9.5%, 9/15/14 (144A)	\$
240,000	B+/B2	Railroads -- 0.1% Kansas City Southern de Mexico, 7.625%, 12/1/13	\$
		Total Transportation	\$ 1,
980,000 (l)	CCC+/Caa2	AUTOMOBILES & COMPONENTS -- 2.0% Auto Parts & Equipment -- 1.9% Allison Transmission, Inc., 11.0%, 11/1/15 (144A)	\$
1,140,000 (b)	D/NR	Lear Corp., 8.75%, 12/1/16	
160,000	CCC/Caa1	Stanadyne Corp., 10.0%, 8/15/14	
500,000 (f)	CCC-/Caa3	Stanadyne Corp., 12.0%, 2/15/15	
700,000 (l)	CCC/Caa2	Tenneco, Inc., 8.625%, 11/15/14	\$ 2,
235,000	B+/B1	Tires & Rubber -- 0.1% Goodyear Tire & Rubber Co., 10.5%, 5/15/16	\$
		Total Automobiles & Components	\$ 3,
695,000	B+/B1	CONSUMER DURABLES & APPAREL -- 1.4% Homebuilding -- 0.4% Meritage Homes Corp., 6.25%, 3/15/15	\$
1,000,000	CCC+/Caa1	Housewares & Specialties -- 0.6% Yankee Acquisition Corp., 9.75%, 2/15/17	\$
500,000	B/Ba3	Textiles -- 0.4% Invista, 9.25%, 5/1/12 (144A)	\$
		Total Consumer Durables & Apparel	\$ 2,

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

		CONSUMER SERVICES -- 3.0%	
		Casinos & Gaming -- 3.0%	
500,000 (b)	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)	1,
395,000	B/B3	FireKeepers Development Authority, 13.875%, 5/1/15 (144A)	
95,000	B/B3	Galaxy Entertainment Finance Co., Ltd., 9.875%, 12/15/12 (144A)	

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

16 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
		Casinos & Gaming -- (continued)
275,000 (b)	D/Ca	Little Traverse Bay Bands of Odawa Indians, 10.25%, 2/15/14 (144A)
1,615,000	CCC/Ca	Mashantucket Western Pequot Tribe, 8.5%, 11/15/15 (144A)
EURO 500,000	B/B3	Peermont Global, Ltd., 7.75%, 4/30/14 (144A)
180,000	BB-/Ba3	Scientific Games International, Inc., 9.25%, 6/15/19
423,000	BB-/Ba3	Scientific Games International, Inc., 9.25%, 6/15/19 (144A)
585,000 (b)	D/NR	Station Casinos, Inc., 6.625%, 3/15/18
EURO 405,000	NR/NR	Unibet Group Plc, 9.7%, 12/21/10
		Total Consumer Services
		MEDIA -- 3.6%
		Advertising -- 0.3%
500,000	B+/B2	MDC Partners, Inc., 11.0%, 11/1/16 (144A)
		Broadcasting -- 2.9%
40,000 (b)	D/NR	CCH I LLC, 11.0%, 10/1/15 (144A)
250,000 (b)	D/NR	CCH II LLC, 10.25%, 9/15/10
840,000	B/B1	Hughes Network Systems LLC, 9.5%, 4/15/14
850,000 (a) (c)	CCC+/Caa3	Intelsat Bermuda, Ltd., 11.5%, 2/4/17 (144A)
500,000	B+/B3	Intelsat Subsidiary Holding Co., Ltd., 8.5%, 1/15/13
400,000	B/B2	Kabel Deutschland GmbH, 10.625%, 7/1/14
430,000	B-/Caa1	Telesat Canada, 12.5%, 11/1/17
1,310,362 (c)	CCC/Caa2	Univision Communications, Inc., 9.75%, 3/15/15 (144A)
		Publishing -- 0.4%
600,000	CCC+/Caa2	Cengage Learning Acquisitions, Inc., 10.5%, 1/15/15 (144A)
		Total Media

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

	640,000	BB-/Ba3	RETAILING -- 1.0% Internet Retail -- 0.4% Ticketmaster Entertainment, Inc., 10.75%, 7/28/16
EURO	74,000 (a)	CCC+/Caa1	Apparel Retail -- 0.0% Edcon Holdings Pty., Ltd., 6.273%, 6/15/15 (144A)
	800,000 (1)	B-/Caa1	Specialty Stores -- 0.6% Sally Holdings LLC, 10.5%, 11/15/16
			Total Retailing
EURO	330,000 (b) (g)	NR/NR	FOOD, BEVERAGE & TOBACCO -- 3.2% Distillers & Vintners -- 0.0% Belvedere SA, 0.0%, 5/15/13 (144A)

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 17

Schedule of Investments | 10/31/09 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
490,000 (b)	NR/NR	Packaged Foods & Meats -- 1.8% Arantes International, Ltd., 10.25%, 6/19/13 (144A)	\$ 6
650,000	B-/B1	Bertin Ltda, 10.25%, 10/5/16 (144A)	6
400,000 (b)	NR/NR	Independencia International, Ltd., 9.875%, 5/15/15 (144A)	
700,000	B+/B1	Marfrig Overseas, Ltd., 9.625%, 11/16/16 (144A)	7
1,175,000	CCC+/NR	Minerva Overseas, Ltd., 9.5%, 2/1/17 (144A)	1,0
275,000 (f)	NR/B2	SA Fabrica de Produtos Alimenticios Vigor, 9.25%, 2/23/17 (144A)	2
			----- \$ 2,7
250,000	B+/NR	Tobacco -- 1.4% Alliance One International, Inc., 10.0%, 7/15/16 (144A)	\$ 2
1,765,000	B+/B2	Alliance One International, Inc., 10.0%, 7/15/16 (144A)	1,8
			----- \$ 2,0
		Total Food, Beverage & Tobacco	\$ 4,8
205,000	CCC+/Caa1	HOUSEHOLD & PERSONAL PRODUCTS -- 0.1% Household Products -- 0.1% Central Garden and Pet Co., 9.125%, 2/1/13	\$ 2
		Total Household & Personal Products	\$ 2

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

750,000	CCC+/Caa2	HEALTH CARE EQUIPMENT & SERVICES -- 4.8% Health Care Equipment & Services -- 0.5% Accellent, Inc., 10.5%, 12/1/13	\$ 7
750,000	B/Caa1	Health Care Supplies -- 1.4% Bausch & Lomb, Inc., 9.875%, 11/1/15	\$ 7
1,265,000 (c)	B-/B3	Biomet, Inc., 10.375%, 10/15/17	1,3
			\$ 2,1
1,385,000 (1)	BB-/NR	Health Care Services -- 2.4% DASA Finance Corp., 8.75%, 5/29/18 (144A)	\$ 1,4
600,000	B/B2	Rural/Metro Corp., 9.875%, 3/15/15	6
759,890 (c)	B-/B3	Surgical Care Affiliates, Inc., 8.875%, 7/15/15 (144A)	6
1,170,000	CCC+/Caa1	Surgical Care Affiliates, Inc., 10.0%, 7/15/17 (144A)	9
			\$ 3,6
225,000	BB/Ba3	Health Care Facilities -- 0.2% HCA, Inc., 8.5%, 4/15/19 (144A)	\$ 2
500,000	B-/Caa1	Managed Health Care -- 0.3% Multiplan, Inc., 10.375%, 4/15/16 (144A)	\$ 4
		Total Health Care Equipment & Services	\$ 7,2

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

18 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		
250,000	B/B2	PHARMACEUTICALS & BIOTECHNOLOGY & LIFE SCIENCES -- 0.3%	
200,000	CCC+/Caa1	Phibro Animal Health Corp., 10.0%, 8/1/13 (144A)	
		Phibro Animal Health Corp., 13.0%, 8/1/14 (144A)	
		Total Pharmaceuticals & Biotechnology & Life Sciences	
250,000	NR/Ba1	BANKS -- 2.1%	
500,000 (a)	NR/B2	Diversified Banks -- 1.3%	
700,000	NR/Ba2	ATF Capital BV, 9.25%, 2/21/14 (144A)	
BRL 350,000	NR/NR	Banco Macro SA, 9.75%, 12/18/36	
200,000	NR/NR	Banco Macro SA, 10.75%, 6/7/12	
550,000	B+/Ba3	International Finance Corp., 9.25%, 3/15/13	
500,000 (b)	D/C	JSC TemirBank, 9.5%, 5/21/14 (144A)	
		Russian Standard Finance SA, 7.5%, 10/7/10 (144A)	
		TuranAlem Finance BV, 8.5%, 2/10/15 (144A)	

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

600,000 (a) (d)	BBB/Baa2	Regional Banks -- 0.8%
500,000 (a) (d) (1)	A-/Ba3	PNC Financial Services Group, Inc., 8.25%
		Wells Fargo Capital XV, 9.75%
Total Banks		
400,000 (a)	BB-/NR	DIVERSIFIED FINANCIALS -- 2.7%
		Other Diversified Financial Services -- 0.3%
		Ibis Re, Ltd., 10.549%, 5/10/12 (144A)
750,000	B-/Caa1	Specialized Finance -- 1.5%
500,000	BB/Baa2	ACE Cash Express, Inc., 10.25%, 10/1/14 (144A)
755,000 (a)	CCC+/B3	Capital One Capital V, 10.25%, 8/15/39
900,000	CCC+/Caa1	NCO Group, Inc., 5.315%, 11/15/13
		NCO Group, Inc., 11.875%, 11/15/14
375,000	BB+/Baa3	Asset Management & Custody Banks -- 0.7%
665,000	BB+/Baa3	Janus Capital Group, Inc., 6.5%, 6/15/12
		Janus Capital Group, Inc., 6.95%, 6/15/17
450,000 (a) (d)	BBB/A3	Investment Banking & Brokerage -- 0.2%
		Goldman Sachs Capital II, 5.793%
Total Diversified Financials		

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 19

Schedule of Investments | 10/31/09 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		
		INSURANCE -- 22.6%	
250,000	CCC/Caa1	Insurance Brokers -- 1.5%	
1,050,000	CCC+/Caa1	Alliant Holdings I, Inc., 11.0%, 5/1/15 (144A)	\$
		HUB International Holdings, Inc., 10.25%, 6/15/15 (144A)	
500,000 (a)	CCC/B3	U.S.I. Holdings Corp., 4.315%, 11/15/14 (144A)	
804,000	CCC/Caa1	U.S.I. Holdings Corp., 9.75%, 5/15/15 (144A)	
			\$

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

			Multi-Line Insurance -- 1.3%	
	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	BB-/NR	Sul America Participacoes SA, 8.625%, 2/15/12 (144A)	

			Reinsurance -- 19.8%	
	1,000,000 (a)	BB+/NR	AKIBARE, 3.557%, 5/22/12 (144A)	\$
	1,500,000 (a)	BB+/NR	AKIBARE, 3.567%, 5/22/12 (144A)	
EURO	1,500,000 (a)	B-/NR	Atlas Reinsurance Plc, 11.0%, 1/10/11 (144A)	
	2,000,000 (a)	BB+/NR	Blue Fin, Ltd., 4.684%, 4/10/12 (144A)	
	1,000,000 (a)	BB/NR	Caelus Re, Ltd., 6.611%, 6/7/11 (144A)	
	1,000,000 (a)	BB/NR	Calabash Re II, Ltd., 8.844%, 1/8/10 (144A)	
	1,500,000 (a)	BB-/NR	Calabash Re II, Ltd., 10.044%, 1/8/10 (144A)	
	1,000,000 (a)	B-/NR	Carillon, Ltd., 15.549%, 1/10/11 (144A)	
	1,500,000 (a)	BB/NR	East Lane Re, Ltd., 7.483%, 5/6/11 (144A)	
	1,750,000 (a)	BB+/NR	Fhu-Jin, Ltd., 4.383%, 8/10/11 (144A)	
	500,000 (a)	BB/NR	Foundation Re, Ltd., 7.69%, 2/24/10 (144A)	
	1,000,000 (a)	NR/B1	GlobeCat, Ltd., 6.287%, 1/2/13 (144A)	
	350,000 (a)	NR/B3	GlobeCat, Ltd., 9.537%, 1/2/13 (144A)	
EURO	1,500,000 (a)	BB+/NR	Green Valley, Ltd., 4.343%, 1/10/11 (144A)	
	820,000 (a)	B+/Caa3	MBIA Insurance Corp., 14.0%, 1/15/33 (144A)	
	250,000 (a)	B/NR	MultiCat Mexico, Ltd., Series 2009-I Class A, 11.556%, 10/19/12 (144A)	
	250,000 (a)	B/NR	MultiCat Mexico, Ltd., Series 2009-I Class B, 10.306%, 10/19/12 (144A)	
	250,000 (a)	B/NR	MultiCat Mexico, Ltd., Series 2009-I Class C, 10.306%, 10/19/12 (144A)	
	250,000 (a)	BB-/NR	MultiCat Mexico, Ltd., Series 2009-I Class D, 10.306%, 10/19/12 (144A)	
	2,500,000 (a)	NR/Ba2	Muteki, Ltd., 4.84%, 5/24/11 (144A)	
	250,000 (a)	BB/NR	Mystic Re II, Ltd., 12.361%, 3/20/12 (144A)	
	1,000,000 (a)	NR/B1	Nelson Re, Ltd., 4.94%, 6/6/11 (144A)	
	1,000,000 (a)	BB+/NR	Newton Re, Ltd., 4.936%, 12/24/10 (144A)	
	1,000,000 (a)	BB/NR	Newton Re, Ltd., 7.236%, 12/24/10 (144A)	

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

20 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Val
		Reinsurance -- (continued)	
425,000 (a)	BB-/NR	Residential Reinsurance 2008, Ltd., 7.111%, 6/6/11 (144A)	\$
2,000,000 (a)	B-/NR	Residential Reinsurance 2008, Ltd., 11.861%, 6/6/11 (144A)	1
440,000 (a)	NR/NR	Successor II, Ltd., 17.064%, 4/6/10 (144A)	
2,000,000 (a)	NR/NR	Successor II, Ltd., 25.314%, 4/6/10 (144A)	1
500,000 (a) (b)	D/NR	Willow Re, Ltd., 0.0%, 6/16/10 (144A)	

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

				\$ 30
			Total Insurance	\$ 34
			REAL ESTATE -- 0.3%	
			Real Estate Operating Companies -- 0.3%	
88,261		B-/NR	Alto Palermo SA, 11.0%, 6/11/12 (144A)	\$
410,000		B-/NR	IRSA Inversiones y Representaciones SA, 8.5%, 2/2/17 (144A)	\$
			Total Real Estate	\$
			SOFTWARE & SERVICES -- 2.9%	
			Internet Software & Services -- 0.7%	
905,000		B-/B2	Terremark Worldwide, Inc., 12.0%, 6/15/17 (144A)	\$ 1
			IT Consulting & Other Services -- 0.2%	
405,000		CCC/Caa1	Activant Solutions, Inc., 9.5%, 5/1/16	\$
			Data Processing & Outsourced Services -- 0.9%	
1,465,000 (1)		B-/Caa1	First Data Corp., 9.875%, 9/24/15	\$ 1
			Application Software -- 0.9%	
1,390,000		B-/Caa1	Vangent, Inc., 9.625%, 2/15/15	\$ 1
			Systems Software -- 0.2%	
1,110,000 (b)		NR/NR	Pegasus Solutions, Inc., 10.5%, 4/15/15 (144A)	\$
			Total Software & Services	\$ 4
			TECHNOLOGY HARDWARE & EQUIPMENT -- 0.5%	
			Computer Storage & Peripherals -- 0.3%	
430,000		BB+/Ba1	Seagate Technology International, 10.0%, 5/1/14 (144A)	\$
			Electronic Equipment & Instruments -- 0.2%	
250,000		B/B1	Da-Lite Screen Co., Inc., 9.5%, 5/15/11	\$
			Total Technology Hardware & Equipment	\$
			TELECOMMUNICATION SERVICES -- 6.3%	
			Alternative Carriers -- 0.7%	
945,000		B-/B2	Global Crossing, Ltd., 12.0%, 9/15/15 (144A)	\$ 1

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 21

Schedule of Investments | 10/31/09 (unaudited) (continued)

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

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

		Integrated Telecommunication Services -- 2.8%	
910,000	CCC+/B3	Broadview Networks Holdings, Inc., 11.375%, 9/1/12	\$
1,250,000	BB-/B2	GCI, Inc., 7.25%, 2/15/14	
750,000	B/B1	PAETEC Holding Corp., 8.875%, 6/30/17 (144A)	
1,010,000	CCC+/Caa1	PAETEC Holding Corp., 9.5%, 7/15/15	
500,000	BB/Ba3	Windstream Corp., 8.625%, 8/1/16	\$
<hr style="border-top: 1px dashed #000;"/>			
		Wireless Telecommunication Services -- 2.8%	
60,000	CCC/Caa2	Cell C Property, Ltd., 11.0%, 7/1/15 (144A)	\$
365,000	B+/Ba2	Cricket Communications, Inc., 7.75%, 5/15/16 (144A)	
500,000(1)	B-/B3	Cricket Communications, Inc., 9.375%, 11/1/14	
400,000	NR/B1	Digicel, Ltd., 9.25%, 9/1/12 (144A)	
750,000(1)	BB-/B1	NII Capital Corp., 10.0%, 8/15/16 (144A)	
790,000	BB+/Ba2	OJSC Vimpel Communications, 9.125%, 4/30/18 (144A)	
1,330,000	B-/B2	True Move Co., Ltd., 10.375%, 8/1/14 (144A)	
100,000	B-/B2	True Move Co., Ltd., 10.75%, 12/16/13 (144A)	\$
<hr style="border-top: 1px dashed #000;"/>			
		Total Telecommunication Services	\$
<hr style="border-top: 1px dashed #000;"/>			
		UTILITIES -- 2.1%	
		Electric Utilities -- 0.7%	
750,000	B-/NR	Cia de Transporte de Energia Electrica de Alta Tension Transener SA, 8.875%, 12/15/16 (144A)	\$
500,000(1)	CC/Caa2	Texas Competitive Electric Holdings Co. LLC, 10.25%, 11/1/15	\$
<hr style="border-top: 1px dashed #000;"/>			
		Gas Utilities -- 1.0%	
490,000	B+/B1	Inergy, L.P., 8.25%, 3/1/16	\$
1,135,000	B-/B2	Transportadora de Gas del Sur SA, 7.875%, 5/14/17 (144A)	\$
<hr style="border-top: 1px dashed #000;"/>			
		Multi-Utilities -- 0.1%	
225,000	BB-/Ba2	PNM Resources, Inc., 9.25%, 5/15/15	\$
<hr style="border-top: 1px dashed #000;"/>			
		Independent Power Producers & Energy Traders -- 0.3%	
500,000	BB-/Ba3	Intergen NV, 9.0%, 6/30/17 (144A)	\$
<hr style="border-top: 1px dashed #000;"/>			
		Total Utilities	\$
<hr style="border-top: 1px dashed #000;"/>			
		TOTAL CORPORATE BONDS & NOTES	
		(Cost \$139,480,359)	\$1
<hr style="border-top: 1px dashed #000;"/>			

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

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

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Val
		CONVERTIBLE BONDS & NOTES -- 4.0% of Net Assets	
		MATERIALS -- 0.8%	
1,900 (e)	B/NR	Diversified Chemicals -- 0.8%	
		Hercules Inc, 6.5%, 6/30/29	\$ 1
		Total Materials	\$ 1
		TRANSPORTATION -- 0.5%	
990,000	CCC+/Caa2	Marine -- 0.5%	
		Horizon Lines, Inc., 4.25%, 8/15/12	\$
		Total Transportation	\$
		MEDIA -- 0.2%	
559,000	CCC+/NR	Movies & Entertainment -- 0.2%	
		Live Nation, Inc., 2.875%, 7/15/27	\$
		Total Media	\$
		HEALTH CARE EQUIPMENT & SERVICES -- 1.6%	
1,040,000 (f)	BB-/NR	Health Care Equipment & Services -- 0.6%	
		Hologic, Inc., 2.0%, 12/15/37	\$
		Health Care Services -- 0.8%	
1,550,000	B+/B3	Omnicare, Inc., 3.25%, 12/15/35	\$ 1
		Health Care Facilities -- 0.2%	
405,000	B/NR	LifePoint Hospitals, Inc., 3.5%, 5/15/14	\$
		Total Health Care Equipment & Services	\$ 2
		TECHNOLOGY HARDWARE & EQUIPMENT -- 0.2%	
450,000 (b)	NR/NR	Communications Equipment -- 0.2%	
		Nortel Networks Corp., 2.125%, 4/15/14	\$
		Total Technology Hardware & Equipment	\$
		TELECOMMUNICATION SERVICES -- 0.7%	
1,150,000	B+/NR	Wireless Telecommunication Services -- 0.7%	
		NII Holdings, Inc., 3.125%, 6/15/12	\$ 1
		Total Telecommunication Services	\$ 1
		TOTAL CONVERTIBLE BONDS & NOTES (Cost \$5,674,333)	\$ 6
		FLOATING RATE LOAN INTERESTS -- 38.6% of Net Assets (h)	
		ENERGY -- 1.0%	
886,811	B+/B2	Oil & Gas Equipment & Services -- 0.6%	
		Coffeyville Resources LLC, Tranche D Term Loan, 8.5%, 12/30/13	\$
		Integrated Oil & Gas -- 0.2%	
336,600	BBB-/Ba2	Hudson Products Holdings, Inc., Term Loan, 8.0%, 8/24/15	\$

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

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 23

Schedule of Investments | 10/31/09 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
320,588	B/B3	Oil & Gas Exploration & Production -- 0.2% Venoco, Inc., Second Lien Term Loan, 4.25%, 5/7/14	\$
		Total Energy	\$ 1,
989,899	BB+/Ba1	MATERIALS -- 4.2% Diversified Chemicals -- 0.8% Huntsman International LLC, New Dollar Term Loan B, 1.994%, 4/21/14	\$
371,827	B/Ba1	Solutia, Inc., Term Loan, 7.25%, 2/28/14	\$ 1,
52,886	B+/B1	Paper Packaging -- 0.7% Graham Packaging Co. LP, Term Loan B, 2.5% - 2.563%, 10/7/11	\$
529,271	B+/B1	Graham Packaging Co. LP, Term Loan C, 6.75%, 4/5/14	\$
492,500	B-/B3	Graphic Packaging International, Inc., Incremental Term Loan, 2.995% - 3.04%, 5/16/14	\$ 1,
1,294,378	BB-/B3	Steel -- 1.2% Essar Steel Algoma, Inc., Term Loan, 8.0%, 6/20/13	\$ 1,
1,293,538	NR/B1	Niagara Corp., Term Loan, 9.25%, 6/30/14	\$ 1,
1,500,000 (c)	NR/Ba3	Forest Products -- 0.8% Ainsworth Lumber Co., Ltd., Term Loan, 5.25%, 6/26/14	\$ 1,
1,132,372	BB+/NR	Paper Products -- 0.7% Georgia-Pacific LLC, Term Loan B, 2.283% - 2.464%, 12/21/12	\$ 1,
		Total Materials	\$ 6,
731,144	B+/NR	CAPITAL GOODS -- 3.3% Aerospace & Defense -- 1.4% Aeroflex, Inc., Tranche B-2 Term Loan, 4.0% - 4.25%, 8/15/14	\$
500,231	BB-/B1	DAE Aviation Holdings, Inc., Tranche B-1 Term Loan,	\$

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

		4.04%, 7/31/14		
492,386	BB+/Ba3		Spirit Aerosystems, Inc., Term Loan B-1, 2.034%, 9/30/13	\$ 2,
489,381	BB-/B1		Standard Aero, Ltd., Tranche B-2 Term Loan, 4.0% - 4.03%, 7/31/14	
1,158,000	BB/Ba3	Construction & Engineering -- 0.7%	Goodman Global, Inc., Term Loan, 6.25%, 2/13/14	\$ 1,

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

24 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
1,000,000	BB-/Ba3	Construction & Farm Machinery & Heavy Trucks -- 1.2%	
498,744	NR/NR	Accuride Corp., Advance Term Loan, 8.0%, 1/31/12	\$ 995,31
290,000	NR/B2	Manitowoc Co., Inc., Term Loan B, 7.5%, 11/16/14	491,88
		Oshkosh Truck Corp., Term Loan B, 6.29% - 6.33%, 12/6/13	290,20
			\$ 1,777,40
		Total Capital Goods	\$ 5,027,27
COMMERCIAL & PROFESSIONAL SERVICES -- 1.6%			
6,922	BB-/Ba3	Commercial Printing -- 0.2%	
		Cenveo Corp., Delayed Draw Term Loan, 4.792%, 6/21/13	\$ 6,74
242,439	BB-/Ba2	Cenveo Corp., Facility Term Loan C, 4.792%, 6/21/13	236,07
			\$ 242,81
Diversified Commercial & Professional Services -- 0.7%			
720,988	BB+/B1	Asset Acceptance Capital Corp., Tranche B Term Loan, 3.5% - 5.5%, 6/12/13	\$ 699,35
420,246	BB-/B2	Rental Service Corp., Second Lien Initial Term Loan, 3.79% - 3.91%, 11/30/13	381,37
			\$ 1,080,73
Environmental & Facilities Services -- 0.7%			
124,688	B+/Ba2	Casella Waste Systems, Inc., Term Loan B, 7.0%, 4/9/14	\$ 125,77
1,221,875	BB-/Ba3	Synagro Technologies, Inc., First Lien Term Loan, 2.24%, 4/2/14	994,30
			\$ 1,120,08
		Total Commercial & Professional Services	\$ 2,443,62

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

		TRANSPORTATION -- 1.0%	
439,482	NR/Ba2	Air Freight & Logistics -- 1.0%	
		Ceva Group Plc, Pre-Funded LC Loan, 0.183%, 11/4/13	\$ 370,99
1,309,420	NR/Ba2	Ceva Group Plc, U.S. Term Loan, 3.243%, 11/4/13	1,105,36
		Total Transportation	\$ 1,476,36
		AUTOMOBILES & COMPONENTS -- 0.9%	
1,000,000	BB/Ba1	Tires & Rubber -- 0.6%	
		Goodyear Tire & Rubber Co., Second Lien Term Loan, 2.34%, 4/30/14	\$ 916,78
498,087	B/Ba3	Automobile Manufacturers -- 0.3%	
		Ford Motor Co., Term Loan, 3.25% - 3.29%, 12/15/13	\$ 445,16
		Total Automobiles & Components	\$ 1,361,95

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 25

Schedule of Investments | 10/31/09 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
		CONSUMER DURABLES & APPAREL -- 0.8%	
876,651	BB-/Ba3	Housewares & Specialties -- 0.5%	
		Yankee Candle Co., Inc., Term Loan, 2.25%, 2/6/14	\$ 82
368,502	BB-/Ba2	Apparel, Accessories & Luxury Goods -- 0.3%	
		Hanesbrands, Inc., Term Loan B, 5.032%, 9/5/13	\$ 37
		Total Consumer Durables & Apparel	\$ 1,19
		CONSUMER SERVICES -- 0.6%	
500,000 (b)	B+/B1	Casinos & Gaming -- 0.5%	
		Fontainebleau Las Vegas LLC, Delayed Draw Term Loan, 6.0%, 6/6/14	\$ 14
1,000,000 (b)	B/NR	Fontainebleau Las Vegas LLC, Initial Term Loan, 6.0%, 6/6/14	29
1,000,000	BB-/Caa1	Gateway Casinos & Entertainment, Inc., Advance Second Lien Term Loan, 5.787%, 3/31/15	29
			\$ 73
167,580	BB/Ba2	Hotels, Resorts & Cruise Lines -- 0.1%	
		Travelport LLC, Incremental Term Loan C, 10.5%, 8/23/13	\$ 17

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

		Total Consumer Services	\$	90

		MEDIA -- 2.1%		
		Broadcasting -- 1.0%		
1,000,000	B+/Ba3	Insight Midwest Holdings LLC, Term Loan B, 2.29%, 4/7/14	\$	95
675,000	B/Ba3	Univision Communications, Inc., Initial Term Loan, 2.533%, 9/29/14		54

				\$ 1,49

		Cable & Satellite -- 0.1%		
157,318	B-/B3	Knology, Inc., Term Loan, 2.493%, 6/30/12	\$	15

		Movies & Entertainment -- 0.5%		
838,971	B+/B1	Lodgenet Entertainment Corp., Closing Date Term Loan, 2.29% , 4/4/14	\$	77

		Publishing -- 0.5%		
869,685	BB-/Ba1	RH Donnelley, Inc., Tranche D-1 Term Loan, 6.75%, 6/30/11	\$	76

				\$ 3,18

		RETAILING -- 0.2%		
		Catalog Retail -- 0.2%		
250,000	BBB-/Ba2	QVC, Inc., Tranche 2-W Term Loan, 3.745%, 10/4/11	\$	24

				\$ 24

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

26 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

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

		FOOD & STAPLES RETAILING -- 0.7%	
		Drug Retail -- 0.7%	
1,000,000	NR/B3	Rite Aid Corp., Tranche 4 Term Loan, 9.5%, 6/10/15	\$ 1,036,667

			\$ 1,036,667

		FOOD, BEVERAGE & TOBACCO -- 0.4%	
		Packaged Foods & Meats -- 0.4%	
736,776	BB/B1	Dean Foods Co., Tranche B Term Loan, 1.625% - 1.665%, 4/2/14	\$ 690,267

			\$ 690,267

		HOUSEHOLD & PERSONAL PRODUCTS -- 0.5%	
		Personal Products -- 0.5%	
815,228	B+/Ba3	Brickman Group Holdings, Inc., Tranche B Term Loan,	

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

		2.283%, 1/23/14	\$ 769,712
Total Household & Personal Products			\$ 769,712

		HEALTH CARE EQUIPMENT & SERVICES -- 4.3%	
		Health Care Supplies -- 1.1%	
112,592	BB-/B1	Bausch & Lomb, Inc., Delayed Draw Term Loan, 3.504% - 3.533%, 4/24/15	\$ 107,581
463,644	BB-/B1	Bausch & Lomb, Inc., Parent Term Loan, 3.533%, 4/24/15	443,006
488,750	B+/B2	IM US Holdings LLC, First Lien Term Loan, 2.244% - 2.283%, 6/26/14	463,091
600,000	B+/B2	IM US Holdings LLC, Second Lien Term Loan, 4.494%, 6/26/15	576,000

			\$ 1,589,678

		Health Care Services -- 1.4%	
1,351,751	BB-/Ba3	Catalent Pharma Solutions, Inc., Dollar Term Loan, 2.493%, 4/10/14	\$ 1,178,727
522,294	B/B3	HealthSouth Corp., Tranche 1 Term Loan, 2.54% - 2.55%, 3/10/13	498,791
429,871	BB-/B3	HealthSouth Corp., Tranche 2 Term Loan, 4.04 - 4.05%, 3/15/14	416,439

			\$ 2,093,957

		Health Care Facilities -- 1.8%	
47,884	NR/NR	Community Health Systems, Inc., Delayed Draw Term Loan, 2.493% - 2.511%, 7/25/14	\$ 44,715
938,626	BB/Ba3	Community Health Systems, Inc., Term Loan, 2.493% - 2.622%, 7/25/14	876,501
712,270	B+/B3	Hanger Orthopedic Group, Inc., Tranche B Term Loan, 2.25%, 5/26/13	677,547
330,914	B+/Ba2	HCA, Inc., Tranche B-1 Term Loan, 2.533%, 11/18/13	308,830
162,256	B+/B1	Sun Healthcare Group, Inc., Synthetic LC Loan, 0.183%, 4/19/14	153,535

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 27

Schedule of Investments | 10/31/09 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
764,765	B+/B1	Health Care Facilities -- (continued) Sun Healthcare Group, Inc., Term Loan, 2.281% - 3.313%, 4/19/14	\$ 723,65

			\$ 2,784,78

Total Health Care Equipment & Services			\$ 6,468,42

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

PHARMACEUTICALS & BIOTECHNOLOGY & LIFE SCIENCES -- 1.3%			
			Biotechnology -- 0.7%
396,610	BB+/B1	Warner Chilcott Co. LLC, Term Loan A, 3.25%, 10/30/14	\$ 397,88
198,305	BB+/B1	Warner Chilcott Co. LLC, Term Loan B-1, 3.5%, 4/30/15	198,94
436,271	BB+/B1	Warner Chilcott Co. LLC, Term Loan B-2, 3.5%, 4/30/15	431,90
			\$ 1,028,72

			Pharmaceuticals -- 0.5%
727,500	BB/Ba3	Mylan, Inc., U.S. Tranche B Term Loan, 3.5% - 3.563%, 10/2/14	\$ 709,31

			Life Sciences Tools & Services -- 0.1%
198,125	BBB-/Baa3	Life Technologies Corp., Facility Term Loan B, 5.25%, 11/23/15	\$ 199,52
			\$ 1,937,56

DIVERSIFIED FINANCIALS -- 3.4%			
			Other Diversified Financial Services -- 0.8%
435,326	BB/Ba2	Metavante Corp., Term Loan, 2.233%, 11/3/14	\$ 434,96
792,000	BB-/Ba3	SRAM LLC., Term Loan, 7.0% - 8.0%, 9/30/14	788,04
			\$ 1,223,00

			Specialized Finance -- 1.0%
836,985	BB-/B3	Ace Cash Express, Inc., Term Loan, 3.283%, 10/5/13	\$ 707,25
912,041	B-/B2	Collect Acquisition Corp., Advance Term Loan B, 7.5%, 5/15/13	884,11
			\$ 1,591,36

			Consumer Finance -- 1.1%
1,028,833	BB-/NR	Dollar Financial Corp., Canadian Borrower Term Loan, 3.04%, 10/30/12	\$ 978,67
756,495	BB-/NR	Dollar Financial Corp., Delayed Draw Term Loan, 3.04%, 10/30/12	719,61
			\$ 1,698,29

			Investment Banking & Brokerage -- 0.5%
687,750	NR/NR	MSCI, Inc., Term Loan B, 2.872%, 11/20/14	\$ 678,29
			\$ 5,190,95

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

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

Amount USD (\$)	Ratings (unaudited)		Value
		INSURANCE -- 3.3%	
		Insurance Brokers -- 2.4%	
1,470,000	B-/B3	Alliant Holdings I, Inc., Term Loan, 3.283%, 8/21/14	\$ 1,370
119,073	B/B2	HUB International, Ltd., Delay Draw Term Loan, 2.743%, 6/13/14	105
529,745	B/B3	HUB International, Ltd., Initial Term Loan, 2.743%, 6/13/14	467
100,000	B-/B3	U.S.I. Holdings Corp., Add-on Term Loan, 5.0%, 5/5/14	97
1,955,000	B-/B2	U.S.I. Holdings Corp., Tranche B Term Loan, 3.04%, 5/5/14	1,702
			----- \$ 3,742
		Multi-Line Insurance -- 0.9%	
783,474	B-/B2	AmWins Group, Inc., Initial Term Loan, 2.79% - 2.88%, 6/8/13	\$ 640
1,000,000	B-/B2	AmWins Group, Inc., Second Lien Initial Term Loan, 5.79%, 6/9/14	700
			----- \$ 1,340
		Total Insurance	\$ 5,083
		SOFTWARE & SERVICES -- 3.7%	
		Internet Software & Services -- 0.3%	
448,866	B+/B1	Web Service Co. LLC, Term Loan, 7.0%, 8/28/14	\$ 446
		IT Consulting & Other Services -- 1.8%	
404,694	B+/B1	Activant Solutions, Inc., Term Loan, 2.313%, 5/2/13	\$ 377
555,924	B+/B2	Keane International, Inc., Closing Date Term Loan, 2.63%, 6/4/13	501
42,654	B+/B2	Keane International, Inc., Synthetic LC Loan, 2.63%, 6/4/13	38
1,949,875	B+/Ba3	SunGard Data Systems, Inc., Tranche A U.S. Term Loan, 1.994%, 2/28/14	1,835
			----- \$ 2,753
		Data Processing & Outsourced Services -- 0.1%	
178,514	NR/Ba1	Fidelity National Information Services, Inc., Tranche C Term Loan, 4.473%, 1/18/12	\$ 178
		Application Software -- 0.6%	
982,188	B/B1	Nuance Communications, Inc., Term Loan, 2.25%, 3/29/13	\$ 941
		Systems Software -- 0.9%	
1,439,787	BB-/B3	Vangent, Inc., Term Loan, 2.65%, 2/14/13	\$ 1,367
		Total Software & Services	\$ 5,688

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

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

Schedule of Investments | 10/31/09 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
		TECHNOLOGY HARDWARE & EQUIPMENT -- 0.8%	
769,251	BB/Ba2	Electronic Equipment & Instruments -- 0.8%	
		H3C Holdings, Ltd., Tranche B Term Loan, 3.639%, 9/28/12	\$ 734,6
488,773	B/B3	Scitor Corp., Term Loan, 4.49%, 9/26/14	432,5
		Total Technology Hardware & Equipment	\$ 1,167,1
		SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT -- 0.5%	
		Semiconductor Equipment -- 0.5%	
970,639	BB-/Ba3	Freescale Semiconductor, Inc., Term Loan, 1.996%, 11/29/13	\$ 791,3
		Total Semiconductors & Semiconductor Equipment	\$ 791,3
		TELECOMMUNICATION SERVICES -- 2.4%	
		Alternative Carriers -- 0.3%	
501,297	B-/Ba3	PAETEC Holding Corp., Replacement Term Loan, 2.743%, 2/28/13	\$ 476,8
		Integrated Telecommunication Services -- 0.6%	
434,910	B+/B2	Telesat Canada, U.S. Term I Loan, 3.25%, 10/31/14	\$ 418,3
37,356	B+/B2	Telesat Canada, U.S. Term II Loan, 3.25%, 10/31/14	35,9
250,000	BB-/Ba1	Wind Telecomunicazioni S.P.A., Facility Term Loan B-2, 3.926%, 5/27/13	240,1
250,000	BB-/Ba1	Wind Telecomunicazioni S.P.A., Facility Term Loan C-2, 4.926%, 5/26/14	240,1
			\$ 934,5
		Wireless Telecommunication Services -- 1.5%	
1,710,327	B/B1	MetroPCS Wireless, Inc., Tranche B Term Loan, 2.5% - 2.75%, 11/3/13	\$ 1,611,1
587,121	B+/B1	Stratos Global Corp., Facility Term Loan B, 2.783%, 2/13/12	578,3
		Total Telecommunication Services	\$ 2,189,4
		UTILITIES -- 1.6%	
		Electric Utilities -- 0.3%	
598,919	B+/Ba3	Texas Competitive Electric Holdings Co. LLC, Initial Tranche B-2 Term Loan, 3.744% - 3.783%, 10/10/14	\$ 465,5

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

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

30 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
1,950,263	NR/NR	Independent Power Producers & Energy Traders -- 1.3% Calpine Corp., First Priority Term Loan, 3.165%, 3/29/14	\$ 1,7
184,378	B/B2	Mach Gen LLC, First Lien Synthetic LC Loan, 0.033%, 2/22/13	1 \$ 1,9
		Total Utilities	\$ 2,4
TOTAL FLOATING RATE LOAN INTERESTS (Cost \$63,882,675)			\$ 58,5
100,000	B/B2	FIXED RATE LOAN INTERESTS -- 0.6% of Net Assets MATERIALS -- 0.1% Diversified Metals & Mining -- 0.1% Blaze Recycling & Metals LLC, Term Loan, 15.0%, 5/14/12	\$ 1 ----- \$ 1
		Total Materials	\$ 1
824,333 (1)	NR/NR	SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT -- 0.5% Semiconductor Equipment -- 0.5% Freescale Semiconductor, Inc., Incremental Term Loan, 12.5%, 12/15/14	\$ 8 ----- \$ 8
		Total Semiconductors & Semiconductor Equipment	\$ 8
TOTAL FIXED RATE LOAN INTERESTS (Cost \$1,037,339)			\$ 9
Shares			
383,316 (i)		COMMON STOCK -- 0.3% of Net Assets ENERGY -- 0.0% Oil & Gas Equipment & Services -- 0.0% Skeie Drilling & Production ASA	\$ ----- \$
		Total Energy	\$
29,346 (i)		MATERIALS -- 0.3% Commodity Chemicals -- 0.3% Georgia Gulf Corp.	\$ 4 ----- \$ 4
13,963 (i)		Forest Products -- 0.0% Ainsworth Lumber Co., Ltd.	\$ ----- \$ 4
		Total Materials	\$ 4
TOTAL COMMON STOCK			

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

(Cost \$540,661)

\$ 4

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 31

Schedule of Investments | 10/31/09 (unaudited) (continued)

Shares		Value
	CONVERTIBLE PREFERRED STOCK -- 0.3% of Net Assets DIVERSIFIED FINANCIALS -- 0.3% Other Diversified Financial Services -- 0.3% Bank of America Corp.	\$ 498,217
595		
	TOTAL CONVERTIBLE PREFERRED STOCK (Cost \$490,737)	\$ 498,217
	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)	\$ 24,193
750,000 (g) (i)		
	TOTAL WARRANTS (Cost \$17,012)	\$ 24,193

Principal
Amount
USD (\$)

	TEMPORARY CASH INVESTMENTS -- 4.4% of Net Assets Securities Lending Collateral -- 4.4%(j) Certificates of Deposit:	
325,369	Bank of Nova Scotia, 0.25%, 11/17/09	\$ 325,369
343,445	BNP Paribas NY, 0.3%, 11/17/09	343,445
159,072	Nordea NY, 0.21%, 12/22/09	159,072
216,913	Rabobank Nederland NY, 0.24%, 12/11/09	216,913
216,913	Societe Generale, 0.27%, 12/4/09	216,913
216,913	Toronto Dominion, 0.23%, 12/16/09	216,913
		\$ 1,478,625
	Commercial Paper:	
180,713	ABB LLC, 0.59%, 12/28/09	\$ 180,713
361,475	BBVA London, 0.29%, 11/6/09	361,475
180,701	BCS FUN, 0.60%, 12/29/09	180,701

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

216,866	Cafco, 0.40%, 12/9/09	216,866
216,817	CBA Financial, 0.27%, 12/29/09	216,817
126,531	Char FD, 0.30%, 11/2/09	126,531
108,428	Ciesco, 0.25%, 12/7/09	108,428
108,433	Ciesco, 0.33%, 11/23/09	108,433
180,711	GE, 0.23%, 12/28/09	180,711
216,831	HND AF, 0.30%, 12/15/09	216,831
180,722	HSBC, 0.24%, 12/2/09	180,722
36,144	HSBC, 0.24%, 12/3/09	36,144
180,757	Kithaw, 0.23%, 11/3/09	180,757
325,272	NABPP, 0.29%, 12/7/09	325,272

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

32 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Principal Amount USD (\$)		Value
	Commercial Paper -- (continued)	
180,711	Ranger, 0.24%, 12/11/09	\$ 180,711
126,175	Santander U.S. Debt, 0.37%, 11/20/09	126,175
106,220	TB LLC, 0.20%, 12/10/09	106,220
		\$ 3,033,507
	Tri-party Repurchase Agreements:	
801,283	Barclays Capital Markets, 0.05%, 11/2/09	\$ 801,283
1,048,411	Deutsche Bank, 0.06%, 11/2/09	1,048,411
		\$ 1,849,694
	Shares	
	Money Market Mutual Funds:	
144,608	Dreyfus Preferred Money Market Fund	\$ 144,608
180,761	Fidelity Prime Money Market Fund	180,761
		\$ 325,369
	TOTAL TEMPORARY CASH INVESTMENTS (Cost \$6,687,195)	\$ 6,687,195
	TOTAL INVESTMENTS IN SECURITIES -- 138.9% (Cost \$226,372,025) (k)	\$210,812,991
	OTHER ASSETS AND LIABILITIES -- (38.9)%	\$ (58,994,410)
	NET ASSETS APPLICABLE TO COMMON SHAREOWNERS -- 100.0%	\$151,818,581

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

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

- (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 October 31, 2009, the value of these securities amounted to \$84,600,896 or 55.7% of total net assets applicable to common shareowners.
- (a) Floating rate note. The rate shown is the coupon rate at October 31, 2009.
 - (b) Security is in default and is non-income producing.
 - (c) Payment-in-Kind (PIK) security which may pay interest in additional principal amount.
 - (d) Security is a perpetual bond and has no definite maturity date.
 - (e) Security is priced as a unit.
 - (f) Debt obligation initially issued at one coupon which converts to another coupon at a specific date. The rate shown is the coupon rate at October 31, 2009.
 - (g) Indicates a security that has been deemed illiquid. The aggregate cost of illiquid securities is \$469,131. The aggregate value of \$72,883 represents 0.0% of total net assets applicable to common shareowners.

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 33

Schedule of Investments | 10/31/09 (unaudited) (continued)

- (h) 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 October 31, 2009.
- (i) Non-income producing.
- (j) Securities lending collateral is managed by Credit Suisse AG, New York branch.
- (k) At October 31, 2009, the net unrealized loss on investments based on cost for federal income tax purposes of \$227,237,904 was as follows:

Aggregate gross unrealized gain for all investments in which there is an excess of value over tax cost	\$ 6,370,442
Aggregate gross unrealized loss for all investments in which there is an excess of tax cost over value	(22,795,355)

Net unrealized loss	\$ (16,424,913)
	=====

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

For financial reporting purposes net unrealized loss was \$15,559,034 and cost of investments aggregated \$226,372,025.

(1) At October 31, 2009, the following securities were out on loan:

Principal Amount USD (\$)	Description	Value
379,000	Aleris International, Inc., 10.0%, 12/15/16	\$ 3,316
970,000	Allison Transmission, Inc., 11.0%, 11/1/15 (144A)	989,400
224,000	Ashland, Inc., 9.125%, 6/1/17 (144A)	241,920
490,000	Cricket Communications, Inc., 9.375%, 11/1/14	475,300
356,000	DASA Finance Corp., 8.75%, 5/29/18 (144A)	374,690
1,450,000	First Data Corp., 9.875%, 9/24/15	1,337,625
608,000	Freescale Semiconductor, Inc., Incremental Term Loan, 12.5%, 12/15/14	625,734
137,000	Graphic Packaging International, Inc., 9.5%, 8/15/13	140,596
5,000	Intcomex, Inc., 11.75%, 1/15/11	3,988
385,000	NII Capital Corp., 10.0%, 8/15/16 (144A)	406,175
775,000	Sally Holdings LLC, 10.5%, 11/15/16	821,500
683,000	Tenneco, Inc., 8.625%, 11/15/14	643,728
495,000	Texas Competitive Electric Holdings Co. LLC, 10.25%, 11/1/15	351,450
495,000	Wells Fargo Capital XV, 9.75%	532,125
		\$ 6,947,547

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

34 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Glossary of Terms:

LC -- Letter of Credit

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

BRL Brazilian Real
EURO Euro
NOK Norwegian Krone

Purchases and sales of securities (excluding temporary cash investments) for the period ended October 31, 2009, aggregated \$38,896,069 and \$16,235,889, respectively.

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

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

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

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 October 31, 2009, in valuing the Trust's investments:

	Level 1	Level 2	Level 3	Total
Asset backed securities	\$ --	\$ 4,306,574	\$ --	\$ 4,306,574
Collateralized mortgage obligations	--	2,435,528	--	2,435,528
Corporate bonds & notes	--	130,801,235	--	130,801,235
Convertible bonds & notes	--	6,047,586	--	6,047,586
Floating rate loan interests	--	58,581,226	--	58,581,226
Fixed rate loan interests	--	948,376	--	948,376
Common stocks	482,861	--	--	482,861
Convertible preferred stocks	498,217	--	--	498,217
Warrants	--	24,193	--	24,193
Temporary cash investments	--	6,687,195	--	6,687,195
Total	\$ 981,078	\$209,831,913	\$ --	\$210,812,991
Other Financial Instruments*	\$ (79,793)	\$ 2,032	\$ --	\$ (77,761)

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

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 35

Statement of Assets and Liabilities | 10/31/09 (unaudited)

ASSETS:

Investments in securities, at value (including securities loaned of \$6,947,547) (cost \$226,372,025)	\$210,812,991
Cash	707,042
Foreign currencies, at value (cost \$2,643,571)	2,725,102
Receivables --	
Interest receivable	3,603,201
Unfunded loan commitment	2,032
Prepaid expenses	13,332
Total assets	\$217,863,700

LIABILITIES:

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

Payables --	
Notes payable	\$ 55,000,000
Investment securities purchased	3,913,665
Upon return of securities loaned	6,687,195
Forward foreign currency portfolio hedge contracts -- net	79,793
Unamortized facility fees	1,587
Due to affiliates	140,048
Accrued interest expense	63,067
Accrued expenses and other liabilities	159,764
<hr style="border-top: 1px dashed black;"/>	
Total liabilities	\$ 66,045,119
<hr style="border-top: 1px dashed black;"/>	
NET ASSETS:	
Paid-in capital	\$194,476,554
Distribution in excess of investment income	(4,348,459)
Accumulated net realized loss on investments and foreign currency transactions	(22,773,959)
Net unrealized loss on investments	(15,557,002)
Net unrealized gain on forward foreign currency contracts and other assets and liabilities denominated in foreign currencies	21,447
<hr style="border-top: 1px dashed black;"/>	
Net assets applicable to common shareowners	\$151,818,581
<hr style="border-top: 1px dashed black;"/>	
NET ASSET VALUE PER SHARE:	
No par value (unlimited number of shares authorized)	
Based on \$151,818,581/8,190,918 shares	\$ 18.53
<hr style="border-top: 1px dashed black;"/>	

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

36 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Statement of Operations (unaudited)

For the Six Months Ended 10/31/09

INVESTMENT INCOME:	
Interest (net of foreign taxes withheld \$5,531)	\$ 8,235,746
Dividends	21,569
Facility and other fees	86,439
Income from securities loaned, net	10,911
<hr style="border-top: 1px dashed black;"/>	
Total investment income	\$ 8,354,675
<hr style="border-top: 1px dashed black;"/>	
EXPENSES:	
Management fees	\$ 791,053
Administrative fees	97,370
Transfer agent fees and expenses	33,952
Bank loan fees and expenses	65,089
Custodian fees	12,184
Registration fees	8,785
Professional fees	46,650
Printing expenses	15,371
Trustees' fees	3,822
Pricing fees	16,402
Miscellaneous	27,235

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

Net operating expenses		\$ 1,117,
Interest expense		\$ 639,
Net operating expenses and interest expense		\$ 1,757,
Less management fees waived and expenses reimbursed by Pioneer Investment Management, Inc. ("PIM")		(178,
Less fees paid indirectly		
Net expenses		\$ 1,579,
Net investment income		\$ 6,775,
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS AND FOREIGN CURRENCY TRANSACTIONS:		
Net realized gain (loss) from:		
Investments	\$ (7,720,901)	
Forward foreign currency contracts and other assets and liabilities denominated in foreign currencies	119,413	\$ (7,601,
Change in net unrealized gain (loss) from:		
Investments	\$ 47,351,485	
Unfunded corporate loans	3,223	
Forward foreign currency contracts and other assets and liabilities denominated in foreign currencies	(347,884)	\$47,006,
Net gain on investments and foreign currency transactions		\$39,405,
Net increase in net assets resulting from operations		\$46,180,

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 37

Statement of Changes in Net Assets

For the Six Months Ended 10/31/09 and the Year Ended 4/30/09, respectively

	Six Months Ended 10/31/09 (unaudited)	Year En 4/30/09
FROM OPERATIONS:		
Net investment income	\$ 6,775,059	\$ 17,09
Net realized loss on investments and foreign currency transactions	(7,601,488)	(12,59
Change in net unrealized gain (loss) on investments and foreign currency transactions	47,006,824	(49,85
Net increase (decrease) in net assets resulting from operations	\$ 46,180,395	\$ (45,35

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

DISTRIBUTIONS TO SHAREOWNERS:

Net investment income (\$1.050 and \$2.469 per share, respectively)	\$ (8,588,256)	\$ (20,133)
Tax return of capital (\$0.000 and \$0.045 per share respectively)	--	(37)
<hr style="border-top: 1px dashed black;"/>		
Total distributions to common shareowners	\$ (8,588,256)	\$ (20,500)
<hr style="border-top: 1px dashed black;"/>		
FROM TRUST SHARE TRANSACTIONS:		
Reinvestment of distributions	\$ 413,996	\$ 15
<hr style="border-top: 1px dashed black;"/>		
Net increase in net assets resulting from Trust share transactions	\$ 413,996	\$ 15
<hr style="border-top: 1px dashed black;"/>		
Net increase (decrease) in net assets	\$ 38,006,135	\$ (65,700)
NET ASSETS:		
Beginning of period	113,812,446	179,510
<hr style="border-top: 1px dashed black;"/>		
End of period	\$151,818,581	\$113,812,446
<hr style="border-top: 1px dashed black;"/>		
Distribution in excess of net investment income	\$ (4,348,459)	\$ (2,530)
<hr style="border-top: 1px dashed black;"/>		

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

38 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Statement of Cash Flows (unaudited)

For the Six Months Ended 10/31/09

Cash Flows Used in Operating Activities		
Net investment income	\$ 6,775,059	
<hr style="border-top: 1px dashed black;"/>		
Adjustment to Reconcile Net Investment Income to Net Cash and Foreign Currency Provided used in Operating Activities		
Purchase of investment securities	\$ (521,255,451)	
Proceeds from disposition of investment securities	504,848,033	
Decrease in receivable for investments sold	710,823	
Increase in interest and foreign tax reclaim receivable	(280,309)	
Decrease in commitment fees receivable	29	
Increase in interest payable	14,437	
Increase in payable for investments purchased	2,853,785	
Increase in accrued expenses and other liabilities	106,919	
Decrease in unrealized appreciation on foreign currency transactions	(299,928)	
Net realized gain from foreign currency transactions	119,413	
Net amortization/(accretion) of premium/(discount)	(624,697)	
<hr style="border-top: 1px dashed black;"/>		
Net adjustment to reconcile net investment income	(13,806,946)	
<hr style="border-top: 1px dashed black;"/>		
Net cash and foreign currency used in operating activities	\$ (7,031,887)	
<hr style="border-top: 1px dashed black;"/>		
Cash Flows From Financing Activities		
Increase in notes payable	\$ 17,000,000	

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

Cash dividends paid to common shareowners	(9,725,786)
<hr style="border-top: 1px dashed black;"/>	
Net cash flow from financing activities	\$ 7,274,214
<hr style="border-top: 1px dashed black;"/>	
Net increase in cash and foreign currency	\$ 242,327
<hr style="border-top: 1px dashed black;"/>	
Cash and Foreign Currency	
Beginning of the period	\$ 3,189,817
<hr style="border-top: 1px dashed black;"/>	
End of the period	\$ 3,432,144
<hr style="border-top: 3px double black;"/>	

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 39

Financial Highlights

	Six Months Ended 10/31/09 (unaudited)	Year Ended 4/30/09	5/30/07 to 4/30/08
<hr style="border-top: 1px dashed black;"/>			
Per Share Operating Performance			
Net asset value, beginning of period	\$ 13.94	\$ 22.02	\$ 23.8
<hr style="border-top: 1px dashed black;"/>			
Increase (decrease) from investment operations:(a)			
Net investment income	\$ 0.83	\$ 2.10	\$ 1.7
Net realized and unrealized gain (loss) on investments and foreign currency transactions	4.81	(7.67)	(1.8
<hr style="border-top: 1px dashed black;"/>			
Net decrease from investment operations	\$ 5.64	\$ (5.57)	\$ (0.0
Distributions from			
Net investment income	(1.05)	(2.47)	(1.7
Tax return of capital	--	(0.04)	-
Capital charge with respect to issuance of shares	--	--	(0.0
<hr style="border-top: 1px dashed black;"/>			
Net increase (decrease) in net asset value	\$ 4.59	\$ (8.08)	\$ (1.8
<hr style="border-top: 1px dashed black;"/>			
Net asset value, end of period(d)	\$ 18.53	\$ 13.94	\$ 22.0
<hr style="border-top: 1px dashed black;"/>			
Market value, end of period(d)	\$ 16.94	\$ 13.23	\$ 20.4
<hr style="border-top: 3px double black;"/>			
Total return at market value(e)	36.32%	(23.11)%	(10.6
Ratios to average net assets			
Net operating expenses	1.38% (f)	1.38%	0.9
Interest expense	0.94% (f)	1.14%	0.3
Net expenses	2.32% (f)	2.52%	1.3
Net investment income	9.92% (f)	12.27%	8.4
Portfolio turnover	9%	25%	2
Net assets, end of period (in thousands)	\$151,819	\$113,812	\$179,51
Ratios to average net assets before waivers and reimbursements of expenses			
Net operating expenses	1.64% (f)	1.68%	1.2

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

Interest expense	0.94% (f)	1.14%	0.3
Net expenses	2.58% (f)	2.82%	1.6
Net investment income	9.66% (f)	11.97%	8.1

- (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.
- (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 less than a full period are not annualized. Past performance is not a guarantee of future results.
- (f) Annualized.

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

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

40 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Notes to Financial Statements | 10/31/09 (unaudited)

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. 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

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

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 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 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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 41

of income, expenses and gains and losses on investments during the reporting period. Actual results could differ from those estimates.

The following is a summary of significant accounting policies followed by the Trust in preparation of its financial statements, which are consistent with those 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 the limited number of Loan Interests for which no reliable price quotes are available, such investments will be 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 October 31, 2009, there were no securities valuations that were board determined. Temporary cash investments are valued at amortized cost which approximates market

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

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 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.

42 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

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 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 5).

D. Federal Income Taxes

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

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

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 net realized gain (loss) on investments and foreign currency transactions, or from paid-in capital, depending on the type of book/tax differences that may exist.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 43

The tax character of current year distributions paid to shareowners will be determined at the end of the fiscal year. Distributions paid during the year ended April 30, 2009 were as follows:

	2009

Distributions paid from:	
Ordinary income	\$20,135,595
Tax return of capital	371,077

Total	\$20,506,672
	=====

The following shows the components of distributable earnings (loss) 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 default, the difference between book and tax amortization methods for premiums and discounts on fixed income securities and other book/tax temporary differences.

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

E. Repurchase Agreements

With respect to repurchase agreements entered into by the Trust, the value of the underlying securities (collateral), including accrued interest, is required to be 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. The Trust's investment adviser, Pioneer Investment Management, Inc. (PIM), is responsible for determining that the value of the collateral remains at least equal to the repurchase price.

F. 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 AG, New York Branch, as the Trust's securities lending

44 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

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 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 NYSE Amex or elsewhere. If, on the payment

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

date for any dividend, the net asset value per common share is equal to or less than the market price per share plus estimated brokerage trading fees (market premium), the Plan Agent will invest the dividend amount in newly issued common shares. The number of newly issued common shares to be credited to each account will be determined by dividing the dollar amount of the dividend by the net asset value per common share on the date the shares are issued, provided that the maximum discount from the then current market price per share on the date of issuance does not exceed 5%. If, on the payment date for any dividend, the net asset value per common share is greater than the market value (market discount), the Plan Agent will invest the dividend amount in common shares acquired in open-market purchases. There are no brokerage charges with respect to newly issued

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 45

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

Pioneer Investment Management, Inc. (PIM), a wholly owned indirect subsidiary of UniCredit S.p.A. (UniCredit) manages the Trust's portfolio. Management fees payable under the Trust's Advisory Agreement with PIM are calculated daily at the annual rate of 0.85% of the Trust's average daily managed assets. "Managed assets" means (a) the total assets of the Trust, including any form of investment leverage, minus (b) all accrued liabilities incurred in the normal course of operations, which shall not include any liabilities or obligations attributable to investment leverage obtained through (i) indebtedness of any type (including, without limitation, borrowing through a credit facility or the issuance of debt securities), (ii) the issuance of preferred stock or other similar preference securities, and/or (iii) any other means. For the six months ended October 31, 2009, the net management fee was equivalent to 0.66% of the Trust's average daily managed assets and 0.90% of the Trust's average daily net assets.

In addition, under PIM's management and administration agreements, certain other services and costs are paid by PIM and reimbursed by the Trust. At October 31, 2009, \$140,048 was payable to PIM related to management costs, administrative costs and certain other services and it is included in "Due to affiliates" on the Statement of Assets and Liabilities.

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.

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. Montpelier received no compensation directly from the Trust.

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

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

46 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

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 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 in 2010. There can be no assurance that it will be continued after that time. For the period ended October 31, 2009, the expense reduction under such arrangement was \$178,145.

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.

4. Expense Offset Arrangements

The Trust has entered into an arrangement with its custodian whereby credits realized as a result of uninvested cash balances are used to reduce a portion of the Trust's custodian expenses. For the six months ended October 31, 2009, the Trust expenses were reduced by \$3 under such arrangement.

5. Forward Foreign Currency Contracts

During the six months ended October 31, 2009, the Trust has entered into various 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. The average number of contracts open during the six months ended October 31, 2009 was 3,433,333.

Open portfolio hedges at October 31, 2009 were as follows:

Currency	Net Contracts to Receive (Deliver)	In Exchange For US\$	Settlement Date	US\$ Value	Net Unrealiz Loss
EURO	(3,340,000)	\$(4,855,825)	11/5/09	\$ (4,927,998)	\$ (72,1
EURO	500,000	745,344	11/5/09	737,724	(7,6

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

Total

\$ (79,7

As of October 31, 2009, the Trust had no outstanding forward currency settlement contracts.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 47

6. Unfunded Loan Commitments

As of October 31, 2009, the Trust had unfunded loan commitments of \$138,814 which could be extended at the option of the borrower, pursuant to the following loan agreements:

Borrower	Unfunded Loan Commitment
Warner Chilcott Co., Delayed Draw Term Loan	\$138,814

7. Loan Agreement

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 October 31, 2009, the Trust had a borrowing outstanding under the Credit Agreement totaling \$55,000,000. The interest rates charged at October 31, 2009 were 2.49% to 2.50%. During the six months ended October 31, 2009, the average daily balance was \$49,173,913 at a weighted average interest rate of 2.55%. With respect to the loan, interest expense of \$639,841 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:

Date	Total Amount Outstanding	Asset coverage per \$1,000 of Indebtedness
10/31/09	\$55,000,000	\$3,760

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

8. Trust Shares

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

Transactions in common shares of beneficial interest for the six months ended October 31, 2009 and the year ended April 30, 2009 were as follows:

	10/2009	4/2009
Shares outstanding at beginning of period	8,165,927	8,154,188
Reinvestment of distributions	24,991	11,739
Shares outstanding at end of period	8,190,918	8,165,927

48 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

9. Additional Disclosures about Derivative Instruments and Hedging Activities:

Fair values of derivative instruments as of October 31, 2009:

Derivatives Not Accounted for as Hedging Instruments Under Statement 133	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Foreign Exchange Contracts	Receivables	\$--	Payables*	\$79,793
Total		\$--		\$79,793

* Foreign Exchange Contracts are shown as a net payable on the Statement of Assets and Liabilities.

The effect of derivative instruments on the Statement of Operations for the six months ended October 31, 2009 was as follows:

Derivatives Not Accounted for as Hedging	Location of Gain or	Realized Gain or	Change in Unrealized Gain or (Loss) on Derivatives

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

Instruments Under Statement 133	(Loss) On Derivatives Recognized in Income	(Loss) on Derivatives Recognized in Income	Recogni Inco
Foreign Exchange Contracts	Net realized gain on forward foreign currency contracts and other assets and liabilities denominated in foreign currencies	\$96,145	
Foreign Exchange Contracts	Change in unrealized gain (loss) on forward foreign currency contracts and other assets and liabilities denominated in foreign currencies		\$ (47,

10. Subsequent Events

Subsequent to October 31, 2009, the Board of Trustees of the Trust declared a dividend from undistributed net investment income of \$0.16 per common share payable November 30, 2009, to shareowners of record on November 16, 2009.

In preparing these financial statements, PIM has evaluated the impact of all events and transactions for potential recognition or disclosure through December 21, 2009, and has determined that there were no subsequent events requiring recognition or disclosure in the financial statements.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 49

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

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

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 Shareholder Meeting (unaudited)

At the annual meeting of shareowners held on September 22, 2009, and adjourned

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

to October 8, 2009 with respect to Proposal 2, shareowners of Pioneer Diversified High Income Trust were asked to consider the proposals described below. A report of the total votes cast by the Trust's shareholders follows:

Proposal 1 - To elect Class II Trustees.

Nominee	For	Withheld
Mary K. Bush	5,239,303	173,207
Thomas J. Perna	5,270,819	141,691
Marguerite A. Piret	5,251,980	160,530

Proposal 2 - To approve an Amended and Restated Management Agreement with Pioneer Investment Management, Inc.

For	Against	Abstain	Broker Non-Votes
3,645,869	95,651	114,518	1,486,898

50 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

Trustees, Officers and Service Providers

Trustees

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

Officers

John F. Cogan, Jr., President
 Daniel K. Kingsbury, Executive
 Vice President
 Mark E. Bradley, Treasurer
 Dorothy E. Bourassa, Secretary

Investment Adviser
 Pioneer Investment Management, Inc.

Custodian

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

Brown Brothers Harriman & Co.

Legal Counsel
Bingham McCutchen LLP

Transfer Agent
Pioneer Investment Management Shareholder Services, Inc.

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

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 pioneerinvestments.com. This information is also available on the Securities and Exchange Commission's web site at <http://www.sec.gov>.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09 51

This page for your notes.

52 Pioneer Diversified High Income Trust | Semiannual Report | 10/31/09

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

Dividend reinvestment plan (DRIP)

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

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

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, 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

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

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

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

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

Not applicable.

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

Not applicable.

(f) The registrant must:

(1) File with the Commission, pursuant to Item 10(a), a copy of its code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, as an exhibit to its annual report on this Form N-CSR;

(2) Post the text of such code of ethics on its Internet website and disclose, in its most recent report on this Form N-CSR, its Internet address and the fact that it has posted such code of ethics on its Internet website; or

(3) Undertake in its most recent report on this Form N-CSR to provide to any person without charge, upon request, a copy of such code of ethics and explain the manner in which such request may be made.
See Item 10(2)

ITEM 3. AUDIT COMMITTEE FINANCIAL EXPERT.

(a) (1) Disclose that the registrant's board of trustees has determined that the registrant either:

(i) Has at least one audit committee financial expert serving on its audit committee; or

(ii) Does not have an audit committee financial expert serving on its audit committee.

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

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

(2) If the registrant provides the disclosure required by paragraph (a)(1)(i) of this Item, it must disclose the name of the audit committee financial expert and whether that person is "independent." In order to be considered "independent" for purposes of this Item, a member of an audit committee may not, other than in his or her capacity as a member of the audit committee, the board of trustees, or any other board committee:

(i) Accept directly or indirectly any consulting, advisory, or other compensatory fee from the issuer; or

(ii) Be an "interested person" of the investment company as defined in Section 2(a)(19) of the Act (15 U.S.C. 80a-2(a)(19)).

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

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

Not applicable.

ITEM 4. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

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

N/A

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

N/A

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

N/A

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

N/A

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

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

PIONEER FUNDS

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

SECTION I - POLICY PURPOSE AND APPLICABILITY

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

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

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

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

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

SECTION II - POLICY

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PRE-APPROVED SERVICE SUBCATEGORIES
I. AUDIT SERVICES	Services that are directly related to performing the independent audit of the Funds	<ul style="list-style-type: none">o Accounting research assistanceo SEC consultation, registration statements, and reportingo Tax accrual related matterso Implementation of new accounting standardso Compliance letters (e.g. rating agency letters)o Regulatory reviews and assistance regarding financial matterso Semi-annual reviews (if requested)o Comfort letters for closed end offerings
II. AUDIT-RELATED SERVICES	Services which are not prohibited under Rule 210.2-01(C)(4) (the "Rule")	<ul style="list-style-type: none">o AICPA attest and agreed-upon procedureso Technology control assessmentso Financial reporting control assessments

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

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.)

o Enterprise security architecture assessment

AUDIT COMMITTEE APPROVAL POLICY

AUDIT COMMITTEE REPORTING POLICY

-
- | | |
|---|---|
| <ul style="list-style-type: none">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. | <ul style="list-style-type: none">o A summary of all such services and related fees reported at each regularly scheduled Audit Committee meeting. |
| <ul style="list-style-type: none">o "One-time" pre-approval for the fund fiscal year within a specified dollar limit for all pre-approved specific service subcategorieso 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 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" | <ul style="list-style-type: none">o A summary of all such services and related fees (including comparison to specified dollar limits) reported quarterly. |
-

SECTION III - POLICY DETAIL, CONTINUED

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

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 o Specific approval is needed to exceed the pre-approved dollar limits for these services (see general Audit Committee approval policy below for details on obtaining specific approvals) o Specific approval is needed to use the Fund's auditors for tax services not denoted as pre-approved, or to add a specific service subcategory as "pre-approved" 	<ul style="list-style-type: none"> o A summary of all such services and related fees (including comparison to specified dollar limits) reported quarterly.

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	<ul style="list-style-type: none"> o Business Risk Management support o Other control and regulatory compliance projects

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

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.

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. |
|---|---|

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,

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

- 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

- 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.

AUDIT COMMITTEE REPORTING POLICY

- 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.
- o At least quarterly, the Audit Committee shall review a report summarizing the services by service category, including fees, provided by the Audit firm as set forth in the above policy.

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

N/A

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

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

N/A

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

N/A

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

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

Item 5. Audit Committee of Listed Registrants

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

N/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

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

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

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

Information not required in semi annual reports on form NCSR.

Item 8. Portfolio Managers of Closed-End Management Investment Companies.

(a) If the registrant is a closed-end management investment company that is filing an annual report on this Form N-CSR, provide the following information:

(1) State the name, title, and length of service of the person or persons employed by or associated with the registrant or an investment adviser of the registrant who are primarily responsible for the day-to-day management of the registrants portfolio (Portfolio Manager). Also state each Portfolio Managers business experience during the past 5 years.

Information not required in semi annual reports on form NCSR.

Item 9. Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers.

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

During the period covered by this report, there were no purchases made by or on behalf of the registrant or any affiliated purchaser

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

as defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934 (the Exchange Act), of shares of the registrants equity securities that are registered by the registrant pursuant to Section 12 of the Exchange Act.

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

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

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

ITEM 11. CONTROLS AND PROCEDURES.

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

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

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

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

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

In August of 2006 the registrant's investment adviser enhanced its internal procedures for reporting performance information required to be included in prospectuses. Those enhancements involved additional internal controls

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

over the appropriateness of performance data generated for this purpose. Such enhancements were made following an internal review which identified prospectuses relating to certain classes of shares of a limited number of registrants where, inadvertently, performance information not reflecting the deduction of applicable sales charges was included. Those prospectuses were revised, and the revised prospectuses were distributed to shareholders.

ITEM 12. EXHIBITS.

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

(a) Any code of ethics, or amendment thereto, that is the subject of the disclosure required by Item 2, to the extent that the registrant intends to satisfy the Item 2 requirements through filing of an exhibit.

(b) A separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2 under the Act (17 CFR 270.30a-2).

Filed herewith.

SIGNATURES

[See General Instruction F]

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant) Pioneer Diversified High Income Trust

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

Date December 29, 2009

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

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

Date December 29, 2009

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

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

Date December 29, 2009

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