

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

Pioneer Diversified High Income Trust
Form N-CSR
December 30, 2011

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

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED
MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-22014

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)

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

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

Date of fiscal year end: April 30

Date of reporting period: May 1, 2011 through October 31, 2011

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

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

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

ITEM 1. REPORTS TO SHAREOWNERS.

[GRAPHIC MAP]

Pioneer Diversified
High Income Trust

Semiannual Report | October 31, 2011

Ticker Symbol: HNW

[LOGO] PIONEER
Investments (R)

visit us: us.pioneerinvestments.com

Table of Contents

Letter to Shareowners	2
Portfolio Management Discussion	4
Portfolio Summary	10
Prices and Distributions	11

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

Performance Update	12
Schedule of Investments	13
Financial Statements	42
Financial Highlights	46
Notes to Financial Statements	48
Trustees, Officers and Service Providers	59

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 1

President's Letter

Dear Shareowner,

During the first three quarters of 2011, the U.S. economy struggled to gain solid footing. The economy went through a soft patch in the first half, and the second half, so far, has been highlighted by the U.S. government's battle over the debt ceiling and Standard & Poor's downgrade of the U.S. Treasury's credit rating from the top rating of "AAA" for the first time in history. After rallying nicely in the first half, U.S. equity markets reacted sharply this summer to the political stalemate and the downgrade. There has been continued pressure on equities due to concerns about the growing European sovereign-debt crisis and its potential impact on the global economy.

Despite legitimate reasons for concern, we believe there are also reasons for optimism that the U.S. economy will continue to exhibit modest growth and is not headed into a severe recession. Corporations continue to post solid earnings and, for the most part, are maintaining their positive earnings outlooks. They also have strong balance sheets with improved net leverage and high cash levels. Auto production has rebounded following the Japanese supply-chain interruptions caused by the earthquake and tsunami last spring. Retail sales growth year-over-year has remained steady despite low consumer confidence. And despite high unemployment in the U.S., private sector employment has grown consistently, albeit modestly, since February 2010. There are certainly risks to our outlook, including possible contagion from the European sovereign-debt and banking crisis, the fiscal drag from federal and state budget cuts in the U.S., as well as potential "negative feedback loops" from capital-market volatility. But broadly speaking, we think the subpar economic recovery is consistent with recoveries from other "balance sheet"-caused recessions.

The difficult recovery process has been accompanied by wide market swings. While this is a challenging environment, our investment professionals continue to focus on finding good opportunities to invest in both equity and bond markets using the same disciplined approach Pioneer has used since 1928. Our approach is to identify undervalued individual securities with the greatest potential for success, carefully weighing risk against reward. Our teams of investment professionals continually monitor and analyze the relative valuations of different sectors and securities globally to help build portfolios that we believe can help you achieve your investment goals.

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

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

At Pioneer, we have long advocated the benefits of staying diversified and investing for the long term. The strategy has generally performed well for many investors. 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.

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 us.pioneerinvestments.com. We greatly appreciate 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 opinion 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 | 10/31/11 3

Portfolio Management Discussion | 10/31/11

High-yield corporate bonds and other credit-sensitive securities generated weak returns during the six months ended October 31, 2011, as a variety of concerns weighed on investors' minds. In the following interview, Andrew Feltus discusses the factors that influenced the performance of Pioneer Diversified High Income Trust during the six-month period. Mr. Feltus, senior vice president and portfolio manager at Pioneer, is responsible for the daily management of the Trust.

Q What was the investment environment like during the six months ended October 31, 2011?

A Although the environment for investing in high-yield bonds was generally positive early in 2011, problems started appearing in April, just before the start of the Trust's semiannual reporting period. The U.S. Federal Reserve System (the Fed) sold some asset-backed securities into the market, which generally led to lower prices in the credit sectors. As markets struggled with the new development, worries over sovereign-debt problems in Greece, Italy and several other European countries re-emerged, raising concerns about the potentially contagious effects on the global economy. Investor confidence was undermined further during the summer months by new data indicating that unemployment problems in the U.S. were not improving and that economic growth was weakening. For example, the growth of gross domestic product (GDP) slowed to a 1.3% annual pace for the second quarter of 2011 (April through June). To make matters worse, confidence in the ability of the Federal government to make decisions faltered. The contentious debate over raising the national debt ceiling further rattled the capital markets, which received an additional jolt in early August when the Standard & Poor's (S&P) credit rating agency downgraded its rating for

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

Treasury securities from AAA for the first time since one of S&P's predecessor firms assigned the AAA rating to the U.S. in 1917.

The market for higher-yielding, emerging market debt also fared badly over the six-month period, with investment money flowing out of the emerging markets over the final two months of the period as investors sought perceived safer havens in a time of market volatility.

After the almost unrelenting tide of negative news, the market appeared to start turning around again in the final weeks of the six-month period. First, new data about the domestic economy appeared to indicate unexpected strength, and even the jobs market showed some improvement. At the same time, European political and financial leaders appeared to be seriously addressing the major debt problems affecting some European nations. In reaction, the domestic high-yield market rallied again in the final month of the Trust's semiannual reporting period.

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

Q How did the Trust perform in that environment during the six months ending October 31, 2011?

A Pioneer Diversified High Income Trust produced total return of -3.60% at net asset value and -5.38% at market price during the six months ended October 31, 2011, with shares of the Trust selling at a 2.5% premium to net asset value at the end of the period. During the same period, the Trust's custom benchmark returned -1.40%. The custom benchmark is based on equal weightings of the Bank of America Merrill Lynch Global High Yield and Emerging Markets Plus Index, which returned -1.26%, and the Credit Suisse Leveraged Loan Index, which returned -1.53%. Unlike the Trust, the custom benchmark does not use leverage. While the use of leverage can increase investment opportunity, it also can increase investment risk.

Over the same six-month period ended October 31, 2011, the average return (at market price) of the 40 closed end funds in Lipper's Closed-End Fund High Yield (Leveraged) category, was -2.55%. On October 31, 2011, the Trust's 30-day SEC standardized yield was 9.73%.

Q What were your principal investment strategies in managing the Trust over the six months ended October 31, 2011, and how did the strategies affect the Trust's performance?

A We maintained a well-diversified approach to investing the Trust in the fixed-income market. The largest allocation remained in domestic, high-yield corporate bonds, which accounted for 38.2% of the Trust's total investment portfolio as of October 31, 2011. The heavy weighting in domestic high-yield bonds proved to be a drag on the Trust's performance, as lower-rated corporates, as measured by the Bank of America Merrill Lynch High Yield Master II Index, performed poorly, returning -1.25% over the six-month period despite a solid recovery in October.

While a variety of factors combined to drive prices of higher-yielding securities down over the six-month period, we believe that the bond market has overreacted and that high-yield debt has become undervalued. By the end of the period on October 31, 2011, the yield spreads between domestic high-yield corporates and Treasuries had widened to approximately 7.5% -- or 750 basis points. By historical standards, that type of yield spread reflects a default rate of approximately 9%, and yet the current default rate for high-yield securities is at just 2%. We also think corporations are in solid financial shape, with strong balance sheets -- much stronger, in

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

fact, than we saw going into the recession of 2007-2008. Also, we do not expect any significant rise in default rates at a time when U.S. corporations generally are improving their earnings. The low prices for high-yield bonds are not, in our estimation, justified by the underlying economic fundamentals.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 5

The next-largest portfolio component was the Trust's allocation to floating-rate bank loans, which accounted for 24.1% of the Trust's total investment portfolio on October 31, 2011. The Trust's floating-rate bank loans positioning also proved to be a drag on performance as credit-sensitive investments generally underperformed when investors sought lower-risk alternatives. The Trust's investments in emerging market and foreign high-yield bonds also did not help performance, as those securities accounted for 15.8% of the Trust's total investment portfolio as of October 31, 2011.

On the positive side, the Trust's heavy exposure to catastrophe-linked bonds had a positive effect on performance. Those securities, sometimes called event-linked bonds, are issued by property-and-casualty reinsurance companies to spread out the risks associated with property claims from large natural disasters. Although the group underperformed immediately following the March 2011 earthquake and tsunami in Japan, they went on to post good results for the remainder of the six-month period as insurance companies received relatively moderate damage claims during the 2011 hurricane season. Catastrophe-linked bonds represented 16.5% of the Trust's total investment portfolio as of October 31, 2011. The Trust's exposure to catastrophe-linked bonds, we think, demonstrated the value of diversification, especially in a generally volatile period for fixed-income markets.

Q What individual investments had noteworthy effects on the Trust's performance, either positive or negative, over the six months ended October 31, 2011?

A In addition to the catastrophe-linked bond holdings, several other of the Trust's investments fared well. The better performers included bonds of U.S. Corrugated, a packaging manufacturer. The securities gained in value as U.S. Corrugated sold major assets to another company and was able to strengthen its balance sheet. Also outperforming during the six-month period were the bonds of Basell Finance, a subsidiary of LyondellBasell, which is a Netherlands-based chemical company that has been paying down its debt as it moves to investment-grade status.

Holding back the Trust's performance was a position in Mariah catastrophe-linked bonds. We invested in the security -- which is sensitive to damage from tornadoes -- to diversify the Trust's risks away from hurricane damage. Unfortunately, an unusual amount of damage was caused by tornadoes in 2011. Also detracting from the Trust's results was an investment in Sevan Marine, which manufactures offshore drilling platforms for the energy industry. The company restructured its debt when it ran into cash flow problems. Securities of Mexico-based Cemex, a global cement manufacturer, likewise detracted from the Trust's performance as markets became nervous about the company's future financing.

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

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

Q Could you describe how leverage is used in managing the Trust?

A The Trust employs leverage provided by a bank loan to invest the Trust in additional higher-yielding securities that typically pay higher dividends than the interest rates payable on the loan, thereby increasing the Trust's yield. The use of leverage can increase the Trust's potential to pay higher yields to its shareowners than would generally be paid by an unleveraged portfolio. During periods of low market interest rates and modest borrowing costs, the use of leverage can have a significant positive effect on the Trust's yield. However, just as the use of leverage provides the potential to enhance yield, it also can increase investment risk. During periods when high-yield bond prices tend to change, the use of leverage can magnify the effect of changing prices on the Trust's total return, which is the combination of yield and price change. When bond prices rise, the use of leverage can further enhance the Trust's total return; when bond prices decline, the use of leverage can magnify the price loss to the Trust.

Q How did the level of leverage employed by the Trust change over the six months ended October 31, 2011?

A At the end of the six-month period, 30.2% of the Trust's total managed assets were financed by leverage, compared with 28.5% of the Trust's total managed assets financed by leverage at the start of the period on May 1, 2011.

Q Did the use of derivatives affect Trust performance during the six months ended October 31, 2011?

A The only use of derivatives in the Trust was a small exposure to currency forward contracts, which are used to reduce the risk to the Trust's portfolio from changes in the values of currencies in which any foreign investments may be denominated. The Trust's use of the contracts had no notable impact on performance.

Q What is your investment outlook?

A We continue to be optimistic, believing that the U.S. and global economies should expand, although at moderate paces. The two principal risks facing the market appear to be from outside the U.S.

Worries about sovereign-debt problems in Europe will keep markets around the world volatile. At the same time, investors are concerned that the Chinese government will become more aggressive in slowing the rate of domestic growth in that country, and that could have a damaging effect on the global economy.

We believe U.S. high-yield debt is undervalued, that the risk of any significant increase in default rates is unlikely, and that high-yield bonds offer potentially attractive investment opportunities, particularly at a time when economies are growing and corporations have healthy finances.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 7

We also think the Trust's diversified approach has the added advantage of providing protection in the event of any increases in market interest rates. At the end of the past six-month period on October 31, 2011, approximately 40% of the Trust's total investment portfolio was allocated to floating-rate holdings -- either bank loans or catastrophe-linked bonds. Because the interest rates of the floating-rate securities rise when market

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

interest rates increase, they offer more price protection than do conventional fixed-income investments, whose prices tend to decline when interest rates rise.

Please refer to the Schedule of Investments on pages 13-41 for a full listing of Trust securities.

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

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

The Trust may invest up to 50% of its total assets 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 incremental income or capital appreciation will not be sufficient to cover the cost of leverage, which may adversely affect the return for shareholders.

Risks of investing in the Trust are discussed in greater detail in the Trust's original offering prospectus and in shareowner reports issued from time to time.

These risks may increase share price volatility.

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

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 9

Portfolio Summary | 10/31/11

Portfolio Diversification

(As a percentage of total investment portfolio)

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

[This is a representation of a pie chart in the printed material]

Corporate Bonds & Notes	66.4%
Senior Floating Rate Loan Interests	24.1%
Temporary Cash Investments	3.8%
Convertible Bonds & Notes	2.2%
Asset-Backed Securities	1.0%
Collateralized Mortgage Obligations	0.9%
Sovereign Debt Obligations	0.5%
Common Stocks	0.4%
Municipal Bonds	0.3%
Convertible Preferred Stocks	0.2%
Preferred Stock	0.2%
Rights/Warrants*	0.0%

* Amount is less than 0.1%

Portfolio Quality

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

[This is a representation of a pie chart in the printed material]

B	41.0%
BB	23.7%
Not Rated	16.9%
CCC	12.2%
CC	2.8%
BBB	2.7%
AAA	0.4%
C	0.2%
AA	0.1%
D*	0.0%

* Amount is less than 0.1%

Bond ratings are ordered highest to lowest in portfolio. Based on S&P's measures, AAA (highest possible rating) through BBB are considered investment grade; BB or lower ratings are considered non-investment grade. Cash equivalents and some bonds may not be rated.

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

10 Largest Holdings

 (As a percentage of long-term holdings)*

1. Successor X, Ltd., 16.077%, 1/7/14 (144A)	0.96%
2. Lodestone Re, Ltd., 8.235%, 5/17/13 (144A)	0.95
3. Montana Re, Ltd., 16.733%, 1/8/14 (144A)	0.95
4. Successor X, Ltd., 14.577%, 1/7/14 (144A)	0.95
5. Queen Street IV Capital, Ltd., 7.485%, 4/9/15 (144A)	0.93
6. Blue Fin, Ltd., 4.791%, 4/10/12 (144A)	0.93

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

7. SunGard Data Systems, Inc., Tranche A U.S.Term Loan, 1.993%, 2/28/14	0.87
8. U.S.I. Holdings Corp., Tranche B Term Loan, 2.75%, 5/5/14	0.85
9. Lodestone Re, Ltd., 7.235%, 1/8/14 (144A)	0.85
10. Alliance One International, Inc., 10.0%, 7/15/16	0.81

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

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

Prices and Distributions | 10/31/11

Market Value per Common Share

	10/31/11	4/30/11
	\$19.79	\$21.95
Premium	2.5%	4.5%

Net Asset Value per Common Share

	10/31/11	4/30/11
	\$19.30	\$21.01

Distributions per Common Share: 5/1/11-10/31/11

Net Investment Income	Short-Term Capital Gains	Long-Term Capital Gains
\$ 0.9600	\$ --	\$ --

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

Performance Update | 10/31/11

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

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%) Bank of America Merrill Lynch Global High Yield and Emerging Markets Plus Index (BofA ML Global HY and EMP Index) and CS Leveraged Loan Index.

Cumulative Total Returns (As of October 31, 2011)

Period	Net Asset Value (NAV)	Market Price
Life-of-Trust (5/30/07)	35.60%	32.79%
1 Year	2.92	4.67

[This is a representation of a mountain chart in the printed material]

Value of \$10,000 Investment

	Pioneer Diversified High Income Trust	50% BofA ML Global HY and EMP Index 50% CS Leveraged Loan Index
5/07	\$10,000	\$10,000
10/07	10,099	10,034
10/08	7,370	7,683
10/09	10,472	10,570
10/10	12,845	12,116
10/11	13,279	12,532

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

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

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

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

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

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 BofA ML 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 CS Leveraged Loan Index is designed to mirror the investible universe of the U.S. dollar-denominated leveraged loan market. The CS 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.

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

Schedule of Investments | 10/31/11 (Consolidated) (unaudited)

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
		ASSET BACKED SECURITIES -- 1.3% of Net Assets	
		TRANSPORTATION -- 0.1%	
		Airlines -- 0.1%	
119,887	BB/Ba2	Continental Airlines, Inc., Series 981B, 6.748%, 9/15/18	\$ 1
		Total Transportation	\$ 1
		BANKS -- 0.8%	
		Thriffs & Mortgage Finance -- 0.8%	
246,741 (a)	AA+/Baa2	ACE Securities Corp., 1.145%, 12/25/34	\$ 1
450,000 (a)	BB-/A2	Bear Stearns Asset-Backed Securities Trust, 1.295%, 10/25/34	3
699,000 (a)	CC/Caa2	Carrington Mortgage Loan Trust, 0.445%, 2/25/37	3
471,522 (a)	CC/NR	Countrywide Asset-Backed Certificates, 0.695%, 3/25/47 (144A)	2
153,376 (a)	B-/B3	GSAMP Trust, 0.375%, 1/25/37	1
526,057 (a)	C/Ca	Lehman XS Trust, 0.595%, 12/25/35	1
		Total Banks	\$ 1,3
		DIVERSIFIED FINANCIALS -- 0.4%	
		Other Diversified Financial Services -- 0.3%	
1,033,564 (a)	B-/Caa1	Aircraft Finance Trust, 0.723%, 5/15/24 (144A)	\$ 5
18,552 (a)	B-/Ba3	Aircraft Finance Trust, 0.743%, 5/15/24 (144A)	5
		Specialized Finance -- 0.1%	

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

150,000	BBB-/Baa3	Dominos Pizza Master Issuer LLC, 5.261%, 4/25/37 (144A)	\$ 1
Total Diversified Financials			\$ 6
TOTAL ASSET-BACKED SECURITIES (Cost \$2,449,594)			\$ 2,1
COLLATERALIZED MORTGAGE OBLIGATIONS -- 1.3% of Net Assets			
BANKS -- 1.2%			
Diversified Banks -- 0.1%			
59,143 (a)	CC/Caa1	WaMu Asset-Backed Certificates, 0.295%, 1/25/37	\$
Investment Banking & Brokerage -- 0.1%			
250,000 (a)	BB+/A3	Bear Stearns Commercial Mortgage Securities, 5.759%, 9/11/38	\$ 1
Thrifths & Mortgage Finance -- 1.0%			
207,723 (a)	CC/B2	Bank of America Funding Corp., 0.325%, 5/20/47	\$ 2
226,878 (a)	C/C	Countrywide Home Loans, 0.595%, 3/25/35	
468,615 (a)	C/C	Downey Savings and Loan Association Mortgage Loan Trust, 0.614%, 10/19/45	1
90,768 (a)	D/C	Downey Savings and Loan Association Mortgage Loan Trust, 0.664%, 10/19/45	

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 13

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
Thrifths & Mortgage Finance -- (continued)			
186,479 (a)	BBB+/NR	GSR Mortgage Loan Trust, Series 2004-3F, 5.718%, 2/25/34	\$ 1
1,009,916 (a)	AAA/Baa3	Impac CMB Trust, 1.005%, 1/25/35	7
16,842 (a) (b)	D/B3	Impac Secured Assets CMN Owner Trust, 0.335%, 11/25/36	
224,352 (a)	NR/Ba1	JP Morgan Chase Commercial Mortgage Securities Corp., 0.603%, 11/15/18 (144A)	1
125,192 (a)	CC/NR	WaMu Mortgage Pass-Through Certificates, 5.39%, 4/25/45	1
Total Banks			\$ 1,8
DIVERSIFIED FINANCIALS -- 0.1%			
Other Diversified Financial Services -- 0.1%			
200,000 (a)	BBB-/A3	Morgan Stanley Capital I, 0.944%, 12/18/20	\$ 1
Total Diversified Financials			\$ 1

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

TOTAL COLLATERALIZED MORTGAGE OBLIGATIONS			
(Cost \$2,470,117)			
CORPORATE BONDS & NOTES -- 93.1% of Net Assets			
ENERGY -- 7.7%			
Coal & Consumable Fuels -- 1.8%			
850,000	BB/Ba3	Bumi Capital Pte, Ltd., 12.0%, 11/10/16 (144A)	\$ 8
1,200,000	B/Caa1	Foresight Energy Corp., 9.625%, 8/15/17 (144A)	1,2
400,000	NR/B2	James River Coal Co., 7.875%, 4/1/19	3
500,000 (c)	B-/Caa1	Xinergy Corp., 9.25%, 5/15/19 (144A)	4

			\$ 2,8
Oil & Gas Drilling -- 1.5%			
NOK 500,000 (a)	NR/NR	Aker Drilling ASA, 10.05%, 2/24/16	\$
NOK 1,000,000	NR/NR	Aker Drilling ASA, 11.0%, 2/24/16	1
1,000,000	CCC+/Caa2	Ocean Rig UDW, Inc., 9.5%, 4/27/16	9
670,000	B-/B3	Offshore Group Investments, Ltd., 11.5%, 8/1/15	7
500,000	B/NR	Pioneer Drilling Co., 9.875%, 3/15/18	5

			\$ 2,4
Oil & Gas Equipment & Services -- 2.1%			
1,358,000	B+/B1	American Petroleum Tankers LLC, 10.25%, 5/1/15	\$ 1,3
730,000	B-/B2	Expro Finance Luxembourg SCA, 8.5%, 12/15/16 (144A)	7
330,000	B-/Caa1	Forbes Energy Services, Ltd., 9.0%, 6/15/19 (144A)	3
65,067 (b)	NR/NR	Nexus 1 Pte., Ltd., 10.5%, 3/7/12 (144A)	
820,000 (a) (b)	NR/NR	Sevan Marine ASA, 3.417%, 5/14/13 (144A)	5
NOK 2,560,000 (a) (b)	NR/NR	Sevan Marine ASA, 13.13%, 10/24/12 (144A)	2
NOK 2,500,000 (b)	NR/NR	Sevan Marine ASA, 14.0%, 12/22/14	1
90,000 (b)	NR/NR	Sevan Marine ASA, 15.0%, 7/22/12	

			\$ 3,3

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

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

Principal Amount	S&P/Moody's Ratings		Value
USD (\$)			
Oil & Gas Exploration & Production -- 1.7%			
505,000	BB-/B2	Berry Petroleum Co., 10.25%, 6/1/14	\$ 5
444,000	B/B2	Linn Energy LLC/Linn Energy Finance Corp., 11.75%, 5/15/17	5
500,000	B+/NR	MIE Holdings Corp., 9.75%, 5/12/16 (144A)	4
NOK 2,500,000	NR/NR	Norwegian Energy Co. AS, 12.9%, 11/20/14	4
240,000	B-/B3	Quicksilver Resources, Inc., 7.125%, 4/1/16	2
472,000	B+/Caa1	Rosetta Resources, Inc., 9.5%, 4/15/18	5

			\$ 2,7

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

500,000	BB-/B1	Oil & Gas Refining & Marketing -- 0.3% Holly Energy Partners LP, 6.25%, 3/1/15	\$ 4
450,000 (a)	BB/Ba1	Oil & Gas Storage & Transportation -- 0.3% Southern Union Co., 7.2%, 11/1/66	\$ 3
		Total Energy	\$ 12,3
1,386,670 (a) (d)	B/B2	MATERIALS -- 11.7% Aluminum -- 0.8% Noranda Aluminum Acquisition Corp., 4.417%, 5/15/15	\$ 1,2
EURO 200,000 (a) (e)	B-/NR	Building Products -- 0.1% C10--EUR Capital SPV, Ltd., 6.277%	\$ 1
300,000	NR/NR	Commodity Chemicals -- 0.2% Monthell Finance Co. BV, 8.1%, 3/15/27 (144A)	\$ 3
865,000	CCC+/B3	Construction Materials -- 0.6% AGY Holding Corp., 11.0%, 11/15/14	\$ 6
300,000 (a) (e)	B-/NR	C8 Capital SPV, Ltd., 6.64% (144A)	1
100,000	B/NR	Cemex SAB de CV, 9.0%, 1/11/18 (144A)	8
EURO 1,275,000	CC/Caa1	Diversified Chemicals -- 1.1% Ineos Group Holdings Plc, 7.875%, 2/15/16 (144A)	\$ 1,4
275,000	CC/Caa1	Momentive Performance Materials, Inc., 9.0%, 1/15/21	2
			\$ 1,6
200,000 (c)	B-/B2	Diversified Metals & Mining -- 0.9% Mirabela Nickel, Ltd., 8.75%, 4/15/18 (144A)	\$ 1
428,000	BBB/Baa2	Teck Resources, Ltd., 10.25%, 5/15/16	5
750,000 (c)	BB/Ba2	Vedanta Resources Plc, 9.5%, 7/18/18 (144A)	7
			\$ 1,3
475,000 (d)	B-/Caa1	Metal & Glass Containers -- 1.4% Ardagh Finance SA, 11.125%, 6/1/18 (144A)	\$ 4
EURO 250,000 (d)	B-/B3	Ardagh Glass Finance Plc, 8.75%, 2/1/20 (144A)	3
EURO 255,000 (d)	BB-/Ba3	Ardagh Glass Finance Plc, 9.25%, 7/1/16 (144A)	3
175,000	CCC+/B3	BWAY Holdings Co., 10.0%, 6/15/18	1
1,055,885 (d)	CCC+/Caa1	BWAY Parent Co., Inc., 10.125%, 11/1/15	9
			\$ 2,2

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 15

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

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

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

			Paper Packaging -- 1.6%	
750,103 (d) (f)	NR/NR		Corporacion Durango SAB de CV, 7.0%, 8/27/16	\$ 5
700,000	B-/Caa1		Graham Packaging Co., Inc., 9.875%, 10/15/14	7
500,000	B/B3		Pretium Packaging LLC, 11.5%, 4/1/16 (144A)	4
750,000	NR/NR		U.S. Corrugated, Inc., 10.0%, 6/1/13	7

				\$ 2,5
			Paper Products -- 1.6%	
459,000	BB-/B1		ABI Escrow Corp., 10.25%, 10/15/18 (144A)	\$ 5
500,000	B+/B1		Appleton Papers, Inc., 10.5%, 6/15/15 (144A)	5
200,000	CCC+/B3		Appleton Papers, Inc., 11.25%, 12/15/15	1
260,000	BB/Ba3		Clearwater Paper Corp., 10.625%, 6/15/16	2
580,000	CCC+/Caa1		Exopack Holdings Corp., 10.0%, 6/1/18 (144A)	5
186,000 (c)	B+/Ba3		Grupo Papelero Scribe SA, 8.875%, 4/7/20 (144A)	1
344,000	B+/B3		Mercer International, Inc., 9.5%, 12/1/17	3

				\$ 2,5
			Precious Metals & Minerals -- 0.3%	
500,000	BB-/Ba3		ALROSA Finance SA, 8.875%, 11/17/14 (144A)	\$ 5
			Steel -- 3.1%	
1,,245,000	CCC+/Caa2		Algoma Acquisition Corp., 9.875%, 6/15/15 (144A)	\$ 1,0
250,000	BB/B1		APERAM, 7.375%, 4/1/16 (144A)	2
350,000	B+/B3		Atkore International, Inc., 9.875%, 1/1/18 (144A)	3
450,000	B+/B3		Essar Steel Algoma, Inc., 9.375%, 3/15/15 (144A)	4
250,000	B+/B2		Evrax Group SA, 8.875%, 4/24/13 (144A)	2
250,000	B+/B2		Evrax Group SA, 9.5%, 4/24/18 (144A)	2
900,000	NR/B2		Metinvest BV, 8.75%, 2/14/18 (144A)	8
600,000	NR/B2		Metinvest BV, 10.25%, 5/20/15 (144A)	6
920,000	CCC+/Caa1		Ryerson, Inc., 12.0%, 11/1/15	9
EURO 50,000	CC/Caa2		Zlomrex International Finance SA, 8.5%, 2/1/14 (144A)	

				\$ 4,9
			Total Materials	\$ 18,6
			CAPITAL GOODS -- 6.3%	
			Aerospace & Defense -- 1.1%	
600,000 (c)	B/B3		ADS Tactical, Inc., 11.0%, 4/1/18 (144A)	\$ 6
1,170,000	B-/B2		DynCorp International, Inc., 10.375%, 7/1/17 (144A)	1,0
90,000	BB-/Ba3		GeoEye, Inc., 9.625%, 10/1/15	1

				\$ 1,7
			Building Products -- 0.2%	
365,000	BB-/B2		USG Corp., 9.75%, 8/1/14 (144A)	\$ 3

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		Value
900,000	B+/Ba3	Construction & Engineering -- 1.0%	
850,000	B-/Caa2	Empresas ICA S.A.B. de C.V., 8.9%, 2/4/21 (144A)	\$ 8
		New Enterprise Stone & Lime Co., 11.0%, 9/1/18 (144A)	7
			----- \$ 1,5
720,000	B+/Caa1	Construction & Farm Machinery & Heavy Trucks -- 0.9%	
750,000 (c)	BB/Ba3	American Railcar Industries, Inc., 7.5%, 3/1/14	\$ 7
		Lonking Holdings, Ltd., 8.5%, 6/3/16 (144A)	6
			----- \$ 1,3
750,000	B/B2	Electrical Components & Equipment -- 0.5%	
		WireCo WorldGroup, 9.75%, 5/15/17 (144A)	\$ 7
90,000	NR/NR	Industrial Conglomerates -- 0.1%	
EURO 100,000	BB-/Ba3	Little Traverse Bay Bands of Odawa Indians, 9.0%, 8/31/20 (144A)	\$
		Mark IV USA/EURO LUX, 8.875%, 12/15/17 (144A)	1
			----- \$ 2
500,000 (b)	NR/NR	Industrial Machinery -- 1.1%	
335,000	B/Caa1	Indalex Holding Corp., 11.5%, 2/1/14	\$
875,000	CCC+/Caa2	Liberty Tire Recycling, 11.0%, 10/1/16 (144A)	3
665,000	B+/NR	Mueller Water Products, Inc., 7.375%, 6/1/17	7
		WPE International Cooperatief UA, 10.375%, 9/30/20 (144A)	5
			----- \$ 1,7
150,000	B/B2	Trading Companies & Distributors -- 1.4%	
1,090,000	B-/B3	Avis Budget Car Rental LLC/Avis Budget Finance, Inc., 9.625%, 3/15/18	\$ 1
1,000,000	B/B1	Intcomex, Inc., 13.25%, 12/15/14	1,0
		Wesco Distribution, Inc., 7.5%, 10/15/17	1,0
			----- \$ 2,2
		Total Capital Goods	\$ 9,9
400 (g)	NR/Caa1	COMMERCIAL & PROFESSIONAL SERVICES -- 0.9%	
		Diversified Support Services -- 0.2%	
		MSX International, Ltd., UK, 12.5%, 4/1/12 (144A)	\$ 3
700,000 (b)	NR/NR	Environmental & Facilities Services -- 0.2%	
210,000	BB/B2	Aleris International, Inc., 10.0%, 12/15/16	\$
EURO 107,128	CCC+/Caa2	Casella Waste Systems, Inc., 11.0%, 7/15/14	2
		New Reclamation Group Pty., Ltd., 8.125%, 2/1/13 (144A)	1
			----- \$ 3

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 | 10/31/11 17

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
750,000	CCC+/Caa1	Security & Alarm Services -- 0.5% WP Rocket Merger Sub, Inc., 10.125%, 7/15/19 (144A)	\$ 7
		Total Commercial & Professional Services	\$ 1,4
929,000	CCC+/Caa1	TRANSPORTATION -- 2.1% Air Freight & Logistics -- 0.5% CEVA Group Plc, 11.5%, 4/1/18 (144A)	\$ 8
305,000	BB-/Ba2	Airlines -- 0.5% Delta Air Lines, Inc., 9.5%, 9/15/14 (144A)	\$ 3
500,000	B/NR	Tam Capital 3, Inc., 8.375%, 6/3/21 (144A)	5
			\$ 8
441,000	B/B2	Airport Services -- 0.3% Aeropuertos Argentina 2000 SA, 10.75%, 12/1/20 (144A)	\$ 4
375,000 (c)	B+/B3	Marine -- 0.2% Navios South American Logistic, 9.25%, 4/15/19 (144A)	\$ 3
263,281 (d)	CC/Caa3	Railroads -- 0.2% Florida East Coast Holdings, 10.5%, 8/1/17 (144A)	\$ 2
425,000	B-/Caa1	Trucking -- 0.4% Swift Services Holdings, Inc., 10.0%, 11/15/18	\$ 4
300,000	B/B3	Syncreon Global Ireland, Ltd., 9.5%, 5/1/18 (144A)	2
			\$ 7
		Total Transportation	\$ 3,4
980,000	CCC+/Caa1	AUTOMOBILES & COMPONENTS -- 2.1% Auto Parts & Equipment -- 2.0% Allison Transmission, Inc., 11.0%, 11/1/15 (144A)	\$ 1,0
350,000	B/B3	International Automotive Components Group S.L., 9.125%, 6/1/18 (144A)	3
160,000	CC/Caa1	Stanadyne Corp., 10.0%, 8/15/14	1
500,000	CCC-/Caa3	Stanadyne Corp., 12.0%, 2/15/15	4
1,174,000	B+/B1	Tower Automotive Holdings USA LLC, 10.625%, 9/1/17 (144A)	1,2

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

Principal Amount USD (\$)	S&P/Moody's Ratings	Description	Value
		Tires & Rubber -- 0.1%	\$ 3,2
153,000	B+/B1	Goodyear Tire & Rubber Co., 10.5%, 5/15/16	\$ 1
		Total Automobiles & Components	\$ 3,3

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

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

Principal Amount USD (\$)	S&P/Moody's Ratings	Description	Value
		CONSUMER DURABLES & APPAREL -- 3.0%	
		Homebuilding -- 1.0%	
530,000	CC/Caa3	Beazer Homes USA, Inc., 9.125%, 6/15/18	\$ 3
430,000	BB-/Ba3	Desarrolladora Homex SA de CV, 9.5%, 12/11/19 (144A)	4
695,000	B+/B1	Meritage Homes Corp., 6.25%, 3/15/15	6
			\$ 1,4
		Housewares & Specialties -- 1.1%	
500,000	B-/Caa1	Reynolds Group Holdings, Ltd, 9.0%, 4/15/19 (144A)	\$ 4
1,000,000	CCC+/B3	Yankee Acquisition Corp., 9.75%, 2/15/17	9
350,000 (d)	CCC+/Caa1	YCC Holdings LLC, 10.25%, 2/15/16 (144A)	3
			\$ 1,7
		Leisure Products -- 0.9%	
EURO 575,000	CCC+/Caa1	Heckler & Koch GmbH, 9.5%, 5/15/18 (144A)	\$ 6
1,000,000	B/B2	Icon Health & Fitness, 11.875%, 10/15/16 (144A)	8
			\$ 1,4
		Total Consumer Durables & Apparel	\$ 4,7
		CONSUMER SERVICES -- 3.8%	
		Casinos & Gaming -- 2.1%	
500,000 (b)	NR/NR	Buffalo Thunder Development Authority, 9.375%, 12/15/14 (144A)	\$ 1
EURO 1,155,000	B/B2	Codere Finance Luxembourg SA, 8.25%, 6/15/15 (144A)	1,5
395,000	B+/B2	FireKeepers Development Authority, 13.875%, 5/1/15 (144A)	4
1,615,000 (b)	NR/NR	Mashantucket Western Pequot Tribe, 8.5%, 11/15/15 (144A)	
EURO 500,000	B-/B3	Peermont Global, Ltd., 7.75%, 4/30/14 (144A)	5
450,000	BB-/B1	Scientific Games International, Inc., 9.25%, 6/15/19	4
			\$ 3,2

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

400,000	B-/B3	Hotels, Resorts & Cruise Lines -- 0.2% Seven Seas Cruises S de RL LLC, 9.125%, 5/15/19 (144A)	\$ 4
<hr/>			
1,235,000 (c) (f)	CCC+/Caa1	Restaurants -- 0.7% Burger King Capital Holdings LLC, 0.0%, 4/15/19 (144A)	\$ 7
400,000 (c)	B-/B3	Burger King Corp., 9.875%, 10/15/18	4
			<hr/> \$ 1,1

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 19

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
685,000	BB-/Ba3	Specialized Consumer Services -- 0.8% Service Corp., International, 7.0%, 5/15/19	\$ 7
500,000	B-/B3	StoneMor Operating LLC/Cornerstone Family Services/Osiris Holdings, 10.25%, 12/1/17	4
			<hr/> \$ 1,2
Total Consumer Services			\$ 6,0
<hr/>			
		MEDIA -- 4.6%	
		Advertising -- 1.6%	
1,100,000	NR/B3	Good Sam Enterprises LLC, 11.5%, 12/1/16	\$ 1,0
716,000	B+/B2	MDC Partners, Inc., 11.0%, 11/1/16	7
800,000	B-/Caa2	Sitel LLC/Sitel Finance Corp., 11.5%, 4/1/18	6
			<hr/> \$ 2,4
<hr/>			
182,676	B/B2	Broadcasting -- 1.4% CCH II LLC/CCH II Capital Corp., 13.5%, 11/30/16	\$ 2
989,556 (d)	CCC+/Caa3	Intelsat Bermuda, Ltd., 11.5%, 2/4/17	9
EURO 200,000	B/B1	Nara Cable Funding, Ltd., 8.875%, 12/1/18 (144A)	2
430,000	B-/Caa1	Telesat Canada, 12.5%, 11/1/17	4
EURO 200,000	B+/B1	TVN Finance Corp II AB, 10.75%, 11/15/17 (144A)	3
			<hr/> \$ 2,2
<hr/>			
1,710,000	CCC+/Caa1	Movies & Entertainment -- 1.1% AMC Entertainment, Inc., 9.75%, 12/1/20 (144A)	\$ 1,6
200,000	B-/B3	Production Resource Group, Inc., 8.875%, 5/1/19 (144A)	1
			<hr/> \$ 1,8
<hr/>			
Publishing -- 0.5%			

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

600,000	CCC+/Caa2	Cengage Learning Acquisitions, Inc., 10.5%, 1/15/15 (144A)	\$ 4
245,000	B-/Caa1	Interactive Data Corp., 10.25%, 8/1/18	2
			----- \$ 7
		Total Media	\$ 7,3

		RETAILING -- 1.7%	
		Distributors -- 0.8%	
(c) 1,438,000 (c)	B/B2	Minerva Overseas II, Ltd., 10.875%, 11/15/19 (144A)	\$ 1,2

		Internet Retail -- 0.4%	
640,000	B/B3	Ticketmaster Entertainment, Inc., 10.75%, 8/1/16	\$ 6

		Specialty Stores -- 0.5%	
800,000 (c)	B+/B3	Sally Holdings LLC, 10.5%, 11/15/16	\$ 8
		Total Retailing	\$ 2,7

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

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

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
		FOOD, BEVERAGE & TOBACCO -- 3.9%	
		Agricultural Products -- 0.8%	
1,127,000	B+/B3	Southern States Cooperative, Inc., 11.25%, 5/15/15 (144A)	\$ 1,1

		Packaged Foods & Meats -- 2.0%	
650,000	NR/B1	Bertin, Ltd., 10.25%, 10/5/16 (144A)	\$ 6
491,000	NR/B2	Corporacion Pesquera Inca SAC, 9.0%, 2/10/17 (144A)	4
750,000 (c)	B-/B3	FAGE Dairy Industry SA/FAGE USA Dairy Industry, Inc., 9.875%, 2/1/20 (144A)	6
224,421 (b) (d)	NR/NR	Independencia International, Ltd., 12.0%, 12/30/16 (144A)	3
475,000	B+/B1	Marfrig Overseas, Ltd., 9.5%, 5/4/20 (144A)	6
700,000	B+/B1	Marfrig Overseas, Ltd., 9.625%, 11/16/16 (144A)	2
300,000 (c)	B-/Caa1	Pilgrim's Pride Corp., 7.875%, 12/15/18 (144A)	2
275,000 (f)	NR/B1	SA Fabrica de Produtos Alimenticios Vigor, 9.25%, 2/23/17 (144A)	2
			----- \$ 3,2

		Tobacco -- 1.1%	
2,015,000	B/B2	Alliance One International, Inc., 10.0%, 7/15/16	\$ 1,7
		Total Food, Beverage & Tobacco	\$ 6,1

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

			HOUSEHOLD & PERSONAL PRODUCTS -- 0.2%	
			Personal Products -- 0.2%	
300,000	B/B2		Revlon Consumer Products Corp., 9.75%, 11/15/15	\$ 3

			Total Household & Personal Products	\$ 3

			HEALTH CARE EQUIPMENT & SERVICES -- 4.0%	
			Health Care Equipment -- 0.7%	
750,000	CCC+/Caa2		Accellent, Inc., 10.0%, 11/1/17	\$ 6
500,000	B-/Caa1		IVD Acquisition Corp., 11.125%, 8/15/19 (144A)	5

				\$ 1,1

			Health Care Facilities -- 0.3%	
600,000	B-/B3		Kindred Healthcare, Inc., 8.25%, 6/1/19 (144A)	\$ 5
26,000	CCC+/Caa1		Vanguard Health Systems, Inc., 0.0%, 2/1/16	

				\$ 5

			Health Care Services -- 1.7%	
378,000	B-/Caa1		BioScrip, Inc., 10.25%, 10/1/15	\$ 3
476,000	CCC+/B3		Gentiva Health Services, Inc., 11.5%, 9/1/18	3
796,459(d)	CCC+/B3		Surgical Care Affiliates, Inc., 8.875%, 7/15/15 (144A)	7
1,170,000	CCC+/Caa1		Surgical Care Affiliates, Inc., 10.0%, 7/15/17 (144A)	1,1

				\$ 2,7

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 21

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
		Health Care Supplies -- 1.1%	
750,000	B/Caa1	Bausch & Lomb, Inc., 9.875%, 11/1/15	\$ 7
815,000(d)	B-/B3	Biomet, Inc., 10.375%, 10/15/17	8

			\$ 1,6

		Health Care Technology -- 0.2%	
275,000	NR/Caa1	Emdeon, Inc., 11.0%, 12/31/19 (144A)	\$ 2

		Total Health Care Equipment & Services	\$ 6,3

		PHARMACEUTICALS & BIOTECHNOLOGY & LIFE SCIENCES -- 1.4%	
		Biotechnology -- 0.8%	
300,000	B/Caa1	ConvaTec Healthcare E SA, 10.5%, 12/15/18 (144A)	\$ 2
1,043,000	B+/B3	Lantheus Medical Imaging, Inc., 9.75%, 5/15/17	9

			\$ 1,2

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

	131,406 (d)	B/Caa1	Life Sciences Tools & Services -- 0.1% Catalent Pharma Solutions, Inc., 9.5%, 4/15/15	\$	1
	1,215,000	NR/NR	Pharmaceuticals -- 0.5% KV Pharmaceutical Co., 12.0%, 3/15/15 (144A)	\$	7
			Total Pharmaceuticals & Biotechnology & Life Sciences	\$	2,1
	400,000 (a) (c) (e)	BB+/Ba3	BANKS -- 1.6% Diversified Banks -- 1.2% ABN Amro North American Holding Preferred Capital Repackage Trust I, 6.523% (144A)	\$	3
	500,000 (a)	NR/B2	Banco Macro SA, 9.75%, 12/18/36		3
	700,000 (a)	NR/Ba2	Banco Macro SA, 10.75%, 6/7/12		5
	525,000	B/B2	BCO de Galicia Y Buenos Aires SA de CV, 8.75%, 5/4/18 (144A)		4
BRL	350,000	AAA/NR	International Finance Corp., 9.25%, 3/15/13		2
	15,747	B/NR	JSC Temirbank, 14.0%, 6/30/22 (144A)		
				\$	1,9
	600,000 (a) (e)	BBB/Baa3	Regional Banks -- 0.4% PNC Financial Services Group, Inc., 8.25%	\$	6
			Total Banks	\$	2,5
	590,000 (a)	BBB-/Baa3	DIVERSIFIED FINANCIALS -- 19.8% Asset Management & Custody Banks -- 0.4% Janus Capital Group, Inc., 6.7%, 6/15/17	\$	6
	610,000	NR/NR	Consumer Finance -- 0.4% Tarjeta Naranja SA, 9.0%, 1/28/17 (144A)	\$	5
	450,000 (a) (e)	BBB-/Baa2	Investment Banking & Brokerage -- 0.2% Goldman Sachs Capital II, 5.793%	\$	3

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

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

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
600,000	B/B2	Multi-Sector Holdings -- 0.3% Constellation Enterprises, 10.625%, 2/1/16 (144A)	\$ 5
EURO 500,000 (a)	B/NR	Other Diversified Financial Services -- 10.8% ATLAS VI Capital, Ltd., 11.05%, 4/6/13 (144A)	\$ 6
EURO 500,000 (a)	B-/NR	ATLAS VI Capital, Ltd., 11.81%, 4/7/14 (144A)	6
1,500,000 (a)	BB+/NR	Caelus Re II, Ltd., 6.485%, 5/24/13 (144A)	1,5
500,000 (a)	BB-/NR	Ibis Re, Ltd., 6.185%, 5/3/13 (144A)	5
1,000,000 (a)	B/NR	Ibis Re, Ltd., 9.235%, 5/3/13 (144A)	1,0

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

400,000 (a)	BB/NR	Ibis Re, Ltd., 10.597%, 5/10/12 (144A)	4
1,800,000 (a)	BB/NR	Lodestone Re, Ltd., 7.235%, 1/8/14 (144A)	1,8
2,000,000 (a)	BB-/NR	Lodestone Re, Ltd., 8.235%, 5/17/13 (144A)	2,0
1,000,000 (a)	BB-/NR	LOMA Reinsurance, Ltd., 9.826%, 12/21/14 (144A)	1,0
500,000 (a)	C/NR	Mariah Re, Ltd., 6.235%, 1/8/14 (144A)	1
1,200,000 (a)	BB-/NR	Queen Street II Capital, Ltd., 7.485%, 4/9/14 (144A)	1,2
1,000,000 (a)	B+/NR	Queen Street III Capital, Ltd., 4.735%, 7/28/14 (144A)	9
2,000,000 (a)	BB-/NR	Queen Street IV Capital, Ltd., 7.485%, 4/9/15 (144A)	1,9
250,000 (a)	NR/NR	Residential Reinsurance 2010, Ltd., 7.235%, 6/6/13 (144A)	2
1,250,000 (a)	NR/NR	Residential Reinsurance 2010, Ltd., 10.735%, 6/6/13 (144A)	1,2
1,250,000 (a)	B-/NR	Residential Reinsurance 2010, Ltd., 11.985%, 6/6/15 (144A)	1,2
250,000 (a)	B-/NR	Residential Reinsurance 2010, Ltd., 13.02%, 6/6/13 (144A)	2
			----- \$ 17,1

500,000	BB/Baa3	Specialized Finance -- 7.7% Capital One Capital V, 10.25%, 8/15/39	\$ 5
1,000,000 (a)	CCC+/NR	Montana Re, Ltd., 12.233%, 1/8/14 (144A)	9
750,000 (a)	CCC+/NR	Montana Re, Ltd., 13.583%, 12/7/12 (144A)	7
2,000,000 (a)	NR/NR	Montana Re, Ltd., 16.733%, 1/8/14 (144A)	2,0
425,000	B+/B2	National Money Mart Co., 10.375%, 12/15/16	4
755,000 (a)	CCC-/Caa2	NCO Group, Inc., 5.161%, 11/15/13	6
510,000	CCC-/Caa3	NCO Group, Inc., 11.875%, 11/15/14	4
500,000 (a)	B-/NR	Successor X, Ltd., 9.735%, 4/4/13 (144A)	4
1,250,000 (a)	NR/NR	Successor X, Ltd., 11.735%, 4/4/13 (144A)	1,2
2,000,000 (a)	B-/NR	Successor X, Ltd., 14.577%, 1/7/14 (144A)	2,0
2,000,000 (a)	NR/NR	Successor X, Ltd., 16.077%, 1/7/14 (144A)	2,0
500,000 (a)	NR/NR	Successor X, Ltd., 16.735%, 4/4/13 (144A)	4
			----- \$ 12,2
Total Diversified Financials			\$ 31,4

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 23

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

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

		INSURANCE -- 9.5%	
		Insurance Brokers -- 2.2%	
250,000	CC/Caa1	Alliant Holdings I, Inc., 11.0%, 5/1/15 (144A)	\$ 2
1,175,000	CCC+/Caa1	HUB International Holdings, Inc., 10.25%, 6/15/15 (144A)	1,1
GBP 475,000	NR/B3	Towergate Finance Plc., 10.5%, 2/15/19 (144A)	6
827,000 (a)	CC/B3	U.S.I. Holdings Corp., 4.161%, 11/15/14 (144A)	7

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

804,000	CC/Caa1	U.S.I. Holdings Corp., 9.75%, 5/15/15 (144A)	7
			\$ 3,5

		Multi-Line Insurance -- 1.1%	
1,000,000 (a)	BB/Baa3	Liberty Mutual Group, Inc., 7.0%, 3/7/67 (144A)	\$ 8
670,000 (a)	BB/Baa3	Liberty Mutual Group, Inc., 10.75%, 6/15/88 (144A)	8
65,000	BB-/NR	Sul America Participacoes SA, 8.625%, 2/15/12 (144A)	

			\$ 1,7

		Property & Casualty Insurance -- 0.0%	
40,000 (a) (e)	BB+/Ba2	White Mountains Insurance Group, Ltd., 7.506% (144A)	\$

		Reinsurance -- 6.2%	
1,000,000 (a)	BB+/NR	Akibare, Ltd., 3.248%, 5/22/12 (144A)	\$ 1,0
500,000 (a)	BB+/NR	Akibare, Ltd., 3.448%, 5/22/12 (144A)	5
2,000,000 (a)	BB+/NR	Blue Fin, Ltd., 4.791%, 4/10/12 (144A)	1,9
1,000,000 (a)	BB-/NR	Blue Fin, Ltd., 13.903%, 4/16/12 (144A)	1,0
1,000,000 (a)	BB+/NR	Foundation Re III, Ltd., 4.985%, 2/25/15 (144A)	1,0
1,000,000 (a)	BB/NR	Foundation Re III, Ltd., 5.735%, 2/3/14 (144A)	1,0
750,000 (a)	NR/B1	GlobeCat, Ltd., 6.372%, 1/2/13 (144A)	7
350,000 (a)	NR/B3	GlobeCat, Ltd., 9.622%, 1/2/13 (144A)	3
600,000 (a)	BB+/NR	Merna Reinsurance II, Ltd., 3.65%, 4/8/13 (144A)	6
250,000 (a)	BB-/NR	MultiCat Mexico, Ltd., Series 2009-I Class A, 10.235%, 10/19/12 (144A)	2
250,000 (a)	B/NR	MultiCat Mexico, Ltd., Series 2009-I Class B, 10.25%, 10/19/12 (144A)	2
250,000 (a)	B/NR	MultiCat Mexico, Ltd., Series 2009-I Class C, 10.25%, 10/19/12 (144A)	2
250,000 (a)	B/NR	MultiCat Mexico, Ltd., Series 2009-I Class D, 11.5%, 10/19/12 (144A)	2
500,000 (a)	BB/NR	Mystic Re II, Ltd., 12.323%, 3/20/12 (144A)	5

			\$ 9,8

		Total Insurance	\$ 15,1

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

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

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
		REAL ESTATE -- 0.4%	
		Real Estate Operating Companies -- 0.3%	
43,674 (a)	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)	3

			\$ 4

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

200,000	BB-/Ba3	Specialized Real Estate Investment Trusts -- 0.1% CNL Lifestyle Properties, Inc., 7.25%, 4/15/19	\$ 1
		Total Real Estate	\$ 5
689,000	B/B3	SOFTWARE & SERVICES -- 1.2% Application Software -- 0.4% Allen Systems Group, Inc., 10.5%, 11/15/16 (144A)	\$ 6
404,000	B-/Caa1	Data Processing & Outsourced Services -- 0.3% First Data Corp., 8.25%, 1/15/21 (144A)	\$ 3
91,000 (c)	B-/Caa1	First Data Corp., 9.875%, 9/24/15	\$ 4
827,442 (d)	NR/NR	Systems Software -- 0.5% Pegasus Solutions, Inc., 13.0%, 4/15/14 (144A)	\$ 7
		Total Software & Services	\$ 1,8
415,000	BBB/Baa3	TECHNOLOGY HARDWARE & EQUIPMENT -- 0.3% Computer Storage & Peripherals -- 0.3% Seagate Technology International, Inc., 10.0%, 5/1/14 (144A)	\$ 4
		Total Technology Hardware & Equipment	\$ 4
945,000	B/NR	TELECOMMUNICATION SERVICES -- 4.5% Alternative Carriers -- 2.1% Global Crossing, Ltd., 12.0%, 9/15/15	\$ 1,0
750,000	B/Ba3	PAETEC Holding Corp., 8.875%, 6/30/17	\$ 8
1,010,000	CCC+/Caa1	PAETEC Holding Corp., 9.5%, 7/15/15	1,0
350,000	NR/Caa1	PAETEC Holding Corp., 9.875%, 12/1/18	3
			\$ 3,3
700,000	B/NR	Integrated Telecommunication Services -- 1.1% Bakrie Telecom Tbk PT, 11.5%, 5/7/15 (144A)	\$ 4
910,000 (c)	CC/Caa1	Broadview Networks Holdings, Inc., 11.375%, 9/1/12	7
388,000	CCC+/B3	Cincinnati Bell, Inc., 8.75%, 3/15/18	3
181,000 (c)	B+/Ba3	Windstream Corp., 8.625%, 8/1/16	1
			\$ 1,7
300,000	NR/Caa1	Wireless Telecommunication Services -- 1.3% Digicel Group, Ltd., 10.5%, 4/15/18 (144A)	\$ 3
750,000	B+/B2	NII Capital Corp, 10.0%, 8/15/16	8

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 25

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Principal
Amount S&P/Moody's

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

USD (\$)	Ratings		Value
790,000 (c)	BB/Ba3	Wireless Telecommunication Services -- (continued) OJSC Vimpel Communications Via VIP Ireland, Ltd., 9.125%, 4/30/18 (144A)	\$ 8
			\$ 1,9
		Total Telecommunication Services	\$ 7,0
		UTILITIES -- 2.4%	
750,000	B-/NR	Electric Utilities -- 1.1%	
		Cia de Transporte de Energia Electrica de Alta Tension S.A., 9.75%, 8/15/21 (144A)	\$ 6
419,000 (c)	NR/B2	Empresa Distribuidora Y Comercializadora Note, 9.75%, 10/25/22 (144A)	3
225,000	BB/Ba2	PNM Resources, Inc., 9.25%, 5/15/15	2
510,000 (c)	CCC/B2	Texas Competitive Electric Holdings Co., LLC, 15.0%, 4/1/21	3
240,000 (c)	CC/B2	Texas Competitive Electric Holdings LLC, 11.5%, 10/1/20 (144A)	2
			\$ 1,7
1,135,000	B/B2	Gas Utilities -- 0.6%	
		Transportadora de Gas del Sur SA, 7.875%, 5/14/17 (144A)	\$ 1,0
500,000	BB-/Ba3	Independent Power Producers & Energy Traders -- 0.7%	\$ 5
500,000	NR/B2	Intergen NV, 9.0%, 6/30/17 (144A)	
		Star Energy Geothermal (Wayang Windu), Ltd., 11.5%, 2/12/15 (144A)	5
			\$ 1,0
		Total Utilities	\$ 3,8
		TOTAL CORPORATE BONDS & NOTES (Cost \$153,206,870)	\$148,1
		CONVERTIBLE BONDS & NOTES -- 3.1% of Net Assets	
		MATERIALS -- 0.9%	
1,900 (g)	B+/NR	Diversified Chemicals -- 0.9%	\$ 1,4
		Hercules, Inc., 6.5%, 6/30/29	
		Total Materials	\$ 1,4
		TRANSPORTATION -- 0.4%	
		Marine -- 0.4%	
539,999	NR/NR	Horizon Lines, Inc., 6.0%, 4/15/17--Series A	\$ 4
299,999	NR/NR	Horizon Lines, Inc., 6.0%, 4/15/17--Series B	2
		Total Transportation	\$ 6
		MEDIA -- 0.4%	
		Movies & Entertainment -- 0.4%	
659,000	B-/NR	Live Nation, Inc., 2.875%, 7/15/27	\$ 6
		Total Media	\$ 6

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

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

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

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
1,040,000 (c) (f)	BB+/NR	HEALTH CARE EQUIPMENT & SERVICES -- 1.0% Health Care Equipment & Services -- 0.7% Hologic, Inc., 2.0%, 12/15/37	\$ 1,1
405,000	B/NR	Health Care Facilities -- 0.3% LifePoint Hospitals, Inc., 3.5%, 5/15/14	\$ 4
15,000	B+/B2	Health Care Services -- 0.0% Omnicare, Inc., 3.25%, 12/15/35	\$
		Total Health Care Equipment & Services	\$ 1,5
150,000 (c)	NR/NR	SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT -- 0.2% Semiconductors -- 0.2% JA Solar Holdings Co., Ltd., 4.5%, 5/15/13	\$ 1
250,000	NR/NR	Renesola, Ltd., 4.125%, 3/15/18 (144A)	1
271,000	NR/NR	Suntech Power Holdings Co., Ltd., 3.0%, 3/15/13	1
		Total Semiconductors & Semiconductor Equipment	\$ 3
250,000	B-/NR	TELECOMMUNICATION SERVICES -- 0.2% Wireless Telecommunication Services -- 0.2% NII Holdings, Inc., 3.125%, 6/15/12	\$ 2
		Total Telecommunication Services	\$ 2
		TOTAL CONVERTIBLE BONDS & NOTES (Cost \$4,294,808)	\$ 4,8
BRL 1,750,000	BBB-/Baa2	SOVEREIGN DEBT OBLIGATION -- 0.7% of Net Assets Brazil -- 0.7% Brazilian Government International Bond, 10.25%, 1/10/28	\$ 1,1
		TOTAL SOVEREIGN DEBT OBLIGATIONS (Cost \$947,120)	\$ 1,1
450,000	NR/NR	SENIOR FLOATING RATE LOAN INTERESTS -- 33.8% of Net Assets* ENERGY -- 0.4% Coal & Consumable Fuels -- 0.3% PT Bumi Resources Tbk, Term Loan, 11.241%, 8/7/13	\$ 4
245,374	B-/B2	Oil & Gas Equipment & Services -- 0.1% Hudson Products Holdings, Inc., Term Loan, 8.5%, 8/24/15	\$ 2
		Total Energy	\$ 6

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

MATERIALS -- 3.1%			
			Diversified Chemicals -- 0.7%
EURO	78,483	B/Ba3	Ineos US Finance LLC, Facility Term Loan B-1, 7.5%, 12/16/13
EURO	86,183	B/Ba3	Ineos US Finance LLC, Facility Term Loan C-1, 8.0%, 12/16/14

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 27

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
Diversified Chemicals -- (continued)			
172,658	B/Ba3	Ineos US Finance LLC, Senior Credit Facility Term Loan B-2, 7.5%, 12/16/13	\$ 1
190,615	B/Ba3	Ineos US Finance LLC, Senior Credit Facility Term Loan C-2, 8.0%, 12/16/14	1
195,956	BB+/Ba1	Solutia, Inc., Term Loan 1, 3.5%, 8/1/17	1
347,375	B/B2	Univar, Inc., Term Loan B, 5.0%, 3/31/17	3
			\$ 1,1
Forest Products -- 0.8%			
1,500,000	B+/Ba3	Ainsworth Lumber Co., Ltd., Term Loan, 5.25%, 6/26/14	\$ 1,3
Paper Packaging -- 0.2%			
378,626	BBB-/Ba2	Graphic Packaging International, Inc., Incremental Term Loan, 3.136%, 5/16/14	\$ 3
Paper Products -- 0.3%			
463,838	B/B1	Exopack LLC/Cello Foil Products, Inc., Term Loan B, 6.5%, 5/31/17	\$ 4
Precious Metals & Minerals -- 0.1%			
209,250	BB-/B1	Fairmount Minerals, Ltd. Tranche B Term Loan, 5.25%, 3/15/17	\$ 2
Specialty Chemicals -- 0.4%			
250,000	BB+/Ba1	Chemtura Corp., Facility Term Loan, 5.5%, 8/29/16	\$ 2
351,264	BB/NR	Huntsman International LLC, Extended Term Loan B, 2.8%, 4/19/17	3
			\$ 5
Steel -- 0.6%			
886,880 (d)	B/B3	Niagara Corp., New Term Loan, 8.5%, 6/29/14	\$ 8
Total Materials			\$ 4,9

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

		CAPITAL GOODS -- 2.9%	
		Aerospace & Defense -- 1.9%	
902,338	BB-/B2	API Technologies Corp., Term Loan, 7.75%, 6/27/16	\$ 8
605,843	B/B2	DAE Aviation Holdings, Inc., Tranche B-1 Term Loan, 5.43%, 7/31/14	5
240,398	BB/B1	Hunter Defense Technologies, Inc., Term Loan, 3.62%, 8/22/14	2
482,437	BBB-/Ba1	Spirit Aerosystems, Inc., Term Loan B-2, 3.493%, 9/30/16	4
580,605	B/B2	Standard Aero, Ltd., Tranche B-2 Term Loan, 5.43%, 7/31/14	5
328,592	BB/Ba2	TASC, Inc., New Tranche B Term Loan, 4.5%, 12/18/15	3

			\$ 3,0

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

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

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
		Building Products -- 0.7%	
1,047,188	B+/B1	Goodman Global, Inc., First Lien Initial Term Loan, 5.75%, 10/28/16	\$ 1,0
		Construction & Farm Machinery & Heavy Trucks -- 0.3%	
498,750	BB/Ba2	Manitowoc Co., Inc., Term Loan B, 4.25%, 11/13/17	\$ 4
		Total Capital Goods	-----
			\$ 4,5
		COMMERCIAL & PROFESSIONAL SERVICES -- 1.6%	
		Commercial Printing -- 0.2%	
248,125	BB-/Caa1	Cenveo Corp., Facility Term Loan B, 6.25%, 12/21/16	\$ 2
		Environmental & Facilities Services -- 1.3%	
808,887	B+/B1	Brickman Group Holdings, Inc., Tranche B Term Loan, 7.25%, 10/14/16	\$ 8
1,076,812	B-/B3	Synagro Technologies, Inc., First Lien Term Loan, 2.25%, 4/2/14	9
298,500	B+/B1	Waste Industries USA, Inc., Term Loan B, 4.75%, 3/17/17	2

			\$ 2,0
		Security & Alarm Services -- 0.1%	
216,731	BB/B1	Protection One, Inc., Term Loan, 6.0%, 6/4/16	\$ 2
		Total Commercial & Professional Services	-----
			\$ 2,4
		TRANSPORTATION -- 0.9%	
		Air Freight & Logistics -- 0.8%	
439,482	B/B1	Ceva Group Plc, Pre-Funded Tranche B LC Loan,	

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

919,588	NR/B1	0.269%, 8/31/16 Ceva Group Plc, U.S. Tranche B Term Loan, 5.428%, 8/31/16	\$ 4 8 ----- \$ 1,2
273,625	BB-/Ba2	Airlines -- 0.1% Delta Air Lines, Inc., New Term Loan, 4.25%, 3/7/16	\$ 2 ----- \$ 1,5
139,823	B+/Ba3	AUTOMOBILES & COMPONENTS -- 2.0% Auto Parts & Equipment -- 0.5% Federal-Mogul Corp., Tranche B Term Loan, 2.178%, 12/29/14	\$ 1 -----
71,338	B+/Ba3	Federal-Mogul Corp., Tranche C Term Loan, 2.178%, 12/28/15	-----
159,200	B+/NR	Metaldyne LLC, Term Loan, 5.25%, 5/18/17	1
225,318	BB/Ba2	Tomkins LLC, Term Loan B-1, 4.25%, 9/21/16	2
143,913	B+/Ba2	UCI International, Inc., Term Loan, 5.5%, 7/26/17	1 ----- \$ 7

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 29

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
1,496,250	BB/Ba2	Automobile Manufacturers -- 0.9% Chrysler Group LLC, Tranche B Term Loan, 6.0%, 5/24/17	\$ 1,4
1,000,000	BB/Ba1	Tires & Rubber -- 0.6% Goodyear Tire & Rubber Co., Second Lien Term Loan, 1.93%, 5/15/16	\$ 9 ----- \$ 3,1
218,900	BB/Ba3	CONSUMER DURABLES & APPAREL -- 0.4% Housewares & Specialties -- 0.1% Reynolds Group Holdings, Inc., U.S. Term Loan, 6.5%, 2/9/18	\$ 2 -----
424,934	B+/Ba2	Leisure Products -- 0.3% SRAM LLC, First Lien Term Loan, 4.764%, 6/7/18	\$ 4 ----- \$ 6
		CONSUMER SERVICES -- 0.3% Specialized Consumer Services -- 0.3%	

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

439,798	B+/B1	Wash MultiFamily Laundry Services LLC, Term Loan, 7.0%, 8/28/14	\$ 4
		Total Consumer Services	\$ 4

		MEDIA -- 3.0%	
		Advertising -- 0.6%	
985,013	BB-/Ba3	Affinion Group, Inc., Tranche B Term Loan, 5.0%, 10/9/16	\$ 9

		Broadcasting -- 1.4%	
482,675	B+/Caa2	FoxCo Aquisition Sub LLC, Replacement, Term Loan, 4.75%, 7/14/15	\$ 4
878,189	B+/Ba3	Insight Midwest Holdings LLC, Term Loan B, 1.99%, 4/7/14	8
412,925	BB-/Ba3	TWCC Holding Corp., Term Loan, 4.25%, 2/11/17	4
590,050	B+/B2	Univision Communications, Inc., Extended First Lien Term Loan, 4.496%, 3/31/17	5
			\$ 2,2

		Cable & Satellite -- 0.3%	
549,363 (h)	B-/B1	WideOpenWest Finance LLC, Series A Term Loan, 6.742%, 6/30/14	\$ 5

		Movies & Entertainment -- 0.5%	
190,633	NR/Ba1	Cinedigm Digital Funding I LLC, Term Loan, 5.25%, 4/29/16	\$ 1
620,133	B/B3	Lodgenet Entertainment Corp., Closing Date Term Loan, 6.5%, 4/4/14	5
			\$ 7

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

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

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
		Publishing -- 0.2%	
793,386	B-/B2	R.H. Donnelley, Inc., Term Loan, 9.0%, 10/24/14	\$ 3
		Total Media	\$ 4,7

		RETAILING -- 1.3%	
		Automotive Retail -- 0.4%	
248,750	BB+/Ba3	Autotrader.com, Inc., Tranche B Term Loan, 4.0%, 1/14/18	\$ 2
400,000	NR/B1	Stackpole Powertrain International ULC, Term Loan, 7.5%, 8/2/17	3
			\$ 6

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

897,750	B/B2	Computer & Electronics Retail -- 0.6% Targus Group International, Inc., Term Loan, 11.0%, 5/24/16	\$ 8
547,250	B+/Ba3	Specialty Stores -- 0.3% Savers, Inc., Term Loan, 4.25%, 3/4/17	\$ 5
		Total Retailing	\$ 2,0
249,375	B/Ba3	FOOD, BEVERAGE & TOBACCO -- 0.5% Packaged Foods & Meats -- 0.5% Del Monte Foods Co., Initial Term Loan, 4.5%, 3/8/18	\$ 2
500,000	BB-/B2	Pierre Foods, Inc., Second Lien Term Loan, 11.25%, 9/29/17	4
		Total Food, Beverage & Tobacco	\$ 7
248,125	BB-/Ba3	HOUSEHOLD & PERSONAL PRODUCTS -- 0.3% Personal Products -- 0.3% NBTY, Inc., Term Loan B-1, 4.25%, 10/1/17	\$ 2
246,881	BB-/Ba3	Revlon Consumer Products Corp., Term Loan B, 4.75%, 11/19/17	2
		Total Household & Personal Products	\$ 4
245,000	BB-/NR	HEALTH CARE EQUIPMENT & SERVICES -- 5.6% Health Care Equipment & Services -- 0.2% Kinetic Concepts, Inc., Term Loan, 0.0%, 5/14/18	\$ 2
246,250	B/B1	Health Care Facilities -- 1.0% Ardent Medical Services, Inc., Term Loan, 6.5%, 9/15/15	\$ 2
115,000	B/B1	Ardent Medical Services, Inc., Tranche B Term Loan, 6.5%, 9/15/15	1
49,430	BB/Ba3	Community Health Systems, Inc., Non-Extended Delayed Draw Term Loan, 2.569%, 7/25/14	
962,012	BB/Ba3	Community Health Systems, Inc., Non-Extended Term Loan, 2.569%, 7/25/14	9
198,040	BB/Ba3	HCA, Inc., Tranche B-2 Term Loan, 3.619%, 3/31/17	1
82,579	BB/Ba3	HCA, Inc., Tranche B-3 Term Loan, 3.619%, 5/1/18	
			\$ 1,6

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

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

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
452,083	NR/NR	Health Care Services -- 3.2% AccentCare, Inc., Term Loan, 6.5%, 12/22/16	\$ 4

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

284,401	B+/B1	Aveta, Inc., NAMM Term Loan, 8.5%, 4/14/15	2
1,324,094	BB-/Ba3	Catalent Pharma, Inc., Dollar Term Loan, 2.496%, 4/10/14	1,2
385,177	B+/Ba3	Gentiva Health Services, Inc., Term Loan B-1, 4.75%, 8/17/16	3
638,128	BB-/Ba3	Inventiv Health, Inc., Consolidated Term Loan, 6.5%, 8/4/16	6
407,950	B+/B1	National Mentor Holdings, Inc., Tranche B Term Loan, 7.0%, 2/9/17	3
254,170	B/B2	National Specialty Hospitals, Inc., Initial Term Loan, 8.25%, 2/3/17	2
25,510	B/NR	Physician Oncology Services LP, Delayed Draw Term Loan, 6.25%, 1/31/17	
209,980	B/B2	Physician Oncology Services LP, Effective Date Term Loan, 6.25%, 1/31/17	1
369,375	NR/B1	Prime Healthcare Services, Inc., Term Loan B, 7.25%, 4/28/15	3
238,889	B+/Ba2	Sun Healthcare Group, Inc., Term Loan, 7.5%, 10/18/16	1
349,125	B/Ba3	Valitas Health Services, Inc., Term Loan B, 5.75%, 6/2/17	3
498,750	NR/NR	Virtual Radiologic Corp. Term Loan B, 7.75%, 12/22/16	4
			\$ 5,1

		Health Care Supplies -- 0.7%	
490,000	BB-/Ba2	Alere, Inc., Term Loan B, 4.5%, 6/30/17	\$ 4
111,552	BB-/B1	Bausch & Lomb, Inc., Delayed Draw Term Loan, 3.496%, 4/24/15	1
457,700	BB-/B1	Bausch & Lomb, Inc., Parent Term Loan, 3.591%, 4/24/15	4
			\$ 1,0

		Health Care Technology -- 0.3%	
246,253	BB-/Ba3	IMS Health, Inc., Tranche B Dollar Term Loan, 4.5%, 8/26/17	\$ 2
385,000	B/B2	Medical Card System, Inc., Term Loan, 12.0%, 9/17/15	3
			\$ 5

		Managed Health Care -- 0.2%	
284,401	NR/B1	Aveta, Inc., MMM Term Loan, 8.5%, 4/14/15	\$ 2
		Total Health Care Equipment & Services	\$ 8,8

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

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

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

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

		PHARMACEUTICALS & BIOTECHNOLOGY & LIFE SCIENCES -- 1.3%	
		Biotechnology -- 1.3%	
690,000	B/Caa1	Alkermes, Inc., Second Lien Term Loan, 9.5%, 9/16/18	\$ 6
496,250	BB/B1	Axcan Intermediate Holdings, Inc., Term Loan, 5.5%, 2/10/17	4
434,389	BBB-/Ba3	Warner Chilcott Co., LLC, Term Loan B-1, 4.25%, 3/15/18	4
217,194	BBB-/Ba3	Warner Chilcott Co., LLC, Term Loan B-2, 4.25%, 3/15/18	2
298,642	BBB-/Ba3	Warner Chilcott Co., LLC, Term Loan B-3, 4.25%, 3/15/18	2
		Total Pharmaceuticals & Biotechnology & Life Sciences	\$ 2,1

		DIVERSIFIED FINANCIALS -- 1.6%	
		Other Diversified Financial Services -- 0.6%	
147,789	B-/B2	BNY ConvergEX Group LLC, Second Lien (EZE) Term Loan, 8.75%, 12/18/17	\$ 1
352,211	B-/B2	BNY ConvergEX Group LLC, Second Lien (TOP) Term Loan, 8.75%, 12/18/17	3
222,454	NR/NR	Long Haul Holdings, Ltd. and PT Bakrie & Brothers Tbk, Tranche A Vallar Loan, 6.79%, 3/5/12	2
177,546	B/B2	Long Haul Holdings, Ltd. and PT Bakrie & Brothers Tbk, Tranche B Vallar Loan, 6.79%, 3/5/12	1
			\$ 8

		Specialized Finance -- 1.0%	
661,175	BB/B1	Asset Acceptance Capital Corp., Tranche B Term Loan, 4.117%, 6/12/13	\$ 6
762,044	CCC+/B2	Collect Acquisition Corp., Advance Term Loan B, 8.0%, 5/15/13	7
221,460	BB+/Ba1	MSCI, Inc., Term Loan B-1, 3.75%, 3/14/17	2
			\$ 1,6
		Total Diversified Financials	\$ 2,5

		INSURANCE -- 3.6%	
		Insurance Brokers -- 2.5%	
1,397,955	B-/B2	Alliant Holdings I, Inc., Term Loan, 3.369%, 8/21/14	\$ 1,3
126,558	B/B2	HUB International, Ltd., Delayed Draw Term Loan, 2.869%, 6/13/14	1
563,006	B/B2	HUB International, Ltd., Initial Term Loan, 2.869%, 6/13/14	5
98,000	B-/B3	U.S.I. Holdings Corp., Series C Term Loan, 7.0%, 5/5/14	
1,915,000	B-/B2	U.S.I. Holdings Corp., Tranche B Term Loan, 2.75%, 5/5/14	1,8
			\$ 3,9

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

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

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
783,179	B/B2	Multi-Line Insurance -- 1.1%	
		AmWins Group, Inc., Initial Term Loan, 4.624%, 6/8/13	\$ 7
1,000,000	CCC+/B3	AmWins Group, Inc., Second Lien Initial Term Loan, 5.86%, 6/9/14	9
			----- \$ 1,7
		Total Insurance	\$ 5,7
		REAL ESTATE -- 0.1%	
246,250	B/B2	Real Estate Development -- 0.1%	
		Ozburn-Hessey Holding Co., LLC, First Lien Term Loan, 7.509%, 4/8/16	\$ 2
		Total Real Estate	\$ 2
		SOFTWARE & SERVICES -- 2.7%	
487,035	BB-/Ba2	Application Software -- 1.2%	
		Allen Systems Group, Inc., Term Loan B, 6.5%, 11/21/15	\$ 4
961,966	BB+/Baa3	Nuance Communications, Inc., Term Loan C, 3.25%, 3/31/16	9
500,000	CCC+/Caa1	Vertafore, Inc., Second Lien Term Loan, 9.75%, 10/29/17	4
			----- \$ 1,9
522,375	BB-/Ba3	Data Processing & Outsourced Services -- 0.3%	
		Vantiv LLC, First Lien Term Loan B-1, 4.5%, 11/3/16	\$ 5
1,887,369	BB/Ba3	IT Consulting & Other Services -- 1.2%	
		SunGard Data Systems, Inc., Tranche A U.S. Term Loan, 1.993%, 2/28/14	\$ 1,8
		Total Software & Services	\$ 4,3
		TECHNOLOGY HARDWARE & EQUIPMENT -- 0.6%	
248,750	BB/Ba3	Communications Equipment -- 0.3%	
		CommScope, Inc., Term Loan, 5.0%, 1/14/18	\$ 2
248,750	BB-/Ba3	Towerco Finance LLC, Term Loan, 5.25%, 2/2/17	2
			----- \$ 4
511,138	B/B2	Electronic Equipment & Instruments -- 0.3%	
		Scitor Corp., Term Loan, 5.0%, 2/15/17	\$ 4
		Total Technology Hardware & Equipment	\$ 9
		SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT -- 0.9%	
698,250	NR/B1	Semiconductor Equipment -- 0.9%	
		Aeroflex, Inc., Tranche B Term Loan, 4.25%, 5/9/18	\$ 6

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

765,247	B/Ba3	Freescale Semiconductor, Inc., Extended Maturity Term Loan, 4.489%, 12/1/16	7

Total Semiconductors & Semiconductor Equipment			\$ 1,4

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

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

Principal Amount USD (\$)	S&P/Moody's Ratings		Value
		TELECOMMUNICATION SERVICES -- 0.3%	
		Integrated Telecommunication Services -- 0.3%	
426,057	B+/B1	Telesat Canada, U.S. Term I Loan, 3.25%, 10/31/14	\$ 4
36,599	B+/B1	Telesat Canada, U.S. Term II Loan, 3.25%, 10/31/14	\$ 4
Total Telecommunication Services			\$ 4
		UTILITIES -- 0.4%	
		Electric Utilities -- 0.3%	
629,720	CCC/B2	Texas Competitive Electric Holdings Co., LLC, Extending Term Loan, 4.757%, 10/10/17	\$ 4
		Independent Power Producers & Energy Traders -- 0.1%	
184,378	B/Ba3	Mach Gen LLC, First Lien Synthetic LC Loan, 0.119%, 2/22/13	\$ 1
Total Utilities			\$ 6
TOTAL SENIOR FLOATING RATE LOAN INTERESTS (Cost \$55,378,090)			\$ 53,7
		MUNICIPAL BONDS -- 0.4% of Net Assets	
		Texas -- 0.4%	
950,000	CCC+/NR	Alliance Airport Authority Income Special Facilities Revenue, 5.75%, 12/1/29	\$ 5
175,000	CCC+/Caa2	Dallas-Fort Worth International Airport Facility Improvement Revenue, 6.375%, 5/1/35	\$ 5
TOTAL MUNICIPAL BONDS (Cost \$848,190)			\$ 5

Shares

COMMON STOCKS -- 0.6% of Net Assets
ENERGY -- 0.0%
Oil & Gas Drilling -- 0.0%

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

1,109 (i)	Rowan Companies, Inc.	\$
	Total Energy	\$
2,459 (i) 551 (i)	MATERIALS -- 0.4% Commodity Chemicals -- 0.0% Georgia Gulf Corp. Lyondell Basell Industries NV	\$
		\$
371,096 (h) (i) (j)	Diversified Metals & Mining -- 0.2% Blaze Recycling and Metals LLC Class A Units	\$ 2
13,963 (i)	Forest Products -- 0.0% Ainsworth Lumber Co., Ltd.	\$
15,083 (h) (i) (j)	Steel -- 0.2% KNIA Holdings, Inc.	\$ 2
	Total Materials	\$ 6

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 35

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Shares		Value
150,000	TRANSPORTATION -- 0.0% Marine -- 0.0% Horizon Lines, Inc.	\$
	Total Transportation	\$
5,787 (i)	AUTOMOBILES & COMPONENTS -- 0.2% Auto Parts & Equipment -- 0.2% Lear Corp.	\$ 2
	Total Automobiles & Components	\$ 2
731 (i)	DIVERSIFIED FINANCIALS -- 0.0% Other Diversified Financial Services -- 0.0% BTA Bank JSC (144A)	\$
	Total Diversified Financials	\$
2,114 (h) (i) (j)	SOFTWARE & SERVICES -- 0.0% Systems Software -- 0.0% Perseus Holding Corp.	\$
	Total Software & Services	\$
	TOTAL COMMON STOCKS	

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

	(Cost \$843,385)	\$	9
470	CONVERTIBLE PREFERRED STOCK -- 0.2% of Net Assets DIVERSIFIED FINANCIALS -- 0.2% Other Diversified Financial Services -- 0.2% Bank of America Corp.	\$	4
	Total Diversified Financials	\$	4
	TOTAL CONVERTIBLE PREFERRED STOCK (Cost \$382,899)	\$	4
22,000 (g)	PREFERRED STOCKS -- 0.3% of Net Assets DIVERSIFIED FINANCIALS -- 0.3% Other Diversified Financial Services -- 0.3% GMAC Capital Trust I, 8.125%	\$	4
	Total Diversified Financials	\$	4
1,110 (h) (i)	SOFTWARE & SERVICES -- 0.0% Systems Software -- 0.0% Perseus Holding Corp. (144A)	\$	
	Total Software & Services	\$	
	TOTAL PREFERRED STOCKS (Cost \$550,000)	\$	4
750,000 (h) (i)	RIGHTS/WARRANTS -- 0.0% of Net Assets REAL ESTATE -- 0.0% Real Estate Development -- 0.0% Neo-China Group Holdings, Ltd., Expires 7/22/12 (144A)	\$	
	Total Real Estate	\$	
	TOTAL RIGHTS/WARRANTS (Cost \$17,012)	\$	

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

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

Principal Amount USD (\$)		Value
283,835	TEMPORARY CASH INVESTMENTS -- 5.3% of Net Assets	
354,802	SECURITIES LENDING COLLATERAL -- 5.3% (k)	
319,492	Certificates of Deposit:	
248,444	Bank of Nova Scotia Houston, 0.32%, 6/11/12	\$ 2
212,994	Dnb Nor Bank ASA NY, 0.22%, 11/14/11	3
	JPMorgan Chase Bank NA, 0.43%, 5/18/12	3
	National Australia Bank NY, 0.31%, 1/19/12	2
	Rabobank Nederland, 0.34%, 4/2/12	2

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

354,581	Skandinav Enskilda Bank NY, 0.33%, 11/9/11	3
354,870	Westpac Banking Corp., NY, 0.32%, 12/6/11	3
		----- \$ 2,1

	Commercial Paper:	
113,578	Commonwealth Bank of Australia, 0.28%, 12/15/11	\$ 1
216,420	Commonwealth Bank of Australia, 0.39%, 2/23/12	2
39,023	General Electric Capital Corp., 0.28%, 11/21/11	
319,463	Nestle Capital Corp., 0.19%, 12/20/11	3
283,888	Nordea NA, 0.28%, 1/9/12	2
284,039	Procter & Gamble, 0.14%, 11/3/11	2
78,869	Straight-A Funding LLC, 0.19%, 12/9/11	
212,911	Svenska HandelsBanken, 0.38%, 10/5/12	2
70,992	Thunderbay Funding LLC, 0.22%, 12/13/11	
141,991	Thunderbay Funding LLC, 0.22%, 12/5/11	1
177,488	Variable Funding Capital Co., LLC, 0.21%, 12/7/11	1
		----- \$ 1,9

	Tri-Party Repurchase Agreements:	
887,627	Barclays Capital Markets, 0.09%, dated 10/31/11, repurchase price of \$887,627 plus accrued interest on 11/1/11 collateralized by \$905,380 U.S. Treasury Note, 3.125%, 5/15/21	\$ 8
1,065,154	HSBC Plc, 0.09%, dated 10/31/11, repurchase price of \$1,065,153 plus accrued interest on 11/1/11 collateralized by the following:	
	\$566,813 Federal Home Loan Bank, 0.12 - 5.625%, 2/27/12 - 8/15/24	
	\$519,668 Federal National Mortgage Association, 0.75 - 7.25%, 12/18/13 - 11/15/30	1,0
710,102	Merrill Lynch, Inc., 0.08%, dated 10/31/11, repurchase price of \$710,102 plus accrued interest on 11/1/11 collateralized by the following:	
	\$663,643 Freddie Mac, 0.5 - 0.75%, 2/15/13 - 3/28/13	
	\$60,139 Federal Home Loan Bank, 0.0%, 11/4/11	7
920,036	RBS Securities, Inc., 0.09%, dated 10/31/11, repurchase price of \$920,036 plus accrued interest on 11/1/11 collateralized by \$938,464 U.S. Treasury Note, 1.75%, 10/31/18	9
		----- \$ 3,5

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 37

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Shares		Value

	Money Market Mutual Funds:	
355,050	Blackrock Preferred Money Market Fund	\$ 3
355,050	Fidelity Prime Money Market Fund	3

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

	\$ 7
Total Securities Lending Collateral	\$ 8,3
TOTAL TEMPORARY CASH INVESTMENTS (Cost \$8,362,160)	\$ 8,3
TOTAL INVESTMENTS IN SECURITIES -- 140.1% (Cost \$229,750,245) (1)	\$222,9
OTHER ASSETS AND LIABILITIES -- (40.1)%	\$(63,8
NET ASSETS APPLICABLE TO COMMON SHAREOWNERS -- 100.0%	\$159,1

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

(144A) Security is exempt from registration under Rule 144A of the Securities Act of 1933. Such securities may be resold normally to qualified institutional buyers in a transaction exempt from registration. At October 31, 2011, the value of these securities amounted to \$101,301,840 or 63.6% of total net assets applicable to common shareowners.

* Senior floating rate loan interests in which the Trust invests generally pay interest at rates that are periodically redetermined by reference to a base lending rate plus a premium. These base lending rates are generally (i) the lending rate offered by one or more major European banks, such as LIBOR (London InterBank Offered Rate), (ii) the prime rate offered by one or more major United States banks, (iii) the certificate of deposit or (iv) other base lending rates used by commercial lenders. The interest rate shown is the rate accruing at October 31, 2011.

(a) Floating rate note. The rate shown is the coupon rate at October 31, 2011.

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

(c) At October 31, 2011, the following securities were out on loan:

Principal Amount USD (\$)	Description	Value
390,000	ABN Amro North American Holding Preferred Capital Repackage Trust I, 6.523% (144A)	\$ 316
594,000	ADS Tactical, Inc., 11.0%, 4/1/18 (144A)	614
500,000	Broadview Networks Holdings, Inc., 11.375%, 9/1/12	420
1,222,000	Burger King Capital Holdings LLC, 0.0%, 4/15/19 (144A)	714
390,000	Burger King Corp., 9.875%, 10/15/18	419
77,000	Empresa Distribuidora Y Comercializadora Note, 9.75%, 10/25/22 (144A)	62
475,000	FAGE Dairy Industry SA/FAGE USA Dairy Industry, Inc., 9.875%, 2/1/20 (144A)	416
85,000	First Data Corp., 9.875%, 9/24/15	82

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

100,000

Grupo Papelero Scribe SA, 8.875%, 4/7/20 (144A)

88

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

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

Principal Amount USD (\$)	Description	Value
983,600	Hologic, Inc., 2.0%, 12/15/37	\$1,051
148,000	JA Solar Holdings Co., Ltd., 4.5%, 5/15/13	115
742,000	Lonking Holdings, Ltd., 8.5%, 6/3/16 (144A)	717
167,000	Minerva Overseas II, Ltd., 10.875%, 11/15/19 (144A)	153
150,000	Mirabela Nickel, Ltd., 8.75%, 4/15/18 (144A)	134
100,000	Navios South American Logistic, 9.25%, 4/15/19 (144A)	88
750,000	OJSC Vimpel Communications Via VIP Ireland, Ltd., 9.125%, 4/30/18 (144A)	793
198,000	Pilgrim's Pride Corp., 7.875%, 12/15/18 (144A)	170
200,000	Sally Holdings LLC, 10.5%, 11/15/16	220
447,000	Texas Competitive Electric Holdings Co., LLC, 15.0%, 4/1/21	294
237,000	Texas Competitive Electric Holdings LLC, 11.5%, 10/1/20 (144A)	206
700,000	Vedanta Resources Plc, 9.5%, 7/18/18 (144A)	691
20,000	Windstream Corp., 8.625%, 8/1/16	21
400,000	Xinergy Corp., 9.25%, 5/15/19 (144A)	353
		\$8,146

- (d) Payment-in-Kind (PIK) security which may pay interest in the form of additional principal.
- (e) Security is perpetual in nature and has no stated maturity date.
- (f) Debt obligation initially issued at one coupon which converts to a higher coupon at a specific date. The rate shown is the rate at October 31, 2011.
- (g) Security is priced as a unit.
- (h) Indicates a security that has been deemed illiquid. The aggregate cost of illiquid securities is \$980,490. The aggregate fair value of \$1,112,565 represents 0.7% of the total net assets applicable to common shareowners.
- (i) Non-income producing.
- (j) Security is valued using fair value methods (other than prices supplied by independent pricing services). (See Note 1A)
- (k) Security lending collateral is managed by Credit Suisse AG, New York branch.
- (l) At October 31, 2011, the net unrealized loss on investments based on

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

cost for federal income tax purposes of \$230,332,702 was as follows:

Aggregate gross unrealized gain in which there is an excess of value over tax cost	\$ 7,66
Aggregate gross unrealized loss in which there is an excess of tax cost over value	(15,03
Net unrealized loss	\$ (7,36 =====

For financial reporting purposes net unrealized loss on investments was \$6,774,101 and cost of investments aggregated \$229,750,245.

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 39

Schedule of Investments | 10/31/11 (Consolidated) (unaudited) (continued)

Purchases and sales of securities (excluding temporary cash investments) for the period ended October 31, 2011 aggregated \$15,054,708 and \$19,505,396, respectively.

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

BRL -- Brazilian Real
 EURO -- Euro
 GBP -- British Pound
 NOK -- Norwegian Krone

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

- 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)

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

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

	Level 1	Level 2	Level 3	Total
Asset backed securities	\$ --	\$ 2,155,403	\$ --	\$ 2,155,
Collateralized mortgage obligations	--	2,054,534	--	2,054,
Corporate bonds & notes	--	148,151,247	--	148,151,
Convertible bonds & notes	--	4,888,230	--	4,888,
Sovereign debt obligations	--	1,149,345	--	1,149,

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

Senior floating rate loan interests	--	53,732,116	--	53,732,
Municipal bonds	--	599,756	--	599,
Common stocks (diversified metals & mining)	--	--	244,923	244,
Common stocks (steel)	--	--	286,426	286,
Common stocks (system software)	--	--	--	--
Common stocks (other industries)*	434,950	3,220	--	438,
Convertible preferred stock	402,320	--	--	402,
Preferred stocks	--	499,415	--	499,
Rights/Warrants	--	966	--	--
Temporary cash investments	--	4,069,141	--	4,069,
Repurchase agreements	--	3,582,919	--	3,582,
Money market mutual funds	710,100	--	--	710,
<hr/>				
Total	\$1,547,370	\$220,886,292	\$531,349	\$222,965,
<hr/>				
Other Financial Instruments**	\$ --	\$ 17,650	\$ --	\$ 17,
<hr/>				

* Level 2 securities are valued by independent pricing services using fair value factors.

** Other financial instruments include foreign exchange contracts and net unrealized loss on unfunded loan commitments.

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

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

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

	Balance as of 4/30/11	Realized gain (loss)	Change in unrealized appreciation (depreciation) (1)	Net purchase (sales)	Transfer in and out of Level 3*	Bala as 10/3
Common stocks (diversified metals & mining)	\$256,056	\$--	\$ (11,133)	\$--	\$--	\$244,
Common stocks (steel)	105,430	--	180,996	--	--	286,
Ending balance	\$361,486	\$--	\$180,996	\$--	\$--	\$531,

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

* Transfers are calculated on the date of transfer.

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 41

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

Statement of Assets and Liabilities | 10/31/11 (Consolidated) (unaudited)

ASSETS:

Investments in securities, at value (including securities loaned of \$8,146,706) (cost \$229,750,245)	\$222,965,011
Cash	8,912,080
Foreign currencies, at value (cost \$1,541,950)	1,558,494
Receivables --	
Investment securities sold	733,395
Interest receivable	4,089,986
Forward foreign currency portfolio hedge contracts -- net	18,869
Prepaid Expenses	27,787
Total assets	
	\$238,305,622

Liabilities:

Payables --	
Notes payable	\$ 69,000,000
Investment securities purchased	1,225,592
Upon return of securities loaned	8,362,160
Depreciation on unfunded loan commitments -- net	1,219
Unamortized facility fees	784
Due to affiliates	165,229
Administration fee payable	45,356
Accrued interest expense	295,011
Accrued expenses	66,753
Total liabilities	
	\$ 79,162,104

NET ASSETS:

Paid-in capital	192,927,836
Distribution in excess of investment income	(945,394)
Accumulated net realized loss on investments and foreign currency transactions	(26,087,261)
Net unrealized loss on investments	(6,786,453)
Net unrealized gain on forward foreign currency contracts and other assets and liabilities denominated in foreign currencies	34,790
Net assets applicable to shareowners	
	\$159,143,518

NET ASSET VALUE PER SHARE:

No par value (unlimited number of shares authorized)	
Based on \$159,143,518 /8,246,102 shares	\$ 19.30

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

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

Statement of Operations (Consolidated) (unaudited)

For the Six Months Ended 10/31/11

INVESTMENT INCOME:

Interest (net of foreign taxes withheld \$ 2,464)	\$ 10,031,712
---	---------------

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

Dividends		18,688	
Facility and other fees		135,732	
Income from securities loaned, net		13,551	
<hr/>			
Total investment income			\$ 10
<hr/>			
EXPENSES:			
Management fees	\$	996,386	
Administration fees		82,015	
Transfer agent fees and expenses		6,400	
Shareowner communications expense		18,624	
Bank loan fees and expenses		5,925	
Custodian fees		35,872	
Registration fees		5,455	
Professional fees		32,627	
Printing expense		16,742	
Trustees' fees		2,410	
Pricing fee		6,310	
Miscellaneous		51,766	
<hr/>			
Net operating expenses			\$ 1
<hr/>			
Interest expense			\$
<hr/>			
Net operating expenses and interest expense			\$ 1
<hr/>			
Net investment income			\$ 8
<hr/>			
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS			
UNFUNDED CORPORATE LOANS AND FOREIGN CURRENCY			
TRANSACTIONS:			
Net realized gain (loss) from:			
Investments	\$	(2,130,838)	
Forward foreign currency contracts and other assets and liabilities denominated in foreign currencies		185,199	\$ (1
<hr/>			
Change in unrealized gain (loss) from:			
Investments	\$	(12,588,596)	
Unfunded corporate loans		5,023	
Forward foreign currency contracts and other assets and liabilities denominated in foreign currencies		(157,672)	\$ (12
<hr/>			
Net loss on investments and foreign currency transactions			\$ (14
<hr/>			
Net decrease in net assets resulting from operations			\$ (6
<hr/>			

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 43

Statement of Changes in Net Assets (Consolidated)

Six Months Ended		Year Ended
10/31/11		4/30/11
(unaudited)		

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

FROM OPERATIONS:		
Net investment income	\$ 8,477,556	\$ 16,650,75
Net realized gain (loss) on investments and foreign currency transactions	(1,945,639)	148,72
Change in net unrealized gain (loss) on investments, unfunded loan commitments and foreign currency transactions	(12,741,245)	5,934,23

Net increase (decrease) in net assets resulting from operations	\$ (6,209,328)	\$ 22,733,72

DISTRIBUTIONS TO SHAREOWNERS FROM:		
Net investment income (\$0.960 and \$1.920 per share, respectively)	\$ (7,907,260)	\$ (15,772,90

Total distributions to shareowners	\$ (7,907,260)	\$ (15,772,90

FROM TRUST SHARE TRANSACTIONS:		
Reinvestment of distributions	\$ 378,335	\$ 639,83

Net increase in net assets from Trust share transactions	\$ 378,335	\$ 639,83

Net increase (decrease) in net assets	\$ (13,728,253)	\$ 7,600,65
NET ASSETS:		
Beginning of period	172,881,771	165,281,11

End of period	\$159,143,518	\$172,881,77

Distributions in excess of net investment income	\$ (945,394)	\$ (1,515,69

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

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

Statement of Cash Flows (Consolidated) (unaudited)

For the Six Months Ended October 31, 2011

Cash Flows Used in Operating Activities	
Net investment income	\$ 8,477,556

Adjustment to Reconcile Net Investment Income to Net Cash and Foreign Currency Provided From Operating Activities	
Purchase of investment securities	\$58,769,742)
Proceeds from disposition of investment securities	63,469,224
Increase in temporary cash investments	(2,866,062)
Decrease in receivable for investments sold	697,119
Decrease in interest receivable	14,741
Increase in prepaid expenses	(15,359)
Decrease in other assets	81,780
Increase in accrued interest payable	144,681
Decrease in payable for investments purchased	(1,265,188)
Increase in payable upon return of securities loaned	2,866,062

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

Decrease in accrued expenses	(232,026)
Increase in administration fee payable	45,356
Decrease in other liabilities	(33,272)
Decrease in due to affiliates	(118,113)
Decrease in unamortized facility fee	(322)
Decrease in unrealized appreciation on foreign currency transactions	(327,687)
Net realized gain from foreign currency transactions	185,199
Net amortization/(accretion) of premium/(discount)	(621,389)
<hr/>	
Net adjustment to reconcile net investment income	3,255,002
<hr/>	
Net cash and foreign currency provided from operating activities	\$11,732,558
<hr/>	
Cash Flows in Financing Activities	
Cash dividends paid to common shareowners	\$(8,845,276)
<hr/>	
Net cash flow used in financing activities	\$(8,845,276)
<hr/>	
Net increase in cash and foreign currency	\$ 2,887,282
<hr/>	
Cash and Foreign Currency	
Beginning of Period	\$ 7,583,292
<hr/>	
End of Period	\$10,470,574
<hr/>	
Cash Flow Information	
Interest expense paid	\$ (316,914)
<hr/>	

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 45

Financial Highlights

<hr/>		Six M 10/31 (Unau (Cons
<hr/>		
Per Share Operating Performance		
Net asset value, beginning of period		\$ 21
<hr/>		
Increase (decrease) from investment operations: (a)		
Net investment income		\$ 1
Net realized and unrealized gain (loss) on investments and foreign currency transactions		(1
<hr/>		
Net increase (decrease) from investment operations		\$ (0
Distributions from:		
Net investment income		(0
Tax return of capital		
Capital charge with respect to issuance of shares		
<hr/>		
Net increase (decrease) in net asset value		\$ (1
<hr/>		

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

Net asset value, end of period(d)	\$ 19

Market value, end of period(d)	\$ 19
=====	
Total return at market value(e)	(5)
Ratios to average net assets	
Net operating expenses	1
Interest expense	0
Net expenses	2
Net investment income	10
Portfolio turnover	
Net assets, end of period (in thousands)	\$159,

Year
4/30/

Per Share Operating Performance	
Net asset value, beginning of period	\$ 13

Increase (decrease) from investment operations: (a)	
Net investment income	\$ 1
Net realized and unrealized gain (loss) on investments and foreign currency transactions	6

Net increase (decrease) from investment operations	\$ 8
Distributions from:	
Net investment income	(1)
Tax return of capital	(0)
Capital charge with respect to issuance of shares	

Net increase (decrease) in net asset value	\$ 6

Net asset value, end of period(d)	\$ 20

Market value, end of period(d)	\$ 20
=====	
Total return at market value(e)	73
Ratios to average net assets	
Net operating expenses	1
Interest expense	0
Net expenses	2
Net investment income	9
Portfolio turnover	
Net assets, end of period (in thousands)	\$165,

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

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

Six M
10/31
(Unau
(Cons

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

Ratios to average net assets before waivers and reimbursements of expenses	
Net operating expenses	1.53
Interest expense	0.56
Net expenses	2.09
Net investment income	10.28

	Year
	4/30/
Ratios to average net assets before waivers and reimbursements of expenses	
Net operating expenses	1.61%
Interest expense	0.83%
Net expenses	2.44%
Net investment income	9.62%

- (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.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 47

Notes to Financial Statements | 10/31/11 (Consolidated) (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

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

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 financial statements have been prepared in conformity with U.S. generally accepted accounting principles that require the management of the Trust to, among other things, make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of income, expenses and gain or loss 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 the preparation of its financial statements, which are consistent with those policies generally accepted in the investment company industry:

A. Security Valuation

Security transactions are recorded as of trade date. 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 (LPC). Senior floating rate loan interests (senior loans) for which no reliable price quotes are available will be valued by Loan Pricing Corporation through the use of pricing matrices to determine valuations. Fixed income securities with remaining maturity of more than sixty days are valued at prices supplied by independent pricing services, which consider such factors as market prices, market events, quotations from one or more brokers, Treasury spreads, yields, maturities and ratings. Valuations may be supplemented by dealers and other sources, as required. Short-term fixed income securities with remaining maturities of sixty days or less generally are valued at amortized cost. Money market mutual funds are valued at net asset value.

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.

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

Equity securities that have traded on an exchange are valued at the last sale price on the principal exchange where they are traded. Equity securities that have not traded on the date of valuation, or securities for which sale prices are not available, generally are valued using the mean between the last bid and asked prices. Equity securities or senior loans for which independent pricing services are unable to supply prices or for which market prices and/or quotations are not readily available or are considered to be unreliable are valued using fair value methods pursuant to procedures adopted by the Board of Trustees. The Trust may use fair value methods if it is determined that a significant event has occurred after the close of the exchange or market on which the security trades and prior to the determination of the Trust's net asset value. Examples of a significant event might include political or economic news, corporate restructurings, natural disasters, terrorist activity or trading halts. Thus, the valuation of the Trust's securities may differ from exchange prices.

At October 31, 2011, three securities were valued using fair value methods (in addition to securities valued using prices supplied by independent pricing services representing 0.3% of net assets). Inputs used when applying fair value methods to value a security may include credit ratings,

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

the financial condition of the company, current market conditions and comparable securities.

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

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

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

B. Foreign Currency Translation

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

Net realized gains and losses on foreign currency transactions, if any, represent, among other things, the net realized gains and losses on foreign

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 49

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. 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 6).

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 three fiscal years remain subject to examination by federal and state 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 from or in excess of net investment income or net realized gain (loss) on investment and foreign currency transactions, or as from paid-in capital, depending on the type of book/tax differences that may exist.

The tax character of current year distributions payable will be determined at the end of the current taxable year. The tax character of distributions paid during the year ended April 30, 2011 was as follows:

	2011
Distributions paid from:	
Ordinary income	\$15,772,901
Tax return of capital	--
Total	\$15,772,901

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

The following shows the components of distributable earnings (losses) on a federal income tax basis at April 30, 2011:

	2011
Distributable earnings:	
Undistributed ordinary income	\$ 516,102
Capital loss carryforward	(23,843,173)
Post-October-loss deferred	(450,629)
Dividends payable	(1,316,351)
Unrealized depreciation	5,426,321
Total	\$(19,667,730)

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 gains on investments in passive foreign investment companies, 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.

E. Risks

Information regarding the Trust's principal risks is contained in the

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

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 principal risks.

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

The Trust invests 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 investments in certain foreign markets or countries with limited developing markets may subject the Trust to a greater degree of risk than would investments in a developed market. These risks include disruptive

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 51

political or economic conditions and the possible imposition of adverse governmental laws or currency exchange restrictions.

F. Repurchase Agreements

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

G. 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 investments. Credit Suisse AG, New York Branch, as the Trust's securities lending agent, manages the Trust's securities lending collateral. The income earned on the investment of collateral is shared with the borrower and the lending agent in payment of any rebate due to the borrower with respect to the securities loan, and in compensation for the lending agent's services to the Trust. The Trust also continues to receive payments in lieu of dividends or interest 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

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

fluctuation in the value of the loaned securities. If the required market value of the collateral is less than the value of the loaned securities, the borrower is required to deliver additional collateral for the account of the Trust prior to the close of business on that day. 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 is required to return the cash collateral to the borrower and could suffer a loss if the value of the collateral, as invested, has declined.

H. Automatic Dividend Reinvestment Plan

All common shareowners whose shares are registered in their own names automatically participate in the Automatic Dividend Reinvestment Plan (the Plan), under which participants receive all dividends and capital gain distributions (collectively, dividends) in full and fractional common shares of the Trust in lieu of cash. Shareowners may elect not to participate in the Plan. Shareowners not participating in the Plan receive all dividends and capital gain distributions in cash. Participation in the Plan is completely voluntary

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

and may be terminated or resumed at any time without penalty by notifying American Stock Transfer & Trust Company, the agent for shareowners in administering the Plan (the Plan Agent), in writing prior to any dividend record date; otherwise such termination or resumption will be effective with respect to any subsequently declared dividend or other distribution.

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

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

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

2. Management Agreement

PIM, a wholly owned indirect subsidiary of UniCredit S.p.A. (UniCredit), manages the Trust's portfolio. Management fees payable under the Trust's Advisory Agreement with PIM are calculated daily at the annual rate of 0.85% 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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 53

shall not include any liabilities or obligations attributable to investment leverage obtained through (i) indebtedness of any type (including, without limitation, borrowing through a credit facility of the issuance of debt securities), (ii) the issuance of preferred stock or other similar preference securities, and/or (iii) any other means. For the six months ended October 31, 2011, the net management fee was 0.85% of the Trust's average daily managed assets, which was equivalent to 1.21% 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, 2011, \$165,229 was payable to PIM related to management costs, administrative costs and certain other reimbursements and is included in "Due to affiliates" on the Statement of Assets and Liabilities.

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

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.

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 at negotiated rates.

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

4. Basis for Consolidation for the Pioneer Diversified High Income Trust

The consolidated financial statements of the Trust include the accounts of Blaze Holding DHINCT, Inc. ("the Subsidiary"). All intercompany accounts

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

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

and transactions have been eliminated in consolidation. The Subsidiary, a Delaware corporation, was incorporated on February 10, 2011 and is wholly-owned and controlled by the Trust. It is intended that the Trust will remain the sole shareholder of, and will continue to control, the Subsidiary. The Subsidiary acts as an investment vehicle for the Trust's interest in Blaze Recycling and Metals LLC, Class A Units which was acquired through restructuring. As of October 31, 2011, the Subsidiary represented approximately \$244,923 or approximately 0.2% of the net assets of the Trust.

5. Expense Offset Arrangement

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

6. Forward Foreign Currency Contracts

During the six months ended October 31, 2011, the Trust entered into various forward foreign currency contracts that obligate the Trust to deliver or take delivery of currencies at specified future maturity dates. Alternatively, prior to the settlement date of a forward foreign currency contract, the Trust may close out such contract by entering into an offsetting contract. The average value of contracts open during the six months ended October 31, 2011 was \$2,107,667.

Open portfolio hedges at October 31, 2011, were as follows:

Currency	Net Contracts to Receive/ (Deliver)	In Exchange for US\$	Settlement Date	US\$ Value	Net Unrealized Gain (Loss)
EURO	(1,000,000)	\$(1,362,301)	1/31/12	\$(1,382,919)	\$(20,618)
EURO	(1,000,000)	(1,437,764)	2/2/12	(1,382,910)	54,854
GBP	(323,000)	(508,824)	12/15/11	(519,120)	(10,296)
GBP	(110,000)	(171,653)	1/18/12	(176,724)	(5,071)
Total					\$ 18,869

There were no settlement hedges open at October 31, 2011.

7. Loan Agreement

Effective February 4, 2011, the Trust extended the maturity of its existing Revolving Credit Facility (the Credit Agreement) with the Bank of Nova Scotia and, among other things, decreased the size of the Credit Agreement from \$80,000,000 to \$69,000,000.

At October 31, 2011 the Trust had a borrowing outstanding under the Credit Agreement totaling \$69,000,000. The interest rate charged at October 31, 2011 was 1.34%. During the six months ended October 31, 2011, the average daily

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

balance was \$69,000,000 at a weighted average interest rate of 1.31%. With

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 55

respect to the loan, interest expense of \$461,595 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 of Debt Outstanding	Asset coverage Per \$1,000 of Indebtedness
10/31/11	\$69,000,000	\$3,307

8. Unfunded Loan Commitments

As of October 31, 2011, the Trust had an unfunded loan commitment of \$44,554 (excluding unrealized depreciation on that commitment of \$1,219 as of October 31, 2011) which could be extended at the option of the borrower, pursuant to the following loan agreement:

Borrower	Unfunded Loan Commitment
National Specialty Hospitals, Inc., Delayed Draw Term Loan	\$44,554

9. 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, 2011 and the year ended April 30, 2011 were as follows:

	10/30/11	4/30/11
Shares outstanding at beginning of period	8,227,194	8,195,218

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

Reinvestment of distributions	18,908	31,976
Shares outstanding at end of period	8,246,102	8,227,194

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

10. Additional Disclosures about Derivative Instruments and Hedging Activities:

Values of derivative instruments as of October 31, 2011 were as follows:

Derivatives Not Accounted for as Hedging Instruments Under Accounting Standards Codification (ASC) 815 (formerly FASB Statement 133)	Asset Derivatives		Liabilities Derivatives	
	Balance Sheet Location	Value	Balance Sheet Location	Value
Foreign Exchange Contracts	Net Assets -- Receivables	\$54,854	Net Assets -- Payables	\$()
Total		\$54,854		\$()

The effect of derivative instruments on the Statement of Operations for the six months ended October 31, 2011 was as follows:

Derivatives Not Accounted for as Hedging Instruments Under Accounting Standards Codification (ASC) 815 (formerly FASB Statement 133)	Location of Gain or (Loss) on Derivatives Recognized in Income	Realized Gain or (Loss) on Derivatives Recognized in Income	Change in Unrealized Gain or (Loss) on Derivatives Recognized in Income
Foreign Exchange Contracts	Net realized gain on forward foreign currency contracts and other assets and liabilities denominated in foreign currencies	\$173,458	
Foreign Exchange Contracts	Change in net unrealized gain (loss) on forward foreign currency contracts and other assets and liabilities denominated in foreign currencies		\$170,015

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

11. Subsequent Events

The Board of Trustees of the Trust declared a dividend from undistributed net investment income of \$0.095 per common share payable November 30, 2011, to common shareowners of record on November 15, 2011.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 57

ADDITIONAL INFORMATION

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 which has 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.

Results of Shareholder Meeting (unaudited)

At the annual meeting of shareowners held on September 21, 2011 shareowners of Pioneer Diversified High Income Trust were asked to consider the proposal described below. A report of the total votes cast by the Trust's shareholders follows:

Proposal 1 -- To elect Class I Trustees.

Nominee	For	Withheld
Benjamin M. Friedman	7,561,100	283,915
Margaret B.W. Graham	7,557,726	287,289
Daniel K. Kingsbury	7,564,424	280,591

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

Trustees, Officers and Service Providers

Trustees

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

Officers

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

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

Investment Adviser and Administrator
Pioneer Investment Management, Inc.

Custodian
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
State Street Bank and Trust Company

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/11 59

This page for your notes.

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

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

How to Contact Pioneer

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

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

Account Information 1-800-710-0935

Or write to AST:

For	Write to
General inquiries, lost dividend checks, change of address, lost stock certificates, stock transfer	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
Website	www.amstock.com

For additional information, please contact your investment advisor or visit our web site us.pioneerinvestments.com.

The Trust files a complete schedule 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.

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,

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

a code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer and controller.

(b) For purposes of this Item, the term "code of ethics" means written standards that are reasonably designed to deter wrongdoing and to promote:

- (1) Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
- (2) Full, fair, accurate, timely, and understandable disclosure in reports and documents that a registrant files with, or submits to, the Commission and in other public communications made by the registrant;
- (3) Compliance with applicable governmental laws, rules, and regulations;
- (4) The prompt internal reporting of violations of the code to an appropriate person or persons identified in the code; and
- (5) Accountability for adherence to the code.

(c) The registrant must briefly describe the nature of any amendment, during the period covered by the report, to a provision of its code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, regardless of whether these individuals are employed by the registrant or a third party, and that relates to any element of the code of ethics definition enumerated in paragraph (b) of this Item. The registrant must file a copy of any such amendment as an exhibit pursuant to Item 10(a), unless the registrant has elected to satisfy paragraph (f) of this Item by posting its code of ethics on its website pursuant to paragraph (f)(2) of this Item, or by undertaking to provide its code of ethics to any person without charge, upon request, pursuant to paragraph (f)(3) of this Item.

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

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

Not applicable.

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

Not applicable.

(f) The registrant must:

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

(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 (see attachment);

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

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

ITEM 3. AUDIT COMMITTEE FINANCIAL EXPERT.

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

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

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

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

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

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

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

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

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

Not applicable.

ITEM 4. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

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

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

N/A

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

N/A

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

N/A

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

N/A

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

PIONEER FUNDS

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

SECTION I - POLICY PURPOSE AND APPLICABILITY

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

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

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

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

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

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 assistance o SEC consultation, registration statements, and reporting o Tax accrual related matters o Implementation of new accounting standards o Compliance letters (e.g. rating agency letters) o Regulatory reviews and assistance regarding financial matters o Semi-annual reviews (if requested) o Comfort letters for closed end offerings
II. AUDIT-RELATED SERVICES	Services which are not prohibited under Rule 210.2-01(C) (4) (the "Rule") and are related extensions of the audit services support the audit, or use the knowledge/expertise gained from the audit procedures as a foundation to complete the project. In most cases, if the Audit-Related Services are not performed by the Audit firm, the scope of the Audit Services would likely increase. The Services are typically well-defined and governed by accounting professional standards (AICPA, SEC, etc.)	<ul style="list-style-type: none"> o AICPA attest and agreed-upon procedures o Technology control assessments o Financial reporting control assessments o Enterprise security architecture assessment
AUDIT COMMITTEE APPROVAL POLICY		AUDIT COMMITTEE REPORTING POLICY
<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.

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

- o "One-time" pre-approval for the fund fiscal year within a specified dollar limit for all pre-approved specific service subcategories
- o Specific approval is needed to exceed the pre-approved dollar limit for these services (see general Audit Committee approval policy below for details on obtaining specific approvals)
- o Specific approval is needed to use the Fund's auditors for Audit-Related Services not denoted as "pre-approved", or to add a specific service subcategory as "pre-approved"

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PRE-APPROVED SERVICE SUBCATEGORIES
III. TAX SERVICES	Services which are not prohibited by the Rule, if an officer of the Fund determines that using the Fund's auditor to provide these services creates significant synergy in the form of efficiency, minimized disruption, or the ability to maintain a desired level of confidentiality.	<ul style="list-style-type: none"> o Tax planning and support o Tax controversy assistance o Tax compliance, tax returns, excise tax returns and support o Tax opinions

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

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

pre-approved dollar limits for these services (see general Audit Committee approval policy below for details on obtaining specific approvals)

- o Specific approval is needed to use the Fund's auditors for tax services not denoted as pre-approved, or to add a specific service subcategory as "pre-approved"

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PRE-APPROVED SERVICE SUBCATEGORIES
<p>IV. OTHER SERVICES</p> <p>A. SYNERGISTIC, UNIQUE QUALIFICATIONS</p>	<p>Services which are not prohibited by the Rule, if an officer of the Fund determines that using the Fund's auditor to provide these services creates significant synergy in the form of efficiency, minimized disruption, the ability to maintain a desired level of confidentiality, or where the Fund's auditors possess unique or superior qualifications to provide these services, resulting in superior value and results for the Fund.</p>	<ul style="list-style-type: none"> o Business Risk Management support o Other control and regulatory compliance projects

AUDIT COMMITTEE APPROVAL POLICY	AUDIT COMMITTEE REPORTING POLICY
<ul style="list-style-type: none"> o "One-time" pre-approval for the fund fiscal year within a specified dollar limit o Specific approval is needed to exceed the pre-approved dollar limits for these services (see general Audit Committee approval policy below for details on obtaining 	<ul style="list-style-type: none"> o A summary of all such services and related fees (including comparison to specified dollar limits) reported quarterly.

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

specific approvals)

- o Specific approval is needed to use the Fund's auditors for "Synergistic" or "Unique Qualifications" Other Services not denoted as pre-approved to the left, or to add a specific service subcategory as "pre-approved"

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PROHIBITED SERVICE SUBCATEGORIES
PROHIBITED SERVICES	Services which result in the auditors losing independence status under the Rule.	<ol style="list-style-type: none"> 1. Bookkeeping or other services related to the accounting records or financial statements of the audit client* 2. Financial information systems design and implementation* 3. Appraisal or valuation services, fairness* opinions, or contribution-in-kind reports 4. Actuarial services (i.e., setting actuarial reserves versus actuarial audit work)* 5. Internal audit outsourcing services* 6. Management functions or human resources 7. Broker or dealer, investment advisor, or investment banking services 8. Legal services and expert services unrelated to the audit 9. Any other service that the Public Company Accounting Oversight Board determines, by regulation, is impermissible

AUDIT COMMITTEE APPROVAL POLICY

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.

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

GENERAL AUDIT COMMITTEE APPROVAL POLICY:

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

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

N/A

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

N/A

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

N/A

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

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

Item 5. Audit Committee of Listed Registrants

(a) If the registrant is a listed issuer as defined in Rule 10A-3

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

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 registrant's audit committee as specified in Section 3(a)(58)(B) of the Exchange Act (15 U.S.C. 78c(a)(58)(B)), so state.

The registrant has a separately-designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Exchange Act (15 U.S.C. 78c(a)(58)(A)).

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

N/A

Item 6. Schedule of Investments.

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

Included in Item 1

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

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

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 registrant's portfolio (Portfolio Manager). Also state each Portfolio Manager's business experience during the past 5 years.

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

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 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

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

procedures as of a date within 90 days of the filing date of this report.

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

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

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

In August of 2006 the registrant's investment adviser enhanced its internal procedures for reporting performance information required to be included in prospectuses. Those enhancements involved additional internal controls over the appropriateness of performance data generated for this purpose. Such enhancements were made following an internal review which identified prospectuses relating to certain classes of shares of a limited number of registrants where, inadvertently, performance information not reflecting the deduction of applicable sales charges was included. Those prospectuses were revised, and the revised prospectuses were distributed to shareholders.

ITEM 12. EXHIBITS.

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

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

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

Filed herewith.

SIGNATURES

[See General Instruction F]

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

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 30, 2011

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

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

Date December 30, 2011

By (Signature and Title)* /s/ Mark Bradley
Mark Bradley, Treasurer & Chief Accounting & Financial Officer

Date December 30, 2011

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