Pioneer Diversified High Income Trust Form N-CSR December 30, 2008

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

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-22014

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

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

Dorothy E. Bourassa, Pioneer Investment Management, Inc., 60 State Street, Boston, MA 02109 (Name and address of agent for service)

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

Date of fiscal year end: April 30

Date of reporting period: May 1, 2008 through October 31, 2008

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

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

ITEM 1. REPORTS TO SHAREOWNERS.

Pioneer Diversified High Income Trust Semiannual Report | October 31, 2008

Ticker Symbol: HNW

[LOGO]PIONEER Investments(R)

visit us: pioneerinvestments.com

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President's Letter

Dear Shareowner,

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

First, invest for the long term. The founder of Pioneer Investments, Philip L. Carret, began his investment career during the 1920s. One lesson he learned is

that while great prosperity affords an advantageous time for selling stocks, extreme economic slumps can create opportunities for purchase. Indeed, many of our portfolio managers, who follow the value-conscious investing approach of our founder, are looking at recent market conditions as an opportunity to buy companies whose shares we believe have been unjustifiably beaten down by indiscriminate selling, but that we have identified as having strong prospects over time. While investors may be facing a sustained market downturn, we continue to believe that patience, along with staying invested in the market, are important considerations for long-term investors.

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

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

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

We invite you to learn more about Pioneer and our time-tested approach to investing by consulting with your financial advisor or visiting us online at . Thank you for investing with Pioneer.

Respectfully,

/s/ Daniel K. Kingsbury

Daniel K. Kingsbury President and CEO Pioneer Investment Management USA, Inc.

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

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Portfolio Management Discussion |10/31/08

A credit crisis that originally appeared in the U.S. subprime mortgage market spread to financial markets throughout the globe during the six months ended October 31, 2008. As markets grew increasingly worried about credit risk, corporate bonds and bank loans were among the asset classes that suffered steep price losses in a global flight-to-quality that primarily benefited only the highest-quality assets, such as U.S. Treasuries. The following is an interview with Portfolio Managers Andrew Feltus, CFA, and Jonathan Sharkey, who discuss the factors that affected performance of Pioneer Diversified High Income Trust during the six-month period ended October 31. Mr. Feltus and Mr. Sharkey are members of the Pioneer Fixed Income Department and leaders of the investment team responsible for the daily management of the Trust.

Q How did the Trust perform during the six months ended October 31, 2008?

- A Pioneer Diversified High Income Trust had a total return of -25.51% at net asset value and -31.16% at market price during the six months ended October 31, 2008. During the same period, the Trust's custom benchmark returned -22.11%. The custom benchmark is based on a 50% weight of the Merrill Lynch Global High Yield and Emerging Markets Plus Index, which returned -26.77%, and a 50% weight of the CSFB Leveraged Loan Index, which returned -17.44%. The Trust's distribution yield to investors on October 31, 2008, was 20.14% at market price.
- Q What was the investment environment like during the six months ended October 31, 2008?
- A An emerging crisis in financial markets hit credit markets particularly hard during the six-month period, resulting in dramatic price declines for investments carrying credit risk, including high-yield corporate bonds, investment-grade corporate bonds, and bank loans. October, the final month of the period, was the worst month on record in both the high-yield bond market and the bank loan market. The Merrill Lynch Global High Yield and Emerging Markets Plus Index returned -17.62%, and the CSFB Leveraged Loan Index returned -13.03% during that month alone. The problem started with the deterioration in housing prices, which eventually resulted in the failure or near-collapse of several major financial institutions. As the financial markets became more volatile and available money for traditional lending grew scarce, Congress passed a \$700 billion financial rescue plan and the Federal Reserve Board (the "Fed") continued to find ways to inject more money into the financial system. The Fed, for example,
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cut the key fed funds rate to just 1.00% in October 2008. Meanwhile, evidence increased of deteriorating economic conditions both in the United States and abroad, with fears growing that the global economy might already have entered a recession.

In this environment, in which investors tried to avoid risk, U.S. Treasuries and the sovereign debt of foreign industrialized nations tended to hold up better than other parts of the fixed-income markets. Mortgages backed by U.S. federal agencies trailed Treasuries, but outperformed most other types of fixed-income investments. Bank loans, while turning in their worst performance on record, nevertheless outperformed corporate bonds, both high yield and investment grade. In the emerging markets, higher-quality sovereign debt performed relatively well, outperforming U.S. investment-grade corporate bonds. Other emerging market securities, including corporates, did well until late summer, when they faltered as the aversion to credit risk spread to markets throughout the world.

- Q What were your principal investment strategies for the Trust during the six months ended October 31, 2008?
- A We kept the Trust well diversified, with larger allocations to U.S. and foreign high-yield securities, floating-rate bank loans and event-linked bonds. We managed the Trust to maintain a balanced, fixed-income strategy that gives its portfolio exposure to different yield-oriented asset classes. At October 31, 2008, for example, approximately 29% of the Trust's assets were invested in domestic bank loans and more than 28% of assets were invested in U.S. high-yield corporate bonds. Emerging market and European high-yield investments accounted for nearly 10% of Trust investments at October 31, while mortgage-backed securities represented nearly 6% of assets. Also, about 23% of the Trust's assets were invested in event-linked bonds, which are issued as reinsurance securities against the possibility of significant losses from natural catastrophes, such as hurricanes or earthquakes. The rest of the Trust's assets were allocated to cash and cash equivalents. The average credit quality of Trust's investments was B+ at October 31, 2008.

The Trust has the ability to borrow funds, or use leverage, in its investment strategy. At the end of the period, about 30.2% of the Trust's portfolio was leveraged through bank loans.

- Q How did the Trust's positioning affect performance results for the period?
- A The Trust's investment in event-linked bonds supported relative performance, as these securities outperformed other high-yielding categories. While several strong hurricanes did cause significant property losses over the six-month period, the damage was not sufficient to adversely affect investors in the bonds. The Trust's exposure to high-yield bonds hurt performance during a period when lower-rated securities performed poorly.

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Also, the Trust's relatively low exposure to emerging market and European high-yield bonds helped relative performance, as those securities performed particularly poorly over the period. We underweighted the Trust both in European high-yield corporate bonds and the euro currency, because we believed the European market offered less yield than the United States, while many European corporations had greater debt loads, or leverage, than American companies.

Although bank loan investments tended to lose value during the six months, the Trust's portfolio held up better than the overall bank loan market, primarily because of the higher-quality orientation of the portfolio. We focused on loans with credit ratings of BB- and above. We also had fewer covenant-light loans, which are bank loans that offer relatively thin protection for investors. The Trust's investments tended to be in loans that offered greater covenant protection, and these outperformed the overall loan market. During the period ended October 31, 2008, we added investments in senior tranches of private label, lower-quality U.S. mortgage-backed securities. The investments did not help the Trust's performance immediately, but we found their valuations to be particularly attractive, as they were priced for extremely severe scenarios that we thought unlikely to occur.

While the Trust's use of leverage allowed investors to gain higher yields, the use of leverage tends to exaggerate the price moves in the market. During a period in which higher-yielding investments tended to endure losses in their valuations, the use of leverage hurt the Trust's

performance on a total return basis.

- Q What were some of the individual investments that influenced the Trust's performance?
- A The Trust's position in bank loans to Talecris helped support results when the value of the investment increased in value. A health care-related company involved in processing blood supplies, Talecris successfully entered into an agreement with another corporation that improved the company's growth prospects.

On the negative side, two defaults held back performance. One was of a bank loan to LandSource, which is a land development joint venture between homebuilder Lennar and the California Public Employees' Retirement System (CALPERS). The joint venture was hit hard by the real estate slump in California and filed for bankruptcy protection. We have retained the position because we think there is an opportunity to recover some of the value of the investment. The second default was of a bond issued by Bulgaria Steel. The company had been acquired by a group of Indian investors who subsequently found that the company had some unanticipated problems. We sold most of the Trust's Bulgaria Steel holding. Also hurting performance were investments in the bonds of Kazak and Russian banks, which

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underperformed other emerging market corporate bonds when they came under pressure in the global credit crisis.

- Q What is your investment outlook?
- A As we enter a six month period, we think both high-yield bonds and bank loans appear inexpensive.

We have a cautious view of the near-term environment for bank loans because of the many uncertainties in the market. On a fundamental basis, we believe bank loans have been trading at extraordinarily cheap levels and offer the opportunity for some price appreciation when the market begins to stabilize and eventually recover. We believe that even if market default rates were to increase from their present levels, bank loans at present prices offer considerable potential value. However, the market still may face some short-term volatility. With loan prices at unprecedented lows, the overall loan market is trading at intrinsic value (this means that the entire loan market is being priced by investors at levels that reflect historical recovery rates in bankruptcy). With loan prices at historically deep discounts, any payments by borrowers should allow investors to reap capital appreciation, and the payment proceeds would then need to be reinvested by fund managers. That should boost both demand and prices, given the limited supply of new loan issues in today's market.

In the high-yield bond market, we think prices -- as reflected by the yield spreads between high-yield bonds and less-risky investments -- are trading at levels that reflect Depression-era default rates, which we believe is a highly unlikely scenario. While we cannot forecast when the economy will begin to improve, we do think there is great value in the high-yield market. We intend to rely on intensive credit analysis and remain focused on finding the best opportunities among the highest-quality companies in the high-yield market.

We also expect to continue to look at values for investments in

event-linked bonds, as those opportunities present themselves.

Please refer to the Schedule of Investments on pages 12-34 for a full listing of Trust securities.

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.

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

The Trust may invest significantly in illiquid securities. Illiquid securities may be difficult to dispose of at a fair price at the times when the Trust believes it is desirable to do so and their market price is generally more volatile than that of more liquid securities. Illiquid securities are also more difficult to value and investment of the Trust's assets in illiquid securities may restrict the Trust's ability to take advantage of market opportunities.

The Trust may use leverage through the issuance of preferred shares with an aggregate liquidation preference of up to 331/3% of the Trust's total assets after such issuance. Leverage creates significant risks, including the risk that the Trust's income or capital appreciation will not be sufficient to cover the cost of leverage, which may adversely affect the return for the holders of common shares.

Risks of investing in the Trust are discussed in greater detail in the Trust's registration statement on Form N-2 relating to its common shares, which may be viewed by visiting the Securities and Exchange Commission's web site at http://www.sec.gov.

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

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

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Portfolio Summary | 10/31/08

Portfolio Diversification

(As a percentage of total investment portfolio)

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

Corporate Bonds & Notes Floating Rate Loan Interests Asset Backed Securities Temporary Cash Investments Collateralized Mortgage Obligations Convertible Bonds & Notes Convertible Preferred Stock Common Stock* Warrants*			
* Amount is less than 0.1%.			
Portfolio Quality			
(As a percentage of total investment portfolio; based on S&P ratings)			
[THE FOLLOWING DATA IS REPRESENTED AS A PIE CHART IN THE PRINTED MATERIAL]			
BBB 2 BB 2 B 3 CCC & Lower Cash Equivalents	6.1% 0.2% 28.6% 36.7% 9.0% 3.3% 16.1%		
1. Atlantic & Western Re, Ltd., 10.133%, 1/9/09 (144A) 1	L.45%		
2. Australis, Ltd., 6.441%, 3/24/09 (144A) 1	 L.45		
	 L.17		
4. Fhu-Jin, Ltd., 6.691%, 8/10/11 (144A) 1	L.15		
5. Residential Reinsurance 2008, Ltd., 14.311%, 6/6/11 (144A) 1	L.15		
	.14		
	L.13		
8. Green Valley, Ltd., 8.993%, 1/10/11 (144A) 1	L.08		
	L.08		
	L.05		

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

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Prices and Distributions | 10/31/08

Market Value per Common Share

10/31/08	4/30/08
 \$ 13.11	\$ 20.47

Net Asset Value per Common Share

10/31/08	4/30/08
 \$ 15.26	\$ 22.02

Distributions per Common Share: 5/1/08-10/31/08

Net Investment Income	Short-Term Capital Gains	Long-Term Capital Gains	
\$ 1.2540	\$	\$	

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Performance Update |10/31/08

Investment Returns

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

Cumulative Total Returns (As of October 31, 2008)		
Period	Net Asset Value ("NAV")	Market Price
Life-of-Trust (5/30/07) 1 Year	-25.05% -25.84	-38.51% -29.00

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

		50% ML Global HY
	Pioneer Diversified High Income Trust	and EM Plus Index 50% CSFB Leveraged Loan Index
5/07 10/07 4/08 10/08	10,000 8,661 8,933 6,149	10,000 10,100 10,246 8,069

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

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

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

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

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

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

The Merrill Lynch Global High Yield and Emerging Markets Plus Index tracks the performance of the below- and border-line investment-grade global debt markets denominated in the major developed market currencies. The Index includes

sovereign issuers rated BBB1 and lower along with corporate issues rated BB1 and lower. There are no restrictions on issuer country of domicile. The CSFB Leveraged Loan Index is designed to mirror the investible universe of the U.S. dollar-denominated leveraged loan market. The CSFB Leveraged Loan Index consists of tradable term loans with at least one year to maturity and rated BBB or lower.

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

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Schedule of Investments | 10/31/08 (unaudited)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
500,000	BB/Ba3	ASSET BACKED SECURITIES 5.6% of Net Assets CONSUMER SERVICES 0.3% Restaurants 0.3% DB Master Finance LLC, 8.285%, 6/20/31 (144A)	\$
		Total Consumer Services	\$
246,741 (a) 1,160,531 (a) 1,826,738 (a) 200,000 (a) 699,000 (a) 211,452 (a) 600,000 (a) 367,256 (a) 820,525 (a) 202,938 (a)	AA+/Aa1 AAA/Aaa AAA/Aaa AAA/A1 AAA/Aaa AA+/Aa1 AAA/Aaa AAA/Aaa AAA/Aaa AAA/Aaa	BANKS 4.1% Thrifts & Mortgage Finance 4.1% Ace Securities Corp., 3.859%, 12/25/34 Bayview Financial Acquisition Trust, 3.63%, 8/28/44 Bayview Financial Acquisition Trust, 3.87%, 5/28/44 Carrington Mortgage Loan Trust, 3.359%, 10/25/36 Carrington Mortgage Loan Trust, 3.459%, 2/25/37 Countrywide Asset-Backed Certificates, 3.439%, 7/25/36 Countrywide Asset-Backed Certificates, 3.719%, 10/25/35 Lehman XS Trust, 3.378%, 8/25/36 Lehman XS Trust, 3.609%, 12/25/35 Residential Asset Mortgage Products, Inc., 3.459%, 3/25/36	\$ 1, 1,
		Total Banks	\$5,
410,000(a) 108,149(a)	A/Baal AAA/Aaa	DIVERSIFIED FINANCIALS 1.2% Other Diversified Financial Services 0.3% Bear Stearns Asset Backed Securities Trust, 3.939%, 3/25/35 First Franklin Mortgage Loan Asset-Backed Certificates, 3.449%, 3/25/36	\$ \$
250,000(a) 218,790(a) 391,401(a) 265,915(a)	AAA/Aaa A/Aa2 AAA/Aaa AAA/Aaa	Investment Banking & Brokerage 0.9% GSAMP Trust, 3.389%, 1/25/37 GSAMP Trust, 3.689%, 3/25/35 Option One Mortgage Loan Trust, 3.349%, 5/25/37 Option One Mortgage Loan Trust, 3.359%, 7/25/36	\$

			\$ 1,
		Total Diversified Financials	\$ 1,
		TOTAL ASSET BACKED SECURITIES (Cost \$7,157,136)	\$ 6,
500,000(a) 68,793(a)	AAA/Aaa AAA/Aaa	COLLATERALIZED MORTGAGE OBLIGATIONS 2.6% of Net Assets BANKS 2.1% Thrifts & Mortgage Finance 2.1% Adjustable Rate Mortgage Trust, 3.649%, 6/25/35 Banc of America Funding Corp., 4.498%, 4/20/35	\$

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

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Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
297,821(a) 1,453,376(a) 816,830(a) 481,004(a) 1,606,393(a)	AAA/Aaa AAA/Aaa B/B1 AAA/Aaa AAA/Aaa	Thrifts & Mortgage Finance (continued) Countrywide Home Loans, 3.609%, 3/25/35 Impac CMB Trust, 4.019%, 1/25/35 Luminent Mortgage Trust, 3.519%, 7/25/36 WaMu Mortgage Pass-Through Certificates, 3.489%, 4/25/45 WaMu Mortgage Pass-Through Certificates, 3.739%, 7/25/45	\$ 1,
		Total Banks	\$2,
751,554(a) 516,694(a)	AAA/Aaa AAA/Aaa	DIVERSIFIED FINANCIALS 0.5% Other Diversified Financial Services 0.5% Downey Savings & Loan Association Mortgage Loan Trust, 4.648%, 10/19/45 Downey Savings & Loan Association Mortgage Loan Trust, 4.698%, 10/19/45	Ş
		Total Diversified Financials	 \$
		TOTAL COLLATERALIZED MORTGAGE OBLIGATIONS (Cost \$4,213,397)	\$3,
NOK 1,500,000 NOK 3,000,000	NR/NR NR/NR	CORPORATE BONDS & NOTES 85.2% of Net Assets ENERGY 4.8% Oil & Gas Drilling 0.3% Petrolia Drilling ASA, 12.0%, 6/20/12 (144A) Petromena AS, 9.75%, 5/24/12 (144A)	\$,
			\$
300,000 700,000(a)	NR/NR NR/NR	Oil & Gas Equipment & Services 1.1% Nexus 1 Pte, Ltd., 10.5%, 3/7/12 (144A) Sevan Marine ASA, 5.78%, 5/14/13 (144A)	\$

NOK 3,000,000(a) 300,000	NR/NR NR/NR	Sevan Marine ASA, 12.29%, 10/24/12 (144A) Skeie Drilling & Production ASA, 11.25%, 3/8/13 (144A)	
			\$ 1,
		Integrated Oil & Gas 0.2%	
600,000	NR/B2		\$
		Oil & Gas Exploration & Production 2.7%	
500,000	CCC+/Caal	Harvest Operations Corp., 7.875%, 10/15/11	\$
970,000	BB-/B3	Hilcorp Energy I L.P./Hilcorp Finance Co., 9.0%,	
,		6/1/16 (144A)	
NOK 5,000,000	NR/NR	Norwegian Energy Co. AS, 11.0%, 7/13/10 (144A)	
NOK 2,000,000	NR/NR	PA Resources AB, 8.75%, 3/10/10	
675,000	B/Caal	Parallel Petroleum Corp., 10.25%, 8/1/14	
225,000	B/Caal	PetroQuest Energy, Inc., 10.375%, 5/15/12	
150,000	B/B2	Quicksilver Resources, Inc., 7.125%, 4/1/16	
250,000(a)	B-/B3	SandRidge Energy, Inc., 7.508%, 4/1/14	
	-	l part of these financial statements. Trust Semiannual Report 10/31/08 13	

Schedule of Investments | 10/31/08 (unaudited) (continued)

Principal Amount USD (\$)		S&P/Moody's Ratings (unaudited)	
	335,000 600,000(b)	B-/B3 B-/NR	Oil & Gas Exploration & Production (continued) SandRidge Energy, Inc., 8.0%, 6/1/18 (144A) SandRidge Energy, Inc., 8.625%, 4/1/15
	755,000(m) 460,000(c)(m) 50,000(c)(m)	B/Caal D/Ca D/Caal	Oil & Gas Refining & Marketing 0.2% Aventine Renewable Energy Holdings, Inc., 10.0%, 4/1/17 VeraSun Energy Corp., 9.375%, 6/1/17 VeraSun Energy Corp., 9.875%, 12/15/12
	505 , 000	вв-/в2	Coal & Consumable Fuels 0.3% Massey Energy Co., 6.875%, 12/15/13 Total Energy
1	1,750,000(m) 650,000	CCC-/Caa2 CCC+/B3	MATERIALS 6.6% Commodity Chemicals 0.5% Georgia Gulf Corp., 10.75%, 10/15/16 Montell Finance Co. BV, 8.1%, 3/15/27 (144A)
			Diversified Chemicals 0.5%

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EURO 1,275,000		в-/вз	Ineos Group Holdings Plc, 7.875%, 2/15/16 (1	44A)
400,000 EURO 200,000		B-/B3 B/B2	Specialty Chemicals 0.2% ARCO Chemical Co., 9.8%, 2/1/20 Kronos International, Inc., 6.5%, 4/15/13	
500,000 300,000 500,000	(a)(d)(m)	B/B2 BB+/NR B/B3	Construction Materials 0.6% AGY Holding Corp., 11.0%, 11/15/14 C8 Capital SPV, Ltd., 6.64% (144A) U.S. Concrete, Inc., 8.375%, 4/1/14	
1,145,000 EURO 625,000 330,000)	B-/B2 B-/B3 B-/Caal	Metal & Glass Containers 1.0% AEP Industries, Inc., 7.875%, 3/15/13 Impress Holdings BV, 9.25%, 9/15/14 (144A) Vitro, S.A.B. de CV, 9.125%, 2/1/17	
700,000 500,000 750,000		CC+/Caal B-/B3 B/NR	Paper Packaging 0.9% Graham Packaging Co., Inc., 9.875%, 10/15/14 Graphic Packaging International, Inc., 9.5%, U.S. Corrugated, Inc., 10.0%, 6/1/13	8/15
			of these financial statements.	
			of these financial statements. Semiannual Report 10/31/08	
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4 Pioneer Dive rincipal mount	ersified High Inc S&P/Moody's Ratings	come Trust Aluminur CII Carł		Val \$
4 Pioneer Dive cincipal mount SD (\$) 300,000	ersified High Inc S&P/Moody's Ratings (unaudited) CCC+/B3	come Trust Aluminur CII Carł Noranda	Semiannual Report 10/31/08 n 0.7% Don LLC, 11.125%, 11/15/15 (144A)	
4 Pioneer Dive rincipal mount SD (\$) 300,000	ersified High Inc S&P/Moody's Ratings (unaudited) CCC+/B3	Aluminur CII Carl Noranda 5/15/15 Diversi: Algoma <i>D</i> FMG Fina	Semiannual Report 10/31/08 n 0.7% Don LLC, 11.125%, 11/15/15 (144A)	\$
<pre>4 Pioneer Dive rincipal nount SD (\$)</pre>	S&P/Moody's Ratings (unaudited) CCC+/B3 B-/B3 B-/B3	Aluminur CII Carl Noranda 5/15/15 Diversi: Algoma <i>D</i> FMG Fina	<pre> Semiannual Report 10/31/08 n 0.7% con LLC, 11.125%, 11/15/15 (144A) Aluminum Acquisition Corp., 6.828%, fied Metals & Mining 1.0% Acquisition Corp., 9.875%, 6/15/15 (144A) ance Pty., Ltd., 10.625%, 9/1/16 (144A)</pre>	\$ \$

\$

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250,000	CC/Caa3 BB/Ba2	Forest Products 0.2% Ainsworth Lumber Co., Ltd., 11.0%, 7/29/15 (144A) Sino-Forest Corp., 9.125%, 8/17/11 (144A)	\$
			\$
	D (D)	Paper Products 0.4%	~
600,000	B-/B3	Exopack Holding Corp., 11.25%, 2/1/14	\$
		Total Materials	\$
		CAPITAL GOODS 6.5% Aerospace & Defense 0.5%	
750,000	B-/NR	Aeroflex, Inc., 11.75%, 2/15/15 (144A)	\$
600,000	B+/B2	Building Products 0.2% Asia Aluminum Holdings, Ltd., 8.0%, 12/23/11 (144A)	\$
750,000	NR/B2	Construction & Engineering 1.0% Desarrolladora Metropolitana SA de CV, 10.875%,	
		5/9/17 (144A)	\$
350,000 500,000	BB-/Ba3 B/B2	Dycom Industries, Inc., 8.125%, 10/15/15 Esco Corp., 8.625%, 12/15/13 (144A)	
			 \$
620,106(b)	CCC+/NR	Industrial Conglomerates 1.0% American Achievement Group Holding Corp., 14.75%,	
500,000	B-/NR	10/1/12 Cia Latinoamericana de Infraestructura & Servicios SA,	\$
500,000	CCC/Caa3	9.75%, 5/10/12 Indalex Holding Corp., 11.5%, 2/1/14	
740,000	B-/B3	Park-Ohio Industries, Inc., 8.375%, 11/15/14	
			\$
		al part of these financial statements. e Trust Semiannual Report 10/31/08 15	\$
Pioneer Divers	ified High Incom		\$
Pioneer Divers edule of Investme ncipal	sified High Incom ents 10/31/08 (S&P/Moody's Ratings	e Trust Semiannual Report 10/31/08 15 unaudited) (continued)	\$
Pioneer Divers edule of Investme ncipal	sified High Incom ents 10/31/08 (S&P/Moody's Ratings (unaudited)	e Trust Semiannual Report 10/31/08 15 unaudited) (continued) Construction, Farm Machinery & Heavy Trucks 2.1%	\$ \$

	1,220,000	B/NR	Industrial Machinery 0.9% Industrias Metalurgicas Pescarmona SA, 11.25%, 10/22/14 (144A)	\$	
	875,000	в/в3	Mueller Water Products, Inc., 7.375%, 6/1/17		
				\$	1
			Trading Companies & Distributors 0.8%		
	320,000	NR/NR	Blaze Recycling & Metals LLC, 10.875%, 7/15/12 (144A)	\$	
	500,000	B-/B3	Intcomex, Inc., 11.75%, 1/15/11		
	125,000 300,000	BB-/B1 B/B1	United Rentals North America, Inc., 6.5%, 2/15/12 Wesco Distribution, Inc., 7.5%, 10/15/17		
	·	·			
				Ş 	1
			Total Capital Goods	\$	8
			COMMERCIAL & PROFESSIONAL SERVICES 0.5% Commercial Printing 0.2%	·	
	250,000	B+/B2	Sheridan Group, Inc., 10.25%, 8/15/11	\$ 	
	400(e)	NR/B2	Diversified Commercial & Professional Services MSX International UK, 12.5%, 4/1/12 (144A)	0.1% \$	5
EUI	700,000 RO 107,128	B-/Caal B+/B1	Environmental & Facilities Services 0.2% Aleris International, Inc., 10.0%, 12/15/16 New Reclamation Group Pty., Ltd., 8.125%, 2/1/13 (144A)	\$	
				 \$	
			Total Commercial & Professional Services	\$	
			TRANSPORTATION 0.6%		
	775,000	B-/B3	Air Freight & Logistics 0.4% CEVA Group Plc, 10.0%, 9/1/14 (144A)	\$	
	240,000	BB-/B1	Railroads 0.2% Kansas City Southern de Mexico, 7.625%, 12/1/13	\$	
			Total Transportation	 \$	
	980,000(m) 1,140,000	B-/Caal B-/B3	AUTOMOBILES & COMPONENTS 1.7% Auto Parts & Equipment 1.4% Allison Transmission, Inc., 11.0%, 11/1/15 (144A) Lear Corp., 8.75%, 12/1/16	\$	

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

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Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Val
500,00	0(f) CCC+/Caa2	Auto Parts & Equipment (continued) Stanadyne Corp., 0.0%, 2/15/15	Ş

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	160,000 700,000(m)	B-/B3 B/B3	Stanadyne Corp., 10.0%, 8/15/14 Tenneco, Inc., 8.625%, 11/15/14	
				\$
	985,000	CCC+/Caal	Tires & Rubber 0.3% Cooper-Standard Automotive, Inc., 8.375%, 12/15/14	\$
			Total Automobiles & Components	\$
	695,000	BB-/B1	CONSUMER DURABLES & APPAREL 1.5% Homebuilding 0.3% Meritage Homes Corp., 6.25%, 3/15/15	 \$
		BL	Mericage nomes corp., 0.23%, 3/13/13	ې
1	,120,000 175,000(f) 500,000(m)	B+/NR B-/B3 CCC+/Caal	Housewares & Specialties 0.9% Oceanografia SA de CV, 11.25%, 7/15/15 (144A) Visant Holding Corp., 0.0%, 12/1/13 Yankee Acquisition Corp., 9.75%, 2/15/17	\$
				\$
	500 , 000	BB/Ba3	Textiles 0.3% Invista, 9.25%, 5/1/12 (144A)	\$
			Total Consumer Durables & Apparel	\$
	500,000	в/в3	CONSUMER SERVICES 3.1% Casinos & Gaming 2.3% Buffalo Thunder Development Authority, 9.375%,	
ت مرتام 1	,155,000	B+/B2	12/15/14 (144A) Codere Finance Luxembourg SA, 8.25%, 6/15/15	\$
LUNO I	,100,000	D17 D2	(144A)	
	550,000	CCC/Caal	Fontainebleau Las Vegas Holdings LLC, 10.25%, 6/15/15 (144A)	
	95,000	B+/B1	Galaxy Entertainment Finance Co., Ltd., 9.875%, 12/15/12 (144A)	
	275,000	B-/Caal	Little Traverse Bay Bands of Odawa Indians, 10.25%, 2/15/14 (144A)	
1	,615,000	BB-/Ba2	Mashantucket Western Pequot Tribe, 8.5%, 11/15/15	
EURO	50,000 750,000 750,000 (m)	B/B3 CCC/Caa3 CCC+/Caa2	(144A) Peermont Global, Ltd., 7.75%, 4/30/14 (144A) Station Casinos, Inc., 6.625%, 3/15/18 Trump Entertainment Resorts, Inc., 8.5%, 6/1/15	
EURO	405,000	NR/NR	Unibet Group Plc, 9.7%, 12/21/10	
				\$
1	.,110,000	B-/Caal	Hotels, Resorts & Casinos 0.6% Pegasus Solutions, Inc., 10.5%, 4/15/15 (144A)	\$

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/08 17

Schedule of Investments | 10/31/08 (unaudited) (continued)

	Laga: 1 migi		
Principal Amount USD (\$)		S&P/Moody's Ratings (unaudited)	
	395,000	В/ВЗ	Leisure Facilities 0.2% FireKeepers Development Authority, 13.875%, 5/1/15 (144A)
			Total Consumer Services
	40,000(m) 250,000 500,000 400,000 430,000 1,245,000(b)	CCC/Caa3 CCC/Caa2 BB-/B3 B-/B2 B-/Caa1 CCC/Caa1	<pre>MEDIA 1.5% Broadcasting 1.2% CCH I LLC, 11.0%, 10/1/15 CCH II LLC, 10.25%, 9/15/10 Intelsat Subsidiary Holding Co., Ltd., 8.5%, 1/15/13 (144A) Kabel Deutschland GmbH, 10.625%, 7/1/14 Telesat Canada, 12.5%, 11/1/17 (144A) Univision Communications, Inc., 9.75%, 3/15/15 (144A)</pre>
	600,000	CCC+/Caal	Publishing 0.3% TL Acquisitions, Inc., 10.5%, 1/15/15 (144A) Total Media
:	700,000 1,175,000	B+/B1 B/NR	RETAILING 1.8% Distributors 0.7% Marfrig Overseas, Ltd., 9.625%, 11/16/16 (144A) Minerva Overseas, Ltd., 9.5%, 2/1/17 (144A)
	465,000	BB/Ba3	Internet Retail 0.3% Ticketmaster, 10.75%, 8/1/16 (144A)
EURO	74,000(a)	B-/Caal	Apparel Retail 0.0% Edcon Holdings Pty., Ltd., 10.458%, 6/15/15 (144A)
	500,000	CCC/Caal	Home Improvement Retail 0.2% KAR Holdings, Inc., 10.0%, 5/1/15
	950,000	CCC+/Caal	Specialty Stores 0.6% Sally Holdings LLC, 10.5%, 11/15/16
			Total Retailing
	275,000(m)	CCC-/Caa3	FOOD & STAPLES RETAILING 0.8% Drug Retail 0.1% Duane Reade, Inc., 9.75%, 8/1/11
:	1,000,000 400,000	NR/B2 B/B2	Food Distributors 0.7% Arantes International, Ltd., 10.25%, 6/19/13 (144A) Independencia International, Ltd., 9.875%, 5/15/15 (144A)

Total Food & Staples Retailing _____

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

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Principal Amount USD (\$)			S&P/Moody's Ratings (unaudited)	
	EURO	330,000(g)(h)	D/Caa2	FOOD, BEVERAGE & TOBACCO 1.6% Distillers & Vintners 0.1% Belvedere SA, 8.106%, 5/15/13 (144A)
		350,000	в-/вз	Agricultural Products 0.3% American Rock Salt Co. LLC, 9.5%, 3/15/14
		400,000 275,000(f)	B+/Ba3 NR/B2	Packaged Foods & Meats 0.3% Bertin Ltda, 10.25%, 10/5/16 (144A) SA Fabrica de Produtos Alimenticios Vigor, 9.25%, 2/23/17 (144A)
		1,360,000 125,000	B+/B2 B+/B2	Tobacco 0.9% Alliance One International, Inc., 8.5%, 5/15/12 Alliance One International, Inc., 11.0%, 5/15/12
				Total Food, Beverage & Tobacco
		205,000(m)	CCC+/Caal	HOUSEHOLD & PERSONAL PRODUCTS 0.1% Household Products 0.1% Central Garden & Pet Co., 9.125%, 2/1/13
				Total Household & Personal Products
		750,000	CCC+/Caa3	HEALTH CARE EQUIPMENT & SERVICES 4.3% Health Care Equipment & Services 0.4% Accellent, Inc., 10.5%, 12/1/13
		1,265,000(b)	в-/вз	Health Care Supplies 0.9% Biomet, Inc., 10.375%, 10/15/17
		1,385,000 320,000 500,000 725,000(b) 1,170,000	BB-/NR CCC+/Caa1 B-/B2 B-/B3 CCC+/Caa1	Health Care Services 2.2% DASA Finance Corp., 8.75%, 5/29/18 (144A) Hanger Orthopedic Group, Inc., 10.25%, 6/1/14 Rural/Metro Corp., 9.875%, 3/15/15 Surgical Care Affiliates, Inc., 8.875%, 7/15/15 (144A) Surgical Care Affiliates, Inc., 10.0%, 7/15/17 (1
		575,000	в/вз	Health Care Facilities 0.4% Community Health Systems, Inc., 8.875%, 7/15/15

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	500,000	B-/Caal	Managed Health Care 0.4% Multiplan, Inc., 10.375%, 4/15/16 (144A)		
			Total Health Care Equipment & Services		
ie accom	panying notes are	e an integral par	t of these financial statements.		
Pio	neer Diversified	High Income Trus	t Semiannual Report 10/31/08 19		
chedule	of Investments	10/31/08 (unaudi	ted) (continued)		
cincipal nount SD (\$)		S&P/Moody's Ratings (unaudited)			
	400,000(m) 250,000 200,000	C/C B/B2 CCC+/Caal	PHARMACEUTICALS & BIOTECHNOLOGY & LIFE SCIENCES Pharmaceuticals 0.4% Angiotech Pharmaceuticals, Inc., 7.75%, 4/1/14 Phibro Animal Health Corp., 10.0%, 8/1/13 (144A) Phibro Animal Health Corp., 13.0%, 8/1/14 (144A)		
			Total Pharmaceuticals & Biotechnology & Life Sciences		
			BANKS 1.4% Diversified Banks 1.2%		
	750,000(a)(d)	NR/B2	ALB Finance BV, 9.375%		
	250,000	BB+/Baa2	ATF Capital BV, 9.25%, 2/21/14 (144A)		
	500,000(a) 700,000(a)	NR/B2 NR/Ba1	Banco Macro SA, 9.75%, 12/18/36 Banco Macro SA, 10.75%, 6/7/12		
	200,000	B+/Ba3	JSC TemirBank, 9.5%, 5/21/14 (144A)		
	300,000	B+/Ba3	Petrocommerce Finance SA, 8.75%, 12/17/09		
	550,000	BB-/Ba2	Russian Standard Finance SA, 7.5%, 10/7/10 (144A)		
EURO	500,000(m) 445,000	BB/Ba1 NR/Ba3	TuranAlem Finance BV, 8.5%, 2/10/15 (144A) URSA Bank, 7.0%, 5/21/10		
		,			
			Regional Banks 0.2%		
	250,000(a)(d)	AA-/Aa2	Wells Fargo Capital XV, 9.75%		
			Total Banks		
			DIVERSIFIED FINANCIALS 8.5% Other Diversified Financial Services 5.6%		
	2,500,000(a)	BB/NR	Australis, Ltd., 6.441%, 3/24/09 (144A)		
	1,750,000(a)	BB/NR	Australis, Ltd., 6.791%, 2/3/09 (144A)		
EURO	500,000(a)(d) 1,500,000(a)	A/A2 BB+/NR	Citigroup, Inc., 8.4% Green Valley, Ltd., 8.993%, 1/10/11 (144A)		
20110	500,000	B-/B3	Mandra Forestry Holdings, Ltd., 12.0%, 5/15/13 (144A)		
	250,000	NR/NR	Mirant JPSCo. Finance, Ltd., 11.0%, 7/6/16 (144A)		
	50,000	CCC/Caa3	Multi-Sector Holdings 0.0% Zlomrex International Finance SA, 8.5%, 2/1/14		

	Edgar Filing: Pioneer Diversified High Income Trust - Form N-CSR				
	750,000 425,000(a) 900,000	B-/Caal B-/B3 B-/Caal	Specialized Finance 2.9% ACE Cash Express, Inc., 10.25%, 10/1/14 (144A) NCO Group, Inc., 7.679%, 11/15/13 NCO Group, Inc., 11.875%, 11/15/14		
The accor	mpanying notes are	e an integral part	of these financial statements.		
20 Pic	oneer Diversified	High Income Trust	Semiannual Report 10/31/08		
Principa Amount USD (\$)	_	S&P/Moody's Ratings (unaudited)			
	440,000(a) 2,000,000(a)	NR/NR NR/NR	Specialized Finance (continued) Successor II, Ltd., 19.565%, 4/6/10 (144A) Successor II, Ltd., 27.815%, 4/6/10 (144A)		
			Total Diversified Financials		
	250,000 1,050,000	CCC/Caal CCC+/Caal	INSURANCE 27.9% Insurance Brokers 1.2% Alliant Holdings I, Inc., 11.0%, 5/1/15 (144A) HUB International Holdings, Inc., 10.25%, 6/15/15		
	500,000(a) 500,000	CCC/B3 CCC/Caal	(144A) USI Holdings Corp., 6.679%, 11/15/14 (144A) USI Holdings Corp., 9.75%, 5/15/15 (144A)		
	1,000,000(a) 1,000,000(a) 65,000	NR/Baa3 BB/Baa3 B+/NR	Multi-Line Insurance 0.9% Liberty Mutual Group, Inc., 7.0%, 3/15/37 (144A) Liberty Mutual Group, Inc., 10.75%, 6/15/58 (144A) Sul America Participacoes SA, 8.625%, 2/15/12 (144A)		
	625,000(a) 2,000,000(a) 820,000(a)(m)	BBB+/Baal BB+/NR A/Baal	Property & Casualty Insurance 1.9% AMBAC Financial Group, Inc., 6.15%, 2/15/37 Blue Fin, Ltd., 8.689%, 4/10/12 (144A) MBIA Insurance Corp., 14.0%, 1/15/33 (144A)		
EURO	1,500,000(a) 1,000,000(a) 2,500,000(a) 1,500,000(a) 1,000,000(a) 1,500,000(a) 1,500,000(a) 2,000,000(a)	BB+/NR BB+/NR CCC/NR B-/NR BB+/NR BB/NR BB-/NR BB/NR	Reinsurance 23.9% AKIBARE, 5.762%, 5/22/12 (144A) AKIBARE, 5.962%, 5/22/12 (144A) Atlantic & Western Re, Ltd., 10.133%, 1/9/09 (144A) Atlas Reinsurance Plc, 15.487%, 1/10/11 (144A) Caelus Re, Ltd., 9.061%, 6/7/11 (144A) Calabash Re II, Ltd., 11.219%, 1/8/10 (144A) Calabash Re II, Ltd., 12.419%, 1/8/10 (144A) Calabash Re, Ltd., 11.311%, 6/1/09 (144A)		

1,000,000(a)	B/NR	Carillon, Ltd., 18.069%, 1/10/11 (144A)
1,500,000(a)	BB+/NR	East Lane Re, Ltd., 9.801%, 5/6/11 (144A)
2,000,000(a)	BB+/NR	Fhu-Jin, Ltd., 6.691%, 8/10/11 (144A)
750,000(a)	BB/NR	Foundation Re, Ltd., 6.907%, 11/24/08 (144A)
1,000,000(a)	NR/B1	GlobeCat, Ltd., 10.053%, 1/2/13 (144A)
350,000(a)	NR/B3	GlobeCat, Ltd., 13.303%, 1/2/13 (144A)
2,000,000(a)	NR/Ba2	Muteki, Ltd., 7.204%, 5/24/11 (144A)
1,000,000(a)	NR/B1	Nelson Re, Ltd., 7.304%, 6/6/11 (144A)
1,000,000(a)	BB+/NR	Newton Re, Ltd., 7.848%, 12/24/10 (144A)

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

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Schedule of Investments | 10/31/08 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Va
1,000,000(a) 1,250,000(a) 1,250,000(a) 1,500,000(a)	BB/NR NR/B2 NR/NR B+/NR	Reinsurance (continued) Newton Re, Ltd., 10.148%, 12/24/10 (144A) Redwood Capital X, Ltd., 13.451%, 1/9/09 (144A) Redwood Capital X, Ltd., 17.451%, 1/9/09 (144A) Residential Reinsurance 2006, Ltd., 12.811%, 6/5/09 (144A)	Ş
2,000,000(a) 500,000(a)	B/NR CC/NR	Residential Reinsurance 2008, Ltd., 14.311%, 6/6/11 (144A) Willow Re, Ltd., 8.545%, 6/16/10 (144A)	
			 \$
		Total Insurance	\$
100,000(a) 410,000	B+/NR B+/NR	REAL ESTATE 0.3% Real Estate Operating Companies 0.2% Alto Palermo SA, 11.0%, 6/11/12 (144A) IRSA Inversiones y Representaciones SA, 8.5%, 2/2/17 (144A)	\$
			 \$
105,000 955,000	B+/B1 CCC+/Caal	Real Estate Development 0.1% China Properties Group, Ltd., 9.125%, 5/4/14 (144A) Neo-China Group Holdings, Ltd., 9.75%, 7/23/14 (144A)	Ş
			 \$
		Total Real Estate	 \$
405,000	CCC+/Caal	SOFTWARE & SERVICES 1.9% IT Consulting & Other Services 0.2% Activant Solutions, Inc., 9.5%, 5/1/16	 \$
1,690,000	в/вз	Data Processing & Outsourced Services 0.9% First Data Corp., 9.875%, 9/24/15	\$

500,000 1,390,000	CCC+/Caal B-/Caal	Application Software 0.8% Open Solutions, Inc., 9.75%, 2/1/15 (144A) Vangent, Inc., 9.625%, 2/15/15	Ş
			 \$
 		Total Software & Services	\$
 70,000	в-/вз	TECHNOLOGY HARDWARE & EQUIPMENT 0.2% Electronic Manufacturing Services 0.0% Sanmina-SCI Corp., 6.75%, 3/1/13	Ş
 250,000	в/в1	Technology Distributors 0.2% Da-Lite Screen Co., Inc., 9.5%, 5/15/11	\$
 		Total Technology Hardware & Equipment	\$

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

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Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)	
650,000(b) 1,750,000(m)	B-/B2 B-/B3	SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT 0.7% Semiconductor Equipment 0.7% Freescale Semiconductor, Inc., 9.125%, 12/15/14 Freescale Semiconductor, Inc., 10.125%, 12/15/16 Total Semiconductors & Semiconductor Equipment
910,000 400,000 1,200,000 1,250,000 1,010,000(m) 142,000 500,000	CCC+/B3 NR/B2 B-/B2 B/B3 CCC+/Caa1 NR/Baa3 BB/Ba3	TELECOMMUNICATION SERVICES 5.1% Integrated Telecommunication Services 3.1% Broadview Networks Holdings, Inc., 11.375%, 9/1/12 Digicel, Ltd., 9.25%, 9/1/12 (144A) GC Impsat Holdings I Plc, 9.875%, 2/15/17 (144A) GCI, Inc., 7.25%, 2/15/14 PAETEC Holding Corp., 9.5%, 7/15/15 Tele Norte Leste Participacoes SA, 8.0%, 12/18/13 Windstream Corp., 8.625%, 8/1/16
380,000 500,000 EURO 500,000(a) 840,000 540,000 1,330,000	CCC/Caa2 B-/B3 CCC+/Caa1 B/B1 BB+/Ba2 B/B1	Wireless Telecommunication Services 2.0% Cell C Property, Ltd., 11.0%, 7/1/15 (144A) Cricket Communications, Inc., 9.375%, 11/1/14 Hellas Telecommunications Luxembourg II, 11.318%, 1/15/15 (144A) Hughes Network Systems LLC, 9.5%, 4/15/14 OJSC Vimpel Communications, 9.125%, 4/30/18 (144A) True Move Co., Ltd., 10.375%, 8/1/14 (144A)

		Total Telecommunication Services
		UTILITIES 3.4% Electric Utilities 1.2%
750,000	B/NR	Cia de Transporte de Energia Electrica de Alta Tension SA, 8.875%, 12/15/16 (144A)
930,000(d)	NR/B3	Rede Empresas de Energia Eletrica SA, 11.125% (144A)
1,200,000	CCC/B3	Texas Competitive Electric Holdings Co. LLC, 10.25%, 11/1/15 (144A)
490,000	B+/B1	Gas Utilities 0.7% Inergy L.P., 8.25%, 3/1/16
1,185,000	B+/B1	Transportadora de Gas del Sur SA, 7.875%, 5/14/17 (144A)
225,000	BB-/Ba2	Multi-Utilities 0.2% PNM Resources, Inc., 9.25%, 5/15/15

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/08 23

Schedule of Investments | 10/31/08 (unaudited) (continued)

1	S&P/Moody's Ratings (unaudited)		Va	lue
2,000,000	BB-/Ba3	Independent Power Producers & Energy Traders 1 Intergen NV, 9.0%, 6/30/17 (144A)		1,600,000
		Total Utilities	\$	4,182,725
		TOTAL CORPORATE BONDS & NOTES (Cost \$151,601,748)	\$1	06,030,679
990,000	B/Caal	CONVERTIBLE BONDS & NOTES 1.9% of Net Assets TRANSPORTATION 0.4% Marine 0.4% Horizon Lines, Inc., 4.25%, 8/15/12	\$	527,175
		Total Transportation	\$	527 , 175
1,550,000	B+/B3	HEALTH CARE EQUIPMENT & SERVICES 0.9% Health Care Services 0.6% Omnicare, Inc., 3.25%, 12/15/35	\$	747,875
120,000 405,000		Health Care Facilities 0.3% LifePoint Hospitals, Inc., 3.25%, 8/15/25 LifePoint Hospitals, Inc., 3.5%, 5/15/14	\$	66,900 240,469
			\$	307,369

		Total Health Care Equipment & Services		1,055,244
850,000	в-/вз	TECHNOLOGY HARDWARE & EQUIPMENT 0.2% Communications Equipment 0.2% Nortel Networks Corp., 2.125%, 4/15/14		297 , 500
		Total Technology Hardware & Equipment	\$	297,500
900,000	NR/NR	TELECOMMUNICATION SERVICES 0.4% Wireless Telecommunication Services 0.4% NII Holdings, Inc., 3.125%, 6/15/12	\$	495,000
		Total Telecommunication Services	\$	495,000
		TOTAL CONVERTIBLE BONDS & NOTES (Cost \$3,610,456)	\$	2,374,919
340,000	BBB-/Ba2	FLOATING RATE LOAN INTERESTS 40.8% of Net Asse ENERGY 0.5% Integrated Oil & Gas 0.2% Hudson Products Holdings, Inc., Term Loan, 8.0%, 8/24/15	ets \$	(i) 294,100
400,000	B/B3	Oil & Gas Exploration & Production 0.3% Venoco, Inc., Second Lien Term Loan, 6.813%, 9/20/11	\$	304,000
		Total Energy	\$	598,100

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

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Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Va	lue
1,000,000	BB+/Bal	MATERIALS 4.8% Diversified Chemicals 0.7% Huntsman International LLC, New Dollar Term Loan B, 4.969%, 4/21/14	Ş	869
595,466	B+/B1	Paper Packaging 0.7% Graham Packaging Co., L.P., New Term Loan, 5.063% - 6.313%, 10/7/11	\$	487
492,726	в-/вз	Graphic Packaging International, Inc., Incremental Term Loan, 5.884% - 7.5%, 5/16/14		419
			\$	907
1,307,620 1,306,771	BB-/B3 NR/B1	Steel 1.6% Algoma Steel, Inc., Term Loan, 5.35%, 6/20/13 Niagara Corp., Term Loan, 8.5%, 6/29/14	\$	1,059 901
			 \$	1,960

•	-	-	
1,500,000	NR/Ba3	Forest Products 0.9% Ainsworth Lumber Co., Ltd., Term Loan, 8.25%, 6/26/14	\$ 1,080
 1,424,074	BB+/NR	Paper Products 0.9% Georgia-Pacific LLC, Term Loan B, 4.219% - 4.551%, 12/20/12	\$ 1,186
		Total Materials	\$ 6,004
 738,482	B+/NR BB-/NR	CAPITAL GOODS 3.1% Aerospace & Defense 1.5% Aeroflex, Inc., Tranche B-2 Term Loan, 6.563%, 8/15/14 DAE Aviation Holdings, Inc., Tranche B-1 Term Loan,	\$ 590
497,462 494,374	BB+/Ba3 NR/NR	7.17% - 7.47%, 7/31/14 Spirit Aerosystems, Inc., Term Loan B, 6.5%, 9/30/13 Standard Aero, Ltd., Tranche B-2 Term Loan, 6.55%, 7/31/14	372 424 491
			 \$ 1,879
 1,000,000 2,000,000	BB-/Ba3 BB-/B2	Construction, Farm Machinery & Heavy Trucks 1.6% Accuride Corp., Term Loan, 6.0% - 6.688%, 1/31/12 Rental Service Corp., Second Lien Initial Term Loan, 7.61% - 7.71%, 11/30/13	\$ 757 1,235
			\$ 1,992
		Total Capital Goods	\$ 3,871
 740,625	BB+/B1	COMMERCIAL & PROFESSIONAL SERVICES 1.2% Diversified Commercial & Professional Services 0.4% Asset Acceptance Capital Corp., Tranche B Term Loan, 4.99% - 6.25%, 6/12/13	\$

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

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Schedule of Investments | 10/31/08 (unaudited) (continued)

Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
1,234,375	BB-/Ba3	Environmental & Facilities Services 0.8% Synagro Technologies, Inc., First Lien Term Loan, 4.81% - 5.77%, 4/2/14	\$
		Total Commercial & Professional Services	\$ 1,52
439,482 1,323,597	NR/Ba2 NR/Ba2	TRANSPORTATION 1.1% Air Freight & Logistics 1.1% Ceva Group Plc, Pre-Funded LC Loan, 3.662%, 11/4/13 Ceva Group Plc, U.S. Term Loan, 6.171%, 11/4/13	\$ 35 1,06

		Total Transportation	\$ 1,41
1,000,000	BB/Bal	AUTOMOBILES & COMPONENTS 0.6% Tires & Rubber 0.6% Goodyear Tire & Rubber Co., Second Lien Term Loan, 4.78%, 4/30/14	\$ 71
		Total Automobiles & Components	\$ 71
2,000,000(g)	BB+/Ba2	CONSUMER DURABLES & APPAREL 0.9% Homebuilding 0.1% LandSource Communities Development LLC, Second Lien Facility Term Loan, 10.5%, 2/27/14	\$ 10
925 , 583	BB-/Ba3	Housewares & Specialties 0.5% Yankee Candle Co., Inc., Term Loan, 5.26% - 5.77%, 2/6/14	\$ 62
505 , 978	BB-/Ba2	Apparel, Accessories & Luxury Goods 0.3% Hanesbrands, Inc., First Lien Term Loan B, 5.25% - 5.266%, 9/5/13	\$ 43
		Total Consumer Durables & Apparel	\$ 1,15
1,000,000	B/NR	CONSUMER SERVICES 1.3% Casinos & Gaming 1.3% Fontainebleau Las Vegas LLC, Initial Term Loan, 6.065%, 6/6/14	\$
220,458	B-/B2	Gateway Casinos & Entertainment, First Lien Delayed Draw Term Loan, 6.553%, 9/30/14	11
1,094,025	BB-/NR	Gateway Casinos & Entertainment, First Lien Term Loan, 6.553%, 9/30/14	54
1,000,000	BB-/Caal	Gateway Casinos & Entertainment, Second Lien Term Loan, 9.553%, 3/31/15	49
		Total Consumer Services	 \$ 1,62

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

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Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value
		MEDIA 2.4%	
		Broadcasting 1.3%	
1,000,000	B+/Ba3	Insight Midwest Holdings LLC, Term Loan B, 5.93%,	
		4/7/14	\$
593,434	B+/B1	Stratos Global Corp., Facility Term Loan B, 6.262%,	
		2/13/12	
675,000	B/Ba3	Univision Communications, Inc., Initial Term Loan,	
		5.049% - 5.75%, 9/29/14	
			\$ 1,

9-				
161,289	B-/B3	Cable & Satellite 0.1% Knology, Inc., Term Loan, 6.4%, 6/30/12	Ş	à
971 , 500	B+/B1	Movies & Entertainment 0.5% Lodgenet Entertainment Corp., Closing Date Term Loan, 5.77%, 4/4/14		\$
926,401	NR/B1	Publishing 0.5% RH Donnelley, Inc., Tranche D-1 Term Loan, 6.75% - 7.46%, 6/30/11		\$
		Total Media	Ş	ş 2,
744,332	BB/B1	FOOD, BEVERAGE & TOBACCO 0.5% Packaged Foods & Meats 0.5% Dean Foods Co., Tranche B Term Loan, 4.62% - 5.27%, 4/2/14		2
		Total Food, Beverage & Tobacco	Ş	\$
793,955	NR/Ba3	HOUSEHOLD & PERSONAL PRODUCTS 0.5% Personal Products 0.5% Brickman Group Holdings, Inc., Tranche B Term Loan, 5.118%, 1/23/14		2
		Total Household & Personal Products	Ş	\$
1,728,015	NR/B2	HEALTH CARE EQUIPMENT & SERVICES 5.1% Health Care Equipment & Services 1.2% Talecris Biotherapeutics Holdings Corp., First Lien T Loan, 6.31%, 12/6/13		\$ 1,
54,000	NR/NR	Health Care Supplies 0.9% Bausch & Lomb, Inc., Delayed Draw Term Loan, 6.051% - 7.012%, 4/24/15		>
357,299	NR/NR	Bausch & Lomb, Inc., Parent Term Loan, 6.051% - 7.012%, 4/24/15		
493,750	B+/B2	IM US Holdings LLC, First Lien Term Loan, 5.476% - 5.5%, 6/26/14		
600,000	B+/B2	IM US Holdings LLC, Second Lien Term Loan, 7.75%, 6/26/15		
			÷	, 1°
Pioneer Div	versified High I	tegral part of these financial statements. ncome Trust Semiannual Report 10/31/08 27		
Schedule of Inves	stments 10/31/	08 (unaudited) (continued)		
Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Value	è
1,365,580	BB-/Ba3	Health Care Services 1.8% Catalent Pharma Solutions, Inc., Dollar Term Loan, 6.012%, 4/10/14	\$	884,

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713,997 B+/B3	Hanger Orthopedic Group, Inc., Tranche B Term Loan, 5.18%, 5/26/13		560,
993,241 B/B3	HealthSouth Corp., Term Loan, 4.99% - 6.0%, 3/11/13		825,
		\$	2,270,
907,327 B+/NR	Health Care Facilities 1.2% Community Health Systems, Inc., Term Loan, 4.719% - 5.06%, 7/25/14	 \$	729,
98,225 B+/B1	Sun Healthcare Group, Inc., Delayed Draw Term Loan, 5.042% - 5.762%, 4/19/14		71,
162,256 B+/B1	Sun Healthcare Group, Inc., Synthetic LC Loan, 3.604%, 4/19/14		117,
706,608 B+/B1	Sun Healthcare Group, Inc., Term Loan, 4.81% - 5.541%, 4/19/14		512,
		 \$	 1,430,
	Total Health Care Equipment & Services	 \$	 6,361,
ND (ND	PHARMACEUTICALS & BIOTECHNOLOGY & LIFE SCIENCES 0. Pharmaceuticals 0.5%	 .7왕	
744,375 NR/NR	Mylan, Inc., U.S. Tranche B Term Loan, 6.625% - 7.063%, 10/2/14	\$	642 ,
250,000 NR/Baa3	Life Sciences Tools & Services 0.2% Invitrogen Corp., Term Loan B, 3.0%, 6/11/16	\$	233,
	Total Pharmaceuticals & Biotechnology & Life Sciences	\$	876,
995,000 BB/Ba2 800,000 NR/Baa3	DIVERSIFIED FINANCIALS 4.0% Other Diversified Financial Services 1.2% Metavante Corp., Term Loan, 4.551%, 11/1/14 SRAM LLC., Term Loan, 8.75%, 9/30/14	\$	815, 740,
		\$	1,555,
845,609 BB-/B3 977,194 B-/B2	Specialized Finance 1.2% Ace Cash Express, Inc., Term Loan, 6.77%, 10/5/13 Collect Acquisition Corp., Term Loan B,	\$	600,
	7.06% - 8.02%, 5/15/13		842,
		\$	1,443,
995,773 BB-/NR	Consumer Finance 1.1% Dollar Financial Corp., Canadian Borrower Term Loan, 6.52%, 10/30/12	\$	771,
732,186 BB-/NR	Dollar Financial Corp., Delayed Draw Term Loan, 6.52%, 10/30/12		567 ,
		\$	1,339,

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

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Principal Amount USD (\$)	S&P/Moody's Ratings (unaudited)		Vā	lue
694 , 750	NR/NR	Investment Banking & Brokerage 0.5% MSCI, Inc., Term Loan B, 5.31%, 11/20/14	\$	587 ,
		Total Diversified Financials	\$	4,925,
		INSURANCE 3.3%		
		Insurance Brokers 2.3%		
1,485,000	B-/B3	Alliant Holdings I, Inc., Term Loan, 6.762%, 8/21/14	\$	1,024,
108,886	B/B2	HUB International, Ltd., Delay Draw Term Loan,		
		6.262%, 6/13/14		75,
484,440	B/B3	HUB International, Ltd., Initial Term Loan, 6.262%, 6/13/14		334,
1,975,000	B-/B2	USI Holdings Corp., Tranche B Term Loan, 6.52%,		
		5/5/14		1,436,
			\$	2,870,
		Multi-Line Insurance 1.0%		
791 , 489	B-/B2	AmWins Group, Inc., Initial Term Loan, 4.99% - 5.31%,		
		6/8/13	\$	577,
1,000,000	B-/B2	AmWins Group, Inc., Second Lien Initial Term Loan,		
		7.97%, 6/9/14		630,