

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

Pioneer Diversified High Income Trust
Form N-CSRS
December 29, 2017

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, Amundi Pioneer Asset 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, 2017 through October 31, 2017

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 STOCKHOLDERS.

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

Pioneer Diversified
High Income Trust

Semiannual Report | October 31, 2017

Ticker Symbol: HNW

[LOGO] Amundi Pioneer

=====

ASSET MANAGEMENT

visit us: www.amundipioneer.com

Table of Contents

President's Letter	2
Portfolio Management Discussion	4
Portfolio Summary	11
Prices and Distributions	12
Performance Update	13
Schedule of Investments	14
Financial Statements	49
Financial Highlights	53
Notes to Financial Statements	55
Additional Information	71
Trustees, Officers and Service Providers	74

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 1

President's Letter

Robust, synchronized global economic growth and rising corporate profits have continued to drive strong performance in both the credit and equity markets for most of 2017. U.S. stocks, as measured by the Standard & Poor's 500 Index, returned 14.23% through the end of the third quarter. Fixed-income markets, while not generating the same dazzling returns as equities, held their own, led by high-yield securities, which produced a return of 7.05% in the U.S., as measured by the Bank of America Merrill Lynch U.S. High Yield Index. Meanwhile, the Bloomberg Barclays U.S. Aggregate Bond Index returned 3.14% over the first three quarters of the calendar year.

Continued strong employment numbers and higher consumer confidence, together with solid global economic growth and a depreciating U.S. dollar contributed to

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

better-than-expected U.S. gross domestic product (GDP) growth of more than 3% in both the second and third quarters. Outside the U.S., economic growth in the second quarter also surprised to the upside across the Euro zone, China, and Japan. Meanwhile, despite higher oil and commodities prices, inflation continued to be moderate, both in the U.S. and globally, enabling major non-U.S. central banks to maintain their easy monetary policies. As expected, however, the U.S. Federal Reserve System (the Fed) recently announced that it would commence tapering its balance sheet this October. The Fed also appears primed to raise interest rates one more time before the end of this year, which would be the fourth rate increase since December of 2016.

As we move into the final months of 2017, we believe the U.S. economy will experience modest growth in the short term, depending on the mix of economic policies enacted as the country moves away from monetary stimulus (driven by the Fed) and toward fiscal stimulus (potentially including tax reform) as well as lighter regulatory burdens. Meanwhile, corporate earnings remain solid and we think they will improve even further, despite the possibility of some pressure from wage increases. In addition, it is our view that the economy will continue to grow and that we may begin to see a modest upturn in inflation. In that scenario, we anticipate that the Fed will continue to raise interest rates.

While economic and market conditions appear solid, there are always risks to consider that could dampen the outlook. Geopolitical concerns, such as increased tensions with North Korea, and continued political gridlock in Washington are just some of the risks that could lead to increased market volatility.

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

It is for those reasons that we at Amundi Pioneer continue to believe that investors can benefit from the experience and tenure of our investment teams who make active and informed decisions across our funds.

As always, and particularly during times of market uncertainty, we encourage you to work with your financial advisor to develop an overall investment plan that addresses both your short- and long-term goals, and to implement such a plan in a disciplined manner.

We greatly appreciate the trust you have placed in us and look forward to continuing to serve you in the future.

Sincerely,

/s/ Lisa M. Jones

Lisa M. Jones
Head of the Americas, President and CEO of U.S.
Amundi Pioneer Asset Management USA, Inc.
October 31, 2017

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. Past performance is no guarantee of future results.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 3

Portfolio Management Discussion | 10/31/17

Higher-yielding, credit-sensitive debt produced solid results over the six-month period ended October 31, 2017, as an optimistic outlook for both the domestic

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

and global economies drove positive market performance. In the following interview, Andrew Feltus, Charles Melchreit, Jonathan Sharkey, and Chin Liu discuss the factors that affected the performance of Pioneer Diversified High Income Trust during the six-month period. Mr. Feltus, Co-Director of High Yield, a senior vice president, and a portfolio manager at Amundi Pioneer Asset Management, Inc. ("Amundi Pioneer"), Mr. Melchreit, Deputy Head of Fixed Income, Director of Multisector Fixed Income, a senior vice president, and a portfolio manager at Amundi Pioneer, Mr. Sharkey, a senior vice president, and a portfolio manager at Amundi Pioneer, and Mr. Liu, Director of Insurance-Linked Securities, a vice president, and a portfolio manager at Amundi Pioneer, are responsible for the day-to-day management of the Trust.

Q How did the Trust perform during the six months ended October 31, 2017?

A Pioneer Diversified High Income Trust returned 2.84% at net asset value (NAV) and 1.69% at market price during the six-month period ended October 31, 2017. During the same six-month period, the Trust's composite benchmark returned 3.58% and the Trust's former composite benchmark returned 3.62%.

The Trust's current composite benchmark is based on equal weights of the ICE Bank of America Merrill Lynch (BofA ML) Global High Yield and Emerging Markets Plus (GHY & EMP) Index and the Standard & Poor's/Loan Syndications & Trading Association (S&P/LSTA) Leveraged Loan Index. The Trust's former composite benchmark was based on equal weights of the ICE BofA ML GHY & EMP Index and the Credit Suisse (CS) Leveraged Loan Index. Unlike the Trust, the composite benchmarks do not use leverage. While the use of leverage increases investment opportunity, it also increases investment risk.

During the same period, the average return (at market price) of the 31 closed end funds in Lipper's High Yield Closed End Funds Category (which may or may not be leveraged) was 4.47%, and the average return (at NAV) of the 35 closed end funds in the same Lipper category was 3.67%. Meanwhile, the average return (at market price) of the 24 closed end funds in Lipper's Loan Participation Closed End Funds Category (which may or may not be leveraged) was -0.45%, and the average return of the 38 closed end Fund's (at NAV) in the same Lipper category was 2.11%.

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

The shares of the Trust were selling at a 6.6% discount to NAV on October 31, 2017. Comparatively, the shares of the Trust were selling at a 5.5% discount to NAV on April 30, 2017.

On October 31, 2017, the 30-day SEC yield on the Trust's shares was 8.51%.

Q How would you describe the investment environment in the global fixed-income markets during the six-month period ended October 31, 2017?

A The period was characterized by generally uninterrupted market optimism about both the domestic and global economies, which drove a sustained rally in credit-sensitive debt, such as corporate bonds. In the United States, the economy expanded at a steady pace, although the annual rate of gross domestic product (GDP) growth did accelerate to better than 3% in both the second and third calendar quarters of 2017, while the nation's unemployment rate fell from 4.4% to 4.1% from the start of the period on May 1, 2017, through the end of the period on October 31, 2017. Even though lawmakers in Washington struggled to reach a consensus on health care and tax policy, positive outlooks for both the economy and corporate profits continued to fuel solid performance in the financial markets.

In Europe, despite some evidence of increasing political nationalism and

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

anti-European Union sentiment in advance of national elections in several countries, the eventual election results seemed to calm worries about anti-global trends. The European economy, meanwhile, continued to improve over the six-month period and the euro strengthened on currency markets.

U.S. monetary policy continued to tighten during the period, but the Federal Reserve System (the Fed) acted cautiously, raising short-term interest rates just once after increasing rates twice between December 2016 and March 2017. The Fed's action on interest rates had been widely expected, and the gradual implementation of rate increases showed no evidence of dampening the improvements in global economic growth trends. Late in the period, the Fed began reducing the rather large balance sheet it had accumulated through its multiple quantitative easing bond-buying programs from 2008 through 2014 by limiting reinvestments in some of its holdings. As the period progressed, other central banks also began to consider moving away from their highly accommodative policies.

In that environment, domestic and international high-yield corporate bonds and emerging markets debt all produced solid overall performance. One notable exception to the generally positive results was the performance of insurance-linked securities (ILS), which are used by property-and-casualty insurers to help alleviate some of the risks the insurers face in the

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 5

event of a major disaster. ILS returns skewed to the negative side in the latter part of the six-month period when three severe hurricanes (Harvey, Irma, and Maria) hit the U.S. mainland and Puerto Rico, two major earthquakes shook western Mexico, and California suffered through its worst period of wild fires on record. Those events, which occurred over a relatively short space of time, resulted in a 12-year high in natural-disaster-related damage claims in the global insurance industry, while causing the industry \$110 billion in estimated losses.

Q What factors affected the Trust's performance during the six-month period ended October 31, 2017?

A The Trust's allocation to high-yield corporates, bank loans, emerging markets debt, and securitized bonds all delivered positive results during the period, and contributed to the Trust's returns, but the portfolio's exposure to ILS, which are not a component of the benchmark, was a major drag on performance due to the significant insurance claims and industry losses resulting from the natural disasters mentioned earlier.

Investing in ILS has been part of our portfolio diversification* strategy since the Trust's inception in May 2007, and the six-month period ended October 31, 2017, marked the first reporting cycle - either annual or semiannual - in which holdings of ILS did not contribute positively to the Trust's performance. During the six-month period, ILS accounted for, on average, about 16% of the Trust's total investment portfolio. Among the Trust's ILS positions, a World Bank-sponsored bond holding became a total loss because of the first Mexican earthquake. Subsequently, the effects of Hurricanes Harvey, Irma, and Maria eroded the values of all ILS in general, and helped pull down the Trust's performance.

In addition, a few of the portfolio's non-insurance-related investments acted as minor drags on the Trust's results, including bonds issued by wireline-based telecommunications companies Windstream and Frontier, loans to Dixie Electric, an electric company providing services to the energy industry, and to American Commercial Barge, which operates barges on major waterways.

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

In a generally positive environment for European financials, portfolio holdings that contributed positively to the Trust's performance during the period included the subordinated debt issued by BNP, a major French financial corporation, and the securitized debt of several other European-based banks. Other notable contributors to the Trust's performance were

* Diversification does not assure a profit nor protect against loss.

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

two securities that benefitted from the rising value of the fishing grounds in Peruvian waters: debt issued by China Fish Group and by Pesquera Exalmar.

Q How did the level of leverage in the Trust change over the six-month period ended October 31, 2017?

A The Trust employs leverage through a credit agreement.

At the end of the six-month period on October 31, 2017, 30.6% of the Trust's total managed assets were financed by leverage, or borrowed funds, compared with 27.9% of the Trust's total managed assets financed by leverage at the start of the period on May 1, 2017. The Trust's leverage ratio rose primarily due to an increased amount of absolute funds borrowed by the Trust early in the six-month period, and marginally due to the depreciation of the value of the Trust's holdings.

Q Did the Trust's distributions to shareholders change during the six-month period ended October 31, 2017?

A The Trust's distributions did not change during the period. However, newer portfolio investments in high-yield bonds and bank loans tended to pay yields that were lower than older investments issued when interest rates were higher, and that could have a negative impact on future distributions. In addition, as we lowered the overall risk in the portfolio, we invested in bonds and loans that offered lower yields.

Q Did the Trust invest in any derivative securities during the six-month period ended October 31, 2017? If so, did the derivatives have a notable effect on performance?

A We did invest in some forward foreign currency contracts during the period to help manage the risk of the portfolio's exposures to foreign currencies. The contracts did not have a material effect on the Trust's results. In addition to the currency forward contracts, the portfolio had a small CDS (credit default swap) position, which also had no material effect on the Trust's performance.

Q What is your investment outlook?

A Overall, we believe the global and domestic economic outlooks are good and that the investment fundamentals of credit-sensitive debt appear solid. We believe that corporations may have the financial health to pay their bond obligations and that default rates should remain low, which would support the performance of credit-sensitive securities. Nevertheless, we are

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

concerned about the relatively high current valuations of corporate bonds and other fixed-income debt after more than a year and a half of strong performance and price appreciation.

Over the coming 12 months, we anticipate that the Fed will raise the federal funds rate as many as three more times. While we think the Fed's gradual approach in tightening monetary policy should not be disruptive to the capital markets, we also anticipate that higher short-term interest rates may result in greater yields from bank loans and other floating-rate investments.

In addition, following a period in which the asset class performed relatively poorly, we anticipate that ILS securities will reprice to pay investors higher coupons, and should once again offer favorable investment opportunities.

In general, we remain optimistic about the credit markets, although we are more cautious about higher-priced securities and have moved to reduce the portfolio's credit risk by paring back exposures to high-yield debt. We've done this for two reasons. First, given the flattening yield curve, with short-term rates on the rise, we felt bank loans and other adjustable floating-rate investments offered better opportunities. Second, high-yield credit spreads have compressed, making those securities somewhat less attractive. (Credit spreads are commonly defined as the differences in yield between Treasuries and other types of fixed-income securities with similar maturities.)

We intend to keep the Trust's portfolio well diversified by sector and to remain vigilant regarding any potential changes in the investment environment.

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

Please refer to the Schedule of Investments on pages 14-48 for a full listing of Trust securities.

All investments are subject to risk, including the possible loss of principal. In the past several years, financial markets have experienced increased volatility, depressed valuations, decreased liquidity and heightened uncertainty. These conditions may continue, recur, worsen or spread.

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.

Interest rates in the U.S. recently have been historically low, so the Trust faces a heightened risk that interest rates may rise. A general rise in interest rates may cause investors to move out of fixed income securities on a large

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

scale, which could adversely affect the price and liquidity of fixed income securities.

The Trust may invest a significant amount of its total assets in illiquid securities. Illiquid securities may be difficult to dispose of at a price reflective of their value at the times when the Trust believes it is desirable to do so and the market price of illiquid securities 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 for investments purchased with the proceeds of leverage will not be sufficient to cover the cost of the leverage, which may adversely affect the return for shareholders.

The Trust is required to maintain certain regulatory and other asset coverage requirements in connection with its use of leverage. In order to maintain required asset coverage levels, the Trust may be required to reduce the amount of leverage employed by the Trust, alter the composition of its investment portfolio or take

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 9

other actions at what might be inopportune times in the market. Such actions could reduce the net earnings or returns to shareowners over time, which is likely to result in a decrease in the market value of the Trust's shares.

Certain securities in which the Trust invests, including floating rate loans, once sold, may not settle for an extended period (for example, several weeks or even longer). The Trust will not receive its sale proceeds until that time, which may constrain the Trust's ability to meet its obligations.

Insurance-linked securities may include event-linked bonds (also known as insurance-linked bonds or catastrophe bonds). The return of principal and the payment of interest on insurance-linked securities are contingent on the non-occurrence of a predefined "trigger" event that leads to physical or economic loss, such as a hurricane or an aerospace catastrophe.

These risks may increase share price volatility.

Any information in this shareholder report regarding market or economic trends or the factors influencing the Fund's historical or future performance are statements of opinion as of the date of this report. Past performance is no guarantee of future results.

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

Portfolio Summary | 10/31/17

Portfolio Diversification*

(As a percentage of total investment portfolio)

Corporate Bonds & Notes	63.5%
Senior Secured Floating Rate Loan Interests	26.4%

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

Treasury Bills	3.0%
Sovereign Debt Obligations	1.8%
Commercial Mortgage-Backed Securities	1.4%
Convertible Bond	0.9%
Preferred Stocks	0.9%
Repurchase Agreements	0.8%
Convertible Preferred Stock	0.5%
Asset Backed Securities	0.4%
Collateralized Mortgage Obligations	0.2%
Common Stocks	0.2%
Right / Warrant	0.0%+

* Includes investments in Insurance Linked Securities totaling 16.1% of total investment portfolio.

+ Amount rounds to less than 0.1%.

10 Largest Holdings

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

1. Fixed Income Trust Series 2013-A, 0.0%, 10/15/97 (144A)	3.25%
2. Gullane Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 11/30/21	1.22
3. Queen Street X Re, Ltd., 6.884% (3 Month U.S. Treasury Bill + 575 bps), 6/8/18 (144A) (Cat Bond)	1.00
4. Hercules LLC, 6.5%, 6/30/29	0.95
5. East Lane Re VI, Ltd., 3.779% (3 Month U.S. Treasury Bill + 265 bps), 3/14/18 (144A) (Cat Bond)	0.87
6. Pangaea Re Segregated Account (Artex SAC, Ltd.), Series 2017-1, Variable Rate Notes, 11/30/21	0.83
7. SIG Combibloc Holdings SCA, 7.75%, 2/15/23 (144A)	0.83
8. Minerva Luxembourg SA, 7.75%, 1/31/23 (144A)	0.83
9. Uniti Group, Inc. / CSL Capital LLC, 8.25%, 10/15/23	0.73
10. Gleneagles Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 11/30/21	0.71

** 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.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 11

Prices and Distributions | 10/31/17

Market Value per Share^

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

	10/31/17	4/30/17
Market Value	\$16.29	\$16.70
(Discount)	(6.6)%	(5.5)%

Net Asset Value per Share^

	10/31/17	4/30/17
Net Asset Value	\$17.44	\$17.68

Distributions per Share

	Net Investment Income	Short-Term Capital Gains	Long-Term Capital Gains
5/1/17 - 10/31/17	\$0.69	\$--	\$--

Yields

	10/31/17	4/30/17
30-Day SEC Yield	8.51%	9.56%

The data shown above represents past performance, which is no guarantee of future results.

^ 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. Net asset value and market value are published daily on the Trust's website at www.amundipioneer.com.

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

Performance Update | 10/31/17

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 shares of Pioneer Diversified High Income Trust during the periods shown, compared to that of the composite (50%/50%) ICE BofA ML GHY & EMP Index and S&P/LSTA Leveraged Loan Index benchmark; and compared to that of the Trust's prior benchmark, which was the composite (50%/50%) ICE BofA ML GHY & EMP Index and CS Leveraged Loan Index.

Average Annual Total Returns
(As of October 31, 2017)

Period	Net Asset Value (NAV)	Market Price	50% ICE BofA ML GHY & EMP Index/ 50% S&P/LSTA Leveraged Loan Index	50% ICE BofA ML GHY & EMP Index/ 50% CS Leveraged Loan Index
10 years	8.18%	8.61%	5.98%	5.85%
5 years	7.28	5.41	4.72	4.87%
1 year	9.69	11.17	7.20	7.29%

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

Value of \$10,000 Investment

	Pioneer Diversified High Income Trust	50% ICE BofA ML GHY & EMP Index/ 50% S&P/LSTA Leveraged Loan Index	50% ICE BofA ML GHY & EMP Index/ 50% CS Leveraged Loan Index
10/07	\$ 10,000	\$ 10,000	\$ 10,000
10/08	\$ 7,100	\$ 7,625	\$ 7,659
10/09	\$ 10,810	\$ 10,739	\$ 10,545
10/10	\$ 14,649	\$ 12,323	\$ 12,066
10/11	\$ 15,309	\$ 12,730	\$ 12,490
10/12	\$ 17,547	\$ 14,202	\$ 13,925
10/13	\$ 20,278	\$ 15,134	\$ 14,899
10/14	\$ 21,565	\$ 15,734	\$ 15,520
10/15	\$ 17,933	\$ 15,489	\$ 15,303
10/16	\$ 20,546	\$ 16,682	\$ 16,464
10/17	\$ 22,840	\$ 17,883	\$ 17,665

Call 1-800-225-6292 or visit www.amundipioneer.com for the most recent month-end

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

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.

Shares of 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 bought and sold in the open market through a stock exchange and frequently trade at prices lower than their NAV. NAV per share is total assets less total liabilities, which include preferred shares or borrowings, as applicable, 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 through open-market purchases 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 or the sale of Trust shares. Had these fees and taxes been reflected, performance would have been lower.

The ICE BofA ML GHY & EMP Index is an unmanaged index that tracks the performance of the below- and borderline 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 S&P/LSTA Leveraged Loan Index provides broad and comprehensive total return metrics of the U.S. universe of syndicated term loans. Note: Effective November 1, 2016, the Trust's composite benchmark changed from 50% ICE BofA ML GHY & EMP Index/50% CS Leveraged Loan Index, to 50% ICE BofA ML GHY & EMP Index/50% S&P/LSTA Leveraged Loan Index. The change was implemented because management believes that the S&P/LSTA Leveraged Loan Index better reflects the Trust's investment strategy.

Index returns are calculated monthly, assume reinvestment of dividends and, unlike Trust returns, do not reflect any fees, expenses or sales charges. The indices do not use leverage. It is not possible to invest directly in an index.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 13

Schedule of Investments | 10/31/17 (unaudited)

Principal Amount		Value	
USD (\$)			
299,996	UNAFFILIATED ISSUERS -- 144.1%		
	ASSET BACKED SECURITIES --		
	0.5% of Net Assets		
	Axis Equipment Finance Receivables III LLC, Series 2015-1A, Class E, 5.27%, 5/20/20 (144A)	\$	29

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

500,000	VB-S1 Issuer LLC, Series 2016-1A, Class F, 6.901%, 6/15/46 (144A)		51
<hr/>			
	TOTAL ASSET BACKED SECURITIES (Cost \$795,436)	\$	80
<hr/>			
	COLLATERALIZED MORTGAGE OBLIGATIONS -- 0.4% of Net Assets		
41,959	Global Mortgage Securitization, Ltd., Series 2004-A, Class B1, 5.25%, 11/25/32 (144A)	\$	3
82,418	Global Mortgage Securitization, Ltd., Series 2005-A, Class B3, 5.25%, 4/25/32 (144A)		2
290,000 (a)	GMAT Trust, Series 2013-1A, Class M, 5.0%, 11/25/43 (144A)		24
192,039 (b)	GMAT Trust, Series 2015-1A, Class A1, 4.25%, 9/25/20 (144A)		19
49,300	Homeowner Assistance Program Reverse Mortgage Loan Trust, Series 2013-RM1, Class A, 4.0%, 5/26/53 (144A)		4
<hr/>			
	TOTAL COLLATERALIZED MORTGAGE OBLIGATIONS (Cost \$636,445)	\$	54
<hr/>			
	COMMERCIAL MORTGAGE-BACKED SECURITIES -- 2.0% of Net Assets		
200,000 (a)	BAMLL Commercial Mortgage Securities Trust, Series 2016-FR14, Class C, 1.388%, 2/27/48 (144A)	\$	17
500,000 (a)	Banc of America Commercial Mortgage Trust, Series 2007-4, Class D, 5.907%, 2/10/51 (144A)		50
112,543 (a)	Bear Stearns Commercial Mortgage Securities Trust, Series 2005-PWR7, Class B, 5.214%, 2/11/41		11
260,000 (c)	CFCRE Mortgage Trust, Series 2015-RUM, Class E, 5.839% (1 Month USD LIBOR + 460 bps), 7/15/30 (144A)		25
500,000 (a)	Citigroup Commercial Mortgage Trust, Series 2014-GC23, Class E, 3.208%, 7/10/47 (144A)		32
500,000 (a)	COBALT CMBS Commercial Mortgage Trust, Series 2007-C3, Class C, 5.842%, 5/15/46		35
250,000 (c)	COMM Mortgage Trust, Series 2014-FL5, Class D, 5.239% (1 Month USD LIBOR + 400 bps), 10/15/31 (144A)		23
2,205 (a)	LB-UBS Commercial Mortgage Trust, Series 2006-C1, Class AJ, 5.276%, 2/15/41		
341,818 (a)	Morgan Stanley Capital I Trust, Series 2007-T25, Class AJ, 5.574%, 11/12/49		34

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

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

Principal Amount USD (\$)	Value
<hr/>	
COMMERCIAL MORTGAGE-BACKED SECURITIES -- (continued)	

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

450,000 (a)	Wachovia Bank Commercial Mortgage Trust, Series 2006-C27, Class B, 5.865%, 7/15/45	\$	45
250,000	Wells Fargo Commercial Mortgage Trust, Series 2016-BNK1, Class D, 3.0%, 8/15/49 (144A)		19
<hr/>			
	TOTAL COMMERCIAL MORTGAGE-BACKED SECURITIES (Cost \$3,055,201)	\$	2,96
<hr/>			
	SENIOR SECURED FLOATING RATE LOAN INTERESTS -- 38.0% of Net Assets*(c) AUTOMOBILES & COMPONENTS -- 1.1% Auto Parts & Equipment -- 1.0%		
232,063	American Axle & Manufacturing, Inc., Tranche B Term Loan, 3.62% (LIBOR + 225 bps), 4/6/24	\$	23
339,516	Electrical Components International, Inc., Term Loan, 6.085% (LIBOR + 475 bps), 5/28/21		34
143,248	TI Group Automotive Systems LLC, Initial US Term Loan, 3.992% (LIBOR + 275 bps), 6/30/22		14
775,512	Tower Automotive Holdings USA LLC, Initial Term Loan, 4.0% (LIBOR + 275 bps), 3/7/24		78
		<hr/>	<hr/>
		\$	1,49
<hr/>			
106,796	Automobile Manufacturers -- 0.1% Federal-Mogul Corp., Tranche C Term Loan, 4.99% (LIBOR + 375 bps), 4/15/21	\$	10
		<hr/>	<hr/>
	Total Automobiles & Components	\$	1,60
<hr/>			
	CAPITAL GOODS -- 6.1% Aerospace & Defense -- 1.5%		
992,500 (d)	ADS Tactical, Inc., Term Loan, 8.833% (LIBOR + 750 bps), 12/31/22	\$	99
296,222	DAE Aviation Holdings, Inc., Initial Term Loan, 4.99% (LIBOR + 375 bps), 7/7/22		29
461,428	DynCorp International, Inc., Term Loan B2, 7.75% (LIBOR + 600 bps), 7/7/20		46
225,420	Vencore, Inc. (fka SI Organization, Inc.), First Lien Initial Term Loan, 6.083%, (LIBOR + 475 bps) 11/23/19		22
157,600	WP CPP Holdings LLC, Second Lien Term Loan B-1, 9.13% (LIBOR + 775 bps), 4/30/21		15
		<hr/>	<hr/>
		\$	2,13
<hr/>			
	Building Products -- 1.1%		
872,411	Builders FirstSource, Inc., Refinancing Term Loan, 4.333% (LIBOR + 300 bps), 2/29/24	\$	87
250,000	NCI Building Systems, Inc., Tranche B Term Loan, 4.238% (LIBOR + 300 bps), 6/24/22		25
298,473	Summit Materials LLC, Restatement Effective Date Term Loan, 3.992% (LIBOR + 275 bps), 7/18/22		30

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 15

Schedule of Investments | 10/31/17 (unaudited) (continued)

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

Principal Amount USD (\$)		Value
Building Products -- (continued)		
249,375	Unifrax I LLC, Initial Dollar Term Loan, 4.9% (LIBOR + 375 bps), 4/4/24	\$ 25
		\$ 1,68
Construction Machinery & Heavy Trucks -- 0.9%		
398,000	Clark Equipment Co. (aka Doosan Bobcat, Inc.), Tranche B Term Loan, 4.083% (LIBOR + 275 bps), 5/18/24	\$ 40
496,875	Commercial Vehicle Group, Inc., Term Loan B, 7.242% (LIBOR + 600 bps), 3/30/23	50
382,200	Navistar, Inc., Tranche B Term Loan, 5.24% (LIBOR + 400 bps), 8/7/20	38
		\$ 1,28
Electrical Components & Equipment -- 0.5%		
248,711	Pelican Products, Inc., First Lien Term Loan, 5.583% (LIBOR + 425 bps), 4/10/20	\$ 25
414,399	WireCo WorldGroup, Inc., First Lien Initial Term Loan B, 6.817% (LIBOR + 550 bps), 9/29/23	41
		\$ 66
Industrial Conglomerates -- 0.8%		
84,214	CeramTec Service GmbH (CeramTec Acquisition Corp.), Dollar Term B-3 Loan, 4.067% (LIBOR + 275 bps), 8/30/20	\$ 8
277,676	CeramTec Service GmbH (CeramTec Acquisition Corp.), Initial Dollar Term B-1 Loan, 4.067% (LIBOR + 275 bps), 8/30/20	27
34,491	CeramTec Service GmbH (CeramTec Acquisition Corp.), Initial Dollar Term B-2 Loan, 4.067% (LIBOR + 275 bps), 8/30/20	3
594,248	DTI Holdco, Inc., Initial Term Loan, 6.63% (LIBOR + 525 bps), 10/2/23	58
248,706	Filtration Group Corp., First Lien Term Loan, 4.38% (LIBOR + 300 bps), 11/23/20	25
		\$ 1,23
Industrial Machinery -- 0.5%		
187,625(e)	Blount International, Inc., Refinancing Term Loan, 4/12/23	\$ 18
489,778	NN, Inc., Tranche B Term Loan, 5.492% (LIBOR + 425 bps), 10/19/22	49
		\$ 67
Trading Companies & Distributors -- 0.8%		
497,462	Beacon Roofing Supply, Inc., Initial Term Loan, 3.989% (LIBOR + 275 bps), 10/1/22	\$ 50
500,000(e)	Beacon Roofing Supply, Inc., Term Loan B, 10/11/24	50
138,021	WESCO Distribution, Inc., Tranche B-1 Term Loan, 6.25% (LIBOR + 300 bps), 12/12/19	13
		\$ 1,14

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

Total Capital Goods \$ 8,82

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

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

Principal Amount USD (\$)		Value
248,654	COMMERCIAL & PROFESSIONAL SERVICES -- 0.3% Environmental & Facilities Services -- 0.2% Infiltrator Water Technologies LLC, Term B-1 Loan, 4.333% (LIBOR + 300 bps), 5/27/22	\$ 25
125,982	Security & Alarm Services -- 0.1% Prime Security Services Borrower LLC, First Lien 2016-2 Refinancing Term B-1 Loan, 3.992% (LIBOR + 275 bps), 5/2/22	\$ 12
	Total Commercial & Professional Services	\$ 37
522,133	CONSUMER DURABLES & APPAREL -- 0.8% Home Furnishings -- 0.3% Serta Simmons Bedding LLC, Second Lien Initial Term Loan, 9.312% (LIBOR + 800 bps), 11/8/24	\$ 49
350,000	Leisure Products -- 0.5% Bass Pro Group LLC, Initial Term Loan, 6.242% (LIBOR + 500 bps), 9/25/24	\$ 34
361,864	Bombardier Recreational Products, Inc., Term B Loan, 3.74% (LIBOR + 250 bps), 6/30/23	\$ 36
		\$ 70
	Total Consumer Durables & Apparel	\$ 1,20
169,267	CONSUMER SERVICES -- 3.0% Casinos & Gaming -- 0.5% Eldorado Resorts, Inc., Term Loan, 3.5% (LIBOR + 225 bps), 4/17/24	\$ 16
557,792	Scientific Games International, Inc., Term Loan B-4, 4.522% (LIBOR + 325 bps), 8/14/24	\$ 56
		\$ 73
188,396	Education Services -- 1.0% Cengage Learning Acquisitions, Inc., 2016 Refinancing Term Loan, 5.485% (LIBOR + 425 bps), 6/7/23	\$ 17
735,075	KUEHG Corp. (fka KC MergerSub, Inc.), Term B-2 Loan, 5.083% (LIBOR + 375 bps), 8/12/22	\$ 73
600,109	Laureate Education, Inc., Series 2024 Term Loan, 5.742% (LIBOR + 450 bps), 4/26/24	\$ 60
		\$ 1,51

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

275,522	Leisure Facilities -- 0.2% Fitness International LLC, Term B Loan, 4.742% (LIBOR + 350 bps), 7/1/20	\$	27
347,522	Restaurants -- 0.4% 1011778 BC Unlimited Liability Co. (New Red Finance, Inc.) (aka Burger King/Tim Hortons), Term B-3 Loan, 3.583% (LIBOR + 225 bps), 2/16/24	\$	34
242,250	Golden Nugget, Inc. (aka Landry's, Inc.), Initial Term Loan B, 4.554% (LIBOR + 325 bps), 10/4/23	\$	24
		\$	59

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

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

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)		Value
748,125	Specialized Consumer Services -- 0.9% Constellis Holdings LLC, First Lien Term B Loan, 6.333% (LIBOR + 500 bps), 4/21/24	\$ 74
531,199	Creative Artists Agency LLC, Refinancing Term Loan, 4.739% (LIBOR + 350 bps), 2/15/24	53
		\$ 1,28
	Total Consumer Services	\$ 4,40
246,875	DIVERSIFIED FINANCIALS -- 0.9% Diversified Capital Markets -- 0.2% Freedom Mortgage Corp., Initial Term Loan, 6.956% (LIBOR + 550 bps), 2/23/22	\$ 25
190,266	Investment Banking & Brokerage -- 0.2% Duff & Phelps Corp., Restatement Term Loan, 4.607% (LIBOR + 325 bps), 10/12/24	\$ 19
179,500	LPL Holdings, Inc., Tranche B Term Loan, 3.576% (LIBOR + 225 bps), 9/23/24	18
		\$ 37
243,750	Specialized Finance -- 0.5% DBRS, Ltd., Initial Term Loan, 6.567% (LIBOR + 525 bps), 3/4/22	\$ 24
498,750	Peraton Corp. (fka MHVC Acquisition Corp.), First Lien Initial Term Loan, 6.5% (LIBOR + 525 bps), 4/29/24	50
		\$ 74

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

	Total Diversified Financials	\$	1,37
	ENERGY -- 2.1%		
250,000	Oil & Gas Drilling -- 0.3%		
	Gavilan Resources LLC, Second Lien Initial Term Loan, 7.238% (LIBOR + 600 bps), 3/1/24	\$	243
250,000 (e)	Traverse Midstream Partners LLC, Advance Term Loan, 9/27/24		25
		\$	49
	Oil & Gas Equipment & Services -- 0.2%		
533,145	FR Dixie Acquisition Corp., Term Loan, 6.067% (LIBOR + 475 bps), 12/18/20	\$	32
	Oil & Gas Exploration & Production -- 0.6%		
250,000	California Resources Corp., Term Loan, 11.612% (LIBOR + 1038 bps), 12/31/21	\$	26
550,000	Chesapeake Energy Corp., Term Loan, Class A, 8.814% (LIBOR + 750 bps), 8/23/21		59
		\$	86
	Oil & Gas Storage & Transportation -- 0.5%		
672,959	Gulf Finance LLC, Tranche B Term Loan, 6.59% (LIBOR + 525 bps), 8/25/23	\$	65

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

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

Principal Amount USD (\$)		Value
	Pipeline -- 0.5%	
633,413	Summit Midstream Partners Holdings LLC, Term Loan Credit Facility, 7.242% (LIBOR + 600 bps), 5/13/22	\$ 64
	Total Energy	\$ 2,98
	FOOD, BEVERAGE & TOBACCO -- 1.3%	
	Agricultural Products -- 0.4%	
98,746	NVA Holdings, Inc., First Lien Term B-2 Loan, 4.833% (LIBOR + 350 bps), 8/14/21	\$ 9
414,286	NVA Holdings, Inc., Second Lien Term Loan, 8.333% (LIBOR + 700 bps), 8/14/22	41
		\$ 51
	Packaged Foods & Meats -- 0.9%	
495,000	Amplify Snack Brands, Inc., Term Loan, 6.74% (LIBOR + 550 bps), 9/2/23	\$ 49
468,315	Dole Food Co., Inc., Tranche B Term Loan, 4.022% (LIBOR + 275 bps/PRIME + 175 bps), 4/6/24	47

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

350,000	Give and Go Prepared Foods Corp. (fka GG Foods Acquisition Corp.), First Lien 2017 Term Loan, 5.564% (LIBOR + 425 bps), 7/29/23		35
		\$	1,31
	Total Food, Beverage & Tobacco	\$	1,83
<hr/>			
	HEALTH CARE EQUIPMENT & SERVICES -- 2.9%		
	Health Care Facilities -- 0.6%		
151,216	CHS/Community Health Systems, Inc., Incremental 2019 Term G Loan, 4.067% (LIBOR + 275 bps), 12/31/19	\$	14
450,472	CHS/Community Health Systems, Inc., Incremental 2021 Term H Loan, 4.317% (LIBOR + 300 bps), 1/27/21		43
311,303	Kindred Healthcare, Inc., New Term Loan, 4.875% (LIBOR + 350 bps), 4/9/21		31
		\$	89
<hr/>			
	Health Care Services -- 1.3%		
250,000	Envision Healthcare Corp. (fka Emergency Medical Services Corp.), Initial Term Loan, 4.25% (LIBOR + 300 bps), 12/1/23	\$	25
248,747	ExamWorks Group, Inc. (fka Gold Merger Co., Inc.), Term B-1 Loan, 4.492% (LIBOR + 325 bps), 7/27/23		25
200,000	Genoa Healthcare Co., LLC, Second Lien Initial Term Loan, 9.242% (LIBOR + 800 bps), 10/28/24		20
343,000	HC Group Holdings III, Inc., First Lien Initial Term Loan, 6.317% (LIBOR + 500 bps), 4/7/22		34
197,825	National Mentor Holdings, Inc., Tranche B Term Loan, 4.333% (LIBOR + 300 bps), 1/31/21		19
198,492	nThrive, Inc. (fka Precyse Acquisition Corp.), Additional Term B-2 Loan, 5.742% (LIBOR + 450 bps), 10/20/22		19

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 19

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)		Value
<hr/>		
493,750	Health Care Services -- (continued) Prospect Medical Holdings, Inc., Term Loan, 7.5% (LIBOR + 600 bps), 6/30/22	\$ 50
		\$ 1,95
<hr/>		
184,538	Health Care Supplies -- 0.5% Kinetic Concepts, Inc., Dollar Term Loan, 4.583% (LIBOR + 325 bps), 2/2/24	\$ 18
497,500	Sterigenics-Nordion Holdings LLC, Incremental Term	

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

	Loan, 4.242% (LIBOR + 300 bps), 5/15/22		49
		\$	68
248,750	Health Care Technology -- 0.5% Change Healthcare Holdings, Inc. (fka Emdeon, Inc.), Closing Date Term Loan, 3.992% (LIBOR + 275 bps), 3/1/24	\$	25
375,258(d)	Medical Card System, Inc., Term Loan, 1.859% (LIBOR + 50 bps), 5/31/19		24
168,725	Quintiles IMS Inc., Term B-1 Dollar Loan, 3.333% (LIBOR + 200 bps), 3/7/24		16
		\$	66
	Total Health Care Equipment & Services	\$	4,19
149,625	HOUSEHOLD & PERSONAL PRODUCTS -- 1.2% Cleaning Products -- 0.1% Parfums Holding Co., Inc., First Lien Initial Term Loan, 6.083% (LIBOR + 475 bps), 6/30/24	\$	15
350,000	Household Products -- 0.5% Alphabet Holding Co., Inc. (aka Nature's Bounty), First Lien Initial Term Loan, 4.833% (LIBOR + 350 bps), 9/26/24	\$	34
399,000	WKI Holding Co., Inc., Initial Term Loan, 5.311% (LIBOR + 400 bps), 5/1/24		40
		\$	74
248,091	Personal Products -- 0.6% Atrium Innovations, Inc., First Lien Initial Tranche B-1 Term Loan, 4.833% (LIBOR + 350 bps), 2/15/21	\$	24
770,112	Revlon Consumer Products Corp., Initial Term Loan B, 4.742% (LIBOR + 350 bps), 9/7/23		66
		\$	91
	Total Household & Personal Products	\$	1,81
491,392	INSURANCE -- 1.9% Life & Health Insurance -- 0.4% Integro, Inc., First Lien Initial Term Loan, 7.062% (LIBOR + 575 bps), 10/31/22	\$	49
164,388	Multi-Line Insurance -- 0.1% Alliant Holdings I LLC, Term Loan B, 4.49% (LIBOR + 325 bps), 8/12/22	\$	16

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

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

Principal
Amount

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

USD (\$)		Value
497,500	Property & Casualty Insurance -- 1.4% Acrisure LLC, First Lien Term B Loan, 6.272% (LIBOR + 500 bps), 11/22/23	\$ 50
593,765	Confie Seguros Holding II Co., Second Lien Term Loan, 11.25% (LIBOR + 1000 bps), 5/8/19	58
508,331	Confie Seguros Holding II Co., Term B Loan, 6.992% (LIBOR + 575 bps), 4/19/22	50
500,000	USI, Inc. (fka Compass Investors, Inc.), Initial Term Loan, 4.314% (LIBOR + 300 bps), 5/16/24	50
		\$ 2,08
	Total Insurance	\$ 2,74
	MATERIALS -- 4.8%	
117,750	Construction Materials -- 0.4% 84 Lumber Co., Initial Term Loan, 6.988% (LIBOR + 575 bps), 10/25/23	\$ 11
496,241	American Bath Group LLC, First Lien Replacement Term Loan, 6.583% (LIBOR + 525 bps), 9/30/23	50
		\$ 61
	Diversified Chemicals -- 1.3%	
311,675	Allnex (Luxembourg) & Cy SCA (fka AI Chem & Cy SCA), Tranche B-2 Term Loan, 4.567% (LIBOR + 325 bps), 9/13/23	\$ 31
234,813	Allnex (Luxembourg) & Cy SCA (fka AI Chem & Cy SCA), Tranche B-3 Term Loan, 4.567% (LIBOR + 325 bps), 9/13/23	23
292,220	Chemours Co., Tranche B-1 US Dollar Term Loan, 3.75% (LIBOR + 250 bps), 5/12/22	29
366,686	Tata Chemicals North America, Term Loan, 4.125% (LIBOR + 275 bps), 8/7/20	36
128,488	Tronox, Ltd., First Lien Blocked Dollar Term Loan, 4.323% (LIBOR + 300 bps), 9/23/24	12
296,512	Tronox, Ltd., First Lien Initial Dollar Term Loan, 4.323% (LIBOR + 300 bps), 9/23/24	29
269,526	Univar USA, Inc., Term B-2 Loan, 3.992% (LIBOR + 275 bps), 7/1/22	27
		\$ 1,91
	Diversified Metals & Mining -- 0.4%	
495,000	Global Brass and Copper, Inc., Initial Term Loan, 4.5% (LIBOR + 325 bps), 7/18/23	\$ 50
72,335(f)	PT Bakrie & Brothers TBK, Term Loan B, 8.152% (LIBOR + 800 bps), 9/28/17	
		\$ 50

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

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

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)		Value
225,801	Metal & Glass Containers -- 0.9% Coveris Holdings SA (fka Exopack Holdings SA), USD Term B-1 Loan, 5.583% (LIBOR + 425 bps), 6/29/22	\$ 22
473,204	Tank Holding Corp., Initial Term Loan, 7.5% (LIBOR + 425 bps), 3/16/22	47
598,500	Twist Beauty International Holdings SA, Facility B, 5.164% (LIBOR + 375 bps), 4/22/24	59
		\$ 1,30
515,911	Paper Packaging -- 0.5% Caraustar Industries, Inc., Refinancing Term Loan, 6.833% (LIBOR + 550 bps), 3/14/22	\$ 52
247,500	Expera Specialty Solutions LLC, Term Loan B, 5.492% (LIBOR + 425 bps), 11/3/23	24
		\$ 77
166,062	Paper Products -- 0.3% Ranpak Corp., Second Lien Initial Term Loan, 8.487% (LIBOR + 725 bps), 10/3/22	\$ 16
198,473	Ranpak Corp., Tranche B-1 USD Term Loan, 4.492% (LIBOR + 325 bps), 10/1/21	19
		\$ 36
288,947	Specialty Chemicals -- 0.7% MacDermid, Inc. (Platform Specialty Products Corp.), Tranche B-6 Term Loan, 3.742% (LIBOR + 250 bps), 6/7/20	\$ 29
644,992	Omnova Solutions, Inc., Term B-2 Loan, 5.492% (LIBOR + 425 bps), 8/25/23	65
		\$ 94
493,769	Steel -- 0.3% Zekelman Industries, Inc. (fka JMC Steel Group, Inc.), Term Loan, 4.073%, (LIBOR + 275 bps) 6/14/21	\$ 49
	Total Materials	\$ 6,91
247,505	MEDIA -- 2.6% Advertising -- 0.5% CB Poly Investments LLC, First Lien Closing Date Term Loan, 5.992% (LIBOR + 475 bps), 8/16/23	\$ 24
500,000 (e)	Red Ventures LLC, Term Loan, 10/18/24	49
		\$ 74
163,365	Broadcasting -- 0.9% A-L Parent LLC (aka Learfield Communications), First Lien Initial Term Loan, 4.5% (LIBOR + 325 bps), 12/1/23	\$ 16

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

199,000 CSC Holdings LLC (fka CSC Holdings, Inc. (Cablevision)),
March 2017 Refinancing Term Loan, 3.489% (LIBOR
+ 225 bps), 7/17/25

19

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

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

Principal Amount USD (\$)		Value
	Broadcasting -- (continued)	
220,000	Hubbard Radio LLC, Term Loan, 4.5% (LIBOR + 325 bps), 5/27/22	\$ 22
291,000	MediArena Acquisition BV (fka AP NMT Acquisition BV), First Lien Dollar Term B Loan, 7.085% (LIBOR + 575 bps), 8/13/21	28
450,089	Univision Communications, Inc., First Lien 2017 Replacement Repriced Term Loan, 3.992% (LIBOR + 275 bps), 3/15/24	44
		\$ 1,31
	Publishing -- 1.2%	
491,272	DH Publishing LP, Term B-5 Loan, 3.738% (LIBOR + 250 bps), 8/21/23	\$ 49
317,688	Houghton Mifflin Holdings, Inc., Term Loan, 4.242% (LIBOR + 300 bps), 5/28/21	30
32,504	Lee Enterprises, Inc., First Lien Term Loan, 7.492% (LIBOR + 625 bps), 3/31/19	3
913,438	McGraw-Hill Global Education Holdings LLC, First Lien Term B Loan, 5.242% (LIBOR + 400 bps), 5/4/22	90
		\$ 1,74
	Total Media	\$ 3,80
	PHARMACEUTICALS, BIOTECHNOLOGY & LIFE SCIENCES -- 0.9%	
364,763	Life Sciences Tools & Services -- 0.3% Catalent Pharma Solutions, Inc. (fka Cardinal Health 409, Inc.), Dollar Term Loan, 3.492% (LIBOR + 225 bps), 5/20/24	\$ 36
	Pharmaceuticals -- 0.6%	
497,500	Horizon Pharma, Inc., Term Loan B, 4.5% (LIBOR + 325 bps), 3/29/24	\$ 49
362,943	VRX Escrow Corp., Series F Tranche B Term Loan, 5.99% (LIBOR + 475 bps), 4/1/22	37
		\$ 87
	Total Pharmaceuticals, Biotechnology & Life Sciences	\$ 1,23
	REAL ESTATE -- 0.5%	

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

	Retail REITs -- 0.2%		
271,136	DTZ US Borrower LLC, First Lien 2015-1 Additional Term Loan, 4.567% (LIBOR + 325 bps), 11/4/21	\$	27
42,553	DTZ US Borrower LLC, Second Lien Initial Term Loan, 9.63% (LIBOR + 825 bps), 11/4/22		4

		\$	31

	Specialized REIT -- 0.3%		
491,278	Communications Sales & Leasing, Inc. (CSL Capital LLC), Shortfall Term Loan, 4.242% (LIBOR + 300 bps), 10/24/22	\$	47

	Total Real Estate	\$	78

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 23

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)		Value	

	RETAILING -- 0.5%		
	Automotive Retail -- 0.4%		
633,821	CWGS Group LLC, Term Loan, 4.981% (LIBOR + 300 bps), 11/8/23	\$	64

	Specialty Stores -- 0.1%		
154,522	PetSmart, Inc., Tranche B-2 Term Loan, 4.24% (LIBOR + 300 bps), 3/11/22	\$	13

	Total Retailing	\$	77

	SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT -- 0.9%		
	Semiconductors -- 0.9%		
494,933	MACOM Technology Solutions Holdings, Inc. (fka M/A-COM Technology Solutions Holdings, Inc.), Initial Term Loan, 3.489% (LIBOR + 225 bps), 5/17/24	\$	49
248,741	Micron Technology, Inc., Term Loan, 3.39% (LIBOR + 200 bps), 4/26/22		25
547,990	Mirion Technologies (Finance) LLC (Mirion Technologies, Inc.), First Lien Initial Term Loan, 6.083% (LIBOR + 475 bps), 3/31/22		54

	Total Semiconductors & Semiconductor Equipment	\$	1,29

	SOFTWARE & SERVICES -- 2.4%		
	Application Software -- 0.5%		
248,128	Greeneden US Holdings I LLC, Tranche B-2 Dollar Term Loan, 5.083% (LIBOR + 375 bps), 12/1/23	\$	24
500,000	STG-Fairway Acquisitions, Inc., First Lien Term Loan,		

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

	6.583% (LIBOR + 525 bps), 6/30/22		48
		\$	73
230,733	Data Processing & Outsourced Services -- 0.2% First Data Corp., 2024 New Dollar Term Loan, 3.738% (LIBOR + 250 bps), 4/26/24	\$	23
52,000	Home Entertainment Software -- 0.0%+ MA FinanceCo., LLC (aka Micro Focus International Plc), Tranche B-3 Term Loan, 3.989% (LIBOR + 275 bps), 6/21/24	\$	5
240,703	Internet Software & Services -- 0.3% Avast Holding BV, Initial Refinancing Dollar Term Loan, 4.583% (LIBOR + 325 bps), 9/30/23	\$	24
154,000	Blucora, Inc., Initial Term Loan, 5.073% (LIBOR + 375 bps), 5/22/24	\$	15
		\$	39
348,749	IT Consulting & Other Services -- 1.2% Go Daddy Operating Co., LLC (GD Finance Co., Inc.), Initial Term Loan, 3.742% (LIBOR + 250 bps), 2/15/24	\$	35
248,752	Rackspace Hosting, Inc., First Lien 2017 Refinancing Term B Loan, 4.311% (LIBOR + 300 bps), 11/3/23		24

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

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

Principal Amount USD (\$)		Value
300,000	IT Consulting & Other Services -- (continued) Rocket Software, Inc., Second Lien Term Loan, 10.833% (LIBOR + 950 bps), 10/14/24	\$ 30
612,500	Sitel Worldwide Corp., First Lien Term B-1 Loan, 6.875% (LIBOR + 550 bps), 9/18/21	61
249,375	Tempo Acquisition LLC, Initial Term Loan, 4.242% (LIBOR + 300 bps), 5/1/24	25
		\$ 1,76
348,000	Systems Software -- 0.2% Seattle Spinco, Inc. (aka Micro Focus International Plc), Initial Term Loan, 3.988% (LIBOR + 275 bps), 6/21/24	\$ 34
	Total Software & Services	\$ 3,53
750,000	TELECOMMUNICATION SERVICES -- 1.2% Integrated Telecommunication Services -- 0.8% CenturyLink, Inc., Initial Term B Loan, 2.75% (Ticking Fee + 275 bps), 1/31/25	\$ 74

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

486,811	Level 3 Financing, Inc., Tranche B 2024 Term Loan, 3.489% (LIBOR + 225 bps), 2/22/24	48
		\$ 1,22
200,000	Wireless Telecommunication Services -- 0.4% Digicel International Finance, Ltd., First Lien Initial Term B Loan, 5.07% (LIBOR + 375 bps), 5/27/24	20
348,250	Sprint Communications, Inc., Initial Term Loan, 3.75% (LIBOR + 250 bps), 2/2/24	34
		\$ 55
	Total Telecommunication Services	\$ 1,78
575,470	TRANSPORTATION -- 1.1% Marine -- 0.6% Commercial Barge Line Co., Initial Term Loan, 9.992% (LIBOR + 875 bps), 11/12/20	44
487,500	Navios Maritime Partners LP, Initial Term Loan, 6.32% (LIBOR + 500 bps), 9/14/20	48
		\$ 93
693,696	Trucking -- 0.5% YRC Worldwide, Inc., Tranche B-1 Term Loan, 9.742% (LIBOR + 850 bps), 7/26/22	68
	Total Transportation	\$ 1,61
561,240	UTILITIES -- 1.5% Electric Utilities -- 0.8% APLP Holdings LP, Term Loan B, 0.0% (LIBOR + 350 bps), 4/13/23	56
487,684	TPF II Power LLC (TPF II Convert Midco LLC), Term Loan, 4.992% (LIBOR + 375 bps), 10/2/23	49
		\$ 1,05

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 25

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)		Value
453,786	Independent Power Producers & Energy Traders -- 0.7% Dynegy, Inc., Tranche C-1 Term Loan, 4.492% (LIBOR + 325 bps), 2/7/24	45
594,162	TerraForm AP Acquisition Holdings LLC, Term Loan, 5.583% (LIBOR + 425 bps), 6/27/22	60

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

			\$	1,05
		Total Utilities	\$	2,11
		TOTAL SENIOR SECURED FLOATING RATE LOAN INTERESTS (Cost \$55,313,007)	\$	55,23
		CORPORATE BONDS & NOTES -- 91.6% of Net Assets		
		AUTOMOBILES & COMPONENTS -- 0.8%		
		Auto Parts & Equipment -- 0.8%		
EUR	165,000 (g)	IHO Verwaltungs GmbH, 3.25% (4.0% PIK 0.0% cash), 9/15/23 (144A)	\$	20
EUR	395,000 (g)	IHO Verwaltungs GmbH, 3.75% (4.5% PIK 0.0% cash), 9/15/26 (144A)		49
	454,000	International Automotive Components Group SA, 9.125%, 6/1/18 (144A)		45
		Total Automobiles & Components	\$	1,14
		BANKS -- 5.1%		
		Diversified Banks -- 4.2%		
	200,000	Access Bank Plc, 10.5%, 10/19/21 (144A)	\$	22
	300,000 (a)	Banco de Galicia y Buenos Aires, 8.25% (5 Year CMT Index + 716 bps), 7/19/26 (144A)		33
	200,000 (a) (h)	Banco Santander SA, 6.38% (5 Year USD Swap Rate + 479 bps)		20
	950,000 (a) (h)	BNP Paribas SA, 7.625% (5 Year USD Swap Rate + 631 bps) (144A)		1,06
	240,000 (a) (h)	Goldman Sachs Capital II, 4.0% (3 Month USD LIBOR + 77 bps)		21
	350,000 (a) (h)	ING Groep NV, 6.5% (5 Year USD Swap Rate + 445 bps)		38
	225,000 (a) (h)	Intesa Sanpaolo S.p.A., 7.7% (5 Year USD Swap Rate + 546 bps) (144A)		24
ARS	5,842,000 (i)	Letras del Banco Central de la Republica Argentina, 4/18/18		29
	250,000 (a) (h)	Royal Bank of Scotland Group Plc, 8.0% (5 Year USD Swap Rate + 572 bps)		28
	400,000 (a) (h)	Royal Bank of Scotland Group Plc, 8.625% (5 Year USD Swap Rate + 760 bps)		45
	200,000	Sberbank of Russia Via SB Capital SA, 5.25%, 5/23/23 (144A)		20
	460,000 (a) (h)	Societe Generale SA, 7.375% (5 Year USD Swap Rate + 624 bps) (144A)		50

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

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

Principal	
Amount	
USD (\$)	Value

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

Diversified Banks -- (continued)				
420,000	Turkiye Vakiflar Bankasi TAO, 5.625%, 5/30/22 (144A)	\$	41	
344,000 (a)	Turkiye Vakiflar Bankasi TAO, 8.0% (5 Year USD Swap Rate + 585 bps), 11/1/27 (144A)		35	
750,000	UBS AG, 7.625%, 8/17/22		88	
		\$	6,08	

Thrifts & Mortgage Finance -- 0.9%				
880,000	Financiera Independencia SAB de CV SOFOM ENR, 8.0%, 7/19/24 (144A)	\$	91	
450,000	Vnesheconombank Via VEB Finance Plc, 6.902%, 7/9/20 (144A)		48	
		\$	1,39	

Total Banks				
		\$	7,47	

CAPITAL GOODS -- 2.1%				
Agricultural & Farm Machinery -- 0.3%				
475,000	Titan International, Inc., 6.875%, 10/1/20	\$	48	

Construction & Engineering -- 0.3%				
455,000	Tutor Perini Corp., 6.875%, 5/1/25 (144A)	\$	49	

Construction Machinery & Heavy Trucks -- 0.2%				
229,000	Meritor, Inc., 6.75%, 6/15/21	\$	23	

Industrial Conglomerates -- 0.7%				
121,317 (g)	Boart Longyear Management Pty, Ltd., 10.0% (12.0% PIK 10.0% cash), 12/31/22	\$	10	
490,000	CSVC Acquisition Corp., 7.75%, 6/15/25 (144A)		47	
365,000	JB Poindexter & Co., Inc., 9.0%, 4/1/22 (144A)		38	
5,000	Park-Ohio Industries, Inc., 6.625%, 4/15/27			
		\$	96	

Industrial Machinery -- 0.6%				
435,000	Apex Tool Group LLC, 7.0%, 2/1/21 (144A)	\$	41	
450,000	Cleaver-Brooks, Inc., 8.75%, 12/15/19 (144A)		46	
		\$	87	

Total Capital Goods				
		\$	3,05	

COMMERCIAL & PROFESSIONAL SERVICES -- 0.2%				
Security & Alarm Services -- 0.2%				
290,000	Prime Security Services Borrower LLC / Prime Finance, Inc., 9.25%, 5/15/23 (144A)	\$	32	

Total Commercial & Professional Services				
		\$	32	

CONSUMER DURABLES & APPAREL -- 1.1%				
Homebuilding -- 0.8%				
135,000	Beazer Homes USA, Inc., 8.75%, 3/15/22	\$	15	
350,000	Brookfield Residential Properties, Inc., 6.375%, 5/15/25 (144A)		36	

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

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 27

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)			Value
<hr/>			
		Homebuilding -- (continued)	
	250,000	KB Home, 7.0%, 12/15/21	\$ 28
	340,000	KB Home, 7.625%, 5/15/23	39
			<hr/>
			\$ 1,19
<hr/>			
		Textiles -- 0.3%	
	460,000	Springs Industries, Inc., 6.25%, 6/1/21	\$ 47
			<hr/>
			\$ 1,66
<hr/>			
		CONSUMER SERVICES -- 3.4%	
		Casinos & Gaming -- 1.8%	
EUR	750,000	Intralot Capital Luxembourg SA, 6.75%, 9/15/21 (144A)	\$ 93
	911,090 (f) (g)	Mashantucket Western Pequot Tribe, 6.5% (5.5% PIK 1.0% cash), 7/1/36	
	365,000	MGM Resorts International, 6.0%, 3/15/23	40
	100,000	Scientific Games International, Inc., 6.25%, 9/1/20	10
	1,050,000	Scientific Games International, Inc., 10.0%, 12/1/22	1,16
			<hr/>
			\$ 2,60
<hr/>			
		Hotels, Resorts & Cruise Lines -- 0.8%	
	320,000	Hilton Grand Vacations Borrower LLC / Hilton Grand Vacations Borrower, Inc., 6.125%, 12/1/24 (144A)	\$ 35
	250,000	Silversea Cruise Finance, Ltd., 7.25%, 2/1/25 (144A)	26
	266,000	Viking Cruises, Ltd., 5.875%, 9/15/27 (144A)	26
	245,000	Viking Cruises, Ltd., 6.25%, 5/15/25 (144A)	25
			<hr/>
			\$ 1,14
<hr/>			
		Restaurants -- 0.3%	
	495,000	Golden Nugget, Inc., 6.75%, 10/15/24 (144A)	\$ 50
<hr/>			
		Specialized Consumer Services -- 0.5%	
	160,000	Monitronics International, Inc., 9.125%, 4/1/20	\$ 13
	540,000	StoneMor Partners LP / Cornerstone Family Services WV, 7.875%, 6/1/21	51
			<hr/>
			\$ 65
<hr/>			
			\$ 4,90
<hr/>			
		DIVERSIFIED FINANCIALS -- 6.8%	
		Consumer Finance -- 1.0%	
	600,000	Credito Real SAB de CV SOFOM ER, 7.25%, 7/20/23 (144A)	\$ 63
	445,000	Jefferies Finance LLC / JFIN Co-Issuer Corp., 7.375%, 4/1/20 (144A)	45

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

440,000	TMX Finance LLC / TitleMax Finance Corp., 8.5%, 9/15/18 (144A)	40
		\$ 1,49
<hr/>		
6,000,000 (b) (d)	Other Diversified Financial Services -- 4.5% Fixed Income Trust Series 2013-A, 0.0%, 10/15/97 (144A)	\$ 6,55
<hr/>		

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

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

Principal Amount USD (\$)		Value
<hr/>		
175,000	Specialized Finance -- 0.5% Nationstar Mortgage LLC / Nationstar Capital Corp., 6.5%, 7/1/21	\$ 17
580,000	Nationstar Mortgage LLC / Nationstar Capital Corp., 6.5%, 6/1/22	59
		\$ 77
<hr/>		
200,000	Supranational -- 0.8% Banque Ouest Africaine de Developpement, 5.0%, 7/27/27 (144A)	\$ 20
680,000	Banque Ouest Africaine de Developpement, 5.5%, 5/6/21 (144A)	72
IDR 2,730,000,000	European Investment Bank, 7.2%, 7/9/19 (144A)	20
		\$ 1,13
<hr/>		
	Total Diversified Financials	\$ 9,95
<hr/>		
	ENERGY -- 14.4%	
	Integrated Oil & Gas -- 2.2%	
145,000	Ascent Resources Utica Holdings LLC / ARU Finance Corp., 10.0%, 4/1/22 (144A)	\$ 15
410,000	Petrobras Global Finance BV, 6.25%, 3/17/24	43
650,000	Petrobras Global Finance BV, 7.375%, 1/17/27	72
MXN 540,000	Petroleos Mexicanos, 7.19%, 9/12/24 (144A)	2
995,000	YPF SA, 6.95%, 7/21/27 (144A)	1,06
325,000	YPF SA, 8.875%, 12/19/18 (144A)	34
ARS 7,750,000	YPF SA, 16.5%, 5/9/22 (144A)	41
		\$ 3,16
<hr/>		
	Oil & Gas Drilling -- 0.6%	
442,000	Rowan Cos., Inc., 5.4%, 12/1/42	\$ 33
62,000	Rowan Cos., Inc., 5.85%, 1/15/44	4
289,904	Shelf Drilling Holdings, Ltd., 9.5%, 11/2/20 (144A)	29
120,000	Transocean, Inc., 7.5%, 1/15/26 (144A)	12
160,000	Trinidad Drilling, Ltd., 6.625%, 2/15/25 (144A)	15

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

			\$	95
540,000	Oil & Gas Equipment & Services -- 0.8%			
	Archrock Partners LP / Archrock Partners Finance Corp.,			
	6.0%, 10/1/22	\$	53	
425,000	McDermott International, Inc., 8.0%, 5/1/21 (144A)		43	
170,000	SESI LLC, 7.75%, 9/15/24 (144A)		17	
		\$	1,15	
300,000	Oil & Gas Exploration & Production -- 5.5%			
	Alta Mesa Holdings LP / Alta Mesa Finance			
	Services Corp., 7.875%, 12/15/24 (144A)	\$	32	
100,000	California Resources Corp., 8.0%, 12/15/22 (144A)		6	

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 29

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)		Value
250,000	Oil & Gas Exploration & Production -- (continued)	
	Extraction Oil & Gas, Inc. / Extraction Finance Corp.,	
	7.875%, 7/15/21 (144A)	\$ 26
410,000	Great Western Petroleum LLC / Great Western	
	Finance, Inc., 9.0%, 9/30/21 (144A)	42
740,000	Gulfport Energy Corp., 6.0%, 10/15/24	74
450,000	Gulfport Energy Corp., 6.375%, 5/15/25	45
67,000	Halcon Resources Corp., 6.75%, 2/15/25 (144A)	6
420,000	MEG Energy Corp., 6.5%, 1/15/25 (144A)	41
1,045,000	Nostrum Oil & Gas Finance BV, 8.0%, 7/25/22 (144A)	1,08
450,000	Novatek OAO via Novatek Finance, DAC, 4.422%,	
	12/13/22 (144A)	46
390,000	Oasis Petroleum, Inc., 6.875%, 3/15/22	39
470,000	PDC Energy, Inc., 7.75%, 10/15/22	48
547,012 (g)	PetroQuest Energy, Inc., 10.0% (9.0% PIK 1.0%	
	cash), 2/15/21	41
375,000	Rice Energy, Inc., 6.25%, 5/1/22	39
870,000	Sanchez Energy Corp., 7.75%, 6/15/21	80
150,000	Whiting Petroleum Corp., 5.0%, 3/15/19	15
480,000	Whiting Petroleum Corp., 5.75%, 3/15/21	48
300,000	WPX Energy, Inc., 7.5%, 8/1/20	32
150,000	WPX Energy, Inc., 8.25%, 8/1/23	16
		\$ 7,94
669,000	Oil & Gas Refining & Marketing -- 0.6%	
	Calumet Specialty Products Partners LP / Calumet	
	Finance Corp., 6.5%, 4/15/21	\$ 65
200,000	PBF Holding Co., LLC / PBF Finance Corp.,	

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

7.0%, 11/15/23

20

\$ 86

	Oil & Gas Storage & Transportation -- 4.7%		
220,000	Blue Racer Midstream LLC / Blue Racer Finance Corp., 6.125%, 11/15/22 (144A)	\$	22
200,000	Cheniere Corpus Christi Holdings LLC, 7.0%, 6/30/24		22
230,000	DCP Midstream Operating LP, 5.6%, 4/1/44		21
555,000	Delek Logistics Partners LP, 6.75%, 5/15/25 (144A)		56
450,000 (c)	Energy Transfer LP, 4.394% (3 Month USD LIBOR + 302 bps), 11/1/66		40
118,000	EnLink Midstream Partners LP, 5.05%, 4/1/45		11
344,000	EnLink Midstream Partners LP, 5.6%, 4/1/44		35
950,000	Genesis Energy LP / Genesis Energy Finance Corp., 6.75%, 8/1/22		98
480,000	Global Partners LP / GLP Finance Corp., 7.0%, 6/15/23		48
765,000	PBF Logistics LP / PBF Logistics Finance Corp., 6.875%, 5/15/23 (144A)		79

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

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

Principal Amount			Value
USD (\$)			
	Oil & Gas Storage & Transportation -- (continued)		
170,000	PBF Logistics LP / PBF Logistics Finance Corp., 6.875%, 5/15/23	\$	17
925,000	Sunoco LP / Sunoco Finance Corp., 6.375%, 4/1/23		98
1,175,000	Williams Cos., Inc., 5.75%, 6/24/44		1,24
		\$	6,78
	Total Energy	\$	20,87
	FOOD & STAPLES RETAILING -- 0.3%		
	Food Retail -- 0.3%		
200,000	C&S Group Enterprises LLC, 5.375%, 7/15/22 (144A)	\$	19
169,849(f)	Tonon Luxembourg SA, 10.5%, 5/14/24 (144A)		6
260,000	Tops Holding LLC / Tops Markets II Corp., 8.0%, 6/15/22 (144A)		15
	Total Food & Staples Retailing	\$	41
	FOOD, BEVERAGE & TOBACCO -- 6.5%		
	Agricultural Products -- 0.3%		
444,769	Pinnacle Operating Corp., 9.0%, 5/15/23 (144A)	\$	41
	Packaged Foods & Meats -- 5.3%		
300,000(f)	CFG Investment SAC, 9.75%, 7/30/19 (144A)	\$	30
655,000	JBS Investments GmbH, 7.25%, 4/3/24 (144A)		64
800,000	Marfrig Holding Europe BV, 8.375%, 5/9/18 (144A)		82

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

700,000	Marfrig Holding Europe BV, 11.25%, 9/20/21 (144A)	69
515,000	Marfrig Holding Europe BV, 6.875%, 6/24/19 (144A)	53
975,000	Marfrig Holding Europe BV, 8.0%, 6/8/23 (144A)	1,01
700,000	MHP SE, 8.25%, 4/2/20 (144A)	75
580,000	Minerva Luxembourg SA, 6.5%, 9/20/26 (144A)	60
1,600,000	Minerva Luxembourg SA, 7.75%, 1/31/23 (144A)	1,67
600,000	Pesquera Exalmar SAA, 7.375%, 1/31/20 (144A)	58
		\$ 7,64
<hr/>		
355,000	Soft Drinks -- 0.2% Cott Beverages, Inc., 5.375%, 7/1/22	\$ 36
<hr/>		
160,000	Tobacco -- 0.7% Alliance One International, Inc., 8.5%, 4/15/21 (144A)	\$ 16
900,000	Alliance One International, Inc., 9.875%, 7/15/21	79
		\$ 96
<hr/>		
	Total Food, Beverage & Tobacco	\$ 9,39
<hr/>		
	HEALTH CARE EQUIPMENT & SERVICES -- 1.8%	
	Health Care Facilities -- 1.5%	
700,000	Kindred Healthcare, Inc., 6.375%, 4/15/22	\$ 64
445,000	RegionalCare Hospital Partners Holdings, Inc., 8.25%, 5/1/23 (144A)	46

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

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

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)		Value
<hr/>		
	Health Care Facilities -- (continued)	
455,000	Team Health Holdings, Inc., 6.375%, 2/1/25 (144A)	\$ 41
630,000	Universal Hospital Services, Inc., 7.625%, 8/15/20	63
		\$ 2,17
<hr/>		
	Health Care Services -- 0.3%	
425,000	BioScrip, Inc., 8.875%, 2/15/21	\$ 39
	Total Health Care Equipment & Services	\$ 2,56
<hr/>		
	HOUSEHOLD & PERSONAL PRODUCTS -- 0.1%	
	Personal Products -- 0.1%	
125,000	Revlon Consumer Products Corp., 5.75%, 2/15/21	\$ 10
	Total Household & Personal Products	\$ 10
<hr/>		
	INSURANCE -- 23.6%	

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

500,000 (c)	Property & Casualty Insurance -- 0.3% Spectrum Capital, Ltd., 6.903% (6 Month USD LIBOR + 575 bps), 6/8/21 (144A)	\$	48
<hr/>			
500,000+ (j) (k)	Reinsurance -- 23.3% Ailsa Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 6/15/18	\$	48
500,000 (c)	Alamo Re, Ltd., 4.884% (3 Month U.S. Treasury Bill + 375 bps), 6/8/20 (144A) (Cat Bond)		50
300,000 (c)	Aozora Re, Ltd., 3.219% (6 Month USD LIBOR + 200 bps), 4/7/21 (144A) (Cat Bond)		30
500,000 (c)	Aozora Re, Ltd., 3.549% (6 Month USD LIBOR + 220 bps), 4/7/20 (144A) (Cat Bond)		50
750,000 (c)	Bosphorus Re, Ltd., 4.468% (6 Month USD LIBOR + 325 bps), 8/17/18 (144A) (Cat Bond)		75
400,000 (c)	Caelus Re V, Ltd, Series C, 7.631% (3 Month U.S. Treasury Bill + 650 bps), 6/5/20 (144A) (Cat Bond)		30
375,000 (c)	Caelus Re V, Ltd., Series D, 10.381% (3 Month U.S. Treasury Bill + 925 bps), 6/5/20 (144A) (Cat Bond)		17
800,000+ (j) (k)	Carnoustie Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 12/31/17		1
1,000,000+ (j) (k)	Carnoustie Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 11/30/20		10
1,000,000+ (j) (k)	Carnoustie Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 11/30/21		90
750,000 (c)	Citrus Re, Ltd., 8.869% (3 Month U.S. Treasury Bill + 774 bps), 2/25/19 (144A) (Cat Bond)		62
750,000 (c)	Cranberry Re, Ltd., 3.129% (6 Month USD LIBOR + 200 bps), 7/13/20 (144A) (Cat Bond)		75
650,000+ (j) (k)	Cyprus Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 1/10/18		56
400,000+ (j) (k)	Denning Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 8/15/18		39

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

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

Principal Amount USD (\$)		Value
Reinsurance -- (continued)		
1,750,000 (c)	East Lane Re VI, Ltd., 3.779% (3 Month U.S. Treasury Bill + 265 bps), 3/14/18 (144A) (Cat Bond)	\$ 1,75
1,000,000+(j) (k)	Eden Re II, Ltd., Variable Rate Notes, 3/22/21 (144A)	96
250,000 (c)	Galilei Re, Ltd., 9.145% (6 Month USD LIBOR + 800 bps), 1/8/21 (144A) (Cat Bond)	21
250,000 (c)	Galilei Re, Ltd., 14.375% (6 Month USD LIBOR + 1,325 bps), 1/8/20 (144A) (Cat Bond)	17
250,000 (c)	Galilei Re, Ltd., 14.395% (6 Month USD LIBOR + 1,325 bps), 1/8/21 (144A) (Cat Bond)	16
500,000 (c)	Galileo Re, Ltd., 8.705% (3 Month USD LIBOR + 750 bps), 11/6/20 (Cat Bond)	50
250,000 (c)	Galileo Re, Ltd., 9.851% (3 Month U.S. Treasury	

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

	Bill + 872 bps), 1/8/19 (144A) (Cat Bond)	21
250,000 (c)	Galileo Re, Ltd., 14.371% (3 Month U.S. Treasury	
	Bill + 1,324 bps), 1/8/19 (144A) (Cat Bond)	17
157,500 (c)	Gator Re, Ltd., 0.5% (3 Month U.S. Treasury Bill +	
	50 bps), 10/9/17 (144A) (Cat Bond)	
2,400,000+ (j) (k)	Gleneagles Segregated Account (Artex SAC, Ltd.),	
	Variable Rate Notes, 11/30/20	28
1,500,000+ (j) (k)	Gleneagles Segregated Account (Artex SAC, Ltd.),	
	Variable Rate Notes, 11/30/21	1,43
2,500,000+ (j) (k)	Gullane Segregated Account (Artex SAC, Ltd.), Variable	
	Rate Notes, 11/30/20	5
2,500,000+ (j) (k)	Gullane Segregated Account (Artex SAC, Ltd.), Variable	
	Rate Notes, 11/30/21	2,45
750,000 (c)	Integrity Re, Ltd., Series A, 4.369% (6 Month USD	
	LIBOR + 325 bps), 6/10/20 (144A) (Cat Bond)	74
500,000 (c)	Integrity Re, Ltd., Series C, 5.119% (6 Month USD	
	LIBOR + 400 bps), 6/10/20 (144A) (Cat Bond)	49
375,000 (f) (c)	International Bank for Reconstruction & Development,	
	5.572% (6 Month USD LIBOR + 450 bps),	
	8/11/20 (Cat Bond) (144A)	1
250,000 (c)	International Bank for Reconstruction & Development,	
	6.972% (6 Month USD LIBOR + 590 bps),	
	12/20/19 (Cat Bond) (144A)	24
300,000 (c)	International Bank for Reconstruction & Development,	
	7.957% (6 Month USD LIBOR + 7 bps),	
	7/15/20 (Cat Bond)	29
250,000 (c)	International Bank for Reconstruction & Development,	
	10.372% (6 Month USD LIBOR + 930 bps),	
	12/20/19 (Cat Bond) (144A)	24
300,000 (c)	International Bank for Reconstruction & Development,	
	12.557% (6 Month USD LIBOR + 1,150 bps),	
	7/15/20 (Cat Bond) (144A)	29
500,000 (c)	Kilimanjaro II Re, Ltd., 8.709% (6 Month USD	
	LIBOR + 750 bps), 4/20/21 (144A) (Cat Bond)	46

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 33

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)		Value

	Reinsurance -- (continued)	
500,000 (c)	Kilimanjaro II Re, Ltd., 11.209% (6 Month USD	
	LIBOR + 1,000 bps), 4/20/21 (144A) (Cat Bond)	\$ 30
750,000+ (j) (k)	Lahinch Segregated Account (Artex SAC, Ltd.), Variable	
	Rate Notes, 5/10/22	74
EUR 500,000+ (c)	Lion II Re, DAC, 3.0% (3 Month EURIBOR + 300 bps),	
	7/15/21 (144A) (Cat Bond)	58
1,000,000+ (j) (k)	Lorenz Re 2017, Ltd. (Prime, Ltd.), Variable Rate	
	Notes, 3/31/20	90
500,000 (c)	Merna Re, Ltd., 3.129% (3 Month U.S. Treasury Bill +	

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

	200 bps), 4/8/20 (144A) (Cat Bond)	50
500,000 (c)	Nakama Re, Ltd., 3.329% (6 Month USD LIBOR + 220 bps), 10/13/21 (144A) (Cat Bond)	50
750,000 (c)	Northshore Re II, Ltd., 8.376% (3 Month U.S. Treasury Bill + 725 bps), 7/6/20 (144A) (Cat Bond)	76
3,000,000+ (j) (k)	Pangaea Re Segregated Account (Artex SAC, Ltd.), Series 2015-1, Variable Rate Notes, 2/1/19	1
2,000,000+ (j) (k)	Pangaea Re Segregated Account (Artex SAC, Ltd.), Series 2016-1, Variable Rate Notes, 2/1/20	13
2,000,000+ (j) (k)	Pangaea Re Segregated Account (Artex SAC, Ltd.), Series 2017-1, Variable Rate Notes, 11/30/21	1,67
750,000+ (j) (k)	Portrush 2017 Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 6/15/18	70
2,000,000 (c)	Queen Street X Re, Ltd., 6.884% (3 Month U.S. Treasury Bill + 575 bps), 6/8/18 (144A) (Cat Bond)	2,00
500,000 (i)	Residential Reinsurance 2016, Ltd., 12/6/17 (144A) (Cat Bond)	49
700,000+ (j) (k)	Resilience Re, Ltd., Variable Rate Notes, 1/8/18	67
750,000+ (j) (k)	Resilience Re, Ltd., Variable Rate Notes, 6/4/18	73
AUD 300,000+ (j) (k)	Rewire Securities LLC, Variable Rate Notes, 1/10/18	
AUD 250,000+ (j) (k)	Rewire Securities LLC, Variable Rate Notes, 7/15/18	16
500,000 (c)	Sanders Re, Ltd., 4.367% (6 Month USD LIBOR + 325 bps), 6/5/20 (144A) (Cat Bond)	50
750,000+ (j) (k)	Shinnecock Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 7/1/18	64
1,000,000+ (j) (k)	Silverton Re, Ltd., Variable Rate Notes, 9/17/18 (144A)	2
1,000,000+ (j) (k)	Silverton Re, Ltd., Variable Rate Notes, 9/16/19 (144A)	93
1,000,000+ (j) (k)	St. Andrews Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 12/31/17	1
1,000,000+ (j) (k)	St. Andrews Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 2/1/18	14
1,000,000+ (j) (k)	St. Andrews Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 2/1/19	1,03
500,000 (c)	Vitality Re VI, Ltd., 3.229% (3 Month U.S. Treasury Bill + 210 bps), 1/8/18 (144A) (Cat Bond)	49
1,000,000 (c)	Vitality Re VII, Ltd., 3.779% (3 Month U.S. Treasury Bill + 265 bps), 1/7/20 (144A) (Cat Bond)	1,01
500,000+ (j) (k)	Wentworth 2017, Variable Rate Notes, 7/13/18	46
		\$ 33,78
	Total Insurance	\$ 34,26

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

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

Principal Amount USD (\$)		Value
	MATERIALS -- 6.9%	
	Commodity Chemicals -- 0.6%	
300,000	Basell Finance Co., BV, 8.1%, 3/15/27 (144A)	\$ 40

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

	175,000	Hexion US Finance Corp., 6.625%, 4/15/20		15
	336,000	Rain CII Carbon LLC / CII Carbon Corp., 7.25%, 4/1/25 (144A)		36
			\$	92
	215,000	Construction Materials -- 0.2% Cemex SAB de CV, 7.75%, 4/16/26 (144A)	\$	24
	425,000	Copper -- 0.6% First Quantum Minerals, Ltd., 7.25%, 4/1/23 (144A)	\$	44
	465,000	Freeport-McMoRan, Inc., 3.55%, 3/1/22		46
			\$	90
	55,000	Diversified Chemicals -- 1.2% Blue Cube Spinco, Inc., 9.75%, 10/15/23	\$	6
	55,000	Blue Cube Spinco, Inc., 10.0%, 10/15/25		6
	500,000	Evolution Escrow Issuer LLC, 7.5%, 3/15/22 (144A)		52
	1,025,000	Koks OAO Via Koks Finance, DAC, 7.5%, 5/4/22 (144A)		1,10
			\$	1,76
	300,000	Diversified Metals & Mining -- 1.0% FMG Resources August 2006 Pty, Ltd., 9.75%, 3/1/22 (144A)	\$	33
	200,000	Hudbay Minerals, Inc., 7.25%, 1/15/23 (144A)		21
	180,000	Prince Mineral Holding Corp., 11.5%, 12/15/19 (144A)		18
	70,000	Teck Resources, Ltd., 8.5%, 6/1/24 (144A)		8
	160,000	Vale Overseas, Ltd., 6.25%, 8/10/26		18
	375,000	Vedanta Resources Plc, 6.375%, 7/30/22 (144A)		39
			\$	1,39
	200,000	Fertilizers & Agricultural Chemicals -- 0.2% CVR Partners LP / CVR Nitrogen Finance Corp., 9.25%, 6/15/23 (144A)	\$	21
	100,000 (g)	Metal & Glass Containers -- 0.4% ARD Finance SA, 7.125% (7.875% PIK 0.0% cash), 9/15/23	\$	10
	320,000	Ardagh Packaging Finance Plc / Ardagh Holdings USA, Inc., 7.25%, 5/15/24 (144A)		35
EUR	150,000	Horizon Holdings I SAS, 7.25%, 8/1/23 (144A)		18
			\$	64
	390,000	Paper Packaging -- 1.4% Eldorado International Finance GmbH, 8.625%, 6/16/21 (144A)	\$	39
EUR	1,365,000	SIG Combibloc Holdings SCA, 7.75%, 2/15/23 (144A)		1,67
			\$	2,07

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

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

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)		Value
410,000	Specialty Chemicals -- 0.4%	
150,000	A Schulman, Inc., 6.875%, 6/1/23	\$ 43
	Koppers, Inc., 6.0%, 2/15/25 (144A)	16
		\$ 59
600,000	Steel -- 0.9%	
	Big River Steel LLC / BRS Finance Corp., 7.25%, 9/1/25 (144A)	\$ 64
215,000	SunCoke Energy Partners LP / SunCoke Energy Partners Finance Corp., 7.5%, 6/15/25 (144A)	22
400,000	Warrior Met Coal, Inc., 8.0%, 11/1/24 (144A)	40
		\$ 1,27
	Total Materials	\$ 10,03
270,000	MEDIA -- 1.8%	
	Advertising -- 0.2%	
	MDC Partners, Inc., 6.5%, 5/1/24 (144A)	\$ 27
315,000	Broadcasting -- 0.2%	
	CSC Holdings LLC, 5.5%, 4/15/27 (144A)	\$ 32
220,000	Cable & Satellite -- 0.2%	
78,000	DISH DBS Corp., 7.75%, 7/1/26	\$ 24
	Intelsat Connect Finance SA, 12.5%, 4/1/22 (144A)	7
		\$ 31
600,000	Movies & Entertainment -- 0.5%	
225,000	Gibson Brands, Inc., 8.875%, 8/1/18 (144A)	\$ 49
	Regal Entertainment Group, 5.75%, 2/1/25	22
		\$ 72
855,000	Publishing -- 0.7%	
	Gannett Co., Inc., 6.375%, 10/15/23	\$ 90
	Total Media	\$ 2,54
650,000	PHARMACEUTICALS, BIOTECHNOLOGY & LIFE SCIENCES -- 1.9%	
	Pharmaceuticals -- 1.9%	
	Endo Finance LLC / Endo, Ltd. / Endo Finco, Inc., 6.0%, 7/15/23 (144A)	\$ 52
240,000	Endo Finance LLC / Endo, Ltd. / Endo Finco, Inc., 6.0%, 2/1/25 (144A)	19
225,000	Horizon Pharma, Inc., 6.625%, 5/1/23	22
70,000	Horizon Pharma, Inc. / Horizon Pharma USA, Inc., 8.75%, 11/1/24 (144A)	7
EUR 450,000	VRX Escrow Corp., 4.5%, 5/15/23	44

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

EUR	345,000	VRX Escrow Corp., 4.5%, 5/15/23 (144A)	34
	494,000	VRX Escrow Corp., 5.875%, 5/15/23 (144A)	41

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

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

Principal Amount USD (\$)		Value
	Pharmaceuticals -- (continued)	
430,000	VRX Escrow Corp., 7.0%, 3/15/24 (144A)	\$ 46
125,000	West Street Merger Sub, Inc., 6.375%, 9/1/25 (144A)	12
	Total Pharmaceuticals, Biotechnology & Life Sciences	\$ 2,80
	REAL ESTATE -- 1.3%	
	Specialized REITs -- 1.3%	
428,536(g)	AAF Holdings LLC / AAF Finance Co., 12.0% (12.75% PIK 12.0% cash), 7/1/19 (144A)	\$ 44
1,520,000	Uniti Group, Inc. / CSL Capital LLC, 8.25%, 10/15/23	1,46
	Total Real Estate	\$ 1,91
	RETAILING -- 1.3%	
	Department Stores -- 1.3%	
655,000	Grupo Kaltex SA de CV, 8.875%, 4/11/22 (144A)	\$ 61
350,000	Neiman Marcus Group, Ltd., LLC, 8.0%, 10/15/21 (144A)	20
450,000	PetSmart, Inc., 5.875%, 6/1/25 (144A)	39
300,000	PetSmart, Inc., 7.125%, 3/15/23 (144A)	22
660,000	PetSmart, Inc., 8.875%, 6/1/25 (144A)	51
	Total Retailing	\$ 1,96
	SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT -- 0.3%	
	Semiconductors -- 0.3%	
200,000	Micron Technology, Inc., 5.5%, 2/1/25	\$ 21
150,000	Micron Technology, Inc., 5.625%, 1/15/26 (144A)	15
	Total Semiconductors & Semiconductor Equipment	\$ 37
	SOFTWARE & SERVICES -- 0.6%	
	IT Consulting & Other Services -- 0.6%	
130,000	Dell International LLC / EMC Corp., 7.125%, 6/15/24 (144A)	\$ 14
635,000	Rackspace Hosting, Inc., 8.625%, 11/15/24 (144A)	66
	Total Software & Services	\$ 81
	TECHNOLOGY HARDWARE & EQUIPMENT -- 0.7%	
	Communications Equipment -- 0.2%	
280,000	CommScope Technologies LLC, 6.0%, 6/15/25 (144A)	\$ 29

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

89,000	Electronic Equipment & Instruments -- 0.1%		
	Zebra Technologies Corp., 7.25%, 10/15/22	\$	9
<hr/>			
560,000	Technology Hardware, Storage & Peripherals -- 0.4%		
	Diebold Nixdorf, Inc., 8.5%, 4/15/24	\$	58
<hr/>			
	Total Technology Hardware & Equipment	\$	97
<hr/>			
	TELECOMMUNICATION SERVICES -- 4.3%		
	Integrated Telecommunication Services -- 2.1%		
325,000	CB Escrow Corp., 8.0%, 10/15/25 (144A)	\$	33
300,000	Cincinnati Bell, Inc., 7.0%, 7/15/24 (144A)		29

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 37

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)			Value
<hr/>			
	Integrated Telecommunication Services -- (continued)		
1,165,000	Frontier Communications Corp., 8.75%, 4/15/22	\$	95
290,000	Frontier Communications Corp., 11.0%, 9/15/25		24
750,000	GCI, Inc., 6.875%, 4/15/25		81
600,000	Windstream Corp., 7.5%, 6/1/22		44
<hr/>			
		\$	3,09
<hr/>			
	Wireless Telecommunication Services -- 2.2%		
250,000	Altice Finco SA, 8.125%, 1/15/24 (144A)	\$	26
300,000	Altice SA, 7.75%, 5/15/22 (144A)		31
225,000	Digicel Group, Ltd., 8.25%, 9/30/20 (144A)		22
750,000	Digicel, Ltd., 6.0%, 4/15/21 (144A)		73
200,000	Mobile Telesystems OJSC via MTS International Funding, Ltd., 5.0%, 5/30/23 (144A)		20
340,000	Sprint Corp., 7.125%, 6/15/24		36
485,000	Sprint Corp., 7.25%, 9/15/21		52
250,000	Unison Ground Lease Funding LLC, 5.78%, 3/15/20 (144A)		24
RUB 14,100,000	VimpelCom Holdings BV, 9.0%, 2/13/18 (144A)		24
<hr/>			
		\$	3,14
<hr/>			
	Total Telecommunication Services	\$	6,24
<hr/>			
	TRANSPORTATION -- 1.2%		
	Airlines -- 0.3%		
155,000	Intrepid Aviation Group Holdings LLC / Intrepid Finance Co., 6.875%, 2/15/19 (144A)	\$	15
300,000	Latam Finance, Ltd., 6.875%, 4/11/24 (144A)		31
<hr/>			
		\$	47

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

		Airport Services -- 0.1%		
	200,000	Aeropuertos Dominicanos Siglo XXI SA, 6.75%, 3/30/29 (144A)	\$	21
		Highways & Railtracks -- 0.4%		
MXN	4,500,000	Red de Carreteras de Occidente SAPIB de CV, 9.0%, 6/10/28 (144A)	\$	22
	260,000	Rumo Luxembourg S.a.r.l., 7.375%, 2/9/24 (144A)		28
			\$	51
		Marine -- 0.4%		
	300,000 (f)	Far East Capital, Ltd., SA, 8.0%, 5/2/18	\$	23
	375,000	Navios South American Logistics, Inc. / Navios Logistics Finance US, Inc., 7.25%, 5/1/22 (144A)		36
			\$	60
		Total Transportation	\$	1,80

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

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

Principal Amount USD (\$)			Value	
		UTILITIES -- 5.1%		
		Electric Utilities -- 1.0%		
	575,000	Centrais Eletricas Brasileiras SA, 5.75%, 10/27/21	\$	60
	460,000 (a)	Enel S.p.A., 8.75% (5 Year USD Swap Rate + 588 bps), 9/24/73 (144A)		56
	225,000	Stoneway Capital Corp., 10.0%, 3/1/27 (144A)		23
			\$	1,41
		Gas Utilities -- 1.0%		
	665,000	Ferrellgas LP / Ferrellgas Finance Corp., 6.75%, 6/15/23	\$	61
	400,000	Ferrellgas Partners LP / Ferrellgas Partners Finance Corp., 8.625%, 6/15/20		35
	492,450	Transportadora de Gas del Sur SA, 9.625%, 5/14/20 (144A)		53
			\$	1,50
		Independent Power Producers & Energy Traders -- 3.1%		
	224,000	Calpine Corp., 5.75%, 1/15/25	\$	21
	633,000	Dynegy, Inc., 8.0%, 1/15/25 (144A)		69
	338,000	Dynegy, Inc., 8.125%, 1/30/26 (144A)		37
	570,000	NRG Energy, Inc., 6.625%, 1/15/27		60
	320,000	NRG Energy, Inc., 7.25%, 5/15/26		34
	232,009	NSG Holdings LLC / NSG Holdings, Inc., 7.75%,		

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

	12/15/25 (144A)	25
1,065,000	TerraForm Global Operating LLC, 9.75%, 8/15/22 (144A)	1,17
125,000 (b)	TerraForm Power Operating LLC, 6.375%, 2/1/23 (144A)	13
585,000 (b)	TerraForm Power Operating LLC, 6.625%, 6/15/25 (144A)	63
		\$ 4,43
	Total Utilities	\$ 7,35
	TOTAL CORPORATE BONDS & NOTES (Cost \$127,516,944)	\$ 132,97
	CONVERTIBLE BOND -- 1.3% of Net Assets	
	MATERIALS -- 1.3%	
	Specialty Chemicals -- 1.3%	
1,900,000 (1)	Hercules LLC, 6.5%, 6/30/29	\$ 1,91
	Total Materials	\$ 1,91
	TOTAL CONVERTIBLE BOND (Cost \$1,247,121)	\$ 1,91
	SOVEREIGN DEBT OBLIGATIONS --	
	2.6% of Net Assets	
	Argentina -- 2.0%	
211,840	Province of Salta Argentina, 9.5%, 3/16/22 (144A)	\$ 22
360,000	Provincia de Buenos Aires, 9.125%, 3/16/24 (144A)	41
230,000	Provincia de Buenos Aires, 9.95%, 6/9/21 (144A)	26

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 39

Schedule of Investments | 10/31/17 (unaudited) (continued)

Principal Amount USD (\$)		Value
	Argentina -- (continued)	
670,000	Provincia de Entre Rios Argentina, 8.75%, 2/8/25 (144A)	\$ 72
1,135,000	Provincia del Chubut Argentina, 7.75%, 7/26/26 (144A)	1,19
		\$ 2,83
	Bahrain -- 0.2%	
300,000	Bahrain Government International Bond, 7.0%, 10/12/28 (144A)	\$ 30
	Kenya -- 0.4%	
500,000	Kenya Government International Bond, 6.875%, 6/24/24 (144A)	\$ 51
	Mexico -- 0.0%+	

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

MXN	970,000	Mexican Bonos, 7.75%, 11/13/42	\$	5
MXN	350,245	Mexican Udibonos, 3.5%, 12/14/17		1
			\$	7
TOTAL SOVEREIGN DEBT OBLIGATIONS (Cost \$3,399,124)				\$ 3,73
Shares				
		COMMON STOCKS -- 0.3% of Net Assets		
		CAPITAL GOODS -- 0.0%+		
		Industrial Machinery -- 0.0%+		
	10,289 (d) (m)	Liberty Tire Recycling LLC	\$	
		Total Capital Goods	\$	
		CONSUMER DURABLES & APPAREL -- 0.0%+		
		Homebuilding -- 0.0%+		
MXN	89,094 (m)	Desarrolladora Homex SAB de CV	\$	
		Total Consumer Durables & Apparel	\$	
		ENERGY -- 0.0%+		
		Oil & Gas Exploration & Production -- 0.0%+		
	273 (m)	Midstates Petroleum Co., Inc.	\$	
	11,059 (m)	PetroQuest Energy, Inc.		1
		Total Energy	\$	2
		HEALTH CARE EQUIPMENT & SERVICES -- 0.0%+		
		Health Care Technology -- 0.0%+		
	69,875 (d) (m)	Medical Card System, Inc.	\$	
		Total Health Care Equipment & Services	\$	
		RETAILING -- 0.0%+		
		Computer & Electronics Retail -- 0.0%+		
	42,088 (d) (m)	Targus Cayman SubCo., Ltd.	\$	8
		Total Retailing	\$	8

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

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

Shares		Value
	TRANSPORTATION -- 0.3%	
	Air Freight & Logistics -- 0.3%	

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

943 (m)	CEVA Holdings LLC	\$	38
	Total Transportation	\$	38
<hr/>			
	TOTAL COMMON STOCKS (Cost \$1,137,301)	\$	49
<hr/>			
770 (h)	CONVERTIBLE PREFERRED STOCK -- 0.7% of Net Assets BANKS -- 0.7% Diversified Banks -- 0.7% Bank of America Corp., 7.25%	\$	99
	Total Banks	\$	99
<hr/>			
	TOTAL CONVERTIBLE PREFERRED STOCK (Cost \$739,352)	\$	99
<hr/>			
40,675 (c)	PREFERRED STOCKS -- 1.3% of Net Assets BANKS -- 0.7% Diversified Banks -- 0.7% GMAC Capital Trust I, 7.1% (3 Month USD LIBOR + 579 bps), 2/15/40	\$	1,06
	Total Banks	\$	1,06
<hr/>			
500 (a) (h)	DIVERSIFIED FINANCIALS -- 0.4% Specialized Finance -- 0.4% Compeer Financial ACA, 6.75% (3 Month USD LIBOR + 458 bps) (144A)	\$	53
	Total Diversified Financials	\$	53
<hr/>			
455,230 (m)	MATERIALS -- 0.2% Diversified Chemicals -- 0.2% Pinnacle Agriculture, 0.0%, 12/30/99	\$	29
	Total Materials	\$	29
<hr/>			
	TOTAL PREFERRED STOCKS (Cost \$1,810,580)	\$	1,89
<hr/>			
1,934 (m) (n)	RIGHT / WARRANT -- 0.0%+ of Net Assets ENERGY -- 0.0%+ Oil & Gas Exploration & Production -- 0.0%+ Midstates Petroleum Co., Inc., Expires 4/21/20	\$	
	Total Energy	\$	
<hr/>			
	TOTAL RIGHT / WARRANT (Cost \$--)	\$	
<hr/>			

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 41

Schedule of Investments | 10/31/17 (unaudited) (continued)

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

Principal Amount							Value
USD (\$)							

		TEMPORARY CASH INVESTMENTS --					
		5.4% of Net Assets					
		REPURCHASE AGREEMENTS -- 1.2%					
775,000		\$775,000 ScotiaBank, 1.05%, dated 10/31/17, plus					
		accrued interest on 11/1/17 collateralized by the following:					
		\$827 Freddie Mac Giant, 3.0%, 8/1/29					
		\$789,696 Government National Mortgage Association,					
		3.0-3.5%, 7/20/46-9/20/47.					\$ 77
475,000		\$475,000 TD Securities USA LLC, 1.04%, dated					
		10/31/17, plus accrued interest on 11/1/17					
		collateralized by the following:					
		\$484,557 U.S. Treasury Notes, 1.75-1.875%,					
		7/31/22-9/30/22.					47
475,000		\$475,000 TD Securities USA LLC, 1.05%, dated					
		10/31/17, plus accrued interest on 11/1/17					
		collateralized by the following: \$484,557 U.S.					
		Treasury Notes, 1.75-1.875%, 7/31/22-9/30/22.					47

							\$ 1,72

		TREASURY BILLS -- 4.2%					
2,515,000 (i)		U.S. Treasury Bills, 11/2/17					\$ 2,51
2,625,000 (i)		U.S. Treasury Bills, 11/16/17					2,62
1,050,000 (i)		U.S. Treasury Bills, 11/24/17					1,04

							\$ 6,18

		TOTAL TEMPORARY CASH INVESTMENTS					
		(Cost \$7,913,261)					\$ 7,91

	Number of		Counter-		Strike	Expiration	
	Contracts	Description	party	Notional	Price	Date	Value

		CALL OPTIONS PURCHASED -- 0.0%+					
MXN	18,332 (o)	Desarrolladora	Bank of				
		Homex SAB	New York				
		de CV	Mellon				
			Corp.	18,332	\$-- (q)	10/23/22	\$
MXN	18,332 (p)	Desarrolladora	Bank of				
		Homex SAB	New York				
		de CV	Mellon				
			Corp.	18,332	-- (q)	10/23/22	

							\$

		TOTAL CALL OPTIONS PURCHASED					
		(Premium paid \$0)					\$

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

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

Principal Amount USD (\$)	Value
TOTAL INVESTMENTS IN UNAFFILIATED ISSUERS -- 144.1% (Cost -- \$203,563,772) (r)	\$ 209,48
OTHER ASSETS AND LIABILITIES -- (44.1)%	\$ (64,15
NET ASSETS -- 100.0%	\$ 145,32

BPS Basis Point.

LIBOR London Interbank Offered Rate.

REIT Real Estate Investment Trust.

(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, 2017, the value of these securities amounted to \$88,582,456, or 61.0% of net assets.

(Cat Bond) Catastrophe or event-linked bond. At October 31, 2017, the value of these securities amounted to \$17,110,448, or 11.8% of net assets. See Notes to Financial Statements -- Note 1F.

+ Amount rounds to less than 0.1%.

* Senior secured floating rate loan interests in which the Trust invests generally pay interest at rates that are periodically redetermined by reference to a base lending rate plus a premium. These base lending rates are generally (i) the lending rate offered by one or more major European banks, such as LIBOR, (ii) the prime rate offered by one or more major United States banks, (iii) the rate of a certificate of deposit or (iv) other base lending rates used by commercial lenders. The interest rate shown is the rate accruing at October 31, 2017.

+ Securities that used significant unobservable inputs to determine their value.

(a) The interest rate is subject to change periodically. The interest rate, reference index and spread shown at October 31, 2017.

(b) 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, 2017.

(c) Floating rate note. The Coupon rate, reference index and spread,

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

if applicable, shown as of October 31, 2017.

- (d) Security is valued using fair value methods (other than prices supplied by independent pricing services). See Notes to Financial Statements -- Note 1A.
- (e) This term loan will settle after October 31, 2017, at which time the interest rate will be determined.
- (f) Security is in default.
- (g) Payment in Kind (PIK) security which may pay interest in the form of additional principal amount.
- (h) Security is perpetual in nature and has no stated maturity date.
- (i) Security issued with a zero coupon. Income is recognized through accretion of discount.
- (j) Structured reinsurance investment. At October 31, 2017, the value of these securities amounted to \$16,669,885, or 11.5% of net assets. See Notes to Financial Statements -- Note 1A.
- (k) Rate to be determined.
- (l) Security is priced as a unit.

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 43

Schedule of Investments | 10/31/17 (unaudited) (continued)

- (m) Non-income producing security.
- (n) Midstates Petroleum Co., Inc. warrants are exercisable into 1,934 shares.
- (o) Option does not become effective until underlying company's outstanding common shares reach a market capitalization of MXN 12.5 Billion.
- (p) Option does not become effective until underlying company's outstanding common shares reach a market capitalization of MXN 15.5 Billion.
- (q) Strike price is 1 Mexican Peso (MXN).
- (r) Distributions of investments by country of issue, as a percentage of long-term holdings based on country of domicile, is as follows:

United States	57.8%
Bermuda	13.6
Luxembourg	4.2
Netherlands	3.5
Cayman Islands	3.1
Argentina	2.9

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

Canada	2.7
Ireland	2.6
Supranational	1.5
Mexico	1.4
Other (individually less than 1%)	6.7

	100.0%
	=====

Purchases and sales of securities (excluding temporary cash investments) for the six months ended October 31, 2017 were as follows:

	Purchases	Sales
Long-Term U.S. Government	\$ --	\$ 5,009,832
Other Long-Term Securities	\$33,204,994	\$42,851,472

The Trust is permitted to engage in purchase and sale transactions ("cross trades") with certain funds and accounts for which Amundi Pioneer Asset Management, Inc. (the "Adviser"), serves as the investment adviser, as set forth in Rule 17a-7 under the Investment Company Act of 1940, pursuant to procedures adopted by the Board of Trustees. Under these procedures, cross trades are effected at current market prices. During the six months ended October 31, 2017, the Trust engaged in purchases and sales pursuant to these procedures amounting to \$0 and \$413,272, respectively resulting in a gain of \$10,125.

SWAP CONTRACTS

OVER THE COUNTER (OTC) CREDIT DEFAULT SWAP CONTRACTS -- SELL PROTECTION

Notional Amount (\$)(1)	Counterparty	Obligation Reference Index	Pay/ Receive(2)	Annual Fixed Rate	Expiration Date	Premiums (Received)	Unre Appr
80,000	Goldman Sachs International Bank	Chesapeake Energy Corp.	Pay	5.00%	6/20/22	\$ (9,000)	\$ 4
45,000	Goldman Sachs International Bank	Chesapeake Energy Corp.	Pay	5.00%	6/20/22	(5,512)	3
75,000	Goldman Sachs International Bank	Chesapeake Energy Corp.	Pay	5.00%	6/20/22	(9,188)	5
TOTAL SWAP CONTRACTS						\$ (23,700)	\$ 13

(1) The notional amount is the maximum amount that a seller of credit protection would be obligated to pay upon occurrence of a credit event.

(2) Pays Quarterly.

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

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

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

FORWARD FOREIGN CURRENCY CONTRACTS

Currency Purchased	In Exchange for	Currency Sold	Deliver	Counterparty	Settlement Date	Unrealized Appreciation (Depreciation)
USD	4,690,593	EUR	4,037,329	State Street Bank & Trust Co.	11/30/17	\$ (2,000,000)
EUR	454,000	USD	527,163	State Street Bank & Trust Co.	11/30/17	\$ (1,000,000)
TOTAL FORWARD FOREIGN CURRENCY CONTRACTS						\$ (3,000,000)

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

ARS	-- Argentine Peso
AUD	-- Australian Dollar
EUR	-- Euro
IDR	-- Indonesian Rupiah
MXN	-- Mexican Peso
RUB	-- Russian Ruble

At October 31, 2017, the net unrealized appreciation on investments based on cost for federal tax purposes of \$205,801,673 was as follows:

Aggregate gross unrealized appreciation for all investments in which there is an excess of value over tax cost	\$12,460,235
Aggregate gross unrealized depreciation for all investments in which there is an excess of tax cost over value	(8,805,696)
Net unrealized appreciation	\$ 3,654,539

Various inputs are used in determining the value of the Trust's investments. These inputs are summarized in the three broad levels 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 risks, etc.). See Notes to Financial Statements -- Note 1A.
- Level 3 -- significant unobservable inputs (including the Trust's own assumptions in determining fair value of investments).

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

The following is a summary of the inputs used as of October 31, 2017, in valuing the Trust's investments.

	Level 1	Level 2	Level 3	Total
Asset Backed Securities	\$ --	\$ 806,479	\$ --	\$ 806,479
Collateralized Mortgage Obligations	--	545,450	--	545,450
Commercial Mortgage-Backed Securities	--	2,960,300	--	2,960,300
Senior Secured Floating Rate Loan Interests				
Capital Goods				
Aerospace & Defense	--	1,146,081	992,500	2,138,581
Health Care Equipment & Services				
Health Care Technology	--	420,329	243,918	664,247
All Other Senior Secured Floating Rate Loan Interests	--	52,436,446	--	52,436,446

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 45

Schedule of Investments | 10/31/17 (unaudited) (continued)

	Level 1	Level 2	Level 3	To
Corporate Bonds & Notes				
Diversified Financials				
Other Diversified Financial Services	\$ --	\$ --	\$ 6,551,550	\$
Insurance				
Reinsurance	--	16,529,113	17,251,220	
All Other Corporate Bonds & Notes	--	92,643,424	--	
Convertible Bond	--	1,919,000	--	
Sovereign Debt Obligations	--	3,734,465	--	
Common Stocks				
Capital Goods				
Industrial Machinery	--	--	103	
Health Care Equipment & Services				
Health Care Technology	--	--	699	
Retailing				
Computer & Electronics Retail	--	--	82,913	
Transportation				
Air Freight & Logistics	--	382,041	--	
All Other Common Stocks	27,745	--	--	
Convertible Preferred Stock	998,659	--	--	
Preferred Stocks				
Materials				
Diversified Chemicals	--	295,900	--	

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

All Other Preferred Stocks	1,602,688	--	--
Right/Warrant			
Energy			
Oil & Gas Exploration & Production	--	--*	--
Repurchase Agreements	--	1,725,000	--
Treasury Bills	--	6,188,233	--
Call Options Purchased	--	--*	--
<hr/>			
Total Investments in Securities	\$ 2,629,092	\$ 181,732,261	\$ 25,122,903 \$2
<hr/>			
Other Financial Instruments			
Unrealized depreciation on forward foreign currency contracts	\$ --	\$ (17,602)	\$ -- \$
Unrealized appreciation on swap contracts	--	13,258	--
<hr/>			
Total Other Financial Instruments	\$ --	\$ (4,344)	\$ -- \$
<hr/>			

* Includes securities that are valued \$0.

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

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

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

	Balance as of 4/30/17	Realized gain (loss)	Change in unrealized appreciation (depreciation)	Purchases	Sales	Accrued discounts/ premiums	Transfer in to Level 3*
<hr/>							
Senior Secured Floating Rate Loan Interests							
Capital Goods Aerospace & Defense	\$ 997,500	\$ 44	\$ (1,053)	\$ --	\$ (5,000)	\$ 1,009	\$ --
Health Care Equipment & Services							
Health Care Technology	243,918	--	(7,339)	--	--	7,339	--
Corporate Bonds & Notes							
Diversified Financials							
Other							
Diversified Financial Services	--	--	673,727	--	--	12,265	--
Insurance							

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

Property & Casualty Insurance	5,865,558	--	--	--	--	--
Reinsurance	17,775,556	156,827	(1,597,256)	4,871,259	(3,966,928)	11,762
Common Stocks						
Capital Goods						
Industrial Machinery	103	--	--	--	--	--
Health Care						
Equipment & Services						
Health Care Technology	699	--	--	--	--	--
Retailing						
Computer & Electronics						
Retail	40,825	--	42,088	--	--	--
<hr/>						
Total	\$24,924,159	\$ 156,871	\$ (889,833)	\$4,871,259	\$ (3,971,928)	\$ 32,375
<hr/>						

* Transfers are calculated on the beginning of period value. For the six months ended October 31, 2017, there were no transfers between Levels 2 and 3. For the six months ended October 31, 2017, securities with aggregate market value of \$535,437 transferred from Level 2 to Level 1 as there were observable inputs available to determine their value.

Net change in unrealized depreciation of Level 3 investments still held and considered Level 3 at October 31, 2017: \$722,677.

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 47

Schedule of Investments | 10/31/17 (unaudited) (continued)

The following table presents additional information about valuation techniques and inputs used for investments categorized as Level 3 at October 31, 2017. These amounts exclude valuations provided by a broker.

Asset Type	Fair Value 10/31/17	Valuation Technique	Unobservable Input	Value/ Range
Senior Secured Floating Rate Loan Interests	\$1,236,418	Market Comparables	EBITDA Multiples(1) Yield Comparables	4-7x 6.54%-9.03%
Corporate Bonds & Notes	\$6,551,550	Market Comparables	Yield Premiums(2)	1.05%
Common Stocks	\$ 83,715	Market Comparables	EBITDA Multiples(1)	4x-6x

(1) An increase in this unobservable input would result in a higher fair value measurement, while a decrease would result in a lower fair value

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

measurement.

- (2) An increase in this unobservable input would result in a lower fair value measurement, while a decrease would result in a higher fair value measurement.

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

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

Statement of Assets and Liabilities | 10/31/17 (unaudited)

ASSETS:

Investments in unaffiliated issuers, at value (cost \$203,563,772)	\$209,484,256
Foreign currencies, at value (cost \$6,734)	6,537
Receivables --	
Investment securities sold	1,142,044
Interest	2,026,203
Other assets	2,135

Total assets	\$212,661,175
--------------	---------------

LIABILITIES:

Payables --	
Credit agreement	\$ 64,000,000
Investment securities purchased	2,853,410
Trustees' fees	588
Due to custodian	282,088
Swap contracts, at value (net premiums received \$(23,700))	10,442
Net unrealized depreciation on forward foreign currency contracts	17,602
Due to affiliates	33,779
Accrued expenses and other liabilities	135,908

Total liabilities	\$ 67,333,817
-------------------	---------------

NET ASSETS:

Paid-in capital	\$193,998,881
Distributions in excess of net investment income	(1,886,916)
Accumulated net realized loss on investments	(52,699,131)
Net unrealized appreciation on investments	5,914,524

Net assets	\$145,327,358
------------	---------------

NET ASSET VALUE PER SHARE:

No par value (unlimited number of shares authorized)	
Based on \$145,327,358 / 8,332,790 shares	\$ 17.44

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 49

Statement of Operations (unaudited)

For the Six Months Ended 10/31/17

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

INVESTMENT INCOME:

Interest from unaffiliated issuers	\$ 6,809,438
Dividends from unaffiliated issuers	80,047

Total investment income	\$ 6,889,485
-------------------------	--------------

EXPENSES:

Management fees	\$ 895,774
Administrative expense	49,258
Transfer agent fees	7,628
Shareholder communications expense	3,175
Custodian fees	25,599
Professional fees	34,358
Printing expense	8,829
Trustees' fees	3,643
Pricing fees	18,172
Interest expense	708,392
Miscellaneous	40,330

Total expenses	\$ 1,795,158
----------------	--------------

Net investment income	\$ 5,094,327
-----------------------	--------------

REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS AND FOREIGN CURRENCY TRANSACTIONS:

Net realized gain (loss) on:

Investments from unaffiliated issuers	\$ 692,416
Swap contracts	183
Forward foreign currency contracts	(281,189)
Other assets and liabilities denominated in foreign currencies	20,845 \$ 432,255

Change in net unrealized appreciation on:

Investments from unaffiliated issuers	\$ (1,728,281)
Swap contracts	13,258
Forward foreign currency contracts	(39,157)
Other assets and liabilities denominated in foreign currencies	(4,787) \$ (1,758,967)

Net realized and unrealized gain (loss) on investments	\$ (1,326,712)
--	----------------

Net increase in net assets resulting from operations	\$ 3,767,615
--	--------------

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

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

Statements of Changes in Net Assets

Six Months Ended 10/31/17 (unaudited)	Year Ended 4/30/17*
--	---------------------------

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

FROM OPERATIONS:

Net investment income (loss)	\$ 5,094,327	\$ 10,778,243
Net realized gain (loss) on investments	432,255	(3,030,833)
Change in net unrealized appreciation (depreciation) on investments	(1,758,967)	13,016,437

Net increase (decrease) in net assets resulting from operations	\$ 3,767,615	\$ 20,763,847
---	--------------	---------------

DISTRIBUTIONS TO SHAREOWNERS:

Net investment income (\$0.69 and \$1.44 per share, respectively)	\$ (5,749,625)	\$ (12,024,216)
---	----------------	-----------------

Total distributions to shareowners	\$ (5,749,625)	\$ (12,024,216)
------------------------------------	----------------	-----------------

Net increase (decrease) in net assets	\$ (1,982,010)	\$ 8,739,631
---------------------------------------	----------------	--------------

NET ASSETS:

Beginning of period	\$147,309,368	\$ 138,569,737
---------------------	---------------	----------------

End of period	\$145,327,358	\$ 147,309,368
---------------	---------------	----------------

Distributions in excess of net investment income	\$ (1,886,916)	\$ (1,231,618)
--	----------------	----------------

* The Trust was audited by an independent registered public accounting firm other than Ernst & Young LLP.

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 51

Statement of Cash Flows (unaudited)

For the Six Months Ended 10/31/17

Cash Flows From Operating Activities:

Net increase in net assets resulting from operations	\$ 3,767,615
--	--------------

Adjustments to reconcile net decrease in net assets resulting from operations to net cash and foreign currencies from operating activities:

Purchases of investment securities	\$ (47,473,486)
Proceeds from disposition and maturity of investment securities	49,242,384
Net purchases of temporary cash investments	(7,413,367)
Net accretion and amortization of discount/premium on investment securities	(115,071)
Change in unrealized depreciation on investments	1,728,281
Change in unrealized depreciation on (central cleared) credit defaulted swap contracts	10,442
Change in unrealized depreciation on (central cleared) interest rate swap contracts	40,299
Net realized gain on investments	(692,416)
Decrease in interest receivable	115,700
Decrease in dividends receivable	13,956
Increase in other assets	(2,135)
Decrease in prepaid expenses	52
Decrease in due to affiliates	(107,779)

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

Decrease in trustees' fees payable	(30)
Decrease in administration fees payable	(83,767)
Increase in accrued expenses payable	89,282
Net cash and foreign currencies from operating activities	\$ (880,040)
Cash Flows Used in Financing Activities:	
Decrease in due to custodian	\$ (376,793)
Increase on borrowings	7,000,000
Distributions to shareowners	(5,749,625)
Net cash and foreign currencies used in financing activities	\$ 873,582
Effect of Foreign Exchange Fluctuations on Cash:	
Effect of foreign exchange fluctuations on cash	\$ (1,142)
Cash and Foreign Currencies:	
Beginning of the period	\$ 14,137
End of the period	\$ 6,537
Cash Flow Information:	
Cash paid for interest	\$ 708,392

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

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

Financial Highlights

	Six Months Ended 10/31/17 (unaudited)	Year Ended 4/30/17*	Year Ended 4/30/16*	Year Ended 4/30/15*
Per Share Operating Performance				
Net asset value, beginning of period	\$ 17.68	\$ 16.63	\$ 18.39	\$ 17.68
Increase (decrease) from investment operations: (a)				
Net investment income	\$ 0.61	\$ 1.29	\$ 1.55	\$ 1.55
Net realized and unrealized gain (loss) on investments	(0.16)	1.20	(1.81)	(1.81)
Net increase (decrease) from investment operations	\$ 0.45	\$ 2.49	\$ (0.26)	\$ (0.26)
Distributions to shareowners from:				
Net investment income and previously undistributed net investment income	\$ (0.69)	\$ (1.44)**	\$ (1.50)	\$ (1.50)
Net increase (decrease) in net asset value	\$ (0.24)	\$ 1.05	\$ (1.76)	\$ (1.76)
Net asset value, end of period	\$ 17.44	\$ 17.68	\$ 16.63	\$ 15.92
Market value, end of period	\$ 16.29	\$ 16.70	\$ 15.60	\$ 15.60

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

Total return at net asset value (b)	2.84% (c)	16.20% (c)	(1.01)%
Total return at market value (b)	1.69% (c)	17.01% (c)	(1.26)%
Ratios to average net assets of shareowners:			
Total expenses plus interest expense (d)	2.43% (e)	2.12% (e)	1.99%
Net investment income available to shareowners	6.89% (e)	7.52% (e)	9.11%
Portfolio turnover	16%	58%	36%
Net assets, end of period (in thousands)	\$145,327	\$147,309	\$138,570

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

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 53

Financial Highlights (continued)

	Six Months Ended 10/31/17 (unaudited)	Year Ended 4/30/17*	Year Ended 4/30/16*	Year Ended 4/30/15*
Total amount of debt outstanding (in thousands)	\$ 64,000	\$ 57,000	\$ 57,000	\$ 57,000
Asset coverage per indebtedness (in thousands)	\$ 3,271	\$ 3,584	\$ 3,431	\$ 3,431

* The Trust was audited by an independent registered public accounting firm other than Ernst & Young LLP.

- (a) The per common share data presented above is based upon the average common shares outstanding for the periods presented.
- (b) Total investment return is calculated assuming a purchase of common shares at the current net asset value or market value on the first day and a sale at the current net asset value or 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. Past performance is not a guarantee of future results.
- (c) Not annualized.
- (d) Includes interest expense of 0.96% (annualized), 0.62%, 0.50%, 0.43%, 0.45% and 0.48%, respectively.
- (e) Annualized.

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

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

Notes to Financial Statements | 10/31/17 (unaudited)

1. Organization and Significant Accounting Policies

Pioneer Diversified High Income Trust (the Trust) was organized as a Delaware

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

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 seek a high level of current income and the Trust may, as a secondary objective, also seek capital appreciation to the extent that it is consistent with its investment objective.

On July 3, 2017, Amundi acquired Pioneer Investments, a group of asset management companies located throughout the world. Amundi, one of the world's largest asset managers, is headquartered in Paris, France. As a result of the transaction, Pioneer Investment Management, Inc., the Trust's investment adviser, became an indirect wholly owned subsidiary of Amundi and Amundi's wholly owned subsidiary, Amundi USA, Inc. Prior to July 3, 2017, Pioneer Investments was owned by Pioneer Global Asset Management S.p.A., a wholly owned subsidiary of UniCredit S.p.A.

In connection with the transaction, the names of the Trust's investment adviser and principal underwriter changed. Effective July 3, 2017, the name of Pioneer Investment Management, Inc. changed to Amundi Pioneer Asset Management, Inc. (the Adviser) and the name of Pioneer Funds Distributor, Inc. changed to Amundi Pioneer Distributor, Inc. (the Distributor).

In October 2016, the Securities and Exchange Commission (SEC) released its Final Rule on Investment Company Reporting Modernization. In addition to introducing two new regulatory reporting forms (Form N-PORT and Form N-CEN), the Final Rule amends Regulation S-X, which impacts financial statement presentation, particularly related to the presentation of derivative investments. The Trust's financial statements were prepared in compliance with the amendments to Regulation S-X.

The Trust's financial statements have been prepared in conformity with U.S. generally accepted accounting principles (U.S. GAAP) that require the management of the Trust to 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.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 55

The Trust is an investment company and follows investment company accounting and reporting guidance under U.S. GAAP. The following is a summary of significant accounting policies followed by the Trust in the preparation of its financial statements:

A. Security Valuation

The net asset value of the Trust is computed once daily, on each day the New York Stock Exchange (NYSE) is open, as of the close of regular trading on the NYSE.

Fixed income securities are valued by using 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, or may use a pricing matrix or other fair value methods or techniques to provide an estimated value of the security or instrument. A pricing matrix is a means of valuing a debt security on the basis of current market prices for other debt securities, historical trading patterns in the market for fixed income securities and/or other factors. Non-U.S. debt securities that are listed on an exchange will be

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

valued at the bid price obtained from an independent third party pricing service. When independent third party pricing services are unable to supply prices, or when prices or market quotations are considered to be unreliable, the value of that security may be determined using quotations from one or more broker-dealers.

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, an independent third party pricing service. If price information is not available from Loan Pricing Corporation, or if the price information is deemed to be unreliable, price information will be obtained from an alternative loan interest pricing service. If no reliable price quotes are available from either the primary or alternative pricing service, broker quotes will be solicited.

Event-linked bonds or catastrophe bonds are valued at the bid price obtained from an independent third party pricing service. Other insurance linked securities (including sidecars, collateralized reinsurance and industry loss warranties) may be valued at the bid price obtained from an independent pricing service, or through a third party using a pricing matrix, insurance industry valuation models, or other fair value methods or techniques to provide an estimated value of the instrument.

Equity securities that have traded on an exchange are valued by using 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

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

prices are not available, generally are valued using the mean between the last bid and asked prices or, if both last bid and asked prices are not available, at the last quoted bid price. Last sale and bid and asked prices are provided by independent third party pricing services. In the case of equity securities not traded on an exchange, prices are typically determined by independent third party pricing services using a variety of techniques and methods.

The value of foreign securities is translated in U.S. dollars based on foreign currency exchange rate quotations supplied by a third party pricing source. Trading in non-U.S. equity securities is substantially completed each day at various times prior to the close of the NYSE. The values of such securities used in computing the net asset value of the Trust's shares are determined as of such times. The Trust may use a fair value model developed by an independent pricing service to value non-U.S. equity securities.

Option contracts are generally valued at the mean between the last bid and ask prices on the principal exchange where they are traded. Over-the-counter ("OTC") options and options on swaps ("swaptions") are valued using 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, or may use a pricing matrix or other fair value methods or techniques to provide an estimated value of the security or instrument.

Swap contracts, including interest rate swaps, caps and floors (other than centrally cleared swap contracts) are valued at the dealer quotations obtained from reputable International Swap Dealers Association members. Centrally cleared swaps are valued at the daily settlement price provided

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

by the central clearing counterparty.

Forward foreign currency contracts are valued daily using the foreign exchange rate or, for longer term forward contract positions, the spot currency rate, in each case provided by a third party pricing service. Contracts whose forward settlement date falls between two quoted days are valued by interpolation.

Shares of open-end registered investment companies (including money market mutual funds) are valued at such funds' net asset value. Repurchase agreements are valued at par. Cash may include overnight time deposits at approved financial institutions.

Securities or loan interests for which independent pricing services or broker-dealers 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 by a fair valuation team comprised of certain personnel of the Adviser, pursuant to procedures adopted by the Trust's Board of Trustees. The Adviser's fair valuation team uses fair value methods approved by the

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 57

Valuation Committee of the Board of Trustees. The Adviser's fair valuation team is responsible for monitoring developments that may impact fair valued securities and for discussing and assessing fair values on an ongoing basis, and at least quarterly, with the Valuation Committee of the Board of Trustees.

Inputs used when applying fair value methods to value a security may include credit ratings, the financial condition of the company, current market conditions and comparable securities. 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 significantly from exchange prices and such differences could be material.

At October 31, 2017, six securities were valued using fair value methods (in addition to securities valued using prices supplied by independent pricing services, broker-dealers or using a third party insurance pricing model) representing 5.4% of net assets. The value of these fair valued securities are \$7,871,683.

B. Investment Income and Transactions

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. Interest income, including interest on income bearing cash accounts, is recorded on an accrual basis, net of unrecoverable foreign taxes withheld at the applicable country rates and net of income accrued on defaulted securities.

Discounts and premiums on purchase prices of 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

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

monthly paydowns. Interest and dividend income payable by delivery of additional shares is reclassified as PIK (payment-in-kind) income upon receipt and is included in interest and dividend income, respectively.

Security transactions are recorded as of trade date. Gains and losses on sales of investments are calculated on the identified cost method for both financial reporting and federal income tax purposes.

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

C. 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 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 the market price of those securities but are included with the net realized and unrealized gain or loss on investments.

D. 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 appreciation or depreciation are recorded in the Trust's financial statements. The Trust records realized gains and losses at the time a contract 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.

During six months ended October 31, 2017, the Trust had 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 six months ended October 31, 2017 was \$(6,076,487).

Forward foreign currency contracts outstanding at October 31, 2017 are listed in the Schedule of Investments.

E. 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 net taxable income and net realized capital gains, if any, to its shareowners. Therefore, no federal income tax provision is required. As of April 30, 2017, the Trust did not accrue any interest or penalties with respect to uncertain tax positions, which if applicable, would be recorded as an

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 59

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

income tax expense in the Statement of Operations. Tax returns filed within the prior three years remain subject to examination by federal and state tax authorities.

The amount and character of income and capital gain distributions to shareowners are determined in accordance with federal income tax rules, which may differ from U.S. GAAP. Distributions in excess of net investment income or net realized gains are temporary overdistributions for financial statement and tax purposes. Capital accounts within the financial statements are adjusted for permanent book/tax differences to reflect tax character, but are not adjusted for temporary differences.

The tax character of current year distributions payable to shareowners will be determined at the end of the current taxable year.

The tax character of distributions paid to shareowners during the year ended April 30, 2017 was as follows:

	2017
Distributions paid from:	
Ordinary income	\$12,024,216
Total	\$12,024,216

The following shows the components of distributable earnings (losses) on a federal income tax basis at April 30, 2017:

	2017
Distributable earnings:	
Undistributed ordinary income	\$ 1,049,770
Capital loss carryforward	(50,472,894)
Late year loss deferrals	(2,656,724)
Other book/tax temporary differences	(2,283,156)
Unrealized appreciation	7,673,491
Total	\$(46,689,513)

The difference between book-basis and tax-basis unrealized depreciation is primarily attributable to 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 and discounts on fixed income securities.

F. Insurance Linked Securities (ILS)

The Trust invests in event-linked bonds. Event-linked bonds are floating

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

rate debt obligations for which the return of principal and the payment of interest are contingent on the non-occurrence of a pre-defined "trigger" event, such as a hurricane or an earthquake of a specific magnitude. The trigger event's

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

magnitude may be based on losses to a company or industry, industry indexes or readings of scientific instruments, or may be based on specified actual losses. If a trigger event occurs, as defined within the terms of an event-linked bond, the Trust may lose a portion or all of its accrued interest and/or principal invested in such event-linked bond. The Trust is entitled to receive principal and interest payments so long as no trigger event occurs of the description and magnitude specified by the instrument. In addition to the specified trigger events, event-linked bonds may expose the Trust to other risks, including but not limited to issuer (credit) default, adverse regulatory or jurisdictional interpretations and adverse tax consequences.

The Trust's investments in ILS may include special purpose vehicles (SPVs) or similar instruments structured to comprise a portion of a reinsurer's catastrophe-oriented business, known as quota share instruments (sometimes referred to as reinsurance sidecars), or to provide reinsurance relating to specific risks to insurance or reinsurance companies through a collateralized instrument, known as collateralized reinsurance. Structured reinsurance investments also may include industry loss warranties (ILWs). A traditional ILW takes the form of a bilateral reinsurance contract, but there are also products that take the form of derivatives, collateralized structures, or exchange traded instruments.

Structured reinsurance investments, including quota share instruments, collateralized reinsurance investments and ILWs, generally are subject to the same risks as event-linked bonds. In addition, where the instruments are based on the performance of underlying reinsurance contracts, the Trust has limited transparency into the individual underlying contracts and therefore must rely upon the risk assessment and sound underwriting practices of the issuer. Accordingly, it may be more difficult for the Adviser to fully evaluate the underlying risk profile of the Trust's structured reinsurance investments and therefore the Trust's assets are placed at greater risk of loss than if the Adviser had more complete information. Structured reinsurance instruments generally will be considered illiquid securities by the Trust. These securities may be difficult to purchase, sell or unwind. Illiquid securities also may be difficult to value. If the Trust is forced to sell an illiquid asset, the Trust may be forced to sell at a loss.

G. Purchased Options

The Trust may purchase put and call options to seek increase total return. Purchased call and put options entitle the Trust to buy and sell a specified number of shares or units of a particular security, currency or index at a specified price at a specific date or within a specific period of time. Upon the purchase of a call or put option, the premium paid by the Trust is included in the Statement of Assets and Liabilities as an investment. All premiums are marked-to-market daily, and any unrealized gains or losses are recorded in

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 61

the Trust's financial statements. As the purchaser of an index option, the

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

Trust has the right to receive a cash payment equal to any depreciation in the value of the index below the strike price of the option (in the case of a put) or equal to any appreciation in the value of the index over the strike price of the option (in the case of a call) as of the valuation date of the option. Premiums paid for purchased calls and put options which have expired are treated as realized losses on investments in the Statement of Operations. Upon the exercise or closing of a purchased put option, the premium is offset against the proceeds on the sale of the underlying security or financial instrument in order to determine the realized gain or loss on investments. Upon the exercise or closing of a purchased call option, the premium is added to the cost of the security or financial instrument. The risk associated with purchasing options is limited to the premium originally paid. The average value of purchased options open during the six months ended October 31, 2017 was \$0. Purchased option contracts outstanding at period end are listed within the Schedule of Investments.

H. 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 value of securities held by the Trust may go up or down, sometimes rapidly or unpredictably, due to general market conditions, such as real or perceived adverse economic, political or regulatory conditions, inflation, changes in interest rates, lack of liquidity in the bond markets or adverse investor sentiment. In the past several years, financial markets have experienced increased volatility, depressed valuations, decreased liquidity and heightened uncertainty. These conditions may continue, recur, worsen or spread.

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 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. Below investment grade securities, including floating rate loans, involve greater risk of loss, are subject to greater price volatility, and are less liquid and more difficult to value, especially during periods of economic uncertainty or change, than higher rated debt securities. Certain securities in which the Trust invests, including floating rate loans, once sold, may not settle for an

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

extended period (for example, several weeks or even longer). The Trust will not receive its sale proceeds until that time, which may constrain the Trust's ability to meet its obligations. The Trust may invest in securities of issuers that are in default or that are in bankruptcy. The value of collateral, if any, securing a floating rate loan can decline or may be insufficient to meet the issuer's obligations or may be difficult to liquidate. No active trading market may exist for many floating rate loans, and many loans are subject to restrictions on resale. Any secondary market may be subject to irregular trading activity and extended settlement periods. The Trust's investments in certain foreign markets or countries with limited developing markets may subject the Trust to a greater degree of risk than in a developed market. These risks include disruptive

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

political or economic conditions and the possible imposition of adverse governmental laws or currency exchange restrictions. The Trust may invest up to 50% of its total assets in illiquid securities. Illiquid securities are securities that cannot be disposed of by the Trust within seven days in the ordinary course of business at approximately the amounts which the Trust values the securities.

Interest rates in the U.S. recently have been historically low, so the Trust faces a heightened risk that interest rates may rise. A general rise in interest rates may cause investors to move out of fixed income securities on a large scale, which could adversely affect the price and liquidity of fixed income securities.

I. Repurchase Agreements

Repurchase agreements are arrangements under which the Trust purchases securities from a broker-dealer or a bank, called the counterparty, upon the agreement of the counterparty to repurchase the securities from the Trust at a later date, and at a specific price, which is typically higher than the purchase price paid by the Trust. The securities purchased serve as the Trust's collateral for the obligation of the counterparty to repurchase the securities. The value of the 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 Adviser is responsible for determining that the value of the collateral remains at least equal to the repurchase price. In the event of a default by the counterparty, the Trust is entitled to sell the securities, but the Trust may not be able to sell them for the price at which they were purchased, thus causing a loss to the Trust. Additionally, if the counterparty becomes insolvent, there is some risk that the Trust will not have a right to the securities, or the immediate right to sell the securities. Open repurchase agreements as of October 31, 2017 are disclosed in the Trust's Schedule of Investments.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 63

J. Automatic Dividend Reinvestment Plan

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

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

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

Whenever the Trust declares a dividend on shares payable in cash, participants in the Plan will receive the equivalent in shares acquired by the Plan Agent either (i) through receipt of additional unissued but authorized shares from the Trust or (ii) by purchase of outstanding shares on the New York Stock Exchange or elsewhere. If, on the payment date for any dividend, the net asset value per 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 shares. The number of newly issued shares to be credited to each account will be determined by dividing the dollar amount of the dividend by the net asset value per 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 share is greater than the market value (market discount), the Plan Agent will invest the dividend amount in shares acquired in open-market purchases. There are no brokerage charges with respect to newly issued 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 be able to transfer the shares to another broker and continue to participate in the Plan.

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

K. Credit Default Swap Contracts

A credit default swap is a contract between a buyer of protection and a seller of protection against a pre-defined credit event on an underlying reference obligation, which may be a single security or a basket or index of securities. The Trust may buy or sell credit default swap contracts to seek to increase the Trust's income, or to attempt to hedge the risk of default on portfolio securities. A credit default swap index is used to hedge risk or take a position on a basket of credit entities or indices. As a seller of protection, the Trust would be required to pay the notional (or other agreed-upon) value of the referenced debt obligation to the counterparty in the event of a default by a U.S. or foreign corporate issuer of a debt obligation, which would likely result in a loss to the Trust. In return, the Trust would receive from the counterparty a periodic stream of payments during the term of the contract provided that no event of default occurred. The maximum exposure of loss to the seller would be the notional value of the credit default swaps outstanding. If no default occurs, the Trust would keep the stream of payments and would have no payment obligation. The Trust may also buy credit default swap contracts in order to hedge against the risk of default of debt securities, in which case the Trust would function as the counterparty referenced above.

When the Trust enters into a credit default swap contract, the protection buyer makes an upfront or periodic payment to the protection seller in exchange for the right to receive a contingent payment. An upfront payment made by the Trust, as the protection buyer, is recorded as a component of unrealized appreciation/depreciation on open swap contracts in the Statement of Assets and Liabilities. Periodic payments received or paid by the Trust are recorded as realized gains or losses in the Statement of Operations.

Credit default swap contracts are marked-to-market daily using valuations supplied by independent sources and the change in value, if any, is recorded within the "Swap contracts, at value" line item in the Statement of Assets and Liabilities. Payments received or made as a result of a credit event or upon termination of the contract are recognized, net of the

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

appropriate amount of the upfront payment, as realized gains or losses in the Statement of Operations.

Credit default swap contracts involving the sale of protection may involve greater risks than if the Trust had invested in the referenced debt instrument directly. Credit default swap contracts are subject to general market risk, liquidity risk, counterparty risk and credit risk. If the Trust is a protection buyer and no credit event occurs, it will lose its investment. If the Trust is a protection seller and a credit event occurs, the value of the referenced debt instrument received by the Trust, together with the periodic payments received, may be less than the amount the Trust pays to the protection buyer, resulting in a loss to the Trust.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 65

Certain swap contracts that are cleared through a central clearinghouse are referred to as centrally cleared swaps. All payments made or received by the Trust are pursuant to a centrally cleared swap contract with the central clearing party rather than the original counterparty. Upon entering into a centrally cleared swap contract, the Trust is required to make an initial margin deposit, either in cash or in securities. The daily change in value on open centrally cleared swap contract is recorded as variation margin on centrally cleared swaps in the Statement of Assets and Liabilities.

The amount of cash deposited with the broker as collateral at October 31, 2017 is recorded as "Swaps collateral" on the Statement of Assets and Liabilities.

Open credit default swap contracts at October 31, 2017 are listed in the Schedule of Investments. The average market value of credit default swap contracts open during the six months ended October 31, 2017 was \$(12,764).

2. Management Agreement

The Adviser manages the Trust's portfolio. Management fees payable under the Trust's Advisory Agreement with the Adviser are calculated daily at the annual rate of 0.85% of the Trust's average daily managed assets. "Managed assets" means (a) the total assets of the Trust, including any form of investment leverage, minus (b) all accrued liabilities incurred in the normal course of operations, which shall not include any liabilities or obligations attributable to investment leverage obtained through (i) indebtedness of any type (including, without limitation, borrowing through a credit facility or the issuance of debt securities), (ii) the issuance of preferred stock or other similar preference securities, and/or (iii) any other means. For the six months ended October 31, 2017 the net management fee was 0.85% (annualized) of the Trust's average daily managed assets, which was equivalent of 1.21% (annualized) of the Trust's average daily net assets.

In addition, under the management and administration agreements, certain other services and costs are paid by the Adviser and reimbursed by the Trust. At October 31, 2017, \$33,779 was payable to the Adviser related to management costs, administrative costs and certain other services is included in "Due to affiliates" in the Statement of Assets and Liabilities.

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

3. Transfer Agent

American Stock Transfer & Trust Company (AST) serves as the transfer agent with

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

respect to the Trust's shares. The Trust pays AST an annual fee, as is agreed to from time to time by the Trust and AST, for providing such services.

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

4. Assets and Liabilities Offsetting

The Trust has entered into an International Swaps and Derivatives Association, Inc. Master Agreement (ISDA Master Agreement) or similar agreement with substantially all its derivative counterparties. An ISDA Master Agreement is a bilateral agreement between the Trust and a counterparty that governs the trading of certain OTC derivatives and typically contains, among other things, close-out and set-off provisions which apply upon the occurrence of event of a default and/or termination event as defined under the relevant ISDA Master Agreement. The ISDA Master Agreement may also give a party the right to terminate all transactions traded under such agreement if, among other things, there is deterioration in the credit quality of the other party. Upon an event of default or a termination of the ISDA Master Agreement, the non-defaulting party has the right to close out all transactions under such agreement and to net amounts owed under each transaction to determine one net amount payable by one party to the other. The right to close out and net payments across all transactions under the ISDA Master Agreement could result in a reduction of the Trust's credit risk to its counterparty equal to any amounts payable by the Trust under the applicable transactions, if any. However, the Trust's right to setoff may be restricted or prohibited by the bankruptcy or insolvency laws of the particular jurisdiction to which a specific ISDA counterparty is subject.

The collateral requirements for derivatives transactions under an ISDA Master Agreement are governed by a credit support annex to the ISDA Master Agreement. Collateral requirements are generally determined at the close of business each day and are typically based on changes in market values for each transaction under an ISDA Master Agreement and netted into one amount for such agreement. Generally, the amount of collateral due from or to a counterparty is subject to threshold (a minimum transfer amount) before a transfer is required, which may vary by counterparty. Collateral pledged for the benefit of the Trust and/or counterparty is held in segregated accounts by the Trust's custodian and cannot be sold, re-pledged, assigned or otherwise used while pledged. Cash that has been segregated to cover the Trust's

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 67

collateral obligations, if any, will be reported separately in the Statement of Assets and Liabilities as "Swap Collateral". Securities pledged by the Trust as collateral, if any, are identified as such in the Schedule of Investments.

Financial instruments subject to an enforceable master netting agreement such as an ISDA Master Agreement have not been offset on the Statement of Assets and Liabilities. The following charts show gross assets and liabilities of the Trust as of October 31, 2017:

	Derivative Assets				
	Subject to Master Netting Agreement	Derivatives Available for Offset	Non-Cash Collateral Received (a)	Cash Collateral Received (a)	Net Amount of Derivative Assets (b)
Counterparty					

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

Goldman Sachs International	\$ 13,258	\$ --	\$ --	\$ --	\$ 13,258
State Street Bank & Trust Co.	2,565	(2,565)	--	--	--
Total	\$ 15,823	\$ (2,565)	\$ --	\$ --	\$ 13,258

Counterparty	Derivative Liabilities Subject to Master Netting Agreement	Derivatives Available for Offset	Non-Cash Collateral Pledged (a)	Cash Collateral Pledged (a)	Net Amount of Derivative Liabilities (c)
State Street Bank & Trust Co.	\$ 20,167	\$ (2,565)	\$ --	\$ --	\$ 17,602
Total	\$ 20,167	\$ (2,565)	\$ --	\$ --	\$ 17,602

- (a) The amount presented here may be less than the total amount of collateral received/pledged as the net amount of derivative assets and liabilities cannot be less than \$0.
- (b) Represents the net amount due from the counterparty in the event of default.
- (c) Represents the net amount payable to the counterparty in the event of default.

5. Additional Disclosures about Derivative Instruments and Hedging Activities

The Trust's use of derivatives subjects it to the following risks:

Interest rate risk relates to the fluctuations in the value of interest-bearing securities due to changes in the prevailing levels of market interest rates.

Credit risk relates to the ability of the issuer of a financial instrument to make further principal or interest payments on an obligation or commitment that it has to the Trust.

Foreign exchange rate risk relates to fluctuations in the value of an asset or liability due to changes in currency exchange rates.

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

Equity risk relates to the fluctuations in the value of financial instruments as a result of changes in market prices (other than those arising from interest rate risk or foreign exchange risk), whether caused by factors specific to an individual investment, its issuer, or all factors affecting all instruments traded in a market or market segment.

Commodity risk relates to the risk that the value of a commodity or commodity index will fluctuate based on increases or decreases in the commodities market

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

and factors specific to a particular industry or commodity.

The fair value of open derivative instruments (not considered to be hedging instruments for accounting disclosure purposes) by risk exposure at October 31, 2017 was as follows:

Statement of Assets and Liabilities

	Interest Rate Risk	Credit Risk	Foreign Exchange Risk	Equity Risk	Commodity Risk
Liabilities:					
Net unrealized depreciation on forward foreign currency contracts	\$ --	\$ --	\$ 17,602	\$ --	\$ --
Total Value	\$ --	\$ --	\$ 17,602	\$ --	\$ --

The effect of derivative instruments (not considered to be hedging instruments for accounting disclosure purposes) in the Statement of Operations by risk exposure at October 31, 2017 was as follows:

Statement of Operations

	Interest Rate Risk	Credit Risk	Foreign Exchange Risk	Equity Risk	Commodity Risk
Net realized gain (loss):					
Swap contracts	\$ --	\$ 183	\$ --	\$ --	\$ --
Forward foreign currency contracts	--	--	(281,189)	--	--
Total Value	\$ --	\$ 183	\$ (281,189)	\$ --	\$ --
Change in net unrealized appreciation (depreciation) on:					
Swap contracts	\$ --	\$ 13,258	\$ --	\$ --	\$ --
Forward foreign currency contracts	--	--	(39,157)	--	--
Total Value	\$ --	\$ 13,258	\$ (39,157)	\$ --	\$ --

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

Transactions in shares of beneficial interest for the six months ended October 31, 2017 and the year ended April 30, 2017 were as follows:

	10/31/17	4/30/17
Shares outstanding at beginning of period	8,332,790	8,332,790
Shares outstanding at end of period	8,332,790	8,332,790

7. Credit Agreement

Effective January 27, 2017, the Trust extended the maturity of its existing Revolving Credit Facility (the Credit Agreement) with the Bank of Scotia to January 27, 2020. There is a \$70 million borrowing limit.

At October 31, 2017, the Trust had a borrowing outstanding under the credit agreement totaling \$64,000,000. The interest rate charged at October 31, 2017 was 1.31%. During the six months ended October 31, 2017, the average daily balance was \$62,250,000 at an average interest rate of 2.26%. Interest expense of \$708,392 in connection with the Credit Agreement 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 borrowing outstanding.

8. Subsequent Events

A monthly dividend was declared on December 13, 2017 from undistributed and accumulated net investment income of \$0.0950 per share payable December 18, 2017, to shareowners of record on December 14, 2017.

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

ADDITIONAL INFORMATION (unaudited)

During the period, there have been no material changes in the Trust's investment objective or fundamental policies that have not been approved by the shareowners. There have been no changes in the Trust's charter or By-Laws that would delay or prevent a change in control of the Trust 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 shares in the open market.

Change in Independent Registered Public Accounting Firm

Prior to July 3, 2017 Pioneer Investment Management, Inc. (the Adviser), the Trust's investment adviser, was an indirect, wholly owned subsidiary of

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

UniCredit S.p.A. (UniCredit). On that date, UniCredit completed the sale of its Pioneer Investments business, which includes the Adviser, to Amundi (the Transaction). As a result of the Transaction, the Adviser became an indirect, wholly-owned subsidiary of Amundi. Amundi is controlled by Credit Agricole S.A. Amundi is headquartered in Paris, France, and, as of September 30, 2016, had more than \$1.1 trillion in assets under management worldwide.

Deloitte & Touche LLP (D&T), the Trust's previous independent registered public accounting firm, informed the Audit Committee and the Board that it would no longer be independent with respect to the Trust upon the completion of the Transaction as a result of certain services being provided to Amundi and Credit Agricole, and, accordingly, that it intended to resign as the Trust's independent registered public accounting firm upon the completion of the Transaction. D&T's resignation was effective on July 3, 2017, when the Transaction was completed.

During the periods as to which D&T has served as the Trust's independent registered public accounting firm, including the Trust's two most recent fiscal years, D&T's reports on the Trust's financial statements have not contained an adverse opinion or disclaimer of opinion and have not been qualified or modified as to uncertainty, audit scope or accounting principles. Further, there have been no disagreements with D&T on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which, if not resolved to the satisfaction of D&T, would have caused D&T to make reference to the subject matter of the disagreement in connection with

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 71

its report on the financial statements. In addition, there have been no reportable events of the kind described in Item 304(a)(1)(v) of Regulation S-K under the Securities Exchange Act of 1934.

Effective immediately following the completion of the Transaction on July 3, 2017, the Board, acting upon the recommendation of the Audit Committee, engaged a new independent registered public accounting firm, Ernst & Young LLP (EY).

Prior to its engagement, EY had advised the Trust's Audit Committee that EY had identified the following matters, in each case relating to services rendered by other member firms of Ernst & Young Global Limited, all of which are located outside the United States, to UniCredit and certain of its subsidiaries during the period commencing July 1, 2016, that it determined to be inconsistent with the auditor independence rules set forth by the Securities and Exchange Commission (SEC): (a) project management support services to UniCredit in the Czech Republic, Germany, Italy, Serbia and Slovenia in relation to twenty-two projects, that were determined to be inconsistent with Rule 2-01(c)(4)(vi) of Regulation S-X (management functions); (b) two engagements for UniCredit in Italy where fees were contingent/success based and that were determined to be inconsistent with Rule 2-01(c)(5) of Regulation S-X (contingent fees); (c) four engagements where legal and expert services were provided to UniCredit in the Czech Republic and Germany, and twenty engagements where the legal advisory services were provided to UniCredit in Austria, Czech Republic, Italy and Poland, that were determined to be inconsistent with Rule 2-01(c)(4)(ix) and (x) of Regulation S-X (legal and expert services); and (d) two engagements for UniCredit in Italy involving assistance in the sale of certain assets, that were determined to be inconsistent with Rule 2-01(c)(4)(viii) of Regulation S-X (broker-dealer, investment advisor or investment banking services). None of the foregoing services involved the Trust, any of the other funds in the Pioneer Family of Funds or any other Pioneer entity sold by UniCredit in the Transaction.

EY advised the Audit Committee that it had considered the matters described

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

above and had concluded that such matters would not impair EY's ability to exercise objective and impartial judgment in connection with the audits of the financial statements of the Trust under the SEC and Public Company Accounting Oversight Board independence rules, and that a reasonable investor with knowledge of all relevant facts and circumstances would reach the same conclusion. Management and the Audit Committee considered these matters and discussed the matters with EY and, based upon EY's description of the matters and statements made by EY, Management and the Audit Committee believe that EY will be capable of exercising objective and

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

impartial judgment in connection with the audits of the financial statements of the Trust, and Management further believes that a reasonable investor with knowledge of all relevant facts and circumstances would reach the same conclusion.

Results of Shareholder Meeting

At a special meeting of shareholders held on June 13, 2017, shareholders of the Trust were asked to consider the proposal described below. A report of the total votes cast by the Trust's shareholders follows:

	For	Against	Abstain	Broker Non-Votes
Proposal 1 - To approve a New Management Agreement with the Adviser	5,910,817.800	174,154.000	254,931.000	0.000

At the annual meeting held on September 21, 2017, shareholders of the Trust were asked to consider the proposal described below. A report of the total votes cast by the Trust's shareholders follows:

	For	Withheld
Proposal 1 - To elect three Class I Trustees		
Benjamin M. Friedman	7,127,661.405	281,848.156
Margaret B.W. Graham	7,105,441.744	304,067.817
Kenneth J. Taubes	7,140,095.297	269,414.264

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 73

Trustees, Officers and Service Providers

Trustees Officers

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

Thomas J. Perna, Chairman
David R. Bock
Benjamin M. Friedman
Margaret B.W. Graham
Lisa M. Jones
Lorraine H. Monchak
Marguerite A. Piret
Fred J. Ricciardi
Kenneth J. Taubes

Lisa M. Jones, President and Chief
Executive Officer
Mark E. Bradley, Treasurer and
Chief Financial Officer
Christopher J. Kelley, Secretary and
Chief Legal Officer

Investment Adviser and Administrator
Amundi Pioneer Asset Management, Inc.

Custodian and Sub-Administrator
Brown Brothers Harriman & Co.

Principal Underwriter
Amundi Pioneer Distributor, Inc.

Legal Counsel
Morgan, Lewis & Bockius LLP

Transfer Agent
American Stock Transfer & Trust Company

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

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

This page is for your notes.

Pioneer Diversified High Income Trust | Semiannual Report | 10/31/17 75

This page is for your notes.

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

How to Contact Amundi Pioneer

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

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

Account Information

1-800-710-0935

Or write to AST:

For

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

Write to

American Stock
Transfer & Trust
Operations Center
6201 15th Ave.

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

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 www.amundipioneer.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 www.sec.gov. The filed form may also be viewed and copied at the Commission's Public Reference Room in Washington, DC. Information regarding the operations of the Public Reference Room may be obtained by calling 1-800-SEC-0330.

[LOGO] Amundi Pioneer
=====

ASSET MANAGEMENT

Amundi Pioneer Asset Management, Inc.
60 State Street
Boston, MA 02109
www.amundipioneer.com

Securities offered through Amundi Pioneer Distributor, Inc.
60 State Street, Boston, MA 02109
Underwriter of Pioneer Mutual Funds, Member SIPC
(C) 2017 Amundi Pioneer Asset Management 21398-10-1217

ITEM 2. CODE OF ETHICS.

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

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

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

- (1) Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;

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

(2) Full, fair, accurate, timely, and understandable disclosure in reports and documents that a registrant files with, or submits to, the Commission and in other public communications made by the registrant;

(3) Compliance with applicable governmental laws, rules, and regulations;

(4) The prompt internal reporting of violations of the code to an appropriate person or persons identified in the code; and

(5) Accountability for adherence to the code.

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

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

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

Not applicable.

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

Not applicable.

(f) The registrant must:

(1) File with the Commission, pursuant to Item 12(a)(1), 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

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

address and the fact that it has posted such code of ethics on its Internet website; or

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

ITEM 3. AUDIT COMMITTEE FINANCIAL EXPERT.

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

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

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

- (i) Accept directly or indirectly any consulting, advisory, or other compensatory fee from the issuer; or
- (ii) Be an "interested person" of the investment company as defined in Section 2(a)(19) of the Act (15 U.S.C. 80a-2(a)(19)).

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

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

Not applicable.

ITEM 4. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

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

N/A

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

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

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 Amundi Pioneer Asset Management, Inc, the audit committee and the independent auditors.

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

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

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

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

SECTION II - POLICY

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

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.
<ul style="list-style-type: none"> o "One-time" pre-approval for the fund fiscal year within a specified dollar limit for all pre-approved specific service subcategories 		<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-CSRS

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 o Specific approval is needed to exceed the pre-approved dollar limits for these services (see general Audit Committee approval policy below for details on obtaining specific approvals) o Specific approval is needed to use the Fund's 	<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-CSRS

auditors for tax services not
denoted as pre-approved, or to add a specific
service subcategory as
"pre-approved"

SECTION III - POLICY DETAIL, CONTINUED

SERVICE CATEGORY	SERVICE CATEGORY DESCRIPTION	SPECIFIC PRE-APPROVED SERVICE SUBCATEGORIES
IV. OTHER SERVICES A. SYNERGISTIC, UNIQUE QUALIFICATIONS	Services which are not prohibited by the Rule, if an officer of the Fund determines that using the Fund's auditor to provide these services creates significant synergy in the form of efficiency, minimized disruption, the ability to maintain a desired level of confidentiality, or where the Fund's auditors possess unique or superior qualifications to provide these services, resulting in superior value and results for the Fund.	<ul style="list-style-type: none"> o Business Risk Management support o Other control and regulatory compliance projects
AUDIT COMMITTEE APPROVAL POLICY	AUDIT COMMITTEE REPORTING POLICY	
<ul style="list-style-type: none"> o "One-time" pre-approval for the fund fiscal year within a specified dollar limit o Specific approval is needed to exceed the pre-approved dollar limits for these services (see general Audit Committee approval policy below for details on obtaining specific approvals) o Specific approval is needed to use the Fund's auditors for "Synergistic" or "Unique Qualifications" Other Services not denoted as pre-approved to the left, or to 	<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-CSRS

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	AUDIT COMMITTEE REPORTING POLICY
<ul style="list-style-type: none"> o These services are not to be performed with the exception of the(*) services that may be permitted if they would not be subject to audit procedures at the audit client (as defined in rule 2-01(f)(4)) level the firm providing the service. 	<ul style="list-style-type: none"> o A summary of all services and related fees reported at each regularly scheduled Audit Committee meeting will serve as continual confirmation that has not provided any restricted services.

GENERAL AUDIT COMMITTEE APPROVAL POLICY:

- o For all projects, the officers of the Funds and the Fund's auditors will each make an assessment to determine that any proposed projects will not impair independence.
- o Potential services will be classified into the four non-restricted service categories and the "Approval of Audit, Audit-Related, Tax and Other

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

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

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

ITEM 5. AUDIT COMMITTEE OF LISTED REGISTRANTS

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

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

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.

N/A

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

N/A

ITEM 6. SCHEDULE OF INVESTMENTS.

File Schedule of Investments in securities of unaffiliated issuers as of the close of the reporting period as set forth in 210.1212 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.

N/A

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.

N/A

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

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

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 registrant's equity securities that is registered by the registrant pursuant to Section 12 of the Exchange Act (15 U.S.C. 781).

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 registrant's board of directors, where those changes were implemented after the registrant last provided disclosure in response to the requirements of Item 407(c)(2)(iv) of Regulation S-R(17 CFR 229.407) (as required by Item 22(b)(15)) 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 registrant's board of directors since the registrant last provided disclosure in response to the requirements of Item 407(c)(2)(iv) of Regulation S-R 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 and principal financial officers, or persons performing similar functions, regarding the effectiveness of the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Act (17 CFR 270.30a-3(c))) as of a date within 90 days of the filing date of the report that includes the disclosure required by this paragraph, based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the Act (17 CFR 270.30(a)-3(b) and Rules 13a-15(b) or 15d-15(b) under the Exchange Act (17 CFR 240.13a-15(b) or 240.15d-15(b))).

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

(b) Disclose any change in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the Act (17CFR 270.30a-3(d))) that occurred during the second fiscal quarter of the period covered by this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

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

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

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.

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

(1) 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.

(2) A separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the Act (17 CFR 270.30a-2(a)) , exactly as set forth below:

Filed herewith.

SIGNATURES

[See General Instruction F]

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

(Registrant) Pioneer Diversified High Income Trust

By (Signature and Title)* /s/ Lisa M. Jones
Lisa M. Jones, President & Chief Executive Officer

Date December 29, 2017

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

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/ Lisa M. Jones
Lisa M. Jones, President & Chief Executive Officer

Date December 29, 2017

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

Date December 29, 2017

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