

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

Pioneer Diversified High Income Trust  
Form N-CSR  
June 27, 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, Pioneer Investment Management, Inc.,  
60 State Street, Boston, MA 02109  
(Name and address of agent for service)

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

Date of fiscal year end: April 30

Date of reporting period: May 1, 2016 through April 30, 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-CSR

Pioneer Diversified  
High Income Trust

---

Annual Report | April 30, 2017

---

Ticker Symbol: HNW

[LOGO] PIONEER  
Investments (R)

visit us: [us.pioneerinvestments.com](http://us.pioneerinvestments.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
Report of Independent Registered Public Accounting Firm	70
Approval of New and Interim Management Agreements	72
Trustees, Officers and Service Providers	80

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 1

## President's Letter

After an overall strong year for leading market indices in 2016, U.S. markets continued to generate positive returns over the first calendar quarter of 2017, with so-called "risk" assets, such as equities and credit-sensitive bonds, posting solid gains. In the first quarter, U.S. equities, as measured by the Standard & Poor's 500 Index, returned slightly more than 6%, while high-yield securities dominated bond market performance.

The transfer of power in Washington, D.C. in January had little or no effect on the markets in the first quarter, as the post-election momentum we witnessed

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

late in the fourth quarter of 2016 slowed only when oil prices slumped in March, due to both higher-than-expected inventories and concerns over whether OPEC (Organization of Petroleum Exporting Countries) would continue its supply cuts in June. Not even the Federal Reserve System's (the Fed's) highly anticipated rate hike during the month of March, its second in three months, nor Britain's trigger of Article 50 to begin the "Brexit" process caused any dramatic sell-off of risk assets.

While U.S. gross domestic product (GDP) did slow in the first quarter, the expectation is for GDP to accelerate in the second quarter, with a strong consumer leading the way. Pioneer believes the U.S. economy may lead all developed nations in 2017, with GDP growth in excess of 2% for the year. President Trump has proposed decidedly pro-business policies, such as lower taxes, higher infrastructure spending, and less regulation, though we believe the economy may realize the benefits of those policies, if enacted, more so in 2018 than in 2017. Conversely, the effects of the President's potentially restrictive trade policies could offset some of the benefits of the pro-growth fiscal policies.

Even so, we believe solid domestic employment figures should continue to support consumption and the housing market, and that stronger corporate profits and increased government spending may contribute to economic growth in 2018 and beyond. Increasing global Purchasing Manager Indices (PMIs) suggest that growth in global economies is also improving. (PMIs are used to measure the economic health of the manufacturing sector.)

There are, as always, some risks to our outlook. First, the market already has priced in a good deal of the Trump economic reform platform, and that could lead to near-term disappointment if Congressional follow-through does not happen this year. The future of the Affordable Care Act is another potential concern. The first attempt to repeal/replace it failed, but any new proposed

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

legislation will undoubtedly have an effect on the health care sector, one of the largest segments of the U.S. economy. Geopolitical risks, of course, remain a potential headwind, given ongoing strife in the Middle East and renewed tensions on the Korean Peninsula.

While our current outlook is generally optimistic, conditions can and often do change, and while passive investment strategies may have a place in one's overall portfolio, it is our view that all investment decisions are active choices.

Throughout Pioneer's history, we have believed in the importance of active management. The active decisions to invest in equities or fixed-income securities are made by a team of experienced investment professionals focusing on identifying value across global markets using proprietary research, careful risk management, and a long-term perspective. We believe our shareowners can benefit from the experience and tenure of our investment teams as well as the insights generated from our extensive research process.

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,

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

/s/ Lisa M. Jones

Lisa M. Jones  
President and CEO  
Pioneer Investment Management USA Inc.  
April 30, 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 | Annual Report | 4/30/17 3

Portfolio Management Discussion | 4/30/17

Lower-quality, higher-yielding debt produced solid results over the 12-month period ended April 30, 2017, as global economic conditions appeared to brighten and investor confidence grew. 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 12-month period. Mr. Feltus, Director of High Yield and Bank Loans, a senior vice president and a portfolio manager at Pioneer; Mr. Melchreit, Director of Investment-Grade Management, a senior vice president and a portfolio manager at Pioneer; Mr. Sharkey, a senior vice president and a portfolio manager at Pioneer; and Mr. Liu, a vice president and a portfolio manager at Pioneer, are responsible for the day-to-day management of the Trust.

Q How did the Trust perform during the 12 months ended April 30, 2017?

A Pioneer Diversified High Income Trust returned 16.20% at net asset value and 17.01% at market price during the 12-month period ended April 30, 2017. During the same 12-month period, the Trust's custom benchmark returned 8.44%. The custom benchmark is based on equal weights of the Bank of America Merrill Lynch (BofA ML) Global High Yield and Emerging Markets Plus (GHY and EMP) Index and the Standard & Poor's/Loan Syndications & Trading Association (S&P/LSTA) Leveraged Loan Index. Unlike the Trust, the custom benchmark does not use leverage. While the use of leverage increases investment opportunity, it also increases investment risk.

During the same 12-month period, the average return (at market price) of the 30 closed end funds in Lipper's High Yield Closed End Funds Category (which may or may not be leveraged) was 21.01%, and the average return (at market price) of the 22 closed end funds in Lipper's Loan Participation Closed End Funds Category (which may or may not be leveraged) was 22.06%.

The shares of the Trust were selling at a 5.5% discount to net asset value at the end of the period on April 30, 2017. Comparatively, the shares of the Trust were selling at a 6.2% discount to net asset value on April 30, 2016, the end of the Trust's previous annual reporting period.

On April 30, 2017, the 30-day SEC yield on the Trust's shares was 9.56%\*.

\* The 30-day SEC yield is a standardized formula that is based on the hypothetical annualized earning power (investment income only) of the Trust's portfolio securities during the period indicated.

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

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

- Q How would you describe the investment environment in the fixed-income markets during the 12-month period ended April 30, 2017?
- A Higher-yielding investments performed strongly over the 12-month period. The surge in high-yield bond prices reflected persistent market confidence in the prospects for sustained economic growth in the United States and overseas, and was only briefly interrupted by unforeseen events, such as the so-called "Brexit" vote in June 2016 by the British electorate to exit the European Union. Even monetary tightening by the U.S. Federal Reserve System (the Fed), which hiked the Federal funds rate twice during the period - once in December 2016 and again in March 2017 - did not cause any interruptions in general market trends. In the United States, despite a disappointing gross domestic product (GDP) growth report for the first calendar quarter of 2017, economic indicators were strong, especially the employment situation, as new-job creation brought the nation's unemployment rate down to 4.4% by the period's end. Europe's economy also continued to gain ground during the period, despite the very brief market sell-off driven by the Brexit vote, while Japan's economy strengthened and China's economy responded positively after the Chinese government took steps to encourage business lending. Renewed growth in China combined with rising commodity prices also helped lift the emerging markets, especially in the latter months of the period. Emerging markets corporate bonds, in particular, performed well over the 12 months.

- Q What factors affected the Trust's performance relative to its customized benchmark during the 12-month period ended April 30, 2017?

- A The Trust's heavy exposure to the U.S. high-yield corporate bond market as well as good security selection results within that group were the main drivers of the Trust's benchmark-relative performance. In addition, the Trust's non-benchmark positions in floating-rate bank loans and insurance-linked securities also aided benchmark-relative returns, despite noteworthy property damage claims resulting from Hurricane Matthew in the United States and wildfires in Alberta, Canada.

In addition to strong results from the Trust's portfolio of investments, the Trust's use of leverage, or borrowed funds, also contributed to benchmark-relative returns during the period. The use of leverage increases risk and has the effect of amplifying the size of market swings on the portfolio. Just as the use of leverage can exaggerate negative results during market downturns when prices of high-yield bonds decline, leverage can also enhance gains when high-yield and emerging markets bond prices rise, as they did during the 12-month period.

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 5

Over the course of the 12 months, we eventually reduced the allocation to insurance-linked securities in the Trust's portfolio, as we saw less relative value in the asset class. We used the opportunity to increase the portfolio's exposure to bank loans. Like catastrophe bonds, bank loans have floating-rate features that can be advantageous in a rising interest-rate environment. As of period end, senior secured floating-rate loans represented more than 28% of the Trust's total investment portfolio, while insurance-linked securities represented nearly 15% of the Trust's total investment portfolio.

- Q What were some of the individual holdings that had noteworthy effects on the Trust's benchmark-relative results, either positively or negatively, during the 12-month period ended April 30, 2017?

- A Among the portfolio's U.S. high-yield bond holdings, Scientific Games, a

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

producer of gambling equipment for casinos, delivered standout results for the Trust during the period, while Jack Cooper Holdings, a transportation firm that ships new vehicles from manufacturing plants to dealerships, detracted from benchmark-relative results as the company's profit margins shrank. Among the loan holdings in the Trust's portfolio, leading contributors to benchmark-relative returns during the period included loans of Dixie Electric, a leader in the oil and natural gas services industry, facilitating upstream, midstream, and downstream operations in the most prolific energy-producing regions of the U.S., and Jonah Energy, a privately held natural gas production company.

Holdings that detracted from the Trust's benchmark-relative performance during the period included a loan to Concordia Health, a diversified pharmaceutical company that experienced soft earnings in its operations in the United States and the United Kingdom. Among insurance-linked holdings, while nearly all of the portfolio's positions worked out well for the Trust's benchmark-relative performance, one notable exception was a bond of Gator Re, which was affected by an increase in tornado activity in the U.S.

Q How did the level of leverage in the Trust change over the 12-month period ended April 30, 2017?

A The Trust employs leverage through a credit agreement. (See Note 8 to the Financial Statements.)

At the end of the 12-month period on April 30, 2017, 27.9% of the Trust's total managed assets were financed by leverage (or borrowed funds), compared with 29.1% of the Trust's total managed assets financed by leverage at the start of the period on May 1, 2016. The absolute amount of funds borrowed by the Trust did not change. The reduction in the percentage of leveraged funds was the result of appreciation in the value of the Trust's holdings.

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

Q Were there any changes in the Trust's dividend\*\* distributions during the 12-month period ended April 30, 2017?

A No, the Trust's dividend distributions remained relatively consistent during the period. However, the Trust has drawn on accumulated net investment income in paying the Trust's distributions in recent periods, and these reserves may be depleted over time.

Q Did the Trust invest in any derivative securities during the 12-month period ended April 30, 2017? If so, did the use of derivatives have a material impact on benchmark-relative performance?

A We used some forward foreign currency contracts during the period to help manage the Trust's exposures to different currencies. The contracts had a very minor, negative effect on the Trust's benchmark-relative results.

Q What is your investment outlook?

A The economic fundamentals underpinning high-yield investments appear to be strong, and improving. We anticipate that both the domestic and global economies will continue to expand, adding to corporate profitability and enabling companies to improve their earnings and strengthen their balance sheets. That, in turn, should increase the probability that corporate bond default rates will decline further.

We think there is good potential for U.S. economic growth to accelerate in

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

the coming months, especially if President Trump should secure Congressional approval of his economic agenda, which includes proposed reductions in both personal and corporate income tax rates and a boost in infrastructure spending. We believe Japan's economy should continue to improve, and we anticipate that growth trends in China and Europe should remain steady. An improving global economic outlook characterized by healthy corporate profits and low bond default rates also bodes well for the emerging markets.

As high-yield investments have outperformed other fixed-income securities, credit spreads have tightened. (Credit spreads are commonly defined as the differences in yield between Treasuries and other types of fixed-income securities with similar maturities.) We think high-yield bonds are fairly valued at the present time, and so there may be less potential for price appreciation after the recent market rallies. As a consequence, we have become more cautious and started to reduce the overall credit risk in the Trust's portfolio.

\*\* Dividends are not guaranteed.

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 7

We have a positive outlook for bank-loan investments. We continue to believe that bank loans can create solid opportunities for income-oriented investors, despite recent increases in loan prices, which have resulted in more than three-quarters of the loans in the S&P/LSTA Index selling at above par (face value). Re-pricings in the loan market remain a concern, however, as many issuers continue to call away their older, higher-coupon loans and refinance them into lower-cost loans. We believe the credit-quality of the loan asset class is good, as default rates remain well below historical averages. We think overall default rates should stay relatively low, although we anticipate there may be some defaults in the retail loan sector as online sellers continue to take business from traditional "brick-and-mortar" retailers.

We plan to maintain exposure in the Trust's portfolio to insurance-linked securities. As noted earlier, like bank loans, insurance-linked securities offer the advantage of floating-rate income, which can be advantageous in a rising interest-rate environment. Within the Trust's allocation to insurance-linked securities, our approach is to be well diversified\*\*\* across different types of risk exposures and geographical areas. Our objective remains to have the portfolio's holdings of insurance-linked securities produce strong, risk-adjusted returns for the Trust's shareholders, with performance that is largely separate from the returns of most other asset classes, including bonds and bank loans.

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

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

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

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

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 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 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.

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 9

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 event-linked bonds 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.

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

These risks may increase share price volatility.

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



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

guarantee of future results.

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

Portfolio Summary | 4/30/17

Portfolio Diversification\*

-----  
(As a percentage of total investment portfolio)

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

Corporate Bonds & Notes	61.9%
Senior Secured Floating Rate Loan Interests	28.4%
Commercial Mortgage-Backed Securities	2.4%
U.S. Government And Agency Obligation	2.3%
Sovereign Debt Obligations	1.6%
Convertible Bond	0.9%
Preferred Stocks	0.7%
Asset Backed Securities	0.7%
Convertible Preferred Stock	0.4%
Collateralized Mortgage Obligations	0.3%
Treasury Bill	0.2%
Common Stocks	0.1%
Tax Exempt Obligation	0.1%
Call Options Purchased	0.0%+
Warrant	0.0%+

\* Includes investments in Insurance Linked Securities totaling 14.8% 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)	2.72%
2. U.S. Treasury Notes, 1.012%, 4/30/18	2.32
3. Gullane Segregated Account (Artex SAC, Ltd.), Variable Rate Notes, 11/30/21	1.18
4. Pangaea Re Segregated Account (Artex SAC, Ltd.), Series 2017-1, Variable Rate Notes, 11/30/21	0.95
5. Queen Street X Re, Ltd., 6.547%, 6/8/18 (144A) (Cat Bond)	0.93
6. Hercules LLC, 6.5%, 6/30/29	0.86
7. East Lane Re VI, Ltd., 3.447%, 3/14/18 (144A) (Cat Bond)	0.81
8. Minerva Luxembourg SA, 7.75%, 1/31/23 (144A)	0.78

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

9. Communications Sales & Leasing, Inc. / CSL Capital LLC, 8.25%, 10/15/23	0.75
<hr style="border-top: 1px dashed black;"/>	
10. SIG Combibloc Holdings SCA, 7.75%, 2/15/23 (144A)	0.74
<hr style="border-top: 1px dashed black;"/>	

\*\* 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 | Annual Report | 4/30/17 11

### Prices and Distributions | 4/30/17

#### Market Value per Share^

<hr style="border-top: 1px dashed black;"/>		
	4/30/17	4/30/16
<hr style="border-top: 1px dashed black;"/>		
Market Value	\$16.70	\$15.60
<hr style="border-top: 1px dashed black;"/>		
(Discount)	(5.5)%	(6.2)%
<hr style="border-top: 1px dashed black;"/>		

#### Net Asset Value per Share^

<hr style="border-top: 1px dashed black;"/>		
	4/30/17	4/30/16
<hr style="border-top: 1px dashed black;"/>		
Net Asset Value	\$17.68	\$16.63
<hr style="border-top: 1px dashed black;"/>		

#### Distributions per Share\*

<hr style="border-top: 1px dashed black;"/>			
	Net Investment Income	Short-Term Capital Gains	Long-Term Capital Gains
<hr style="border-top: 1px dashed black;"/>			
5/1/16 - 4/30/17	\$1.44	\$--	\$--
<hr style="border-top: 1px dashed black;"/>			

#### Yields

<hr style="border-top: 1px dashed black;"/>			
---	--	--	--

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

	4/30/17	4/30/16
30-Day SEC Yield	9.56%	9.03%

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 [us.pioneerinvestments.com](http://us.pioneerinvestments.com).

\* The amount of distributions made to shareowners during the period was in excess of the net investment income earned by the Trust during the period. The Trust has accumulated undistributed net investment income which is part of the Trust's NAV. A portion of this accumulated net investment income was distributed to shareowners during the period. A decrease in distributions may have a negative effect on the market value of the Trust's shares.

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

Performance Update | 4/30/17

### 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 combined (50%/50%) Bank of America Merrill Lynch Global High Yield and Emerging Markets Plus Index (BofA ML Global HY and EMP Index) and S&P/LSTA Leveraged Loan Index.

### Average Annual Total Returns (As of April 30, 2017)

	Net Asset Value (NAV)	Market Price	50% BofA ML Global High Yield & EMP Index/ 50% S&P/LSTA Leveraged Loan Index
Life of Trust (5/30/2007)	8.05%	6.94%	5.72%
5 years	8.35	6.46	5.17
1 year	16.20	17.01	8.44

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

Value of \$10,000 Investment

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

	Pioneer Diversified High Income Trust	50% BofA ML Global High Yield & EMP Index/50% S&P/LSTA Leveraged Loan Index
4/07	\$10,000	\$10,000
4/08	\$ 8,933	\$ 9,947
4/09	\$ 6,868	\$ 8,593
4/10	\$11,899	\$11,822
4/11	\$14,034	\$13,026
4/12	\$14,224	\$13,545
4/13	\$17,065	\$15,079
4/14	\$18,280	\$15,835
4/15	\$16,836	\$15,964
4/16	\$16,624	\$16,071
4/17	\$19,452	\$17,428

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

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

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

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 BofA ML Global High Yield and Emerging Markets Plus Index is an unmanaged index that tracks the performance of the below- and border-line investment-grade global debt markets denominated in the major developed market currencies. The Index includes sovereign issuers rated BBB1 and lower along with corporate issues rated BB1 and lower. There are no restrictions on issuer country of domicile. The 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% BofA ML Global High Yield & EMP Index/50% CS Leveraged Loan Index, to 50% BofA ML Global High Yield & EMP Index/50% S&P/LSTA Leveraged Loan Index. The change was implemented to achieve a better style fit and to maintain consistency with Pioneer Floating Rate Trust (PHD), which began to utilize the S&P/LSTA Leveraged Loan Index as its benchmark effective October 1, 2016.

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

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 | Annual Report | 4/30/17 13

### Schedule of Investments | 4/30/17

Principal Amount USD (\$)		Val
	ASSET BACKED SECURITIES -- 1.0% of Net Assets	
250,000	American Credit Acceptance Receivables Trust, Series 2014-2, Class D, 4.96%, 5/10/21 (144A)	\$
299,996	Axis Equipment Finance Receivables III LLC, Series 2015-1A, Class E, 5.27%, 5/20/20 (144A)	
400,000 (a)	NCF Dealer Floorplan Master Trust, Series 2016-1A, Class C, 9.478%, 3/21/22 (144A)	
500,000	VB-S1 Issuer LLC, Series 2016-1A, Class F, 6.901%, 6/15/46 (144A)	
	<b>TOTAL ASSET BACKED SECURITIES</b> (Cost \$1,437,996)	<b>\$</b>
	COLLATERALIZED MORTGAGE OBLIGATIONS -- 0.4% of Net Assets	
46,711	Global Mortgage Securitization, Ltd., Series 2004-A, Class B1, 5.25%, 11/25/32 (144A)	\$
94,977	Global Mortgage Securitization, Ltd., Series 2005-A, Class B3, 5.25%, 4/25/32 (144A)	
290,000 (b)	GMAT Trust, Series 2013-1A, Class M, 5.0%, 11/25/43 (144A)	
248,463 (c)	GMAT Trust, Series 2015-1A, Class A1, 4.25%, 9/25/20 (144A)	
	<b>TOTAL COLLATERALIZED MORTGAGE OBLIGATIONS</b> (Cost \$659,180)	<b>\$</b>
	COMMERCIAL MORTGAGE-BACKED SECURITIES -- 3.5% of Net Assets	
375,000 (a)	BAMLL Commercial Mortgage Securities Trust, Series 2014-INLD, Class F, 3.299%, 12/15/29 (144A)	\$
200,000 (b)	BAMLL Commercial Mortgage Securities Trust, Series 2016-FR14, Class C, 1.407%, 2/27/48 (144A)	
500,000 (b)	Banc of America Commercial Mortgage Trust, Series 2007-4, Class D, 6.103%, 2/10/51 (144A)	
124,956 (b)	Bear Stearns Commercial Mortgage Securities Trust, Series 2005-PWR7, Class B, 5.214%, 2/11/41	
260,000 (a)	CFCRE Mortgage Trust, Series 2015-RUM, Class E, 5.594%, 7/15/30 (144A)	
500,000 (b)	Citigroup Commercial Mortgage Trust, Series 2014-GC23, Class E, 3.208%, 7/10/47 (144A)	
500,000 (b)	COBALT CMBS Commercial Mortgage Trust, Series 2007-C3, Class C, 5.99%, 5/15/46	
300,000 (b)	COMM Mortgage Trust, Series 2007-C9, Class H,	

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

	5.979%, 12/10/49 (144A)
250,000 (a)	COMM Mortgage Trust, Series 2014-FL5, Class D, 4.994%, 10/15/31 (144A)
366,979 (a)	EQTY Mezzanine Trust, Series 2014-INMZ, Class M, 5.739%, 5/8/31 (144A)

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

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

Principal Amount USD (\$)		Val
	COMMERCIAL MORTGAGE-BACKED SECURITIES -- (continued)	
170,000 (a)	EQTY Mortgage Trust, Series 2014-INNS, Class E, 4.439%, 5/8/31 (144A)	\$
80,115	Homeowner Assistance Program Reverse Mortgage Loan Trust, Series 2013-RM1, Class A, 4.0%, 5/26/53 (144A)	
400,000	JP Morgan Chase Commercial Mortgage Securities Trust, Series 2014-FRR1, Class B702, 4.234%, 4/27/44 (144A)	
550,000 (a)	JP Morgan Chase Commercial Mortgage Securities Trust, Series 2014-INN, Class E, 4.594%, 6/15/29 (144A)	
395,422 (b)	LB-UBS Commercial Mortgage Trust, Series 2006-C1, Class AJ, 5.276%, 2/15/41	
346,716 (b)	Morgan Stanley Capital I Trust, Series 2007-T25, Class AJ, 5.574%, 11/12/49	
250,000	Wells Fargo Commercial Mortgage Trust, Series 2016-BNK1, Class D, 3.0%, 8/15/49 (144A)	
	TOTAL COMMERCIAL MORTGAGE-BACKED SECURITIES (Cost \$5,182,496)	\$
	SENIOR SECURED FLOATING RATE LOAN INTERESTS -- 41.6% of Net Assets* (a)	
	AUTOMOBILES & COMPONENTS -- 1.4%	
	Auto Parts & Equipment -- 1.2%	
235,000	American Axle & Manufacturing, Inc., Tranche B Term Loan, 3.24%, 4/6/24	\$
344,277	Electrical Components International, Inc., Term Loan, 5.897%, 5/28/21	
182,707	Federal-Mogul Corp., Tranche C Term Loan, 4.75%, 4/15/21	
176,852	TI Group Automotive Systems LLC, Initial US Term Loan, 3.743%, 6/30/22	
779,419	Tower Automotive Holdings USA LLC, Initial Term Loan, 3.75%, 3/7/24	
	Automobile Manufacturers -- 0.1%	
154,621	Inteva Products LLC, Term B Loan, 9.75%, 9/8/21	\$

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

191,667	Tires & Rubber -- 0.1% Goodyear Tire & Rubber Co., Second Lien Term Loan, 2.99%, 4/30/19	\$
	Total Automobiles & Components	\$

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 15

Schedule of Investments | 4/30/17 (continued)

Principal Amount USD (\$)		Val
	CAPITAL GOODS -- 5.3%	
	Aerospace & Defense -- 1.7%	
401,237	Accudyne Industries Borrower SCA/Accudyne Industries LLC, Refinancing Term Loan, 4.147%, 12/13/19	\$
997,500 (f)	ADS Tactical, Inc., Term Loan, 8.482%, 12/31/22	
297,733	DAE Aviation Holdings, Inc., Initial Term Loan, 5.25%, 7/7/22	
461,428	DynCorp International, Inc., Term Loan B2, 7.75%, 7/7/20	
226,621	Vencore, Inc. (fka SI Organization, Inc.), First Lien Initial Term Loan, 5.897%, 11/23/19	
157,600	WP CPP Holdings LLC, Second Lien Term Loan B-1, 8.922%, 4/30/21	\$
	Building Products -- 0.9%	
776,839	Builders FirstSource, Inc., Refinancing Term Loan, 4.069%, 2/29/24	\$
300,000 (d)	Summit Materials LLC, Restatement Effective Date Term Loan, 7/18/22	
250,000	Unifrax I LLC, Initial Dollar Term Loan, 4.9%, 4/4/24	\$
	Construction Machinery & Heavy Trucks -- 0.9%	
500,000	Commercial Vehicle Group, Inc., Term Loan B, 7.158%, 3/30/23	\$
395,580	Doosan Infracore International, Inc. (Doosan Holdings Europe, Ltd.), Tranche B Term Loan, 4.5%, 5/28/21	
385,125	Navistar, Inc., Tranche B Term Loan, 5.0%, 8/7/20	\$
	Electrical Components & Equipment -- 0.3%	
416,492	Wireco WorldGroup, Inc., First Lien Initial Term Loan, 6.5%, 9/29/23	\$
	Industrial Conglomerates -- 0.6%	
597,249	DTI Holdco, Inc., Initial Term Loan, 6.25%, 10/2/23	\$

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

250,000 (d)	Filtration Group Corp., First Lien Term Loan, 11/23/20	\$
188,575	Industrial Machinery -- 0.4% Blount International, Inc., Initial Term Loan, 6.0%, 4/12/23	\$
492,389	NN, Inc., Tranche B Term Loan, 5.243%, 10/19/22	\$
500,000 (d)	Trading Companies & Distributors -- 0.5% Beacon Roofing Supply, Inc., Initial Term Loan, 10/1/22	\$

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

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

Principal Amount USD (\$)		Val
186,879	Trading Companies & Distributors -- (continued) WESCO Distribution, Inc., Tranche B-1 Loan, 3.778%, 12/12/19	\$
	Total Capital Goods	\$
500,000	COMMERCIAL & PROFESSIONAL SERVICES -- 1.0% Environmental & Facilities Services -- 0.9% Granite Acquisition, Inc., Second Lien Term B Loan, 8.397%, 12/19/22	\$
249,551	Infiltrator Water Technologies LLC, Term B-1 Loan, 4.647%, 5/27/22	\$
547,250	Safway Group Holding LLC, Initial Term Loan, 5.75%, 8/21/23	\$
126,297	Security & Alarm Services -- 0.1% Prime Security Services Borrower LLC, First Lien 2016-2 Refinancing Term B-1 Loan, 4.25%, 5/2/22	\$
	Total Commercial & Professional Services	\$
550,000	CONSUMER DURABLES & APPAREL -- 1.2% Home Furnishings -- 0.4% Serta Simmons Holdings LLC, Second Lien Term Loan, 9.038%, 11/8/24	\$
500,000	Housewares & Specialties -- 0.3% World Kitchen LLC, US Term Loan, 7.25%, 3/4/19	\$
	Leisure Products -- 0.5%	



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

350,000	Bass Pro Group LLC, Initial Term Loan, 6.147%, 12/15/23	\$
363,691	Bombardier Recreational Products, Inc., Term B Loan, 4.04%, 6/30/23	\$

---

### Total Consumer Durables & Apparel

	CONSUMER SERVICES -- 3.1%	
	Casinos & Gaming -- 0.5%	
200,000	CityCenter Holdings LLC, Term B Loan, 3.74389%, 4/18/24	\$
250,000	Eldorado Resorts, Inc., Term Loan, 5.25%, 4/17/24	
309,190	Scientific Games International, Inc., Initial Term B-3 Loan, 4.994%, 10/1/21	\$

	Education Services -- 0.6%	
314,053	Cengage Learning Acquisitions, Inc., 2016 Refinancing Term Loan, 5.25%, 6/7/23	\$
478,124	Laureate Education, Inc., Series 2021 Extended Term Loan, 8.509%, 3/17/21	

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

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

Schedule of Investments | 4/30/17 (continued)

Principal Amount USD (\$)		Val
	Education Services -- (continued)	
125,000	Laureate Education, Inc., Series 2024 Term Loan, 7.5%, 4/26/24	\$
	Leisure Facilities -- 0.2%	
326,880	Fitness International LLC, Term B Loan, 5.397%, 7/1/20	\$
	Restaurants -- 0.4%	
349,272	1011778 BC Unlimited Liability Co. (New Red Finance, Inc.) (aka Burger King/Tim Hortons), Term B-3 Loan, 3.309%, 2/16/24	\$
243,479	Landry's, Inc. (fka Landry's Restaurants, Inc.), Term Loan B, 3.733%, 10/4/23	\$
	Specialized Consumer Services -- 1.4%	
750,000	Constellis Group, Inc., Term Loan B, 6.155%, 4/19/24	\$
533,875 (d)	Creative Artists Agency LLC, Refinancing Term Loan,	

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

	2/15/24		
738,788		KinderCare Education LLC, Term Loan, 4.917%, 8/12/22	\$
		Total Consumer Services	\$
		DIVERSIFIED FINANCIALS -- 1.8%	
		Consumer Finance -- 0.2%	
211,895		Trans Union LLC, Term B-2 Loan, 3.493%, 4/9/23	\$
		Diversified Capital Markets -- 0.2%	
250,000		Freedom Mortgage Corp., Initial Term Loan, 6.862%, 2/23/22	\$
		Investment Banking & Brokerage -- 0.3%	
250,000		Duff & Phelps Corp., Initial Term Loan, 4.897%, 4/23/20	\$
200,000		LPL Holdings, Inc., Initial Term Loan, 3.92%, 3/11/24	\$
		Other Diversified Financial Services -- 0.6%	
268,549		AWAS Finance Luxembourg 2012 SA, Term Loan, 3.91%, 7/16/18	\$
635,000		Summit Midstream Partners Holdings LLC, Term Loan Credit Facility, 7.022%, 5/13/22	\$
		Specialized Finance -- 0.5%	
245,000		DBRS, Ltd., Initial Term Loan, 6.304%, 3/4/22	\$
500,000 (d)		MHVC Acquisition Corp., First Lien Initial Term Loan, 4/29/24	\$
		Total Diversified Financials	\$

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

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

Principal Amount			Val
USD (\$)			USD (\$)
		ENERGY -- 2.3%	
		Integrated Oil & Gas -- 0.3%	
498,114 (d)		ExGen Renewables I LLC, Term Loan, 2/8/21	\$
		Oil & Gas Drilling -- 0.6%	
250,000		Gavilan Resources LLC, Second Lien Initial Term Loan, 7.0%, 3/1/24	\$

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

744,680	Jonah Energy LLC, Second Lien Initial Term Loan, 7.5%, 5/12/21	\$
535,914	Oil & Gas Equipment & Services -- 0.3% FR Dixie Acquisition Corp., Term Loan, 5.804%, 12/18/20	\$
250,000	Oil & Gas Exploration & Production -- 0.6% California Resources Corp., Term Loan, 11.375%, 12/31/21	\$
550,000	Chesapeake Energy Corp., Term Loan Class A, 8.553%, 8/23/21	\$
686,550	Oil & Gas Storage & Transportation -- 0.5% Gulf Finance LLC, Tranche B Term Loan, 6.25%, 8/25/23	\$
	Total Energy	\$
497,500	FOOD, BEVERAGE & TOBACCO -- 0.9% Packaged Foods & Meats -- 0.9% Amplify Snack Brands, Inc., Term Loan, 6.5%, 9/2/23	\$
471,260	Dole Food Co., Inc., Tranche B Term Loan, 4.15%, 4/6/24	
349,123	Give and Go Prepared Foods Corp., First Lien Term Loan, 6.647%, 7/29/23	
	Total Food, Beverage & Tobacco	\$
237,518	HEALTH CARE EQUIPMENT & SERVICES -- 3.9% Health Care Facilities -- 1.1% CHS/Community Health Systems, Inc., Incremental 2019 Term G Loan, 3.75%, 12/31/19	\$
437,027	CHS/Community Health Systems, Inc., Incremental 2021 Term H Loan, 4.0%, 1/27/21	
192,079	HCA Inc., Tranche B-9 Term Loan, 2.993%, 3/17/23	
312,910	Kindred Healthcare, Inc., Incremental Term Loan, 4.688%, 4/9/21	
496,250	Prospect Medical Holdings, Inc., Term Loan, 7.063%, 6/30/22	\$

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 19

Schedule of Investments | 4/30/17 (continued)

Principal Amount USD (\$)	Val
---------------------------------	-----

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

	Health Care Services -- 1.7%	
328,840 (e)	Bioscrip, Inc., Initial Term B Loan, 9.25% (2.75% PIK 6.5% cash), 7/31/20	\$
197,304 (e)	Bioscrip, Inc., Term Loan, 9.25% (2.75% PIK 6.5% cash), 7/31/20	
250,000 (d)	ExamWorks Group, Inc. (fka Gold Merger Co., Inc.), Term B-1 Loan, 7/27/23	
200,000	Genoa Healthcare Co., LLC, Second Lien Initial Term Loan, 9.147%, 10/28/24	
344,750	HC Group Holdings III, Inc., First Lien Initial Term Loan, 6.0%, 4/7/22	
249,375	Inventiv Group Holdings, Inc., Initial Term Loan, 4.804%, 11/9/23	
198,850	National Mentor Holdings, Inc., Tranche B Term Loan, 4.397%, 1/31/21	
199,497 (d)	nThrive, Inc. (fka Precyse Acquisition Corp.), First Lien Initial Term Loan, 10/20/22	
99,243	NVA Holdings, Inc., First Lien Term B-2 Loan, 4.647%, 8/14/21	
414,286	NVA Holdings, Inc., Second Lien Term Loan, 8.147%, 8/14/22	
		---
		\$
	Health Care Supplies -- 0.6%	
228,904	Alere, Inc., Term Loan B, 4.25%, 6/20/22	\$
185,000	Kinetic Concepts, Inc., Dollar Term Loan, 4.397%, 2/2/24	
500,000	Sterigenics-Nordion Holdings LLC, Incremental Term Loan, 4.15%, 5/15/22	
		---
		\$
	Health Care Technology -- 0.5%	
250,000 (d)	Change Healthcare Holdings, Inc. (fka Emdeon Inc.), Closing Date Term Loan, 3/1/24	\$
375,258 (f)	Medical Card System, Inc., Term Loan, 1.5%, 5/31/19	
169,575	Quintiles IMS, Inc., Term B-1 Dollar Loan, 3.051%, 3/7/24	
		---
		\$
		---
		\$
	Total Health Care Equipment & Services	\$
		-----
	HOUSEHOLD & PERSONAL PRODUCTS -- 0.9%	
	Household Products -- 0.5%	
248,063	Redbox Automated Retail LLC, First Lien Term B Loan, 8.5%, 9/27/21	\$
400,000 (d)	WKI Holding Co., Inc. (World Kitchen LLC), Term Loan B, 4/25/24	
		---
		\$

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

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

Principal  
Amount  
USD (\$)

Principal Amount USD (\$)		Val
	Personal Products -- 0.4%	
249,364	Atrium Innovations, Inc., First Lien Initial Tranche B-1 Term Loan, 4.647%, 2/15/21	\$
126,910	Nature's Bounty Co. (aka NBTY Inc.), Dollar Term B-1 Loan, 4.647%, 5/5/23	
248,750	Revlon Consumer Products Corp., Initial Term B Loan, 4.493%, 9/7/23	
		\$
	Total Household & Personal Products	\$
	INSURANCE -- 2.2%	
	Life & Health Insurance -- 0.3%	
493,892	Integro, Ltd., Initial Term Loan, 6.75%, 10/31/22	\$
	Multi-Line Insurance -- 0.1%	
165,228	Alliant Holdings I LLC, Term Loan B, 4.417%, 8/12/22	\$
	Property & Casualty Insurance -- 1.8%	
300,000	Acrisure LLC, First Lien Term B Loan, 5.897%, 11/22/23	\$
593,765	Confie Seguros Holding II Co., Second Lien Term Loan, 10.25%, 5/8/19	
510,892	Confie Seguros Holding II Co., Term B Loan, 5.75%, 4/19/22	
689,587	USI, Inc., Initial Term Loan, 4.25%, 12/27/19	
500,000 (d)	USI, Inc., Term Loan, 4/5/24	
		\$
	Total Insurance	\$
	MATERIALS -- 5.4%	
	Construction Materials -- 0.7%	
119,250	84 Lumber Co., Initial Term Loan, 6.75%, 10/25/23	\$
498,747	American Bath Group LLC, First Lien Replacement Term Loan, 6.397%, 9/30/23	
90,696	CeramTec Service GmbH (CeramTec Acquisition Corp.), Dollar Term B-3 Loan, 3.804%, 8/30/20	
297,122	CeramTec Service GmbH (CeramTec Acquisition Corp.), Initial Dollar Term B-1 Loan, 3.804%, 8/30/20	
34,670	CeramTec Service GmbH (CeramTec Acquisition Corp.), Initial Dollar Term B-2 Loan, 3.804%, 8/30/20	
		\$
	Diversified Chemicals -- 0.6%	
312,926 (d)	Allnex (Luxembourg) & Cy SCA (fka AI Chem & Cy SCA), Tranche B-2 Term Loan, 9/13/23	\$
235,999 (d)	Allnex (Luxembourg) & Cy SCA (fka AI Chem & Cy SCA), Tranche B-3 Term Loan, 9/13/23	
270,884	Univar USA, Inc., Term B-2 Loan, 3.743%, 7/1/22	
		\$

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

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 21

Schedule of Investments | 4/30/17 (continued)

Principal Amount USD (\$)		Val
497,500	Diversified Metals & Mining -- 0.3%	
	Global Brass and Copper, Inc., Initial Term Loan, 5.25%, 7/18/23	\$
72,335 (g) (h)	PT Bakrie & Brothers Tbk, Facility Term Loan B, 8.15%, 9/28/17	\$
248,750	Forest Products -- 0.2%	
	Expera Specialty Solutions LLC, Term Loan B, 5.75%, 11/3/23	\$
600,000 (d)	Metal & Glass Containers -- 1.3%	
10,499	Albea Beauty Holdings SA, Facility B, 4/22/24	\$
	Kleopatra Holdings 2 SCA, Initial German Borrower Dollar Term Loan, 4.397%, 4/28/20	
24,568	Kleopatra Holdings 2 SCA, Initial US Dollar Term Loan, 4.397%, 4/28/20	
497,979	Tank Holding Corp., Initial Term Loan, 5.25%, 3/16/22	
736,875	Tekni-Plex, Inc., USD Term Loan, 4.5%, 6/1/22	\$
647,472	Paper Packaging -- 0.4%	
	Caraustar Industries, Inc., Refinancing Term Loan, 6.647%, 3/14/22	\$
287,111	Paper Products -- 0.6%	
226,974	Appvion, Inc., Term Commitment, 7.75%, 6/28/19	\$
170,064	Exopack Holdings SA, USD Term Loan, 4.647%, 5/8/19	
	Ranpak Corp., Second Lien Initial Term Loan, 8.25%, 10/3/22	
199,491	Ranpak Corp., Tranche B-1 USD Term Loan, 4.25%, 10/1/21	\$
290,407	Specialty Chemicals -- 1.0%	
	Macdermid, Inc. (Platform Specialty Products Corp.), Tranche B-5 Term Loan, 4.5%, 6/7/20	\$
648,250	Omnova Solutions, Inc., Term B-2 Loan, 5.25%, 8/25/23	
450,000 (d)	Tronox Pigments (Netherlands) BV, New Term Loan, 3/19/20	\$
	Steel -- 0.3%	

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

496,256	Zekelman Industries, Inc. (fka JMC Steel Group, Inc.), Term Loan, 4.906%, 6/14/21	\$
	Total Materials	\$

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

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

Principal Amount USD (\$)		Val
	MEDIA -- 2.6%	
	Advertising -- 0.8%	
931,253	Affinion Group, Inc., Tranche B Term Loan, 6.75%, 4/30/18	\$
248,750	CB Poly Investments LLC, First Lien Closing Date Term Loan, 6.25%, 8/16/23	\$
	Broadcasting -- 0.9%	
164,188	A-L Parent LLC (aka Learfield Communications)., First Lien Initial Term Loan, 4.25%, 12/1/23	\$
200,000 (d)	CSC Holdings LLC (fka CSC Holdings Inc. (Cablevision)), March 2017 Refinancing Term Loan, 7/15/25	\$
235,833	Hubbard Radio LLC, Term Loan, 4.25%, 5/27/22	\$
292,500	MediArena Acquisition BV (fka AP NMT Acquisition BV), First Lien Dollar Term B Loan, 6.898%, 8/13/21	\$
452,523	Univision Communications Inc., First Lien 2017 Replacement Repriced Term Loan, 3.75%, 3/15/24	\$
	Publishing -- 0.9%	
319,313	Houghton Mifflin Holdings, Inc., Term Loan, 4.0%, 5/28/21	\$
46,068	Lee Enterprises, Inc., First Lien Term Loan, 7.25%, 3/31/19	\$
918,063	McGraw-Hill Global Education Holdings LLC, First Lien Term B Loan, 5.0%, 5/4/22	\$
	Total Media	\$
	PHARMACEUTICALS, BIOTECHNOLOGY & LIFE SCIENCES -- 1.5%	
	Life Sciences Tools & Services -- 0.9%	
985,000	Albany Molecular Research, Inc., Term Loan B, 5.906%, 7/16/21	\$
366,949	Catalent Pharma Solutions, Inc. (fka Cardinal Health 409, Inc.), Dollar Term Loan, 3.75%, 5/20/21	\$

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

		\$
176,271	Pharmaceuticals -- 0.6%	
	Concordia Healthcare Corp., Initial Dollar Term Loan, 5.25%, 10/21/21	\$
500,000	Horizon Pharma, Inc., Term Loan B, 4.75%, 3/22/24	
250,000 (d)	VRX Escrow Corp., Series F Tranche B Term Loan, 4/1/22	
		\$
		\$
	Total Pharmaceuticals, Biotechnology & Life Sciences	\$

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 23

Schedule of Investments | 4/30/17 (continued)

Principal Amount USD (\$)		Val
	REAL ESTATE -- 0.6%	
	Retail REITs -- 0.2%	
272,523	DTZ US Borrower LLC, First Lien Initial Term Loan, 4.25%, 11/4/21	\$
42,553	DTZ US Borrower LLC, Second Lien Initial Term Loan, 9.422%, 11/4/22	
		\$
		\$
493,753	Specialized REIT -- 0.4%	
	Communications Sales & Leasing, Inc. (CSL Capital LLC), Shortfall Term Loan, 4.0%, 10/24/22	\$
		\$
	Total Real Estate	\$
	RETAILING -- 0.5%	
	Automotive Retail -- 0.4%	
637,014	CWGS Group LLC, Term Loan, 4.736%, 11/8/23	\$
		\$
		\$
155,314	Specialty Stores -- 0.1%	
	PetSmart, Inc., Tranche B-2 Loan, 4.02%, 3/11/22	\$
		\$
	Total Retailing	\$
	SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT -- 0.5%	
	Semiconductors -- 0.5%	
496,173	M/A-COM Technology Solutions Holdings, Inc., Initial Term Loan, 3.989%, 5/7/21	\$
250,000 (d)	Micron Technology, Inc., Term Loan, 4/26/22	
		\$
	Total Semiconductors & Semiconductor Equipment	\$



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

	SOFTWARE & SERVICES -- 2.6%	
249,392	Application Software -- 0.5%	
	Greeneden US Holdings I LLC, Tranche B-1 Dollar Term Loan, 5.158%, 12/1/23	\$
500,000	STG-Fairway Acquisitions, Inc., First Lien Term Loan, 6.397%, 6/30/22	\$
	Home Entertainment Software -- 0.0%+	
52,000 (d)	MA FinanceCo., LLC (aka Micro Focus International Plc), Term Loan B3, 4/19/24	\$
	Internet Software & Services -- 0.6%	
246,875	Avast Holding BV, Initial Refinancing Dollar Term Loan, 4.397%, 9/30/23	\$
165,000 (d)	Blucora, Inc., Term Loan B, 4/19/24	
The accompanying notes are an integral part of these financial statements.		
24 Pioneer Diversified High Income Trust   Annual Report   4/30/17		
Principal Amount USD (\$)		Val
	Internet Software & Services -- (continued)	
249,375	Rackspace Hosting, Inc., First Lien Term Loan B, 4.535%, 11/3/23	\$
250,000 (d)	Zayo Group LLC (Zayo Capital, Inc.), 2017 Incremental Refinancing B-2 Term Loan, 1/19/24	\$
	IT Consulting & Other Services -- 1.3%	
185,173	Evergreen Skills Lux S.a.r.l., First Lien Initial Term Loan, 5.75%, 4/28/21	\$
350,000	Go Daddy Operating Co., LLC (GD Finance Co., Inc.), Initial Term Loan, 3.493%, 2/15/24	
300,000	Rocket Software, Inc., Second Lien Term Loan, 10.647%, 10/14/24	
615,625	Sitel Worldwide Corp., First Lien Term B-1 Loan, 6.688%, 9/18/21	
147,000	TaxACT, Inc. (H.D. Vest, Inc.), Initial Term Loan, 7.0%, 1/3/23	
250,000 (d)	Tempo Acquisition LLC, Term Loan B, 4/19/24	\$
	Systems Software -- 0.2%	
348,000 (d)	Seattle Spinco, Inc. (aka Micro Focus International Plc), Term Loan B, 4/19/24	\$
	Total Software & Services	\$

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

	TECHNOLOGY HARDWARE & EQUIPMENT -- 0.3%		
	Electronic Components -- 0.3%		
450,800	Mirion Technologies (Finance) LLC (Mirion Technologies, Inc.), First Lien Initial Term Loan, 5.897%, 3/31/22		\$
	Total Technology Hardware & Equipment		\$
-----			
	TELECOMMUNICATION SERVICES -- 0.9%		
	Integrated Telecommunication Services -- 0.7%		
489,746	GCI Holdings, Inc., New Term B Loan, 3.993%, 2/2/22		\$
486,811	Level 3 Financing, Inc., Tranche B 2024 Term Loan, 3.241%, 2/22/24		\$
			\$
-----			
	Wireless Telecommunication Services -- 0.2%		
350,000 (d)	Sprint Communications, Inc., Initial Term Loan, 2/2/24		\$
	Total Telecommunication Services		\$

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 25

Schedule of Investments | 4/30/17 (continued)

Principal Amount USD (\$)		Val
-----		
	TRANSPORTATION -- 1.0%	
	Marine -- 0.7%	
591,023	Commercial Barge Line Co., Initial Term Loan, 9.75%, 11/12/20	\$
500,000	Navios Maritime Partners LP (Navios Partners Finance (US) Inc.), Initial Term Loan, 6.13%, 9/14/20	\$
		\$
-----		
	Trucking -- 0.3%	
472,113	YRC Worldwide, Inc., Initial Term Loan, 8.5%, 2/13/19	\$
	Total Transportation	\$
-----		
	UTILITIES -- 1.7%	
	Electric Utilities -- 1.0%	
613,246	APLH Holdings, Ltd., Partnership, Term Loan, 5.25%, 4/13/23	\$
324,188	Talen Energy Supply LLC, Term B-1 Loan, 5.027%, 7/6/23	\$
500,000 (d)	TPF II Power LLC (TPF II Convert Midco LLC), Term Loan, 10/2/23	\$
		\$
-----		

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

		Independent Power Producers & Energy Traders -- 0.7%	
500,000		Dynegy, Inc., Tranche C-1 Term Loan, 4.25%, 2/7/24	\$
609,214		TerraForm AP Acquisition Holdings LLC, Term Loan, 5.647%, 6/27/22	
			---
			\$
			---
		Total Utilities	\$
-----			
		TOTAL SENIOR SECURED FLOATING RATE LOAN INTERESTS (Cost \$61,071,020)	\$ 6
-----			
		CORPORATE BONDS & NOTES --	
		90.7% of Net Assets	
		AUTOMOBILES & COMPONENTS -- 0.7%	
		Auto Parts & Equipment -- 0.7%	
EUR	165,000 (e)	IHO Verwaltungs GmbH, 3.25% (4.0% PIK 0.0% cash), 9/15/23 (144A)	\$
EUR	395,000 (e)	IHO Verwaltungs GmbH, 3.75% (4.5% PIK 0.0% cash), 9/15/26 (144A)	
	454,000	International Automotive Components Group SA, 9.125%, 6/1/18 (144A)	
			---
		Total Automobiles & Components	\$
-----			
		BANKS -- 5.6%	
		Diversified Banks -- 5.3%	
	200,000	Access Bank Plc, 10.5%, 10/19/21 (144A)	\$
	300,000 (b)	Banco de Galicia y Buenos Aires, 8.25%, 7/19/26 (144A)	

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

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

Principal Amount			Val
USD (\$)			
-----			
		Diversified Banks -- (continued)	
	525,000	Banco de Galicia y Buenos Aires, 8.75%, 5/4/18 (144A)	\$
	200,000 (b) (i)	Banco Santander SA, 6.375%	
	680,000	Banque Ouest Africaine de Developpement, 5.5%, 5/6/21 (144A)	
	950,000 (b) (i)	BNP Paribas SA, 7.625% (144A)	
	1,000,000 (b) (i)	Credit Agricole SA, 7.875% (144A)	
	240,000 (b) (i)	Goldman Sachs Capital II, 4.0%	
	350,000 (b) (i)	ING Groep NV, 6.5%	
	225,000 (b) (i)	Intesa Sanpaolo S.p.A., 7.7% (144A)	
	250,000 (b) (i)	Royal Bank of Scotland Group Plc, 8.0%	
	400,000 (b) (i)	Royal Bank of Scotland Group Plc, 8.625%	
	200,000	Sberbank of Russia Via SB Capital SA, 5.25%, 5/23/23 (144A)	
	460,000 (b) (i)	Societe Generale SA, 7.375% (144A)	
	245,000	Trade & Development Bank of Mongolia LLC, 9.375%, 5/19/20 (144A)	

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

344,000 (b)	Turkiye Vakiflar Bankasi TAO, 8.0%, 11/1/27 (144A)	
750,000	UBS AG / Stamford CT, 7.625%, 8/17/22	\$
-----		
450,000	Thrifts & Mortgage Finance -- 0.3%	
	Vnesheconombank Via VEB Finance Plc, 6.902%, 7/9/20 (144A)	\$
	Total Banks	\$
-----		
	CAPITAL GOODS -- 2.3%	
250,000	Aerospace & Defense -- 0.2%	
	Triumph Group, Inc., 4.875%, 4/1/21	\$
-----		
475,000	Agricultural & Farm Machinery -- 0.3%	
	Titan International, Inc., 6.875%, 10/1/20	\$
-----		
455,000	Construction & Engineering -- 0.3%	
	Tutor Perini Corp., 6.875%, 5/1/25 (144A)	\$
-----		
360,000	Construction Machinery & Heavy Trucks -- 0.2%	
	Meritor, Inc., 6.75%, 6/15/21	\$
-----		
455,000	Industrial Conglomerates-- 0.4%	
155,000	JB Poindexter & Co., Inc., 9.0%, 4/1/22 (144A)	\$
	Park-Ohio Industries, Inc., 6.625%, 4/15/27 (144A)	\$
-----		
560,000	Industrial Machinery -- 0.7%	
450,000	Apex Tool Group LLC, 7.0%, 2/1/21 (144A)	\$
	Cleaver-Brooks, Inc., 8.75%, 12/15/19 (144A)	\$
-----		

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 27

Schedule of Investments | 4/30/17 (continued)

Principal Amount USD (\$)		Val
150,000	Trading Companies & Distributors -- 0.2%	
73,000	H&E Equipment Services, Inc., 7.0%, 9/1/22	\$
	TRAC Intermodal LLC / TRAC Intermodal Corp., 11.0%, 8/15/19	\$
	Total Capital Goods	\$
-----		

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

	340,000	COMMERCIAL & PROFESSIONAL SERVICES -- 1.1% Commercial Printing -- 0.2% Cenveo Corp., 6.0%, 8/1/19 (144A)	\$
<hr style="border-top: 1px dashed #000;"/>			
EUR	475,000 280,000 260,000	Diversified Support Services -- 0.7% Boing Group Financing Plc, 6.625%, 7/15/19 (144A) Broadspectrum, Ltd., 8.375%, 5/15/20 (144A) TMS International Corp., 7.625%, 10/15/21 (144A)	\$  \$
<hr style="border-top: 1px dashed #000;"/>			
	290,000	Security & Alarm Services -- 0.2% Prime Security Services Borrower LLC / Prime Finance, Inc., 9.25%, 5/15/23 (144A)	\$
		Total Commercial & Professional Services	\$
<hr style="border-top: 1px dashed #000;"/>			
		CONSUMER DURABLES & APPAREL -- 0.8% Homebuilding -- 0.8%	
	135,000	Beazer Homes USA, Inc., 8.75%, 3/15/22	\$
	350,000	Brookfield Residential Properties, Inc., 6.375%, 5/15/25 (144A)	
	250,000	KB Home, 7.0%, 12/15/21	
	340,000	KB Home, 7.625%, 5/15/23	
		Total Consumer Durables & Apparel	\$
<hr style="border-top: 1px dashed #000;"/>			
		CONSUMER SERVICES -- 4.3% Casinos & Gaming -- 1.7%	
EUR	750,000 882,412 (e) (g)	Intralot Capital Luxembourg SA, 6.75%, 9/15/21 (144A) 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	
	100,000	Scientific Games International, Inc., 6.25%, 9/1/20	
	1,050,000	Scientific Games International, Inc., 10.0%, 12/1/22	\$
<hr style="border-top: 1px dashed #000;"/>			
		Hotels, Resorts & Cruise Lines -- 0.9%	
	320,000	Hilton Grand Vacations Borrower LLC / Hilton Grand Vacations Borrower, Inc., 6.125%, 12/1/24 (144A)	\$
	250,000	Silversea Cruise Finance Ltd., 7.25%, 2/1/25 (144A)	
	245,000	Viking Cruises, Ltd., 6.25%, 5/15/25 (144A)	
	525,000	Viking Cruises, Ltd., 8.5%, 10/15/22 (144A)	\$
<hr style="border-top: 1px dashed #000;"/>			

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

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

Principal Amount USD (\$)	Val
------------------------------	-----

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

		Restaurants -- 0.4%	
	495,000	Landry's, Inc., 6.75%, 10/15/24 (144A)	\$
<hr style="border-top: 1px dashed black;"/>			
	1,153,000	Specialized Consumer Services -- 1.3%	
		Constellis Holdings LLC / Constellis Finance Corp., 9.75%, 5/15/20 (144A)	\$
	160,000	Monitronics International, Inc., 9.125%, 4/1/20	
	540,000	StoneMor Partners LP / Cornerstone Family Services of WV, 7.875%, 6/1/21	
<hr style="border-top: 1px dashed black;"/>			
		Total Consumer Services	\$
<hr style="border-top: 1px dashed black;"/>			
		DIVERSIFIED FINANCIALS -- 1.9%	
		Consumer Finance -- 1.3%	
	600,000	Credito Real SAB de CV SOFOM ER, 7.25%, 7/20/23 (144A)	\$
	445,000	Jefferies Finance LLC / JFIN Co-Issuer Corp., 7.375%, 4/1/20 (144A)	
	345,000	Navient Corp., 6.625%, 7/26/21	
	440,000	TMX Finance LLC / TitleMax Finance Corp., 8.5%, 9/15/18 (144A)	
<hr style="border-top: 1px dashed black;"/>			
		Specialized Finance -- 0.5%	
	175,000	Nationstar Mortgage LLC / Nationstar Capital Corp., 6.5%, 7/1/21	\$
	580,000	Nationstar Mortgage LLC / Nationstar Capital Corp., 6.5%, 6/1/22	
<hr style="border-top: 1px dashed black;"/>			
		Supranational -- 0.1%	
IDR	2,730,000,000	European Investment Bank, 7.2%, 7/9/19 (144A)	\$
<hr style="border-top: 1px dashed black;"/>			
		Total Diversified Financials	\$
<hr style="border-top: 1px dashed black;"/>			
		ENERGY -- 12.7%	
		Integrated Oil & Gas -- 1.1%	
	145,000	Ascent Resources Utica Holdings LLC / ARU Finance Corp., 10.0%, 4/1/22 (144A)	\$
	410,000	Petrobras Global Finance BV, 6.25%, 3/17/24	
	650,000	Petrobras Global Finance BV, 7.375%, 1/17/27	
MXN	540,000	Petroleos Mexicanos, 7.19%, 9/12/24 (144A)	
	325,000	YPF SA, 8.875%, 12/19/18 (144A)	
<hr style="border-top: 1px dashed black;"/>			
		Oil & Gas Drilling -- 0.6%	
	442,000	Rowan Cos., Inc., 5.4%, 12/1/42	\$
	62,000	Rowan Cos., Inc., 5.85%, 1/15/44	
	289,904	Shelf Drilling Holdings Ltd., 9.5%, 11/2/20 (144A)	

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

Pioneer Diversified High Income Trust | Annual Report | 4/30/17 29

Schedule of Investments | 4/30/17 (continued)

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

Principal Amount USD (\$)		Val
160,000	Oil & Gas Drilling -- (continued) Trinidad Drilling, Ltd., 6.625%, 2/15/25 (144A)	\$ \$
540,000	Oil & Gas Equipment & Services -- 1.0% Archrock Partners LP / Archrock Partners Finance Corp., 6.0%, 10/1/22	\$
425,000	McDermott International, Inc., 8.0%, 5/1/21 (144A)	
310,000	Weatherford International, Ltd., 5.95%, 4/15/42	
105,000	Weatherford International, Ltd., 8.25%, 6/15/23	\$
300,000	Oil & Gas Exploration & Production -- 5.5% Alta Mesa Ho	