Pioneer Diversified High Income Trust Form N-Q March 28, 2008

OMB APPROVAL

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

FORM N-Q

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-22014

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

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

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

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

Date of fiscal year end: April 30

Date of reporting period: January 31, 2008

Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-5 (239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after close of the first and third fiscal quarters, pursuant to Rule 30b1-5under the Investment Company Act of 1940 (17 CFR 270.30b-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q 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. Schedule of Investments.

Pioneer Diversified High Income Trust SCHEDULE OF INVESTMENTS 1/31/08 (unaudited)

| | Principal Amount | | |
|------|---|--|--|
| | USD (\$) | | Value |
| | | COLLATERALIZED MORTGAGE OBLIGATIONS - 0.2% of Net Diversified Financials - 0.2% | Assets |
| | 400,000 | DB Master Finance LLC, 8.285%, 6/20/31 (144A) TOTAL COLLATERIZED MORTGAGE OBLIGATIONS | \$340,000 |
| | | (Cost \$406,070) | \$340,000 |
| | 300,000 | CORPORATE BONDS & NOTES - 64.9% of Net Assets Energy - 4.7% Oil & Gas Drilling - 0.1% Skeie Drilling & Production ASA, 11.25%, 3/8/13 | (\$283 , 500 |
| | 400,000 350,000 | Oil & Gas Equipment & Services - 1.4% Bristow Group, Inc., 7.5%, 9/15/17 (144A) Complete Production Services, Inc., 8.0%, 12/15/1 | |
| NOK | 5,000,000 275,000 600,000 (a) | Norwegian Energy Co. AS, 11.0%, 7/13/10 (144A) SemGroup L.P., 8.75%, 11/15/15 (144A) Sevan Marine ASA, 7.438%, 5/14/13 (144A) | \$882,142 \$257,125 \$582,000 |
| | | Integrated Oil & Gas - 0.3% | \$2,464,767 |
| | 500,000 | Tristan Oil, Ltd., 10.5%, 1/1/12 (144A) | \$470,000 |
| | 500,000 160,000 675,000 225,000 150,000 | Oil & Gas Exploration & Production - 0.9% Harvest Operations Corp., 7.875%, 10/15/11 Hilcorp Energy I L.P./Hilcorp Finance Co., 7.75%, Parallel Petroleum Corp., 10.25%, 8/1/14 (144A) PetroQuest Energy, Inc., 10.375%, 5/15/12 Quicksilver Resources, Inc., 7.125%, 4/1/16 | \$452,500 \$153,200 \$661,500 \$228,375 \$145,500 \$1,641,075 |
| | 955,000 600,000 | Oil & Gas Refining & Marketing - 0.7% Aventine Renewable Energy Holdings, Inc., 10.0%, VeraSun Energy Corp., 9.375%, 6/1/17 (144A) | \$797,425 \$477,000 \$1,274,425 |
| | 490,000 250,000 800,000 | Oil & Gas Storage & Transportation - 0.8% Inergy L.P./Inergy Finance Corp., 8.25%, 3/1/16 LPG International, Inc., 7.25%, 12/20/15 Transportadora de Gas del Sur SA, 7.875%, 5/14/17 | \$499,800 \$245,000 7\$688,000 \$1,432,800 |
| | 900,000 | Coal & Consumable Fuels - 0.5% Massey Energy Co., 6.875%, 12/15/13 Total Energy | \$857,250 \$8,423,817 |
| | 400,000 1,750,000 | Materials - 6.6% Commodity Chemicals - 0.8% ARCO Chemical Co., 9.8%, 2/1/20 Georgia Gulf Corp., 10.75%, 10/15/16 | \$364,000 \$1,128,750 \$1,492,750 |
| EURO | 110,000 1,175,000 650,000 | Diversified Chemicals - 1.0% Braskem SA, 11.75%, 1/22/14 (144A) Ineos Group Holdings Plc, 7.875%, 2/15/16 (144A) Montell Finance Co. BV, 8.1%, 3/15/27 (144A) | \$132,000 \$1,243,892 \$500,500 \$1,876,392 |

| | 320,000 | | Construction Materials - 0.2% Blaze Recycling & Metals LLC/Blaze Finance Corp. | , \$288 , 000 |
|------|--|-----|--|---|
| EURO | 625,000 80,000 | | Metal & Glass Containers - 0.5% Impress Holdings BV, 9.25%, 9/15/14 (144A) Vitro, S.A.B. de CV, 9.125%, 2/1/17 | \$818,959 \$69,800 \$888,759 |
| | 600,000 500,000 750,000 | | Paper Packaging - 0.9% Exopack Holding Corp., 11.25%, 2/1/14 Graphic Packaging International, Inc., 9.5%, 8/1 U.S. Corrugated, Inc., 10.0%, 6/1/13 | \$562,500 5\$471,250 \$600,000 \$1,633,750 |
| | 700,000 350,000 500,000 | | Aluminum - 0.7% Aleris International, Inc., 10.0%, 12/15/16 Asia Aluminum Holdings, Ltd., 8.0%, 12/23/11 (14 Indalex Holding Corp., 11.5%, 2/1/14 | \$491,750 |
| | 350,000 250,000 1,085,000 500,000 75,000 | (a) | Diversified Metals & Mining - 1.2% American Rock Salt Co., LLC, 9.5%, 3/15/14 FMG Finance Pty., Ltd., 10.625%, 9/1/16 (144A) Industrias Metalurgicas Pescarmona SA, 11.25%, 1 (Noranda Aluminium Acquisition Corp., 8.738%, 5/1 PNA Group, Inc., 10.75%, 9/1/16 | \$361,375 \$283,750 0\$1,041,600 |
| | 1,245,000 600,000 50,000 | | Steel - 0.9% Algoma Acquisition Corp., 9.875%, 6/15/15 (144A) Bulgaria Steel Finance BV, 12.0%, 5/4/13 Zlomrex International Finance SA, 8.5%, 2/1/14 (| \$586,319 |
| | 250,000 500,000 | | Forest Products - 0.4% Ainsworth Lumber Co., Ltd., 7.25%, 10/1/12 Mandra Forestry Holdings, Ltd., 12.0%, 5/15/13 (Total Materials | \$157,500 |
| | 500,000 | | Capital Goods - 2.6% Building Products - 0.4% Builders FirstSource, Inc., 9.119%, 2/15/12 (C8 Capital SPV, Ltd., 6.64% (144A) | \$406,875 \$271,275 \$678,150 |
| | 200,000 | | Construction & Engineering - 0.1% Dycom Industries, Inc., 8.125%, 10/15/15 | \$196,750 |
| | 650,000 | (c) | Electrical Components & Equipment - 0.3% Rede Empresas de Energia Eletrica SA, 11.125% (1 | 4\$623 , 187 |
| | 600,000 520,000 500,000 1,200,000 500,000 400,000 | (d) | Construction & Farm Machinery & Heavy Trucks - 1 Accuride Corp., 8.5%, 2/1/15 Commercial Vehicle Group, Inc., 8.0%, 7/1/13 Esco Corp., 8.625%, 12/15/13 (144A) Greenbrier Companies, Inc., 8.375%, 5/15/15 Stanadyne Corp., 0.0%, 2/15/15 Titan International, Inc., 8.0%, 1/15/12 Total Capital Goods | .8% \$474,000 \$440,050 \$477,500 \$1,089,000 \$345,000 \$375,000 \$3,200,550 \$4,698,637 |
| | | | Commercial Services & Supplies - 1.1% Trading Companies & Distributors - 0.1% | |
| | 125,000 | | United Rentals North America, Inc., 6.5%, 2/15/1 | |
| | 350,000 | | Diversified Commercial & Professional Services - FTI Consulting, Inc., 7.75%, 10/1/16 | 1.0% \$362,250 |

| | 425,000 900,000 250,000 | (a) | NCO Group, Inc., 9.744%, 11/15/13 NCO Group, Inc., 11.875%, 11/15/14 Park-Ohio Industries, Inc., 8.375%, 11/15/14 Total Commercial Services & Supplies | \$408,000 \$837,000 \$203,125 \$1,810,375 \$1,925,375 |
|------|--|-----|--|---|
| | | | Transportation - 0.5% | |
| | 147,371 500,000 | (c) | Airlines - 0.3% American Airlines, Inc., 7.377%, 5/23/19 GOL Finance, 8.75% (144A) | \$133,370 \$448,750 \$582,120 |
| | 350,000 | | Railroads - 0.2% Kansas City Southern de Mexico, 7.625%, 12/1/13 Total Transportation | \$337,750 \$919,870 |
| | 330,000 500,000 500,000 | (b) | Automobiles & Components - 0.6% Auto Parts & Equipment - 0.6% Allison Transmission, Inc., 11.0%, 11/1/15 (144A) Allison Transmission, Inc., 11.25%, 11/1/15 (144A) Cooper-Standard Automotive, Inc., 8.375%, 12/15/3 | A\$388 , 536 |
| | 315,000 750,000 | | Consumer Durables & Apparel - 1.3% Homebuilding - 0.6% Desarrolladora Homex S.A.B. de CV, 7.5%, 9/28/15 Desarrolladora Metropolitana SA de CV, 10.875%, 9 | |
| | 200,000 750,000 | | Housewares & Specialties - 0.4% Jarden Corp., 7.5%, 5/1/17 Yankee Acquisition Corp., 9.75%, 2/15/17 | \$171,000 \$611,250 \$782,250 |
| EURO | 730,000 | (a) | Footwear - 0.3% Edcon Holdings Proprietary, Ltd., 10.448%, 6/15/1 Total Consumer Durables & Apparel | 1\$545,825 \$2,392,849 |
| | 50,000 550,000 | | Consumer Services - 1.3% Casinos & Gaming - 1.3% Codere Finance Luxembourg SA, 8.25%, 6/15/15 (144) Fontainebleau Las Vegas Holdings LLC/Fontainebleau Vegas Capital Corp., 10.25%, 6/15/15 (144A) | au Las |
| EURO | 275,000 50,000 750,000 750,000 405,000 | | Little Traverse Bay Bands of Odawa Indians, 10.25 Peermont Global, Ltd., 7.75%, 4/30/14 (144A) Station Casinos, Inc., 6.625%, 3/15/18 Trump Entertainment Resorts, Inc., 8.5%, 6/1/15 Unibet Group Plc, 9.7%, 12/21/10 Total Consumer Services | \$59,594 \$481,875 |
| | 400,000 | | <pre>Media - 0.8% Movies & Entertainment - 0.2% Corporacion Interamericana de Entretenimiento SA</pre> | de \$416,000 |
| | 536,875 600,000 | (b) | Publishing - 0.6% AAC Group Holding Corp., 14.75%, 10/1/12 TL Acquisitions, Inc., 10.5%, 1/15/15 (144A) Total Media | \$467,081 \$546,000 \$1,013,081 \$1,429,081 |
| | 500,000 500,000 | | Retailing - 0.8% Distributors - 0.5% Intcomex, Inc., 11.75%, 1/15/11 KAR Holdings, Inc., 10.0%, 5/1/15 (144A) | \$497,500 \$417,500 |

| | | | \$915,000 |
|-------------------------------|-----|--|-------------------------------------|
| 500,000 | | Specialty Stores - 0.3% Sally Holdings LLC, 9.25%, 11/15/14 Total Retailing | \$472,500 \$1,387,500 |
| 275,000 | | Food & Staples Retailing - 0.4% Drug Retail - 0.1% Duane Reade, Inc., 9.75%, 8/1/11 | \$239 , 250 |
| 250,000 275,000 | (d) | Food Distributors - 0.3% JBS SA, 10.5%, 8/4/16 (144A) SA Fabrica de Produtos Alimenticios Vigor, 9.25%, | \$232,500 \$269,156 \$501,656 |
| | | Total Food & Staples Retailing | \$740,906 |
| 189,000 | | Food, Beverage & Tobacco - 1.1% Brewers - 0.1% Cerveceria Nacional Dominicana C por A, 8.0%, 3/2 | 2\$190 , 890 |
| | | Agricultural Products - 0.5% | |
| 580,000 400,000 | (c) | Cosan SA Industria e Comercio, 8.25% (144A) Marfrig Overseas, Ltd., 9.625%, 11/16/16 (144A) | \$526,350 \$386,000 \$912,350 |
| 500,000 | | Packaged Foods & Meats - 0.2% Minerva Overseas, Ltd., 9.5%, 2/1/17 (144A) | \$460,000 |
| 500,000 | | Tobacco - 0.3% Alliance One International, Inc., 8.5%, 5/15/12 Total Food, Beverage & Tobacco | \$465,000 \$2,028,240 |
| 750,000 | | Health Care Equipment & Services - 2.2% Health Care Equipment & Services - 0.3% Accellent, Inc., 10.5%, 12/1/13 | \$592 , 500 |
| 500,000 | (a) | Health Care Supplies - 0.3% Medical Services Co., 11.758%, 10/15/11 | \$452,500 |
| 350,000 725,000 570,000 | (b) | Health Care Services - 0.8% Rural/Metro Corp., 9.875%, 3/15/15 Surgical Care Affiliates, Inc., 8.875%, 7/15/15 Surgical Care Affiliates, Inc., 10.0%, 7/15/17 (1 | |
| 500,000 420,000 | | Health Care Facilities - 0.5% Community Health Systems, Inc., 8.875%, 7/15/15 Hanger Orthopedic Group, Inc., 10.25%, 6/1/14 | \$503,125 \$428,400 \$931,525 |
| 500,000 | | Managed Health Care - 0.3% Multiplan, Inc., 10.375%, 4/15/16 (144A) Total Health Care Equipment & Services | \$465,000 \$3,881,775 |
| | | Pharmaceuticals & Biotechnology & Life Sciences - Biotechnology - 0.2% | - 0.4% |
| 400,000 | | Angiotech Pharmaceuticals, Inc., 7.75%, 4/1/14 | \$308,000 |
| 250,000 150,000 | | Pharmaceuticals - 0.2% Phibro Animal Health Corp., 10.0%, 8/1/13 (144A) Warner Chilcott Corp., 8.75%, 2/1/15 | \$232,500 \$153,000 \$385,500 |
| | | Total Pharmaceuticals & Biotechnology & Life Scie | |
| | | Banks - 1.2% Diversified Banks - 1.2% | |

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500,000 (a) (ALB Finance BV, 9.375%
                                                                           $367,500
     250,000 ATF Capital BV, 9.25%, 2/21/14 (144A)
                                                                           $252,500
     375,000
                   Banco Macro SA, 8.5%, 2/1/17
                                                                          $321,563
     700,000 (a) Banco Macro SA, 10.75%, 6/7/12
                                                                          $525,875
     300,000 Petrocommerce Finance SA, 8.75%, 12/17/09
                                                                         $295,500
     500,000
                    TuranAlem Finance BV, 8.5%, 2/10/15 (144A)
                                                                        $443,150
                    Total Banks
                                                                          $2,206,088
                     Diversified Financials - 12.2%
                     Other Diversified Financial Services - 1.9%
     2,500,000 (a) Blue Fin, Ltd., 9.02% 4/10/12 (144A)
                                                                          $2,512,500
     1,000,000 (a) Carillon, Ltd., 20.241%, 1/10/11 (144A)
                                                                         $1,034,900
                                                                          $3,547,400
                     Specialized Finance - 9.3%
     3,500,000 (a) Australis, Ltd., 8.528%, 3/24/09 (144A) $3,505,250 3,000,000 (a) Australis, Ltd., 8.878%, 2/3/09 (144A) $3,017,700 2,000,000 (a) Calabash Re, Ltd., 13.53%, 6/1/09 (144A) $2,080,000 1,000,000 (a) Calabash Re II, Ltd., 13.391%, 1/8/10 (144A) $1,020,100
     5,000,000 (a) Cascadia, Ltd., 8.271%, 6/13/08 (144A)
                                                                          $5,002,000
     2,000,000 (a) Successor II, Ltd., 44.4%, 6/6/08 (144A)
                                                                          $2,157,000
                                                                          $16,782,050
                     Consumer Finance - 0.5%
     460,000
                     AmeriCredit Corp., 8.5%, 7/1/15 (144A)
                                                                         $334,650
     550,000
                    Russian Standard Finance SA, 7.5%, 10/7/10 (144A) $508,750
                                                                           $843,400
                    Investment Banking & Brokerage - 0.5%
     965,000 (b) LVB Acquisition Merger Sub, Inc., 10.375%, 10/15/$924,789
                    Total Diversified Financials
                                                                           $22,097,639
                     Insurance - 17.8%
                     Insurance Brokers - 0.5%
     600,000
                    HUB International Holdings, Inc., 10.25%, 6/15/15$456,000
     500,000
                    USI Holdings Corp., 9.75%, 5/15/15 (144A) $390,000
                                                                           $846,000
                    Multi-Line Insurance - 0.5%
     1,000,000 (a) Liberty Mutual Group, Inc., 7.0%, 3/15/37 (144A) $883,950
                    Sul America Participacoes SA, 8.625%, 2/15/12 (14$66,381
     65,000
                                                                          $950,331
                    Property & Casualty Insurance - 0.6%
     625,000 (a) AMBAC Financial Group, Inc., 6.15%, 2/15/37 $282,250 900,000 (a) MBIA Insurance Corp., 14.0%, 1/15/33 (144A) $841,500
                                                                           $1,123,750
                    Reinsurance - 16.2%
     2,250,000 (a) AKIBARE, 7.965%, 5/22/12 (144A)
                                                                           $2,272,275
     1,500,000 (a) AKIBARE, 8.165%, 5/22/12 (144A)
                                                                           $1,515,300
     3,000,000 (a) Atlantic & Western Re, Ltd., 10.979%, 1/9/09 (144$3,031,800
EURO 1,500,000 (a) Atlas Reinsurance Plc, 14.953%, 1/10/11 (144A) $2,220,906
     3,000,000 (a) Fhu-Jin, Ltd., 8.778%, 8/10/11 (144A) $3,060,000
     3,750,000 (a) Foundation Re, Ltd., 9.005%, 11/24/08 (144A) $3,670,125
     1,000,000 (a) GlobeCat, Ltd., 10.91%, 1/2/13 (144A)
                                                                         $1,002,200
     350,000 (a) GlobeCat, Ltd., 14.16%, 1/2/13 (144A)
                                                                          $349,510
EURO 1,500,000 (a) Green Valley, Ltd., 8.376%, 1/10/11 (144A) $2,234,898 1,000,000 (a) Newton Re, Ltd., 9.629%, 12/24/10 (144A) $1,000,100 1,000,000 (a) Newton Re, Ltd., 11.929%, 12/24/10 (144A) $995,200
     2,500,000 (a) Redwood Capital X, Ltd., 14.08%, 1/9/09 (144A) $2,500,250
     2,000,000 (a) Redwood Capital X, Ltd., 18.08%, 1/9/09 (144A) $1,999,400
     2,900,000 (a) Residential Reinsurance 2005, Ltd., 13.574%, 6/6/$2,898,550
     500,000 (a) Residential Reinsurance 2006, Ltd., 15.124%, 6/5/$509,350
                                                                           $29,259,864
                     Total Insurance
                                                                           $32,179,945
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Real Estate - 0.7%

| | _ | agai | Timig. Floricoi Bivoromea riigii moome riast ir eiiiris | |
|------|--|------|--|---|
| | 100,000 105,000 410,000 1,100,000 | (a) | Real Estate Management & Development - 0.7% Alto Palermo SA, 11.0%, 6/11/12 (144A) China Properties Group, Ltd., 9.125%, 5/4/14 (144 IRSA Inversiones y Representaciones SA, 8.5%, 2/2 Neo-China Group Holdings, Ltd., 9.75%, 7/23/14 (170 Total Real Estate | 2\$333 , 637 |
| | 400 | (e) | Software & Services - 1.6% IT Consulting & Other Services - 0.2% MSX International UK/MXS International Business S FR/MXS International GmbH, 12.5%, 4/1/12 (144) | |
| | 1,440,000 1,110,000 | | Data Processing & Outsourced Services - 1.2% First Data Corp., 9.875%, 9/24/15 (144A) Pegasus Solutions, Inc., 10.5%, 4/15/15 (144A) | \$1,274,400 \$932,400 \$2,206,800 |
| | 500,000 | | Application Software - 0.2% Open Solutions, Inc., 9.75%, 2/1/15 (144A) Total Software & Services | \$427,500 \$2,970,300 |
| | 870,000 | | Technology Hardware & Equipment - 0.6% Computer Hardware - 0.4% Activant Solutions, Inc., 9.5%, 5/1/16 | \$734,063 |
| | 070 , 000 | | Acceptance Bolderons, Inc., 3.30, 3/1/10 | ¥731 , 003 |
| | 300,000 | | Electronic Manufacturing Services - 0.2% Cia de Transporte de Energia Electrica de Alta Te SA, 8.875%, 12/15/16 (144A) | ension \$261,000 |
| | 70,000 | | Sanmina-SCI Corp., 6.75%, 3/1/13 | \$60,550 \$321,550 |
| | | | Total Technology Hardware & Equipment | \$1,055,613 |
| | 1,000,000 | (b) | Semiconductors & Semiconductor Equipment - 0.6% Semiconductors - 0.6% Freescale Semiconductor, Inc., 9.125%, 12/15/14 Freescale Semiconductor, Inc., 10.125%, 12/15/16 Total Semiconductors & Semiconductor Equipment | \$757,500 \$356,250 \$1,113,750 |
| | 1,000,000 | | Telecommunication Services - 4.3% Alternative Carriers - 0.5% PAETEC Holding Corp., 9.5%, 7/15/15 (144A) | \$932 , 500 |
| | 1,200,000 142,000 500,000 | | Integrated Telecommunication Services - 1.0% GC Impsat Holdings I Plc, 9.875%, 2/15/17 (144A) Tele Norte Leste Participacoes SA, 8.0%, 12/18/13 Windstream Corp., 8.625%, 8/1/16 | |
| EURO | 910,000 500,000 500,000 150,000 500,000 850,000 400,000 1,330,000 | | Wireless Telecommunication Services - 2.8% Broadview Networks Holdings, Inc., 11.375%, 9/1/1 Cell C Property, Ltd., 11.0%, 7/1/15 (144A) Cricket Communications, Inc., 9.375%, 11/1/14 (144) Digicel, Ltd., 9.25%, 9/1/12 (144A) Hellas Telecommunications Luxembourg II, 10.576%, Intelsat Intermediate Holding Co., Ltd., 0.0%, 2/Kabel Deutschland GmbH, 10.625%, 7/1/14 True Move Co., Ltd., 10.375%, 8/1/14 (144A) Total Telecommunication Services | \$900,900 \$478,750 \$455,000 \$152,063 \$580,212 |
| | 2,000,000 | | Utilities - 1.5% Electric Utilities - 1.3% Intergen NV, 9.0%, 6/30/17 (144A) Mirant JPSCo. Finance, Ltd., 11.0%, 7/6/16 (144A) | \$2,085,000 \$266,875 |

| | \$2,351,875 |
|------------------------|---|
| 390,000 | Independent Power Producers & Energy Traders - 0.2% Texas Competitive Electric Holdings Co. LLC, 10.2\$383,175 Total Utilities \$2,735,050 TOTAL CORPORATE BONDS & NOTES (Cost \$125,448,762) \$117,417,535 |
| | |
| 400,000 | CONVERTIBLE BONDS & NOTES - 0.2% of Net Assets Real Estate - 0.2% Retail Real Estate Investment Trust - 0.2% General Growth Properties, Inc., 3.98%, 4/15/27 (\$318,500 |
| | TOTAL CONVERTIBLE BONDS & NOTES (Cost \$384,160) \$318,500 |
| 559,500 992,857 | FLOATING RATE LOAN INTERESTS - 32.5% of Net Assets (f) Energy - 0.9% Oil & Gas Exploration & Production - 0.9% Concho Resources, Inc., Second Lien Term Loan, 9.\$549,709 W&T Offshore, Inc., Tranche B Term Loan, 7.45%, 5\$982,929 Total Energy \$1,532,638 |
| 1,492,386 | Materials - 2.6% Paper Packaging - 0.7% Georgia-Pacific LLC, Term Loan B, 6.948% - 7.474%\$1,381,390 |
| 1,310,931 895,500 | Steel - 1.1% Algoma Steel, Inc., Term Loan, 8.09%, 6/20/13 \$1,222,443 Niagara Corp., Term Loan, 6.819% - 10.129%, 6/29/\$788,040 \$2,010,483 |
| 1,500,000 | Forest Products - 0.8% Ainsworth Lumber Co., Ltd., Term Loan, 7.819%, 6/\$1,395,000 Total Materials \$4,786,873 |
| 1,000,000 2,000,000 | Capital Goods - 2.0% Construction & Farm Machinery & Heavy Trucks - 1.6% Accuride Corp., Term Loan, 8.5%, 1/31/12 \$964,375 Rental Service Corp., Second Lien Initial Term Lo\$1,960,000 \$2,924,375 |
| 746,250 | Diversified Commercial & Professional Services - 0.4% Asset Acceptance Capital Corp., Tranche B Term Lo\$716,400 Total Capital Goods \$3,640,775 |
| 1,243,750 1,223,109 | Commercial Services & Supplies - 1.3% Environmental & Facilities Services - 1.3% Synagro Technologies, Inc., First Lien Term Loan, \$1,106,938 Waste Services, Inc., Tranche E Term Loan, 8.05%, \$1,149,723 Total Commercial Services & Supplies \$2,256,661 |
| 2,000,000 | Consumer Durables & Apparel - 1.0% Homebuilding - 0.6% LandSource Communities Development LLC, Second Lien Term Loan, 9.86%, 2/27/14 \$1,045,000 |
| 925,583 | Housewares & Specialties - 0.4% Yankee Candle Company, Inc., Term Loan, 5.29% - 6\$838,810 Total Consumer Durables & Apparel \$1,883,810 |
| 1,000,000 (g) | Consumer Services - 1.6% Casinos & Gaming - 1.6% Fontainebleau Las Vegas, LLC/Fontainebleau Las Vegas II, LLC, Intial Term Loan, 8.948%, 6/6/14 \$895,000 |
| 166,667 | Gateway Casinos & Entertainment, First Lien Delayed Draw |

| 833,333 1,000,000 250,000 | Term Loan, 9.0%, 9/30/14 \$147,917 Gateway Casinos & Entertainment, First Lien Term \$739,583 Gateway Casinos & Entertainment, Second Lien Term\$850,000 Riviera Holdings Corp., Term Loan, 7.36%, 6/8/14 \$231,250 Total Consumer Services \$2,863,750 |
|---|--|
| 2,000,000 | Media - 2.2% Broadcasting & Cable Television - 1.0% Charter Communications Operating, LLC, Replacemen\$1,850,770 |
| 995,000 | Movies & Entertainment - 0.5% Lodgenet Entertainment Corp., Closing Date Term L\$922,862 |
| 1,243,750 | Publishing - 0.7% Canwest Mediaworks, L.P., Credit D Term Loan, 7.5\$1,200,219 Total Media \$3,973,851 |
| 1,505,978 | Retailing - 0.8% Apparel, Accessories & Luxury Goods - 0.8% Hanesbrands, Inc., Term Loan B, 6.533% - 7.11%, 9\$1,456,327 Total Retailing \$1,456,327 |
| 1,741,206 | Health Care Equipment & Services - 4.8% Health Care Equipment & Services - 0.9% Talecris Biotherapeutics Holdings Corp., First Lien Term Loan, 8.38% - 9.5%, 12/6/13 \$1,730,323 |
| 497,500 600,000 | Health Care Supplies - 0.6% IM US Holdings, LLC, First Lien Term Loan, 7.198%\$460,187 IM US Holdings, LLC, Second Lien Term Loan, 9.448\$562,500 \$1,022,687 |
| 1,090,738 | Health Care Services - 0.6% HealthSouth Corp., Term Loan, 5.78% - 6.92%, 3/11\$1,022,567 |
| 922,660 1,740,779 994,975 498,042 104,307 162,256 706,608 | Health Care Facilities - 2.7% CHS/Community Health Systems, Inc., Term Loan, 7.\$853,816 Hanger Orthopedic Group, Inc., Tranche B Term Loa\$1,658,092 HCA, Inc., Tranche B Term Loan, 7.448%, 11/18/13 \$921,828 Psychiatric Solutions, Inc., Term Loan, 6.568% - \$480,611 Sun Healthcare Group, Inc., Delayed Draw Term Loa\$98,049 Sun Healthcare Group, Inc., Synthetic LC Loan, 5.\$152,521 Sun Healthcare Group, Inc., Term Loan, 6.78% - 7.\$664,212 \$4,829,129 Total Health Care Equipment & Services \$8,604,706 |
| | Pharmaceuticals & Biotechnology & Life Sciences - 0.4% |
| 750,000 | Pharmaceuticals - 0.4% Mylan Inc., Tranche B Term Loam, 7.625%, 10/2/14 \$735,000 Total Pharmaceuticals & Biotechnology & Life Scie\$735,000 |
| 875,721 439,482 1,334,229 | Diversified Financials - 3.2% Specialized Finance - 1.4% Ace Cash Express, Inc., Term Loan, 7.86% - 8.7%, \$757,499 Ceva Group Plc, Pre-Funded LC Loan, 7.86%, 11/4/1\$428,495 Ceva Group 1 Plc, Term Loan, 8.086%, 11/4/13 \$1,300,874 \$2,486,868 Consumer Finance - 1.4% |
| 992,481 1,003,394 737,790 | Collect Acquisition Corp., Facility Term Loan B, \$938,721 Dollar Financial Corp., Canadian Borrower Term Lo\$968,275 Dollar Financial Corp., Delayed Draw Term Loan, 7\$711,967 \$2,618,963 |

| 700,000 | Investment Banking & Brokerage - 0.4% MSCI, Inc., Term Loan B, 7.74%, 11/20/14 Total Diversified Financials | \$697,375 \$5,803,206 |
|---|--|--|
| 70,992 406,454 1,990,000 | <pre>Insurance - 1.9% Insurance Brokers - 1.2% HUB International, Ltd., Delay Draw Term Loan, 7 HUB International, Ltd., Initial Term Loan, 7.33 USI Holdings Corp., Tranche B Term Loan, 7.95%,</pre> | %\$365 , 809 |
| 497,500 1,000,000 | Multi-Line Insurance - 0.7% AmWins Group, Inc., Initial Term Loan, 7.82% - 8 AmWins Group, Inc., Second Lien Initial Term Loa Total Insurance | |
| 1,984,962 1,488,750 | Technology Hardware & Equipment - 3.1% Computer Storage & Peripherals - 1.8% SunGard Data Systems Inc., New Term Loan, 6.898% Vangent, Inc., Term Loan, 7.62%, 2/14/13 | ,\$1,844,568 \$1,332,431 \$3,176,999 |
| 748,125 1,980,000 | Electronic Equipment Manufacturers - 1.4% Aeroflex, Inc., Tranche B-2 Term Loan, 8.619%, 8 H3C Holdings, Ltd., Tranche B Term Loan, 8.141%, | /\$705 , 108 |
| 513,713 | Technology Distributors - 0.3% Scitor Corp., Term Loan, 9.11%, 9/28/14 Total Technology Hardware & Equipment | \$506,649 \$5,584,448 |
| 994,975 | Semiconductors & Semiconductor Equipment - 0.5% Semiconductors - 0.5% Freescale Semiconductor, Inc., Term Loan, 7.33%, Total Semiconductors & Semiconductor Equipment | \$847,594 \$847,594 |
| 1,243,725 | Telecommunication Services - 2.4% Alternative Carriers - 0.6% PAETEC Holding Corp., Replacement Term Loan, 7.3 | 4 \$1 , 175 , 839 |
| 994,950 1,741,184 625,000 | Wireless Telecommunication Services - 1.8% Cricket Communications, Inc., Term Loan B, 7.44 MetroPCS Wireless, Inc., New Tranche B Term Loan Stratos Global Corp./Stratos Funding L.P., Facil Total Telecommunication Services | ,\$1,630,183 |
| 1,496,250 | Utilities - 3.4% Multi-Utilities - 0.8% Alliant Holdings I, Inc., Term Loan, 7.47%, 8/21 | |
| 1,985,000 187,926 1,798,450 418,256 905,913 | Independent Power Producers & Energy Traders - 2 Calpine Corp., First Priority Term Loan, 7.08%, Mach Gen, LLC, First Lien Synthetic LC Loan, 7.3 Mach Gen, LLC, First Lien Term Loan B, 7.2%, 2/2 NRG Energy, Inc., Credit-Linked Deposit Loan, 7. NRG Energy, Inc., Term Loan, 6.948%, 2/1/13 Total Utilities | 3\$1,776,575 5\$169,885 2\$1,625,798 |
| | TOTAL FLOATING RATE LOAN INTERESTS (Cost \$63,675,518) | \$58,742,291 |
| | FIXED RATE LOAN INTERESTS - 0.3% of Net Assets Energy - 0.3% | |

| 600,000 | Oil & Gas Exploration & Production - 0.3% SandRidge Energy, Inc., Term Loan, 8.625%, 4/1/1 TOTAL FIXED RATE LOAN INTERESTS | 5\$595 , 500 |
|-------------------|--|--|
| | (Cost \$602,931) | \$595,500 |
| Shares 750,000 | WARRANTS - 0.0% of Net Assets (h) Real Estate - 0.0% Real Estate Management & Development - 0.0% Neo-China Group Holdings, Ltd., Expires 7/22/12 | \$38,479 |
| , | TOTAL WARRANTS (Cost \$17,012) | \$38,479 |
| | TOTAL INVESTMENTS IN SECURITIES - 98.1% (Cost \$190,534,453) (i) OTHER ASSETS AND LIABILITIES - 1.9% NET ASSETS APPLICABLE TO COMMON SHAREOWNERS - 10 | \$177,452,305 \$3,457,549 0\$180,909,854 |
| (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 January 31, 2008, the value of these securities amounted to \$89,108,829 or 49.3% of total net assets applicable to common shareowners. | |
| (a) 2008. | Floating rate note. The rate shown is the rate at J | anuary 31, |
| (b) | Represents a pay-in-kind security which may pay interest in additional principal. | |
| (c) | Security is a perpetual bond and has no definite mat | urity date. |
| (d) | Debt obligation initially issued at one coupon which converts to a higher coupon at a specific date. The rate shown is the rate at January 31, 2008. | |
| (e) | Security is priced as a unit. | |
| (f) | Floating rate loan interests in which the Trust inve pay interest at rates that are periodically redeterm reference to a base lending rate plus a premium. Th | |
| lending | rates are generally (i) the lending rate offered by | one or more |
| major | European banks, such as LIBOR (London InterBank Offe (ii) the prime rate offered by one or more major Uni | |
| banks, | (iii) the certificate of deposit (iv) other base len | ding rates |
| used by | commercial lenders. The interest rate shown is the at January 31, 2008. | rate accruing |
| (g) | Indicates a security that has been deemed illiquid. The aggregate cost of illiquid securities is \$996,45 The aggregate value \$895,000 represents 0.5% of the | |
| (h) | Non-income producing security. | |
| (i) | At January 31, 2008, the net unrealized | |

loss on investments based on cost for federal income tax purposes of \$190,534,453 was as follows:

Aggregate gross unrealized gain for all investments in which there is an excess of value over tax cost \$757,320

Aggregate gross unrealized loss for all investments in which there is an excess of tax cost over value (\$13,839,468)

Net unrealized loss (\$13,082,148)

For financial reporting purposes net unrealized loss was \$13,082,148 and cost of investments aggregated \$190,534,453.

Glossary of Terms:
LC - Letter of Credit

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

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ITEM 2. CONTROLS AND PROCEDURES.

(a) Disclose the conclusions of the registrant's principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, about the effectiveness of the registrant's disclosure controls and procedures (as defined in Rule 30a-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 their evaluation of these controls and procedures required by Rule 30a-3(b) under the Act (17 CFR270.30a-3(b))) and Rule 13a-15(b) or 15d-15(b) under the Exchange Act (17 CFR240.13a-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 their 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 controls over financial reporting (as defined in Rule 30a-3(d) under the Act (17 CFR270.30a-3(d)) that occurred during the registrant's last fiscal quarter 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 reasonably likely to materially affect, the registrant's internal control over financial reporting.

ITEM 3. EXHIBITS.

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

Filed herewith.

SIGNATURES

[See General Instruction F]

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

(Registrant) Pioneer Diversified High Income Trust

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

Date March 31, 2008

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

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

Date March 31, 2008

By (Signature and Title)* /s/ Vincent Nave Vincent Nave, Treasurer

Date March 31, 2008

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