EATON VANCE TAX ADVANTAGED GLOBAL DIVIDEND INCOME FUND Form N-CSR December 22, 2016

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: 811-21470

Eaton Vance Tax-Advantaged Global Dividend Income Fund

(Exact Name of Registrant as Specified in Charter)

Two International Place, Boston, Massachusetts 02110 (Address of Principal Executive Offices)

Maureen A. Gemma

Two International Place, Boston, Massachusetts 02110

(Name and Address of Agent for Services)

(617) 482-8260

(Registrant s Telephone Number)

October 31

Date of Fiscal Year End

October 31, 2016

Date of Reporting Period

Item 1. Reports to Stockholders

Tax-Advantaged Global Dividend Income Fund (ETG)

Annual Report

October 31, 2016

Commodity Futures Trading Commission Registration. Effective December 31, 2012, the Commodity Futures Trading Commission (CFTC) adopted certain regulatory changes that subject registered investment companies and advisers to regulation by the CFTC if a fund invests more than a prescribed level of its assets in certain CFTC-regulated instruments (including futures, certain options and swap agreements) or markets itself as providing investment exposure to such instruments. The Fund has claimed an exclusion from the definition of the term commodity pool operator under the Commodity Exchange Act. Accordingly, neither the Fund nor the adviser with respect to the operation of the Fund is subject to CFTC regulation. Because of its management of other strategies, the Fund s adviser is registered with the CFTC as a commodity pool operator and a commodity trading advisor.

Fund shares are not insured by the FDIC and are not deposits or other obligations of, or guaranteed by, any depository institution. Shares are subject to investment risks, including possible loss of principal invested.

Annual Report October 31, 2016

Eaton Vance

Tax-Advantaged Global Dividend Income Fund

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Tax-Advantaged Global Dividend Income Fund

October 31, 2016

Management s Discussion of Fund Performance

Economic and Market Conditions

Most global equity markets delivered moderate gains for the 12-month period ended October 31, 2016. Continued low interest rates and a rebound in oil prices were countered by geopolitical tensions and concerns about sluggish economic growth.

Global stocks moved in a choppy pattern during the first two months of the period. Worries about a possible interest rate hike by the U.S. Federal Reserve (the Fed) offset positive economic news, including further gains in the U.S. job market and higher European retail sales.

Expressing confidence in the economy, the Fed finally made its long-anticipated move in mid-December 2015, raising interest rates for the first time in nine years. Following the quarter-point increase, global stocks rose briefly before turbulence struck equity markets in early 2016. Stocks worldwide slid amid worries about falling oil prices, declining interest rates and slowing global growth, particularly in China. However, equity markets turned around in mid-February and soon overcame their earlier losses. Coinciding with the move was a reversal in crude oil prices, which rose following a prolonged decline.

In June 2016, Britain s Brexit vote to leave the European Union sent stocks into a two-day tailspin, but equity markets quickly rallied, recovering the lost ground. In the U.S., major stock indexes reached multiple record highs during July and August 2016.

Global stocks pulled back in late August 2016 amid retreating oil prices and fears about a possible interest rate increase. The Fed s decision at its September 2016 meeting to leave rates unchanged, along with an agreement by the Organization of the Petroleum Exporting Countries (OPEC) to curb oil production, sent stocks briefly higher. In the final month of the period, global equities drifted lower on worries about the U.S. presidential election as well as concerns about China s lagging economy and the possibility of rising interest rates.

For the 12-month period, the MSCI World Index,² a proxy for global equities, returned 1.18%. The MSCI EAFE Index, an index of developed-market international equities, declined 3.23%, while the MSCI Emerging Markets Index returned 9.27%. In the U.S., the blue-chip Dow Jones Industrial Average advanced 5.49%, while the broader U.S. equity market, as represented by the S&P 500 Index, gained 4.51%.

Fund Performance

For the 12-month period ended October 31, 2016, Eaton Vance Tax-Advantaged Global Dividend Income Fund (the Fund) had a total return of 2.09% at net asset value (NAV), underperforming the 1.18% return of the Fund s primary benchmark, the MSCI World Index (the Index).

The Fund s common stock allocation underperformed the Index during the period. Stock selection in the financials, health care and consumer discretionary sectors detracted from results versus the Index.

Within financials, the Fund s overweight position in financial services giant Credit Suisse Group AG declined in value, as a difficult global environment for Credit Suisse s securities trading business hindered the firm s efforts to restructure itself and led to concerns it might need to raise additional capital. In health care, the Fund s out-of-Index holding in Teva Pharmaceutical Industries, Ltd. ADR and overweight positions, relative to the Index, in drug maker Novo Nordisk A/S and biotech firm Gilead Sciences, Inc. detracted from performance versus the Index. All three stocks were hurt by headline news about high drug prices, which raised concerns during an election year that a new administration might press for increased scrutiny of drug prices.

In contrast, stock selection in the industrials, information technology and materials sectors aided Fund performance versus the Index. Within industrials, the Fund s overweight position in Brambles Ltd., a global supplier and manager of shipping pallets and containers, helped performance versus the Index as the firm reported strong growth early in the period and raised projections for future income and profits.

As of period-end, Gilead and Brambles were no longer held in the portfolio.

For the 12-month period, the Fund s preferred security allocation (i.e., preferred stocks, exchange-traded funds investing primarily in preferred stocks, and corporate bonds and notes with preferred characteristics) helped Fund performance versus the Index. The preferred allocation outperformed both the Index and the overall preferred market, as measured by the BofA Merrill Lynch Fixed Rate Preferred Securities Index (BofA Index). That outperformance was driven by several emerging market holdings that performed well; by an overweight in institutional issues that trade in the over-the-counter market, which in general performed better than retail (exchange-traded) issues; and by the preferred allocation s longer duration helpide to the BofA Index. A longer duration positioned the Fund to benefit more when rates fell during the period and prices rose. As of period end, the Fund had 19.2% of its total investments in preferred securities.

The Fund s use of leverage had the effect of achieving additional exposure to the common and preferred markets, thus magnifying the Fund s exposure to its underlying investments. During the period, leverage magnified both the positive performance of the Fund s preferred security allocation and the negative performance of the Fund s common stock allocation. As common stocks comprised a significantly larger portion of the Fund than preferred securities, the net effect of leverage was a detractor from performance versus the Index.

See Endnotes and Additional Disclosures in this report.

Past performance is no guarantee of future results. Returns are historical and are calculated by determining the percentage change in net asset value (NAV) or market price (as applicable) with all distributions reinvested and include management fees and other expenses. Fund performance at market price will differ from its results at NAV due to factors such as changing perceptions about the Fund, market conditions, fluctuations in supply and demand for Fund shares, or changes in Fund distributions. Investment return and principal value will fluctuate so that shares, when sold, may be worth more or less than their original cost. Performance less than or equal to one year is cumulative. Performance is for the stated time period only; due to market volatility, current Fund performance may be lower or higher than the quoted return. For performance as of the most recent month-end, please refer to eatonvance.com.

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Tax-Advantaged Global Dividend Income Fund

October 31, 2016

Performance^{2,3}

Portfolio Managers Michael A. Allison, CFA and John H. Croft, CFA of Eaton Vance Management; Christopher M. Dyer, CFA of Eaton Vance Management (International) Limited

% Average Annual Total Returns	Inception Date	One Year	Five Years	Ten	Years
Fund at NAV	01/30/2004	2.09%	10.37%		3.60%
Fund at Market Price		5.77	9.89		3.22
MSCI World Index		1.18%	9.01%		3.89%
BofA Merrill Lynch Fixed Rate Preferred Securities Index		7.23	7.31		3.26
Blended Index		2.44	8.77		4.02
% Premium/Discount to NAV4					
					9.24%
Distributions ⁵					
Total Distributions per share for the period				\$	1.230
Distribution Rate at NAV					7.78%
Distribution Rate at Market Price					8.58%
% Total Leverage ⁶					
Borrowings					26.06%

See Endnotes and Additional Disclosures in this report.

Past performance is no guarantee of future results. Returns are historical and are calculated by determining the percentage change in net asset value (NAV) or market price (as applicable) with all distributions reinvested and include management fees and other expenses. Fund performance at market price will differ from its results at NAV due to factors such as changing perceptions about the Fund, market conditions, fluctuations in supply and demand for Fund shares, or changes in Fund distributions. Investment return and principal value will fluctuate so that shares, when sold, may be worth more or less than their original cost. Performance less than or equal to one year is cumulative. Performance is for the stated time period only; due to market volatility, current Fund performance may be lower or higher than the quoted return. For performance as of the most recent month-end, please refer to eatonvance.com.

Tax-Advantaged Global Dividend Income Fund

October 31, 2016

Fund Profile

Common Stock Sector Allocation (% of total investments)

Country Allocation (% of total investments)⁷

Top 10 Common Stock Holdings (% of total investments)

3.1%
5.1%
2.0
1.8
1.8
1.8
1.7
1.6
1.6
1.5
1.5
18.4%

See Endnotes and Additional Disclosures in this report.

Tax-Advantaged Global Dividend Income Fund

October 31, 2016

Endnotes and Additional Disclosures

- ¹ The views expressed in this report are those of the portfolio manager(s) and are current only through the date stated at the top of this page. These views are subject to change at any time based upon market or other conditions, and Eaton Vance and the Fund(s) disclaim any responsibility to update such views. These views may not be relied upon as investment advice and, because investment decisions are based on many factors, may not be relied upon as an indication of trading intent on behalf of any Eaton Vance fund. This commentary may contain statements that are not historical facts, referred to as forward looking statements. The Fund s actual future results may differ significantly from those stated in any forward looking statement, depending on factors such as changes in securities or financial markets or general economic conditions, the volume of sales and purchases of Fund shares, the continuation of investment advisory, administrative and service contracts, and other risks discussed from time to time in the Fund s filings with the Securities and Exchange Commission.
- ² MSCI World Index is an unmanaged index of equity securities in the developed markets. MSCI EAFE Index is an unmanaged index of equities in the developed markets, excluding the U.S. and Canada. MSCI Emerging Markets Index is an unmanaged index of emerging markets common stocks. MSCI indexes are net of foreign withholding taxes. Source: MSCI. MSCI data may not be reproduced or used for any other purpose. MSCI provides no warranties, has not prepared or approved this report, and has no liability hereunder. Dow Jones Industrial Average is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry. S&P 500 Index is an unmanaged index of large-cap stocks commonly used as a measure of U.S. stock market performance. BofA Merrill Lynch Fixed Rate Preferred Securities Index is an unmanaged index of fixed-rate, preferred securities issued in the U.S. BofA Merrill Lynch[®] indices not for redistribution or other uses; provided **as is , without warranties, and with no liability.** Eaton Vance has prepared this report, BofAML does not endorse it, or guarantee, review, or endorse Eaton Vance s products. The blended index consists of 80% MSCI World Index and 20% BofA Merrill Lynch Fixed Rate Preferred Securities Index is donot reflect the effect of any applicable sales charges, commissions, expenses, taxes or leverage, as applicable. It is not possible to invest directly in an index.
- ³ Performance results reflect the effects of leverage. Performance since inception for an index, if presented, is the performance since the Fund s or oldest share class inception, as applicable.
- ⁴ The shares of the Fund often trade at a discount or premium from their net asset value. The discount or premium of the Fund may vary over time and may be higher or lower than what is quoted in this report. For up-to-date premium/discount information, please refer to http://eatonvance.com/closedend.
- ⁵ The Distribution Rate is based on the Fund s last regular distribution per share in the period (annualized) divided by the Fund s NAV or market price at the end of the period. The Fund s distributions may be comprised of amounts characterized for federal income tax purposes as qualified and non-qualified ordinary dividends, capital gains and nondividend distributions, also known as return of capital. For additional information about nondividend distributions, please refer to Eaton Vance Closed-End Fund Distribution Notices (19a) posted on our website, eatonvance.com. The Fund will determine the federal income tax character of distributions paid to a shareholder after the end of the calendar year. This is reported on the IRS form 1099-DIV and provided to the shareholder shortly after each year-end. For information about the tax character of distributions made in prior calendar years, please refer to Performance-Tax Character of Distributions on the Fund s webpage available at eatonvance.com. The Fund s distributions are determined by the investment adviser based on its current assessment of the Fund s long-term return potential. Fund distributions may be affected by numerous factors including changes in Fund performance, the cost of financing for leverage, portfolio holdings, realized and projected returns, and other factors. As portfolio and market conditions change, the rate of distributions paid by the Fund could change.
- ⁶ Total leverage is shown as a percentage of the Fund s aggregate net assets plus borrowings outstanding. The Fund employs leverage through borrowings. Use of leverage creates an opportunity for income, but creates risks including greater price volatility. The cost of borrowings rises and falls with changes in short-term interest rates. The Fund may be required to maintain prescribed asset coverage for its leverage and may be required to reduce its leverage at an inopportune time.

The Fund may obtain exposure to certain market segments through investments in exchange-traded funds (ETFs). For purposes of the chart, the Fund s investments in ETFs are included based on the portfolio composition of each ETF.

⁸ Duration is a measure of the expected change in price of a bond in percentage terms given a one percent change in interest rates, all else being constant. Securities with lower durations tend to be less sensitive to interest rate changes.

Fund profile subject to change due to active management.

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Tax-Advantaged Global Dividend Income Fund

October 31, 2016

Portfolio of Investments

Common Stocks 104.0%

Security	Shares	Value
Aerospace & Defense 1.3% CAE, Inc.	1,069,798	\$ 15,026,463
		\$ 15,026,463
Auto Components 1.0% Goodyear Tire & Rubber Co. (The) ⁽¹⁾	426,070	\$ 12,368,812
		\$ 12,368,812
Banks11.3%BNP Paribas SADBS Group Holdings, Ltd.ING Groep NVJPMorgan Chase & Co. ⁽¹⁾ Mitsubishi UFJ Financial Group, Inc.PNC Financial Services Group, Inc. (The)U.S. Bancorp ⁽¹⁾ Wells Fargo & Co. ⁽¹⁾	159,743 649,621 706,078 422,324 3,730,307 176,151 285,768 718,750	 \$ 9,262,419 7,002,074 9,268,693 29,250,160 19,247,670 16,840,036 12,790,976 33,069,687 \$ 136,731,715
Beverages 4.6% Anheuser-Busch InBev SA/NV ⁽¹⁾ Constellation Brands, Inc., Class A ⁽¹⁾ Diageo PLC ⁽¹⁾	165,668 76,776 894,607	 \$ 19,013,682 12,830,805 23,811,341 \$ 55,655,828
Biotechnology 3.5% Celgene Corp. ⁽¹⁾⁽²⁾ Shire PLC ⁽¹⁾	187,274 407,210	 \$ 19,135,657 22,992,174 \$ 42,127,831

Capital Markets 1.1% Credit Suisse Group AG Credit Suisse Group AG ⁽³⁾	132,511	 \$ 11,934,574 1,848,896 \$ 13,783,470
Chemicals 1.6% BASF SE PPG Industries, Inc.	105,257 107,915	 \$ 9,291,873 10,050,124 \$ 19,341,997
Containers & Packaging 1.2% Sealed Air Corp. ⁽¹⁾		\$ 14,699,704\$ 14,699,704
Security	Shares	Value
Diversified Telecommunication Services 2.4% Nippon Telegraph & Telephone Corp. ⁽¹⁾	650,803	\$ 28,854,543
		\$ 28,854,543
Electric Utilities 3.1% American Electric Power Co., Inc. ⁽¹⁾ NextEra Energy, Inc. ⁽¹⁾	211,163 181,853	\$ 13,691,809 23,277,184
		\$ 36,968,993
Electrical Equipment 1.3% Melrose Industries PLC	7,441,717	\$ 15,357,422
		\$ 15,357,422
Electronic Equipment, Instruments & Components 1.8% Keyence Corp. ⁽¹⁾	29,934	\$ 21,944,358
		\$ 21,944,358
Energy Equipment & Services 1.6% Halliburton Co. ⁽¹⁾ Schlumberger, Ltd. ⁽¹⁾	190,165 141,886	\$ 8,747,590 11,099,742
		\$ 19,847,332
Equity Real Estate Investment Trusts (REITs) 2.5% American Tower Corp. ⁽¹⁾ Equity Residential ⁽¹⁾	104,533 292,031	\$ 12,250,222 18,032,914
		\$ 30,283,136
Food Products0.8%Kerry Group PLC, Class A	133,226	\$ 9,668,993

		\$ 9,668,993
Health Care Equipment & Supplies 1.3% Medtronic PLC ⁽¹⁾	197,197	\$ 16,174,098
		\$ 16,174,098
Hotels, Restaurants & Leisure 0.7% Accor SA ⁽¹⁾	206,173	\$ 7,823,517
		\$ 7,823,517
Household Durables 2.0% Newell Brands, Inc. ⁽¹⁾	490,936	\$ 23,574,747
		\$ 23,574,747

See Notes to Financial Statements.

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Tax-Advantaged Global Dividend Income Fund

October 31, 2016

Portfolio of Investments continued

Security	Shares	Value
Household Products 1.3% Reckitt Benckiser Group PLC	179,854	\$ 16,089,830
		\$ 16,089,830
Insurance 5.8% AIA Group, Ltd. Chubb, Ltd. ⁽¹⁾ Prudential PLC ⁽¹⁾ St. James s Place PLC	2,852,351 197,173 619,498 1,484,931	\$ 17,944,145 25,040,971 10,109,507 17,149,182 \$ 70,243,805
Internet & Direct Marketing Retail 1.9% Amazon.com, Inc. ⁽¹⁾⁽²⁾	29,683	\$ 23,444,227 \$ 23,444,227
Internet Software & Services 6.5% Alphabet, Inc., Class C ⁽¹⁾⁽²⁾ Facebook, Inc., Class A ⁽¹⁾⁽²⁾	64,353 213,315	\$ 50,487,502 27,942,132 \$ 78,429,634
IT Services 2.0% Visa, Inc., Class A ⁽¹⁾	297,612	\$ 24,555,966 \$ 24,555,966
Machinery 5.1% Fortive Corp. ⁽¹⁾ Komatsu, Ltd. Kubota Corp. ⁽¹⁾	437,651 462,322 1,769,280	\$ 22,342,084 10,290,873 28,517,877 \$ 61,150,834

Interpublic Group of Cos., Inc. ⁽¹⁾ Time Warner, Inc. ⁽¹⁾	600,988 248,729	\$ 13,456,121 22,134,394
		\$ 35,590,515
Metals & Mining 0.8% Rio Tinto, Ltd.	225,153	\$ 9,315,585
		\$ 9,315,585
Multi-Utilities 0.7% National Grid PLC	633,715	\$ 8,243,223
	055,715	\$ 8,243,223 \$ 8,243,223
Security	Shares	Value
Oil, Gas & Consumable Fuels5.9%Anadarko Petroleum Corp. ⁽¹⁾ Chevron Corp. ⁽¹⁾ Occidental Petroleum Corp. ⁽¹⁾ Royal Dutch Shell PLC, Class B ⁽¹⁾	375,029 145,882 262,286 569,659	\$ 22,291,724 15,281,140 19,123,272 14,692,931
		\$ 71,389,067
Personal Products1.4%Estee Lauder Cos., Inc. (The), Class A ⁽¹⁾	191,639	\$ 16,697,506
		\$ 16,697,506
Pharmaceuticals 9.7% Allergan PLC ⁽¹⁾⁽²⁾ Eli Lilly & Co. ⁽¹⁾ Eli Lilly & Co. ⁽¹⁾ Johnson & Johnson ⁽¹⁾ Novo Nordisk A/S, Class B Roche Holding AG PC ⁽¹⁾ Teva Pharmaceutical Industries, Ltd. ADR ⁽¹⁾	102,537 311,747 226,483 383,868 69,943 384,354	\$ 21,424,081 23,019,399 26,269,763 13,675,482 16,064,616 16,427,290
		\$ 116,880,631
Professional Services 1.7% Verisk Analytics, Inc. ⁽¹⁾⁽²⁾	254,743	\$ 20,774,292
		\$ 20,774,292
Road & Rail 2.0% Union Pacific Corp. ⁽¹⁾	276,323	\$ 24,366,162
		\$ 24,366,162
Semiconductors & Semiconductor Equipment 2.0% ASML Holding NV ⁽¹⁾	227,149	\$ 24,030,982
		\$ 24,030,982 \$ 24,030,982

Specialty Retail 3.0% Industria de Diseno Textil SA Lowe s Cos., Iné!	506,254 274,123	\$ 17,664,425 18,270,298
		\$ 35,934,723
Technology Hardware, Storage & Peripherals 2.1% Apple, Inc. ⁽¹⁾	224,120	\$ 25,446,585
		\$ 25,446,585
Textiles, Apparel & Luxury Goods 3.2% LVMH Moet Hennessy Louis Vuitton SE NIKE, Inc., Class B ⁽¹⁾	81,610 218,489	\$ 14,858,009 10,963,778

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See Notes to Financial Statements.

Tax-Advantaged Global Dividend Income Fund

October 31, 2016

Portfolio of Investments continued

Security	Shares		Value
Textiles, Apparel & Luxury Goods (continued) Pandora A/S	97,262	\$	12,649,457
		\$	38,471,244
Tobacco 0.7%			
Reynolds American, Inc. ⁽¹⁾	149,091	\$ \$	8,211,932 8,211,932
		Ψ	0,211,752
Trading Companies & Distributors 1.3% Brenntag AG	282,483	\$	15,101,594
		\$	15,101,594
Wireless Telecommunication Services 0.8% Vodafone Group PLC	3,349,716	\$	9,199,408
	5,517,710	\$	9,199,408
Total Common Stocks			
(identified cost \$1,241,572,092)		\$ 1	,253,800,704
Preferred Stocks 10.9%			

Security	Shares	Value
Banks 6.1%		
AgriBank FCB, 6.875% to 1/1/24 ⁽⁴⁾	50,890	\$ 5,477,036
CoBank ACB, Series F, 6.25% to 10/1/22 ⁽⁴⁾	51,100	5,472,493
Farm Credit Bank of Texas, 6.75% to		
9/15/23 ⁽⁴⁾	7,600	822,938
Farm Credit Bank of Texas, Series 1, 10.00%	2,490	3,044,025
First Tennessee Bank, 3.75% ⁽⁵⁾⁽⁶⁾	2,570	1,799,080
Huntington Bancshares, Inc., Series A, 8.50% (Convertible)	5,350	7,596,947
IBERIABANK Corp., Series C, 6.60% to 5/1/26 ⁽⁴⁾	114,120	3,003,638
JPMorgan Chase & Co., Series O, 5.50%	125,773	3,197,150

KeyCorp, Series A, 7.75% (Convertible)	46,185	6,304,253
People s United Financial, Inc., Series A, 5.625% to 12/15/26 ⁽⁾	55,625	1,451,813
Regions Financial Corp., Series A, 6.375%	125,376	3,257,268
SunTrust Banks, Inc., Series E, 5.875%	287,627	7,458,168
Texas Capital Bancshares, Inc., 6.50%	286,789	7,379,081
Texas Capital Bancshares, Inc., Series A, 6.50%	21,450	553,196
Webster Financial Corp., Series E, 6.40%	173,970	4,509,302
Wells Fargo & Co., Series L, 7.50% (Convertible)	9,177	11,975,985

\$ 73,302,373