



# MFS<sup>®</sup> Total Return Series

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MFS<sup>®</sup> Variable Insurance Trust

# MFS® Total Return Series

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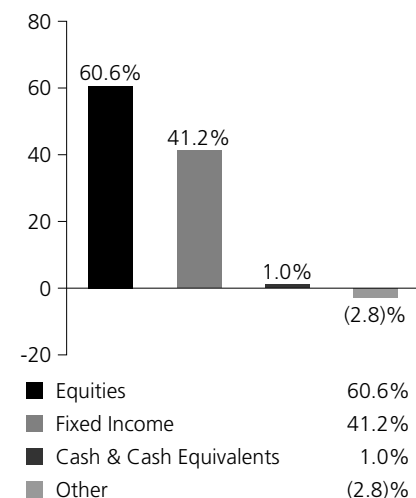
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**The report is prepared for the general information of shareholders. It is authorized for distribution to prospective investors only when preceded or accompanied by a current prospectus.**

NOT FDIC INSURED • MAY LOSE VALUE • NO BANK OR CREDIT UNION GUARANTEE •  
NOT A DEPOSIT • NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY OR NCUA/NCUSIF

## PORTFOLIO COMPOSITION

### Portfolio structure (i)



### Top ten holdings (i)

U.S. Treasury Note 5 yr Future - SEP 2023	3.0%
Microsoft Corp.	2.5%
Goldman Sachs Group, Inc.	2.0%
JPMorgan Chase & Co.	1.9%
Eaton Corp. PLC	1.9%
Comcast Corp., "A"	1.8%
UMBS, TBA, 2.5%, 30 year (h)	1.7%
UMBS, TBA, 2.0%, 30 year (h)	1.7%
Charles Schwab Corp.	1.6%
Johnson & Johnson	1.5%

### Composition including fixed income credit quality (a)(i)

AAA	4.0%
AA	2.0%
A	5.1%
BBB	9.2%
BB	0.1%
CCC (o)	0.0%
U.S. Government	4.9%
Federal Agencies	13.0%
Not Rated	2.9%
Non-Fixed Income	60.6%
Cash & Cash Equivalents	1.0%
Other	(2.8)%

### GICS equity sectors (g)

Financials	14.4%
Industrials	9.3%
Health Care	9.1%
Information Technology	7.9%
Communication Services	4.8%
Consumer Staples	4.1%
Energy	3.2%
Utilities	2.6%
Consumer Discretionary	2.6%
Materials	2.6%

### Fixed income sectors (i)

Investment Grade Corporates	14.0%
Mortgage-Backed Securities	13.0%
U.S. Treasury Securities	7.8%
Collateralized Debt Obligations	3.2%
Commercial Mortgage-Backed Securities	2.0%
Municipal Bonds	0.5%
Asset-Backed Securities	0.5%
Emerging Markets Bonds	0.1%
High Yield Corporates	0.1%
Non-U.S. Government Bonds (o)	0.0%
U.S. Government Agencies (o)	0.0%

(a) For all securities other than those specifically described below, ratings are assigned to underlying securities utilizing ratings from Moody's, Fitch, and Standard & Poor's rating agencies and applying the following hierarchy: If all three agencies provide a rating, the middle rating (after dropping the highest and lowest ratings) is assigned; if two of the three agencies rate a security, the lower of the two is assigned. If none of the 3 rating agencies above assign a rating, but the security is rated by DBRS Morningstar, then the DBRS Morningstar rating is assigned. If none of the 4 rating agencies listed above rate the security, but the security is rated by the Kroll Bond Rating Agency (KBRA), then the KBRA rating is assigned. Ratings are shown in the S&P and Fitch scale (e.g., AAA). Securities rated BBB or higher are considered investment grade. All ratings are subject to change. U.S. Government includes securities issued by the U.S. Department of the Treasury. Federal Agencies includes rated and unrated U.S. Agency fixed-income securities, U.S. Agency mortgage-backed securities, and collateralized mortgage obligations of U.S. Agency mortgage-backed securities. Not Rated includes fixed income securities and fixed income derivatives

## MFS Total Return Series

### *Portfolio Composition - continued*

that have not been rated by any rating agency. Non-Fixed Income includes equity securities (including convertible bonds and equity derivatives), ETFs and Options on ETFs, and/or commodity-linked derivatives. The fund may or may not have held all of these instruments on this date. The fund is not rated by these agencies.

- (g) The Global Industry Classification Standard (GICS®) was developed by and/or is the exclusive property of MSCI, Inc. and S&P Global Market Intelligence Inc. ("S&P Global Market Intelligence"). GICS is a service mark of MSCI and S&P Global Market Intelligence and has been licensed for use by MFS. MFS has applied its own internal sector/industry classification methodology for equity securities and non-equity securities that are unclassified by GICS.
- (h) UMBS may include both Fannie Mae and Freddie Mac securities.
- (i) For purposes of this presentation, the components include the value of securities, and reflect the impact of the equivalent exposure of derivative positions, if any. These amounts may be negative from time to time. Equivalent exposure is a calculated amount that translates the derivative position into a reasonable approximation of the amount of the underlying asset that the portfolio would have to hold at a given point in time to have the same price sensitivity that results from the portfolio's ownership of the derivative contract. When dealing with derivatives, equivalent exposure is a more representative measure of the potential impact of a position on portfolio performance than value. The bond component will include any accrued interest amounts.
- (o) Less than 0.1%.

Where the fund holds convertible bonds, they are treated as part of the equity portion of the portfolio.

Cash & Cash Equivalents includes any cash, investments in money market funds, short-term securities, and other assets less liabilities. Please see the Statement of Assets and Liabilities for additional information related to the fund's cash position and other assets and liabilities.

Other includes equivalent exposure from currency derivatives and/or any offsets to derivative positions and may be negative.

Percentages are based on net assets as of June 30, 2023.

The portfolio is actively managed and current holdings may be different.

## EXPENSE TABLE

### Fund expenses borne by the shareholders during the period, January 1, 2023 through June 30, 2023

As a shareholder of the fund, you incur ongoing costs, including management fees; distribution and/or service (12b-1) fees; and other fund expenses. This example is intended to help you understand your ongoing costs (in dollars) of investing in the fund and to compare these costs with the ongoing costs of investing in other mutual funds.

The example is based on an investment of \$1,000 invested at the beginning of the period and held for the entire period January 1, 2023 through June 30, 2023.

#### Actual Expenses

The first line for each share class in the following table provides information about actual account values and actual expenses. You may use the information in this line, together with the amount you invested, to estimate the expenses that you paid over the period. Simply divide your account value by \$1,000 (for example, an \$8,600 account value divided by \$1,000 = 8.6), then multiply the result by the number in the first line under the heading entitled "Expenses Paid During Period" to estimate the expenses you paid on your account during this period.

#### Hypothetical Example for Comparison Purposes

The second line for each share class in the following table provides information about hypothetical account values and hypothetical expenses based on the fund's actual expense ratio and an assumed rate of return of 5% per year before expenses, which is not the fund's actual return. The hypothetical account values and expenses may not be used to estimate the actual ending account balance or expenses you paid for the period. You may use this information to compare the ongoing costs of investing in the fund and other funds. To do so, compare this 5% hypothetical example with the 5% hypothetical examples that appear in the shareholder reports of the other funds.

Please note that the expenses shown in the table are meant to highlight the fund's ongoing costs only and do not take into account the fees and expenses imposed under the variable contracts through which your investment in the fund is made. Therefore, the second line for each share class in the table is useful in comparing ongoing costs associated with an investment in vehicles (such as the fund) which fund benefits under variable annuity and variable life insurance contracts and to qualified pension and retirement plans only, and will not help you determine the relative total costs of investing in the fund through variable annuity and variable life insurance contracts. If the fees and expenses imposed under the variable contracts were included, your costs would have been higher.

Share Class		Annualized Expense Ratio	Beginning Account Value 1/01/23	Ending Account Value 6/30/23	Expenses Paid During Period (p) 1/01/23-6/30/23
Initial Class	Actual	0.61%	\$1,000.00	\$1,043.58	\$3.09
	Hypothetical (h)	0.61%	\$1,000.00	\$1,021.77	\$3.06
Service Class	Actual	0.86%	\$1,000.00	\$1,042.37	\$4.36
	Hypothetical (h)	0.86%	\$1,000.00	\$1,020.53	\$4.31

(h) 5% class return per year before expenses.

(p) "Expenses Paid During Period" are equal to each class's annualized expense ratio, as shown above, multiplied by the average account value over the period, multiplied by 181/365 (to reflect the one-half year period).

**PORTFOLIO OF INVESTMENTS – 6/30/23 (unaudited)**

The Portfolio of Investments is a complete list of all securities owned by your fund. It is categorized by broad-based asset classes.

<b>Issuer</b>	<b>Shares/Par</b>	<b>Value (\$)</b>
<b>Common Stocks – 59.9%</b>		
<b>Aerospace &amp; Defense – 1.9%</b>		
General Dynamics Corp.	36,283	\$ 7,806,287
Honeywell International, Inc.	68,487	14,211,053
Howmet Aerospace, Inc.	130,533	6,469,215
L3Harris Technologies, Inc.	64,236	12,575,482
		<u>\$ 41,062,037</u>
<b>Alcoholic Beverages – 0.8%</b>		
Constellation Brands, Inc., "A"	43,715	\$ 10,759,573
Diageo PLC	153,100	6,570,023
		<u>\$ 17,329,596</u>
<b>Automotive – 2.0%</b>		
Aptiv PLC (a)	166,406	\$ 16,988,388
Lear Corp.	80,618	11,572,714
LKQ Corp.	247,074	14,397,002
		<u>\$ 42,958,104</u>
<b>Broadcasting – 0.8%</b>		
Omnicom Group, Inc.	159,534	\$ 15,179,660
Warner Bros. Discovery, Inc. (a)	180,137	2,258,918
		<u>\$ 17,438,578</u>
<b>Brokerage &amp; Asset Managers – 2.6%</b>		
Cboe Global Markets, Inc.	65,322	\$ 9,015,089
Charles Schwab Corp.	611,189	34,642,193
CME Group, Inc.	39,159	7,255,771
Invesco Ltd.	279,228	4,693,823
		<u>\$ 55,606,876</u>
<b>Business Services – 2.5%</b>		
Accenture PLC, "A"	38,609	\$ 11,913,965
Amdocs Ltd.	132,658	13,113,243
Cognizant Technology Solutions Corp., "A"	115,891	7,565,365
Fidelity National Information Services, Inc.	153,353	8,388,409
Fiserv, Inc. (a)	98,404	12,413,665
		<u>\$ 53,394,647</u>
<b>Cable TV – 1.8%</b>		
Comcast Corp., "A"	951,597	\$ 39,538,855
<b>Chemicals – 0.7%</b>		
PPG Industries, Inc.	105,874	\$ 15,701,114
<b>Computer Software – 3.3%</b>		
Dun & Bradstreet Holdings, Inc.	552,113	\$ 6,387,947
Microsoft Corp.	163,133	55,553,312
Oracle Corp.	75,651	9,009,278
		<u>\$ 70,950,537</u>
<b>Computer Software - Systems – 0.2%</b>		
Seagate Technology Holdings PLC	80,209	\$ 4,962,531

*Portfolio of Investments (unaudited) – continued*

Issuer	Shares/Par		Value (\$)
<b>Common Stocks – continued</b>			
<b>Construction – 2.0%</b>			
Masco Corp.	404,653	\$	23,218,989
Stanley Black & Decker, Inc.	120,348		11,277,811
Vulcan Materials Co.	38,435		8,664,787
		\$	43,161,587
<b>Consumer Products – 0.2%</b>			
Kenvue, Inc. (a)	162,510	\$	4,293,514
<b>Consumer Services – 0.2%</b>			
Booking Holdings, Inc. (a)	1,788	\$	4,828,190
<b>Electrical Equipment – 1.2%</b>			
Johnson Controls International PLC	390,683	\$	26,621,140
<b>Electronics – 3.0%</b>			
Analog Devices, Inc.	20,340	\$	3,962,435
Applied Materials, Inc.	98,478		14,234,010
Intel Corp.	520,385		17,401,675
NXP Semiconductors N.V.	99,560		20,377,941
Taiwan Semiconductor Manufacturing Co. Ltd., ADR	87,499		8,830,399
		\$	64,806,460
<b>Energy - Independent – 2.7%</b>			
ConocoPhillips	242,397	\$	25,114,753
Hess Corp.	149,340		20,302,773
Pioneer Natural Resources Co.	69,460		14,390,723
		\$	59,808,249
<b>Energy - Integrated – 0.5%</b>			
Suncor Energy, Inc.	362,890	\$	10,644,956
<b>Food &amp; Beverages – 0.8%</b>			
Archer Daniels Midland Co.	87,458	\$	6,608,327
Danone S.A.	99,106		6,071,232
J.M. Smucker Co.	30,691		4,532,140
		\$	17,211,699
<b>General Merchandise – 0.1%</b>			
Dollar Tree, Inc. (a)	20,203	\$	2,899,131
<b>Health Maintenance Organizations – 1.5%</b>			
Cigna Group	115,537	\$	32,419,682
<b>Insurance – 3.3%</b>			
Aon PLC	76,581	\$	26,435,761
Chubb Ltd.	101,945		19,630,529
Travelers Cos., Inc.	51,319		8,912,058
Willis Towers Watson PLC	75,054		17,675,217
		\$	72,653,565
<b>Internet – 1.1%</b>			
Alphabet, Inc., "A" (a)	200,567	\$	24,007,869

## MFS Total Return Series

Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Common Stocks – continued</b>		
<b>Leisure &amp; Toys – 0.3%</b>		
Electronic Arts, Inc.	51,002	\$ 6,614,959
<b>Machinery &amp; Tools – 3.4%</b>		
Eaton Corp. PLC	202,351	\$ 40,692,786
Ingersoll Rand, Inc.	222,134	14,518,678
Regal Rexnord Corp.	115,534	17,780,683
		\$ 72,992,147
<b>Major Banks – 6.3%</b>		
Bank of America Corp.	918,463	\$ 26,350,704
Goldman Sachs Group, Inc.	137,774	44,437,626
JPMorgan Chase & Co.	283,251	41,196,025
Morgan Stanley	195,203	16,670,336
PNC Financial Services Group, Inc.	68,420	8,617,499
		\$ 137,272,190
<b>Medical &amp; Health Technology &amp; Services – 1.5%</b>		
ICON PLC (a)	51,400	\$ 12,860,280
McKesson Corp.	46,097	19,697,709
		\$ 32,557,989
<b>Medical Equipment – 2.0%</b>		
Becton, Dickinson and Co.	26,741	\$ 7,059,891
Boston Scientific Corp. (a)	158,155	8,554,604
Danaher Corp.	24,172	5,801,280
Medtronic PLC	248,738	21,913,818
		\$ 43,329,593
<b>Metals &amp; Mining – 0.2%</b>		
Glencore PLC	903,283	\$ 5,099,165
<b>Other Banks &amp; Diversified Financials – 1.2%</b>		
Northern Trust Corp.	174,127	\$ 12,909,776
Truist Financial Corp.	458,587	13,918,115
		\$ 26,827,891
<b>Pharmaceuticals – 4.2%</b>		
Bayer AG	248,910	\$ 13,762,513
Johnson & Johnson	199,381	33,001,543
Merck & Co., Inc.	41,808	4,824,225
Organon & Co.	158,391	3,296,117
Pfizer, Inc.	459,825	16,866,381
Roche Holding AG	41,789	12,769,445
Vertex Pharmaceuticals, Inc. (a)	18,058	6,354,791
		\$ 90,875,015
<b>Railroad &amp; Shipping – 0.9%</b>		
Union Pacific Corp.	99,053	\$ 20,268,225
<b>Restaurants – 0.2%</b>		
Wendy's Co.	235,617	\$ 5,124,670



## Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Common Stocks – continued</b>		
<b>Specialty Chemicals – 1.2%</b>		
Axalta Coating Systems Ltd. (a)	434,619	\$ 14,259,849
DuPont de Nemours, Inc.	171,943	12,283,608
		<u>\$ 26,543,457</u>
<b>Specialty Stores – 0.9%</b>		
Ross Stores, Inc.	29,452	\$ 3,302,453
Walmart Stores, Inc.	100,125	15,737,647
		<u>\$ 19,040,100</u>
<b>Telecommunications - Wireless – 0.8%</b>		
T-Mobile US, Inc. (a)	119,862	\$ 16,648,832
<b>Tobacco – 1.0%</b>		
Philip Morris International, Inc.	215,250	\$ 21,012,705
<b>Utilities - Electric Power – 2.6%</b>		
Duke Energy Corp.	132,975	\$ 11,933,177
Exelon Corp.	230,692	9,398,392
National Grid PLC	426,081	5,630,380
PG&E Corp. (a)	847,438	14,643,729
Southern Co.	227,986	16,016,016
		<u>\$ 57,621,694</u>
<b>Total Common Stocks (Identified Cost, \$803,243,831)</b>		<b>\$ 1,304,127,549</b>
<b>Bonds – 38.1%</b>		
<b>Aerospace &amp; Defense – 0.1%</b>		
BAE Systems PLC, 3.4%, 4/15/2030 (n)	\$ 1,108,000	\$ 1,001,934
Huntington Ingalls Industries, Inc., 3.844%, 5/01/2025	504,000	484,611
Raytheon Technologies Corp., 4.125%, 11/16/2028	1,570,000	1,512,122
		<u>\$ 2,998,667</u>
<b>Asset-Backed &amp; Securitized – 5.7%</b>		
ACRES 2021-FL2 Issuer Ltd., "AS", FLR, 6.908% (LIBOR - 1mo. + 1.75%), 1/15/2037 (n)	\$ 1,851,500	\$ 1,797,563
Allegro CLO Ltd., 2016-1A, "BR2", FLR, 6.81% (LIBOR - 3mo. + 1.55%), 1/15/2030 (n)	2,407,803	2,361,443
Arbor Realty Trust, Inc., CLO, 2021-FL1, "AS", FLR, 6.419% (LIBOR - 1mo. + 1.2%), 12/15/2035 (n)	2,115,000	2,043,890
Arbor Realty Trust, Inc., CLO, 2021-FL3, "B", FLR, 6.793% (LIBOR - 1mo. + 1.6%), 8/15/2034 (n)	1,807,500	1,699,910
Arbor Realty Trust, Inc., CLO, 2022-FL1, "B", FLR, 7.166% (SOFR - 30 day + 2.1%), 1/15/2037 (n)	5,076,500	4,900,941
AREIT 2019-CRE3 Trust, "AS", FLR, 6.516% (LIBOR - 1mo. + 1.3%), 9/14/2036 (n)	2,931,780	2,878,228
AREIT 2022-CRE6 Trust, "B", FLR, 6.916% (SOFR - 30 day + 1.85%), 1/20/2037 (n)	3,088,500	2,930,072
Bayview Financial Revolving Mortgage Loan Trust, FLR, 6.777% (LIBOR - 1mo. + 1.6%), 12/28/2040 (n)	485,846	645,363
Brazos Securitization LLC, 5.243%, 9/01/2040 (n)	1,552,000	1,549,420
BSPRT 2021-FL6 Issuer Ltd., "AS", FLR, 6.493% (LIBOR - 1mo. + 1.3%), 3/15/2036 (n)	4,964,000	4,752,807
BSPRT 2021-FL7 Issuer Ltd., "B", FLR, 7.243% (LIBOR - 1mo. + 2.05%), 12/15/2038 (n)	849,500	828,317
BSPRT 2022-FL8 Issuer Ltd., "B", FLR, 7.117% (SOFR - 30 day + 2.05%), 2/15/2037 (n)	1,817,000	1,753,510
Business Jet Securities LLC, 2021-1A, "A", 2.162%, 4/15/2036 (n)	865,328	793,510
BXMT 2021-FL4 Ltd., "AS", FLR, 6.561% (LIBOR - 1mo. + 1.3%), 5/15/2038 (n)	5,214,000	4,912,016
CHCP 2021-FL1 Ltd., "AS", FLR, 6.516% (LIBOR - 1mo. + 1.3%) 2/15/2038 (n)	2,203,500	2,119,409
Chesapeake Funding II LLC, 2023-1A, "A1", 5.65%, 5/15/2035 (n)	2,334,935	2,316,231
Columbia Cent CLO 28 Ltd., "A-2-R", 7.023%, 11/07/2030 (n)	3,492,733	3,386,484
Commercial Mortgage Trust, 2015-LC21, "A4", 3.708%, 7/10/2048	3,980,975	3,789,287
Credit Acceptance Auto Loan Trust, 2021-3A, "B", 1.38%, 7/15/2030 (n)	1,118,000	1,051,301
CSAIL Commercial Mortgage Trust, 2015-C2, "A4", 3.504%, 6/15/2057	2,316,427	2,204,112
Cutwater 2015-1A Ltd., "AR", FLR, 6.48% (LIBOR - 3mo. + 1.22%), 1/15/2029 (n)	997,583	993,372
Dryden Senior Loan Fund, 2013-26A, "AR", CLO, FLR, 6.16% (LIBOR - 3mo. + 0.9%), 4/15/2029 (n)	1,749,939	1,734,702

## MFS Total Return Series

Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Bonds – continued</b>		
<b>Asset-Backed &amp; Securitized – continued</b>		
Dryden Senior Loan Fund, 2018-55A, “A1”, CLO, FLR, 6.28% (LIBOR - 3mo. + 1.02%), 4/15/2031 (n)	\$ 4,414,000	\$ 4,368,801
GLS Auto Select Receivables Trust, 2023-1A, “A2”, 6.27%, 8/16/2027 (n)	1,888,095	1,883,468
GMAC Mortgage Corp. Loan Trust, FGIC, 5.805%, 10/25/2036	93,589	92,574
GS Mortgage Securities Trust, 2015-GC30, “A4”, 3.382%, 5/10/2050	4,243,101	4,019,978
JPMBB Commercial Mortgage Securities Trust, 2014-C26, “A4”, 3.494%, 1/15/2048	4,880,000	4,657,580
JPMBB Commercial Mortgage Securities Trust, 2015-C28, “A4”, 3.227%, 10/15/2048	3,256,792	3,070,670
LCCM 2021-FL2 Trust, “B”, FLR, 7.161% (LIBOR - 1mo. + 1.9%), 12/13/2038 (n)	2,562,000	2,500,650
LoanCore 2021-CRE5 Ltd., “AS”, FLR, 6.943% (LIBOR - 1mo. + 1.75%), 7/15/2036 (n)	5,288,000	4,947,727
MF1 2020-FL4 Ltd., “A”, FLR, 6.961% (LIBOR - 1mo. + 1.7%), 11/15/2035 (n)	884,058	876,244
MF1 2021-FL5 Ltd., “AS”, FLR, 6.461% (LIBOR - 1mo. + 1.2%), 7/15/2036 (n)	5,459,500	5,297,751
MF1 2022-FL8 Ltd., “B”, FLR, 7.017% (SOFR - 30 day + 1.95%), 2/19/2037 (n)	2,251,053	2,152,259
MidOcean Credit CLO, 2013-2A, “BR”, FLR, 6.949% (LIBOR - 3mo. + 1.65%), 1/29/2030 (n)	3,932,725	3,892,702
Morgan Stanley Bank of America Merrill Lynch Trust, 2017-C34, “A4”, 3.536%, 11/15/2052	1,600,004	1,463,325
Neuberger Berman CLO Ltd., 2013-15A, “BR2”, FLR, 6.61% (LIBOR - 3mo. + 1.35%), 10/15/2029 (n)	1,750,540	1,708,888
Neuberger Berman CLO Ltd., 2015-20A, “ARR”, FLR, 6.42% (LIBOR - 3mo. + 1.16%), 7/15/2034 (n)	1,900,000	1,870,328
Oaktree CLO 2019-1A Ltd., “BR”, FLR, 7.023% (LIBOR - 3mo. + 1.75%), 4/22/2030 (n)	5,195,227	5,040,227
OneMain Financial Issuance Trust 2022-3A, “A”, 5.94%, 5/15/2034 (n)	2,137,000	2,125,941
PFP III 2021-7 Ltd., “AS”, FLR, 6.343% (LIBOR - 1mo. + 1.15%), 4/14/2038 (n)	3,912,305	3,796,594
ReadyCap Commercial Mortgage Trust, 2021-FL5, “A”, FLR, 6.15% (LIBOR - 1mo. + 1%), 4/25/2038 (n)	1,654,340	1,617,769
ReadyCap Commercial Mortgage Trust, 2021-FL7, “B”, FLR, 6.95% (LIBOR - 1mo. + 1.8%), 11/25/2036 (n)	1,130,000	1,087,154
Residential Funding Mortgage Securities, Inc., FGIC, 4.223%, 12/25/2035	63,221	62,785
Santander Drive Auto Receivables Trust, 2022-6, “A2”, 4.37%, 5/15/2025	180,490	180,210
Starwood Commercial Mortgage, 2022-FL3, “AS”, FLR, 6.867% (SOFR - 30 day + 1.8%), 11/15/2038 (n)	5,210,500	4,982,348
Toyota Lease Owner Trust, 2023-A, “A2”, 5.3%, 8/20/2025 (n)	505,000	502,621
TPG Real Estate Finance, 2021-FL4, “A”, FLR, 6.358% (LIBOR - 1mo. + 1.2%), 3/15/2038 (n)	4,496,301	4,346,291
Verizon Owner Trust, 2020-A, “B”, 1.98%, 7/22/2024	199,607	199,254
Voya CLO 2012-4A Ltd., “A2R3”, FLR, 6.698% (LIBOR - 3mo. + 1.45%), 10/15/2030 (n)	2,010,166	1,938,262
Wells Fargo Commercial Mortgage Trust, 2015-C28, “A4”, 3.54%, 5/15/2048	4,315,766	4,100,259
		\$ 124,224,548
<b>Automotive – 0.4%</b>		
Hyundai Capital America, 2.65%, 2/10/2025 (n)	\$ 804,000	\$ 761,943
Lear Corp., 4.25%, 5/15/2029	656,000	612,641
Magna International, Inc., 2.45%, 6/15/2030	1,902,000	1,610,378
Stellantis N.V., 2.691%, 9/15/2031 (n)	2,944,000	2,352,508
Volkswagen Group of America Finance LLC, 3.35%, 5/13/2025 (n)	3,607,000	3,454,566
		\$ 8,792,036
<b>Broadcasting – 0.3%</b>		
Walt Disney Co., 3.5%, 5/13/2040	\$ 4,664,000	\$ 3,856,254
WarnerMedia Holdings, Inc., 5.05%, 3/15/2042	1,937,000	1,632,634
WarnerMedia Holdings, Inc., 5.141%, 3/15/2052	1,692,000	1,377,707
		\$ 6,866,595
<b>Brokerage &amp; Asset Managers – 0.4%</b>		
Charles Schwab Corp., 5.853% to 5/19/2033, FLR (SOFR - 1 day + 2.5%) to 5/19/2034	\$ 2,941,000	\$ 2,984,779
Intercontinental Exchange, Inc., 2.1%, 6/15/2030	2,155,000	1,796,753
LPL Holdings, Inc., 4.375%, 5/15/2031 (n)	2,431,000	2,100,304
Morgan Stanley Domestic Holdings, Inc., 4.5%, 6/20/2028	975,000	939,133
Raymond James Financial, Inc., 4.95%, 7/15/2046	2,057,000	1,855,124
		\$ 9,676,093

## Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Bonds – continued</b>		
<b>Building – 0.2%</b>		
Martin Marietta Materials, Inc., 2.5%, 3/15/2030	\$ 190,000	\$ 160,534
Masco Corp., 2%, 2/15/2031	3,622,000	2,857,132
Vulcan Materials Co., 3.5%, 6/01/2030	380,000	343,304
		\$ 3,360,970
<b>Business Services – 0.7%</b>		
Equinix, Inc., 2.625%, 11/18/2024	\$ 2,863,000	\$ 2,734,101
Equinix, Inc., 1.8%, 7/15/2027	1,829,000	1,584,513
Equinix, Inc., 2.5%, 5/15/2031	2,363,000	1,923,943
Experian Finance PLC, 4.25%, 2/01/2029 (n)	1,450,000	1,373,725
Fiserv, Inc., 2.65%, 6/01/2030	730,000	622,110
Global Payments, Inc., 1.2%, 3/01/2026	2,011,000	1,787,126
Global Payments, Inc., 2.9%, 11/15/2031	1,699,000	1,382,159
RELX Capital, Inc., 3%, 5/22/2030	620,000	552,736
Verisk Analytics, Inc., 4.125%, 3/15/2029	1,857,000	1,772,636
Verisk Analytics, Inc., 5.75%, 4/01/2033	1,422,000	1,488,683
		\$ 15,221,732
<b>Cable TV – 0.4%</b>		
Charter Communications Operating LLC/Charter Communications Operating Capital Corp., 6.384%, 10/23/2035	\$ 1,053,000	\$ 1,026,343
Charter Communications Operating LLC/Charter Communications Operating Capital Corp., 3.5%, 6/01/2041	2,122,000	1,435,330
Charter Communications Operating LLC/Charter Communications Operating Capital Corp., 5.375%, 5/01/2047	430,000	355,419
Charter Communications Operating LLC/Charter Communications Operating Capital Corp., 5.25%, 4/01/2053	1,734,000	1,400,522
Cox Communications, Inc., 1.8%, 10/01/2030 (n)	1,333,000	1,048,527
Time Warner Entertainment Co. LP, 8.375%, 7/15/2033	2,526,000	2,774,739
		\$ 8,040,880
<b>Chemicals – 0.1%</b>		
RPM International, Inc., 2.95%, 1/15/2032	\$ 1,427,000	\$ 1,128,856
Sherwin-Williams Co., 2.3%, 5/15/2030	1,542,000	1,294,796
		\$ 2,423,652
<b>Computer Software – 0.1%</b>		
Oracle Corp., 4.9%, 2/06/2033	\$ 740,000	\$ 718,321
Roper Technologies, Inc., 4.2%, 9/15/2028	675,000	647,649
Roper Technologies, Inc., 2.95%, 9/15/2029	411,000	363,340
Roper Technologies, Inc., 2%, 6/30/2030	1,302,000	1,064,118
		\$ 2,793,428
<b>Conglomerates – 0.2%</b>		
Carrier Global Corp., 3.377%, 4/05/2040	\$ 3,222,000	\$ 2,473,451
Westinghouse Air Brake Technologies Corp., 3.2%, 6/15/2025	808,000	766,906
Westinghouse Air Brake Technologies Corp., 4.95%, 9/15/2028	2,112,000	2,034,329
		\$ 5,274,686
<b>Consumer Products – 0.2%</b>		
GSK Consumer Healthcare Capital US LLC, 3.375%, 3/24/2029	\$ 1,861,000	\$ 1,690,945
Kenvue, Inc., 4.9%, 3/22/2033 (n)	1,983,000	2,006,429
		\$ 3,697,374
<b>Consumer Services – 0.1%</b>		
Booking Holdings, Inc., 4.625%, 4/13/2030	\$ 1,430,000	\$ 1,393,337
<b>Electrical Equipment – 0.1%</b>		
Arrow Electronics, Inc., 2.95%, 2/15/2032	\$ 2,690,000	\$ 2,219,927

## MFS Total Return Series

Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Bonds – continued</b>		
<b>Electronics – 0.2%</b>		
Broadcom, Inc., 4.15%, 11/15/2030	\$ 505,000	\$ 464,625
Broadcom, Inc., 4.3%, 11/15/2032	1,329,000	1,219,065
Broadcom, Inc., 3.469%, 4/15/2034 (n)	1,184,000	971,246
Broadcom, Inc., 3.187%, 11/15/2036 (n)	2,359,000	1,782,821
Broadcom, Inc., 4.926%, 5/15/2037 (n)	683,000	618,118
		\$ 5,055,875
<b>Energy - Integrated – 0.3%</b>		
BP Capital Markets America, Inc., 2.721%, 1/12/2032	\$ 4,182,000	\$ 3,550,747
Eni S.p.A., 4.75%, 9/12/2028 (n)	3,564,000	3,479,597
		\$ 7,030,344
<b>Financial Institutions – 0.6%</b>		
AerCap Ireland Capital DAC/AerCap Global Aviation Trust, 4.875%, 1/16/2024	\$ 362,000	\$ 359,456
AerCap Ireland Capital DAC/AerCap Global Aviation Trust, 2.45%, 10/29/2026	4,225,000	3,773,562
AerCap Ireland Capital DAC/AerCap Global Aviation Trust, 3.65%, 7/21/2027	2,329,000	2,133,001
Air Lease Corp., 2.2%, 1/15/2027	1,394,000	1,236,120
Air Lease Corp., 2.875%, 1/15/2032	1,830,000	1,469,396
Avolon Holdings Funding Ltd., 4.375%, 5/01/2026 (n)	682,000	637,242
Avolon Holdings Funding Ltd., 3.25%, 2/15/2027 (n)	2,183,000	1,944,842
Avolon Holdings Funding Ltd., 2.528%, 11/18/2027 (n)	1,821,000	1,535,281
Park Aerospace Holdings Ltd., 5.5%, 2/15/2024 (n)	639,000	631,721
		\$ 13,720,621
<b>Food &amp; Beverages – 0.4%</b>		
Anheuser-Busch InBev S.A., 8%, 11/15/2039	\$ 2,950,000	\$ 3,721,574
Anheuser-Busch InBev Worldwide, Inc., 4.375%, 4/15/2038	737,000	682,371
Constellation Brands, Inc., 3.5%, 5/09/2027	1,544,000	1,460,897
Diageo Capital PLC, 2.375%, 10/24/2029	2,618,000	2,269,099
Keurig Dr Pepper, Inc., 3.2%, 5/01/2030	304,000	272,588
		\$ 8,406,529
<b>Gaming &amp; Lodging – 0.3%</b>		
GLP Capital LP/GLP Financing II, Inc., 5.3%, 1/15/2029	\$ 1,593,000	\$ 1,516,780
Las Vegas Sands Corp., 3.9%, 8/08/2029	783,000	698,640
Marriott International, Inc., 4%, 4/15/2028	1,731,000	1,632,449
Marriott International, Inc., 4.625%, 6/15/2030	1,979,000	1,894,855
Marriott International, Inc., 2.85%, 4/15/2031	7,000	5,886
Marriott International, Inc., 2.75%, 10/15/2033	1,600,000	1,271,592
		\$ 7,020,202
<b>Insurance – 0.4%</b>		
AIA Group Ltd., 3.375%, 4/07/2030 (n)	\$ 2,338,000	\$ 2,137,297
Corebridge Financial, Inc., 3.9%, 4/05/2032	3,078,000	2,674,465
Metropolitan Life Global Funding I, 3.3%, 3/21/2029 (n)	4,200,000	3,787,815
		\$ 8,599,577
<b>Insurance - Health – 0.2%</b>		
Humana, Inc., 3.7%, 3/23/2029	\$ 1,850,000	\$ 1,694,369
Humana, Inc., 5.875%, 3/01/2033	1,686,000	1,752,095
		\$ 3,446,464

## Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Bonds – continued</b>		
<b>Insurance - Property &amp; Casualty – 0.4%</b>		
Aon Corp., 4.5%, 12/15/2028	\$ 1,979,000	\$ 1,904,109
Aon Corp., 3.75%, 5/02/2029	1,893,000	1,752,267
Aon Corp./Aon Global Holdings PLC, 2.6%, 12/02/2031	172,000	141,646
Brown & Brown, Inc., 4.2%, 3/17/2032	2,124,000	1,907,409
Fairfax Financial Holdings Ltd., 5.625%, 8/16/2032	3,006,000	2,903,739
Liberty Mutual Group, Inc., 3.951%, 10/15/2050 (n)	1,087,000	794,965
		\$ 9,404,135
<b>International Market Quasi-Sovereign – 0.0%</b>		
Electricite de France S.A., 6.9%, 5/23/2053 (n)	\$ 629,000	\$ 651,785
<b>Machinery &amp; Tools – 0.2%</b>		
Ashtead Capital, Inc., 5.5%, 8/11/2032 (n)	\$ 2,832,000	\$ 2,738,158
CNH Industrial Capital LLC, 4.2%, 1/15/2024	1,679,000	1,662,298
CNH Industrial Capital LLC, 1.875%, 1/15/2026	448,000	409,093
		\$ 4,809,549
<b>Major Banks – 2.6%</b>		
Bank of America Corp., 3.366% to 1/23/2025, FLR (LIBOR - 3mo. + 0.81%) to 1/23/2026	\$ 1,626,000	\$ 1,557,891
Bank of America Corp., 3.5%, 4/19/2026	1,361,000	1,305,542
Bank of America Corp., 2.572% to 10/20/2031, FLR (SOFR + 1.21%) to 10/20/2032	3,452,000	2,811,655
Barclays PLC, 2.894% to 11/24/2031, FLR (CMT - 1yr. + 1.3%) to 11/24/2032	877,000	690,173
Barclays PLC, 7.437% to 11/02/2032, FLR (CMT - 1yr. + 3.5%) to 11/02/2033	1,993,000	2,156,207
Capital One Financial Corp., 3.75%, 3/09/2027	1,728,000	1,609,515
Capital One Financial Corp., 3.273% to 3/01/2029, FLR (SOFR - 1 day + 1.79%) to 3/01/2030	3,742,000	3,177,253
Deutsche Bank AG, 2.311% to 11/16/2026, FLR (SOFR - 1 day + 1.219%) to 11/16/2027	880,000	756,217
Deutsche Bank AG, 6.72% to 1/18/2028, FLR (SOFR - 1 day + 3.18%) to 1/18/2029	2,180,000	2,183,108
Goldman Sachs Group, Inc., 2.6%, 2/07/2030	2,258,000	1,923,088
Goldman Sachs Group, Inc., 2.383% to 7/21/2031, FLR (SOFR - 1 day + 1.248%) to 7/21/2032	2,831,000	2,267,628
HSBC Holdings PLC, 4.7% to 9/09/2031, FLR (CMT - 1yr. + 3.25%) to 9/09/2169	922,000	689,574
HSBC Holdings PLC, 4% to 9/09/2026, FLR (CMT - 1yr. + 3.222%) to 9/09/2170	442,000	373,804
JPMorgan Chase & Co., 3.782% to 2/01/2027, FLR (LIBOR - 3mo. + 1.337%) to 2/01/2028	3,163,000	3,008,769
JPMorgan Chase & Co., 2.739% to 10/15/2029, FLR (SOFR - 1 day + 1.51%) to 10/15/2030	897,000	772,696
JPMorgan Chase & Co., 2.956% to 5/13/2030, FLR (SOFR - 1 day + 2.515%) to 5/13/2031	476,000	408,146
JPMorgan Chase & Co., 2.545% to 11/08/2031, FLR (SOFR - 1 day + 1.18%) to 11/08/2032	4,631,000	3,794,291
JPMorgan Chase & Co., 2.963% to 1/25/2032, FLR (SOFR - 1 day + 1.26%) to 1/25/2033	1,781,000	1,500,338
JPMorgan Chase & Co., 3.897% to 1/23/2048, FLR (LIBOR - 3mo. + 1.22%) to 1/23/2049	938,000	758,211
Mitsubishi UFJ Financial Group, Inc., 2.852% to 1/19/2032, FLR (CMT - 1yr. + 1.1%) to 1/19/2033	2,674,000	2,203,784
Morgan Stanley, 3.875%, 4/29/2024	522,000	514,352
Morgan Stanley, 4%, 7/23/2025	1,063,000	1,032,048
Morgan Stanley, 2.699% to 1/22/2030, FLR (SOFR - 1 day + 1.143%) to 1/22/2031	2,483,000	2,111,775
Morgan Stanley, 2.943% to 1/21/2032, FLR (SOFR - 1 day + 1.29%) to 1/21/2033	3,130,000	2,601,742
Royal Bank of Canada, 1.15%, 6/10/2025	2,774,000	2,560,688
State Street Corp., 2.901% to 3/30/2025, FLR (SOFR + 2.6%) to 3/30/2026	344,000	328,052
Sumitomo Mitsui Financial Group, Inc., 2.472%, 1/14/2029	5,230,000	4,459,715
UBS Group AG, 2.095% to 2/11/2031, FLR (CMT - 1yr. + 1.0%) to 2/11/2032 (n)	6,416,000	4,859,333
Wells Fargo & Co., 3.35% to 3/02/2032, FLR (SOFR - 1 day + 1.5%) to 3/02/2033	5,150,000	4,407,646
		\$ 56,823,241
<b>Medical &amp; Health Technology &amp; Services – 0.4%</b>		
Adventist Health System/West, 5.43%, 3/01/2032	\$ 2,533,000	\$ 2,511,087
Alcon Finance Corp., 2.6%, 5/27/2030 (n)	302,000	257,406
Cigna Corp., 3.2%, 3/15/2040	474,000	364,377
HCA, Inc., 4.125%, 6/15/2029	1,809,000	1,674,028
HCA, Inc., 5.125%, 6/15/2039	1,932,000	1,792,281
HCA, Inc., 4.375%, 3/15/2042 (n)	1,202,000	992,973

## MFS Total Return Series

Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Bonds – continued</b>		
<b>Medical &amp; Health Technology &amp; Services – continued</b>		
Laboratory Corp. of America Holdings, 4.7%, 2/01/2045	\$ 980,000	\$ 848,771
Northwell Healthcare, Inc., 3.979%, 11/01/2046	153,000	119,570
Northwell Healthcare, Inc., 4.26%, 11/01/2047	1,205,000	988,915
		<u>\$ 9,549,408</u>
<b>Medical Equipment – 0.1%</b>		
Boston Scientific Corp., 2.65%, 6/01/2030	\$ 1,590,000	\$ 1,385,320
<b>Metals &amp; Mining – 0.4%</b>		
Anglo American Capital PLC, 3.875%, 3/16/2029 (n)	\$ 496,000	\$ 450,740
Anglo American Capital PLC, 5.625%, 4/01/2030 (n)	1,394,000	1,387,625
Anglo American Capital PLC, 2.625%, 9/10/2030 (n)	4,564,000	3,764,761
Glencore Funding LLC, 2.5%, 9/01/2030 (n)	1,695,000	1,387,912
Glencore Funding LLC, 2.85%, 4/27/2031 (n)	709,000	585,235
		<u>\$ 7,576,273</u>
<b>Midstream – 0.6%</b>		
Cheniere Corpus Christi Holdings LLC, 3.7%, 11/15/2029	\$ 1,833,000	\$ 1,659,624
Enbridge, Inc., 2.5%, 1/15/2025	969,000	921,520
Energy Transfer LP, 5.75%, 2/15/2033	2,187,000	2,201,316
Kinder Morgan Energy Partners LP, 4.15%, 2/01/2024	1,030,000	1,019,905
ONEOK, Inc., 4.95%, 7/13/2047	2,331,000	1,920,865
Plains All American Pipeline LP, 3.8%, 9/15/2030	1,881,000	1,668,987
Sabine Pass Liquefaction LLC, 4.5%, 5/15/2030	512,000	486,688
Spectra Energy Partners LP, 3.375%, 10/15/2026	828,000	777,372
Targa Resources Corp., 4.2%, 2/01/2033	746,000	660,313
Targa Resources Corp., 6.125%, 3/15/2033	2,281,000	2,330,703
		<u>\$ 13,647,293</u>
<b>Mortgage-Backed – 13.0%</b>		
Fannie Mae, 5%, 12/01/2023 - 3/01/2041	\$ 1,637,126	\$ 1,644,162
Fannie Mae, 3%, 11/01/2028 - 9/01/2046	3,271,456	3,044,831
Fannie Mae, 6.5%, 6/01/2031 - 7/01/2037	612,013	630,179
Fannie Mae, 2.5%, 11/01/2031	58,123	53,765
Fannie Mae, 5.5%, 2/01/2033 - 4/01/2040	3,820,770	3,860,802
Fannie Mae, 3%, 2/25/2033 (i)	277,411	23,997
Fannie Mae, 4.5%, 8/01/2033 - 6/01/2044	3,676,398	3,625,755
Fannie Mae, 6%, 1/01/2034 - 7/01/2037	2,230,063	2,272,485
Fannie Mae, 3.5%, 4/01/2038 - 7/01/2046	9,777,686	9,117,762
Fannie Mae, 3.25%, 5/25/2040	85,685	78,557
Fannie Mae, 4%, 9/01/2040 - 6/01/2047	6,817,128	6,547,296
Fannie Mae, 2%, 10/25/2040 - 4/25/2046	224,879	203,053
Fannie Mae, 4%, 7/25/2046 (i)	290,915	54,010
Fannie Mae, UMBS, 5.5%, 10/01/2025 - 3/01/2053	6,067,782	6,045,203
Fannie Mae, UMBS, 2%, 9/01/2036 - 3/01/2052	29,936,712	25,143,839
Fannie Mae, UMBS, 2.5%, 11/01/2036 - 5/01/2052	43,866,438	37,601,130
Fannie Mae, UMBS, 5%, 10/01/2037 - 6/01/2053	4,555,984	4,475,673
Fannie Mae, UMBS, 4.5%, 4/01/2038 - 10/01/2052	3,917,390	3,787,942
Fannie Mae, UMBS, 1.5%, 2/01/2042 - 9/01/2051	1,687,760	1,311,926
Fannie Mae, UMBS, 3%, 6/01/2051 - 8/01/2052	15,243,175	13,448,145
Fannie Mae, UMBS, 3.5%, 5/01/2052 - 4/01/2053	3,441,712	3,136,944
Fannie Mae, UMBS, 6%, 12/01/2052 - 2/01/2053	933,804	959,603
Freddie Mac, 3.06%, 7/25/2023	9,301	9,267
Freddie Mac, 3.458%, 8/25/2023	804,848	801,600
Freddie Mac, 1.041%, 4/25/2024 (i)	4,002,013	19,406
Freddie Mac, 0.636%, 7/25/2024 (i)	14,179,000	79,642

## Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Bonds – continued</b>		
<b>Mortgage-Backed – continued</b>		
Freddie Mac, 0.726%, 7/25/2024 (i)	\$ 4,201,178	\$ 17,525
Freddie Mac, 4.5%, 8/01/2024 - 5/01/2042	623,917	616,770
Freddie Mac, 0.436%, 8/25/2024 (i)	15,246,000	79,523
Freddie Mac, 0.504%, 8/25/2024 (i)	24,622,285	99,090
Freddie Mac, 3.064%, 8/25/2024	767,062	746,707
Freddie Mac, 0.465%, 10/25/2024 (i)	17,839,786	56,784
Freddie Mac, 0.399%, 11/25/2024 (i)	15,385,000	58,109
Freddie Mac, 2.67%, 12/25/2024	1,261,000	1,213,253
Freddie Mac, 0.777%, 6/25/2027 (i)	13,682,000	326,766
Freddie Mac, 0.884%, 6/25/2027 (i)	4,575,524	110,515
Freddie Mac, 0.706%, 7/25/2027 (i)	11,743,381	227,245
Freddie Mac, 0.458%, 8/25/2027 (i)	9,650,000	131,015
Freddie Mac, 0.553%, 8/25/2027 (i)	6,451,040	96,700
Freddie Mac, 0.406%, 9/25/2027 (i)	10,419,000	121,920
Freddie Mac, 0.324%, 11/25/2027 (i)	16,290,000	145,813
Freddie Mac, 0.414%, 11/25/2027 (i)	11,432,446	121,753
Freddie Mac, 0.456%, 11/25/2027 (i)	10,188,874	126,210
Freddie Mac, 0.375%, 12/25/2027 (i)	10,109,000	109,450
Freddie Mac, 0.415%, 12/25/2027 (i)	11,210,000	141,585
Freddie Mac, 0.492%, 12/25/2027 (i)	17,395,869	248,942
Freddie Mac, 1.219%, 7/25/2029 (i)	825,995	44,119
Freddie Mac, 1.267%, 8/25/2029 (i)	5,181,787	291,585
Freddie Mac, 1.916%, 4/25/2030 (i)	900,000	91,259
Freddie Mac, 1.985%, 4/25/2030 (i)	2,701,417	276,971
Freddie Mac, 1.768%, 5/25/2030 (i)	1,301,002	122,726
Freddie Mac, 1.906%, 5/25/2030 (i)	3,334,078	338,315
Freddie Mac, 1.436%, 6/25/2030 (i)	1,327,631	102,869
Freddie Mac, 1.703%, 8/25/2030 (i)	1,191,673	110,853
Freddie Mac, 1.262%, 9/25/2030 (i)	775,587	53,802
Freddie Mac, 1.171%, 11/25/2030 (i)	1,356,411	88,400
Freddie Mac, 0.42%, 1/25/2031 (i)	5,320,183	100,988
Freddie Mac, 0.872%, 1/25/2031 (i)	2,233,850	108,745
Freddie Mac, 1.026%, 1/25/2031 (i)	1,493,151	86,301
Freddie Mac, 0.611%, 3/25/2031 (i)	4,286,962	133,469
Freddie Mac, 0.828%, 3/25/2031 (i)	1,837,683	86,479
Freddie Mac, 1.325%, 5/25/2031 (i)	822,353	63,589
Freddie Mac, 1.039%, 7/25/2031 (i)	1,237,840	76,177
Freddie Mac, 0.608%, 8/25/2031 (i)	1,664,942	55,492
Freddie Mac, 0.632%, 9/25/2031 (i)	5,442,448	183,684
Freddie Mac, 0.955%, 9/25/2031 (i)	1,567,181	87,722
Freddie Mac, 0.441%, 11/25/2031 (i)	8,030,040	196,068
Freddie Mac, 0.597%, 12/25/2031 (i)	7,179,988	241,737
Freddie Mac, 0.665%, 12/25/2031 (i)	12,162,189	465,071
Freddie Mac, 0.433%, 11/25/2032 (i)	8,340,202	164,715
Freddie Mac, 5%, 9/01/2033 - 1/15/2040	885,159	888,902
Freddie Mac, 5.5%, 12/01/2033 - 2/01/2037	625,495	633,167
Freddie Mac, 6%, 4/01/2034 - 6/01/2037	780,988	800,414
Freddie Mac, 6.5%, 5/01/2034 - 7/01/2037	386,046	396,805
Freddie Mac, 5.5%, 2/15/2036 (i)	54,342	8,534
Freddie Mac, 4%, 8/01/2037 - 4/01/2044	2,245,911	2,160,456
Freddie Mac, 3.5%, 11/01/2037 - 10/25/2058	6,628,912	6,182,315
Freddie Mac, 3%, 1/01/2038 - 2/25/2059	8,520,788	7,687,118
Freddie Mac, 4.5%, 12/15/2040 (i)	38,118	3,181
Freddie Mac, 4%, 8/15/2044 (i)	57,496	6,227
Freddie Mac, 3.25%, 11/25/2061	607,279	529,156
Freddie Mac, UMBS, 2%, 12/01/2031 - 5/01/2052	33,122,601	27,514,793
Freddie Mac, UMBS, 6.5%, 10/01/2034	22,887	23,613



## MFS Total Return Series

Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Bonds – continued</b>		
<b>Mortgage-Backed – continued</b>		
Freddie Mac, UMBS, 5%, 10/01/2035 - 3/01/2053	\$ 1,743,155	\$ 1,713,729
Freddie Mac, UMBS, 6%, 1/01/2036 - 1/01/2053	1,065,528	1,075,024
Freddie Mac, UMBS, 3%, 4/01/2037 - 6/01/2052	3,837,048	3,391,560
Freddie Mac, UMBS, 2.5%, 5/01/2037 - 5/01/2052	6,872,491	5,918,236
Freddie Mac, UMBS, 3.5%, 12/01/2046 - 5/01/2052	2,284,591	2,099,003
Freddie Mac, UMBS, 4%, 8/01/2047 - 10/01/2052	5,985,856	5,628,016
Freddie Mac, UMBS, 1.5%, 3/01/2051 - 2/01/2052	2,238,161	1,732,894
Freddie Mac, UMBS, 5.5%, 7/01/2052 - 4/01/2053	1,127,778	1,130,423
Freddie Mac, UMBS, 4.5%, 10/01/2052	3,104,935	2,985,571
Ginnie Mae, 6%, 9/15/2032 - 1/15/2038	946,579	979,222
Ginnie Mae, 5.5%, 5/15/2033 - 4/20/2053	4,355,901	4,347,652
Ginnie Mae, 4.5%, 7/20/2033 - 12/20/2052	8,511,799	8,234,857
Ginnie Mae, 5%, 7/20/2033 - 5/20/2053	8,743,663	8,600,659
Ginnie Mae, 4%, 1/20/2041 - 10/20/2052	5,245,273	4,994,906
Ginnie Mae, 3.5%, 12/15/2041 - 11/20/2052	6,704,705	6,247,479
Ginnie Mae, 3%, 4/20/2045 - 10/20/2052	10,778,714	9,700,074
Ginnie Mae, 2.5%, 8/20/2051 - 4/20/2052	15,839,402	13,720,994
Ginnie Mae, 2%, 1/20/2052 - 3/20/2052	7,059,190	5,932,810
Ginnie Mae, 0.588%, 2/16/2059 (i)	2,384,717	78,516
Ginnie Mae, TBA, 5%, 7/20/2053	125,000	122,832
Ginnie Mae, TBA, 5.5%, 7/20/2053	800,000	796,250
Ginnie Mae, TBA, 6%, 8/21/2053	1,550,000	1,559,566
UMBS, TBA, 2%, 7/18/2038 - 7/13/2053	5,000,000	4,158,412
UMBS, TBA, 4.5%, 7/18/2038	875,000	857,910
UMBS, TBA, 5%, 7/18/2038 - 7/13/2053	2,375,000	2,339,667
UMBS, TBA, 3%, 7/13/2053	1,475,000	1,298,058
		\$ 282,822,786
<b>Municipals – 0.5%</b>		
New Jersey Economic Development Authority State Pension Funding Rev., Taxable, "A", NPFG, 7.425%, 2/15/2029	\$ 2,750,000	\$ 2,953,716
New Jersey Turnpike Authority Rev., Taxable (Build America Bonds), "F", 7.414%, 1/01/2040	3,685,000	4,615,644
Rhode Island Student Loan Authority Education Loan Rev., Taxable, 6.081%, 12/01/2042	2,820,000	2,821,600
State of Florida, Taxable, "A", 2.154%, 7/01/2030	1,437,000	1,197,749
		\$ 11,588,709
<b>Natural Gas - Distribution – 0.0%</b>		
NiSource, Inc., 5.65%, 2/01/2045	\$ 414,000	\$ 413,625
<b>Natural Gas - Pipeline – 0.2%</b>		
APA Infrastructure Ltd., 4.2%, 3/23/2025 (n)	\$ 3,344,000	\$ 3,241,399
APA Infrastructure Ltd., 4.25%, 7/15/2027 (n)	253,000	241,013
		\$ 3,482,412
<b>Network &amp; Telecom – 0.2%</b>		
Verizon Communications, Inc., 3.15%, 3/22/2030	\$ 1,053,000	\$ 935,684
Verizon Communications, Inc., 4.272%, 1/15/2036	1,477,000	1,331,718
Verizon Communications, Inc., 4.812%, 3/15/2039	1,877,000	1,756,112
		\$ 4,023,514
<b>Oils – 0.2%</b>		
Phillips 66 Co., 2.15%, 12/15/2030	\$ 2,934,000	\$ 2,394,110
Valero Energy Corp., 6.625%, 6/15/2037	2,124,000	2,279,017
		\$ 4,673,127



## Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Bonds – continued</b>		
<b>Other Banks &amp; Diversified Financials – 0.4%</b>		
Macquarie Group Ltd., 4.442% to 6/21/2032, FLR (SOFR - 1 day + 2.405%) to 6/21/2033 (n)	\$ 5,881,000	\$ 5,244,282
Northern Trust Corp., 6.125%, 11/02/2032	2,959,000	3,067,723
		\$ 8,312,005
<b>Pollution Control – 0.0%</b>		
Republic Services, Inc., 1.45%, 2/15/2031	\$ 851,000	\$ 667,865
<b>Real Estate - Office – 0.1%</b>		
Boston Properties LP, REIT, 2.55%, 4/01/2032	\$ 1,316,000	\$ 991,717
<b>Real Estate - Retail – 0.1%</b>		
Brixmor Operating Partnership LP, REIT, 4.125%, 5/15/2029	\$ 172,000	\$ 153,423
Brixmor Operating Partnership LP, REIT, 4.05%, 7/01/2030	1,681,000	1,515,197
Realty Income Corp., REIT, 3.25%, 1/15/2031	485,000	423,909
		\$ 2,092,529
<b>Retailers – 0.2%</b>		
Alimentation Couche-Tard, Inc., 3.439%, 5/13/2041 (n)	\$ 2,106,000	\$ 1,517,452
Best Buy Co., Inc., 4.45%, 10/01/2028	1,738,000	1,682,661
		\$ 3,200,113
<b>Specialty Stores – 0.1%</b>		
Genuine Parts Co., 2.75%, 2/01/2032	\$ 2,771,000	\$ 2,273,775
<b>Telecommunications - Wireless – 0.6%</b>		
Crown Castle, Inc., REIT, 1.35%, 7/15/2025	\$ 701,000	\$ 640,884
Crown Castle, Inc., REIT, 3.65%, 9/01/2027	2,565,000	2,397,412
Rogers Communications, Inc., 3.8%, 3/15/2032 (n)	5,197,000	4,542,811
T-Mobile USA, Inc., 2.05%, 2/15/2028	1,892,000	1,640,526
T-Mobile USA, Inc., 4.5%, 4/15/2050	2,244,000	1,925,455
Vodafone Group PLC, 5.625%, 2/10/2053	750,000	735,246
		\$ 11,882,334
<b>Tobacco – 0.4%</b>		
B.A.T. International Finance PLC, 4.448%, 3/16/2028	\$ 4,200,000	\$ 3,964,419
Philip Morris International, Inc., 5.125%, 11/17/2027	869,000	871,659
Philip Morris International, Inc., 5.625%, 11/17/2029	374,000	381,081
Philip Morris International, Inc., 5.125%, 2/15/2030	1,404,000	1,388,195
Philip Morris International, Inc., 5.75%, 11/17/2032	1,653,000	1,692,796
		\$ 8,298,150
<b>Transportation - Services – 0.1%</b>		
ERAC USA Finance LLC, 7%, 10/15/2037 (n)	\$ 1,826,000	\$ 2,086,672
<b>U.S. Government Agencies and Equivalents – 0.0%</b>		
Small Business Administration, 4.35%, 7/01/2023	\$ 127	\$ 127
Small Business Administration, 4.77%, 4/01/2024	14,362	14,160
Small Business Administration, 5.18%, 5/01/2024	18,803	18,575
Small Business Administration, 5.52%, 6/01/2024	866	862
Small Business Administration, 4.99%, 9/01/2024	27,399	26,910
Small Business Administration, 4.95%, 3/01/2025	1,412	1,402
Small Business Administration, 5.11%, 8/01/2025	141,573	139,303
		\$ 201,339

## MFS Total Return Series

Portfolio of Investments (unaudited) – continued

Issuer	Shares/Par	Value (\$)
<b>Bonds – continued</b>		
<b>U.S. Treasury Obligations – 4.9%</b>		
U.S. Treasury Bonds, 1.75%, 8/15/2041	\$ 4,700,000	\$ 3,301,934
U.S. Treasury Bonds, 2.375%, 2/15/2042	6,600,000	5,138,461
U.S. Treasury Bonds, 2.875%, 5/15/2043	9,096,000	7,608,307
U.S. Treasury Bonds, 2.5%, 2/15/2045	9,797,000	7,585,021
U.S. Treasury Bonds, 3%, 11/15/2045	3,638,000	3,067,999
U.S. Treasury Bonds, 2.875%, 5/15/2049	900,000	743,871
U.S. Treasury Bonds, 2.375%, 11/15/2049 (f)	43,390,000	32,398,432
U.S. Treasury Bonds, 2.25%, 2/15/2052	6,300,000	4,552,734
U.S. Treasury Notes, 0.375%, 11/30/2025	33,750,000	30,464,649
U.S. Treasury Notes, 2.5%, 3/31/2027	12,600,000	11,808,070
		<b>\$ 106,669,478</b>
<b>Utilities - Electric Power – 1.0%</b>		
American Electric Power Co., Inc., 5.95%, 11/01/2032	\$ 1,273,000	\$ 1,327,252
American Transmission Systems, Inc., 2.65%, 1/15/2032 (n)	250,000	206,733
Duke Energy Carolinas LLC, 4.95%, 1/15/2033	3,995,000	3,965,408
Duke Energy Corp., 2.65%, 9/01/2026	294,000	271,723
Duke Energy Corp., 4.5%, 8/15/2032	3,023,000	2,850,045
Enel Finance International N.V., 6.8%, 10/14/2025 (n)	926,000	943,247
Enel Finance International N.V., 4.75%, 5/25/2047 (n)	392,000	333,445
Eversource Energy, Inc., 2.9%, 9/15/2029	1,644,000	1,434,536
Exelon Corp., 4.05%, 4/15/2030	1,632,000	1,525,066
FirstEnergy Corp., 3.4%, 3/01/2050	1,078,000	742,915
Georgia Power Co., 3.7%, 1/30/2050	147,000	112,388
Jersey Central Power & Light Co., 4.3%, 1/15/2026 (n)	1,333,000	1,289,325
Jersey Central Power & Light Co., 2.75%, 3/01/2032 (n)	924,000	762,131
Oncor Electric Delivery Co. LLC, 5.75%, 3/15/2029	2,121,000	2,201,458
Pacific Gas & Electric Co., 2.1%, 8/01/2027	480,000	410,008
Pacific Gas & Electric Co., 3%, 6/15/2028	1,410,000	1,215,306
Pacific Gas & Electric Co., 2.5%, 2/01/2031	1,738,000	1,360,652
Pacific Gas & Electric Co., 3.3%, 8/01/2040	926,000	623,858
Xcel Energy, Inc., 3.4%, 6/01/2030	968,000	861,977
		<b>\$ 22,437,473</b>
<b>Utilities - Gas – 0.0%</b>		
East Ohio Gas Co., 2%, 6/15/2030 (n)	\$ 1,135,000	\$ 914,386
<b>Total Bonds (Identified Cost, \$914,957,978)</b>		<b>\$ 831,142,550</b>
<b>Preferred Stocks – 0.8%</b>		
<b>Computer Software - Systems – 0.3%</b>		
Samsung Electronics Co. Ltd.	122,507	\$ 5,559,969
<b>Consumer Products – 0.5%</b>		
Henkel AG & Co. KGaA	149,739	\$ 11,970,336
<b>Total Preferred Stocks (Identified Cost, \$17,159,640)</b>		<b>\$ 17,530,305</b>
<b>Investment Companies (h) – 1.1%</b>		
<b>Money Market Funds – 1.1%</b>		
MFS Institutional Money Market Portfolio, 5.04% (v) (Identified Cost, \$24,055,514)	24,056,737	\$ 24,061,548
Other Assets, Less Liabilities – 0.1%		2,718,631
<b>Net Assets – 100.0%</b>		<b>\$ 2,179,580,583</b>

*Portfolio of Investments (unaudited) – continued*

- (a) Non-income producing security.
- (f) All or a portion of the security has been segregated as collateral for open futures contracts.
- (h) An affiliated issuer, which may be considered one in which the fund owns 5% or more of the outstanding voting securities, or a company which is under common control. At period end, the aggregate values of the fund's investments in affiliated issuers and in unaffiliated issuers were \$24,061,548 and \$2,152,800,404, respectively.
- (i) Interest only security for which the fund receives interest on notional principal (Par amount). Par amount shown is the notional principal and does not reflect the cost of the security.
- (n) Securities exempt from registration under Rule 144A of the Securities Act of 1933. These securities may be sold in the ordinary course of business in transactions exempt from registration, normally to qualified institutional buyers. At period end, the aggregate value of these securities was \$171,204,219, representing 7.9% of net assets.
- (v) Affiliated issuer that is available only to investment companies managed by MFS. The rate quoted for the MFS Institutional Money Market Portfolio is the annualized seven-day yield of the fund at period end.

The following abbreviations are used in this report and are defined:

ADR	American Depositary Receipt
CLO	Collateralized Loan Obligation
CMT	Constant Maturity Treasury
FGIC	Financial Guaranty Insurance Co.
FLR	Floating Rate. Interest rate resets periodically based on the parenthetically disclosed reference rate plus a spread (if any). The period-end rate reported may not be the current rate. All reference rates are USD unless otherwise noted.
LIBOR	London Interbank Offered Rate
NPFG	National Public Finance Guarantee Corp.
REIT	Real Estate Investment Trust
SOFR	Secured Overnight Financing Rate
TBA	To Be Announced
UMBS	Uniform Mortgage-Backed Security

**Derivative Contracts at 6/30/23****Futures Contracts**

Description	Long/ Short	Currency	Contracts	Notional Amount	Expiration Date	Value/Unrealized Appreciation (Depreciation)
<b>Asset Derivatives</b>						
<b>Interest Rate Futures</b>						
U.S. Treasury Ultra Bond 30 yr	Long	USD	140	\$19,070,625	September – 2023	\$221,512
U.S. Treasury Ultra Note 10 yr	Short	USD	272	32,215,000	September – 2023	389,236
						<u>\$610,748</u>
<b>Liability Derivatives</b>						
<b>Interest Rate Futures</b>						
U.S. Treasury Note 2 yr	Long	USD	44	\$8,947,125	September – 2023	\$(94,849)
U.S. Treasury Note 5 yr	Long	USD	617	66,076,844	September – 2023	(1,239,995)
						<u>\$(1,334,844)</u>

At June 30, 2023, the fund had liquid securities with an aggregate value of \$1,396,292 to cover any collateral or margin obligations for certain derivative contracts.

**See Notes to Financial Statements**

# FINANCIAL STATEMENTS | STATEMENT OF ASSETS AND LIABILITIES (unaudited)

This statement represents your fund's balance sheet, which details the assets and liabilities comprising the total value of the fund.

At 6/30/23

<b>Assets</b>	
Investments in unaffiliated issuers, at value (identified cost, \$1,735,361,449)	\$2,152,800,404
Investments in affiliated issuers, at value (identified cost, \$24,055,514)	24,061,548
Cash	34,702
Foreign currency, at value (identified cost, \$28,779)	28,893
Receivables for	
Net daily variation margin on open futures contracts	92,901
Investments sold	7,404,848
TBA sale commitments	4,673,272
Fund shares sold	154,275
Interest and dividends	8,210,158
Receivable from investment adviser	74,285
Other assets	3,434
<b>Total assets</b>	<b>\$2,197,538,720</b>

<b>Liabilities</b>	
Payables for	
Investments purchased	\$705,410
TBA purchase commitments	15,868,563
Fund shares reacquired	1,136,703
Payable to affiliates	
Administrative services fee	1,753
Shareholder servicing costs	466
Distribution and/or service fees	16,078
Accrued expenses and other liabilities	229,164
<b>Total liabilities</b>	<b>\$17,958,137</b>
<b>Net assets</b>	<b>\$2,179,580,583</b>

<b>Net assets consist of</b>	
Paid-in capital	\$1,563,352,454
Total distributable earnings (loss)	616,228,129
<b>Net assets</b>	<b>\$2,179,580,583</b>
Shares of beneficial interest outstanding	94,174,737

	<b>Net assets</b>	<b>Shares outstanding</b>	<b>Net asset value per share</b>
Initial Class	\$996,658,648	42,472,724	\$23.47
Service Class	1,182,921,935	51,702,013	22.88

See Notes to Financial Statements

## FINANCIAL STATEMENTS | STATEMENT OF OPERATIONS (unaudited)

This statement describes how much your fund earned in investment income and accrued in expenses. It also describes any gains and/or losses generated by fund operations.

### Six months ended 6/30/23

#### Net investment income (loss)

Income	
Interest	\$16,512,588
Dividends	16,152,837
Dividends from affiliated issuers	647,074
Other	112,915
Income on securities loaned	1,844
Foreign taxes withheld	(329,471)
Total investment income	\$33,097,787
Expenses	
Management fee	\$7,267,299
Distribution and/or service fees	1,464,711
Shareholder servicing costs	10,706
Administrative services fee	163,037
Independent Trustees' compensation	18,750
Custodian fee	60,792
Shareholder communications	24,524
Audit and tax fees	42,026
Legal fees	5,173
Miscellaneous	39,827
Total expenses	\$9,096,845
Reduction of expenses by investment adviser	(1,031,500)
Net expenses	\$8,065,345
Net investment income (loss)	\$25,032,442

#### Realized and unrealized gain (loss)

Realized gain (loss) (identified cost basis)	
Unaffiliated issuers	\$55,906,159
Affiliated issuers	2,908
Futures contracts	(781,910)
Foreign currency	(6,389)
Net realized gain (loss)	\$55,120,768
Change in unrealized appreciation or depreciation	
Unaffiliated issuers	\$11,113,791
Affiliated issuers	(1,981)
Futures contracts	(248,383)
Translation of assets and liabilities in foreign currencies	11,340
Net unrealized gain (loss)	\$10,874,767
Net realized and unrealized gain (loss)	\$65,995,535
Change in net assets from operations	\$91,027,977

#### See Notes to Financial Statements

## FINANCIAL STATEMENTS | STATEMENTS OF CHANGES IN NET ASSETS

These statements describe the increases and/or decreases in net assets resulting from operations, any distributions, and any shareholder transactions.

	Six months ended 6/30/23 (unaudited)	Year ended 12/31/22
<b>Change in net assets</b>		
<b>From operations</b>		
Net investment income (loss)	\$25,032,442	\$39,724,474
Net realized gain (loss)	55,120,768	92,004,343
Net unrealized gain (loss)	10,874,767	(389,683,653)
Change in net assets from operations	\$91,027,977	\$(257,954,836)
Total distributions to shareholders	\$—	\$(236,287,143)
Change in net assets from fund share transactions	\$(93,142,592)	\$(5,860,762)
Total change in net assets	\$(2,114,615)	\$(500,102,741)
<b>Net assets</b>		
At beginning of period	2,181,695,198	2,681,797,939
At end of period	\$2,179,580,583	\$2,181,695,198

See Notes to Financial Statements

## FINANCIAL STATEMENTS | FINANCIAL HIGHLIGHTS

The financial highlights table is intended to help you understand the fund's financial performance for the semiannual period and the past 5 fiscal years. Certain information reflects financial results for a single fund share. The total returns in the table represent the rate that an investor would have earned (or lost) on an investment in the fund share class (assuming reinvestment of all distributions) held for the entire period.

Initial Class	Six months ended	Year ended				
	6/30/23 (unaudited)	12/31/22	12/31/21	12/31/20	12/31/19	12/31/18
Net asset value, beginning of period	\$22.49	\$27.78	\$26.02	\$24.90	\$21.78	\$24.70
<b>Income (loss) from investment operations</b>						
Net investment income (loss) (d)	\$0.28	\$0.45	\$0.39	\$0.47	\$0.52	\$0.53
Net realized and unrealized gain (loss)	0.70	(3.10)	3.24	1.88	3.83	(1.80)
Total from investment operations	\$0.98	\$(2.65)	\$3.63	\$2.35	\$4.35	\$(1.27)
<b>Less distributions declared to shareholders</b>						
From net investment income	\$—	\$(0.44)	\$(0.51)	\$(0.57)	\$(0.58)	\$(0.54)
From net realized gain	—	(2.20)	(1.36)	(0.66)	(0.65)	(1.11)
Total distributions declared to shareholders	\$—	\$(2.64)	\$(1.87)	\$(1.23)	\$(1.23)	\$(1.65)
Net asset value, end of period (x)	\$23.47	\$22.49	\$27.78	\$26.02	\$24.90	\$21.78
Total return (%) (k)(r)(s)(x)	4.36(n)	(9.58)	14.12	9.81	20.38	(5.61)
<b>Ratios (%) (to average net assets) and Supplemental data:</b>						
Expenses before expense reductions	0.71(a)	0.71	0.70	0.71	0.70	0.70
Expenses after expense reductions	0.61(a)	0.61	0.61	0.61	0.62	0.62
Net investment income (loss)	2.45(a)	1.84	1.43	1.95	2.18	2.20
Portfolio turnover	17(n)	67	98	84	42	26
Net assets at end of period (000 omitted)	\$996,659	\$1,001,860	\$1,274,331	\$1,219,438	\$1,223,166	\$1,134,301

**See Notes to Financial Statements**

## MFS Total Return Series

### Financial Highlights - continued

Service Class	Six months ended	Year ended				
	6/30/23 (unaudited)	12/31/22	12/31/21	12/31/20	12/31/19	12/31/18
Net asset value, beginning of period	\$21.95	\$27.18	\$25.50	\$24.43	\$21.38	\$24.28
<b>Income (loss) from investment operations</b>						
Net investment income (loss) (d)	\$0.24	\$0.38	\$0.32	\$0.40	\$0.45	\$0.46
Net realized and unrealized gain (loss)	0.69	(3.04)	3.17	1.83	3.76	(1.77)
Total from investment operations	\$0.93	\$(2.66)	\$3.49	\$2.23	\$4.21	\$(1.31)
<b>Less distributions declared to shareholders</b>						
From net investment income	\$—	\$(0.37)	\$(0.45)	\$(0.50)	\$(0.51)	\$(0.48)
From net realized gain	—	(2.20)	(1.36)	(0.66)	(0.65)	(1.11)
Total distributions declared to shareholders	\$—	\$(2.57)	\$(1.81)	\$(1.16)	\$(1.16)	\$(1.59)
Net asset value, end of period (x)	\$22.88	\$21.95	\$27.18	\$25.50	\$24.43	\$21.38
Total return (%) (k)(r)(s)(x)	4.24(n)	(9.84)	13.84	9.52	20.12	(5.87)
<b>Ratios (%) (to average net assets) and Supplemental data:</b>						
Expenses before expense reductions	0.96(a)	0.96	0.95	0.96	0.95	0.95
Expenses after expense reductions	0.86(a)	0.86	0.86	0.86	0.87	0.87
Net investment income (loss)	2.20(a)	1.60	1.17	1.71	1.93	1.95
Portfolio turnover	17(n)	67	98	84	42	26
Net assets at end of period (000 omitted)	\$1,182,922	\$1,179,835	\$1,407,467	\$1,319,320	\$1,323,813	\$1,191,222

(a) Annualized.

(d) Per share data is based on average shares outstanding.

(k) The total return does not reflect expenses that apply to separate accounts. Inclusion of these charges would reduce the total return figures for all periods shown.

(n) Not annualized.

(r) Certain expenses have been reduced without which performance would have been lower.

(s) From time to time the fund may receive proceeds from litigation settlements, without which performance would be lower.

(x) The net asset values and total returns have been calculated on net assets which include adjustments made in accordance with U.S. generally accepted accounting principles required at period end for financial reporting purposes.

### See Notes to Financial Statements



## NOTES TO FINANCIAL STATEMENTS (unaudited)

### (1) Business and Organization

MFS Total Return Series (the fund) is a diversified series of MFS Variable Insurance Trust (the trust). The trust is organized as a Massachusetts business trust and is registered under the Investment Company Act of 1940, as amended, as an open-end management investment company. The shareholders of each series of the trust are separate accounts of insurance companies, which offer variable annuity and/or life insurance products, and qualified retirement and pension plans.

The fund is an investment company and accordingly follows the investment company accounting and reporting guidance of the Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 946 Financial Services - Investment Companies.

### (2) Significant Accounting Policies

**General** — The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of increases and decreases in net assets from operations during the reporting period. Actual results could differ from those estimates. In the preparation of these financial statements, management has evaluated subsequent events occurring after the date of the fund's Statement of Assets and Liabilities through the date that the financial statements were issued.

**Balance Sheet Offsetting** — The fund's accounting policy with respect to balance sheet offsetting is that, absent an event of default by the counterparty or a termination of the agreement, the International Swaps and Derivatives Association (ISDA) Master Agreement, or similar agreement, does not result in an offset of reported amounts of financial assets and financial liabilities in the Statement of Assets and Liabilities across transactions between the fund and the applicable counterparty. The fund's right to setoff may be restricted or prohibited by the bankruptcy or insolvency laws of the particular jurisdiction to which a specific master netting agreement counterparty is subject. Balance sheet offsetting disclosures, to the extent applicable to the fund, have been included in the fund's Significant Accounting Policies note under the captions for each of the fund's in-scope financial instruments and transactions.

**Investment Valuations** — Subject to its oversight, the fund's Board of Trustees has delegated primary responsibility for determining or causing to be determined the value of the fund's investments to MFS as the fund's adviser, pursuant to the fund's valuation policy and procedures which have been adopted by the adviser and approved by the Board. In accordance with Rule 2a-5 under the Investment Company Act of 1940, the Board of Trustees designated the adviser as the "valuation designee" of the fund. If the adviser, as valuation designee, determines that reliable market quotations are not readily available for an investment, the investment is valued at fair value as determined in good faith by the adviser in accordance with the adviser's fair valuation policy and procedures.

Under the fund's valuation policy and procedures, equity securities, including restricted equity securities, are generally valued at the last sale or official closing price on their primary market or exchange as provided by a third-party pricing service. Equity securities, for which there were no sales reported that day, are generally valued at the last quoted daily bid quotation on their primary market or exchange as provided by a third-party pricing service. Debt instruments and floating rate loans, including restricted debt instruments, are generally valued at an evaluated or composite bid as provided by a third-party pricing service. Debt instruments sold short are generally valued at an evaluated or composite mean as provided by a third-party pricing service. Short-term instruments with a maturity at issuance of 60 days or less may be valued at amortized cost, which approximates market value. Futures contracts are generally valued at last posted settlement price on their primary exchange as provided by a third-party pricing service. Futures contracts for which there were no trades that day for a particular position are generally valued at the closing bid quotation on their primary exchange as provided by a third-party pricing service. Open-end investment companies are generally valued at net asset value per share. The values of foreign securities and other assets and liabilities expressed in foreign currencies are converted to U.S. dollars using the mean of bid and asked prices for rates provided by a third-party pricing service.

Under the fund's valuation policy and procedures, market quotations are not considered to be readily available for debt instruments, floating rate loans, and many types of derivatives. These investments are generally valued at fair value based on information from third-party pricing services or otherwise determined by the adviser in accordance with the adviser's fair valuation policy and procedures. Securities and other assets generally valued on the basis of information from a third-party pricing service may also be valued at a broker/dealer bid quotation. In determining values, third-party pricing services can utilize both transaction data and market information such as yield, quality, coupon rate, maturity, type of issue, trading characteristics, spreads and other market data. An investment may also be valued at fair value if the adviser determines that the investment's value has been materially affected by events occurring after the close of the exchange or market on which the investment is principally traded (such as foreign exchange or market) and prior to the determination of the fund's net asset value, or after the halt of trading of a specific security where trading does not resume prior to the close of the exchange or market on which the security is principally traded. Events that occur after foreign markets close (such as developments in foreign markets and significant movements in the U.S. markets) and prior to the

## MFS Total Return Series

### Notes to Financial Statements (unaudited) - continued

determination of the fund's net asset value may be deemed to have a material effect on the value of securities traded in foreign markets. Accordingly, the fund's foreign equity securities may often be valued at fair value. The adviser generally relies on third-party pricing services or other information (such as the correlation with price movements of similar securities in the same or other markets; the type, cost and investment characteristics of the security; the business and financial condition of the issuer; and trading and other market data) to assist in determining whether to fair value and at what value to fair value an investment. The value of an investment for purposes of calculating the fund's net asset value can differ depending on the source and method used to determine value. When fair valuation is used, the value of an investment used to determine the fund's net asset value may differ from quoted or published prices for the same investment. There can be no assurance that the fund could obtain the fair value assigned to an investment if it were to sell the investment at the same time at which the fund determines its net asset value per share.

Various inputs are used in determining the value of the fund's assets or liabilities. These inputs are categorized into three broad levels. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, an investment's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The fund's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment, and considers factors specific to the investment. Level 1 includes unadjusted quoted prices in active markets for identical assets or liabilities. Level 2 includes other significant observable market-based inputs (including quoted prices for similar securities, interest rates, prepayment speed, and credit risk). Level 3 includes significant unobservable inputs, which may include the adviser's own assumptions in determining the fair value of investments. Other financial instruments are derivative instruments, such as futures contracts. The following is a summary of the levels used as of June 30, 2023 in valuing the fund's assets and liabilities:

<b>Financial Instruments</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Equity Securities:</b>				
United States	\$1,234,749,436	\$—	\$—	\$1,234,749,436
Germany	25,732,849	—	—	25,732,849
United Kingdom	17,299,568	—	—	17,299,568
Switzerland	12,769,445	—	—	12,769,445
Canada	10,644,956	—	—	10,644,956
Taiwan	8,830,399	—	—	8,830,399
France	6,071,232	—	—	6,071,232
South Korea	—	5,559,969	—	5,559,969
<b>U.S. Treasury Bonds &amp; U.S. Government Agencies &amp; Equivalents</b>	—	106,870,817	—	106,870,817
<b>Non - U.S. Sovereign Debt</b>	—	651,785	—	651,785
<b>Municipal Bonds</b>	—	11,588,709	—	11,588,709
<b>U.S. Corporate Bonds</b>	—	218,966,235	—	218,966,235
<b>Residential Mortgage-Backed Securities</b>	—	282,978,145	—	282,978,145
<b>Commercial Mortgage-Backed Securities</b>	—	42,769,848	—	42,769,848
<b>Asset-Backed Securities (including CDOs)</b>	—	81,299,341	—	81,299,341
<b>Foreign Bonds</b>	—	86,017,670	—	86,017,670
<b>Mutual Funds</b>	24,061,548	—	—	24,061,548
<b>Total</b>	<b>\$1,340,159,433</b>	<b>\$836,702,519</b>	<b>\$—</b>	<b>\$2,176,861,952</b>
<b>Other Financial Instruments</b>				
<b>Futures Contracts – Assets</b>	\$610,748	\$—	\$—	\$610,748
<b>Futures Contracts – Liabilities</b>	(1,334,844)	—	—	(1,334,844)

For further information regarding security characteristics, see the Portfolio of Investments.

**Foreign Currency Translation** — Purchases and sales of foreign investments, income, and expenses are converted into U.S. dollars based upon currency exchange rates prevailing on the respective dates of such transactions or on the reporting date for foreign denominated receivables and payables. Gains and losses attributable to foreign currency exchange rates on sales of securities are recorded for financial statement purposes as net realized gains and losses on investments. Gains and losses attributable to foreign exchange rate movements on receivables, payables, income and expenses are recorded for financial statement purposes as foreign currency transaction gains and losses. That portion of both realized and unrealized gains and losses on investments that results from fluctuations in foreign currency exchange rates is not separately disclosed.

**Derivatives** — The fund uses derivatives primarily to increase or decrease exposure to a particular market or segment of the market, or security, to increase or decrease interest rate or currency exposure, or as alternatives to direct investments. Derivatives are used for hedging or non-hedging purposes. While hedging can reduce or eliminate losses, it can also reduce or eliminate gains. When the fund uses derivatives as an investment to increase market exposure, or for hedging purposes, gains and losses from derivative instruments may be substantially greater than the derivative's original cost.

*Notes to Financial Statements (unaudited) - continued*

The derivative instruments used by the fund during the period were futures contracts. Depending on the type of derivative, a fund may exit a derivative position by entering into an offsetting transaction with a counterparty or exchange, negotiating an agreement with the derivative counterparty, or novating the position to a third party. The fund may be unable to promptly close out a futures position in instances where the daily fluctuation in the price for that type of future exceeds the daily limit set by the exchange. The fund's period end derivatives, as presented in the Portfolio of Investments and the associated Derivative Contract tables, generally are indicative of the volume of its derivative activity during the period.

The following table presents, by major type of derivative contract, the fair value, on a gross basis, of the asset and liability components of derivatives held by the fund at June 30, 2023 as reported in the Statement of Assets and Liabilities:

Risk	Derivative Contracts	Fair Value (a)	
		Asset Derivatives	Liability Derivatives
Interest Rate	Futures Contracts	\$610,748	\$(1,334,844)

(a) Values presented in this table for futures contracts correspond to the values reported in the Portfolio of Investments. Only the current day net variation margin for futures contracts is separately reported within the Statement of Assets and Liabilities.

The following table presents, by major type of derivative contract, the realized gain (loss) on derivatives held by the fund for the six months ended June 30, 2023 as reported in the Statement of Operations:

Risk	Futures Contracts
Interest Rate	\$(781,910)

The following table presents, by major type of derivative contract, the change in unrealized appreciation or depreciation on derivatives held by the fund for the six months ended June 30, 2023 as reported in the Statement of Operations:

Risk	Futures Contracts
Interest Rate	\$(248,383)

Derivative counterparty credit risk is managed through formal evaluation of the creditworthiness of all potential counterparties. On certain, but not all, uncleared derivatives, the fund attempts to reduce its exposure to counterparty credit risk whenever possible by entering into an ISDA Master Agreement on a bilateral basis. The ISDA Master Agreement gives each party to the agreement the right to terminate all transactions traded under such agreement if there is a specified deterioration in the credit quality of the other party. Upon an event of default or a termination of the ISDA Master Agreement, the non-defaulting party has the right to close out all transactions traded under such agreement and to net amounts owed under each agreement to one net amount payable by one party to the other. This right to close out and net payments across all transactions traded under the ISDA Master Agreement could result in a reduction of the fund's credit risk to such counterparty equal to any amounts payable by the fund under the applicable transactions, if any.

Collateral and margin requirements differ by type of derivative. For cleared derivatives (e.g., futures contracts, cleared swaps, and exchange-traded options), margin requirements are set by the clearing broker and the clearing house and collateral, in the form of cash or securities, is posted by the fund directly with the clearing broker. Collateral terms are counterparty agreement specific for uncleared derivatives (e.g., forward foreign currency exchange contracts, uncleared swap agreements, and uncleared options) and collateral, in the form of cash and securities, is held in segregated accounts with the fund's custodian in connection with these agreements. For derivatives traded under an ISDA Master Agreement, which contains a credit support annex, the collateral requirements are netted across all transactions traded under such counterparty-specific agreement and an amount is posted from one party to the other to collateralize such obligations. Cash that has been segregated or delivered to cover the fund's collateral or margin obligations under derivative contracts, if any, will be reported separately in the Statement of Assets and Liabilities as restricted cash for uncleared derivatives and/or deposits with brokers for cleared derivatives. Securities pledged as collateral or margin for the same purpose, if any, are noted in the Portfolio of Investments. The fund may be required to make payments of interest on uncovered collateral or margin obligations with the broker. Any such payments are included in "Miscellaneous" expense in the Statement of Operations.

**Futures Contracts** — The fund entered into futures contracts which may be used to hedge against or obtain broad market exposure, interest rate exposure, currency exposure, or to manage duration. A futures contract represents a commitment for the future purchase or sale of an asset at a specified price on a specified date.

Upon entering into a futures contract, the fund is required to deposit with the broker, either in cash or securities, an initial margin in an amount equal to a specified percentage of the notional amount of the contract. Subsequent payments (variation margin) are made or received by the fund each day, depending on the daily fluctuations in the value of the contract, and are recorded for financial statement purposes as unrealized gain or loss by the fund until the contract is closed or expires at which point the gain or loss on futures contracts is realized.

The fund bears the risk of interest rates, exchange rates or securities prices moving unexpectedly, in which case, the fund may not achieve the anticipated benefits of the futures contracts and may realize a loss. While futures contracts may present less counterparty risk to the fund since the contracts are exchange traded and the exchange's clearinghouse guarantees payments to the broker, there is still counterparty credit risk due to the insolvency of the broker. The fund's maximum risk of loss due to counterparty credit risk is equal to the margin posted by the fund to the broker plus any gains or minus any losses on the outstanding futures contracts.

**Mortgage-Backed/Asset-Backed Securities** — The fund invests a significant portion of its assets in asset-backed and/or mortgage-backed securities. For these securities, the value of the debt instrument also depends on the credit quality and adequacy of the underlying assets or collateral as well as whether there is a security interest in the underlying assets or collateral. Enforcing rights, if any, against the underlying assets or collateral may be difficult. U.S. Government securities not supported as to the payment of principal or interest by the U.S. Treasury, such as those issued by Fannie Mae, Freddie Mac, and the Federal Home Loan Banks, are subject to greater credit risk than are U.S. Government securities supported by the U.S. Treasury, such as those issued by Ginnie Mae.

**Security Loans** — Under its Securities Lending Agency Agreement with the fund, State Street Bank and Trust Company, as lending agent, loans the securities of the fund to certain qualified institutions (the "Borrowers") approved by the fund. Security loans can be terminated at the discretion of either the lending agent or the fund and the related securities must be returned within the earlier of the standard trade settlement period for such securities or within three business days. The loans are collateralized by cash and/or U.S. Treasury and federal agency obligations in an amount typically at least equal to the market value of the securities loaned. On loans collateralized by cash, the cash collateral is invested in a money market fund. The market value of the loaned securities is determined at the close of business of the fund and any additional required collateral is delivered to the fund on the next business day. The lending agent provides the fund with indemnification against Borrower default. In the event of Borrower default, the lending agent will, for the benefit of the fund, either purchase securities identical to those loaned or, when such purchase is commercially impracticable, pay the fund the market value of the loaned securities. In return, the lending agent assumes the fund's rights to the related collateral. If the collateral value is less than the cost to purchase identical securities, the lending agent is responsible for the shortfall, but only to the extent that such shortfall is not due to a decline in collateral value resulting from collateral reinvestment for which the fund bears the risk of loss. A portion of the income generated upon investment of the collateral is remitted to the Borrowers, and the remainder is allocated between the fund and the lending agent. On loans collateralized by U.S. Treasury and/or federal agency obligations, a fee is received from the Borrower, and is allocated between the fund and the lending agent. Income from securities lending is separately reported in the Statement of Operations. The dividend and interest income earned on the securities loaned is accounted for in the same manner as other dividend and interest income. At June 30, 2023, there were no securities on loan or collateral outstanding.

**Indemnifications** — Under the fund's organizational documents, its officers and Trustees may be indemnified against certain liabilities and expenses arising out of the performance of their duties to the fund. Additionally, in the normal course of business, the fund enters into agreements with service providers that may contain indemnification clauses. The fund's maximum exposure under these agreements is unknown as this would involve future claims that may be made against the fund that have not yet occurred.

**Investment Transactions and Income** — Interest income is recorded on the accrual basis. All premium and discount is amortized or accreted for financial statement purposes in accordance with U.S. generally accepted accounting principles. Dividends received in cash are recorded on the ex-dividend date. Certain dividends from foreign securities will be recorded when the fund is informed of the dividend if such information is obtained subsequent to the ex-dividend date. Dividend and interest payments received in additional securities are recorded on the ex-dividend or ex-interest date in an amount equal to the value of the security on such date.

The fund may receive proceeds from litigation settlements. Any proceeds received from litigation involving portfolio holdings are reflected in the Statement of Operations in realized gain/loss if the security has been disposed of by the fund or in unrealized gain/loss if the security is still held by the fund. Any other proceeds from litigation not related to portfolio holdings are reflected as other income in the Statement of Operations.

Investment transactions are recorded on the trade date. In determining the net gain or loss on securities sold, the cost of securities is determined on the identified cost basis.

The fund may purchase or sell mortgage-backed securities on a "To Be Announced" (TBA) basis. A TBA transaction is subject to extended settlement and typically does not designate the actual security to be delivered, but instead includes an approximate principal amount. The price of the TBA security and the date that it will be settled are fixed at the time the transaction is negotiated.

*Notes to Financial Statements (unaudited) - continued*

The value of the security varies with market fluctuations and no interest accrues to the fund until settlement takes place. TBA purchase and sale commitments are held at carrying amount, which approximates fair value and are categorized as level 2 within the fair value hierarchy and included in TBA purchase and TBA sale commitments in the Statement of Assets and Liabilities, as applicable. Losses may arise as a result of changes in the value of the TBA investment prior to settlement date or due to counterparty non-performance.

The fund may also enter into mortgage dollar rolls, typically TBA dollar rolls, in which the fund sells TBA mortgage-backed securities to financial institutions and simultaneously agrees to repurchase similar (same issuer, type and coupon) securities at a later date at an agreed-upon price. During the period between the sale and repurchase, the fund will not be entitled to receive interest and principal payments on the securities sold. The fund accounts for dollar roll transactions as purchases and sales and realizes gains and losses on these transactions. Dollar roll transactions involve the risk that the market value of the securities that the fund is required to purchase may decline below the agreed upon repurchase price of those securities.

To mitigate the counterparty credit risk on TBA transactions, mortgage dollar rolls, and other types of forward settling mortgage-backed and asset-backed security transactions, the fund whenever possible enters into a Master Securities Forward Transaction Agreement ("MSFTA") on a bilateral basis with each of the counterparties with whom it undertakes a significant volume of transactions. The MSFTA gives each party to the agreement the right to terminate all transactions traded under such agreement if there is a specified deterioration in the credit quality of the other party. Upon an event of default or a termination of the MSFTA, the non-defaulting party has the right to close out all transactions traded under such agreement and to net amounts owed under each transaction to one net amount payable by one party to the other. This right to close out and net payments across all transactions traded under the MSFTA could result in a reduction of the fund's credit risk to such counterparty equal to any amounts payable by the fund under the applicable transactions, if any.

For mortgage-backed and asset-backed securities traded under a MSFTA, the collateral and margining requirements are contract specific. Collateral amounts across all transactions traded under such agreement are netted and an amount is posted from one party to the other to collateralize such obligations. Cash that has been pledged to cover the fund's collateral or margin obligations under a MSFTA, if any, will be reported separately on the Statement of Assets and Liabilities as restricted cash. Securities pledged as collateral or margin for the same purpose, if any, are noted in the Portfolio of Investments.

**Tax Matters and Distributions** — The fund intends to qualify as a regulated investment company, as defined under Subchapter M of the Internal Revenue Code, and to distribute all of its taxable income, including realized capital gains. As a result, no provision for federal income tax is required. The fund's federal tax returns, when filed, will remain subject to examination by the Internal Revenue Service for a three year period. Management has analyzed the fund's tax positions taken on federal and state tax returns for all open tax years and does not believe that there are any uncertain tax positions that require recognition of a tax liability. Foreign taxes, if any, have been accrued by the fund in the accompanying financial statements in accordance with the applicable foreign tax law. Foreign income taxes may be withheld by certain countries in which the fund invests. Additionally, capital gains realized by the fund on securities issued in or by certain foreign countries may be subject to capital gains tax imposed by those countries.

Distributions to shareholders are recorded on the ex-dividend date. Income and capital gain distributions are determined in accordance with income tax regulations, which may differ from U.S. generally accepted accounting principles. Certain capital accounts in the financial statements are periodically adjusted for permanent differences in order to reflect their tax character. These adjustments have no impact on net assets or net asset value per share. Temporary differences which arise from recognizing certain items of income, expense, gain or loss in different periods for financial statement and tax purposes will reverse at some time in the future.

Book/tax differences primarily relate to amortization and accretion of debt securities, wash sale loss deferrals, and derivative transactions.

The tax character of distributions declared to shareholders for the last fiscal year is as follows:

	Year ended 12/31/22
Ordinary income (including any short-term capital gains)	\$50,184,261
Long-term capital gains	186,102,882
Total distributions	\$236,287,143

The federal tax cost and the tax basis components of distributable earnings were as follows:

## MFS Total Return Series

Notes to Financial Statements (unaudited) - continued

<b>As of 6/30/23</b>	
Cost of investments	\$1,775,269,911
Gross appreciation	514,516,716
Gross depreciation	(112,924,675)
Net unrealized appreciation (depreciation)	\$401,592,041
<b>As of 12/31/22</b>	
Undistributed ordinary income	41,339,241
Undistributed long-term capital gain	92,309,620
Other temporary differences	(679)
Net unrealized appreciation (depreciation)	391,551,970

The aggregate cost above includes prior fiscal year end tax adjustments, if applicable.

**Multiple Classes of Shares of Beneficial Interest** — The fund offers multiple classes of shares, which differ in their respective distribution and/or service fees. The fund's income, realized and unrealized gain (loss), and common expenses are allocated to shareholders based on the daily net assets of each class. Dividends are declared separately for each class. Differences in per share dividend rates are generally due to differences in separate class expenses. The fund's distributions declared to shareholders as reported in the Statements of Changes in Net Assets are presented by class as follows:

	<b>Six months ended 6/30/23</b>	<b>Year ended 12/31/22</b>
Initial Class	\$—	\$109,061,121
Service Class	—	127,226,022
Total	\$—	\$236,287,143

### (3) Transactions with Affiliates

**Investment Adviser** — The fund has an investment advisory agreement with MFS to provide overall investment management and related administrative services and facilities to the fund. The management fee is computed daily and paid monthly at the following annual rates based on the fund's average daily net assets:

Up to \$1 billion	0.70%
In excess of \$1 billion and up to \$2.5 billion	0.65%
In excess of \$2.5 billion and up to \$5 billion	0.55%
In excess of \$5 billion	0.50%

MFS has agreed in writing to reduce its management fee by a specified amount if certain MFS mutual fund assets exceed thresholds agreed to by MFS and the fund's Board of Trustees. MFS has also agreed in writing to waive at least 0.01% of its management fee as part of this agreement. The agreement to waive at least 0.01% of the management fee will continue until modified by the fund's Board of Trustees, but such agreement will continue at least until April 30, 2024. For the six months ended June 30, 2023, this management fee reduction amounted to \$138,666, which is included in the reduction of total expenses in the Statement of Operations. The management fee incurred for the six months ended June 30, 2023 was equivalent to an annual effective rate of 0.66% of the fund's average daily net assets.

The investment adviser has agreed in writing to pay a portion of the fund's total annual operating expenses, excluding interest, taxes, extraordinary expenses, brokerage and transaction costs, certain tax reclaim recovery expenses (including contingency fees and closing agreement expenses), and investment-related expenses, such that total annual operating expenses do not exceed 0.61% of average daily net assets for the Initial Class shares and 0.86% of average daily net assets for the Service Class shares. This written agreement will continue until modified by the fund's Board of Trustees, but such agreement will continue at least until April 30, 2025. For the six months ended June 30, 2023, this reduction amounted to \$892,834, which is included in the reduction of total expenses in the Statement of Operations.

**Distributor** — MFS Fund Distributors, Inc. (MFD), a wholly-owned subsidiary of MFS, is the distributor of shares of the fund. The Trustees have adopted a distribution plan for the Service Class shares pursuant to Rule 12b-1 under the Investment Company Act of 1940.



*Notes to Financial Statements (unaudited) - continued*

The fund's distribution plan provides that the fund will pay MFD distribution and/or service fees equal to 0.25% per annum of its average daily net assets attributable to Service Class shares as partial consideration for services performed and expenses incurred by MFD and financial intermediaries (including participating insurance companies that invest in the fund to fund variable annuity and variable life insurance contracts, sponsors of qualified retirement and pension plans that invest in the fund, and affiliates of these participating insurance companies and plan sponsors) in connection with the sale and distribution of the Service Class shares as well as shareholder servicing and account maintenance activities. MFD may subsequently pay all, or a portion, of the distribution and/or service fees to financial intermediaries. The distribution and/or service fees are computed daily and paid monthly.

**Shareholder Servicing Agent** — MFS Service Center, Inc. (MFSC), a wholly-owned subsidiary of MFS, receives a fee from the fund for its services as shareholder servicing agent. For the six months ended June 30, 2023, the fee was \$9,500, which equated to 0.0009% annually of the fund's average daily net assets. MFSC also receives reimbursement from the fund for out-of-pocket expenses paid by MFSC on behalf of the fund. For the six months ended June 30, 2023, these costs amounted to \$1,206.

**Administrator** — MFS provides certain financial, legal, shareholder communications, compliance, and other administrative services to the fund. Under an administrative services agreement, the fund reimburses MFS the costs incurred to provide these services. The fund is charged an annual fixed amount of \$17,500 plus a fee based on average daily net assets. The administrative services fee is computed daily and paid monthly. The administrative services fee incurred for the six months ended June 30, 2023 was equivalent to an annual effective rate of 0.0151% of the fund's average daily net assets.

**Trustees' and Officers' Compensation** — The fund pays compensation to independent Trustees in the form of a retainer, attendance fees, and additional compensation to Board and Committee chairpersons. Independent Trustees' compensation is accrued daily and paid subsequent to each Trustee Board meeting. The fund does not pay compensation directly to Trustees or officers of the fund who are also officers of the investment adviser, all of whom receive remuneration from MFS for their services to the fund. Certain officers and Trustees of the fund are officers or directors of MFS, MFD, and MFSC.

**Other** — The fund invests in the MFS Institutional Money Market Portfolio which is managed by MFS and seeks current income consistent with preservation of capital and liquidity. This money market fund does not pay a management fee to MFS but does incur investment and operating costs.

During the six months ended June 30, 2023, pursuant to a policy adopted by the Board of Trustees and designed to comply with Rule 17a-7 under the Investment Company Act of 1940 (the "Act") and relevant guidance, the fund engaged in purchase transactions with funds and accounts for which MFS serves as investment adviser or sub-adviser ("cross-trades") which amounted to \$4,369,802.

The adviser has voluntarily undertaken to reimburse the fund from its own resources on a quarterly basis for the cost of investment research embedded in the cost of the fund's securities trades. This agreement may be rescinded at any time. For the six months ended June 30, 2023, this reimbursement amounted to \$7,971, which is included in "Other" income in the Statement of Operations.

#### (4) Portfolio Securities

For the six months ended June 30, 2023, purchases and sales of investments, other than short-term obligations, were as follows:

	Purchases	Sales
U.S. Government securities	\$222,146,277	\$262,050,811
Non-U.S. Government securities	143,587,516	180,158,788

#### (5) Shares of Beneficial Interest

The fund's Declaration of Trust permits the Trustees to issue an unlimited number of full and fractional shares of beneficial interest. Transactions in fund shares were as follows:

	Six months ended 6/30/23		Year ended 12/31/22	
	Shares	Amount	Shares	Amount
Shares sold				
Initial Class	643,026	\$14,661,852	1,216,820	\$28,906,952
Service Class	1,835,273	41,167,590	3,979,494	96,027,646
	2,478,299	\$55,829,442	5,196,314	\$124,934,598

## MFS Total Return Series

Notes to Financial Statements (unaudited) - continued

	Six months ended 6/30/23		Year ended 12/31/22	
	Shares	Amount	Shares	Amount
Shares issued to shareholders in reinvestment of distributions				
Initial Class	—	\$—	4,817,187	\$109,061,121
Service Class	—	—	5,751,628	127,226,022
	—	\$—	10,568,815	\$236,287,143
Shares reacquired				
Initial Class	(2,724,583)	\$(62,316,486)	(7,347,668)	\$(180,956,671)
Service Class	(3,880,105)	(86,655,548)	(7,768,222)	(186,125,832)
	(6,604,688)	\$(148,972,034)	(15,115,890)	\$(367,082,503)
Net change				
Initial Class	(2,081,557)	\$(47,654,634)	(1,313,661)	\$(42,988,598)
Service Class	(2,044,832)	(45,487,958)	1,962,900	37,127,836
	(4,126,389)	\$(93,142,592)	649,239	\$(5,860,762)

### (6) Line of Credit

The fund and certain other funds managed by MFS participate in a \$1.45 billion unsecured committed line of credit of which \$1.2 billion is reserved for use by the fund and certain other MFS U.S. funds. The line of credit is provided by a syndicate of banks under a credit agreement. Borrowings may be made for temporary financing needs. Interest is charged to each fund, based on its borrowings, generally at a rate equal to the highest of 1) Daily Simple SOFR (Secured Overnight Financing Rate) plus 0.10%, 2) the Federal Funds Effective Rate, or 3) the Overnight Bank Funding Rate, each plus an agreed upon spread. A commitment fee, based on the average daily unused portion of the committed line of credit, is allocated among the participating funds. The line of credit expires on March 14, 2024 unless extended or renewed. In addition, the fund and other funds managed by MFS have established unsecured uncommitted borrowing arrangements with certain banks for temporary financing needs. Interest is charged to each fund, based on its borrowings, at rates equal to customary reference rates plus an agreed upon spread. For the six months ended June 30, 2023, the fund's commitment fee and interest expense were \$5,596 and \$0, respectively, and are included in "Miscellaneous" expense in the Statement of Operations.

### (7) Investments in Affiliated Issuers

An affiliated issuer may be considered one in which the fund owns 5% or more of the outstanding voting securities, or a company which is under common control. For the purposes of this report, the following were affiliated issuers:

Affiliated Issuers	Beginning Value	Purchases	Sales Proceeds	Realized Gain (Loss)	Change in Unrealized Appreciation or Depreciation	Ending Value
MFS Institutional Money Market Portfolio	\$23,640,356	\$171,509,251	\$171,088,986	\$2,908	\$(1,981)	\$24,061,548
Affiliated Issuers					Dividend Income	Capital Gain Distributions
MFS Institutional Money Market Portfolio					\$647,074	\$—

### (8) LIBOR Transition

The London Interbank Offered Rate (LIBOR) was intended to represent the rate at which contributing banks may obtain short-term borrowings from each other in the London interbank market. Certain of the fund's investments, payment obligations, and financing terms were historically based on LIBOR. In 2017, the United Kingdom Financial Conduct Authority (FCA) announced plans to transition away from LIBOR by the end of 2021. LIBOR's administrator, ICE Benchmark Administration (IBA), ceased publication (on a representative basis) of many of its LIBOR settings as of December 31, 2021 and ceased publication (on a representative basis) of the remaining U.S. dollar LIBOR settings as of June 30, 2023. In addition, global regulators announced that, with limited exceptions, no new LIBOR-based contracts should be entered into after 2021. Although the FCA has announced that it will require the IBA to



*Notes to Financial Statements (unaudited) - continued*

continue to publish certain select LIBOR rates on a synthetic basis after the relevant cessation dates, such synthetic rates are not considered to be representative of the underlying market and economic reality they are intended to measure, are expected to be published for a limited time period, and are intended solely for use on a limited basis for legacy transactions.

Regulators and industry groups have implemented measures to facilitate the transition away from LIBOR and other interbank offered rates to alternative reference rates, such as the Secured Overnight Financing Rate (SOFR). SOFR is a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities in the repurchase agreement (repo) market. SOFR is published in various forms including as a daily, compounded, and forward-looking term rate. The transition to alternative reference rates may affect the liquidity and valuation of investments that were tied to LIBOR or other interbank offered rates and may lead to other consequences affecting securities and credit markets more broadly. For example, while some investments that were tied to LIBOR provided for an alternative or “fallback” rate-setting methodology in the event LIBOR is not available, there is uncertainty regarding the effectiveness of any such alternative methodologies to replace LIBOR and certain investments tied to LIBOR may not have fallback provisions. While legislation passed in the United States facilitates by operation of law the replacement of U.S. dollar LIBOR settings in certain legacy instruments with a specified replacement rate, such as SOFR, there is uncertainty regarding the effectiveness of such legislation. There also remains uncertainty regarding the willingness and ability of parties to add or amend fallback provisions in certain other legacy instruments maturing after the cessation of the applicable LIBOR rates, which could create market and litigation risk.

It is difficult to quantify or predict the impact on the fund resulting from the transition from LIBOR to alternative reference rates and the potential effects of the transition from LIBOR on the fund, or on certain instruments in which the fund invests, are not known. The transition process may involve, among other things, increased volatility or illiquidity in markets for instruments that relied on LIBOR to determine interest rates. The transition may also result in a reduction in value of certain LIBOR-related investments held by the fund or reduce the effectiveness of related transactions such as hedges. Any such effects of the transition away from LIBOR and the adoption of alternative reference rates, as well as other unforeseen effects, could have an adverse impact on the fund’s performance.

With respect to the fund’s accounting for investments, including investments in certain debt instruments and derivatives, as well as borrowings by the fund and any other contractual arrangements of the fund that undergo reference rate-related modifications as a result of the transition, management has and will continue to rely upon the relief provided by FASB Codification Topic 848 – Reference Rate Reform (Topic 848). The guidance in Topic 848 permits the fund to account for such contract modifications made on or before December 31, 2024 as a continuation of the existing contracts. The situation remains fluid, and management believes, based on best available information, that the impact of the transition will not be material to the fund.

## **STATEMENT REGARDING LIQUIDITY RISK MANAGEMENT PROGRAM**

The fund has adopted and implemented a liquidity risk management program (the “Program”) as required by Rule 22e-4 under the Investment Company Act of 1940, as amended. The fund’s Board of Trustees (the “Board”) has designated MFS as the administrator of the Program. The Program is reasonably designed to assess and manage the liquidity risk of the fund. Liquidity risk is the risk that the fund could not meet requests to redeem shares issued by the fund without significant dilution of remaining investors’ interests.

MFS provided a written report to the Board for consideration at its March 2023 meeting that addressed the operation of the Program and provided an assessment of the adequacy and effectiveness of the Program during the period from January 1, 2022 to December 31, 2022 (the “Covered Period”). The report concluded that during the Covered Period the Program had operated effectively in all material respects and had adequately and effectively been implemented to assess and manage the fund’s liquidity risk. MFS also reported that there were no liquidity events that impacted the fund or its ability to timely meet redemptions without dilution to existing shareholders during the Covered Period.

There can be no assurance that the Program will achieve its objectives in the future. Further information on liquidity risk, and other principal risks to which an investment in the fund may be subject, can be found in the prospectus.

## PROXY VOTING POLICIES AND INFORMATION

MFS votes proxies on behalf of the fund pursuant to proxy voting policies and procedures that are available without charge, upon request, by calling 1-800-225-2606, by visiting [mfs.com/proxyvoting](http://mfs.com/proxyvoting), or by visiting the SEC's Web site at <http://www.sec.gov>.

Information regarding how the fund voted proxies relating to portfolio securities during the most recent twelve-month period ended June 30 is available by August 31 of each year without charge by visiting [mfs.com/proxyvoting](http://mfs.com/proxyvoting), or by visiting the SEC's Web site at <http://www.sec.gov>.

## QUARTERLY PORTFOLIO DISCLOSURE

The fund files a complete schedule of portfolio holdings with the SEC for the first and third quarters of each fiscal year as an exhibit to its reports on Form N-PORT. The fund's Form N-PORT reports are available on the SEC's Web site at <http://www.sec.gov>. A shareholder can obtain the portfolio holdings report for the first and third quarters of the fund's fiscal year at [mfs.com/vit1](http://mfs.com/vit1) by choosing the fund's name and then scrolling to the "Resources" section and clicking on the "Prospectus and Reports" tab.

## FURTHER INFORMATION

From time to time, MFS may post important information about the fund or the MFS Funds on the MFS Web site ([mfs.com](http://mfs.com)). This information is available at <https://www.mfs.com/announcements> or at [mfs.com/vit1](http://mfs.com/vit1) by choosing the fund's name and then scrolling to the "Resources" section and clicking on the "Announcements" tab, if any.

## INFORMATION ABOUT FUND CONTRACTS AND LEGAL CLAIMS

The fund has entered into contractual arrangements with an investment adviser, administrator, distributor, shareholder servicing agent, and custodian who each provide services to the fund. Unless expressly stated otherwise, shareholders are not parties to, or intended beneficiaries of these contractual arrangements, and these contractual arrangements are not intended to create any shareholder right to enforce them against the service providers or to seek any remedy under them against the service providers, either directly or on behalf of the fund.

Under the Trust's By-Laws and Declaration of Trust, any claims asserted against or on behalf of the MFS Funds, including claims against Trustees and Officers, must be brought in state and federal courts located within the Commonwealth of Massachusetts.

