

MASSMUTUAL SELECT FUNDS

This Prospectus describes the following Funds:

| <u>Fund Name</u> | <u>Class I</u> | <u>Class R5</u> | <u>Service Class</u> | <u>Administrative Class</u> | <u>Class A</u> | <u>Class R4</u> | <u>Class R3</u> |
|---|----------------|-----------------|----------------------|-----------------------------|----------------|-----------------|-----------------|
| MassMutual Select Total Return Bond Fund | MSPZX | MSPSX | MSPHX | MSPLX | MPTRX | MSPGX | MSPNX |
| MassMutual Select Strategic Bond Fund | MSBZX | MBSSX | MBSYX | MSBLX | MSBAX | MSBRX | MSBNX |
| MassMutual Select BlackRock Global Allocation Fund | MGJIX | MGSSX | MGSYX | MGSLX | MGJAX | MGJFX | MGJRX |
| MassMutual Select Diversified Value Fund | MDDIX | MDVSX | MDVYX | MDDLX | MDDAX | MDDRFX | MDVNX |
| MassMutual Select Fundamental Value Fund | MFUZX | MVUSX | MFUYX | MFULX | MFUAX | MFUFX | MFUNX |
| MM S&P 500 [®] Index Fund | MMIZX | MIEZX | MMIEX | MIEYX | MMFFX | MIEAX | MMINX |
| MassMutual Select Equity Opportunities Fund | MFVZX | MFVSX | MMFYX | MMFVX | MFVAX | MFVFX | MFVNX |
| MassMutual Select Fundamental Growth Fund | MOTZX | MOTCX | MOTYX | MOTLX | MOTAX | MFGFX | MOTNX |
| MassMutual Select Blue Chip Growth Fund | MBCZX | MBCSX | MBCYX | MBCLX | MBCGX | MBGFX | MBCNX |
| MassMutual Select Growth Opportunities Fund | MMAZX | MGRSX | MAGYX | MAGLX | MMAAX | MMGFX | MMANX |
| MassMutual Select Mid-Cap Value Fund | MLUZX | MLUSX | MLUYX | MLULX | MLUAX | MLUFX | MLUNX |
| MassMutual Select Small Cap Value Equity Fund | MMQIX | MMQSX | MMQYX | MMQLX | MMQAX | MMQFX | MMQTX |
| MassMutual Select Small Company Value Fund | MSVZX | MSVSX | MMVYX | MMYLX | MMYAX | MMVFX | MSVNX |
| MM S&P [®] Mid Cap Index Fund | MDKZX | MDKIX | MDKSX | MDKYX | MDKAX | MDKFX | MDKTX |
| MM Russell 2000 [®] Small Cap Index Fund | MCJZX | MCJIX | MCJSX | MCJYX | MCJAX | MCJFX | MCJTX |
| MassMutual Select Mid Cap Growth Fund | MEFZX | MGRFX | MEFYX | MMELX | MEFAX | MEFFX | MEFNX |
| MassMutual Select Small Cap Growth Equity Fund | MSGZX | MSGSX | MSCYX | MSGLX | MMGEX | MSERX | MSGNX |
| MM MSCI EAFE [®] International Index Fund | MKRZX | MKRIX | MKRSX | MKRYX | MKRAX | MKRFX | MKRTX |
| MassMutual Select Overseas Fund | MOSZX | MOSSX | MOSYX | MOSLX | MOSAX | MOSFX | MOSNX |
| MassMutual Select T. Rowe Price International Equity Fund | MMIUX | | | | | | |

Important Notice: Beginning on January 1, 2021, as permitted by regulations adopted by the Securities and Exchange Commission, paper copies of the Fund's annual and semi-annual reports will no longer be sent by mail, unless you specifically request paper copies of the reports from the Fund (or from your financial intermediary, such as a broker-dealer, bank, or retirement plan recordkeeper). Instead, the reports will be made available on the Fund's website (<http://www.massmutual.com/funds>), and you will be notified by mail each time a report is posted and provided with a website link to access the report.

If you already elected to receive shareholder reports electronically, you will not be affected by this change and you need not take any action. If you would like to receive shareholder reports and other communications electronically from the Fund and are either a direct investor in the Fund or MassMutual serves as your retirement plan recordkeeper, please call (800) 767-1000 extension 43012 or send your request to enroll to RSProspectusFulfillment@massmutual.com. If you have invested in the Fund through another financial intermediary (such as a broker-dealer, bank, or retirement plan recordkeeper), you can request electronic delivery by contacting that financial intermediary.

Beginning on January 1, 2019, you may elect to receive all future reports in paper free of charge. If you invest directly with the MassMutual Funds or MassMutual serves as your retirement plan recordkeeper, you can call (800) 767-1000 extension 43012 or send an email request to RSProspectusFulfillment@massmutual.com to inform the Funds or MassMutual that you wish to continue receiving paper copies of your shareholder reports. If you invest through a financial intermediary other than MassMutual, you can contact that financial intermediary to request that you continue to receive paper copies of your shareholder reports. Your election to receive reports in paper will apply to all funds held in your account if you invest through your financial intermediary or all funds held within the fund complex if you invest directly with a Fund.

The Securities and Exchange Commission has not approved or disapproved these securities or passed upon the adequacy of this Prospectus. Any statement to the contrary is a crime.

PROSPECTUS
February 1, 2020

MASSMUTUAL SELECT FUNDS
MassMutual Select Growth Opportunities Fund
(the “Fund”)
Supplement dated November 23, 2020 to the
Prospectus dated February 1, 2020 and the
Summary Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and Summary Prospectus, and any previous supplements. It should be retained and read in conjunction with the Prospectus and Summary Prospectus, and any previous supplements.

*Effective December 31, 2020, the information related to **Christopher J. Bonavico, CFA** for the Fund found under the heading **Portfolio Manager(s)** in the section titled **Management** (page 58 of the Prospectus) is hereby removed.*

*The following information replaces similar information for the Fund found under the heading **Portfolio Manager(s)** in the section titled **Management** (page 58 of the Prospectus):*

Daniel J. Prislin, CFA is a Portfolio Manager and Analyst at Jackson Square. He has managed the Fund since June 2006. Mr. Prislin is expected to retire from Jackson Square on or about December 31, 2021.

*Effective December 31, 2020, the information related to **Christopher J. Bonavico, CFA** under **Jackson Square Partners, LLC** (“Jackson Square”) found on page 134 of the Prospectus under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds** is hereby removed.*

*The following information replaces similar information for **Daniel J. Prislin, CFA** under **Jackson Square** found on page 135 of the Prospectus under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds**:*

Daniel J. Prislin, CFA _____
is a portfolio manager of a portion of the **Growth Opportunities Fund**. Mr. Prislin is a Portfolio Manager and Analyst at Jackson Square. Jackson Square manages large-cap growth, smid-cap growth, all-cap growth, and global growth portfolios. Prior to joining Jackson Square, he was a portfolio manager and equity analyst on Delaware Investments’ Focus Growth Equity team from April 2005 to April 2014. Prior to joining Delaware Investments, Mr. Prislin was a principal and portfolio manager at Transamerica Investment Management, where he also managed subadvised funds and institutional separate accounts. Prior to joining Transamerica in 1998, he was a portfolio manager with The Franklin Templeton Group. Mr. Prislin is expected to retire from Jackson Square on or about December 31, 2021.

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

B3001M-20-11
GO-20-2

MASSMUTUAL SELECT FUNDS
MassMutual Select Total Return Bond Fund
(the "Fund")
Supplement dated November 20, 2020 to the
Prospectus dated February 1, 2020 and the
Summary Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and Summary Prospectus, and any previous supplements. It should be retained and read in conjunction with the Prospectus and Summary Prospectus, and any previous supplements.

*Effective November 20, 2020, the following information replaces similar information for the Fund found under the headings **Annual Fund Operating Expenses** and **Example** in the section titled **Fees and Expenses of the Fund** (on page 3 of the Prospectus):*

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | <u>Class I</u> | <u>Class R5</u> | <u>Service Class</u> | <u>Adminis- trative Class</u> | <u>Class A</u> | <u>Class R4</u> | <u>Class R3</u> |
|---|----------------|-----------------|----------------------|-----------------------------------|----------------|-----------------|-----------------|
| Management Fees | .30% | .30% | .30% | .30% | .30% | .30% | .30% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .06% | .16% | .26% | .36% | .36% | .26% | .26% |
| Total Annual Fund Operating Expenses . . | .36% | .46% | .56% | .66% | .91% | .81% | 1.06% |
| Fee Waiver | (.03%) | (.03%) | (.03%) | (.03%) | (.03%) | (.03%) | (.03%) |
| Total Annual Fund Operating Expenses after Fee Waiver ⁽¹⁾ | .33% | .43% | .53% | .63% | .88% | .78% | 1.03% |

(1) The expenses in the above table reflect a written agreement by MML Advisers to waive .03% of its management fees through January 31, 2022. This agreement can only be terminated by mutual consent of the Board of Trustees on behalf of the Fund and MML Advisers.

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | <u>1 Year</u> | <u>3 Years</u> | <u>5 Years</u> | <u>10 Years</u> |
|--------------------------------|---------------|----------------|----------------|-----------------|
| Class I | \$ 34 | \$113 | \$199 | \$ 453 |
| Class R5 | \$ 44 | \$145 | \$255 | \$ 576 |
| Service Class | \$ 54 | \$176 | \$309 | \$ 698 |
| Administrative Class | \$ 64 | \$208 | \$365 | \$ 820 |
| Class A | \$511 | \$700 | \$905 | \$1,494 |
| Class R4 | \$ 80 | \$256 | \$447 | \$ 999 |
| Class R3 | \$105 | \$334 | \$582 | \$1,291 |

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

B3001M-20-10
TRB-20-1

MASSMUTUAL SELECT FUNDS
MassMutual Select T. Rowe Price International Equity Fund
(the “Fund”)
Supplement dated November 6, 2020 to the
Prospectus dated February 1, 2020 and the
Summary Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and Summary Prospectus, and any previous supplements. It should be retained and read in conjunction with the Prospectus and Summary Prospectus, and any previous supplements.

Subject to approval by the Board of Trustees of the MassMutual Select Funds, effective on or about April 1, 2021, the following changes will take place with respect to the Fund:

T. Rowe Price Singapore Private Ltd. will be added as an investment sub-subadviser to the Fund.

*The following information will supplement the information for the Fund found under the heading **Sub-subadviser(s)** in the section titled **Management** (page 107 of the Prospectus):*

T. Rowe Price Singapore Private Ltd. (“T. Rowe Price Singapore”)

*The following information will replace similar information for the Fund found under the heading **Portfolio Manager(s)** in the section titled **Management** (page 107 of the Prospectus):*

Gonzalo Pangaro, CFA is a Vice President and Portfolio Manager at T. Rowe Price International. He has managed the Fund since its inception (February 2018). Mr. Pangaro is expected to retire from T. Rowe Price International effective on or about December 31, 2021.

*The following information will supplement the information for the Fund found under the heading **Portfolio Manager(s)** in the section titled **Management** (page 107 of the Prospectus):*

Malik Asif is a Vice President and Portfolio Manager at T. Rowe Price International. He has managed the Fund since April 2021.

Eric Moffett is a Vice President and Portfolio Manager at T. Rowe Price Singapore. He has managed the Fund since April 2021.

*The following information will replace similar information found on page 137 under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds**:*

T. Rowe Price Associates, Inc. (“T. Rowe Price”), located at 100 East Pratt Street, Baltimore, Maryland 21202, manages the investments of the **Select T. Rowe Price International Equity Fund** and a portion of the portfolio of the **Diversified Value Fund, Equity Opportunities Fund, Blue Chip Growth Fund, and Mid Cap Growth Fund**. T. Rowe Price, a wholly-owned subsidiary of T. Rowe Price Group, Inc., a publicly-traded financial services holding company, has been managing assets since 1937. In addition, each of T. Rowe Price International Ltd (“T. Rowe Price International”), T. Rowe Price Hong Kong Limited (“T. Rowe Price Hong Kong”), and T. Rowe Price Singapore Private Ltd. (“T. Rowe Price Singapore”) serves as sub-subadviser for the **Select T. Rowe Price International Equity Fund** and, subject to the supervision of T. Rowe Price, is authorized to make discretionary investment decisions on behalf of the Fund (which includes selecting foreign investments in developed and emerging market countries). Subject to the supervision of T. Rowe Price, T. Rowe Price International and T. Rowe Price Hong Kong are authorized to trade securities, while T. Rowe Price Singapore is authorized to delegate the trading of securities to an affiliate. T. Rowe Price International is a wholly-owned subsidiary of T. Rowe Price and its address is 60 Queen Victoria Street, London EC4N 4TZ, United Kingdom. T. Rowe Price Hong Kong is a wholly-owned subsidiary of T. Rowe Price International and its address is 6/F Chater House, 8 Connaught Place, Central Hong Kong. T. Rowe Price Singapore is a wholly-owned subsidiary of T. Rowe Price International and its address is 501 Orchard Road, #10-02 Wheelock Place, Singapore, 238880. As of September 30, 2020, T. Rowe Price and its affiliates had approximately \$1.31 trillion in assets under management.

*The following information will replace similar information for **Gonzalo Pangaro** under **T. Rowe Price** found on page 138 of the Prospectus under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds**:*

Gonzalo Pangaro, CPA

is a portfolio manager of the *Select T. Rowe Price International Equity Fund*. Mr. Pangaro is a Vice President and Portfolio Manager for T. Rowe Price International. He joined T. Rowe Price International in 1998 and his investment experience dates from 1991. Mr. Pangaro has served as a portfolio manager for T. Rowe Price International throughout the past five years. Effective on or about December 31, 2021, Mr. Pangaro is expected to retire from T. Rowe Price International.

*The following information will supplement the information under **T. Rowe Price** found on page 138 of the Prospectus under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds**:*

Malik Asif

is a portfolio manager of the *Select T. Rowe Price International Equity Fund*. Mr. Asif is a Vice President and Portfolio Manager for T. Rowe Price International. He joined T. Rowe Price in 2012 and his investment experience dates from 2007. During the past five years, Mr. Asif has served as an associate portfolio manager of the emerging markets strategy for T. Rowe Price (beginning in 2018) and, prior to that, as an analyst for T. Rowe Price covering the financial sector in emerging markets.

Eric Moffett

is a portfolio manager of the *Select T. Rowe Price International Equity Fund*. Mr. Moffett is a Vice President and Portfolio Manager for T. Rowe Price Singapore. He joined T. Rowe Price in 2007 and his investment experience dates from 2000. Mr. Moffett has served as a portfolio manager for T. Rowe Price throughout the past five years.

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

**B3001M-20-09
TRIE-20-04**

MASSMUTUAL SELECT FUNDS
MassMutual Select T. Rowe Price International Equity Fund
(the “Fund”)
Supplement dated July 30, 2020 to the
Prospectus dated February 1, 2020 and the
Summary Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and Summary Prospectus, and any previous supplements. It should be retained and read in conjunction with the Prospectus and Summary Prospectus, and any previous supplements.

Effective as of the close of business on or about October 29, 2020 (the “Closing Date”), the Fund will no longer be available for purchase by new or existing customers, with certain exceptions, as described below. After the Closing Date, the MassMutual Select T. Rowe Price Retirement Funds will continue to be able to purchase shares of the Fund. No other new or existing customers will be able to make purchases of the Fund, except that existing customers may continue to reinvest any dividends and capital gains distributions. Purchases of Fund shares may be further restricted or reopened in the future.

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

B3001M-20-08
TRIE-20-03

MASSMUTUAL SELECT FUNDS
MassMutual Select Total Return Bond Fund
MassMutual Select Strategic Bond Fund
MassMutual Select BlackRock Global Allocation Fund
MassMutual Select Diversified Value Fund
MassMutual Select Fundamental Value Fund
MM S&P 500[®] Index Fund
MassMutual Select Equity Opportunities Fund
MassMutual Select Fundamental Growth Fund
MassMutual Select Blue Chip Growth Fund
MassMutual Select Growth Opportunities Fund
MassMutual Select Mid-Cap Value Fund
MassMutual Select Small Cap Value Equity Fund
MassMutual Select Small Company Value Fund
MM S&P[®] Mid Cap Index Fund
MM Russell 2000[®] Small Cap Index Fund
MassMutual Select Mid Cap Growth Fund
MassMutual Select Small Cap Growth Equity Fund
MM MSCI EAFE[®] International Index Fund
MassMutual Select Overseas Fund
MassMutual Select T. Rowe Price International Equity Fund
Supplement dated July 1, 2020 to the
Prospectus dated February 1, 2020 and the
MassMutual Select T. Rowe Price International Equity Fund
Summary Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and Summary Prospectus, and any previous supplements. It should be retained and read in conjunction with the Prospectus and Summary Prospectus, and any previous supplements.

Effective on or about August 1, 2020, the following information will replace similar information for the MassMutual Select T. Rowe Price International Equity Fund under the heading Annual Fund Operating Expenses in the section titled Fees and Expenses of the Fund (page 103 of the Prospectus):

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I |
|---|----------------|
| Management Fees ⁽¹⁾ | .00% |
| Distribution and Service (Rule 12b-1) Fees | None |
| Other Expenses | .10% |
| Total Annual Fund Operating Expenses | .10% |
| Expense Reimbursement | (.10%) |
| Total Annual Fund Operating Expenses after Expense Reimbursement⁽²⁾ | .00% |

(1) Management Fees have been restated to reflect current fees.

(2) The expenses in the above table reflect a written agreement by MML Advisers to cap the fees and expenses of the Fund (other than extraordinary legal and other expenses, Acquired Fund Fees and Expenses, interest expense, expenses related to borrowings, securities lending, leverage, taxes, and brokerage, short sale dividend and loan expenses, or other non-recurring or unusual expenses such as organizational expenses and shareholder meeting expenses, as applicable) through January 31, 2022, to the extent that Total Annual Fund Operating Expenses after Expense Reimbursement would otherwise exceed .00% for Class I. The Total Annual Fund Operating Expenses after Expense Reimbursement shown in the above table may exceed these amounts, because, as noted in the previous sentence, certain fees and expenses are excluded from the cap. The agreement can only be terminated by mutual consent of the Board of Trustees on behalf of the Fund and MML Advisers.

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods

indicated and then redeem all of your shares at the end of those periods. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | <u>1 Year</u> | <u>3 Years</u> | <u>5 Years</u> | <u>10 Years</u> |
|-------------------|---------------|----------------|----------------|-----------------|
| Class I | \$0 | \$17 | \$41 | \$113 |

*The following information replaces similar information found on pages 120-121 of the Prospectus in the first paragraph under the heading **Market Risk** in the section titled **Additional Information Regarding Principal Risks**:*

Market Risk

The values of a Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable broad market developments, which may affect securities markets generally or particular industries, sectors, or issuers. The values of a Fund's investments may decline as a result of a number of such factors, including actual or perceived changes in general economic and market conditions, industry, political, regulatory, geopolitical and other developments, including the imposition of tariffs or other protectionist actions, changes in interest rates, currency rates, or other rates of exchange, and changes in economic and competitive industry conditions. Likewise, terrorism, war, natural and environmental disasters, and epidemics or pandemics may be highly disruptive to economies and markets. For example, the global pandemic outbreak of the novel coronavirus known as COVID-19 has produced, and will likely continue to produce, substantial market volatility, severe market dislocations and liquidity constraints in many markets, and global business disruption, and it may result in future significant adverse effects, such as exchange trading suspensions and closures, declines in global financial markets, higher default rates, and a substantial economic downturn or recession throughout the world. Such factors may have a significant adverse effect on a Fund's performance and have the potential to impair the ability of a Fund's investment adviser, subadviser, or other service providers to serve the Fund and could lead to disruptions that negatively impact the Fund. Different parts of the market and different types of securities can react differently to these conditions. The possibility that security prices in general will decline over short or even extended periods subjects a Fund to unpredictable declines in the value of its shares, as well as potentially extended periods of poor performance. In addition, the increasing popularity of passive index-based investing may have the potential to increase security price correlations and volatility. As passive strategies generally buy or sell securities based simply on inclusion and representation in an index, securities' prices will have an increasing tendency to rise or fall based on whether money is flowing into or out of passive strategies rather than based on an analysis of the prospects and valuation of individual securities. This may result in increased market volatility as more money is invested through passive strategies.

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

**B3001M-20-07
TRIE-20-02**

MASSMUTUAL SELECT FUNDS
MassMutual Select T. Rowe Price International Equity Fund
(the “Fund”)
Supplement dated May 22, 2020 to the
Prospectus dated February 1, 2020 and the
Summary Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and Summary Prospectus, and any previous supplements. It should be retained and read in conjunction with the Prospectus and Summary Prospectus, and any previous supplements.

Effective May 22, 2020, T. Rowe Price Hong Kong Limited was added as an investment sub-subadviser to the Fund.

*The following information supplements the information for the Fund found under the heading **Sub-subadviser(s)** in the section titled **Management** (page 107 of the Prospectus):*

T. Rowe Price Hong Kong Limited (“T. Rowe Price Hong Kong”)

*The following information supplements the information for the Fund found under the heading **Portfolio Manager(s)** in the section titled **Management** (page 107 of the Prospectus):*

Ernest C. Yeung, CFA is a Vice President and Portfolio Manager at T. Rowe Price Hong Kong. He has managed the Fund since May 2020.

*The following information replaces similar information found on page 137 under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds**:*

T. Rowe Price Associates, Inc. (“T. Rowe Price”), located at 100 East Pratt Street, Baltimore, Maryland 21202, manages the investments of the **Select T. Rowe Price International Equity Fund** and a portion of the portfolio of the **Diversified Value Fund, Equity Opportunities Fund, Blue Chip Growth Fund, and Mid Cap Growth Fund**. T. Rowe Price, a wholly-owned subsidiary of T. Rowe Price Group, Inc., a publicly-traded financial services holding company, has been managing assets since 1937. In addition, each of T. Rowe Price International Ltd (“T. Rowe Price International”) and T. Rowe Price Hong Kong Limited (“T. Rowe Price Hong Kong”) serves as sub-subadviser for the **Select T. Rowe Price International Equity Fund** and subject to the supervision of T. Rowe Price, is authorized to trade securities and make discretionary investment decisions on behalf of the Fund (which includes selecting foreign investments in developed and emerging market countries). T. Rowe Price International is a wholly-owned subsidiary of T. Rowe Price and its address is 60 Queen Victoria Street, London EC4N 4TZ, United Kingdom. T. Rowe Price Hong Kong is a wholly-owned subsidiary of T. Rowe Price International and its address is 6/F Chater House, 8 Connaught Place, Central Hong Kong. As of March 31, 2020, T. Rowe Price and its affiliates had approximately \$1.01 trillion in assets under management.

*The following information supplements the information under **T. Rowe Price Associates, Inc.** related to the Fund found on page 138 of the Prospectus under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds**:*

Ernest C. Yeung, CFA

is a portfolio manager of the **Select T. Rowe Price International Equity Fund**. Mr. Yeung is a Vice President and Portfolio Manager for T. Rowe Price Hong Kong. He joined T. Rowe Price International in 2003 and his investment experience dates from 2001. Mr. Yeung has served as a portfolio manager for T. Rowe Price Hong Kong throughout the past five years.

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

B3001M-20-06
TRIE-20-1

MASSMUTUAL SELECT FUNDS
MassMutual Select Growth Opportunities Fund
(the “Fund”)
Supplement dated May 1, 2020 to the
Prospectus dated February 1, 2020 and the
Summary Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and Summary Prospectus, and any previous supplements. It should be retained and read in conjunction with the Prospectus and Summary Prospectus, and any previous supplements.

*The following information replaces the first paragraph for the Fund found under the heading **Principal Investment Strategies** in the section titled **Investments, Risks, and Performance** (page 54 of the Prospectus):*

This Fund seeks to achieve its objective by investing primarily in equity securities of U.S. companies that the Fund’s subadvisers believe offer the potential for long-term growth. Under normal market conditions, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in equity securities. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, rights, and warrants. The Fund typically invests most of its assets in mid- and large-capitalization equity securities of U.S. companies, but may invest up to 20% of its total assets in foreign securities and American Depositary Receipts (“ADRs”), including emerging market securities. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents. The Fund is non-diversified, which means that it may hold larger positions in a smaller number of stocks than a diversified fund.

*The following information supplements the information for the Fund found under the heading **Principal Risks** in the section titled **Investments, Risks, and Performance** (pages 55-56 of the Prospectus):*

Non-Diversification Risk Because the Fund may invest a relatively large percentage of its assets in a single issuer or small number of issuers than a diversified fund, the Fund’s performance could be closely tied to the value of one issuer or a small number of issuers and could be more volatile than the performance of a diversified fund.

*The following information supplements the information found beginning on page 111 of the Prospectus in the section titled **Additional Information Regarding Principal Risks**:*

- **Non-Diversification Risk**

A “non-diversified” mutual fund may purchase larger positions in a smaller number of issuers than may a diversified mutual fund. Therefore, an increase or decrease in the value of the securities of a single issuer or a small number of issuers may have a greater impact on the Fund’s NAV and the Fund’s performance could be more volatile than the performance of diversified funds.

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

B3001M-20-05
GO-20-1

MASSMUTUAL SELECT FUNDS
MassMutual Select Small Company Value Fund
(the “Fund”)
Supplement dated April 24, 2020 to the
Prospectus dated February 1, 2020 and the
Summary Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and Summary Prospectus, and any previous supplements. It should be retained and read in conjunction with the Prospectus and Summary Prospectus, and any previous supplements.

*Effective April 24, 2020, the following information replaces the information related to **Miles Lewis** under **American Century Investment Management, Inc.** (“American Century”) for the Fund found under the headings **Subadvisers and Portfolio Managers** in the section titled **Management** (page 74 of the Prospectus):*

Ryan Cope, CFA is a Portfolio Manager at American Century. He has managed the Fund since April 2020.

*Effective April 24, 2020, the following information replaces the information related to **Miles Lewis** under **American Century** for the Fund found on page 129 under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds**:*

Ryan Cope, CFA _____

is a portfolio manager of a portion of the **Small Company Value Fund**, which is managed on a team basis. He is jointly and primarily responsible for the day-to-day management of the portfolio. Mr. Cope is a Portfolio Manager for American Century. Mr. Cope joined American Century in 2009, became a portfolio research analyst in 2010, and an investment analyst in 2012.

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

B3001M-20-04
SCV-20-1

MASSMUTUAL SELECT FUNDS
MassMutual Select Growth Opportunities Fund
Supplement dated April 1, 2020 to the
Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and any previous supplements. It should be retained and read in conjunction with the Prospectus and any previous supplements.

*Effective April 1, 2020, the following information supplements the information found in the section titled **Additional Information Regarding Investment Objectives and Principal Investment Strategies** beginning on page 108:*

Growth Opportunities Fund. MML Advisers has agreed to voluntarily waive .02% of its management fees. MML Advisers may amend or discontinue this waiver at any time without advance notice.

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

B3001M-20-03

MASSMUTUAL SELECT FUNDS
MassMutual Select Overseas Fund
(the "Fund")
Supplement dated March 2, 2020 to the
Prospectus dated February 1, 2020 and the
Summary Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and Summary Prospectus, and any previous supplements. It should be retained and read in conjunction with the Prospectus and Summary Prospectus, and any previous supplements.

*Effective March 1, 2020, the following information replaces similar information for the Fund found in the section titled **Fees and Expenses of the Fund** (page 98 of the Prospectus):*

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | <u>Class I</u> | <u>Class R5</u> | <u>Service Class</u> | <u>Adminis- trative Class</u> | <u>Class A</u> | <u>Class R4</u> | <u>Class R3</u> |
|--|----------------|-----------------|----------------------|-----------------------------------|----------------|-----------------|-----------------|
| Management Fees | .80% | .80% | .80% | .80% | .80% | .80% | .80% |
| Distribution and Service (Rule 12b-1) | | | | | | | |
| Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .07% | .17% | .27% | .37% | .37% | .27% | .27% |
| Total Annual Fund Operating Expenses . . | .87% | .97% | 1.07% | 1.17% | 1.42% | 1.32% | 1.57% |
| Expense Reimbursement | (.08%) | (.08%) | (.08%) | (.08%) | (.08%) | (.08%) | (.08%) |
| Total Annual Fund Operating Expenses after Expense Reimbursement ⁽¹⁾ | .79% | .89% | .99% | 1.09% | 1.34% | 1.24% | 1.49% |

(1) The expenses in the above table reflect a written agreement by MML Advisers to cap the fees and expenses of the Fund (other than extraordinary litigation and legal expenses, Acquired Fund Fees and Expenses, interest expense, short sale dividend and loan expense, or other non-recurring or unusual expenses such as organizational expenses and shareholder meeting expenses, as applicable) through January 31, 2022, to the extent that Total Annual Fund Operating Expenses after Expense Reimbursement would otherwise exceed .79%, .89%, .99%, 1.09%, 1.34%, 1.24%, and 1.49% for Classes I, R5, Service, Administrative, A, R4, and R3, respectively. The Total Annual Fund Operating Expenses after Expense Reimbursement shown in the above table may exceed these amounts, because, as noted in the previous sentence, certain fees and expenses are excluded from the cap. The agreement can only be terminated by mutual consent of the Board of Trustees on behalf of the Fund and MML Advisers.

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | <u>1 Year</u> | <u>3 Years</u> | <u>5 Years</u> | <u>10 Years</u> |
|--------------------------------|---------------|----------------|----------------|-----------------|
| Class I | \$ 81 | \$262 | \$ 467 | \$1,058 |
| Class R5 | \$ 91 | \$293 | \$ 521 | \$1,175 |
| Service Class | \$101 | \$325 | \$ 575 | \$1,291 |
| Administrative Class | \$111 | \$356 | \$ 629 | \$1,406 |
| Class A | \$679 | \$960 | \$1,270 | \$2,146 |
| Class R4 | \$126 | \$403 | \$ 708 | \$1,576 |
| Class R3 | \$152 | \$480 | \$ 840 | \$1,854 |

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

B3001M-20-02
O-20-01

MASSMUTUAL SELECT FUNDS
MassMutual Select Fundamental Growth Fund
(the “Fund”)
Supplement dated February 1, 2020 to the
Prospectus dated February 1, 2020 and the
Summary Prospectus dated February 1, 2020

This supplement provides new and additional information beyond that contained in the Prospectus and Summary Prospectus. It should be retained and read in conjunction with the Prospectus and Summary Prospectus.

*Effective March 2, 2020, **Westfield Capital Management Company, L.P.** (“Westfield”) will be added as a subadviser of the Fund.*

*Effective March 2, 2020, the following information replaces the information for the Fund found under the heading **Principal Investment Strategies** in the section titled **Investments, Risks, and Performance** (beginning on Page 44 of the Prospectus):*

The Fund invests primarily in domestic equity securities that the Fund’s subadvisers believe offer the potential for long-term growth. The Fund is managed by two subadvisers, *Wellington Management Company LLP* (“Wellington Management”) and *Westfield Capital Management Company, L.P.* (“Westfield”), each being responsible for a portion of the portfolio, although they may manage different amounts of the Fund’s assets. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, rights, and warrants. While the Fund may invest in issuers of any size, the Fund currently focuses on securities of mid-capitalization companies. While most assets will be invested in equity securities of U.S. companies, the Fund may also invest up to 20% of its total assets in foreign securities and American Depositary Receipts (“ADRs”), including emerging market securities. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

Westfield invests primarily in stocks of domestic growth companies that it believes have a demonstrated record of achievement with excellent prospects for earnings growth over a 1 to 3 year period. In choosing securities, Westfield looks for companies that it believes are reasonably priced with high forecasted earnings potential.

Westfield generally will sell a security if one or more of the following occurs: Westfield’s predetermined price target objective is exceeded; there is an alteration to the original investment case; valuation relative to the stock’s peer group is no longer attractive; or better risk/reward opportunities may be found in other stocks.

Wellington Management seeks to outperform the Russell Midcap Growth Index over full market cycles by investing in secular growth companies with high returns on invested capital that are attractively priced relative to their long-term earnings power. Key stock selection criteria include long-term earnings power, forecasted Return on Invested Capital, valuation, and quantitative risk factors. Portfolio weights are selected using a risk-based approach. The portfolio management process seeks to minimize sector risk as sector allocation is a fallout of the bottom-up security selection process.

Wellington Management will generally sell a security if one or more of the following occurs: the stock price rises to a point where the risk/reward outlook for the company is no longer considered attractive; company fundamentals deteriorate or the investment thesis changes; more attractive investment candidates are identified; or market capitalization exceeds guidelines.

Effective March 2, 2020, the following information replaces similar information for the Fund found in the Average Annual Total Returns table under the heading **Performance Information** in the section titled **Investments, Risks, and Performance** (on page 47 of the Prospectus) for the **Fundamental Growth Fund**:

Average Annual Total Returns
(for the periods ended December 31, 2019)

| | One Year | Five Years | Ten Years |
|---|-------------|---------------|--------------|
| Russell Midcap Growth Index (reflects no deduction for fees, expenses, or taxes) ⁽¹⁾ | 35.47% | 11.60% | 14.24% |
| Russell 1000 Growth Index (reflects no deduction for fees, expenses, or taxes) | 36.39% | 14.63% | 15.22% |

(1) Going forward, the Fund's performance benchmark index will be the Russell Midcap Growth Index rather than the Russell 1000 Growth Index because the Russell Midcap Growth Index more closely represents the Fund's investment strategy.

Effective March 2, 2020, the following information replaces the information for the Fund found under the headings **Subadviser** and **Portfolio Managers** in the section titled **Management** (page 47 of the Prospectus):

Subadviser(s): Wellington Management Company LLP ("Wellington Management")

Westfield Capital Management Company, L.P. ("Westfield")

Portfolio Manager(s):

Timothy N. Manning is a Senior Managing Director and Equity Portfolio Manager at Wellington Management. He has managed the Fund since March 2020.

Richard D. Lee, CFA is Managing Partner and Deputy Chief Investment Officer at Westfield. He has managed the Fund since March 2020.

Ethan J. Meyers, CFA is Managing Partner and Director of Research at Westfield. He has managed the Fund since March 2020.

William A. Muggia is President, Chief Executive Officer, Chief Investment Officer, and Managing Partner at Westfield. He has managed the Fund since March 2020.

Effective March 2, 2020, the following information replaces similar information found on page 138 of the Prospectus under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds**:

Wellington Management Company LLP ("Wellington Management"), a Delaware limited liability partnership with principal offices located at 280 Congress Street, Boston, Massachusetts 02210, manages a portion of the portfolio of the **Equity Opportunities Fund**, **Fundamental Growth Fund**, **Small Cap Value Equity Fund**, and **Small Cap Growth Equity Fund**. Wellington Management is a professional investment counseling firm which provides investment services to investment companies, employee benefit plans, endowments, foundations, and other institutions. Wellington Management and its predecessor organizations have provided investment advisory services for over 80 years. Wellington Management is owned by the partners of Wellington Management Group LLP, a Massachusetts limited liability partnership. As of November 30, 2019, Wellington Management and its investment advisory affiliates had investment management authority with respect to approximately \$1.0 trillion in assets.

Effective March 2, 2020, the following information replaces the information found on page 139 related to the **Fundamental Growth Fund** under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds**:

Timothy N. Manning

has served as the portfolio manager of a portion of the **Fundamental Growth Fund** since March 2020. Mr. Manning is a Senior Managing Director and Equity Portfolio Manager of Wellington Management and joined the firm as an investment professional in 2007.

*Effective March 2, 2020, the following information supplements the information found beginning on page 128 under the heading **Subadvisers and Portfolio Managers** in the section titled **Management of the Funds**:*

Westfield Capital Management, L.P. (“Westfield”), located at One Financial Center, Boston, Massachusetts 02111, manages a portion of the portfolio of the ***Fundamental Growth Fund***. Westfield has been a registered investment adviser since 1989. Westfield is majority employee owned. As of November 30, 2019, Westfield managed approximately \$13.8 billion in assets.

Investment decisions for the Fund are made by consensus of the Westfield Investment Committee (the “Committee”), which is chaired by William A. Muggia. Although the Committee collectively acts as portfolio manager for the Fund, Westfield lists the following Committee members, based either on seniority or role within the Committee, as having day-to-day management responsibilities.

Westfield was added as a subadviser of the Fundamental Growth Fund on March 2, 2020.

Richard D. Lee, CFA

is a Managing Partner and Deputy Chief Investment Officer of Westfield, and a portfolio manager of a portion of the ***Fundamental Growth Fund***. Mr. Lee covers Hardware and Semiconductors. He has been at Westfield since 2004 and has managed the Fundamental Growth Fund since March 2020.

Ethan J. Meyers, CFA

is a Managing Partner and Director of Research of Westfield, and a portfolio manager of a portion of the ***Fundamental Growth Fund***. Mr. Meyers covers Consumer, Financials, and Business Services. He has been at Westfield since 1999 and has managed the Fundamental Growth Fund since March 2020.

William A. Muggia

is President, Chief Executive Officer, Chief Investment Officer, and Managing Partner of Westfield, and a portfolio manager of a portion of the ***Fundamental Growth Fund***. Mr. Muggia covers the Healthcare and Energy sectors, as well as provides overall market strategy. He has been at Westfield since 1994 and has managed the Fundamental Growth Fund since March 2020.

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MassMutual Select Total Return Bond Fund

INVESTMENT OBJECTIVE

This Fund seeks maximum total return, consistent with preservation of capital and prudent investment management.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 4.25% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|-------------|-------------|--------------|
| Management Fees | .30% | .30% | .30% | .30% | .30% | .30% | .30% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .06% | .16% | .26% | .36% | .36% | .26% | .26% |
| Total Annual Fund Operating Expenses | .36% | .46% | .56% | .66% | .91% | .81% | 1.06% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 37 | \$116 | \$202 | \$ 456 |
| Class R5 | \$ 47 | \$148 | \$258 | \$ 579 |
| Service Class | \$ 57 | \$179 | \$313 | \$ 701 |
| Administrative Class | \$ 67 | \$211 | \$368 | \$ 822 |
| Class A | \$514 | \$703 | \$907 | \$1,497 |
| Class R4 | \$ 83 | \$259 | \$450 | \$1,002 |
| Class R3 | \$108 | \$337 | \$585 | \$1,294 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 217% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in a diversified portfolio of investment grade fixed income securities (rated Baa3 or higher by Moody's, BBB- or higher by Standard & Poor's, BBB- or higher by Fitch, or A-2 by S&P, P-2 by Moody's, or F-2 by Fitch for short-term debt obligations, or, if unrated, determined by the Fund's subadviser, *Metropolitan West Asset Management, LLC* ("MetWest"), to be of comparable quality). These typically include bonds, notes, collateralized bond obligations, collateralized debt obligations, mortgage-related and asset-backed securities, municipal securities, private placements, and securities subject to legal restrictions on resale pursuant to Rule 144A. These investments may have interest rates that are fixed, variable, or floating. The Fund invests in securities of varying maturities issued by domestic and foreign corporations and governments (and their agencies and instrumentalities). MetWest focuses the Fund's portfolio holdings in areas of the bond market (based on quality, sector, coupon, or

maturity) that the subadviser believes to be relatively undervalued.

The Fund may invest up to 20% of its net assets in below investment grade debt securities (“junk” or “high yield” bonds), including securities in default and bank loans. In the event that a security is downgraded after its purchase by the Fund, the Fund may continue to hold the security if MetWest considers doing so would be consistent with the Fund’s investment objective.

The Fund may invest up to 25% of its total assets in foreign securities that are denominated in U.S. dollars. The Fund may also invest up to 15% of its total assets in foreign securities that are not denominated in U.S. dollars and up to 10% of its total assets in emerging market foreign securities.

The Fund may but will not necessarily engage in foreign currency forward transactions to take long or short positions in foreign currencies in order to seek to enhance the Fund’s investment return or to seek to hedge or to attempt to protect against adverse changes in currency exchange rates. In pursuing its investment objective, the Fund may (but is not obligated to) use a wide variety of exchange-traded and over-the-counter derivatives, including options, futures contracts, and swap contracts for hedging or investment purposes as a substitute for investing directly in securities or to adjust various portfolio characteristics, including the duration (interest rate volatility) of the Fund’s portfolio. Use of derivatives by the Fund may create investment leverage.

The Fund may purchase and sell securities on a when-issued, delayed delivery, or forward commitment basis. The Fund may normally short sell up to 25% of the value of its total assets for hedging or investment purposes.

The Fund may also invest in money market securities, including commercial paper. The Fund may enter into repurchase agreement transactions. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents. The Fund may enter into dollar roll or reverse repurchase agreement transactions.

MetWest intends for the Fund’s portfolio duration to be between two to eight years. The dollar-weighted average maturity of the Fund’s portfolio is expected to range from two to fifteen years. Duration measures the price sensitivity of a bond to changes in interest rates. Duration is the dollar weighted average time to maturity of a bond utilizing the present value of all future cash flows.

MetWest employs a value-oriented fixed income management philosophy with a goal of consistently outperforming the portfolio benchmark while maintaining volatility similar to the benchmark. The investment process is predicated on a long-term economic outlook, which is determined by the investment team on a quarterly basis and is reviewed constantly. Investments are characterized by diversification among the sectors of the fixed income marketplace. The investment management team seeks to achieve the desired outperformance through the measured and disciplined application of five fixed income management strategies which include duration management, yield curve positioning, sector allocation, security selection, and opportunistic execution.

The first three strategies are top-down in orientation and start with a decision of where within the plus-or-minus one year range around the benchmark the duration should be established. Then comes a determination of how the overall average duration is to be effected – with a concentration of intermediate maturity issues or a combination of long- and short-term issues. The relative value decision regarding where to overweight/underweight sectors, including governments, agencies, corporates, mortgages, or asset-backed securities, is dependent on the current market environment. Bottom-up security selection involves the day-to-day fundamental analysis of available bond market opportunities, while execution is characterized by the aggressive and informed negotiation of the prices at which transactions take place.

The Fund expects that it will engage in active and frequent trading and so will typically have a relatively high portfolio turnover rate.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund’s portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Fixed Income Securities Risk The values of fixed income securities typically will decline during

periods of rising interest rates, and can also decline in response to changes in the financial condition of the issuer, borrower, counterparty, or underlying collateral assets, or changes in market, economic, industry, political, and regulatory conditions affecting a particular type of security or issuer or fixed income securities generally. Certain events, such as market or economic developments, regulatory or government actions, natural disasters, terrorist attacks, war, and other geopolitical events can have a dramatic adverse effect on the debt market and the overall liquidity of the market for fixed income securities. During those periods, the Fund may experience high levels of shareholder redemptions, and may have to sell securities at times when the Fund would otherwise not do so, and potentially at unfavorable prices. Certain securities may be difficult to value during such periods. Fixed income securities are subject to interest rate risk (the risk that the value of a fixed income security will fall when interest rates rise), extension risk (the risk that the average life of a security will be extended through a slowing of principal payments), prepayment risk (the risk that a security will be prepaid and the Fund will be required to reinvest at a less favorable rate), and credit risk.

Bank Loans Risk Many of the risks associated with bank loans are similar to the risks of investing in below investment grade debt securities. Changes in the financial condition of the borrower or economic conditions or other circumstances may reduce the capacity of the borrower to make principal and interest payments on such instruments and may lead to defaults. Senior secured bank loans are typically supported by collateral; however the value of the collateral may be insufficient to cover the amount owed to the Fund, or the Fund may be prevented or delayed from realizing on the collateral. Some loans may be unsecured; unsecured loans generally present a greater risk of loss to the Fund if the issuer defaults. If the Fund relies on a third party to administer a loan, the Fund is subject to the risk that the third party will fail to perform its obligations. In addition, if the Fund holds only a participation interest in a loan made by a third party, the Fund's receipt of payments on the loan will depend on the third party's willingness and ability to make those payments to the Fund. The settlement time for certain loans is longer than the settlement time for many other types of investments, and the Fund may not receive the payment for a loan sold by it until well after the sale; that cash would be unavailable for payment of

redemption proceeds or for reinvestment. Interests in some bank loans may not be readily marketable and may be subject to restrictions on resale. In some cases, negotiations involved in disposing of indebtedness may require weeks to complete. Consequently, some indebtedness may be difficult or impossible to dispose of readily at what the Fund believes to be a fair price.

Below Investment Grade Debt Securities Risk Below investment grade debt securities, commonly known as "junk" or "high yield" bonds, have speculative characteristics and involve greater volatility of price and yield, greater risk of loss of principal and interest, and generally reflect a greater possibility of an adverse change in financial condition that could affect an issuer's ability to honor its obligations.

Credit Risk Credit risk is the risk that an issuer, guarantor, or liquidity provider of a fixed income security held by the Fund may be unable or unwilling, or may be perceived (whether by market participants, ratings agencies, pricing services or otherwise) as unable or unwilling, to make timely principal and/or interest payments, or to otherwise honor its obligations. The Fund may also be exposed to the credit risk of its counterparty to repurchase agreements, reverse repurchase agreements, swap transactions, and other derivatives transactions, and to the counterparty's ability or willingness to perform in accordance with the terms of the transaction. The value of such transactions to the Fund will depend on the willingness and ability of the counterparty to perform its obligations, including among other things the obligation to return collateral or margin to the Fund.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing

in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Mortgage- and Asset-Backed Securities

Risk Investments in mortgage- and asset-backed securities subject the Fund to credit risk, interest rate risk, extension risk, and prepayment risk, among other risks. Mortgage-backed and asset-backed securities not issued by a government agency generally involve greater credit risk than securities issued by government agencies. Payment of principal and interest generally depends on the cash flows generated by the underlying assets and the terms of the security. The types of mortgages (for example, residential or commercial mortgages) underlying securities held by the Fund may differ and be affected differently by market factors. Investments that receive only the interest portion or the principal portion of payments on the underlying assets may be highly volatile. Litigation with respect to the representations and warranties given in connection with the issuance of mortgage-backed securities can be an important consideration in investing in such securities, and the outcome of any such litigation could significantly impact the value of the Fund's mortgage-backed investments.

Short Sales Risk If the Fund sells a security short, it will make money if the security's price goes down (in an amount greater than any transaction costs) and will lose money if the security's price goes up. There is no limit on the amount of money the Fund may lose on a short sale. The Fund may not be able to close out a short sale when it might wish to do so, or may only do so at an unfavorable price. Short sales can involve leverage. If the Fund invests the proceeds from short positions in other securities the Fund could lose money both on the short positions and on the securities in which it has invested the short proceeds.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Defaulted and Distressed Securities Risk Because the issuer of such securities is in default and is likely to be in distressed financial condition, repayment of defaulted securities and obligations of distressed issuers (including insolvent issuers or issuers in payment or covenant default, in workout or restructuring, or in bankruptcy or insolvency proceedings) is uncertain.

Dollar Roll and Reverse Repurchase Agreement Transaction Risk These transactions generally create leverage and subject the Fund to the credit risk of the counterparty.

Frequent Trading/Portfolio Turnover Risk Portfolio turnover generally involves some expense to the Fund and may result in the realization of taxable capital gains (including short-term gains). The trading costs and tax effects associated with portfolio turnover may adversely affect the Fund's performance.

Inflation Risk The value of assets or income from the Fund's investments will be less in the future as inflation decreases the value of money. As inflation increases, the value of the Fund's assets can decline as can the value of the Fund's distributions.

Leveraging Risk Instruments and transactions, including derivatives, dollar roll, and reverse repurchase agreement transactions, that create leverage may cause the value of an investment in the Fund to be more volatile, could result in larger losses than if they were not used, and tend to compound the effects of other risks.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Repurchase Agreement Risk These transactions must be fully collateralized at all times, but involve some risk to a Fund if the other party should default on its obligation and the Fund is delayed or prevented from recovering the collateral.

Restricted Securities Risk The Fund may hold securities that are restricted as to resale under the U.S. federal securities laws, such as securities in certain privately held companies. Such securities may be highly illiquid and their values may experience significant volatility. Restricted securities may be difficult to value.

Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Sovereign Debt Obligations Risk Investments in debt securities issued by governments or by government agencies and instrumentalities involve the risk that the governmental entities responsible for repayment may be unable or unwilling to pay interest and repay principal when due. Many sovereign debt obligations may be rated below investment grade ("junk" or "high yield" bonds). Any restructuring of a sovereign debt obligation held by the Fund will likely have a significant adverse effect on the value of the obligation. In the event of default of sovereign debt, the Fund may be unable to pursue legal action against the sovereign issuer or to realize on collateral securing the debt.

U.S. Government Securities Risk Obligations of certain U.S. Government agencies and instrumentalities are not backed by the full faith and credit of the U.S. Government, and there can

be no assurance that the U.S. Government would provide financial support to such agencies and instrumentalities.

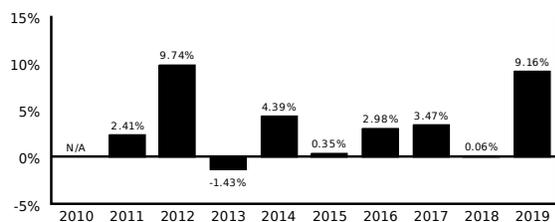
Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

When-Issued, Delayed Delivery, TBA, and Forward Commitment Transaction Risk These transactions may create leverage and involve a risk of loss if the value of the securities declines prior to settlement.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class I shares. The table shows how the Fund's average annual returns for 1 and 5 years, and since inception, compare with those of a broad measure of market performance. The Fund's name and investment strategy changed on October 27, 2014. The performance results shown below would not necessarily have been achieved had the Fund's current investment strategy been in effect for the entire period for which performance results are presented. Performance for Class A shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class A expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class I Shares



Highest Quarter: 3Q '12, 3.36% Lowest Quarter: 2Q '13, -3.30%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and

local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class I only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | | One Year | Five Years | Since Inception (07/06/10) |
|---|--|----------|------------|----------------------------|
| Class I | Return Before Taxes | 9.16% | 3.15% | 3.55% |
| | Return After Taxes on Distributions | 7.84% | 1.78% | 2.20% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 5.42% | 1.80% | 2.20% |
| Class R5 | Return Before Taxes | 9.04% | 3.06% | 3.42% |
| Service Class | Return Before Taxes | 8.91% | 2.94% | 3.32% |
| Administrative Class | Return Before Taxes | 8.78% | 2.85% | 3.22% |
| Class A | Return Before Taxes | 4.01% | 1.73% | 2.38% |
| Class R4 | Return Before Taxes | 8.61% | 2.71% | 3.09% |
| Class R3 | Return Before Taxes | 8.40% | 2.46% | 2.84% |
| Bloomberg Barclays U.S. Aggregate Bond Index (reflects no deduction for fees, expenses, or taxes) | | | | |
| | | 8.72% | 3.05% | 3.39% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC ("MML Advisers")

Subadviser(s): Metropolitan West Asset Management, LLC ("MetWest")

Portfolio Manager(s):

Stephen M. Kane, CFA is a Group Managing Director and a Generalist Portfolio Manager at MetWest. He has managed the Fund since October 2014.

Laird R. Landmann is the President and a Generalist Portfolio Manager at MetWest. He has managed the Fund since October 2014.

Tad Rivelle is the Chief Investment Officer and a Generalist Portfolio Manager at MetWest. He has managed the Fund since October 2014.

Bryan T. Whalen, CFA is a Group Managing Director and a Generalist Portfolio Manager at MetWest. He has managed the Fund since October 2014.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Strategic Bond Fund

INVESTMENT OBJECTIVE

This Fund seeks a superior total rate of return by investing in fixed income instruments.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 4.25% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|--------------|-------------|--------------|
| Management Fees | .38% | .38% | .38% | .38% | .38% | .38% | .38% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .11% | .21% | .31% | .41% | .41% | .31% | .31% |
| Total Annual Fund Operating Expenses | .49% | .59% | .69% | .79% | 1.04% | .94% | 1.19% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 50 | \$157 | \$274 | \$ 616 |
| Class R5 | \$ 60 | \$189 | \$329 | \$ 738 |
| Service Class | \$ 70 | \$221 | \$384 | \$ 859 |
| Administrative Class | \$ 81 | \$252 | \$439 | \$ 978 |
| Class A | \$527 | \$742 | \$975 | \$1,642 |
| Class R4 | \$ 96 | \$300 | \$520 | \$1,155 |
| Class R3 | \$121 | \$378 | \$654 | \$1,443 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 262% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in U.S. dollar-denominated fixed income securities and other debt instruments of domestic and foreign entities, including corporate bonds, securities issued or guaranteed as to principal or interest by the U.S. Government or its agencies or instrumentalities, mortgage-backed securities, and money market instruments. The Fund may invest up to 20% of its total assets in non-U.S. dollar-denominated securities of these entities. The Fund may also invest in emerging markets. The Fund may but will not necessarily engage in foreign currency transactions, including forward contracts, options on currency, futures contracts, and swap contracts, to attempt to seek to hedge or to protect against adverse changes in currency exchange rates. In pursuing its investment objective, the Fund may (but is not obligated to) use a wide variety of additional exchange-traded and over-the-counter derivatives, including futures contracts (for hedging purposes or to adjust various portfolio characteristics, including the duration (interest rate

volatility) of the Fund's portfolio); interest rate swaps (for hedging purposes or to adjust various portfolio characteristics, including the duration (interest rate volatility) of the Fund's portfolio); credit default swaps (for hedging purposes, to earn additional income, or as a substitute for direct investments); and hybrid instruments (as a substitute for direct investments). The Fund may also purchase and sell exchange-traded and over-the-counter options for hedging purposes, to adjust various portfolio characteristics, including the duration (interest rate volatility) of the Fund's portfolio, or as a substitute for direct investments. Use of derivatives by the Fund may create investment leverage. The Fund may also invest in money market securities, including commercial paper. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents. The Fund is managed by two subadvisers, each being responsible for a portion of the portfolio, although they may manage different amounts of the Fund's assets.

The Fund invests primarily in investment grade securities (rated Baa or higher by Moody's or BBB or higher by Standard & Poor's, or, if unrated, determined by the subadviser to be of comparable quality), but may invest up to 25% of the portfolio in below investment grade debt securities ("junk" or "high yield" bonds), including securities in default. In the event that a security is downgraded after its purchase by the Fund, the Fund may continue to hold the security if *Western Asset Management Company, LLC* ("Western Asset"), a subadviser of the Fund, considers that doing so would be consistent with the Fund's investment objective. Certain fixed income securities in which the Fund may invest pay interest at variable or floating rates. Variable rate securities tend to reset at specified intervals, while floating rate securities may reset upon a change in a specified index rate. In most cases, these reset provisions reduce the impact of changes in market interest rates on the value of the security. However, some securities do not track the underlying index directly, but reset based on formulas that may produce a leveraging effect; others may also provide for interest payments that vary inversely with market rates. The market prices of these securities may fluctuate significantly when interest rates change. The Fund may also acquire, and subsequently hold, warrants and other equity interests. The Fund's effective duration is normally expected to be between three and eight years. If the Fund's effective duration falls outside of this range, the Fund will take action

to bring it within its expected range within a reasonable period of time. Duration measures the price sensitivity of a bond to changes in interest rates. Duration is the dollar weighted average time to maturity of a bond utilizing the present value of all future cash flows. Effective duration measures the price sensitivity of a bond with embedded options to changes in interest rates. It provides a more accurate measure of price volatility when, due to the embedded options, the cash flow characteristics of the bond change as interest rates shift.

Western Asset invests in the fixed income markets seeking to exceed returns of the Fund's benchmark while approximating benchmark risk. Western Asset focuses on sector allocation, issue selection, duration weighting, and term structure when buying and selling securities for the Fund. Western Asset emphasizes diversification, the use of multiple strategies and identification of long-term trends. The three key factors that determine the allocation decisions for the Fund are: Western Asset's broad economic outlook, its review of historical yield spreads for debt instruments versus Treasuries, and its evaluation of changes in credit quality and the corresponding impact on prices. Western Asset will determine the portion of the Fund's assets to be allocated to non-U.S. dollar denominated securities from time to time. *Western Asset Management Company Limited* ("Western Asset Limited"), an affiliate of Western Asset, has subadvisory responsibility for Western Asset's non-U.S. dollar denominated investments. Western Asset Limited will select such investments based on its consideration of factors such as relative interest rates, inflation rates, exchange rates, monetary and fiscal policies, and trade and current account balances.

The Fund expects that it will engage in active and frequent trading and so will typically have a relatively high portfolio turnover rate.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Fixed Income Securities Risk The values of fixed income securities typically will decline during periods of rising interest rates, and can also decline in response to changes in the financial condition of the issuer, borrower, counterparty, or underlying collateral assets, or changes in market, economic, industry, political, and regulatory conditions affecting a particular type of security or issuer or fixed income securities generally. Certain events, such as market or economic developments, regulatory or government actions, natural disasters, terrorist attacks, war, and other geopolitical events can have a dramatic adverse effect on the debt market and the overall liquidity of the market for fixed income securities. During those periods, the Fund may experience high levels of shareholder redemptions, and may have to sell securities at times when the Fund would otherwise not do so, and potentially at unfavorable prices. Certain securities may be difficult to value during such periods. Fixed income securities are subject to interest rate risk (the risk that the value of a fixed income security will fall when interest rates rise), extension risk (the risk that the average life of a security will be extended through a slowing of principal payments), prepayment risk (the risk that a security will be prepaid and the Fund will be required to reinvest at a less favorable rate), and credit risk.

Below Investment Grade Debt Securities Risk Below investment grade debt securities, commonly known as “junk” or “high yield” bonds, have speculative characteristics and involve greater volatility of price and yield, greater risk of loss of principal and interest, and generally reflect a greater possibility of an adverse change in financial condition that could affect an issuer’s ability to honor its obligations.

Credit Risk Credit risk is the risk that an issuer, guarantor, or liquidity provider of a fixed income security held by the Fund may be unable or unwilling, or may be perceived (whether by market participants, ratings agencies, pricing services or otherwise) as unable or unwilling, to make timely principal and/or interest payments, or to otherwise honor its obligations. The Fund may also be exposed to the credit risk of its counterparty to repurchase agreements, reverse repurchase agreements, swap transactions, and other derivatives transactions, and to the counterparty’s ability or willingness to perform in accordance with the terms of the transaction. The value of such transactions to the Fund will depend on the willingness and ability of the counterparty to

perform its obligations, including among other things the obligation to return collateral or margin to the Fund.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives’ original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund’s investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund’s assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions

on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Mortgage- and Asset-Backed Securities

Risk Investments in mortgage- and asset-backed securities subject the Fund to credit risk, interest rate risk, extension risk, and prepayment risk, among other risks. Mortgage-backed and asset-backed securities not issued by a government agency generally involve greater credit risk than securities issued by government agencies. Payment of principal and interest generally depends on the cash flows generated by the underlying assets and the terms of the security. The types of mortgages (for example, residential or commercial mortgages) underlying securities held by the Fund may differ and be affected differently by market factors. Investments that receive only the interest portion or the principal portion of payments on the underlying assets may be highly volatile. Litigation with respect to the representations and warranties given in connection with the issuance of mortgage-backed securities can be an important

consideration in investing in such securities, and the outcome of any such litigation could significantly impact the value of the Fund's mortgage-backed investments.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Defaulted and Distressed Securities Risk Because the issuer of such securities is in default and is likely to be in distressed financial condition, repayment of defaulted securities and obligations of distressed issuers (including insolvent issuers or issuers in payment or covenant default, in workout or restructuring, or in bankruptcy or insolvency proceedings) is uncertain.

Frequent Trading/Portfolio Turnover Risk Portfolio turnover generally involves some expense to the Fund and may result in the realization of taxable capital gains (including short-term gains). The trading costs and tax effects associated with portfolio turnover may adversely affect the Fund's performance.

Inflation Risk The value of assets or income from the Fund's investments will be less in the future as inflation decreases the value of money. As inflation increases, the value of the Fund's assets can decline as can the value of the Fund's distributions.

Leveraging Risk Instruments and transactions, including derivatives, that create leverage may cause the value of an investment in the Fund to be more volatile, could result in larger losses than if they were not used, and tend to compound the effects of other risks.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of

investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund’s portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund’s portfolio, and the Fund’s performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Sovereign Debt Obligations Risk Investments in debt securities issued by governments or by government agencies and instrumentalities involve the risk that the governmental entities responsible for repayment may be unable or unwilling to pay interest and repay principal when due. Many sovereign debt obligations may be rated below investment grade (“junk” or “high yield” bonds). Any restructuring of a sovereign debt obligation held by the Fund will likely have a significant adverse effect on the value of the obligation. In the event of default of sovereign debt, the Fund may be unable to pursue legal action against the sovereign issuer or to realize on collateral securing the debt.

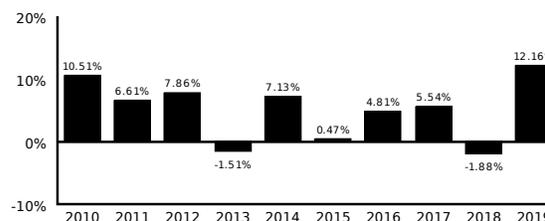
U.S. Government Securities Risk Obligations of certain U.S. Government agencies and instrumentalities are not backed by the full faith and credit of the U.S. Government, and there can be no assurance that the U.S. Government would provide financial support to such agencies and instrumentalities.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund’s performance from year to year for Class R5 shares. The table shows how the Fund’s average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Performance for Class I and Class R4 shares of the Fund for periods prior to their inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 shares to reflect Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class R5 Shares



Highest Quarter: 1Q '19, 4.12% Lowest Quarter: 2Q '13, -3.08%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor’s tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns
(for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|---|--|---------------------|-----------------------|----------------------|
| Class R5 | Return Before Taxes | 12.16% | 4.11% | 5.07% |
| | Return After Taxes on Distributions | 10.35% | 2.84% | 3.68% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 7.23% | 2.59% | 3.35% |
| Class I | Return Before Taxes | 12.31% | 4.22% | 5.13% |
| Service Class | Return Before Taxes | 12.02% | 3.99% | 4.98% |
| Administrative Class | Return Before Taxes | 12.00% | 3.91% | 4.87% |
| | Class A | Return Before Taxes | 6.92% | 2.74% |
| Class R4 | Return Before Taxes | 11.80% | 3.75% | 4.71% |
| Class R3 | Return Before Taxes | 11.56% | 3.50% | 4.38% |
| Bloomberg Barclays U.S. Aggregate Bond Index (reflects no deduction for fees, expenses, or taxes) | | 8.72% | 3.05% | 3.75% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): Western Asset Management Company, LLC (formerly known as Western Asset Management Company) (“Western Asset”)

Western Asset Management Company Limited (“Western Asset Limited”)

Portfolio Manager(s):

John L. Bellows, CFA, PhD is a Portfolio Manager at Western Asset and Western Asset Limited. He has managed the Fund since February 2020.

S. Kenneth Leech is the Chief Investment Officer and a Portfolio Manager at Western

Asset and Western Asset Limited. He has managed the Fund since March 2014.

Mark S. Lindbloom is a Portfolio Manager at Western Asset and Western Asset Limited. He has managed the Fund since December 2005.

Frederick R. Marki, CFA is a Portfolio Manager at Western Asset and Western Asset Limited. He has managed the Fund since February 2020.

Julien A. Scholnick, CFA is a Portfolio Manager at Western Asset and Western Asset Limited. He has managed the Fund since February 2020.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select BlackRock Global Allocation Fund

INVESTMENT OBJECTIVE

The Fund seeks long-term total return.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|--------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .78% | .78% | .78% | .78% | .78% | .78% | .78% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .15% | .25% | .35% | .45% | .45% | .35% | .35% |
| Other Expenses of the Select Cayman Fund | .02% | .02% | .02% | .02% | .02% | .02% | .02% |
| Remainder of Other Expenses | .13% | .23% | .33% | .43% | .43% | .33% | .33% |
| Total Annual Fund Operating Expenses | .93% | 1.03% | 1.13% | 1.23% | 1.48% | 1.38% | 1.63% |
| Expense Reimbursement | (.14%) | (.14%) | (.14%) | (.14%) | (.14%) | (.14%) | (.14%) |
| Total Annual Fund Operating Expenses after Expense Reimbursement ⁽¹⁾ | .79% | .89% | .99% | 1.09% | 1.34% | 1.24% | 1.49% |

- (1) The expenses in the above table reflect a written agreement by MML Advisers to cap the fees and expenses of the Fund (other than extraordinary litigation and legal expenses, Acquired Fund Fees and Expenses, interest expense, short sale dividend and loan expense, or other non-recurring or unusual expenses such as organizational expenses and shareholder meeting expenses, as applicable) through January 31, 2021, to the extent that Total Annual Fund Operating Expenses after Expense Reimbursement would otherwise exceed .79%, .89%, .99%, 1.09%, 1.34%, 1.24%, and 1.49%

for Classes I, R5, Service, Administrative, A, R4, and R3, respectively. The Total Annual Fund Operating Expenses after Expense Reimbursement shown in the above table may exceed these amounts, because, as noted in the previous sentence, certain fees and expenses are excluded from the cap. The agreement can only be terminated by mutual consent of the Board of Trustees on behalf of the Fund and MML Advisers.

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 81 | \$282 | \$ 501 | \$1,130 |
| Class R5 | \$ 91 | \$314 | \$ 555 | \$1,247 |
| Service Class | \$101 | \$345 | \$ 609 | \$1,362 |
| Administrative Class | \$111 | \$376 | \$ 662 | \$1,476 |
| Class A | \$679 | \$979 | \$1,301 | \$2,210 |
| Class R4 | \$126 | \$423 | \$ 742 | \$1,645 |
| Class R3 | \$152 | \$501 | \$ 873 | \$1,921 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 174% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund seeks to achieve its objective by investing in both equity and debt securities, including money market securities and other short-term debt obligations, of issuers located around the world, including emerging markets, without limitation on

the percentage of assets the Fund can invest in a particular type of security. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, securities or other investments whose price is linked to the value of common stock, rights, and warrants, of issuers of any size, or type, including growth and value companies. The Fund may buy debt securities of varying maturities, debt securities paying a fixed or floating rate of interest, and debt securities of any kind, including, by way of example, securities issued or guaranteed by the U.S. Government or its agencies and instrumentalities, by foreign governments or international agencies or supranational entities, or by domestic or foreign private issuers, mortgage-backed or other asset-backed securities, debt securities convertible into equity securities, inflation-indexed bonds, structured notes, credit-linked notes, loan assignments, and loan participations. Debt securities in which the Fund invests may be investment grade debt securities, meaning that they will be rated at least Baa by Moody's or BBB by Standard & Poor's, or if unrated will be considered by the Fund's subadviser, *BlackRock Investment Management, LLC* ("BlackRock"), to be of comparable quality, or below investment grade debt securities ("junk" or "high yield" bonds). The Fund may invest up to 35% of its total assets in below investment grade debt securities, corporate loans, and distressed securities. In the event that a security is downgraded after its purchase by BlackRock, BlackRock may continue to hold the security if BlackRock considers that doing so would be consistent with the Fund's investment objective. BlackRock will invest in "junk" bonds, corporate loans, and distressed securities only when it believes that they will provide an attractive total return, relative to their risk, as compared to higher quality debt securities. BlackRock will invest in distressed securities when BlackRock believes they offer significant potential for higher returns or can be exchanged for other securities that offer this potential. However, there can be no assurance that the Fund will generally achieve these returns or that the issuer will make an exchange offer or adopt a plan of reorganization. The Fund may hold a portion of its assets in cash or cash equivalents.

In making investment decisions, BlackRock tries to identify the long term trends and changes that could benefit particular markets and/or industries relative to other markets and industries. BlackRock will consider a variety of factors when selecting

the markets, such as the rate of economic growth, natural resources, capital reinvestment, and the social and political environment. In deciding between equity and debt investments, BlackRock looks at a number of factors, such as the relative opportunity for capital appreciation, capital recovery risk, dividend yields, and the level of interest rates paid on debt securities of different maturities. The Fund may invest in individual securities, baskets of securities, or particular measurements of value or rate, and may consider a variety of factors and systematic inputs. BlackRock may employ derivatives for a variety of reasons, including but not limited to, adjusting its exposures to markets, sectors, asset classes, and securities. As a result, the economic exposure of the Fund to any particular market, sector, or asset class may vary relative to the market value of any particular exposure.

The Fund seeks to reduce volatility by allocating its assets broadly across markets, industries, and issuers and without geographic or market capitalization limits. BlackRock uses the Fund's investment flexibility to create a portfolio of assets allocated between equity and debt securities. The Fund may but will not necessarily engage in foreign currency transactions, including forward contracts, options on currency, futures contracts, contracts for difference and swap contracts, to take long or short positions in foreign currencies in order to seek to enhance the Fund's investment return or to seek to hedge or to attempt to protect against adverse changes in currency exchange rates. In pursuing its investment objective, the Fund may (but is not obligated to) use a wide variety of additional exchange-traded and over-the-counter derivatives, including options, futures contracts, indexed securities (securities whose return is based on changes in the value of a designated index), inverse securities (securities whose values vary inversely with changes in a specified index or interest rate), forward contracts, and swap contracts (including, but not limited to, contracts for difference) for hedging or investment purposes as a substitute for investing directly in securities. Use of derivatives by the Fund may create investment leverage.

Under normal circumstances, the Fund anticipates it will allocate a substantial amount (approximately 40% or more — unless market conditions are not deemed favorable by BlackRock, in which case the Fund would invest at least 30%) of its total assets in securities of (i) foreign government issuers, (ii) issuers organized or located outside the U.S.,

(iii) issuers which primarily trade in a market located outside the U.S., or (iv) issuers doing substantial business outside the U.S., which the Fund considers to be companies that derive at least 50% of their revenue or profits from business outside the U.S. or have at least 50% of their sales or assets outside the U.S. The Fund will allocate its assets among various regions and countries, including the U.S. (but in no less than three different countries).

The Fund has the ability to invest in other investment companies, such as exchange-traded funds, unit investment trusts, and open-end and closed-end funds. The Fund may invest a portion of its assets in real estate investment trusts (“REITs”) and securities related to real assets (like real estate or precious metals-related securities) such as stock, bonds, or convertible bonds issued by REITs or companies that mine precious metals. The Fund may purchase and sell securities on a when-issued, delayed delivery, or forward commitment basis. The Fund may sell securities short for hedging or investment purposes. The Fund will not make a short sale, other than a short sale “against the box,” if, after giving effect to such sale, the market value of all securities sold short exceeds 20% of its total assets.

The Fund may seek to provide exposure to the investment returns of real assets that trade in the commodity markets, including precious metals, agriculture, energy, livestock, or industrial metals. The Fund may obtain such exposure through, among other things, investments in issuers in commodities-related industries or in other investment vehicles that invest directly in commodities, commodities-related companies, or commodities-related investments, such as exchange-traded funds. The Fund may, but will not necessarily, invest in commodity-linked derivative instruments, including futures contracts, options, and swaps. In order to earn qualifying income under applicable tax rules from commodities and certain commodities-related investments, the Fund may invest up to 25% of its total assets in the MassMutual Select Cayman Global Allocation Fund I, Ltd. (the “Select Cayman Fund”), which was formed in the Cayman Islands and is a wholly-owned subsidiary of the Fund. The Select Cayman Fund may also hold cash and invest in other instruments, including fixed income securities, either as investments or to serve as margin or collateral for its derivative positions.

The Fund expects that it will engage in active and frequent trading and so will typically have a relatively high portfolio turnover rate.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund’s portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Fixed Income Securities Risk The values of fixed income securities typically will decline during periods of rising interest rates, and can also decline in response to changes in the financial condition of the issuer, borrower, counterparty, or underlying collateral assets, or changes in market, economic, industry, political, and regulatory conditions affecting a particular type of security or issuer or fixed income securities generally. Certain events, such as market or economic developments, regulatory or government actions, natural disasters, terrorist attacks, war, and other geopolitical events can have a dramatic adverse effect on the debt market and the overall liquidity of the market for fixed income securities. During those periods, the Fund may experience high levels of shareholder redemptions, and may have to sell securities at times when the Fund would otherwise not do so, and potentially at unfavorable prices. Certain securities may be difficult to value during such periods. Fixed income securities are subject to interest rate risk (the risk that the value of a fixed income security will fall when interest rates rise), extension risk (the risk that the average life of a security will be extended through a slowing of principal payments), prepayment risk (the risk that a security will be prepaid and the Fund will be required to reinvest at a less favorable rate), and credit risk.

Bank Loans Risk Many of the risks associated with bank loans are similar to the risks of investing

in below investment grade debt securities. Changes in the financial condition of the borrower or economic conditions or other circumstances may reduce the capacity of the borrower to make principal and interest payments on such instruments and may lead to defaults. Senior secured bank loans are typically supported by collateral; however the value of the collateral may be insufficient to cover the amount owed to the Fund, or the Fund may be prevented or delayed from realizing on the collateral. Some loans may be unsecured; unsecured loans generally present a greater risk of loss to the Fund if the issuer defaults. If the Fund relies on a third party to administer a loan, the Fund is subject to the risk that the third party will fail to perform its obligations. In addition, if the Fund holds only a participation interest in a loan made by a third party, the Fund's receipt of payments on the loan will depend on the third party's willingness and ability to make those payments to the Fund. The settlement time for certain loans is longer than the settlement time for many other types of investments, and the Fund may not receive the payment for a loan sold by it until well after the sale; that cash would be unavailable for payment of redemption proceeds or for reinvestment. Interests in some bank loans may not be readily marketable and may be subject to restrictions on resale. In some cases, negotiations involved in disposing of indebtedness may require weeks to complete. Consequently, some indebtedness may be difficult or impossible to dispose of readily at what the Fund believes to be a fair price.

Below Investment Grade Debt Securities Risk Below investment grade debt securities, commonly known as "junk" or "high yield" bonds, have speculative characteristics and involve greater volatility of price and yield, greater risk of loss of principal and interest, and generally reflect a greater possibility of an adverse change in financial condition that could affect an issuer's ability to honor its obligations.

Credit Risk Credit risk is the risk that an issuer, guarantor, or liquidity provider of a fixed income security held by the Fund may be unable or unwilling, or may be perceived (whether by market participants, ratings agencies, pricing services or otherwise) as unable or unwilling, to make timely principal and/or interest payments, or to otherwise honor its obligations. The Fund may also be exposed to the credit risk of its counterparty to repurchase agreements, reverse repurchase agreements, swap transactions, and other

derivatives transactions, and to the counterparty's ability or willingness to perform in accordance with the terms of the transaction. The value of such transactions to the Fund will depend on the willingness and ability of the counterparty to perform its obligations, including among other things the obligation to return collateral or margin to the Fund.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally

denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Growth Company Risk The prices of growth securities are often highly sensitive to market fluctuations because of their heavy dependence on future earnings or cash flow expectations, and can be more volatile than the market in general.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Mortgage- and Asset-Backed Securities

Risk Investments in mortgage- and asset-backed securities subject the Fund to credit risk, interest rate risk, extension risk, and prepayment risk, among other risks. Mortgage-backed and asset-backed securities not issued by a government agency generally involve greater credit risk than securities issued by government agencies. Payment of principal and interest generally depends on the cash flows generated by the underlying assets and the terms of the security. The types of mortgages (for example, residential or commercial mortgages) underlying securities held by the Fund may differ and be affected differently by market factors. Investments that receive only the interest portion or the principal portion of payments on the underlying assets may be highly volatile. Litigation with respect to the representations and warranties given in connection with the issuance of mortgage-backed securities can be an important consideration in investing in such securities, and the outcome of any such litigation could significantly impact the value of the Fund's mortgage-backed investments.

Short Sales Risk If the Fund sells a security short, it will make money if the security's price goes down (in an amount greater than any transaction costs) and will lose money if the security's price goes up. There is no limit on the amount of money the Fund may lose on a short sale. The Fund may not be able to close out a short sale when it might wish to do so, or may only do so at an unfavorable price. Short sales can involve leverage. If the Fund invests the proceeds from short positions in other securities the Fund could lose money both on the short positions and on the securities in which it has invested the short proceeds.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Value Company Risk The value investment approach entails the risk that the market will not recognize a security's intrinsic value for a long time,

or that a stock the investment adviser or subadviser judges to be undervalued may actually be appropriately priced.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Commodities-Related Investments Risk Commodity prices (including precious metals) can be extremely volatile and exposure to commodities can cause the net asset value of the Fund's shares to decline or fluctuate in a rapid and unpredictable manner. The values of physical commodities or commodity-linked derivative instruments may be affected by changes in overall market movements, real or perceived inflationary trends, commodity index volatility, changes in interest rates or currency exchange rates, population growth and changing demographics, international economic, political, and regulatory developments, or factors affecting a particular region, industry, or commodity. A liquid secondary market may not exist for certain commodity investments, which may make it difficult for the Fund to sell them at a desirable price or at the price at which it is carrying them.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Defaulted and Distressed Securities Risk Because the issuer of such securities is in default and is likely to be in distressed financial condition, repayment of defaulted securities and obligations of distressed issuers (including insolvent issuers or issuers in payment or covenant default, in workout or restructuring, or in bankruptcy or insolvency proceedings) is uncertain.

Frequent Trading/Portfolio Turnover Risk Portfolio turnover generally involves some expense to the Fund and may result in the realization of taxable capital gains (including short-term gains). The trading costs and tax effects associated with portfolio turnover may adversely affect the Fund's performance.

Leveraging Risk Instruments and transactions, including derivatives, that create leverage may cause

the value of an investment in the Fund to be more volatile, could result in larger losses than if they were not used, and tend to compound the effects of other risks.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

Real Estate Risk; REIT Risk Real estate-related investments may decline in value as a result of factors affecting the real estate industry, such as the supply of real property in certain markets, changes in zoning laws, environmental regulations and other governmental action, delays in completion of construction, changes in real estate values, changes in property taxes, levels of occupancy, losses due

to natural disasters, and local and regional market conditions. Investments in REITs may be subject to risks similar to those associated with direct investment in real estate, as well as additional risks associated with equity investments. As a shareholder in a REIT, the Fund, and indirectly the Fund's shareholders, would bear its ratable share of the REIT's expenses and would at the same time continue to pay its own fees and expenses.

Risk of Investment in Other Funds or Pools The Fund is indirectly exposed to all of the risks of the underlying funds, including ETFs, in which it invests, including the risk that the underlying funds will not perform as expected. The Fund indirectly pays a portion of the expenses incurred by the underlying funds.

Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Select Cayman Fund Risk The Fund's investments in the Select Cayman Fund expose the Fund to the risks associated with that entity's investments, which are generally the risks of commodities-related investments. The Select Cayman Fund is not subject to the investor protections of the Investment Company Act of 1940, as amended (the "1940 Act"). Changes in U.S. or Cayman laws could result in increased expense or the inability of the Fund to operate as intended, which could adversely affect the investment returns of the Fund. There is no guarantee that the investment objective of the Select Cayman Fund will be achieved.

Sovereign Debt Obligations Risk Investments in debt securities issued by governments or by government agencies and instrumentalities involve the risk that the governmental entities responsible for repayment may be unable or unwilling to pay interest and repay principal when due. Many sovereign debt obligations may be rated below investment grade ("junk" or "high yield" bonds). Any restructuring of a sovereign debt obligation held by the Fund will likely have a significant adverse effect on the value of the obligation. In the event of default of sovereign debt, the Fund may be unable to pursue legal action against the sovereign issuer or to realize on collateral securing the debt.

Structured Notes Risk Structured notes and other related instruments purchased by the Fund are generally privately negotiated debt obligations where the principal and/or interest is determined by reference to the performance of a specific asset, benchmark asset, market, or interest rate ("reference measure"). The purchase of structured notes exposes the Fund to the credit risk of the issuer of the structured product. Structured notes may be leveraged, increasing the volatility of each structured note's value relative to the change in the reference measure. Structured notes may also be less liquid and more difficult to price accurately than less complex securities and instruments or more traditional debt securities.

U.S. Government Securities Risk Obligations of certain U.S. Government agencies and instrumentalities are not backed by the full faith and credit of the U.S. Government, and there can be no assurance that the U.S. Government would provide financial support to such agencies and instrumentalities.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

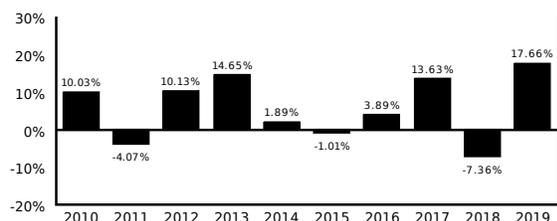
When-Issued, Delayed Delivery, TBA, and Forward Commitment Transaction Risk These transactions may create leverage and involve a risk of loss if the value of the securities declines prior to settlement.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance and additional indexes, including an index that provides a comparison relevant to the Fund's fixed income investments (FTSE World Government Bond Index) and a hypothetical custom index which comprises the S&P 500[®] (36%), FTSE World ex U.S. (24%), ICE BofAML Current 5-Year U.S. Treasury (24%), and FTSE Non-U.S. Dollar World Government Bond (16%) Indexes (the "Custom Global Allocation Index"). Performance for Class I, Class R4, and Class R3 shares of the Fund for periods prior to their inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 and Class R3 shares to reflect

Class R4 and Class R3 expenses, respectively. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class R5 Shares



Highest Quarter: 3Q '10, 8.99% Lowest Quarter: 3Q '11, -11.11%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns
(for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|----------------------|--|----------|------------|-----------|
| Class R5 | Return Before Taxes | 17.66% | 4.96% | 5.63% |
| | Return After Taxes on Distributions | 16.44% | 3.86% | 4.54% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 10.79% | 3.59% | 4.25% |
| Class I | Return Before Taxes | 17.86% | 5.09% | 5.87% |
| Service Class | Return Before Taxes | 17.53% | 4.87% | 5.54% |
| Administrative Class | Return Before Taxes | 17.53% | 4.75% | 5.44% |
| Class A | Return Before Taxes | 10.79% | 3.34% | 4.42% |

| | | One Year | Five Years | Ten Years |
|---|---------------------|----------|------------|-----------|
| Class R4 | Return Before Taxes | 17.28% | 4.60% | 5.28% |
| Class R3 | Return Before Taxes | 17.03% | 4.36% | 5.02% |
| FTSE World Index (reflects no deduction for fees, expenses, or taxes) | | 27.74% | 9.16% | 9.58% |
| FTSE World Government Bond Index (reflects no deduction for fees, expenses, or taxes) | | 5.90% | 2.03% | 1.85% |
| Custom Global Allocation Index (reflects no deduction for fees, expenses, or taxes) | | 18.74% | 6.64% | 7.37% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC ("MML Advisers")

Subadviser(s): BlackRock Investment Management, LLC ("BlackRock")

Portfolio Manager(s):

Dan Chamby, CFA is a Managing Director at BlackRock. He has managed the Fund since its inception (December 2009). Mr. Chamby is expected to retire in March 2020.

David Clayton, CFA, JD is a Managing Director at BlackRock. He has managed the Fund since January 2017.

Russ Koesterich, CFA, JD is a Managing Director at BlackRock. He has managed the Fund since January 2017.

Rick Rieder is a Managing Director at BlackRock. He has managed the Fund since April 2019.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

**PAYMENTS TO BROKER-DEALERS AND
OTHER FINANCIAL INTERMEDIARIES**

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary.

These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Diversified Value Fund

INVESTMENT OBJECTIVE

This Fund seeks to achieve long-term growth of capital and income by investing primarily in a diversified portfolio of equity securities of larger, well-established companies.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .50% | .50% | .50% | .50% | .50% | .50% | .50% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .08% | .18% | .28% | .38% | .38% | .28% | .28% |
| Total Annual Fund Operating Expenses | .58% | .68% | .78% | .88% | 1.13% | 1.03% | 1.28% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 59 | \$186 | \$ 324 | \$ 726 |
| Class R5 | \$ 69 | \$218 | \$ 379 | \$ 847 |
| Service Class | \$ 80 | \$249 | \$ 433 | \$ 966 |
| Administrative Class | \$ 90 | \$281 | \$ 488 | \$1,084 |
| Class A | \$659 | \$889 | \$1,138 | \$1,849 |
| Class R4 | \$105 | \$328 | \$ 569 | \$1,259 |
| Class R3 | \$130 | \$406 | \$ 702 | \$1,545 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 42% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund invests primarily in stocks of companies that the subadvisers believe are undervalued in the marketplace. While the Fund does not limit its investments to issuers in a particular capitalization range, the subadvisers currently focus on securities of larger size companies. The Fund normally invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in stocks, securities convertible into stocks, and other securities, such as warrants and stock rights, whose value is based on stock prices. The Fund typically invests most of its assets in securities of U.S. companies, but may invest up to 25% of its total assets in foreign securities and American Depositary Receipts ("ADRs"), including emerging market securities. The Fund may use futures contracts for hedging or investment purposes as a substitute for investing directly in securities. Use of derivatives by the Fund may create investment leverage. The Fund is managed by two subadvisers, *T. Rowe Price Associates, Inc.* ("T. Rowe Price") and *Brandywine Global Investment Management, LLC* ("Brandywine Global"), each being responsible for a portion of

the portfolio, although they may manage different amounts of the Fund's assets. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

Brandywine Global invests in securities that meet its value criteria, primarily, price-to-earnings, price-to-book, price momentum, and share change and quality, based on both quantitative and fundamental analysis. Brandywine Global expects to hold approximately 175 – 250 stocks under normal market conditions.

Brandywine Global invests in securities of companies that meet its value criteria based on both quantitative and fundamental analysis. Brandywine Global's investment process begins with a valuation screen that identifies large cap stocks with favorable financial ratios. A quantitative deselection process is then applied to eliminate equities that have poor price momentum or high share issuance. Finally Brandywine Global performs a thorough fundamental analysis which seeks to identify and eliminate (de-select) companies with deteriorating fundamentals, anticipated earnings declines, or material write-offs. Brandywine Global may also consider additional factors in its selection process.

Brandywine Global typically sells a security of a company when Brandywine Global believes it is no longer a large capitalization value company, if the company's fundamentals deteriorate, when an investment opportunity arises that Brandywine Global believes is more compelling, or in order to realize gains or limit potential losses. However, Brandywine Global may retain securities of companies that no longer meet its initial purchase criteria.

T. Rowe Price typically employs a "value" approach in selecting investments, using internal research to identify companies that appear to be undervalued by various measures and may be temporarily out of favor but have good prospects for capital appreciation and dividend growth. T. Rowe Price generally looks for companies with one or more of the following: an established operating history; above-average dividend yield and low price/earnings ratio relative to the Russell 1000[®] Value Index; a sound balance sheet and other positive financial characteristics; and low stock price relative to T. Rowe Price's view of the company's underlying value as measured by assets, cash flow, or business franchises. T. Rowe Price generally seeks investments in large-capitalization

companies and the yield of the portion of the Fund managed by T. Rowe Price is expected to normally exceed the yield of the Russell 1000 Value Index. T. Rowe Price may sell securities for a variety of reasons, such as to secure gains, limit losses, or redeploy assets into more promising opportunities.

In pursuing the Fund's investment objective, each of Brandywine Global and T. Rowe Price has the discretion to purchase some securities that do not meet its normal investment criteria described above, when it believes there is an opportunity for substantial appreciation (such as, for example, Brandywine Global or T. Rowe Price believes a security could increase in value as a result of a change in management, an extraordinary corporate event, a new product introduction or innovation, or a favorable competitive development).

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative

is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility,

higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Value Company Risk The value investment approach entails the risk that the market will not recognize a security's intrinsic value for a long time, or that a stock the investment adviser or subadviser judges to be undervalued may actually be appropriately priced.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid

investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Quantitative Models Risk The portfolio managers use quantitative models as part of the idea generation process. Quantitative models are based upon many factors that measure individual securities relative to each other. Such models may not produce the intended results and can be adversely affected by errors or imperfections in the factors or the data on which measurements are based, changing sources of market return or market risk, or any technical issues with the design, construction, implementation, or maintenance of the models.

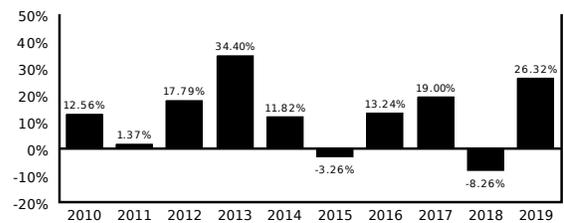
Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Performance for Class I and Class R4 shares of the Fund for periods prior to their inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 shares to reflect Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class R5 Shares



Highest Quarter: 4Q '11, 12.98% Lowest Quarter: 3Q '11, -16.20%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns
(for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|---|--|---------------------|-----------------------|----------------------|
| Class R5 | Return Before Taxes | 26.32% | 8.60% | 11.80% |
| | Return After Taxes on Distributions | 24.28% | 5.51% | 10.02% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 17.02% | 6.41% | 9.60% |
| Class I | Return Before Taxes | 26.33% | 8.71% | 11.86% |
| Service Class | Return Before Taxes | 26.11% | 8.49% | 11.69% |
| Administrative Class | Return Before Taxes | 26.02% | 8.39% | 11.57% |
| Class A | Return Before Taxes | 18.73% | 6.90% | 6.66% |
| Class R4 | Return Before Taxes | 25.86% | 8.24% | 11.41% |
| Class R3 | Return Before Taxes | 25.56% | 7.97% | 11.05% |
| Russell 1000 Value Index (reflects no deduction for fees, expenses, or taxes) | | 26.54% | 8.29% | 11.80% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): T. Rowe Price Associates, Inc. (“T. Rowe Price”)

Brandywine Global Investment Management, LLC (“Brandywine Global”)

Portfolio Manager(s):

John D. Linehan, CFA is a Vice President and Portfolio Manager at T. Rowe Price. He has managed the Fund since September 2017.

Joseph J. Kirby is a Portfolio Manager at Brandywine Global. He has managed the Fund since January 2010.

Henry F. Otto is a Managing Director and Portfolio Manager at Brandywine Global. He has managed the Fund since January 2010.

Steven M. Tonkovich is a Managing Director and Portfolio Manager at Brandywine Global. He has managed the Fund since January 2010.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Fundamental Value Fund

INVESTMENT OBJECTIVE

The Fund seeks long-term total return.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .60% | .60% | .60% | .60% | .60% | .60% | .60% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .04% | .14% | .24% | .34% | .34% | .24% | .24% |
| Total Annual Fund Operating Expenses | .64% | .74% | .84% | .94% | 1.19% | 1.09% | 1.34% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 65 | \$205 | \$ 357 | \$ 798 |
| Class R5 | \$ 76 | \$237 | \$ 411 | \$ 918 |
| Service Class | \$ 86 | \$268 | \$ 466 | \$1,037 |
| Administrative Class | \$ 96 | \$300 | \$ 520 | \$1,155 |
| Class A | \$665 | \$907 | \$1,168 | \$1,914 |
| Class R4 | \$111 | \$347 | \$ 601 | \$1,329 |
| Class R3 | \$136 | \$425 | \$ 734 | \$1,613 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 103% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund invests primarily in equity securities of issuers that the Fund's subadvisers believe are undervalued. The Fund is managed by two subadvisers, *Boston Partners Global Investors, Inc.* ("Boston Partners") and *Barrow, Hanley, Mewhinney & Strauss, LLC* ("Barrow Hanley"), each being responsible for a portion of the portfolio, although they may manage different amounts of the Fund's assets. Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in equity securities. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stocks, rights, and warrants. Although the Fund may invest in companies of any size, the Fund will tend to focus on companies with large market capitalizations (which the Fund's subadvisers believe are generally above \$1 billion). The Fund may invest up to 20% of its total assets in the securities of foreign issuers and American Depositary Receipts ("ADRs"), including emerging market securities. The Fund may invest up to 15% of its net assets in illiquid securities, including

securities that are illiquid by virtue of the absence of a readily available market or legal or contractual restrictions on resale. The Fund may participate as a purchaser in initial public offerings of securities (“IPOs”). An IPO is a company’s first offering of stock to the public. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

In selecting securities for the Fund, Boston Partners examines various factors to determine the value characteristics of such issuers, including price-to-book ratios and price-to-earnings ratios. These value characteristics are examined in the context of the issuer’s operating and financial fundamentals, such as return on equity, earnings growth, and cash flow. Boston Partners selects securities for the Fund based on a continuous study of trends in industries and companies, earnings power, growth, and other investment criteria. Boston Partners will sell a security when it no longer meets one or more investment criteria, either through obtaining target value or due to an adverse change in the fundamentals or business momentum. Each holding has a target valuation established at purchase, which Boston Partners continuously monitors and adjusts as appropriate.

Barrow Hanley employs a value-based investment approach and may perform a number of analyses in considering whether to buy or sell a security for the Fund. In selecting investments for the Fund, Barrow Hanley typically seeks to exploit market inefficiencies by using proprietary research to identify primarily large capitalization companies that it considers to be undervalued and to have the potential to generate superior returns while subjecting the Fund to below average levels of risk. Barrow Hanley typically invests in approximately 80–120 securities. Barrow Hanley may consider selling a stock for the Fund if, in its judgment, the security has reached its valuation target, the company’s fundamentals begin to deteriorate, or other opportunities appear more attractive.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund’s portfolio, market conditions, and

other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund’s investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund’s assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in

the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Value Company Risk The value investment approach entails the risk that the market will not recognize a security's intrinsic value for a long time, or that a stock the investment adviser or subadviser judges to be undervalued may actually be appropriately priced.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer.

In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

Restricted Securities Risk The Fund may hold securities that are restricted as to resale under the U.S. federal securities laws, such as securities in certain privately held companies. Such securities may be highly illiquid and their values may experience significant volatility. Restricted securities may be difficult to value.

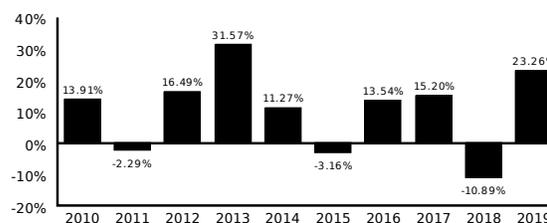
Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Performance for Class I shares of the Fund for periods prior to its inception date (11/15/10) is based on the performance of Class R5 shares. Performance for Class R4 shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance Class R5 Shares



Highest Quarter: 4Q '11, 13.43% Lowest Quarter: 3Q '11, -17.32%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|--|--|-------------|---------------|--------------|
| Class R5 | Return Before Taxes | 23.26% | 6.83% | 10.20% |
| | Return After Taxes on Distributions | 17.31% | 3.09% | 7.72% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 17.92% | 4.91% | 8.05% |
| Class I | Return Before Taxes | 23.44% | 6.93% | 10.33% |
| Service Class | Return Before Taxes | 23.20% | 6.73% | 10.13% |
| Administrative Class | Return Before Taxes | 23.16% | 6.62% | 10.00% |
| Class A | Return Before Taxes | 16.08% | 5.16% | 9.10% |
| Class R4 | Return Before Taxes | 22.86% | 6.48% | 9.83% |
| Class R3 | Return Before Taxes | 22.61% | 6.20% | 9.48% |
| Russell 1000® Value Index (reflects no deduction for fees, expenses, or taxes) | | 26.54% | 8.29% | 11.80% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): Boston Partners Global Investors, Inc. (“Boston Partners”)

Barrow, Hanley, Mewhinney & Strauss, LLC
 (“Barrow Hanley”)

Portfolio Manager(s):

David T. Cohen, CFA is a portfolio manager for the Boston Partners Large Cap Value strategy. He has managed the Fund since February 2019.

Mark E. Donovan, CFA is the lead portfolio manager for Boston Partners’ Large Cap Value portfolios. He has managed the Fund since February 2019.

Stephanie McGirr is a portfolio manager for the Boston Partners Large Cap Value strategy. She has managed the Fund since February 2019.

David J. Pyle, CFA is a portfolio manager for Boston Partners’ Large Cap Value portfolios. He has managed the Fund since February 2019.

Mark Giambrone is a Managing Director and Portfolio Manager at Barrow Hanley. He has managed the Fund since February 2019.

Brad Kinkelaar is a Managing Director and Portfolio Manager at Barrow Hanley. He has managed the Fund since February 2019.

Michael B. Nafya, CFA is a Managing Director and Portfolio Manager at Barrow Hanley. He has managed the Fund since February 2019.

Terry L. Pelzel, CFA is a Managing Director and Portfolio Manager at Barrow Hanley. He has managed the Fund since February 2019.

Brian F. Quinn, CFA is a Managing Director and Portfolio Manager at Barrow Hanley. He has managed the Fund since October 2017.

Lewis Ropp is a Managing Director and Portfolio Manager at Barrow Hanley. He has managed the Fund since October 2017.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MM S&P 500[®] Index Fund

INVESTMENT OBJECTIVE

The Fund seeks to approximate as closely as practicable (before fees and expenses) the capitalization-weighted total rate of return of that portion of the U.S. market for publicly-traded common stocks composed of larger-capitalized companies.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|-------------|-------------|-------------|
| Management Fees | .09% | .09% | .09% | .09% | .09% | .09% | .09% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .03% | .13% | .28% | .38% | .38% | .28% | .28% |
| Total Annual Fund Operating Expenses | .12% | .22% | .37% | .47% | .72% | .62% | .87% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that

the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 12 | \$ 39 | \$ 68 | \$ 154 |
| Class R5 | \$ 23 | \$ 71 | \$ 124 | \$ 280 |
| Service Class | \$ 38 | \$ 119 | \$ 208 | \$ 468 |
| Administrative Class | \$ 48 | \$ 151 | \$ 263 | \$ 591 |
| Class A | \$ 619 | \$ 768 | \$ 929 | \$ 1,395 |
| Class R4 | \$ 63 | \$ 199 | \$ 346 | \$ 774 |
| Class R3 | \$ 89 | \$ 278 | \$ 482 | \$ 1,073 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 4% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

Under normal circumstances, the Fund invests at least 80% (and, typically, substantially all) of its net assets (plus the amount of any borrowings for investment purposes) in the equity securities of companies included within the S&P 500[®] Index* ("Index"). The Fund invests in the equity securities of companies included in the Index in weightings that approximate the relative composition of the securities contained in the Index, and in S&P 500 Index futures contracts. The Index is a widely recognized, unmanaged index representative of

* The S&P 500 Index is a product of S&P Dow Jones Indices LLC ("SPDJI"), and has been licensed for use by MML Advisers. Standard & Poor's[®], S&P[®] and S&P 500[®] are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"); Dow Jones[®] is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); and these trademarks have been licensed for use by SPDJI and sublicensed for certain purposes by MML Advisers. The Fund is not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates, and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the S&P 500 Index.

common stocks of larger capitalized U.S. companies. As of December 31, 2019, the market capitalization range of companies included in the Index was \$4.58 billion to \$1,304.76 billion. If the securities represented in the Index were to become concentrated in any particular industry, the Fund's investments would likewise be concentrated in securities of issuers in that industry; the Index is not currently concentrated in any single industry.

The Fund is passively managed, which means it tries to replicate the investment composition and performance of the Index by using computer programs and statistical procedures. The Fund's subadviser, *Northern Trust Investments, Inc.* ("NTI"), will buy and sell securities in response to changes in the Index. The Fund may use Index futures contracts, a type of derivative, to gain exposure to the Index in lieu of investing in cash, or to reduce its exposure to the Index while it sells the securities in its portfolio. Use of Index futures contracts by the Fund may create investment leverage. Because the Fund, unlike the Index, is subject to fees and transaction expenses, the Fund's returns are likely to be less than those of the Index. NTI expects that, under normal circumstances, the annual performance of the Fund, before fees and expenses, will track the performance of the Index within a 0.95 correlation coefficient.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Indexing Risk The Fund's performance may not track the performance of the index exactly due to a

number of factors, including fees and expenses of the Fund, the Fund's cash positions, and differences between securities held by the Fund and the securities comprising the index.

Industry Concentration Risk The Fund may concentrate its assets in a particular industry or group of industries. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in that industry or group of industries than if the Fund invested more broadly.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and

unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

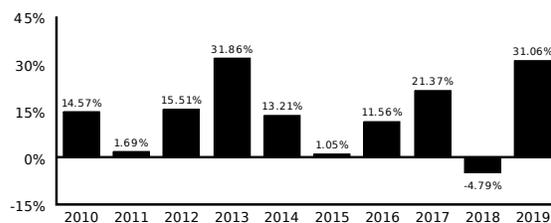
Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Service Class shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance.

Performance for Class I shares of the Fund for periods prior to its inception date (12/07/11) is based on the performance of Service Class shares. Performance for Class A shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Service Class shares, adjusted for Class A expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance Service Class Shares*



* The Fund previously showed Annual Performance for Class R5 shares. The table above shows Annual Performance for Service Class shares, consistent with the practice of the MassMutual Funds complex typically of showing the share class with the longest performance history (and, as among share classes with the same length performance history, the class with the lowest expense ratio, typically the class which is least impacted by distribution, shareholder servicing, and other expenses). Going forward, the Fund will show the performance of Service Class shares consistent with this practice. Because Service Class shares have a higher expense ratio than Class R5 shares, Service Class returns are lower than that of Class R5.

Highest Quarter: 1Q '19, 13.56% Lowest Quarter: 3Q '11, -13.96%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Service Class only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|---------------|--|-------------|---------------|--------------|
| Service Class | Return Before Taxes | 31.06% | 11.29% | 13.12% |
| | Return After Taxes on Distributions | 29.16% | 8.60% | 11.49% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 19.69% | 8.53% | 10.69% |
| Class I | Return Before Taxes | 31.38% | 11.57% | 13.38% |
| Class R5 | Return Before Taxes | 31.27% | 11.45% | 13.32% |

| | | One Year | Five Years | Ten Years |
|--|---------------------|---------------------|-----------------------|----------------------|
| Administrative Class | Return Before Taxes | 30.92% | 11.17% | 13.04% |
| Class A | Return Before Taxes | 23.39% | 9.64% | 12.08% |
| Class R4 | Return Before Taxes | 30.67% | 11.00% | 12.84% |
| Class R3 | Return Before Taxes | 30.39% | 10.74% | 12.54% |
| S&P 500 Index (reflects no deduction for fees, expenses, or taxes) | | 31.49% | 11.70% | 13.56% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): Northern Trust Investments, Inc. (“NTI”)

Portfolio Manager(s):

Brent Reeder is a Senior Vice President at NTI. He has managed the Fund since April 2007.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are

redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Equity Opportunities Fund

INVESTMENT OBJECTIVE

This Fund seeks growth of capital over the long-term.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .69% | .69% | .69% | .69% | .69% | .69% | .69% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .05% | .15% | .25% | .35% | .35% | .25% | .25% |
| Total Annual Fund Operating Expenses | .74% | .84% | .94% | 1.04% | 1.29% | 1.19% | 1.44% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 76 | \$237 | \$ 411 | \$ 918 |
| Class R5 | \$ 86 | \$268 | \$ 466 | \$1,037 |
| Service Class | \$ 96 | \$300 | \$ 520 | \$1,155 |
| Administrative Class | \$106 | \$331 | \$ 574 | \$1,271 |
| Class A | \$674 | \$936 | \$1,219 | \$2,021 |
| Class R4 | \$121 | \$378 | \$ 654 | \$1,443 |
| Class R3 | \$147 | \$456 | \$ 787 | \$1,724 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 33% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund invests primarily in equity securities of U.S. companies that the Fund's subadvisers believe are financially sound, valued conservatively by the market, and have improving prospects. The Fund is managed by two subadvisers, *T. Rowe Price Associates, Inc.* ("T. Rowe Price") and *Wellington Management Company LLP* ("Wellington Management"), each being responsible for a portion of the portfolio, although they may manage different amounts of the Fund's assets. Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in equity securities. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stocks, rights, and warrants, of issuers of any size. The Fund typically invests most of its assets in equity securities of U.S. companies, but may invest in foreign securities and American Depositary Receipts ("ADRs"), including emerging market securities. The Fund generally will not invest more than 30% of its total assets in foreign securities. The Fund may use futures contracts for hedging or

investment purposes as a substitute for investing directly in securities. Use of derivatives by the Fund may create investment leverage. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

T. Rowe Price typically employs a “value” approach in selecting investments, using internal research to identify companies that appear to be undervalued by various measures and may be temporarily out of favor but have good prospects for capital appreciation and dividend growth. T. Rowe Price generally looks for companies with one or more of the following: an established operating history; above-average dividend yield and low price/earnings ratio relative to the Russell 1000® Value Index; a sound balance sheet and other positive financial characteristics; and low stock price relative to T. Rowe Price’s view of the company’s underlying value as measured by assets, cash flow, or business franchises. T. Rowe Price generally seeks investments in large-capitalization companies and the yield of the portion of the Fund managed by T. Rowe Price is expected to normally exceed the yield of the Russell 1000 Value Index. T. Rowe Price may sell securities for a variety of reasons, such as to secure gains, limit losses, or redeploy assets into more promising opportunities.

Wellington Management seeks long-term total returns in excess of the broad market by investing in a select number of high quality, reasonably-valued companies that have demonstrated the willingness to return value to shareholders. The investment process stresses security selection based on bottom-up fundamental research to identify undervalued stocks that have the potential for significant longer-term rewards. Wellington Management’s investment philosophy is based on the premise that investing in high quality companies with superior prospects for dividend growth, and the fundamental strength to support that growth in the future, can provide superior long-term returns. Wellington Management typically sells a security when it achieves its price target or when it no longer exhibits superior upside return versus downside risk.

In pursuing the Fund’s investment objective, each of T. Rowe Price and Wellington Management has the discretion to purchase some securities that do not meet its normal investment criteria described above, when it believes there is an opportunity for substantial appreciation (such as, for example, T. Rowe Price or Wellington

Management believes a security could increase in value as a result of a change in management, an extraordinary corporate event, a new product introduction or innovation, or a favorable competitive development).

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund’s portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives’ original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry,

political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could

lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Value Company Risk The value investment approach entails the risk that the market will not recognize a security's intrinsic value for a long time, or that a stock the investment adviser or subadviser judges to be undervalued may actually be appropriately priced.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid

investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager’s investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund’s portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

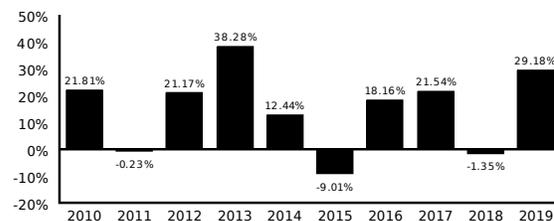
Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund’s portfolio, and the Fund’s performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund’s performance from year to year for Class R5 shares. The table shows how the Fund’s average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. The Fund’s name and investment strategy changed on March 28, 2017. The performance results shown below would not necessarily have been achieved had the Fund’s current investment strategy been in effect for the entire period for which performance results are presented. Performance for Class I shares of the Fund for periods prior to its inception date (11/15/10) is based on the performance of Class R5 shares. Performance for Class R4 shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

**Annual Performance
Class R5 Shares**



Highest Quarter: 4Q '11, 15.78% Lowest Quarter: 3Q '11, -18.10%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor’s tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns
(for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|---|--|---------------------|-----------------------|----------------------|
| Class R5 | Return Before Taxes | 29.18% | 10.74% | 14.32% |
| | Return After Taxes on Distributions | 26.59% | 6.73% | 11.31% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 19.09% | 7.42% | 11.13% |
| Class I | Return Before Taxes | 29.39% | 10.85% | 14.43% |
| Service Class | Return Before Taxes | 29.09% | 10.63% | 14.21% |
| Administrative Class | Return Before Taxes | 28.96% | 10.52% | 14.07% |
| Class A | Return Before Taxes | 21.54% | 9.00% | 13.14% |
| Class R4 | Return Before Taxes | 28.78% | 10.35% | 13.93% |
| Class R3 | Return Before Taxes | 28.45% | 10.08% | 13.54% |
| Russell 1000 Index (reflects no deduction for fees, expenses, or taxes) | | 31.43% | 11.48% | 13.54% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): T. Rowe Price Associates, Inc. (“T. Rowe Price”)

Wellington Management Company LLP
 (“Wellington Management”)

Portfolio Manager(s):

John D. Linehan, CFA is a Vice President and Portfolio Manager at T. Rowe Price. He has managed the Fund since March 2017.

Donald J. Kilbride is a Senior Managing Director and Equity Portfolio Manager at Wellington Management. He has managed the Fund since March 2017.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Fundamental Growth Fund

INVESTMENT OBJECTIVE

The Fund seeks long-term growth of capital.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .65% | .65% | .65% | .65% | .65% | .65% | .65% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .17% | .27% | .37% | .47% | .47% | .37% | .37% |
| Total Annual Fund Operating Expenses | .82% | .92% | 1.02% | 1.12% | 1.37% | 1.27% | 1.52% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 84 | \$262 | \$ 455 | \$1,014 |
| Class R5 | \$ 94 | \$293 | \$ 509 | \$1,131 |
| Service Class | \$104 | \$325 | \$ 563 | \$1,248 |
| Administrative Class | \$114 | \$356 | \$ 617 | \$1,363 |
| Class A | \$682 | \$960 | \$1,259 | \$2,106 |
| Class R4 | \$129 | \$403 | \$ 697 | \$1,534 |
| Class R3 | \$155 | \$480 | \$ 829 | \$1,813 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 123% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund invests primarily in domestic equity securities that the Fund's subadviser, *Wellington Management Company LLP* ("Wellington Management"), believes offer the potential for long-term growth. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, rights, and warrants, of issuers of any size. While most assets will be invested in equity securities of U.S. companies, the Fund may also invest up to 20% of its total assets in foreign securities and American Depositary Receipts ("ADRs"), including emerging market securities. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

Wellington Management generally employs a bottom-up stock selection process that utilizes fundamental analysis to identify specific securities within industries or sectors for purchase or sale. Wellington Management seeks to identify diversified sources of return based on its assessment of individual companies against the

context of broader market factors by evaluating and ranking each stock on a consistent set of growth, quality, and valuation criteria.

In pursuing the Fund's investment objective, Wellington Management has the discretion to purchase some securities that do not meet its normal investment criteria described above, when it believes there is an opportunity for substantial appreciation (such as, for example, Wellington Management believes a security could increase in value as a result of a change in management, an extraordinary corporate event such as a merger, acquisition, or divestiture, a new product introduction or innovation, or a favorable competitive development). The Fund may sell securities for a variety of reasons, such as to secure gains, limit losses, or redeploy assets into more promising opportunities.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or

exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Growth Company Risk The prices of growth securities are often highly sensitive to market fluctuations because of their heavy dependence on future earnings or cash flow expectations, and can be more volatile than the market in general.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at

any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

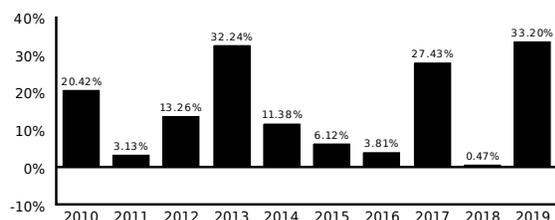
Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Performance for Class I and Class R4 shares of the Fund for periods prior to their inception date (04/01/14) is

based on the performance of Class R5 shares, adjusted for Class R4 shares to reflect Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. The Fund's name, investment objective, and investment strategy changed on February 22, 2012 to permit the Fund to become "actively" managed. Because the Fund was previously "passively" managed, the performance results shown would likely be different had the Fund's current investment objective and investment strategy been in effect for the entire period for which performance results are presented. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class R5 Shares



Highest Quarter: 1Q '12, 18.17% Lowest Quarter: 4Q '18, -14.75%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns
(for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|---|--|----------|------------|-----------|
| Class R5 | Return Before Taxes | 33.20% | 13.44% | 14.56% |
| | Return After Taxes on Distributions | 28.08% | 9.76% | 12.21% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 23.01% | 10.01% | 11.71% |
| Class I | Return Before Taxes | 33.28% | 13.56% | 14.62% |
| Service Class | Return Before Taxes | 33.00% | 13.35% | 14.44% |
| Administrative Class | Return Before Taxes | 33.05% | 13.26% | 14.30% |
| Class A | Return Before Taxes | 25.08% | 11.64% | 13.37% |
| Class R4 | Return Before Taxes | 32.69% | 13.06% | 14.15% |
| Class R3 | Return Before Taxes | 32.41% | 12.76% | 13.75% |
| Russell 1000® Growth Index (reflects no deduction for fees, expenses, or taxes) | | 36.39% | 14.63% | 15.22% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC ("MML Advisers")

Subadviser(s): Wellington Management Company LLP ("Wellington Management")

Portfolio Manager(s):

Joel Thomson, CFA is a Managing Director and Equity Portfolio Manager at Wellington Management. He has managed the Fund since January 2019.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

**PAYMENTS TO BROKER-DEALERS AND
OTHER FINANCIAL INTERMEDIARIES**

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary.

These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Blue Chip Growth Fund

INVESTMENT OBJECTIVE

This Fund seeks growth of capital over the long term.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .61% | .61% | .61% | .61% | .61% | .61% | .61% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .03% | .13% | .23% | .33% | .33% | .23% | .23% |
| Total Annual Fund Operating Expenses | .64% | .74% | .84% | .94% | 1.19% | 1.09% | 1.34% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 65 | \$205 | \$ 357 | \$ 798 |
| Class R5 | \$ 76 | \$237 | \$ 411 | \$ 918 |
| Service Class | \$ 86 | \$268 | \$ 466 | \$1,037 |
| Administrative Class | \$ 96 | \$300 | \$ 520 | \$1,155 |
| Class A | \$665 | \$907 | \$1,168 | \$1,914 |
| Class R4 | \$111 | \$347 | \$ 601 | \$1,329 |
| Class R3 | \$136 | \$425 | \$ 734 | \$1,613 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 25% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

Under normal circumstances, the Fund invests at least 80% of net assets (plus the amount of any borrowings for investment purposes) in the common stocks of large- and medium-sized blue chip growth companies. The Fund is managed by two subadvisers, each being responsible for a portion of the portfolio, although they may manage different amounts of the Fund's assets. The Fund's subadvisers, *T. Rowe Price Associates, Inc.* ("T. Rowe Price") and *Loomis, Sayles & Company, L.P.* ("Loomis Sayles"), currently define blue chip growth companies to mean firms that, in their view, are well-established in their industries and have the potential for above-average earnings growth. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, rights, and warrants. While most assets will be invested in equity securities of U.S. companies, the Fund may also invest up to 20% of its total assets in foreign securities and American Depositary Receipts ("ADRs"), including emerging market securities. The Fund may at times have significant exposure to

one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

In selecting securities, T. Rowe Price generally seeks to identify companies with a leading market position, seasoned management, and strong financial fundamentals. T. Rowe Price believes that solid company fundamentals (with an emphasis on strong growth in earnings per share or operating cash flow) combined with a positive industry outlook may potentially reward investors with strong investment performance. It is anticipated that some of the companies targeted will have good prospects for dividend growth and T. Rowe Price may at times invest significantly in stocks of information technology companies. T. Rowe Price may sell securities for a variety of reasons, such as to secure gains, limit losses, or redeploy assets into more promising opportunities.

In pursuing the Fund's investment objective, T. Rowe Price has the discretion to purchase some securities that do not meet its normal investment criteria described above, when it believes there is an opportunity for substantial appreciation (such as, for example, T. Rowe Price believes a security could increase in value as a result of a change in management, an extraordinary corporate event, a new product introduction or innovation, or a favorable competitive development).

In selecting securities, Loomis Sayles emphasizes companies with sustainable competitive advantages, long-term structural growth drivers, attractive cash flow returns on invested capital, and management teams focused on creating long-term value for shareholders. Loomis Sayles aims to invest in companies when they trade at a significant discount to Loomis Sayles' estimate of intrinsic value. Loomis Sayles will consider selling a portfolio investment when (i) it believes an unfavorable structural change occurs within a given business or the markets in which it operates, (ii) a critical underlying investment assumption is flawed, (iii) a more attractive reward-to-risk opportunity becomes available, (iv) the current price fully reflects intrinsic value, or (v) for other investment reasons which it deems appropriate.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of

any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies

are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Growth Company Risk The prices of growth securities are often highly sensitive to market fluctuations because of their heavy dependence on future earnings or cash flow expectations, and can be more volatile than the market in general.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer.

In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

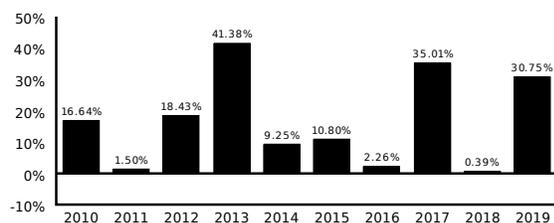
Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance and an additional index that provides a comparison for the Fund's returns without regard to investment style (S&P 500[®] Index). Performance for Class I and Class R4 shares of the Fund for periods prior to their inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 shares to reflect Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class R5 Shares



Highest Quarter: 1Q '12, 18.59% Lowest Quarter: 3Q '11, -13.48%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | One Year | Five Years | Ten Years | |
|--|--|------------|-----------|--------|
| Class R5 | Return Before Taxes | 30.75% | 14.96% | 15.83% |
| | Return After Taxes on Distributions | 29.03% | 12.88% | 14.41% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 19.36% | 11.47% | 13.01% |
| Class I | Return Before Taxes | 30.89% | 15.09% | 15.89% |
| Service Class | Return Before Taxes | 30.60% | 14.85% | 15.73% |
| Administrative Class | Return Before Taxes | 30.54% | 14.75% | 15.59% |
| Class A | Return Before Taxes | 22.97% | 13.17% | 14.67% |
| Class R4 | Return Before Taxes | 30.27% | 14.57% | 15.44% |
| Class R3 | Return Before Taxes | 29.97% | 14.29% | 15.06% |
| Russell 1000 [®] Growth Index (reflects no deduction for fees, expenses, or taxes) | 36.39% | 14.63% | 15.22% | |
| S&P 500 Index (reflects no deduction for fees, expenses, or taxes) | 31.49% | 11.70% | 13.56% | |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC ("MML Advisers")

Subadviser(s): T. Rowe Price Associates, Inc. ("T. Rowe Price")

Loomis, Sayles & Company, L.P. ("Loomis Sayles")

Portfolio Manager(s):

Larry J. Puglia, CFA, CPA is a Vice President at T. Rowe Price. He has managed the Fund since February 2006.

Aziz V. Hamzaogullari, CFA is the Chief Investment Officer of the Growth Equity Strategies Team, an Executive Vice President, and a member of the Board of Directors at Loomis Sayles. He has managed the Fund since January 2015.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Growth Opportunities Fund

INVESTMENT OBJECTIVE

This Fund seeks long-term capital appreciation.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .71% | .71% | .71% | .71% | .71% | .71% | .71% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .05% | .15% | .25% | .35% | .35% | .25% | .25% |
| Total Annual Fund Operating Expenses | .76% | .86% | .96% | 1.06% | 1.31% | 1.21% | 1.46% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 78 | \$243 | \$ 422 | \$ 942 |
| Class R5 | \$ 88 | \$274 | \$ 477 | \$1,061 |
| Service Class | \$ 98 | \$306 | \$ 531 | \$1,178 |
| Administrative Class | \$108 | \$337 | \$ 585 | \$1,294 |
| Class A | \$676 | \$942 | \$1,229 | \$2,042 |
| Class R4 | \$123 | \$384 | \$ 665 | \$1,466 |
| Class R3 | \$149 | \$462 | \$ 797 | \$1,746 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 33% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

This Fund seeks to achieve its objective by investing primarily in equity securities of U.S. companies that the Fund's subadvisers believe offer the potential for long-term growth. Under normal market conditions, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in equity securities. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, rights, and warrants. The Fund typically invests most of its assets in mid- and large-capitalization equity securities of U.S. companies, but may invest up to 20% of its total assets in foreign securities and American Depositary Receipts ("ADRs"), including emerging market securities. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

The Fund is managed by two subadvisers, *Sands Capital Management, LLC* ("Sands Capital") and *Jackson Square Partners, LLC* ("Jackson Square"), each being responsible for a portion of the

portfolio, although they may manage different amounts of the Fund's assets. Sands Capital seeks long-term capital appreciation by investing in stocks believed to have potential for dramatic wealth creation using bottom-up, fundamental research and focusing on six key investment criteria: sustainable, above average earnings growth, a leadership position in a promising business space, significant competitive advantages/unique business franchise, a clear mission and value-added focus, financial strength, and rational valuation relative to the market and business prospects. Sands Capital does not typically invest in companies with market capitalizations less than \$1 billion. Jackson Square seeks to select securities that it believes are undervalued in relation to their intrinsic value, as indicated by multiple factors, including the return on capital above its cost of capital. Jackson Square will normally invest in common stocks of companies with market capitalizations of at least \$3 billion at the time of purchase. Each subadviser may sell securities for a variety of reasons, such as, if, in its judgment, the prospects for future growth diminish, a more attractive opportunity is identified, if fundamentals unexpectedly change, or if valuations are stretched past fair value.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry,

political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could

lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Growth Company Risk The prices of growth securities are often highly sensitive to market fluctuations because of their heavy dependence on future earnings or cash flow expectations, and can be more volatile than the market in general.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid

investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

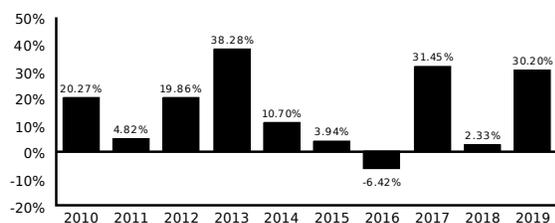
Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Performance for Class I shares of the Fund for periods prior to its inception date (12/07/11) is based on the performance of Class R5 shares. Performance for Class R4 shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class R5 Shares



Highest Quarter: 1Q '12, 20.14% Lowest Quarter: 4Q '18, -15.72%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | One Year | Five Years | Ten Years | |
|--|--|------------|-----------|--------|
| Class R5 | Return Before Taxes | 30.20% | 11.24% | 14.70% |
| | Return After Taxes on Distributions | 21.03% | 6.65% | 11.95% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 24.12% | 8.22% | 11.90% |
| Class I | Return Before Taxes | 30.35% | 11.35% | 15.09% |
| Service Class | Return Before Taxes | 30.19% | 11.15% | 14.59% |
| Administrative Class | Return Before Taxes | 29.87% | 11.02% | 14.44% |
| Class A | Return Before Taxes | 22.53% | 9.49% | 13.50% |
| Class R4 | Return Before Taxes | 29.68% | 10.85% | 14.30% |
| Class R3 | Return Before Taxes | 29.73% | 10.61% | 13.93% |
| Russell 1000 [®] Growth Index (reflects no deduction for fees, expenses, or taxes) | | 36.39% | 14.63% | 15.22% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): Sands Capital Management, LLC (“Sands Capital”)

Jackson Square Partners, LLC (“Jackson Square”)

Portfolio Manager(s):

Wesley A. Johnston, CFA is a Portfolio Manager and Senior Research Analyst at Sands Capital. He has managed the Fund since January 2016.

Frank M. Sands, CFA is the Chief Investment Officer and Chief Executive Officer at Sands Capital. He has managed the Fund since January 2004.

A. Michael Sramek, CFA is a Research Analyst, Senior Portfolio Manager, and Managing Director at Sands Capital. He has managed the Fund since June 2013.

Thomas H. Trentman, CFA is a Portfolio Manager and Research Analyst at Sands Capital. He has managed the Fund since November 2017.

Christopher J. Bonavico, CFA is a Portfolio Manager and Analyst at Jackson Square. He has managed the Fund since June 2006.

Christopher M. Ericksen, CFA is a Portfolio Manager and Analyst at Jackson Square. He has managed the Fund since June 2006.

William Montana is a Portfolio Manager and Analyst at Jackson Square. He has managed the Fund since January 2019.

Daniel J. Prislín, CFA is a Portfolio Manager and Analyst at Jackson Square. He has managed the Fund since June 2006.

Jeffrey S. Van Harte, CFA is the Chairman and Chief Investment Officer at Jackson Square. He has managed the Fund since June 2006.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Mid-Cap Value Fund

INVESTMENT OBJECTIVE

This Fund seeks growth of capital over the long-term.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|--------------|--------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .70% | .70% | .70% | .70% | .70% | .70% | .70% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .31% | .41% | .51% | .61% | .61% | .51% | .51% |
| Total Annual Fund Operating Expenses | 1.01% | 1.11% | 1.21% | 1.31% | 1.56% | 1.46% | 1.71% |
| Expense Reimbursement | (.20%) | (.20%) | (.20%) | (.20%) | (.20%) | (.20%) | (.20%) |
| Total Annual Fund Operating Expenses after Expense Reimbursement ⁽¹⁾ | .81% | .91% | 1.01% | 1.11% | 1.36% | 1.26% | 1.51% |

- (1) The expenses in the above table reflect a written agreement by MML Advisers to cap the fees and expenses of the Fund (other than extraordinary litigation and legal expenses, Acquired Fund Fees and Expenses, interest expense, short sale dividend and loan expense, or other non-recurring or unusual expenses such as organizational expenses and shareholder meeting expenses, as applicable) through January 31, 2021, to the extent that Total Annual Fund Operating Expenses after Expense Reimbursement would otherwise exceed .80%, .90%, 1.00%, 1.10%, 1.35%, 1.25%, and 1.50% for Classes I, R5, Service, Administrative, A, R4, and R3, respectively. The Total Annual Fund Operating Expenses after Expense Reimbursement shown in the above table may exceed these amounts, because, as noted in the previous

sentence, certain fees and expenses are excluded from the cap. The agreement can only be terminated by mutual consent of the Board of Trustees on behalf of the Fund and MML Advisers.

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 83 | \$302 | \$ 538 | \$1,218 |
| Class R5 | \$ 93 | \$333 | \$ 592 | \$1,334 |
| Service Class | \$103 | \$364 | \$ 646 | \$1,448 |
| Administrative Class | \$113 | \$395 | \$ 699 | \$1,562 |
| Class A | \$681 | \$997 | \$1,335 | \$2,288 |
| Class R4 | \$128 | \$442 | \$ 778 | \$1,729 |
| Class R3 | \$154 | \$519 | \$ 909 | \$2,003 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 54% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund invests primarily in equity securities of mid-capitalization companies that the Fund's subadviser, *American Century Investment Management, Inc.* ("American Century"), believes are undervalued. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, stock futures contracts, stock index futures contracts,

rights, and warrants. Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in the stocks of mid-cap companies. The Fund's subadviser currently defines "mid-cap" companies as those whose market capitalizations at the time of purchase are within the market capitalization range of companies included in the Russell 1000[®] Index, excluding the largest 100 companies (as of December 31, 2019, between \$824 million and \$63.10 billion). The Fund's subadviser intends to manage the Fund so that its dollar-weighted average market capitalization falls within the market capitalization range of companies included in the Russell Midcap[®] Index (as of December 31, 2019, between \$824 million and \$78.72 billion). The Fund typically invests most of its assets in equity securities of U.S. companies, but may gain exposure to non-U.S. issuers, including emerging markets issuers, through the purchase of foreign securities and American Depositary Receipts ("ADRs"). The Fund may also invest a portion of its assets in real estate investment trusts ("REITs"). The Fund may use futures contracts as a substitute for direct investments in equity securities. The Fund may but will not necessarily engage in foreign currency forward contracts to seek to hedge or to attempt to protect against adverse changes in currency exchange rates. Use of derivatives by the Fund may create investment leverage. The Fund may invest a portion of its assets in debt securities of companies and debt obligations of governments and their agencies, and other similar securities. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

In selecting investments for the Fund, the Fund's subadviser seeks to identify stocks of companies that it believes are undervalued at the time of purchase. American Century uses a value investment strategy that looks for companies that are temporarily out of favor in the market. American Century attempts to purchase the stocks of these undervalued companies and hold each stock until it has returned to favor in the market and the stock's price has increased to, or is higher than, a level the managers believe more accurately reflects the fair value of the company. Companies may be undervalued due to market declines, poor economic conditions, actual or anticipated bad news regarding the issuer or its industry, or because they have been overlooked by the market. To identify these companies, American Century looks

for companies with earnings, cash flows, and/or assets that may not be accurately reflected in the companies' values, as determined by the managers. The managers also may consider whether the companies' securities have a favorable income-paying history and whether income payments are expected to continue or increase.

American Century may sell a stock from the Fund if, for example, in its judgment, a stock no longer meets its valuation criteria, a stock's risk parameters outweigh its return opportunity, more attractive alternatives are identified, or specific events alter a stock's prospects.

The Fund expects that it will engage in active and frequent trading and so will typically have a relatively high portfolio turnover rate.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly

available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Value Company Risk The value investment approach entails the risk that the market will not recognize a security's intrinsic value for a long time, or that a stock the investment adviser or subadviser judges to be undervalued may actually be appropriately priced.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Credit Risk Credit risk is the risk that an issuer, guarantor, or liquidity provider of a fixed income

security held by the Fund may be unable or unwilling, or may be perceived (whether by market participants, ratings agencies, pricing services or otherwise) as unable or unwilling, to make timely principal and/or interest payments, or to otherwise honor its obligations. The Fund may also be exposed to the credit risk of its counterparty to repurchase agreements, reverse repurchase agreements, swap transactions, and other derivatives transactions, and to the counterparty's ability or willingness to perform in accordance with the terms of the transaction. The value of such transactions to the Fund will depend on the willingness and ability of the counterparty to perform its obligations, including among other things the obligation to return collateral or margin to the Fund.

Fixed Income Securities Risk The values of fixed income securities typically will decline during periods of rising interest rates, and can also decline in response to changes in the financial condition of the issuer, borrower, counterparty, or underlying collateral assets, or changes in market, economic, industry, political, and regulatory conditions affecting a particular type of security or issuer or fixed income securities generally. Certain events, such as market or economic developments, regulatory or government actions, natural disasters, terrorist attacks, war, and other geopolitical events can have a dramatic adverse effect on the debt market and the overall liquidity of the market for fixed income securities. During those periods, the Fund may experience high levels of shareholder redemptions, and may have to sell securities at times when the Fund would otherwise not do so, and potentially at unfavorable prices. Certain securities may be difficult to value during such periods. Fixed income securities are subject to interest rate risk (the risk that the value of a fixed income security will fall when interest rates rise), extension risk (the risk that the average life of a security will be extended through a slowing of principal payments), prepayment risk (the risk that a security will be prepaid and the Fund will be required to reinvest at a less favorable rate), and credit risk.

Frequent Trading/Portfolio Turnover Risk Portfolio turnover generally involves some expense to the Fund and may result in the realization of taxable capital gains (including short-term gains). The trading costs and tax effects associated with portfolio turnover may adversely affect the Fund's performance.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be

difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

REIT Risk Investments in REITs may be subject to risks similar to those associated with direct investment in real estate, as well as additional risks associated with equity investments. As a shareholder in a REIT, the Fund, and indirectly the Fund's shareholders, would bear its ratable share of the REIT's expenses and would at the same time continue to pay its own fees and expenses.

Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may

be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

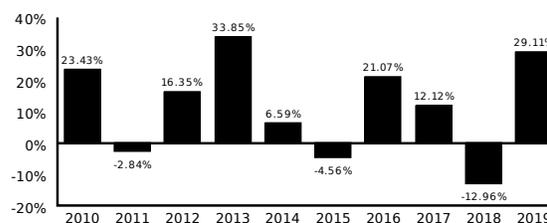
Sovereign Debt Obligations Risk Investments in debt securities issued by governments or by government agencies and instrumentalities involve the risk that the governmental entities responsible for repayment may be unable or unwilling to pay interest and repay principal when due. Many sovereign debt obligations may be rated below investment grade (“junk” or “high yield” bonds). Any restructuring of a sovereign debt obligation held by the Fund will likely have a significant adverse effect on the value of the obligation. In the event of default of sovereign debt, the Fund may be unable to pursue legal action against the sovereign issuer or to realize on collateral securing the debt.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund’s performance from year to year for Class R5 shares. The table shows how the Fund’s average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Performance for Class I shares of the Fund for periods prior to its inception (12/07/11) is based on the performance of Class R5 shares. Performance for Class R4 shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance Class R5 Shares



Highest Quarter: 1Q '13, 13.49% Lowest Quarter: 3Q '11, -19.78%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor’s tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|--|--|-------------|---------------|--------------|
| Class R5 | Return Before Taxes | 29.11% | 7.80% | 11.23% |
| | Return After Taxes on Distributions | 28.54% | 4.84% | 9.54% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 17.53% | 5.28% | 8.83% |
| Class I | Return Before Taxes | 29.25% | 7.92% | 11.34% |
| Service Class | Return Before Taxes | 29.05% | 7.69% | 11.12% |
| Administrative Class | Return Before Taxes | 28.96% | 7.60% | 10.97% |
| Class A | Return Before Taxes | 21.40% | 6.11% | 10.08% |
| Class R4 | Return Before Taxes | 28.57% | 7.42% | 10.85% |
| Class R3 | Return Before Taxes | 28.38% | 7.17% | 10.49% |
| Russell Midcap Value Index (reflects no deduction for fees, expenses, or taxes) | | 27.06% | 7.62% | 12.41% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): American Century Investment Management, Inc. (“American Century”)

Portfolio Manager(s):

Phillip N. Davidson, CFA is a Senior Vice President and Executive Portfolio Manager at American Century. He has managed the Fund since September 2015.

Michael Liss, CFA is a Vice President and Senior Portfolio Manager at American Century. He has managed the Fund since September 2015.

Kevin Toney, CFA is the Chief Investment Officer - Global Value Equity, a Senior Vice President, and a Senior Portfolio Manager at American Century. He has managed the Fund since September 2015.

Brian Woglom, CFA is a Vice President and Senior Portfolio Manager at American Century. He has managed the Fund since September 2015.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Small Cap Value Equity Fund

INVESTMENT OBJECTIVE

This Fund seeks to maximize total return through investment primarily in small capitalization equity securities.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge Imposed (Load) on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|--------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .75% | .75% | .75% | .75% | .75% | .75% | .75% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .22% | .32% | .42% | .52% | .52% | .42% | .42% |
| Total Annual Fund Operating Expenses | .97% | 1.07% | 1.17% | 1.27% | 1.52% | 1.42% | 1.67% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 99 | \$ 309 | \$ 536 | \$1,190 |
| Class R5 | \$109 | \$ 340 | \$ 590 | \$1,306 |
| Service Class | \$119 | \$ 372 | \$ 644 | \$1,420 |
| Administrative Class | \$129 | \$ 403 | \$ 697 | \$1,534 |
| Class A | \$696 | \$1,004 | \$1,333 | \$2,263 |
| Class R4 | \$145 | \$ 449 | \$ 776 | \$1,702 |
| Class R3 | \$170 | \$ 526 | \$ 907 | \$1,976 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 30% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund invests primarily in common stocks of small-capitalization companies that the Fund's subadvisers believe are undervalued. Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in equity securities of companies whose market capitalizations at the time of purchase are within the market capitalization range of companies included in the Russell 2000[®] Index or the S&P SmallCap 600 Index (as of December 31, 2019, between \$13 million and \$8.34 billion). Equity securities may include common stocks, preferred stock, rights, and warrants. The Fund typically invests most of its assets in U.S. companies, but may invest up to 20% of its total assets in foreign securities, including emerging market securities. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

The Fund is managed by two subadvisers, *Wellington Management Company LLP* ("Wellington Management") and *Barrow, Hanley, Mewhinney & Strauss, LLC* ("Barrow Hanley"),

each being responsible for a portion of the portfolio, although they may manage different amounts of the Fund's assets. Each subadviser employs a value-based investment approach and may perform a number of analyses in considering whether to buy or sell a security for the Fund. In selecting investments for the Fund, Wellington Management generally employs a bottom-up stock selection process that utilizes proprietary, fundamental research to identify companies it considers to be undervalued and to have the potential for significant longer-term returns. In selecting securities for the Fund, Barrow Hanley typically seeks to exploit market inefficiencies by using proprietary research to identify small capitalization companies that it considers to be undervalued and to have the potential to generate superior returns while subjecting the Fund to below average levels of risk. Each subadviser may consider selling a stock for the Fund if, in its judgment, the security has reached its target price, has failed to perform as expected, or other opportunities appear more attractive.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger

companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political,

economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Value Company Risk The value investment approach entails the risk that the market will not recognize a security's intrinsic value for a long time, or that a stock the investment adviser or subadviser judges to be undervalued may actually be appropriately priced.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries,

sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

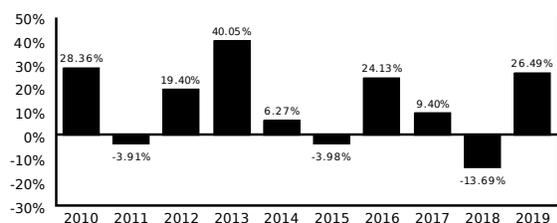
Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Performance for Class I, Class R4, and Class R3 shares of the Fund for periods prior to their inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 and Class R3 shares to reflect Class R4 and Class R3 expenses, respectively. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance

Class R5 Shares



Highest Quarter: 4Q '11, 20.75% Lowest Quarter: 3Q '11, -24.50%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|--|--|-------------|---------------|--------------|
| Class R5 | Return Before Taxes | 26.49% | 7.32% | 12.05% |
| | Return After Taxes on Distributions | 23.85% | 4.14% | 10.32% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 17.52% | 5.37% | 9.85% |
| Class I | Return Before Taxes | 26.53% | 7.41% | 12.10% |
| Service Class | Return Before Taxes | 26.24% | 7.20% | 11.95% |
| Administrative Class | Return Before Taxes | 26.12% | 7.09% | 11.78% |
| Class A | Return Before Taxes | 18.97% | 5.63% | 10.90% |
| Class R4 | Return Before Taxes | 26.00% | 6.93% | 11.65% |
| Class R3 | Return Before Taxes | 25.70% | 6.67% | 11.38% |
| Russell 2000 Value Index (no deduction for fees, expenses, or taxes) | | 22.39% | 6.99% | 10.56% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC ("MML Advisers")

Subadviser(s): Wellington Management Company LLP ("Wellington Management")

Barrow, Hanley, Mewhinney & Strauss, LLC ("Barrow Hanley")

Portfolio Manager(s):

Edmond C. Griffin, CFA is a Managing Director and Equity Portfolio Manager at Wellington Management. He has managed the Fund since February 2020.

Timothy J. McCormack, CFA is a Senior Managing Director and Equity Portfolio Manager at Wellington Management. He has managed the Fund since October 2009.

Shaun F. Pedersen is a Senior Managing Director and Equity Portfolio Manager at Wellington Management. He has managed the Fund since October 2009.

John P. Harloe, CFA is a Managing Director and Portfolio Manager at Barrow Hanley. He has managed the Fund since October 2009.

Coleman Hubbard, CFA is a Director and Portfolio Manager at Barrow Hanley. He has managed the Fund since January 2020.

James S. McClure, CFA is a Managing Director and Portfolio Manager at Barrow Hanley. He has managed the Fund since October 2009.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or

others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another

investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Small Company Value Fund

INVESTMENT OBJECTIVE

The Fund seeks to achieve long-term growth of capital by investing primarily in a diversified portfolio of equity securities of smaller companies.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|--------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .85% | .85% | .85% | .85% | .85% | .85% | .85% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .13% | .23% | .33% | .43% | .43% | .33% | .33% |
| Total Annual Fund Operating Expenses | .98% | 1.08% | 1.18% | 1.28% | 1.53% | 1.43% | 1.68% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$100 | \$ 312 | \$ 542 | \$1,201 |
| Class R5 | \$110 | \$ 343 | \$ 595 | \$1,317 |
| Service Class | \$120 | \$ 375 | \$ 649 | \$1,432 |
| Administrative Class | \$130 | \$ 406 | \$ 702 | \$1,545 |
| Class A | \$697 | \$1,007 | \$1,338 | \$2,273 |
| Class R4 | \$146 | \$ 452 | \$ 782 | \$1,713 |
| Class R3 | \$171 | \$ 530 | \$ 913 | \$1,987 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 146% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund invests primarily in equity securities that the Fund's subadvisers consider to be undervalued. Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in the securities of companies whose market capitalizations at the time of purchase are within the market capitalization range of companies included in the Russell 2000[®] Index or the S&P SmallCap 600 Index (as of December 31, 2019, between \$13 million and \$8.34 billion). Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, rights, and warrants. The Fund typically invests most of its assets in equity securities of U.S. companies, but may invest in foreign securities and American Depositary Receipts ("ADRs"), including emerging market securities. The Fund generally will not invest more than 20% of its total assets in foreign securities. The Fund may invest in real estate investment trusts ("REITs") and exchange-traded funds. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

The Fund is managed by two subadvisers, *AllianceBernstein L.P.* (“AllianceBernstein”) and *American Century Investment Management, Inc.* (“American Century”), each being responsible for a portion of the portfolio, although they may manage different amounts of the Fund’s assets. Each subadviser employs a value-based investment approach and may perform a number of analyses in considering whether to buy or sell a security for the Fund.

AllianceBernstein seeks to invest primarily in a diversified portfolio of equity securities of small-sized companies that it determines, using its own fundamental value approach, to be undervalued. Using fundamental and quantitative research, AllianceBernstein seeks to identify companies whose ability to grow earnings over the long term does not appear to be reflected in their current market price. AllianceBernstein looks for companies with attractive valuation (e.g., low price to cash flow ratios) and compelling quality factors (e.g., return on equity), then ranks those stocks by their expected return. Returns and rankings are updated on a daily basis. The rankings are used to determine prospective candidates for further fundamental research and, subsequently, possible addition to the Fund. Typically, AllianceBernstein’s fundamental research analysts focus on the most attractive 40% of the companies in the small-capitalization universe as defined above. AllianceBernstein generally sells a security when it no longer meets appropriate valuation criteria, although sales may be delayed when return trends are favorable. Typically, growth in the size of a company’s market capitalization relative to other domestically traded companies will not cause AllianceBernstein to dispose of the security.

In selecting investments for the Fund, American Century seeks to identify stocks of companies that it believes are undervalued at the time of purchase. American Century attempts to purchase the stocks of these undervalued companies and hold each stock until it has returned to favor in the market and the stock’s price has increased to, or is higher than, a level the managers believe more accurately reflects the fair value of the company. Companies may be undervalued due to market declines, poor economic conditions, actual or anticipated bad news regarding the issuer or its industry, or because they have been overlooked by the market. To identify these companies, American Century looks for companies with earnings, cash flows, and/or assets that may not be accurately reflected in the companies’ stock prices or may be

outside the companies’ historical ranges. The managers also may consider whether the companies’ securities have a favorable income-paying history and whether income payments are expected to continue or increase. American Century may sell a stock from the Fund if, for example, in its judgment, a stock no longer meets its valuation criteria, a stock’s risk parameters outweigh its return opportunity, more attractive alternatives are identified, or specific events alter a stock’s prospects.

The Fund expects that it will engage in active and frequent trading and so will typically have a relatively high portfolio turnover rate.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund’s portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant

foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in

currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Value Company Risk The value investment approach entails the risk that the market will not recognize a security's intrinsic value for a long time, or that a stock the investment adviser or subadviser judges to be undervalued may actually be appropriately priced.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Frequent Trading/Portfolio Turnover Risk Portfolio turnover generally involves some expense to the Fund and may result in the realization of taxable capital gains (including short-term gains). The trading costs and tax effects associated with portfolio turnover may adversely affect the Fund's performance.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of

investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund’s portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

Quantitative Models Risk The portfolio managers use quantitative models as part of the idea generation process. Quantitative models are based upon many factors that measure individual securities relative to each other. Such models may not produce the intended results and can be adversely affected by errors or imperfections in the factors or the data on which measurements are based, changing sources of market return or market risk, or any technical issues with the design, construction, implementation, or maintenance of the models.

REIT Risk Investments in REITs may be subject to risks similar to those associated with direct investment in real estate, as well as additional risks associated with equity investments. As a shareholder in a REIT, the Fund, and indirectly the Fund’s shareholders, would bear its ratable share of the REIT’s expenses and would at the same time continue to pay its own fees and expenses.

Risk of Investment in Other Funds or Pools The Fund is indirectly exposed to all of the risks of the underlying funds, including ETFs, in which it invests, including the risk that the underlying funds will not perform as expected. The Fund indirectly pays a portion of the expenses incurred by the underlying funds.

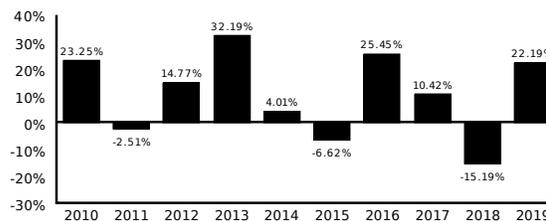
Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund’s portfolio, and the Fund’s performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund’s performance from year to year for Class R5 shares. The table shows how the Fund’s average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance and an additional index that provides a comparison for the Fund’s returns without regard to investment style (Russell 2000 Index). Performance for Class I shares of the Fund for periods prior to its inception date (11/15/10) is based on the performance of Class R5 shares. Performance for Class R4 shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

**Annual Performance
Class R5 Shares**



Highest Quarter: 4Q '11, 16.48% Lowest Quarter: 3Q '11, -20.63%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an

investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns
(for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|---|--|---------------------|-----------------------|----------------------|
| Class R5 | Return Before Taxes | 22.19% | 6.03% | 9.78% |
| | Return After Taxes on Distributions | 20.77% | 2.52% | 7.01% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 14.13% | 4.05% | 7.45% |
| Class I | Return Before Taxes | 22.24% | 6.13% | 9.91% |
| Service Class | Return Before Taxes | 22.08% | 5.93% | 9.70% |
| Administrative Class | Return Before Taxes | 21.82% | 5.82% | 9.56% |
| Class A | Return Before Taxes | 14.88% | 4.36% | 8.66% |
| Class R4 | Return Before Taxes | 21.72% | 5.66% | 9.40% |
| Class R3 | Return Before Taxes | 21.41% | 5.40% | 9.05% |
| Russell 2000 Value Index (reflects no deduction for fees, expenses, or taxes) | | 22.39% | 6.99% | 10.56% |
| Russell 2000 Index (reflects no deduction for fees, expenses, or taxes) | | 25.52% | 8.23% | 11.83% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): AllianceBernstein L.P. (“AllianceBernstein”)

American Century Investment Management, Inc. (“American Century”)

Portfolio Manager(s):

James W. MacGregor, CFA is Chief Investment Officer for U.S. Small and Mid-Cap Value Equities and a Portfolio Manager at AllianceBernstein. He has managed the Fund since June 2019.

Erik A. Turechalk, CFA is a Senior Vice President for U.S. Small and Mid-Cap Value Equities and a Portfolio Manager at AllianceBernstein. He has managed the Fund since January 2020.

Jeff John, CFA is a Vice President and Senior Portfolio Manager at American Century. He has managed the Fund since June 2019.

Miles Lewis, CFA is a Vice President and Portfolio Manager at American Century. He has managed the Fund since June 2019.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plan, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MM S&P[®] Mid Cap Index Fund

INVESTMENT OBJECTIVE

The Fund seeks to provide investment results approximating (before fees and expenses) the aggregate price and dividend performance of the securities included in the Standard & Poor's MidCap 400[®] Index ("S&P MidCap 400 Index").*

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|-------------|-------------|-------------|
| Management Fees | .10% | .10% | .10% | .10% | .10% | .10% | .10% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .08% | .18% | .33% | .43% | .43% | .33% | .33% |
| Total Annual Fund Operating Expenses | .18% | .28% | .43% | .53% | .78% | .68% | .93% |

* The S&P MidCap 400 Index is a product of S&P Dow Jones Indices LLC ("SPDJI"), and has been licensed for use by MML Advisers. Standard & Poor's[®], S&P[®] and S&P MidCap 400[®] are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"); Dow Jones[®] is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); and these trademarks have been licensed for use by SPDJI and sublicensed for certain purposes by MML Advisers. The Fund is not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates, and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the S&P MidCap 400 Index.

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 18 | \$ 58 | \$101 | \$ 230 |
| Class R5 | \$ 29 | \$ 90 | \$157 | \$ 356 |
| Service Class | \$ 44 | \$138 | \$241 | \$ 542 |
| Administrative Class | \$ 54 | \$170 | \$296 | \$ 665 |
| Class A | \$625 | \$785 | \$959 | \$1,463 |
| Class R4 | \$ 69 | \$218 | \$379 | \$ 847 |
| Class R3 | \$ 95 | \$296 | \$515 | \$1,143 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 15% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

Under normal circumstances, the Fund invests at least 80% (and, typically, substantially all) of its net assets (plus the amount of any borrowings for investment purposes) in the equity securities of companies included in the S&P MidCap 400 Index ("Index"), in weightings that approximate the relative composition of the securities contained in the Index, and in S&P MidCap 400 Index futures contracts. The Index is a widely recognized, unmanaged index representative of common stocks of mid-capitalized U.S. companies. The companies chosen for inclusion in the Index tend to be

industry leaders within the U.S. economy as determined by Standard & Poor's®. However, companies are not selected by Standard & Poor's for inclusion in the Index because they are expected to have superior stock price performance relative to the market in general or other stocks in particular. As of December 31, 2019, the market capitalization range of companies included in the Index was \$1.10 billion to \$12.64 billion. If the securities represented in the Index were to become concentrated in any particular industry, the Fund's investments would likewise be concentrated in securities of issuers in that industry; the Index is not currently concentrated in any single industry.

The Fund is passively managed, which means it tries to replicate the investment composition and performance of the Index by using computer programs and statistical procedures. The Fund's subadviser, *Northern Trust Investments, Inc.* ("NTI"), will buy and sell securities in response to changes in the Index. The Fund may use Index futures contracts, a type of derivative, to gain exposure to the Index in lieu of investing in cash, or to reduce its exposure to the Index while it sells the securities in its portfolio. Use of Index futures contracts by the Fund may create investment leverage. Because the Fund, unlike the Index, is subject to fees and transaction expenses, the Fund's returns are likely to be less than those of the Index. NTI expects that, under normal circumstances, the annual performance of the Fund, before fees and expenses, will track the performance of the Index within a 0.95 correlation coefficient.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting

individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Indexing Risk The Fund's performance may not track the performance of the index exactly due to a number of factors, including fees and expenses of the Fund, the Fund's cash positions, and differences between securities held by the Fund and the securities comprising the index.

Industry Concentration Risk The Fund may concentrate its assets in a particular industry or group of industries. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in that industry or group of industries than if the Fund invested more broadly.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents,

its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

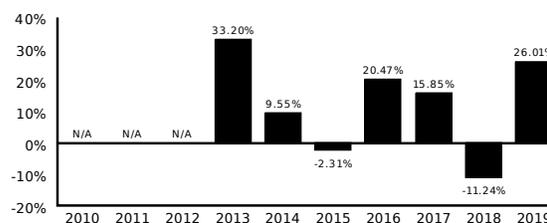
Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class I shares. The table shows how the Fund's average annual returns for 1 and 5 years, and since inception, compare with those of a broad measure of market performance. Performance for Class R4 and Class R3 shares of the Fund for periods prior to their inception date (04/01/14) is based on the performance of Class R5 shares, adjusted to reflect Class R4 and Class R3 expenses, respectively. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance

Class I Shares



Highest Quarter: 1Q '19, 14.47% Lowest Quarter: 4Q '18, -17.34%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class I only. After-tax returns for other classes will vary.

Average Annual Total Returns

(for the periods ended December 31, 2019)

| | | One Year | Five Years | Since Inception (07/26/12) |
|---|--|----------|------------|----------------------------|
| Class I | Return Before Taxes | 26.01% | 8.81% | 13.08% |
| | Return After Taxes on Distributions | 24.85% | 6.95% | 10.92% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 16.21% | 6.56% | 10.10% |
| Class R5 | Return Before Taxes | 25.90% | 8.69% | 12.95% |
| Service Class | Return Before Taxes | 25.68% | 8.52% | 12.79% |
| Administrative Class | Return Before Taxes | 25.56% | 8.43% | 12.69% |
| Class A | Return Before Taxes | 18.41% | 6.96% | 11.55% |
| Class R4 | Return Before Taxes | 25.41% | 8.26% | 12.52% |
| Class R3 | Return Before Taxes | 25.14% | 8.01% | 12.26% |
| S&P MidCap 400 Index (reflects no deduction for fees, expenses, or taxes) | | 26.20% | 9.03% | 13.32% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): Northern Trust Investments, Inc. (“NTI”)

Portfolio Manager(s):

Brent Reeder is a Senior Vice President at NTI. He has managed the Fund since its inception (July 2012).

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MM Russell 2000[®] Small Cap Index Fund

INVESTMENT OBJECTIVE

The Fund seeks to provide investment results approximating (before fees and expenses) the aggregate price and dividend performance of the securities included in the Russell 2000[®] Index*.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|-------------|-------------|-------------|
| Management Fees | .10% | .10% | .10% | .10% | .10% | .10% | .10% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .11% | .21% | .36% | .46% | .46% | .36% | .36% |
| Total Annual Fund Operating Expenses | .21% | .31% | .46% | .56% | .81% | .71% | .96% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem

* The Fund is not promoted, sponsored, or endorsed by, nor in any way affiliated with Russell Investment Group ("Russell"). Russell is not responsible for and has not reviewed the Fund nor any associated literature or publications and Russell makes no representation or warranty, express or implied, as to their accuracy, or completeness, or otherwise. The Russell 2000[®] Index and Russell[®] are trademarks of the Frank Russell Company.

all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 22 | \$ 68 | \$118 | \$ 268 |
| Class R5 | \$ 32 | \$100 | \$174 | \$ 393 |
| Service Class | \$ 47 | \$148 | \$258 | \$ 579 |
| Administrative Class | \$ 57 | \$179 | \$313 | \$ 701 |
| Class A | \$628 | \$794 | \$975 | \$1,497 |
| Class R4 | \$ 73 | \$227 | \$395 | \$ 883 |
| Class R3 | \$ 98 | \$306 | \$531 | \$1,178 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 16% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

Under normal circumstances, the Fund invests at least 80% (and, typically, substantially all) of its net assets (plus the amount of any borrowings for investment purposes) in the equity securities of companies included in the Russell 2000 Index ("Index"), in weightings that approximate the relative composition of the securities contained in the Index, and in Russell 2000 Index futures contracts. The Index is a widely recognized, unmanaged index representative of common stocks of smaller capitalized U.S. companies. The companies in the Index are selected according to their total market capitalization. However, companies are *not* selected by Frank Russell Company for inclusion in the Index because they are expected to have superior stock price performance relative to the stock market in general or other stocks in particular. As of December 31,

2019, the market capitalization range of companies included in the Index was \$13 million to \$8.34 billion. If the securities represented in the Index were to become concentrated in any particular industry, the Fund's investments would likewise be concentrated in securities of issuers in that industry; the Index is not currently concentrated in any single industry.

The Fund is passively managed, which means it tries to replicate the investment composition and performance of the Index by using computer programs and statistical procedures. The Fund's subadviser, *Northern Trust Investments, Inc.* ("NTI"), will buy and sell securities in response to changes in the Index. The Fund may use Index futures contracts, a type of derivative, to gain exposure to the Index in lieu of investing in cash, or to reduce its exposure to the Index while it sells the securities in its portfolio. Use of Index futures contracts by the Fund may create investment leverage. Because the Fund, unlike the Index, is subject to fees and transaction expenses, the Fund's returns are likely to be less than those of the Index. NTI expects that, under normal circumstances, the annual performance of the Fund, before fees and expenses, will track the performance of the Index within a 0.95 correlation coefficient.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for

securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Indexing Risk The Fund's performance may not track the performance of the index exactly due to a number of factors, including fees and expenses of the Fund, the Fund's cash positions, and differences between securities held by the Fund and the securities comprising the index.

Industry Concentration Risk The Fund may concentrate its assets in a particular industry or group of industries. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in that industry or group of industries than if the Fund invested more broadly.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective.

There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

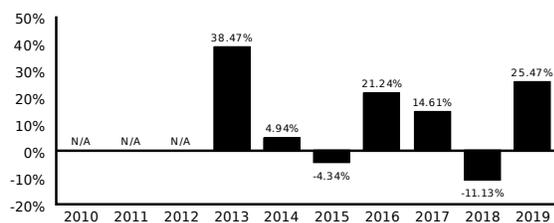
Market Risk The value of the Fund’s portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund’s performance from year to year for Class I shares. The table shows how the Fund’s average annual returns for 1 and 5 years, and since inception, compare with those of a broad measure of market performance. Performance for Class R4 and Class R3 shares of the Fund for periods prior to their inception date (04/01/14) is based on the performance of Class R5 shares, adjusted to reflect Class R4 and Class R3 expenses, respectively. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class I Shares



Highest Quarter: 1Q '19, 14.64% Lowest Quarter: 4Q '18, -20.25%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor’s tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class I only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | | One Year | Five Years | Since Inception (07/26/12) |
|---|---|----------|------------|----------------------------|
| Class I | Return Before Taxes | 25.47% | 8.19% | 12.47% |
| | Return After Taxes on Distributions | 23.48% | 6.18% | 9.92% |
| | Return After Taxes on Distributions and Sale of Fund Shares | 16.19% | 6.00% | 9.39% |
| Class R5 | Return Before Taxes | 25.34% | 8.09% | 12.36% |
| Service Class | Return Before Taxes | 25.11% | 7.93% | 12.18% |
| Administrative Class | Return Before Taxes | 25.09% | 7.83% | 12.08% |
| Class A | Return Before Taxes | 17.88% | 6.34% | 10.93% |
| Class R4 | Return Before Taxes | 24.80% | 7.65% | 11.90% |
| Class R3 | Return Before Taxes | 24.51% | 7.40% | 11.64% |
| Russell 2000 Index (reflects no deduction for fees, expenses, or taxes) | | 25.52% | 8.23% | 12.53% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): Northern Trust Investments, Inc. (“NTI”)

Portfolio Manager(s):

Brent Reeder is a Senior Vice President at NTI. He has managed the Fund since its inception (July 2012).

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments

from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

Except as noted below, the **MassMutual Select Mid Cap Growth Fund** has not been available for purchase by new investors since August 15, 2018. Customers who were invested in the Fund on August 15, 2018 will continue to be able to invest. Investment products and programs offered by MassMutual or its affiliates, including, but not limited to, certain separate investment accounts, mutual funds, collective trust funds, qualified and non-qualified retirement plans, and IRA customers, as well as other institutional investors and programs sponsored by financial intermediaries for which investment decisions are made on a centralized basis at the discretion of the firm, may be able to purchase the Fund at the discretion of MML Advisers. Sales of Fund shares may be further restricted or reopened in the future.

MassMutual Select Mid Cap Growth Fund

INVESTMENT OBJECTIVE

This Fund seeks growth of capital over the long-term.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .68% | .68% | .68% | .68% | .68% | .68% | .68% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .03% | .13% | .23% | .33% | .33% | .23% | .23% |
| Total Annual Fund Operating Expenses | .71% | .81% | .91% | 1.01% | 1.26% | 1.16% | 1.41% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that

you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 73 | \$227 | \$ 395 | \$ 883 |
| Class R5 | \$ 83 | \$259 | \$ 450 | \$1,002 |
| Service Class | \$ 93 | \$290 | \$ 504 | \$1,120 |
| Administrative Class | \$103 | \$322 | \$ 558 | \$1,236 |
| Class A | \$671 | \$928 | \$1,204 | \$1,989 |
| Class R4 | \$118 | \$368 | \$ 638 | \$1,409 |
| Class R3 | \$144 | \$446 | \$ 771 | \$1,691 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 37% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund invests primarily in equity securities of mid-capitalization companies that the Fund's subadvisers believe offer the potential for long-term growth. The Fund is managed by two subadvisers, *T. Rowe Price Associates, Inc.* ("T. Rowe Price") and *Frontier Capital Management Company, LLC* ("Frontier"), each being responsible for a portion of the portfolio, although they may manage different amounts of the Fund's assets. Equity

securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, rights, and warrants. Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in a broadly diversified portfolio of common stocks of mid-cap companies whose earnings the Fund's subadvisers expect to grow at a faster rate than the average company. The Fund's subadvisers currently define "mid-cap" companies as those whose market capitalizations at the time of purchase fall within the market capitalization range of companies included in either the S&P MidCap 400[®] Index or the Russell Midcap[®] Growth Index (as of December 31, 2019, between \$1.10 billion and \$78.72 billion). The Fund may invest up to 20% of its net assets in stocks whose market capitalizations at the time of investment are outside of that capitalization range. The Fund typically invests most of its assets in equity securities of U.S. companies, but may invest in foreign securities and American Depositary Receipts ("ADRs"), including emerging market securities. The Fund generally will not invest more than 25% of its total assets in foreign securities. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

In selecting securities for the Fund, T. Rowe Price generally uses a "growth" approach, seeking to identify companies that it believes have proven products or services, a record of above-average earnings growth, demonstrated potential to sustain earnings growth, stock prices that appear to undervalue growth prospects, or a connection to industries experiencing increasing demand. T. Rowe Price has the discretion to purchase some securities for the Fund that do not meet those investment criteria when it believes there is an opportunity for substantial appreciation.

In selecting securities for the Fund, Frontier employs a "growth at a reasonable price" approach to identify the best risk/reward investment ideas in the U.S. equity mid-capitalization universe. Frontier believes that over time stock prices tend to follow earnings progress and that stocks must be purchased and owned at reasonable valuations. Frontier tends to own companies that, in its opinion, can generate long-term, sustainable earnings, managed by qualified professionals capable of executing a well conceived strategic plan. Frontier looks for businesses that, in its opinion, can generate returns on capital in excess of their cost of capital over a business cycle.

Each subadviser may sell securities for the Fund for a variety of reasons, such as, for example, to seek to secure gains, limit losses, or redeploy assets into more promising opportunities.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental

agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Growth Company Risk The prices of growth securities are often highly sensitive to market fluctuations because of their heavy dependence on future earnings or cash flow expectations, and can be more volatile than the market in general.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

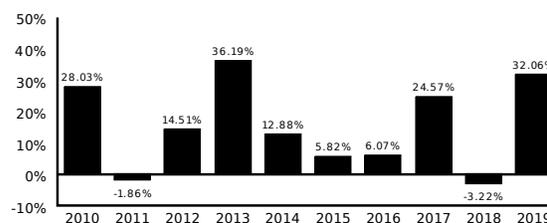
Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Performance for Class I shares of the Fund for periods prior to its inception date (11/15/10) is based on the performance of Class R5 shares. Performance for Class R4 shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance Class R5 Shares



Highest Quarter: 1Q '19, 17.27% Lowest Quarter: 3Q '11, -17.20%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|--|--|----------|------------|-----------|
| Class R5 | Return Before Taxes | 32.06% | 12.31% | 14.73% |
| | Return After Taxes on Distributions | 30.44% | 10.50% | 12.96% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 20.11% | 9.45% | 11.94% |
| Class I | Return Before Taxes | 32.22% | 12.44% | 14.84% |
| Service Class | Return Before Taxes | 31.99% | 12.21% | 14.62% |
| Administrative Class | Return Before Taxes | 31.85% | 12.09% | 14.49% |
| Class A | Return Before Taxes | 24.27% | 10.56% | 13.56% |
| Class R4 | Return Before Taxes | 31.66% | 11.93% | 14.35% |
| Class R3 | Return Before Taxes | 31.28% | 11.65% | 13.96% |
| Russell Midcap Growth Index (reflects no deduction for fees, expenses, or taxes) | | 35.47% | 11.60% | 14.24% |

MANAGEMENT

Investment Advisers: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): T. Rowe Price Associates, Inc. (“T. Rowe Price”)

Frontier Capital Management Company, LLC (“Frontier”)

Portfolio Manager(s):

Brian W. H. Berghuis, CFA is a Vice President and Equity Portfolio Manager at T. Rowe Price. He has managed the Fund since its inception (June 2000).

Ravi Dabas is a Vice President and Portfolio Manager at Frontier. He has managed the Fund since January 2019.

Christopher J. Scarpa is a Vice President and Portfolio Manager at Frontier. He has managed the Fund since August 2010.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are

redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Small Cap Growth Equity Fund

INVESTMENT OBJECTIVE

This Fund seeks long-term capital appreciation.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .80% | .80% | .80% | .80% | .80% | .80% | .80% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .07% | .17% | .27% | .37% | .37% | .27% | .27% |
| Total Annual Fund Operating Expenses | .87% | .97% | 1.07% | 1.17% | 1.42% | 1.32% | 1.57% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 89 | \$278 | \$ 482 | \$1,073 |
| Class R5 | \$ 99 | \$309 | \$ 536 | \$1,190 |
| Service Class | \$109 | \$340 | \$ 590 | \$1,306 |
| Administrative Class | \$119 | \$372 | \$ 644 | \$1,420 |
| Class A | \$687 | \$975 | \$1,284 | \$2,158 |
| Class R4 | \$134 | \$418 | \$ 723 | \$1,590 |
| Class R3 | \$160 | \$496 | \$ 855 | \$1,867 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 71% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund invests primarily in equity securities of smaller companies that the Fund's subadvisers believe offer potential for long-term growth. Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in the equity securities of companies whose market capitalizations at the time of purchase are within the market capitalization range of companies included in the Russell 2000[®] Index or the S&P SmallCap 600 Index (as of December 31, 2019, between \$13 million and \$8.34 billion). Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, rights, and warrants. While most assets typically will be invested in common stocks of U.S. companies, the Fund also may invest up to 20% of its total assets in foreign securities, including emerging market securities. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

The Fund is managed by two subadvisers, *Wellington Management Company LLP* (“Wellington Management”) and *Invesco Advisers, Inc.* (“Invesco”), each being responsible for a portion of the portfolio, although they may manage different amounts of the Fund’s assets. Each subadviser employs a growth-based investment approach and may perform a number of analyses in considering whether to buy or sell a security for the Fund. Wellington Management uses a combination of fundamental and quantitative analyses to identify small-cap companies that it believes are experiencing or will experience rapid earnings or revenue growth. Invesco uses fundamental research to select securities for the Fund’s portfolio. Each subadviser may consider selling a security for the Fund if, for example, in its judgment, target prices are reached, future upside potential is limited, company fundamentals are no longer attractive, superior purchase candidates are identified, or market capitalization ceilings are exceeded.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund’s portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small

and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund’s investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund’s assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody

and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Growth Company Risk The prices of growth securities are often highly sensitive to market fluctuations because of their heavy dependence on future earnings or cash flow expectations, and can be more volatile than the market in general.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of

investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

Quantitative Models Risk The portfolio managers use quantitative models as part of the idea generation process. Quantitative models are based upon many factors that measure individual securities relative to each other. Such models may not produce the intended results and can be adversely affected by errors or imperfections in the factors or the data on which measurements are based, changing sources of market return or market risk, or any technical issues with the design, construction, implementation, or maintenance of the models.

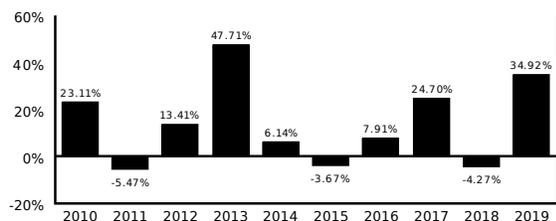
Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance and an additional index that provides a comparison for the Fund's returns without regard to investment style (Russell 2000 Index). Performance for Class I shares of the Fund for periods prior to its inception date (11/15/10) is based on the performance of Class R5 shares. Performance for Class R4 shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class R5 Shares



Highest Quarter: 1Q '19, 19.53% Lowest Quarter: 3Q '11, -22.98%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | One Year | Five Years | Ten Years | |
|--|--|------------|-----------|--------|
| Class R5 | Return Before Taxes | 34.92% | 10.86% | 13.23% |
| | Return After Taxes on Distributions | 31.23% | 7.74% | 10.08% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 23.02% | 7.88% | 9.98% |
| Class I | Return Before Taxes | 34.99% | 10.97% | 13.32% |
| Service Class | Return Before Taxes | 34.79% | 10.76% | 13.10% |
| Administrative Class | Return Before Taxes | 34.69% | 10.64% | 12.96% |
| Class A | Return Before Taxes | 26.88% | 9.11% | 12.03% |
| Class R4 | Return Before Taxes | 34.36% | 10.48% | 12.84% |
| Class R3 | Return Before Taxes | 34.02% | 10.21% | 12.43% |
| Russell 2000 Growth Index (reflects no deduction for fees, expenses, or taxes) | 28.48% | 9.34% | 13.01% | |
| Russell 2000 Index (reflects no deduction for fees, expenses, or taxes) | 25.52% | 8.23% | 11.83% | |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC ("MML Advisers")

Subadviser(s): Wellington Management Company LLP ("Wellington Management")

Invesco Advisers, Inc. ("Invesco")

Portfolio Manager(s):

Mario E. Abularach, CFA, CMT is a Senior Managing Director and Equity Research Analyst at Wellington Management. He has managed the Fund since April 2006.

Steven C. Angeli, CFA is a Senior Managing Director and Equity Portfolio Manager at Wellington Management. He has managed the Fund since April 2004.

Daniel J. Fitzpatrick, CFA is a Senior Managing Director and Equity Portfolio Manager at Wellington Management. He has managed the Fund since November 2001.

Stephen Mortimer is a Senior Managing Director and Equity Portfolio Manager at

Wellington Management. He has managed the Fund since April 2006.

John V. Schneider, CFA is a Vice President and Equity Research Analyst at Wellington Management. He has managed the Fund since February 2018.

Ash Shah, CFA is a Portfolio Manager at Invesco. He has managed the Fund since July 2015.

Ronald Zibelli, Jr., CFA is a Portfolio Manager at Invesco. He has managed the Fund since July 2015.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MM MSCI EAFE[®] International Index Fund

INVESTMENT OBJECTIVE

The Fund seeks to provide investment results approximating (before fees and expenses) the aggregate price and dividend performance of the securities included in the MSCI EAFE Index.*

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|-------------|-------------|-------------|
| Management Fees | .10% | .10% | .10% | .10% | .10% | .10% | .10% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .13% | .23% | .38% | .48% | .48% | .38% | .38% |
| Total Annual Fund Operating Expenses | .23% | .33% | .48% | .58% | .83% | .73% | .98% |

* The Fund is not sponsored, endorsed, sold, or promoted by MSCI Inc. ("MSCI"), any of its affiliates, any of its information providers, or any other third party involved in, or related to, compiling, computing, or creating any MSCI index (collectively, the "MSCI Parties"). The MSCI indexes are the exclusive property of MSCI. MSCI and the MSCI index names are service mark(s) of MSCI or its affiliates and have been licensed for use for certain purposes by MML Advisers. None of the MSCI Parties makes any representation or warranty, express or implied, to the issuer or owners of the Fund or any other person or entity regarding the advisability of investing in funds generally or in the Fund particularly or the ability of any MSCI index to track corresponding stock market performance.

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 24 | \$ 74 | \$ 130 | \$ 293 |
| Class R5 | \$ 34 | \$ 106 | \$ 185 | \$ 418 |
| Service Class | \$ 49 | \$ 154 | \$ 269 | \$ 604 |
| Administrative Class | \$ 59 | \$ 186 | \$ 324 | \$ 726 |
| Class A | \$ 630 | \$ 800 | \$ 985 | \$ 1,519 |
| Class R4 | \$ 75 | \$ 233 | \$ 406 | \$ 906 |
| Class R3 | \$ 100 | \$ 312 | \$ 542 | \$ 1,201 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 7% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

Under normal circumstances, the Fund invests at least 80% (and, typically, substantially all) of its net assets (plus the amount of any borrowings for investment purposes) in the equity securities of companies included in the MSCI EAFE Index ("Index"), in weightings that approximate the relative composition of the securities contained in the Index, and in MSCI EAFE Index futures contracts. The Index is a widely recognized, unmanaged index representative of equity securities in developed markets, excluding the U.S. and Canada. As of December 31, 2019, the market

capitalization range of companies included in the Index was \$2.04 billion to \$312.44 billion, and the Index consisted of securities in the following 21 developed market country indexes: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom. If the securities represented in the Index were to become concentrated in any particular industry, the Fund's investments would likewise be concentrated in securities of issuers in that industry; the Index is not currently concentrated in any single industry.

The Fund is passively managed, which means it tries to replicate the investment composition and performance of the Index by using computer programs and statistical procedures. The Fund's subadviser, *Northern Trust Investments, Inc.* ("NTI"), will buy and sell securities in response to changes in the Index. The Fund may use Index futures contracts, a type of derivative, to gain exposure to the Index in lieu of investing in cash, or to reduce its exposure to the Index while it sells the securities in its portfolio. Use of Index futures contracts by the Fund may create investment leverage. Because the Fund, unlike the Index, is subject to fees and transaction expenses, the Fund's returns are likely to be less than those of the Index.

Because the proportion of assets allocated to each country will approximate the relative country weights in the Index, more than 25% of the Fund's assets may be invested in a single country (such as the United Kingdom and Japan). This may make the Fund's performance more dependent upon the performance of a single country than if the Fund allocated its assets among issuers in a larger number of countries.

NTI expects that, under normal circumstances, the annual performance of the Fund, before fees and expenses, will track the performance of the Index within a 0.95 correlation coefficient.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and

other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in

the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Indexing Risk The Fund's performance may not track the performance of the index exactly due to a number of factors, including fees and expenses of the Fund, the Fund's cash positions, and differences between securities held by the Fund and the securities comprising the index.

Industry Concentration Risk The Fund may concentrate its assets in a particular industry or

group of industries. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in that industry or group of industries than if the Fund invested more broadly.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Geographic Focus Risk When the Fund focuses investments on a particular country, group of countries, or geographic region, its performance will be closely tied to the market, currency, economic, political, or regulatory conditions and developments in those countries or that region, and could be more volatile than the performance of more geographically diversified funds.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

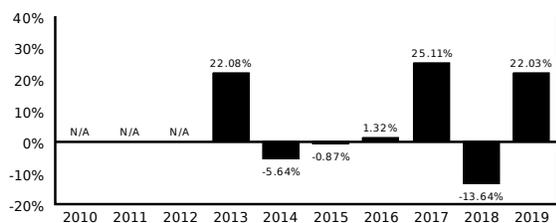
Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class I shares. The table shows how the Fund's average annual returns for 1 and 5 years, and since inception, compare with those of a broad measure of market performance. Performance for Class R4 and Class R3 shares of the Fund for periods prior to their inception date (04/01/14) is based on the performance of Class R5 shares, adjusted to reflect Class R4 and Class R3 expenses, respectively. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class I Shares



Highest Quarter: 3Q '13, 11.64% Lowest Quarter: 4Q '18, -12.52%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class I only. After-tax returns for other classes will vary.

Average Annual Total Returns (for the periods ended December 31, 2019)

| | One Year | Five Years | Since Inception (07/25/12) | |
|--|--|------------|----------------------------|-------|
| Class I | Return Before Taxes | 22.03% | 5.77% | 8.41% |
| | Return After Taxes on Distributions | 21.20% | 4.71% | 7.22% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 13.91% | 4.42% | 6.56% |
| Class R5 | Return Before Taxes | 21.86% | 5.65% | 8.30% |
| Service Class | Return Before Taxes | 21.66% | 5.50% | 8.13% |
| Administrative Class | Return Before Taxes | 21.55% | 5.39% | 8.02% |
| Class A | Return Before Taxes | 14.64% | 3.94% | 6.93% |
| Class R4 | Return Before Taxes | 21.35% | 5.22% | 7.85% |
| Class R3 | Return Before Taxes | 21.15% | 4.99% | 7.57% |
| MSCI EAFE Index (reflects no deduction for fees or expenses) | | | | |
| | | 22.01% | 5.67% | 8.42% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC ("MML Advisers")

Subadviser(s): Northern Trust Investments, Inc. ("NTI")

Portfolio Manager(s):

Steven Santiccioli is a Vice President at NTI. He has managed the Fund since October 2013.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

**PAYMENTS TO BROKER-DEALERS AND
OTHER FINANCIAL INTERMEDIARIES**

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary.

These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select Overseas Fund

INVESTMENT OBJECTIVE

The Fund seeks growth of capital over the long-term by investing in foreign equity securities.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 144 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|--|---------|----------|---------------|----------------------|---------|----------|----------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None | None | None | None | 5.50% | None | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None | None | None | None | None | None | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I | Class R5 | Service Class | Administrative Class | Class A | Class R4 | Class R3 |
|---|-------------|-------------|---------------|----------------------|--------------|--------------|--------------|
| Management Fees | .80% | .80% | .80% | .80% | .80% | .80% | .80% |
| Distribution and Service (Rule 12b-1) Fees | None | None | None | None | .25% | .25% | .50% |
| Other Expenses | .07% | .17% | .27% | .37% | .37% | .27% | .27% |
| Total Annual Fund Operating Expenses | .87% | .97% | 1.07% | 1.17% | 1.42% | 1.32% | 1.57% |

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your

actual costs may be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|----------------------|--------|---------|---------|----------|
| Class I | \$ 89 | \$278 | \$ 482 | \$1,073 |
| Class R5 | \$ 99 | \$309 | \$ 536 | \$1,190 |
| Service Class | \$109 | \$340 | \$ 590 | \$1,306 |
| Administrative Class | \$119 | \$372 | \$ 644 | \$1,420 |
| Class A | \$687 | \$975 | \$1,284 | \$2,158 |
| Class R4 | \$134 | \$418 | \$ 723 | \$1,590 |
| Class R3 | \$160 | \$496 | \$ 855 | \$1,867 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 27% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in stocks of foreign companies, including companies located in Europe, Latin America, and Asia. The Fund may invest up to 25% of its total assets in equity securities of issuers in emerging markets. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stocks, depositary receipts, rights and warrants, of issuers of any size. The Fund may but will not necessarily engage in foreign currency forward contracts to seek to hedge or to attempt to protect against adverse changes in currency exchange rates. The Fund may use futures contracts as a substitute for direct investments. Use of derivatives by the Fund may create investment leverage. The Fund may at times have significant exposure to one or more industries or sectors. The Fund may hold a portion of its assets in cash or cash equivalents.

The Fund is managed by two subadvisers, *Massachusetts Financial Services Company* ("MFS") and *Harris Associates L.P.* ("Harris"),

each being responsible for a portion of the portfolio, but not necessarily equally weighted. Each subadviser may invest a significant percentage of the Fund's assets in a single country or sector, a small number of countries or sectors, or a particular geographic region.

In selecting investments for the Fund, MFS is not constrained by any particular investment style. MFS may invest the Fund's assets in the stocks of companies it believes to have above average earnings growth potential compared to other companies (growth companies), in the stocks of companies it believes are undervalued compared to their perceived worth (value companies), or in a combination of growth and value companies. MFS may invest the Fund's assets in securities of companies of any size. MFS uses an active bottom-up investment approach to buying and selling investments for the Fund. Investments are selected primarily based on fundamental analysis of individual issuers and their potential in light of their financial condition, and market, economic, political, and regulatory conditions. Factors considered may include analysis of an issuer's earnings, cash flows, competitive position, and management ability. MFS may also consider environmental, social, and governance ("ESG") factors in its fundamental investment analysis. Quantitative screening tools that systematically evaluate an issuer's valuation, price and earnings momentum, earnings quality, and other factors, may also be considered.

In selecting investments for the Fund, Harris uses a value investment philosophy. This value investment philosophy is based upon the belief that, over time, a company's stock price converges with Harris' estimate of intrinsic value. Harris uses this value investment philosophy to identify companies that it believes have discounted stock prices compared to the companies' true business values. By "intrinsic value," Harris means an estimate of the price a knowledgeable buyer would pay to acquire the entire business. Harris usually sells a stock when the price approaches its estimated value. This means that Harris sets specific "buy" and "sell" targets for each stock held by the Fund. Harris also monitors each holding and adjusts those price targets as warranted to reflect changes in a company's fundamentals. Harris may from time to time have significant investments in one or more countries or in particular sectors.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange

control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Growth Company Risk The prices of growth securities are often highly sensitive to market fluctuations because of their heavy dependence on future earnings or cash flow expectations, and can be more volatile than the market in general.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Value Company Risk The value investment approach entails the risk that the market will not recognize a security's intrinsic value for a long time, or that a stock the investment adviser or subadviser judges to be undervalued may actually be appropriately priced.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Geographic Focus Risk When the Fund focuses investments on a particular country, group of countries, or geographic region, its performance will be closely tied to the market, currency,

economic, political, or regulatory conditions and developments in those countries or that region, and could be more volatile than the performance of more geographically diversified funds.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

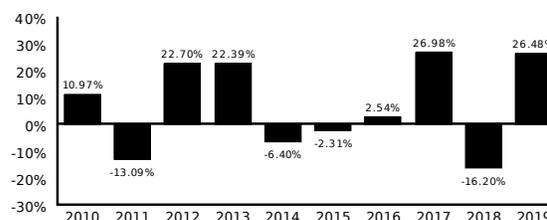
Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Performance for Class I shares of the Fund for periods prior to its inception date (11/15/10) is based on the performance of Class R5 shares. Performance for Class R4 shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class R5 Shares



Highest Quarter: 3Q '10, 16.06% Lowest Quarter: 3Q '11, -20.99%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class R5 only. After-tax returns for other classes will vary.

Average Annual Total Returns
(for the periods ended December 31, 2019)

| | | One Year | Five Years | Ten Years |
|--|--|---------------------|-----------------------|----------------------|
| Class R5 | Return Before Taxes | 26.48% | 6.16% | 6.21% |
| | Return After Taxes on Distributions | 25.57% | 5.05% | 5.54% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 16.64% | 4.70% | 4.99% |
| Class I | Return Before Taxes | 26.74% | 6.28% | 6.37% |
| Service Class | Return Before Taxes | 26.36% | 6.06% | 6.13% |
| Administrative Class | Return Before Taxes | 26.24% | 5.96% | 6.04% |
| Class A | Return Before Taxes | 19.02% | 4.48% | 5.18% |
| Class R4 | Return Before Taxes | 26.18% | 5.79% | 5.83% |
| Class R3 | Return Before Taxes | 25.77% | 5.51% | 5.54% |
| MSCI EAFE Index (reflects no deduction for fees or expenses) | | 22.01% | 5.67% | 5.50% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser(s): Massachusetts Financial Services Company (“MFS”)

Harris Associates L.P. (“Harris”)

Portfolio Manager(s):

Filipe Benzinho is an Investment Officer at MFS. He has managed the Fund since May 2016.

Daniel Ling is an Investment Officer at MFS. He has managed the Fund since October 2009.

David G. Herro, CFA is the Deputy Chairman, the Chief Investment Officer of International Equities, and a Portfolio Manager at Harris. He has managed the Fund since July 2001.

Michael L. Manelli, CFA is a Vice President, a Portfolio Manager, and an International Investment Analyst at Harris. He has managed the Fund since January 2017.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

MassMutual Select T. Rowe Price International Equity Fund

INVESTMENT OBJECTIVE

The Fund seeks long-term capital growth and current income primarily through investments in non-U.S. stocks.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund.

Shareholder Fees (fees paid directly from your investment)

| | Class I |
|--|---------|
| Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price) | None |
| Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds) | None |

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

| | Class I |
|---|-------------|
| Management Fees | .69% |
| Distribution and Service (Rule 12b-1) Fees | .00% |
| Other Expenses | .10% |
| Total Annual Fund Operating Expenses | .79% |
| Expense Reimbursement | (.12%) |
| Total Annual Fund Operating Expenses after Expense Reimbursement ⁽¹⁾ | .67% |

(1) The expenses in the above table reflect a written agreement by MML Advisers to cap the Fees and Expenses of the Fund (other than extraordinary litigation and legal expenses, Acquired Fund Fees and Expenses, interest expense, short sale dividend and loan expense, or other non-recurring or unusual expenses such as organizational expenses and shareholder meeting expenses) through January 31, 2021, to the extent that Total Annual Fund Operating Expenses after Expense Reimbursement would otherwise exceed .67% for Class I. The Total Annual Fund Operating Expenses after Expense Reimbursement shown in the above table may exceed these amounts, because, as noted in the previous sentence, certain fees and expenses are excluded from the cap. The agreement can only be terminated by mutual consent of the Board of Trustees on behalf of the Fund and MML Advisers.

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. The example also assumes that your investment earns a 5% return each year and that the Fund's operating expenses are exactly as described in the preceding table. Although your actual costs may

be higher or lower, based on these assumptions your costs would be:

| | 1 Year | 3 Years | 5 Years | 10 Years |
|---------|--------|---------|---------|----------|
| Class I | \$68 | \$240 | \$427 | \$967 |

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 26% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in equity securities. Equity securities may include common stocks, preferred stocks, securities convertible into common or preferred stock, rights, and warrants. The Fund normally invests in a number of different countries throughout the world and may purchase the stocks of companies of any size.

The Fund will normally invest primarily in non-U.S. securities, which may include emerging markets (including so-called "frontier market") securities. Emerging market countries in which the Fund may invest include, but are not limited to, the following:

- *Asia:* China, India, Indonesia, Malaysia, Pakistan, Philippines, South Korea, Sri Lanka, Taiwan, Thailand, and Vietnam.
- *Latin America:* Argentina, Belize, Brazil, Chile, Colombia, Mexico, Panama, Peru, and Venezuela.
- *Europe:* Croatia, Czech Republic, Estonia, Greece, Hungary, Kazakhstan, Latvia, Lithuania, Poland, Romania, Russia, Slovakia, Slovenia, Turkey, and Ukraine.
- *Africa and the Middle East:* Bahrain, Botswana, Egypt, Jordan, Kenya, Kuwait, Lebanon, Mauritius, Morocco, Nigeria, Oman, Qatar, Saudi Arabia, South Africa, Tunisia, United Arab Emirates, and Zimbabwe.

The Fund may at times have significant exposure to one or more industries or sectors, including the financial sector. The Fund may (but is not obligated to) use a wide variety of exchange-traded and over-the-counter derivatives, for hedging purposes, to adjust various portfolio characteristics, or as a substitute for direct investments in securities. Such derivatives may include futures contracts, swaps, and options. The Fund may also, but will not necessarily, engage in foreign currency transactions, including forward contracts, options on currencies, futures contracts, and swap contracts, to seek to hedge or to attempt to protect against adverse changes in currency exchange rates or otherwise to adjust the currency exposures within the Fund's portfolio. Use of derivatives by the Fund may create investment leverage. The Fund may also invest in other investment companies, including exchange-traded funds. The Fund may hold a portion of its assets in cash or cash equivalents.

The Fund's subadviser, *T. Rowe Price Associates, Inc.* ("T. Rowe Price"), takes a core approach to investing, which provides exposure to both growth and value styles of investing. While T. Rowe Price invests with an awareness of the global economic backdrop and T. Rowe Price's outlook for certain industries, sectors, and individual countries, T. Rowe Price's decision making process focuses on bottom-up stock selection. Country allocation is driven largely by stock selection, though T. Rowe Price may limit investments in markets or industries that appear to have poor overall prospects. T. Rowe Price relies on a global research team to identify stocks of companies that are capable of achieving and sustaining above-average, long-term earnings growth, including companies that appear to be undervalued by various measures and may be temporarily out of favor, but have good prospects for capital appreciation and dividend growth.

T. Rowe Price generally looks for companies with one or more of the following: leading or improving market position; attractive business niche with potential for earnings growth; attractive valuation on various earnings, book value, sales and cash flow metrics in absolute terms and/or relative to a company's peers or its own historical norm; barriers to entry in its business; attractive or improving franchise or industry position; seasoned management; low valuation relative to a company's growth potential; companies that may benefit from restructuring activity or other turnaround opportunities; a sound or improving balance sheet

and other positive financial characteristics; and above-average dividend yield and/or the potential to grow dividends or conduct share repurchases.

In pursuing the Fund's investment objective, T. Rowe Price has the discretion to purchase some securities that do not meet its normal investment criteria described above, when it believes there is an opportunity for substantial appreciation (such as, for example, T. Rowe Price believes a security could increase in value as a result of a change in management, an extraordinary corporate event, a new product introduction or innovation, or a favorable competitive development).

T. Rowe Price may sell securities for a variety of reasons, such as to secure gains, limit losses, or redeploy assets into more promising opportunities.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund. Certain risks relating to instruments and strategies used in the management of the Fund are placed first. The significance of any specific risk to an investment in the Fund will vary over time, depending on the composition of the Fund's portfolio, market conditions, and other factors. You should read all of the risk information presented below carefully, because any one or more of these risks may result in losses to the Fund.

Equity Securities Risk Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry, political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization

of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can react differently to market, economic, industry, political, regulatory, and other conditions than the U.S. market.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially

greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect or benefit anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Growth Company Risk The prices of growth securities are often highly sensitive to market fluctuations because of their heavy dependence on future earnings or cash flow expectations, and can be more volatile than the market in general.

Large Company Risk Large-capitalization stocks as a group could fall out of favor with the market, causing the Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.

Small and Mid-Cap Company Risk Market risk and liquidity risk are particularly pronounced for securities of small and medium-sized companies, which may trade less frequently and in smaller volumes than more widely-held securities, and may fluctuate in price more than other securities. Their shares can be less liquid than those of larger companies, especially during market declines. Small and medium-sized companies may have limited product lines, markets, or financial resources and may be dependent on a limited management group; they may have been recently organized and have little or no track record of success.

Value Company Risk The value investment approach entails the risk that the market will not recognize a security's intrinsic value for a long time, or that a stock the investment adviser or subadviser judges to be undervalued may actually be appropriately priced.

Banking and Financial Companies Risk To the extent the Fund has significant investments in financial companies, it is more susceptible to adverse developments affecting such companies

and may perform poorly during a downturn in the industries of such companies. Financial companies can be adversely affected by, among other things, regulatory changes, interest rate movements, the availability of capital and the cost to borrow, and the rate of debt defaults. Financial companies may also be adversely affected by decreases in the availability of money or reductions in asset valuations, credit rating downgrades, increased competition, and adverse conditions in other related markets.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

Geographic Focus Risk When the Fund focuses investments on a particular country, group of countries, or geographic region, its performance will be closely tied to the market, currency, economic, political, or regulatory conditions and developments in those countries or that region, and could be more volatile than the performance of more geographically diversified funds.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or certain positions may be difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time. The Fund may not receive the proceeds from the sale of certain investments for an extended period.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Preferred Stock Risk Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, changes in interest rates may adversely affect the value of a preferred stock that pays a fixed dividend.

Risk of Investment in Other Funds or Pools The Fund is indirectly exposed to all of the risks of the underlying funds, including ETFs, in which it invests, including the risk that the underlying funds will not perform as expected. The Fund indirectly pays a portion of the expenses incurred by the underlying funds.

Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those industries or sectors than if the Fund invested more broadly.

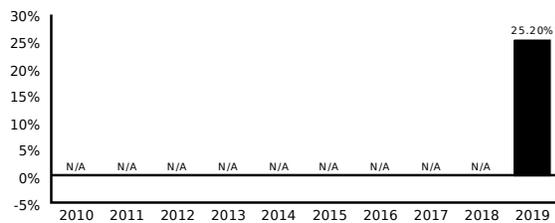
Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class I shares. The table shows how the Fund's average annual returns for 1 year, and since inception, compare with those of a broad measure of market performance. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance

Class I Shares



Highest Quarter: 1Q '19, 11.28% Lowest Quarter: 3Q '19, -0.84%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts.

Average Annual Total Return (for the periods ended December 31, 2019)

| | | One Year | Since Inception (2/9/2018) |
|---|--|-------------|----------------------------------|
| Class I | Return Before Taxes | 25.20% | 3.14% |
| | Return After Taxes on Distributions | 24.73% | 2.80% |
| | Return After Taxes on Distributions and Sales of Fund Shares | 15.56% | 2.52% |
| MSCI ACWI ex USA (reflects no deduction for fees or expenses) | | 21.51% | 2.93% |

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC ("MML Advisers")

Subadviser(s): T. Rowe Price Associates, Inc. ("T. Rowe Price")

Sub-subadviser(s): T. Rowe Price International Ltd ("T. Rowe Price International")

Portfolio Manager(s):

Richard N. Clattenburg, CFA is a Vice President and Portfolio Manager at T. Rowe Price. He has managed the Fund since its inception (February 2018).

Colin McQueen is a Vice President and Portfolio Manager at T. Rowe Price International. He has managed the Fund since July 2019.

Raymond A. Mills, Ph.D., CFA is a Vice President and Portfolio Manager at T. Rowe Price. He has managed the Fund since its inception (February 2018).

Gonzalo Pangaro, CFA is a Vice President and Portfolio Manager at T. Rowe Price International. He has managed the Fund since its inception (February 2018).

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone, or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.

Additional Information Regarding Investment Objectives and Principal Investment Strategies

Changes to Investment Objectives and Strategies. Each Fund's investment objective and strategies are non-fundamental and may be changed by the Board of Trustees (the "Trustees") of the MassMutual Select Funds (the "Trust") without shareholder approval.

Note Regarding Percentage Limitations. All percentage limitations on investments in this Prospectus will apply at the time of investment, and will not be considered violated unless an excess or deficiency occurs or exists immediately after and as a result of the investment. (As a result, the actual investments making up a Fund's portfolio may not at a particular time comport with any such limitation due to increases or decreases in the values of securities held by the Fund.) However, if, through a change in values, net assets, or other circumstances, a Fund were in a position where more than 15% of its net assets was invested in illiquid securities, the Fund would take appropriate orderly steps, as deemed necessary, to protect liquidity. With respect to a Fund whose name suggests that the Fund focuses its investments in a particular type of investment or investments, or in investments in a particular industry or group of industries, and that has adopted a policy under Rule 35d-1 under the 1940 Act, such Fund's policy to invest at least 80% of its net assets in certain investments may be changed by the Trustees upon at least 60 days' prior written notice to shareholders.

Credit Ratings. Security ratings are determined at the time of investment based on ratings published by nationally recognized statistical rating organizations; if a security is not rated, it will be deemed to have the same rating as a security determined by the investment adviser or subadviser to be of comparable quality. Unless otherwise stated, if a security is rated by more than one nationally recognized statistical rating organization, the highest rating is used. The Fund may retain any security whose rating has been downgraded after purchase.

Duration. Duration is a measure of the expected life of a debt security that is used to determine the sensitivity of the security's value to changes in interest rates. The longer a security's duration, the more sensitive it will be to changes in interest rates. Unlike the maturity of a debt security, which

measures only the time until final payment is due, duration takes into account the time until all payments of interest and principal on a security are expected to be made, including how these payments are affected by prepayments and by changes in interest rates.

Leverage. Leverage generally has the effect of increasing the amount of loss or gain a Fund might realize, and may increase volatility in the value of a Fund's investments. Adverse changes in the value or level of the underlying asset, rate, or index may result in a loss substantially greater than the amount invested in the derivative itself.

Temporary Defensive Positions. At times, a Fund's investment adviser or subadviser may determine that market conditions make pursuing a Fund's basic investment strategy inconsistent with the best interests of its shareholders. At such times, the investment adviser or subadviser may (but will not necessarily), without notice, temporarily use alternative strategies primarily designed to reduce fluctuations in the values of a Fund's assets. In implementing these defensive strategies, a Fund may hold assets without limit in cash and cash equivalents and in other investments that the investment adviser or subadviser believes to be consistent with the Fund's best interests. If such a temporary defensive strategy is implemented, a Fund may not achieve its investment objective.

Portfolio Turnover. Changes are made in a Fund's portfolio whenever the investment adviser or subadviser believes such changes are desirable. Portfolio turnover rates are generally not a factor in making buy and sell decisions. A high portfolio turnover rate will result in higher costs from brokerage commissions, dealer-mark-ups, bid-ask spreads, and other transaction costs and may also result in a higher percentage of short-term capital gains and a lower percentage of long-term capital gains as compared to a fund that trades less frequently (short-term capital gains generally receive less favorable tax treatment in the hands of shareholders than do long-term capital gains). Such costs are not reflected in the Funds' Total Annual Fund Operating Expenses set forth in the fee tables but do have the effect of reducing a Fund's investment return.

Non-Principal Investments; Use of Derivatives; Securities Loans; Repurchase Agreements. A Fund may hold investments that are not included in its

principal investment strategies. These non-principal investments are described in the Statement of Additional Information (“SAI”) or below under “Additional Information Regarding Principal Risks.” A Fund also may choose not to invest in certain securities described in this Prospectus and in the SAI, even though it has the ability to do so. Certain Funds may engage in transactions involving derivatives as part of their principal investment strategies; the disclosures of the principal investment strategies of those Funds include specific references to those derivatives transactions. Any of the other Funds may engage in derivatives transactions not as part of their principal investment strategies, and Funds that may use certain derivatives as part of their principal investment strategies may use other derivatives (not as part of their principal investment strategies), as well. A Fund may use derivatives for hedging purposes, as a substitute for direct investment, to earn additional income, to adjust portfolio characteristics, including duration (interest rate volatility), to gain exposure to securities or markets in which it might not be able to invest directly, to provide asset/liability management, or to take long or short positions on one or more indexes, securities, or foreign currencies. If a Fund takes a short position with respect to a particular index, security, or currency, it will lose money if the index, security, or currency appreciates in value, or an expected credit or other event that might affect the value of the index, security, or currency fails to occur. Losses could be significant. Derivatives transactions may include, but are not limited to, foreign currency exchange transactions, options, futures contracts, interest rate swaps, interest rate futures contracts, forward contracts, total return swaps, credit default swaps, and hybrid instruments. A Fund may use derivatives to create investment leverage. See “Additional Information Regarding Principal Risks,” below, and the SAI for more information regarding those transactions.

A Fund may make loans of portfolio securities to broker-dealers and other financial intermediaries of up to 33% of its total assets, and may enter into repurchase agreements. These transactions must be fully collateralized at all times, but involve some risk to a Fund if the other party should default on its obligation and the Fund is delayed or prevented from recovering the collateral, or if the Fund is required to return collateral to a borrower at a time when it may realize a loss on the investment of that collateral. Any losses from the investment of cash collateral received by the Fund will be for the Fund’s account and may

exceed any income the Fund receives from its securities lending activities. A repurchase agreement is a transaction in which a Fund purchases a security from a seller, subject to the obligation of the seller to repurchase that security from the Fund at a higher price. A Fund may enter into securities loans and repurchase agreements as a non-principal investment strategy.

Foreign Securities. The globalization and integration of the world economic system and related financial markets have made it increasingly difficult to define issuers geographically. Accordingly, the Funds intend to construe geographic terms such as “foreign,” “non-U.S.,” “European,” “Latin American,” “Asian,” and “emerging markets” in the manner that affords to the Funds the greatest flexibility in seeking to achieve the investment objective(s) of the relevant Fund. Specifically, unless otherwise stated, in circumstances where the investment objective and/or strategy is to invest (a) exclusively in “foreign securities,” “non-U.S. securities,” “European securities,” “Latin American securities,” “Asian securities,” or “emerging markets” (or similar directions) or (b) at least some percentage of the Fund’s assets in foreign securities, etc., the Fund will take the view that a security meets this description so long as the issuer of a security is tied economically to the particular country or geographic region indicated by words of the relevant investment objective and/or strategy (the “Relevant Language”). For these purposes the issuer of a security is deemed to have that tie if:

- (i) the issuer is organized under the laws of the country or a country within the geographic region suggested by the Relevant Language or maintains its principal place of business in that country or region; or
- (ii) the securities are traded principally in the country or region suggested by the Relevant Language; or
- (iii) the issuer, during its most recent fiscal year, derived at least 50% of its revenues or profits from goods produced or sold, investments made, or services performed in the country or region suggested by the Relevant Language or has at least 50% of its assets in that country or region.

In addition, the Funds intend to treat derivative securities (e.g., call options) for this purpose by reference to the underlying security. Conversely, if the investment objective and/or strategy of a Fund limits the percentage of assets that may be

invested in “foreign securities,” etc. or prohibits such investments altogether, a Fund intends to categorize securities as “foreign,” etc. only if the

security possesses all of the attributes described above in clauses (i), (ii), and (iii).

Disclosure of Portfolio Holdings

A description of the Funds' policies and procedures with respect to the disclosure of each Fund's portfolio securities is available in the Funds' SAI.

Additional Information Regarding Principal Risks

A Fund, by itself, generally is not intended to provide a complete investment program. Investment in the Funds is intended to serve as part of a diversified portfolio of investments. An investment in a Fund is not a bank deposit and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

The value of your investment in a Fund changes with the values of the investments in the Fund's portfolio. Many things can affect those values. Factors that may have an important or significant effect on a particular Fund's portfolio as a whole are called "Principal Risks." The Principal Risks of each Fund are identified in the foregoing Fund Summaries and are described in this section. Certain Funds may be more susceptible to some risks than others. Although the Funds strive to reach their stated goals, they cannot offer guaranteed results. The value of your investment in a Fund could go down as well as up. You can lose money by investing in the Funds.

The SAI contains further information about the Funds, their investments and their related risks.

- **Bank Loans Risk**

Many of the risks associated with bank loans are similar to the risks of investing in below investment grade debt securities, although bank loans are typically (though not always) senior and secured, while below investment grade debt securities or investments are often subordinated and unsecured. Changes in the financial condition of the borrower or economic conditions or other circumstances may reduce the capacity of the borrower to make principal and interest payments on such instruments and may lead to defaults. The value of any collateral securing a bank loan may decline after a Fund invests, and there is a risk that the value of the collateral may not be sufficient to cover the amount owed to the Fund. In addition, collateral securing a loan may be found invalid, may be used to pay other outstanding obligations of the borrower under

applicable law, or may be difficult to sell. In the event that a borrower defaults, a Fund's access to the collateral may be limited by bankruptcy and other insolvency laws. There is also the risk that the collateral may be difficult to liquidate, or that a majority of the collateral may be illiquid. In addition, some loans may be unsecured. Unsecured loans generally present a greater risk of loss to the Fund if the issuer defaults. In some cases, the Fund may rely on a third party to administer its interest in a loan, and so is subject to the risk that the third party will be unwilling or unable to perform its obligations. The Fund may invest in a loan by purchasing an indirect interest in the loan held by a third party. In that case, the Fund will be subject to both the credit risk of the borrower and of the third party, and the Fund may be unable to realize some or all of the value of its interest in the loan in the event of the insolvency of the third party. The settlement time for certain loans is longer than the settlement time for many other types of investments, and the Fund may not receive the payment for a loan sold by it until well after the sale; that cash would be unavailable for payment of redemption proceeds or for reinvestment. Interests in some bank loans may not be readily marketable and may be subject to restrictions on resale. In some cases, negotiations involved in disposing of indebtedness may require weeks to complete. Consequently, some indebtedness may be difficult or impossible to dispose of readily at what the Fund believes to be a fair price. Some bank loans may be illiquid, and bank loans generally tend to be less liquid than many other debt securities. The lack of a liquid secondary market may make it more difficult for the Fund to assign a value to such instruments for purposes of valuing the Fund's portfolio and calculating its net asset value ("NAV").

- **Banking and Financial Companies Risk**

A Fund may invest significantly in banks and other financial services companies. To the extent a Fund has significant investments in financial companies, it is more susceptible to adverse developments affecting such companies and may perform poorly during a downturn in the industries of such companies. Financial companies can be adversely affected by, among other things, regulatory changes, interest rate movements, the availability of

capital and the cost to borrow, and the rate of debt defaults. Banks and other financial services institutions are often subject to extensive governmental regulation and intervention, and additional regulation could reduce profit margins and adversely affect the scope of their activities, and the amount of capital they must maintain, and limit the amounts and types of loans and other financial commitments they can make. Financial companies may also be adversely affected by decreases in the availability of money or reductions in asset valuations, credit rating downgrades, increased competition, and adverse conditions in other related markets. Interconnectedness or interdependence among financial companies increases the risk that the financial distress or failure of one financial company may materially and adversely affect a number of other financial companies. The oversight of, and regulations applicable to, financial companies in emerging markets may be ineffective when compared with the regulatory frameworks in developed markets. Financial companies in emerging markets may have significantly less access to capital than companies in more developed markets, leading them to be more likely to fail under adverse economic conditions. In addition, the impact of future regulation on any individual financial company, or on the financial services sector as a whole, can be very difficult to predict.

- **Below Investment Grade Debt Securities Risk**

Below investment grade debt securities, which are also known as “junk” or “high yield” bonds, and comparable unrated securities in which a Fund may invest, have speculative characteristics, and changes in economic conditions, the financial condition of the issuer, and/or an unanticipated rise in interest rates or other circumstances are more likely to lead to a weakened capacity to make principal and interest payment than in the case of higher grade securities. Below investment grade debt securities involve greater volatility of price and yield and greater risk of loss of principal and interest than do higher quality securities. In the past, economic downturns or increases in interest rates have, under certain circumstances, resulted in a higher incidence of default by the issuers of these instruments and are likely to do so in the future, especially in the case of highly leveraged issuers. The

prices for these instruments may be affected by legislative and regulatory developments. Some below investment grade debt securities are issued in connection with management buy-outs and other highly leveraged transactions, and may entail substantial risk of delays in payments of principal or interest or of defaults. The inability (or perceived inability) of issuers to make timely payment of interest and principal would likely make the values of securities held by the Fund more volatile and could limit the Fund’s ability to sell its securities at prices approximating the values the Fund has placed on such securities. In the absence of a liquid trading market for securities held by it, a Fund at times may be unable to establish the fair value of such securities. To the extent a Fund invests in securities in the lower rating categories, the achievement of the Fund’s goals is more dependent on the Fund investment adviser’s or subadviser’s investment analysis than would be the case if the Fund were investing in securities in the higher rating categories. Securities that are rated CCC or below by Standard & Poor’s or Caa or below by Moody’s Investors Service, Inc. are generally regarded by the rating agencies as having extremely poor prospects of ever attaining any real investment standing.

- **Cash Position Risk**

A Fund may hold a significant portion of its assets in cash or cash equivalents at the sole discretion of the Fund’s investment adviser or subadviser, based on such factors as it may consider appropriate under the circumstances. The portion of a Fund’s assets invested in cash and cash equivalents may at times exceed 25% of the Funds’ net assets. To the extent a Fund holds a significant portion of its assets in cash or cash equivalents, its investments returns may be adversely affected and the Fund may not achieve its investment objective.

- **Commodities-Related Investments Risk**

Commodity prices (including precious metals) can be extremely volatile and exposure to commodities can cause the NAV of the Fund’s shares to decline or fluctuate in a rapid and unpredictable manner. The values of physical commodities or commodity-linked derivative investments may be affected by changes in overall market movements, real or perceived inflationary trends, commodity index volatility,

changes in interest rates or currency exchange rates, population growth and changing demographics, international economic, political and regulatory developments, or factors affecting a particular region, industry, or commodity, such as drought, floods, weather, embargoes, tariffs, and international economic, political, and regulatory developments. The price of a commodity may be affected by demand/supply imbalances in the market for the commodity. Also, a liquid secondary market may not exist for certain commodity investments, which may make it difficult for the Fund to sell them at a desirable price or the price at which it is carrying them. A Fund's investments in commodities and commodity-related instruments may bear on or be limited by the Fund's intention or ability to qualify as a "regulated investment company" for U.S. federal income tax purposes. See "Taxation and Distributions" below.

- **Convertible Securities Risk**

Convertible securities are bonds, debentures, notes or other debt securities that may be converted at either a stated price or stated rate into shares of common or preferred stock (or cash or other securities of equivalent value), and so are subject to the risks of investments in both debt securities and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality of the issuer, and interest rates. Due to the conversion feature, convertible debt securities generally yield less than non-convertible securities of similar credit quality and maturity. The values of convertible securities may be interest-rate sensitive and tend to decline as interest rates rise and to rise when interest rates fall. A Fund may invest at times in securities that have a mandatory conversion feature, pursuant to which the securities convert automatically into stock at a specified date and conversion ratio, or that are convertible at the option of the issuer. When conversion is not at the option of the holder, a Fund may be required to convert the security into the underlying stock even at times when the value of the underlying common stock has declined substantially or it would otherwise be disadvantageous to do so.

- **Credit Risk**

Credit risk is the risk that an issuer, guarantor, or liquidity provider of a fixed income security held by a Fund may be unable or unwilling, or may be perceived (whether by market participants, ratings agencies, pricing services or otherwise) as unable or unwilling, to make timely principal and/or interest payments, or to otherwise honor its obligations. It includes the risk that the security will be downgraded by a credit rating agency; generally, lower credit quality issuers present higher credit risks. An actual or perceived decline in creditworthiness of an issuer of a fixed income security held by the Fund may result in a decrease in the value of the security. It is possible that the ability of an issuer to meet its obligations will decline substantially during the period when the Fund owns securities of the issuer or that the issuer will default on its obligations or that the obligations of the issuer will be limited or restructured. The credit rating assigned to any particular investment does not necessarily reflect the issuer's current financial condition and does not reflect an assessment of an investment's volatility or liquidity. Securities rated in the lowest category of investment grade are considered to have speculative characteristics. In addition, below investment grade debt securities (i.e., "junk" or "high yield" bonds) involve greater credit risk, are more volatile, involve greater risk of price declines and may be more susceptible to economic downturn than investment grade securities. If a security held by the Fund loses its rating or its rating is downgraded, the Fund may nonetheless continue to hold the security in the discretion of the investment adviser or subadviser. In the case of asset-backed or mortgage-related securities, changes in the actual or perceived ability of the obligors on the underlying assets or mortgages may affect the values of those securities.

The Fund may also be exposed to the credit risk of its counterparty to repurchase agreements, reverse repurchase agreements, swap transactions, and other derivatives transactions, and to the counterparty's ability or willingness to perform in accordance with the terms of the transaction. The value of such transactions to the Fund will depend on the willingness and ability of the counterparty to perform its obligations, including among other things the obligation to return collateral or margin to the Fund.

- **Currency Risk**

Because foreign securities normally are denominated and traded in foreign currencies, the value of a Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, currency exchange control regulations, intervention (or failure to intervene) by the U.S. or foreign governments in currency markets, foreign withholding taxes, and restrictions or prohibitions on the repatriation of foreign currencies. A Fund may, but will not necessarily, engage in foreign currency transactions in order to protect against fluctuations in the values of holdings denominated in or exposed to other currencies, or, for certain Funds, to generate additional returns. Derivatives transactions providing exposure to foreign currencies create investment leverage. A Fund's investment in foreign currencies may increase the amount of ordinary income recognized by the Fund.

Officials in foreign countries may from time to time take actions in respect of their currencies which could significantly affect the value of a Fund's assets denominated in those currencies or the liquidity of such investments. For example, a foreign government may unilaterally devalue its currency against other currencies, which would typically have the effect of reducing the U.S. dollar value of investments denominated in that currency. A foreign government may also limit the convertibility or repatriation of its currency or assets denominated in its currency, which would adversely affect the U.S. dollar value and liquidity of investments denominated in that currency. In addition, although at times most of a Fund's income may be received or realized in foreign currencies, the Fund will be required to compute and distribute its income in U.S. dollars. As a result, if the exchange rate for any such currency declines after the Fund's income has been earned and translated into U.S. dollars but before payment to shareholders, the Fund could be required to sell portfolio investments to make such distributions. Similarly, if a Fund incurs an expense in a foreign currency and the exchange rate changes adversely to the Fund before the expense is paid, the Fund would have to convert a greater amount of U.S. dollars to pay for the expense at that time than it would have had to convert at the time the Fund incurred the expense. Investments in foreign

currencies themselves (directly or through derivatives transactions) may be highly volatile and may create investment leverage.

- **Cyber Security and Technology Risk**

The Funds and their service providers (including the Funds' investment adviser, subadvisers, custodian, and transfer agent) are subject to operational and information security risks, including those resulting from cyber-attacks and other technological issues. Technological issues or failures, or interference or attacks by "hackers" or others, may have the effect of disabling or hindering the Funds' operations or the operations of a service provider to the Funds. There are inherent limitations in business continuity plans and technology systems designed to prevent cyber-attacks and avoid operational incidents, including the possibility that certain risks have not been identified. The Funds' investment adviser does not control the cyber security plans and systems put in place by third-party service providers, and such third-party service providers may have limited indemnification obligations to the Funds' investment adviser or the Funds, each of whom could be negatively impacted as a result. Similar risks also are present for issuers of securities in which the Funds invest, which could result in material adverse consequences for such issuers, and may cause a Fund's investment in such securities to lose value.

- **Defaulted and Distressed Securities Risk**

Defaulted securities risk refers to the uncertainty of repayment of defaulted securities and obligations of distressed issuers. Because the issuer of such securities is in default and is likely to be in distressed financial condition, repayment of defaulted securities and obligations of distressed issuers (including insolvent issuers or issuers in payment or covenant default, in workout or restructuring, or in bankruptcy or insolvency proceedings) is subject to significant uncertainties. The market will likely be less liquid for distressed or defaulted securities than for other types of securities. Reduced liquidity can affect the valuations of distressed or defaulted securities, make their valuation and sale more difficult, and result in greater volatility. Insolvency laws and practices in foreign countries are different than those in the U.S. and the effect of these laws and practices cannot be predicted with

certainty. Investments in defaulted securities and obligations of distressed issuers are considered speculative.

- **Derivatives Risk**

Derivatives are financial contracts whose values depend upon, or are derived from, the value of an underlying asset, reference rate, or index. Derivatives may relate to stocks, bonds, interest rates, currencies, credit exposures, currency exchange rates, commodities, related indexes, or other assets. The use of derivative instruments may involve risks different from, or greater than, the risks associated with investing directly in securities and other more traditional investments. Derivatives can be highly volatile and are subject to a number of potential risks described in this Prospectus, including market risk, credit risk, management risk, liquidity risk, and leveraging risk. Derivative products are highly specialized instruments that may require investment techniques and risk analyses different from those associated with stocks and bonds. The use of a derivative requires an understanding not only of the underlying instrument or index but also of the derivative itself, often without the benefit of observing the performance of the derivative under all possible market conditions. (For example, successful use of a credit default swap may require, among other things, an understanding of both the credit of the company to which it relates and of the way the swap is likely to respond to changes in various market conditions and to factors specifically affecting the company.) The use of derivatives involves the risk that a loss may be sustained as a result of the failure of another party to the contract (typically referred to as a “counterparty”) to make required payments or otherwise to comply with the contract’s terms. Derivative transactions can create investment leverage. Losses from derivatives can be substantially greater than the derivatives’ original cost and can sometimes be unlimited. Since the values of derivatives are calculated and derived from the values of other assets, reference rates, or indexes, there is greater risk that derivatives will be improperly valued. Derivatives also involve the risk that changes in the value of a derivative may not correlate perfectly with changes in the value of its underlying asset, rate, or index, and the risk that a derivative transaction may not have the effect or benefit

the Fund’s investment adviser or subadviser anticipated. Also, suitable derivative transactions may not be available in all circumstances, and there can be no assurance that a Fund will engage in these transactions when that would be beneficial. A liquid secondary market may not always exist for a Fund’s derivative positions at any time. If a derivative transaction is particularly large or if the relevant market is illiquid (as is the case with many privately negotiated derivatives), it may not be possible to initiate a transaction or liquidate a position at an advantageous price or at all. Although the use of derivatives is intended to enhance a Fund’s performance, it may instead reduce returns and increase volatility.

Recent U.S. and non-U.S. legislative and regulatory reforms, including those related to the Dodd-Frank Wall Street Reform and Consumer Protection Act, have resulted in, and may in the future result in, new regulation of derivative instruments and the Funds’ use of such instruments. New regulations could, among other things, restrict a Fund’s ability to engage in derivative transactions (for example, by making certain types of derivative instruments or transactions no longer available to a Fund), establish new margin requirements and/or increase the costs of derivatives transactions, and a Fund may as a result be unable to execute its investment strategies in a manner its subadviser might otherwise choose. Counterparty risk with respect to derivatives has been and may continue to be affected by new rules and regulations concerning the derivatives market. Some derivatives transactions are required to be centrally cleared, and a party to a cleared derivatives transaction is subject to the credit risk of the clearing house and the clearing member through which it holds the position, rather than the credit risk of its original counterparty to the derivatives transaction. Credit risk of market participants with respect to derivatives that are centrally cleared is concentrated in a few clearing houses and clearing members, and it is not clear how an insolvency proceeding of a clearing house or clearing member would be conducted, what effect the insolvency proceeding would have on any recovery by a Fund, and what impact an insolvency of a clearing house or clearing member would have on the financial system more generally.

- ***Futures Contract Risk.*** A Fund may enter into futures contracts, in which the Fund agrees to buy or sell certain financial instruments or index units or other assets on a specified future date at a specified price or rate. A Fund may also enter into contracts to deliver in the future an amount of one currency in return for an amount of another currency. If a Fund's investment adviser or subadviser misjudges the direction of interest rates, markets, or foreign exchange rates, a Fund's overall performance could suffer. The risk of loss could be far greater than the investment made because a futures contract requires only a small deposit to take a large position. A small change in a financial futures contract could have a substantial impact on a Fund, favorable or unfavorable. An investor could also suffer losses if it is unable to close out a futures contract because of an illiquid secondary market. Futures are subject to the creditworthiness of the futures commission merchants or brokers and clearing organizations involved in the transactions. In the event of the insolvency of its futures commission merchant or broker, a Fund may be delayed or prevented from recovering some or all of the margin it has deposited with the merchant or broker, or any increase in the value of its futures positions held through that merchant or broker.

- **Dollar Roll and Reverse Repurchase Agreement Transaction Risk**

In a dollar roll transaction, a Fund sells mortgage-backed securities for delivery to the buyer in the current month and simultaneously contracts to purchase similar securities on a specified future date from the same party. In a reverse repurchase agreement transaction, a Fund sells securities to a bank or securities dealer and agrees to repurchase them at an agreed time and price; a reverse repurchase agreement is similar to a secured borrowing by a Fund. Both types of transactions generally create leverage (see "Leveraging Risk" below). It may be difficult or impossible for a Fund to exercise its rights under a dollar roll transaction or reverse repurchase agreement in the event of the insolvency or bankruptcy of the counterparty, and the Fund may not be able to purchase the securities or other assets subject to the transaction and may be required to return any collateral it holds.

- **Emerging Markets Risk**

Investing in emerging market securities poses risks different from, and/or greater than, risks of investing in domestic securities or in the securities of foreign, developed countries. These risks may include, for example, smaller market-capitalizations of securities markets; significant price volatility; illiquidity; limits on foreign investment; and possible limits on repatriation of investment income and capital. Future economic or political events or crises could lead to price controls, forced mergers, expropriation or confiscatory taxation, seizure, nationalization, or the creation of government monopolies. The currencies of emerging market countries may experience significant declines against the U.S. dollar, and devaluation may occur subsequent to investments in those currencies by a Fund. Inflation and rapid fluctuations in inflation rates have had, and may continue to have, negative effects on the economies and securities markets of certain emerging market countries. Although many of the emerging market securities in which a Fund may invest are traded on securities exchanges, they may trade in limited volume, and the exchanges may not provide all of the conveniences or protections provided by securities exchanges in more developed markets.

Additional risks of emerging market securities may include greater social, economic, and political uncertainty and instability; more substantial governmental involvement in the economy; less governmental supervision and regulation; greater custody and operational risks; unavailability of currency hedging techniques; companies that are newly organized and small; differences in auditing and financial reporting standards, which may result in unavailability of material information about issuers; and less developed legal, regulatory, and accounting systems. In addition, emerging securities markets may have different clearance and settlement procedures, which may be unable to keep pace with the volume of securities transactions or otherwise make it difficult to engage in such transactions. Settlement problems may cause a Fund to miss attractive investment opportunities, hold a portion of its assets in cash pending settlement, or be delayed in disposing of a portfolio security. It may be more difficult to obtain and/or enforce a judgment in a court

outside the U.S., and a judgment against a foreign government may be unenforceable.

Frontier markets, a subset of emerging markets, generally have smaller economies and less mature capital markets than emerging markets. As a result, the risks of investing in emerging market countries are magnified in frontier market countries. Frontier markets are more susceptible to having abrupt changes in currency values, less mature markets and settlement practices, and lower trading volumes that could lead to greater price volatility and illiquidity.

- **Equity Securities Risk**

Although stocks may have the potential to outperform other asset classes over the long term, their prices tend to fluctuate more dramatically over the shorter term. These movements may result from factors affecting individual companies, or from broader influences like changes in interest rates, market conditions, or investor confidence, or announcements of economic, political, or financial information.

- **Fixed Income Securities Risk**

The values of debt securities change in response to interest rate changes. In general, as interest rates rise, the value of a debt security is likely to fall. This risk is generally greater for obligations with longer maturities or for debt securities that do not pay current interest (such as zero-coupon securities). Debt securities with variable and floating interest rates can be less sensitive to interest rate changes, although, to the extent a Fund's income is based on short-term interest rates that fluctuate over short periods of time, income received by the Fund may decrease as a result of a decline in interest rates. In response to an interest rate decline, debt securities that provide the issuer with the right to call or redeem the security prior to maturity may be called or redeemed, which may result in the Fund having to reinvest proceeds in other investments at a lower interest rate and therefore the Fund might not benefit from any increase in value as a result of declining interest rates. The value of a debt security also depends on the issuer's actual or perceived credit quality or ability to pay principal and interest when due. The value of a debt security is likely to fall if an issuer or the guarantor of a security is unable or unwilling (or is

perceived to be unable or unwilling) to make timely principal and/or interest payments or otherwise to honor its obligations or if the debt security's rating is downgraded by a credit rating agency. The value of a debt security can also decline in response to changes in market, economic, industry, political, and regulatory conditions that affect a particular type of debt security or issuer or debt securities generally. Certain events, such as market or economic developments, regulatory or government actions, natural disasters, terrorist attacks, war, and other geopolitical events can have a dramatic adverse effect on the debt market and the overall liquidity of the market for fixed income securities.

- *Extension Risk.* During periods of rising interest rates, the average life of certain types of securities may be extended because of slower than expected principal payments. This may lock in a below-market interest rate, increase the security's duration, and reduce the value of the security.
- *Prepayment Risk.* Prepayment risk is the risk that principal of a debt obligation will be repaid at a faster rate than anticipated. In such a case, a Fund may lose the benefit of a favorable interest rate for the remainder of the term of the security in question, and may only be able to reinvest the amount of the prepayment at a less favorable rate.
- *Interest Rate Risk.* The values of bonds and other debt instruments usually rise and fall in response to changes in interest rates. The values of debt instruments generally increase in response to declines in interest rates and rise in response to increases in interest rates. Interest rate risk is generally greater for investments with longer durations or maturities. Some investments give the issuer the option to call or redeem an investment before its maturity date. If an issuer calls or redeems an investment during a time of declining interest rates, a Fund might have to reinvest the proceeds in an investment offering a lower yield, and therefore might not benefit from any increase in value as a result of declining interest rates.
- **Foreign Investment Risk**
Investments in securities of foreign issuers, securities of companies with significant foreign exposure, and foreign currencies can involve additional risks relating to market, industry,

political, regulatory, and other conditions. Political, social, diplomatic, and economic developments, U.S. and foreign government action such as the imposition of currency or capital blockages, controls, or tariffs, economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, a Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of a Fund (or clients of a Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of a Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the United States. The securities of some non-U.S. companies are less liquid and at times more volatile than securities of comparable U.S. companies. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, foreign markets can perform differently from U.S. markets and can react differently to market, economic, industry, political, regulatory, geopolitical, and other conditions than the U.S. market.

The willingness and ability of foreign governmental entities to pay principal and interest on government securities depends on various economic factors, including for example the issuer's balance of payments,

overall debt level, and cash-flow considerations related to the availability of tax or other revenues to satisfy the issuer's obligations. If a foreign governmental entity defaults on its obligations on the securities, a Fund may have limited recourse available to it. The laws of some foreign countries may limit a Fund's ability to invest in securities of certain issuers located in those countries. Special tax considerations apply to a Fund's investments in foreign securities. A Fund's investments in foreign securities or foreign currencies may increase or accelerate the Fund's recognition of ordinary income and may affect the amount, timing, or character of the Fund's distributions.

A Fund may invest in foreign securities known as depositary receipts, in the form of American Depositary Receipts ("ADRs"), European Depositary Receipts ("EDRs"), Global Depositary Receipts ("GDRs"), or other similar securities. An ADR is a U.S. dollar-denominated security issued by a U.S. bank or trust company that represents, and may be converted into, a foreign security. An EDR or a GDR is generally similar but is issued by a non-U.S. bank. Depositary receipts are subject to the same risks as direct investment in foreign securities. Depositary receipts may not necessarily be denominated in the same currency as the underlying securities into which they may be converted, and changes in currency exchange rates may affect the value of an ADR investment in ways different from direct investments in foreign securities. Funds may invest in both sponsored and unsponsored depositary receipts. Unsponsored depositary receipts are organized independently and without the cooperation of the issuer of the underlying securities. As a result, available information concerning the issuers may not be as current for unsponsored depositary receipts and the prices of unsponsored depositary receipts may be more volatile than if such instruments were sponsored by the issuer. An investment in an ADR is subject to the credit risk of the issuer of the ADR.

- **Frequent Trading/Portfolio Turnover Risk**

The length of time a Fund has held a particular security is not generally a consideration in investment decisions. The investment policies of a Fund may lead to frequent changes in the Fund's investments, particularly in periods of volatile market

movements, in order to take advantage of what the Fund's investment adviser or subadviser believes to be temporary investment opportunities. A change in the securities held by a Fund is known as "portfolio turnover." Portfolio turnover generally involves some expense to a Fund, including brokerage commissions, bid-asked spreads, dealer mark-ups, and other transaction costs on the sale of securities and reinvestments in other securities, and may result in the realization of taxable capital gains (including short-term gains, which are generally treated as ordinary income when distributed to shareholders). The trading costs and tax effects associated with portfolio turnover may adversely affect a Fund's performance. Consult your tax adviser regarding the effect of a Fund's portfolio turnover rate on your investments.

- **Geographic Focus Risk**

When a Fund invests a relatively large percentage of its assets in issuers located in a single country, a small number of countries, or a particular geographic region, the Fund's performance could be closely tied to the market, currency, economic, political, or regulatory conditions and developments in those countries or that region, and could be more volatile than the performance of more geographically diversified funds.

- **Growth Company Risk**

Growth company securities tend to be more volatile in terms of price swings and trading volume than many other types of equity securities. Growth companies, especially technology related companies, have seen dramatic rises and falls in stock valuations. Funds that invest in growth companies are subject to the risk that the market may deem these companies' stock prices over-valued, which could cause steep and/or volatile price swings. Also, since investors buy these stocks because of their expected superior earnings growth, earnings disappointments often result in sharp price declines.

- **Indexing Risk**

There are several reasons why an index Fund's performance may not track the performance of the relevant index exactly. For example, the Fund incurs a number of operating expenses not applicable to the index, and incurs costs in buying and selling securities. A Fund may

not be fully invested at times, either as a result of cash flows into the Fund or reserves of cash held by the Fund to meet redemptions. The return on the sample of securities purchased by the investment adviser or subadviser, or futures or other derivative positions taken by the investment adviser or subadviser, to replicate the performance of the index may not correlate precisely with the return on the index.

- **Industry Concentration Risk**

If a Fund concentrates its assets in a particular industry or group of industries, economic, business, regulatory, or other developments affecting issuers in that industry or group of industries may affect the Fund adversely to a greater extent than if the Fund had invested more broadly. A concentrated investment in any industry or group of industries may increase the volatility of a Fund's portfolio, and may cause the Fund to underperform other mutual funds.

- **Inflation Risk**

The value of assets or income from a Fund's investments will be less in the future as inflation decreases the value of money. As inflation increases, the value of a Fund's assets can decline as can the value of the Fund's distributions. The market prices of debt securities generally fall as inflation increases because the purchasing power of the future income and repaid principal is expected to be worth less when received by the Fund. Debt securities that pay a fixed rather than variable interest rate are especially vulnerable to inflation risk because variable-rate debt securities may be able to participate, over the long term, in rising interest rates which have historically accompanied long-term inflationary trends.

- **Large Company Risk**

Large-capitalization stocks as a group could fall out of favor with the market, causing a Fund's investments in large-capitalization stocks to underperform investments that focus on small- or medium-capitalization stocks. Larger, more established companies may be slow to respond to challenges, including changes to technology or consumer tastes, and may grow more slowly than smaller companies, especially during market cycles corresponding to periods of economic expansion. Market capitalizations of companies change over time.

- **Leveraging Risk**

The use of leverage has the potential to increase returns to shareholders, but also involves additional risks. A Fund may create leverage by borrowing money (through traditional borrowings or by means of so-called reverse repurchase agreements); certain transactions, including, for example, when-issued, delayed-delivery, to-be-announced, and forward commitment purchases, loans of portfolio securities, dollar roll transactions, and the use of some derivatives, can also result in leverage. Leverage will increase the volatility of the Fund's investment portfolio and could result in larger losses than if it were not used. The use of leverage is considered to be a speculative investment practice and may result in losses to a Fund. Certain derivatives have the potential for unlimited loss, regardless of the size of the initial investment. A Fund will typically pay interest or incur other borrowing costs in connection with leverage transactions.

- **Liquidity Risk**

Liquidity risk is the risk that particular investments may be difficult to sell or terminate at approximately the price at which the Fund is carrying the investments. The ability of a Fund to dispose of illiquid positions at advantageous prices may be greatly limited, and a Fund may have to continue to hold such positions during periods when the investment adviser or subadviser otherwise would have sold them. Some securities held by a Fund may be restricted as to resale, may trade in the over-the-counter ("OTC") market, or may not have an active trading market due to adverse market, economic, industry, political, regulatory, geopolitical or other conditions. In addition, a Fund, by itself or together with other accounts managed by the investment adviser or subadviser, may hold a position in a security that is large relative to the typical trading volume for that security, which can make it difficult for the Fund to dispose of the position at an advantageous time or price.

Market values for illiquid securities may not be readily available, and there can be no assurance that any fair value assigned to an illiquid security at any time will accurately reflect the price a Fund might receive upon the sale of that security. It is possible that, during periods of extreme market volatility or unusually high and unanticipated levels of redemptions,

a Fund may be forced to sell large amounts of securities or terminate outstanding transactions at a price or time that is not advantageous in order to meet redemptions or other cash needs. In such a case, the sale proceeds received by a Fund may be substantially less than if the Fund had been able to sell the securities or terminate the transactions in more orderly transactions, and the sale price may be substantially lower than the price previously used by the Fund to value the securities for purposes of determining the Fund's NAV. To the extent a Fund holds illiquid securities, it may be more likely to pay redemption proceeds in kind.

- **Management Risk**

Each Fund is subject to management risk because it relies on the investment adviser's and/or subadviser's investment analysis and its selection of investments to achieve its investment objective. A Fund's investment adviser or subadviser manages the Fund based on its assessment of economic, financial, and market factors and its investment judgment. The investment adviser or subadviser may fail to ascertain properly the appropriate mix of securities for any particular economic cycle. A Fund's investment adviser or subadviser applies its investment techniques and risk analyses in making investment decisions for the Fund, but there can be no guarantee that they will produce the intended result. Management risk includes the risk that poor security selection will cause a Fund to underperform relative to other funds with similar investment objectives, or that the timing of movements from one type of security to another could have a negative effect on the overall investment performance of the Fund. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time.

- **Market Risk**

The values of a Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable broad market developments, which may affect securities markets generally or particular industries, sectors, or issuers. The values of a Fund's investments may decline as a result of a number of such factors, including actual or perceived changes in general economic and market conditions, industry, political, regulatory, geopolitical and other

developments, including the imposition of tariffs or other protectionist actions, changes in interest rates, currency rates, or other rates of exchange, and changes in economic and competitive industry conditions. Different parts of the market and different types of securities can react differently to these conditions. The possibility that security prices in general will decline over short or even extended periods subjects a Fund to unpredictable declines in the value of its shares, as well as potentially extended periods of poor performance. In addition, the increasing popularity of passive index-based investing may have the potential to increase security price correlations and volatility. As passive strategies generally buy or sell securities based simply on inclusion and representation in an index, securities' prices will have an increasing tendency to rise or fall based on whether money is flowing into or out of passive strategies rather than based on an analysis of the prospects and valuation of individual securities. This may result in increased market volatility as more money is invested through passive strategies.

Federal, state, and other governments, their regulatory agencies, or self-regulatory organizations may take actions that affect the regulation of the securities in which a Fund invests or the issuers of such securities in ways that are unforeseeable. The uncertainty surrounding the sovereign debt of a significant number of European Union countries, as well as the status of the Euro, the European Monetary Union, and the European Union itself, has disrupted and may continue to disrupt markets in the U.S. and around the world. The risks associated with investments in Europe may be heightened due to the approval by citizens of the United Kingdom, in June 2016, of a referendum to leave the European Union. The United Kingdom is working towards withdrawal from the European Union at a yet to be determined date. Significant uncertainty remains in the market regarding the ramifications of that development and the arrangements that will apply to the United Kingdom's relationship with the European Union and other countries following its withdrawal; the range and potential implications of possible political, regulatory, economic, and market outcomes are difficult to predict. There is the potential for decreased trade, capital outflows from

the United Kingdom, devaluation of the pound sterling, decreased business and consumer spending and decreased foreign investment in the United Kingdom, and negative effects on the value of a Fund's investments and/or on a Fund's ability to enter into certain transactions or value certain investments. If one or more additional countries leave the European Union, or the European Union partially or completely dissolves, the world's economies and securities markets may be significantly disrupted and adversely affected. Legislation or regulation also may change the way in which a Fund, the investment adviser, or subadviser is regulated. Such legislation, regulation, or other government action could limit or preclude a Fund's ability to achieve its investment objective and affect the Fund's performance.

- **Mortgage- and Asset-Backed Securities Risk**

Investments in mortgage-related and other asset-backed securities are subject to the risk of severe credit downgrades, illiquidity and defaults to a greater extent than many other types of fixed income investments. Mortgage-backed securities, including collateralized mortgage obligations and certain stripped mortgage-backed securities, represent a participation in, or are secured by, mortgage loans. Asset-backed securities are generally structured like mortgage-backed securities, but instead of mortgage loans or interests in mortgage loans, the underlying assets may include such items as motor vehicle installment sale or installment loan contracts, leases of various types of real and personal property, receivables from credit card agreements, and student loan payments. Asset-backed securities also may be backed by pools of corporate or sovereign bonds, loans made to corporations, or a combination of these bonds and loans, commonly referred to as "collateralized debt obligations," including collateralized bond obligations ("CBOs") and collateralized loan obligations ("CLOs"). The assets backing collateralized debt obligations may consist in part or entirely of high risk, below investment grade debt obligations (or comparable unrated obligations). In the case of CBOs and certain other collateralized debt obligations, those may include, by way of example, high yield debt, residential privately issued mortgage-related securities, commercial privately issued mortgage-related securities, trust preferred

securities, and emerging market debt. In the case of CLOs, they may include, among other things, domestic and foreign senior secured loans, senior unsecured loans, and subordinate corporate loans, any or all of which may be rated below investment grade or may be comparable unrated obligations.

Traditional debt investments typically pay a fixed rate of interest until maturity, when the entire principal amount is due. By contrast, payments on mortgage-backed and many asset-backed investments typically include both interest and partial payment of principal. Principal may also be prepaid voluntarily, or as a result of refinancing or foreclosure. The Fund may have to invest the proceeds from prepaid investments in other investments with less attractive terms and yields. As a result, these securities may have less potential for capital appreciation during periods of declining interest rates than other securities of comparable maturities, although they may have a similar risk of decline in market value during periods of rising interest rates. Because the prepayment rate generally declines as interest rates rise, an increase in interest rates will likely increase the duration, and thus the volatility, of mortgage-backed and asset-backed securities. (Duration is a measure of the expected life of a fixed income security that is used to determine the sensitivity of the security's price to changes in interest rates. Unlike the maturity of a fixed income security, which measures only the time until final payment is due, duration takes into account the time until all payments of interest and principal on a security are expected to be made, including how these payments are affected by prepayments and by changes in interest rates.) Prepayment rates are difficult to predict and the potential impact of prepayments on the value of a mortgage-related or other asset-backed security depends on the terms of the instrument and can result in significant volatility. In addition to interest rate risk (as described under "Interest Rate Risk"), investments in mortgage-backed securities composed of subprime mortgages and investments in CDOs and CLOs backed by pools of high-risk, below investment grade debt securities may be subject to a higher degree of credit risk, valuation risk, and liquidity risk (as described under "Credit Risk," "Valuation Risk," and "Liquidity Risk"). Litigation with respect to the

representations and warranties given in connection with the issuance of mortgage-backed securities can be an important consideration in investing in such securities, and the outcome of any such litigation could significantly impact the value of the Fund's mortgage-backed investments.

The types of mortgages underlying securities held by the Fund may differ and may be affected differently by market factors. For example, the Fund's investments in residential mortgage-backed securities will likely be affected significantly by factors affecting residential real estate markets and mortgages generally; similarly, investments in commercial mortgage-backed securities will likely be affected significantly by factors affecting commercial real estate markets and mortgages generally.

Some mortgage-backed and asset-backed investments receive only the interest portion ("IOs") or the principal portion ("POs") of payments on the underlying assets. The yields and values of these investments are extremely sensitive to changes in interest rates and in the rate of principal payments on the underlying assets. IOs tend to decrease in value if interest rates decline and rates of repayment (including prepayment) on the underlying mortgages or assets increase; it is possible that the Fund may lose the entire amount of its investment in an IO due to a decrease in interest rates. Conversely, POs tend to decrease in value if interest rates rise and rates of repayment decrease. Moreover, the market for IOs and POs may be volatile and limited, which may make them difficult for the Fund to buy or sell. The values of mortgage-related and other asset-backed securities may be substantially dependent on the servicing of the underlying asset pools, and are therefore subject to risks associated with the negligence or malfeasance by their servicers and to the credit risk of their servicers. In certain situations, the mishandling of related documentation may also affect the rights of securities holders in and to the benefits of the underlying collateral. There may be legal and practical limitations on the enforceability of any security interest granted with respect to underlying assets, or the value of the underlying assets, if any, may be insufficient if the issuer defaults.

The Fund may gain investment exposure to mortgage-backed and asset-backed investments

by entering into agreements with financial institutions to buy the investments at a fixed price at a future date. The Fund may or may not take delivery of the investments at the termination date of such an agreement, but will nonetheless be exposed to changes in value of the underlying investments during the term of the agreement. These transactions may create investment leverage.

- **Preferred Stock Risk**

Like other equity securities, preferred stock is subject to the risk that its value may decrease based on actual or perceived changes in the business or financial condition of the issuer. In addition, if interest rates rise, the dividends on preferred stocks may be less attractive, causing the prices of preferred stocks to decline. Preferred stock may have mandatory sinking fund provisions or call/redemption provisions that can negatively affect its value. In addition, in the event of liquidation of a corporation's assets, the rights of preferred stock generally are subordinate to the rights associated with a corporation's debt securities.

- **Quantitative Models Risk**

Certain portfolio managers use quantitative models as part of the idea generation process. Quantitative models are based upon many factors that measure individual securities relative to each other. Such models may not produce the intended results and can be adversely affected by errors or imperfections in the factors or the data on which measurements are based, changing sources of market return or market risk, or any technical issues with or errors in the design, construction, implementation, or maintenance of the models.

- **Real Estate Risk; REIT Risk**

Investments in real estate are subject to a number of risks, including losses from casualty, condemnation or natural disasters, and changes in local and general economic conditions, supply and demand, interest rates, zoning laws, environmental regulations and other governmental action, regulatory limitations on rents, property taxes, and operating expenses. An investment in a REIT may be subject to risks similar to those associated with direct ownership of real estate, and may be subject to additional risks, such as poor performance by the manager of the REIT, adverse changes to the tax laws or

failure by the REIT to qualify for favorable tax treatment under the Internal Revenue Code of 1986, as amended (the "Code"), and to the risk of general declines in stock prices. In addition, some REITs have limited diversification because they invest in a limited number of properties, a narrow geographic area, or a single type of property. A "mortgage" REIT that invests most or all of its assets in mortgages will be subject to many of the risks described above in respect of mortgage-backed securities. Also, the organizational documents of a REIT may contain provisions that make changes in control of the REIT difficult and time-consuming. As a shareholder in a REIT a Fund, and indirectly the Fund's shareholders, would bear its ratable share of the REIT's expenses and would at the same time continue to pay its own fees and expenses. Real estate-related investments may entail leverage and may be highly volatile. The securities of small real-estate issuers can be more volatile and less liquid than securities of larger issuers and their issuers can have more limited financial resources.

- **Redemptions by Affiliated Funds and by Other Significant Investors**

A Fund may be an investment option for other MassMutual Funds that are managed as "funds of funds" and for other investors who may make substantial investments in the Fund. As a result, from time to time, a Fund may experience a relatively large redemption and could be required to liquidate assets at inopportune times or at a loss or depressed value, which could cause the value of your investment to decline. Similarly, large Fund share purchases may adversely affect a Fund's performance to the extent that the Fund is delayed in investing new cash and is required to maintain a larger cash position than it ordinarily would, or if the Fund is unable to invest the cash in portfolio securities that it considers as desirable as the Fund's portfolio securities.

- **Repurchase Agreement Risk**

A Fund may enter into repurchase agreements. These transactions must be fully collateralized at all times, but involve some risk to a Fund if the other party should default on its obligation and the Fund is delayed or prevented from recovering the collateral, or if

the Fund is required to return collateral to a borrower at a time when it may realize a loss on the investment of that collateral.

- **Restricted Securities Risk**

A Fund may hold securities that are restricted as to resale under the U.S. federal securities laws, such as securities in certain privately held companies. There can be no assurance that a trading market will exist at any time for any particular restricted security. Limitations on the resale of these securities may prevent the Fund from disposing of them promptly at reasonable prices or at all. Restricted securities may be highly illiquid. A Fund may have to bear the expense of registering the securities for resale and the risk of substantial delays in effecting the registration. Restricted securities may be difficult to value because market quotations may not be readily available, and there may be little publicly available information about the securities or their issuers. The values of restricted securities may be highly volatile.

- **Risk of Investment in other Funds or Pools**

A Fund may invest in other investment companies or pooled vehicles, including closed-end funds, trusts, and exchange-traded funds (“ETFs”), that are advised by the Fund’s investment adviser or subadviser, as applicable, their affiliates, or by unaffiliated parties, to the extent permitted by applicable law. As a shareholder in an investment company or other pool, the Fund, and indirectly that Fund’s shareholders, bear a ratable share of the investment company’s or pool’s expenses, including, but not limited to, advisory and administrative fees, and the Fund at the same time continues to pay its own fees and expenses. Investment companies or pools in which the Funds may invest may change their investment objectives or policies without the approval of a Fund, in which case a Fund may be forced to withdraw its investment from the investment company or pool at a disadvantageous time. Private investment pools in which the Funds may invest are not registered under the 1940 Act, and so will not offer all of the protections provided by the 1940 Act (including, among other things, independent oversight, protections against certain conflicts of interest, and custodial risks). A Fund is exposed indirectly to all of the risks applicable to any

other investment company or pool in which it invests, including that the investment company or pool will not perform as expected.

Investments in other investment companies or private pools may be illiquid, may be leveraged, and may be highly volatile.

Investing in other investment companies or private investment vehicles sponsored or managed by the investment adviser or subadviser, as applicable, or affiliates of the investment adviser or subadviser, as applicable, involves potential conflicts of interest. For example, the investment adviser or subadviser, as applicable, or their affiliates may receive fees based on the amount of assets invested in such other investment vehicles, which fees may be higher than the fees the investment adviser or subadviser, as applicable, receives for managing the investing Fund. Investment by a Fund in those other vehicles may be beneficial in the management of those other vehicles, by helping to achieve economies of scale or enhancing cash flows. Due to this and other factors, the investment adviser or subadviser, as applicable, will have an incentive to invest a portion of a Fund’s assets in investment vehicles sponsored or managed by the investment adviser or subadviser, as applicable, or their affiliates in lieu of investments by the Fund directly in portfolio securities, and will have an incentive to invest in such investment vehicles over non-affiliated investment companies. The investment adviser or subadviser, as applicable, will have no obligation to select the least expensive or best performing funds available to serve as an underlying investment vehicle. Similarly, the investment adviser or subadviser, as applicable, will have an incentive to delay or decide against the sale of interests held by the Fund in investment vehicles sponsored or managed by the investment adviser or subadviser, as applicable, or their affiliates.

ETFs are subject to many of the same risks applicable to investments in mutual funds generally, including that an ETF will not perform as anticipated, that a Fund will bear its proportionate share of the ETF’s fees and expenses, and that the ETF will lose money. Many ETFs engage in derivatives strategies and use leverage, and as a result their values can be highly volatile. It is possible that an ETF’s performance will diverge significantly from the performance of any

index or indexes it seeks to replicate. Because shares of ETFs are actively traded, their values may be affected in unanticipated ways by the effects of supply and demand in the market, activities of short sellers, or unusual speculative activity in their shares. Some ETFs may experience periods of reduced liquidity due to restrictions on trading activity or due to a general lack of investor interest in the asset class represented by the ETF.

- **Sector Risk**

If a Fund allocates a substantial amount of its assets to one or more particular industries or to particular economic, market, or industry sectors, then economic, business, regulatory, or other developments affecting issuers in those industries or sectors may affect the Fund adversely to a greater extent than if the Fund had invested more broadly. Examples might include investments in the technology, health care, or financial sectors or in one or more industries within those sectors. A substantial investment in one or more such industries or sectors has the potential to increase the volatility of a Fund's portfolio, and may cause the Fund to underperform other mutual funds.

- **Select Cayman Fund Risk**

To the extent it invests in the Select Cayman Fund, the Select BlackRock Global Allocation Fund is indirectly exposed to the risks associated with the Select Cayman Fund's investments. The commodities-related investments held by the Select Cayman Fund generally are subject to the risks of commodities-related investments described above. The Select Cayman Fund is not registered under the 1940 Act, and is not subject to all the investor protections of the 1940 Act. Changes in the laws of the United States and/or the Cayman Islands could result in an increase in expenses and in the inability of the Select BlackRock Global Allocation Fund and/or the Select Cayman Fund to operate as described in this Prospectus and the SAI and could adversely affect the Select BlackRock Global Allocation Fund. For example, the Cayman Islands does not currently impose any income, corporate, or capital gains tax, estate duty, inheritance tax, gift tax, or withholding tax on the Select Cayman Fund. If Cayman Islands law changes such that the Select Cayman Fund must pay

Cayman Islands taxes, Select BlackRock Global Allocation Fund shareholders would likely experience decreased investment returns. In addition, changes in law, or interpretations of existing law, including tax law and the regulation of entities that invest in commodity interests, may limit the ability of the Select BlackRock Global Allocation Fund to invest in the Select Cayman Fund and may limit the ability of the Select Cayman Fund to invest as actively or as broadly as it might otherwise, and/or increase expenses.

- **Short Sales Risk**

If a Fund sells a security short, it will make money if the security's price goes down (in an amount greater than any transaction costs) and will lose money if the security's price goes up. There is no limit on the amount of money a Fund may lose on a short sale. A Fund may not be able to close out a short sale when it might wish to do so, or may only do so at an unfavorable price. Short sales can involve leverage. When the Fund engages in a short sale, it typically borrows the security sold short. The Fund will ordinarily have to pay a fee or premium to borrow the security and will be obligated to repay to the lender of the security any dividends or interest that accrue on the security during the period of the loan. If the Fund invests the proceeds from short positions in other securities the Fund could lose money both on the short positions and on the securities in which it has invested the short proceeds.

- **Small and Mid-Cap Company Risk**

Small and medium-sized companies may have limited product lines, markets, or financial resources or they may depend on a few key employees. Such companies may have been recently organized and have little or no track record of success. Also, a Fund's investment adviser or subadviser may not have had an opportunity to evaluate such newer companies' performance in adverse or fluctuating market conditions. Market risk and liquidity risk are particularly pronounced for stocks of small and medium-sized companies. The securities of small and medium-sized companies may trade less frequently and in smaller volume than more widely held securities. The prices of these securities may fluctuate more sharply than those of other securities, and a Fund may experience some difficulty in establishing or

closing out positions in these securities at prevailing market prices. There may be less publicly available information about the issuers of these securities or less market interest in such securities than in the case of larger companies, both of which can cause significant price volatility. Some securities of small and medium-sized issuers may be illiquid or may be restricted as to resale.

- **Sovereign Debt Obligations Risk**

Investments in debt securities issued by governments or by government agencies and instrumentalities involve the risk that the governmental entities responsible for repayment may be unable or unwilling to pay interest and repay principal when due. A governmental entity's willingness or ability to pay interest and repay principal in a timely manner may be affected by a variety of factors, including its cash flow, the size of its reserves, its access to foreign exchange, the relative size of its debt service burden to its economy as a whole, and political constraints. A governmental entity may default on its obligations or may require renegotiation or rescheduling of debt payments. Any restructuring of a sovereign debt obligation held by the Fund will likely have a significant adverse effect on the value of the obligation. In the event of default of sovereign debt, the Fund may be unable to pursue legal action against the sovereign issuer or to realize on collateral securing the debt. The sovereign debt of many non-U.S. governments, including their sub-divisions and instrumentalities, is rated below investment grade ("junk" or "high yield" bonds). Sovereign debt risk may be greater for debt securities issued or guaranteed by emerging and/or frontier market countries. At times, certain emerging and frontier market countries have declared moratoria on the payment of principal and interest on external debt. Certain emerging and frontier market countries have experienced difficulty in servicing their sovereign debt on a timely basis, which has led to defaults and the restructuring of certain indebtedness to the detriment of debtholders.

- **Structured Notes Risk**

Structured notes and other related instruments purchased by a Fund are generally privately negotiated debt obligations where the principal and/or interest is determined by reference to

the performance of a specific asset, benchmark asset, market, index, or interest rate ("reference measure"). The interest rate or the principal amount payable upon maturity or redemption may increase or decrease, depending upon changes in the value of the reference measure. The terms of a structured note may provide that, in certain circumstances, no principal is due at maturity and, therefore, may result in a loss of invested capital by the Fund.

Structured notes may be positively or negatively indexed, so the appreciation of the reference measure may produce an increase or a decrease in the interest rate or the value of the principal at maturity. The rate of return on structured notes may be determined by applying a multiplier to the performance or differential performance of reference measures. Application of a multiplier involves leverage that will serve to magnify the potential for gain and the risk of loss.

The purchase of structured notes exposes a Fund to the credit risk of the issuer of the structured product. Structured notes may also be more volatile, less liquid, and more difficult to price accurately than less complex securities and instruments or more traditional debt securities.

- **U.S. Government Securities Risk**

U.S. Government securities include a variety of securities that differ in their interest rates, maturities, and dates of issue. While securities issued or guaranteed by some agencies or instrumentalities of the U.S. Government (such as the Government National Mortgage Association) are supported by the full faith and credit of the United States, securities issued or guaranteed by certain other agencies or instrumentalities of the U.S. Government (such as Federal Home Loan Banks) are supported only by the right of the issuer to borrow from the U.S. Government. Securities issued or guaranteed by certain other agencies and instrumentalities of the U.S. Government (such as Fannie Mae and Freddie Mac) are not supported by the full faith and credit of the U.S. Government and are supported only by the credit of the issuer itself. There is no assurance that the U.S. Government would provide financial support to its agencies and instrumentalities if not required to do so. In addition, certain governmental entities have been subject to regulatory scrutiny regarding

their accounting policies and practices and other concerns that may result in legislation, changes in regulatory oversight and/or other consequences that could adversely affect the credit quality, availability, or investment character of securities issued by these entities. Investments in these securities are also subject to, among other things, interest rate risk, prepayment risk, extension risk, and the risk that the value of the securities will fluctuate in response to political, market, or economic developments.

- **Valuation Risk**

A portion of a Fund's assets may be valued at fair value pursuant to guidelines that have been approved by the Trustees. A Fund's assets may be valued using prices provided by a pricing service or, alternatively, a broker-dealer or other market intermediary (sometimes just one broker-dealer or other market intermediary) when other reliable pricing sources may not be available. The Fund, or persons acting on its behalf, may determine a fair value of a security based on such other information as may be available to them. There can be no assurance that any fair valuation of an investment held by a Fund will in fact approximate the price at which the Fund might sell the investment at the time. Technological issues or other service disruption issues involving third-party service providers may limit the ability of the Fund to value its investment accurately or timely. To the extent a Fund sells a security at a price lower than the price it has been using to value the security, its NAV will be adversely affected. If a Fund has overvalued securities it holds, you may pay too much for the Fund's shares when you buy into the Fund. If a Fund underestimates the price of its portfolio securities, you may not receive the full market value for your Fund shares when you sell.

- **Value Company Risk**

A Fund may purchase some equity securities at prices below what the investment adviser or subadviser considers to reflect their actual or potential fundamental values. The Fund bears the risk that the prices of these securities may not increase to reflect what the investment adviser or subadviser believes to be their fundamental value or that the investment adviser or subadviser may have overestimated the securities' fundamental value or that it may take a substantial period of time to realize that value.

- **When-Issued, Delayed Delivery, TBA, and Forward Commitment Transaction Risk**

A Fund may purchase securities on a when-issued, delayed delivery, to-be-announced, or forward commitment basis. These transactions involve a commitment by a Fund to purchase securities for a predetermined price or yield, with payments and delivery taking place more than seven days in the future, or after a period longer than the customary settlement period for that type of security. These transactions involve a risk of loss if the value of the securities declines prior to the settlement date. These transactions may create investment leverage. Recently finalized rules of the Financial Industry Regulatory Authority impose mandatory margin requirements for certain types of when-issued, TBA, or forward commitment transactions, with limited exceptions. Such transactions historically have not been required to be collateralized, and mandatory collateralization could increase the cost of such transactions and impose added operational complexity and may increase the credit risk of such transactions to a Fund.

Management of the Funds

Investment Adviser

MML Investment Advisers, LLC (“MML Advisers”), a Delaware limited liability company, located at 100 Bright Meadow Blvd., Enfield, Connecticut 06082-1981, is the Funds’ investment adviser and is responsible for providing all necessary investment management and administrative services. MML Advisers, formed in 2013, is a wholly-owned subsidiary of Massachusetts Mutual Life Insurance Company (“MassMutual”). Founded in 1851, MassMutual is a mutual life insurance company that provides a broad range of insurance, money management, retirement, and asset accumulation products and services for individuals and businesses. As of September 30, 2019, MML Advisers had assets under management of approximately \$55.7 billion.

In 2019, each Fund paid MML Advisers an investment management fee based on a percentage of each Fund’s average daily net assets as follows: .30% for the Total Return Bond Fund; .38% for the Strategic Bond Fund; .77% for the Select BlackRock Global Allocation Fund; .50% for the Diversified Value Fund; .60% for the Fundamental Value Fund; .10% for the S&P 500 Index Fund; .69% for the Equity Opportunities Fund; .65% for the Fundamental Growth Fund; .61% for the Blue Chip Growth Fund; .71% for the Growth Opportunities Fund; .70% for the Mid-Cap Value Fund; .75% for the Small Cap Value Equity Fund; .85% for the Small Company Value Fund; .10% for the S&P Mid Cap Index Fund; .10% for the Russell 2000 Small Cap Index Fund; .68% for the Mid Cap Growth Fund; .80% for the Small Cap Growth Equity Fund; .10% for the MSCI EAFE International Index Fund; .80% for the Overseas Fund; and .69% for the Select T. Rowe Price International Equity Fund.

A discussion regarding the basis for the Trustees approving any investment advisory contract of the Funds is available in the Funds’ annual reports to shareholders dated September 30, 2019 and the Funds’ semiannual reports to shareholders dated March 31, 2019.

Each Fund also pays MML Advisers an administrative and shareholder services fee to compensate it for providing general administrative services to the Funds and for providing or causing to be provided ongoing shareholder servicing to direct and indirect investors in the Funds. MML Advisers pays substantially all of the fee to MassMutual in respect of shareholder servicing and investor recordkeeping services provided by it, or to another entity with which MassMutual has contracted. The fee is calculated and paid based on the average daily net assets attributable to each share class of the Fund separately, and is paid at the following annual rates for each Fund other than the S&P 500 Index Fund, S&P Mid Cap Index Fund, Russell 2000 Small Cap Index Fund, and MSCI EAFE International Index Fund (each, an “Index Fund”): .10% for Class R5 shares; .15% for Service Class shares, Administrative Class shares, and Class A shares; and .20% for Class R4 shares and Class R3 shares. The fee for each Index Fund is paid at the following annual rates: .10% for Class R5 shares; .20% for Service Class shares, Administrative Class shares, and Class A shares; and .25% for Class R4 shares and Class R3 shares. Class I shares do not pay any administrative and shareholder services fee.

Subadvisers and Portfolio Managers

MML Advisers contracts with the following subadvisers to help manage the Funds. Subject to the oversight of the Trustees, MML Advisers has the ultimate responsibility to oversee subadvisers and recommend their hiring, termination, and replacement. This responsibility includes, but is not limited to, analysis and review of subadviser performance, as well as assistance in the identification and vetting of new or replacement subadvisers. In addition, MML Advisers maintains responsibility for a number of other important obligations, including, among other things, board reporting, assistance in the annual advisory contract renewal process, and, in general, the performance of all obligations not delegated to a subadviser. MML Advisers also provides advice and recommendations to the Trustees, and performs such review and oversight functions as the Trustees may reasonably request, as to the continuing appropriateness of the investment objective, strategies, and policies of each Fund, valuations of portfolio securities, and other matters relating generally to the investment program of each Fund.

MML Advisers is responsible for determining the allocation of portfolio assets and/or cash flows among subadvisers for those Funds with multiple subadvisers.

AllianceBernstein L.P. (“AllianceBernstein”), located at 1345 Avenue of the Americas, New York, New York 10105, manages a portion of the portfolio of the *Small Company Value Fund*. AllianceBernstein is a Delaware limited partnership, the majority limited partnership interests in which are held, directly and indirectly, by its parent company AXA Equitable Holdings, Inc. (“EQH”), a publicly traded holding company for a diverse group of financial services companies. AllianceBernstein Corporation, an indirect wholly-owned subsidiary of EQH, is the general partner of both AllianceBernstein and AllianceBernstein Holding L.P., a publicly traded partnership. As of September 30, 2019, AllianceBernstein managed approximately \$592 billion in assets.

AllianceBernstein replaced Federated Clover Investment Advisors, Invesco Advisers, Inc., and T. Rowe Price Associates, Inc. as a subadviser of the Small Company Value Fund on June 20, 2019.

James W. MacGregor, CFA

is a portfolio manager of a portion of the *Small Company Value Fund*. Mr. MacGregor became Chief Investment Officer for U.S. Small and Mid-Cap Value Equities in 2009. From 2004 to 2009 he was the Director of Research for U.S. Small and Mid-Cap Value Equities. Previously, he was a Senior Research Analyst covering the banking, energy, industrial commodity, transportation, and aerospace & defense industries for U.S. Small and Mid-Cap Value Equities. Prior to joining AllianceBernstein in 1998, he was a sell-side research analyst at Morgan Stanley and Co., where he covered U.S. Packaging and Canadian Paper stocks.

Erik A. Turenchalk, CFA

is a portfolio manager of a portion of the *Small Company Value Fund*. Prior to January 1, 2020, Mr. Turenchalk served as a Global Industrial Sector Leader (2017-2019) and Senior Research Analyst (2012-2019) on the U.S. Small and Mid-Cap Value Equities team, responsible for covering industrial companies. He joined the firm in 1999, and was promoted to research analyst in 2005. From 1999 to 2007, Mr. Turenchalk worked on the Advanced Value Hedge Fund team, primarily researching short-position ideas with an emphasis on the consumer-cyclicals sector. In 2007, he relocated to London to support the firm’s international hedge-fund offerings. In 2010, Mr. Turenchalk returned to New York to oversee the research of short positions for the domestic hedge-fund portfolios. In 2012, he joined the U.S. Small and Mid-Cap Value Equities team. Prior to joining the firm, Mr. Turenchalk was a business analyst at Pratt & Whitney, a United Technologies company.

American Century Investment Management, Inc. (“American Century”), located at 4500 Main Street, Kansas City, Missouri 64111, manages the investments of the *Mid-Cap Value Fund* and a portion of the portfolio of the *Small Company Value Fund*. American Century is a privately held subsidiary of American Century Companies, Inc. As of September 30, 2019, American Century had approximately \$169.3 billion in total assets under management.

American Century replaced Federated Clover Investment Advisors, Invesco Advisers, Inc., and T. Rowe Price Associates, Inc. as a subadviser of the Small Company Value Fund on June 20, 2019.

Phillip N. Davidson, CFA

is a portfolio manager of a portion of the *Mid-Cap Value Fund*, which is managed on a team basis. He is jointly and primarily responsible for the day-to-day management of the portfolio. Mr. Davidson is a Senior Vice President and Executive Portfolio Manager for American Century. He joined American Century in 1993 as a portfolio manager.

Jeff John, CFA

is a portfolio manager of a portion of the *Small Company Value Fund*, which is managed on a team basis. He is jointly and primarily responsible for the day-to-day management of the portfolio. Mr. John is a Vice President and Senior Portfolio Manager for American Century. He joined American Century in 2008 and became a portfolio manager in 2012.

Miles Lewis, CFA

is a portfolio manager of a portion of the *Small Company Value Fund*, which is managed on a team basis. He is jointly and primarily responsible for the day-to-day management of the portfolio. Mr. Lewis is a Vice President and Portfolio Manager for American Century. Mr. Lewis joined American Century in 2010 and became a portfolio manager in 2014.

Michael Liss, CFA

is a portfolio manager of a portion of the *Mid-Cap Value Fund*, which is managed on a team basis. He is jointly and primarily responsible for the day-to-day management of the portfolio. Mr. Liss is a Vice President and Senior Portfolio Manager for American Century. Mr. Liss joined American Century in 1998 and became a portfolio manager in 2004.

Kevin Toney, CFA

is a portfolio manager of a portion of the *Mid-Cap Value Fund*, which is managed on a team basis. He is jointly and primarily responsible for the day-to-day management of the portfolio. Mr. Toney is the Chief Investment Officer - Global Value Equity, Senior Vice President, and Senior Portfolio Manager for American Century. Mr. Toney joined American Century in 1999 as an investment analyst and became a portfolio manager in 2006.

Brian Woglom, CFA

is a portfolio manager of a portion of the *Mid-Cap Value Fund*, which is managed on a team basis. He is jointly and primarily responsible for the day-to-day management of the portfolio. Mr. Woglom is a Vice President and Senior Portfolio Manager for American Century. Mr. Woglom joined American Century in 2005 as an investment analyst and became a portfolio manager in 2012.

Barrow, Hanley, Mewhinney & Strauss, LLC (“Barrow Hanley”), located at 2200 Ross Avenue, 31st Floor, Dallas, Texas 75201, manages a portion of the portfolio of the *Fundamental Value Fund* and *Small Cap Value Equity Fund*. Barrow Hanley is an indirect subsidiary of BrightSphere Investment Group, Inc., a public company listed on the New York Stock Exchange (“NYSE”) (Ticker: BSIG). BSIG is comprised of approximately seven independent asset management firms. As of September 30, 2019, Barrow Hanley had approximately \$72 billion in assets under management.

Mark Giambrone

is a portfolio manager of a portion of the *Fundamental Value Fund*. Mr. Giambrone joined Barrow Hanley in 1999 and serves as a Managing Director. Prior to joining Barrow Hanley, Mr. Giambrone served as a portfolio consultant at HOLT Value Associates. During his 28-year investment career, he has also served as a senior auditor/tax specialist for KPMG Peat Marwick and Ernst & Young Kenneth Leventhal.

John P. Harloe, CFA

is a portfolio manager of a portion of the *Small Cap Value Equity Fund*. Mr. Harloe has been a Managing Director at Barrow Hanley since 1995. Prior to joining Barrow Hanley, Mr. Harloe was employed by Sterling Capital Management, where he served as a vice president and equity portfolio manager/analyst for nine years. During the remainder of his 44-year investment career, Mr. Harloe worked with James S. McClure at American National Insurance Company, American Capital Management and Research, and Oppenheimer & Co., Inc.

Coleman Hubbard, CFA

is a portfolio manager of a portion of the *Small Cap Value Equity Fund*. Mr. Hubbard has been a Director at Barrow Hanley since 2016. Prior to joining Barrow Hanley, he served as a financial analyst at Edgeview Partners. Mr. Hubbard began his investment career as an analyst at Bank of America Merrill Lynch.

Brad Kinkelaar

is a portfolio manager of a portion of the *Fundamental Value Fund*. Mr. Kinkelaar joined Barrow Hanley in 2017 and serves as a Managing Director. Prior to joining Barrow Hanley, Mr. Kinkelaar was employed by Pacific Investment Management Company (PIMCO) as an equity portfolio manager and head of dividend strategies. During his 24-year investment career, Mr. Kinkelaar served as a managing director and equity portfolio manager at Thornburg Investment Management and as an equity analyst at State Farm Insurance Companies.

James S. McClure, CFA

is a portfolio manager of a portion of the *Small Cap Value Equity Fund*. Mr. McClure has been a Managing Director at Barrow Hanley since 1995. Prior to joining Barrow Hanley, Mr. McClure was employed by Goldman Sachs Asset Management as a vice president and senior portfolio manager, managing the Capital Growth Fund, as well as separate accounts. During his 48-year investment career, he has served as the

Chief Investment Officer, and then President and Chief Operating Officer at National Securities and Research Corporation. He also served as the Chief Investment Officer and executive vice president at Oppenheimer & Co., Inc. He managed mutual funds at American Capital Management and Research and was initially a securities analyst at American National Insurance Company.

Michael B. Nafya, CFA

is a portfolio manager of a portion of the *Fundamental Value Fund*. Mr. Nafya joined Barrow Hanley in 2008 as an equity analyst and currently serves as a Managing Director. During his 16-year investment career, he has served as an analyst at HBK and in institutional equity sales at Natexis Bleichroeder. Prior to joining Barrow Hanley, Mr. Nafya began his career in institutional sales at Sidoti & Company, LLC.

Terry L. Pelzel, CFA

is a portfolio manager of a portion of the *Fundamental Value Fund*. Mr. Pelzel joined Barrow Hanley in 2010 as an equity analyst and currently serves as a Managing Director. During his 15-year investment career, he has served as a senior portfolio analyst at Highland Capital Management, LP and as a financial analyst at Houlihan, Lokey, Howard & Zukin, Inc.

Brian F. Quinn, CFA

is a portfolio manager of a portion of the *Fundamental Value Fund*. Mr. Quinn joined Barrow Hanley in 2005 and serves as a Managing Director. During his 19-year investment career, he has served as an equity analyst for Clover Partners, LP and as a credit analyst for Frost Bank.

Lewis Ropp

is a portfolio manager of a portion of the *Fundamental Value Fund*. Mr. Ropp joined Barrow Hanley in 2001 and serves as a Managing Director. Prior to joining Barrow Hanley, Mr. Ropp was employed by Frost Securities where he was a senior equity analyst and a managing director of the Energy Group. Mr. Ropp also served in management positions at Shell Oil Company and as a securities analyst in the energy sector at Howard, Weil, Labouisse, Friedrichs, Inc. prior to joining Frost Securities.

BlackRock Investment Management, LLC (“BlackRock”), located at 1 University Square, Princeton, New Jersey 08540, manages the investments of the *Select BlackRock Global Allocation Fund*. BlackRock is an affiliate of BlackRock Advisors, LLC, which is an indirect, wholly-owned subsidiary of BlackRock, Inc. BlackRock and its affiliates had approximately \$6.96 trillion in investment company and other portfolio assets under management as of September 30, 2019. The *Select BlackRock Global Allocation Fund* is managed by a team of financial professionals. The following individuals are jointly and primarily responsible for the day-to-day management of the Fund.

Dan Chamby, CFA

is jointly responsible for the day-to-day management of the *Select BlackRock Global Allocation Fund's* portfolio, including setting the Fund's overall investment strategy and overseeing the management of the Fund. Mr. Chamby has been a Managing Director of BlackRock, Inc. since 2007. He was a Director of BlackRock, Inc. in 2006 and previously was an Associate Portfolio Manager of MLIM from 2003 to 2006. Mr. Chamby is expected to retire in March 2020.

David Clayton, CFA, JD

is jointly responsible for the day-to-day management of the *Select BlackRock Global Allocation Fund's* portfolio, including setting the Fund's overall investment strategy and overseeing the management of the Fund. Mr. Clayton has been a Managing Director of BlackRock, Inc. since 2012. He was a Director of BlackRock from 2010 to 2011.

Russ Koesterich, CFA, JD

is jointly responsible for the day-to-day management of the *Select BlackRock Global Allocation Fund's* portfolio, including setting the Fund's overall investment strategy and overseeing the management of the Fund. Mr. Koesterich has been a Managing Director of BlackRock, Inc. since 2009.

Rick Rieder

is jointly responsible for the day-to-day management of the *Select BlackRock Global Allocation Fund's* portfolio, including setting the Fund's overall investment strategy and overseeing the management of the Fund. Mr. Rieder has been a Managing Director of BlackRock, Inc. since 2009.

Boston Partners Global Investors, Inc. (“Boston Partners”), located at One Grand Central Place, 60 East 42nd Street, Suite 1550, New York, New York 10165, manages a portion of the portfolio of the ***Fundamental Value Fund***. Boston Partners is a registered investment adviser organized in Delaware. As of September 30, 2019, Boston Partners had approximately \$86.6 billion in assets under management.

David T. Cohen, CFA

is a portfolio manager for Boston Partners’ Large Cap Value strategy and a portion of the ***Fundamental Value Fund***. Mr. Cohen’s previous experience includes managing a portion of the Boston Partners Long/Short Research strategy and as an equity analyst specializing in the energy sector as well as the engineering & construction, and metals & mining industries. He has deep experience analyzing and understanding capital intensive commodity oriented businesses. Mr. Cohen joined the firm from Loomis Sayles where he had over 8 years of experience as a portfolio manager for their Research Fund, as well as running a global energy hedge fund. As an equity analyst Mr. Cohen covered the energy, materials, and industrials sectors. Prior to joining Loomis Sayles, Mr. Cohen was in consultant relations at MFS Investment Management. Mr. Cohen has 15 years of experience.

Mark E. Donovan, CFA

is the lead portfolio manager for Boston Partners’ Large Cap Value portfolios and a portion of the ***Fundamental Value Fund***. Mr. Donovan is responsible for strategic and tactical operating decisions affecting the firm. He was one of the founding partners of Boston Partners Asset Management in 1995. Mr. Donovan joined the firm from The Boston Company where he was Senior Vice President and equity portfolio manager. He also spent five years as a consulting associate with Kaplan, Smith & Associates, and two years as a securities analyst for Value Line Inc. Mr. Donovan has 38 years of investment experience.

Stephanie McGirr

is a portfolio manager for Boston Partners’ Large Cap Value strategy and a portion of the ***Fundamental Value Fund***. Ms. McGirr’s previous experience includes managing a portion of the Boston Partners Long/Short Research strategy and as an equity analyst specializing in the health care services, insurance, restaurant, retail, and apparel industries. Over the course of her tenure at Boston Partners, Ms. McGirr also covered the consumer staples and business services industries. She started with Boston Partners in 2002 as a research and quantitative assistant in the firm’s research group. Ms. McGirr joined Boston Partners from Arthur Andersen where she was an operations associate. Ms. McGirr has 17 years of experience.

David J. Pyle, CFA

is a portfolio manager for Boston Partners’ Large Cap Value portfolios and a portion of the ***Fundamental Value Fund***. Prior to assuming this role, Mr. Pyle was an equity analyst covering the utility, insurance, leisure and lodging, packaging, publishing, and computer equipment and services sectors. Mr. Pyle joined Boston Partners from State Street Research where he was a research analyst and associate portfolio manager in their equity value group. Prior to that, he spent five years with Price Waterhouse. Mr. Pyle has 24 years of investment experience.

Brandywine Global Investment Management, LLC (“Brandywine Global”), located at 1735 Market Street, Suite 1800, Philadelphia, Pennsylvania 19103, manages a portion of the portfolio of the ***Diversified Value Fund***. Founded in 1986, Brandywine Global offers an array of equity, fixed income, and balanced portfolios that invest in U.S., international, and global markets. The firm is a wholly-owned, independently operated subsidiary of Legg Mason, Inc., and is headquartered in Philadelphia. Brandywine Global also operates two affiliated companies with offices in Singapore and London. As of September 30, 2019, Brandywine Global managed approximately \$74.6 billion in assets.

Joseph J. Kirby

is a portfolio manager of a portion of the ***Diversified Value Fund***. Mr. Kirby is lead portfolio manager for Brandywine Global’s Diversified Large Cap Value Equity strategy. He serves as a portfolio manager and securities analyst on the Diversified Value Equity team. Mr. Kirby contributes to the quantitative and fundamental analysis of securities for the Diversified Value Equity portfolios by consistently applying Brandywine Global’s disciplined management exclusionary process. Since joining the firm and Diversified Team in 1995, he has been involved in each aspect of the portfolio process, including leading the trading efforts for all Diversified portfolios from 1997 through 2000. Prior to joining Brandywine Global, Mr. Kirby was with CoreStates Financial Corporation as an auditor (1992 – 1994).

Henry F. Otto

is a portfolio manager of a portion of the *Diversified Value Fund*. Mr. Otto, Managing Director and Portfolio Manager of Brandywine Global, is the founder and co-lead portfolio manager of Brandywine Global's Diversified Value Equity strategies. Prior to joining Brandywine Global in 1988, he was with Dimensional Fund Advisors, Inc., where he managed and traded small cap portfolios and developed computer systems to structure portfolios and analyze performance (1984 – 1987), and the Chicago Board of Trade as a financial economist developing financial-based futures and options (1982 – 1984). Mr. Otto is a member of the firm's Executive Board.

Steven M. Tonkovich

is a portfolio manager of a portion of the *Diversified Value Fund*. Mr. Tonkovich, Managing Director and Portfolio Manager of Brandywine Global, is co-lead portfolio manager of the Diversified Value Equity strategies. He plays an integral role in the team's continual refinement of the Diversified Value Equity investment process and the firm's ongoing research into value investing. Prior to joining the firm in 1989, he was with the Wharton School of the University of Pennsylvania as a research analyst in the Finance Department (1987 – 1989); and the Moore School of Electrical Engineering of the University of Pennsylvania as a research assistant (1986 – 1987). Mr. Tonkovich is a member of the firm's Executive Board.

Frontier Capital Management Company, LLC ("Frontier"), located at 99 Summer Street, Boston, Massachusetts 02110, manages a portion of the portfolio of the *Mid Cap Growth Fund*. Frontier was founded in 1980 and since 2000 has been a Delaware limited liability company with senior professionals of the firm sharing ownership with Affiliated Managers Group, Inc. As of September 30, 2019, Frontier had approximately \$13.1 billion in assets under management.

Ravi Dabas

is a portfolio manager of a portion of the *Mid Cap Growth Fund*. Mr. Dabas is a Vice President and Portfolio Manager at Frontier. Mr. Dabas joined Frontier in 2007 as an equity research analyst. He assumed portfolio management responsibilities for Frontier's Mid Cap Growth portfolios in January 2019.

Christopher J. Scarpa

is a portfolio manager of a portion of the *Mid Cap Growth Fund*. Mr. Scarpa is a Vice President and Portfolio Manager at Frontier. Mr. Scarpa joined Frontier in 2001 as an equity research analyst. He assumed portfolio management responsibilities for Frontier's Mid Cap Growth portfolios in 2010.

Harris Associates L.P. ("Harris"), located at 111 S. Wacker Drive, Suite 4600, Chicago, Illinois 60606, manages a portion of the portfolio of the *Overseas Fund*. Harris is a limited partnership managed by its general partner, Harris Associates, Inc. ("HAI"). Harris and HAI are wholly-owned subsidiaries of Natixis Investment Managers, L.P., which is an indirect subsidiary of Natixis Investment Managers, an international asset management group based in Paris, France, that is in turn principally owned by Natixis, a French investment banking and financial services firm. Natixis is principally owned by BPCE, France's second largest banking group. BPCE is owned by banks comprising two autonomous and complementary retail banking networks consisting of the Caisse d'Epargne regional savings banks and the Banque Populaire regional cooperative banks. Together with its predecessor firms, Harris has advised and managed mutual funds since 1970. Harris managed approximately \$111 billion in assets as of September 30, 2019.

David G. Herro, CFA

is a portfolio manager of a portion of the *Overseas Fund*. Mr. Herro is the Deputy Chairman, the Chief Investment Officer of International Equities, and a Portfolio Manager at Harris. Prior to joining Harris in 1992, Mr. Herro worked as a portfolio manager for The Principal Financial Group from 1986 to 1989 and as a portfolio manager for The State of Wisconsin Investment Board from 1989 to 1992.

Michael L. Manelli, CFA

is a portfolio manager of a portion of the *Overseas Fund*. Mr. Manelli is a Vice President, a Portfolio Manager, and an International Investment Analyst at Harris. Prior to joining Harris in 2005, Mr. Manelli was a Research Associate/Analyst at Morgan Stanley from 2001 to 2005.

Invesco Advisers, Inc. (“Invesco”), located at 1555 Peachtree Street, N.E., Atlanta, Georgia 30309, manages a portion of the portfolio of the *Small Cap Growth Equity Fund*. Invesco is an indirect wholly-owned subsidiary of Invesco Ltd., a publicly traded company that, through its subsidiaries, engages in the business of investment management on an international basis. As of September 30, 2019, Invesco had approximately \$1.2 trillion in assets under management.

Invesco replaced OFI Global Institutional, Inc. as a subadviser of the Small Cap Growth Equity Fund at the close of business on May 24, 2019.

Ash Shah, CFA

is a co-portfolio manager of a portion of the *Small Cap Growth Equity Fund*. Mr. Shah is a portfolio manager at Invesco. He has been associated with Invesco and/or its affiliates since 2019. Prior to 2019, he was a Senior Portfolio Manager at OFI Global Institutional, Inc. (“OFI Global”) since February 2014. Mr. Shah was a Senior Research Analyst of OFI Global from February 2006 to February 2014. Prior to joining OFI Global, Mr. Shah was a Vice President and Senior Analyst with Merrill Lynch Investment Managers. Prior to that, he was a Vice President and Senior Analyst for BlackRock Financial Management.

Ronald Zibelli, Jr., CFA

is a co-portfolio manager of a portion of the *Small Cap Growth Equity Fund*. Mr. Zibelli is a portfolio manager at Invesco. He has been associated with Invesco and/or its affiliates since 2019. Prior to 2019, he was a Senior Portfolio Manager at OFI Global Institutional, Inc. (“OFI Global”) since May 2006. Prior to joining OFI Global, he spent six years at Merrill Lynch Investment Managers, during which time he was a Managing Director and Small Cap Growth Team Leader, responsible for managing 11 portfolios. Prior to joining Merrill Lynch Investment Managers, Mr. Zibelli spent 12 years with Chase Manhattan Bank, including two years as Senior Portfolio Manager (U.S. Small Cap Equity) at Chase Asset Management.

Jackson Square Partners, LLC (“Jackson Square”), is located at 101 California Street, Suite 3750, San Francisco, California 94111 and manages a portion of the portfolio of the *Growth Opportunities Fund*. Jackson Square is a limited liability company organized under the laws of Delaware. Jackson Square is jointly owned by California Street Partners, LP, which is beneficially owned by its portfolio management team and other employees of Jackson Square, and Macquarie Investment Management Advisers, a series of Macquarie Investment Management Business Trust (formerly known as Delaware Investments Fund Advisers (“Delaware Investments”). As of September 30, 2019, Jackson Square had approximately \$20.9 billion in assets under management.

Christopher J. Bonavico, CFA

is a portfolio manager of a portion of the *Growth Opportunities Fund*. Mr. Bonavico is a Portfolio Manager and Analyst at Jackson Square. Jackson Square manages large-cap growth, smid-cap growth, all-cap growth, and global growth portfolios. Prior to joining Jackson Square, he was a portfolio manager and equity analyst on Delaware Investments’ Focus Growth Equity team from April 2005 to April 2014. Prior to joining Delaware Investments, Mr. Bonavico was a principal and portfolio manager at Transamerica Investment Management, where he managed subadvised funds and institutional separate accounts. Before joining Transamerica in 1993, he was a research analyst for Salomon Brothers.

Christopher M. Ericksen, CFA

is a portfolio manager of a portion of the *Growth Opportunities Fund*. Mr. Ericksen is a Portfolio Manager and Analyst at Jackson Square. Jackson Square manages large-cap growth, smid-cap growth, all-cap growth, and global growth portfolios. Prior to joining Jackson Square, he was a portfolio manager and equity analyst on Delaware Investments’ Focus Growth Equity team from April 2005 to April 2014. Prior to joining Delaware Investments, Mr. Ericksen was a portfolio manager at Transamerica Investment Management, where he also managed institutional separate accounts. Before joining Transamerica in 2004, he was a vice president at Goldman Sachs. During his 10 years there, he worked in investment banking as well as investment management.

William Montana

is a portfolio manager for a portion of the *Growth Opportunities Fund*. Mr. Montana is a Portfolio Manager and Analyst at Jackson Square. Jackson Square manages large-cap growth, smid-cap growth, all-cap growth, and global growth portfolios. Mr. Montana joined Jackson Square in September 2014. Prior to

joining Jackson Square, he was an associate at TPG Capital, a private equity firm, from August 2011 to August 2014, focusing on growth capital opportunities. Before that, Mr. Montana spent two years at Goldman Sachs as an investment banking analyst, focusing on financial institutions.

Daniel J. Prislin, CFA

is a portfolio manager of a portion of the *Growth Opportunities Fund*. Mr. Prislin is a Portfolio Manager and Analyst at Jackson Square. Jackson Square manages large-cap growth, smid-cap growth, all-cap growth, and global growth portfolios. Prior to joining Jackson Square, he was a portfolio manager and equity analyst on Delaware Investments' Focus Growth Equity team from April 2005 to April 2014. Prior to joining Delaware Investments, Mr. Prislin was a principal and portfolio manager at Transamerica Investment Management, where he also managed subadvised funds and institutional separate accounts. Prior to joining Transamerica in 1998, he was a portfolio manager with The Franklin Templeton Group.

Jeffrey S. Van Harte, CFA

is a portfolio manager of a portion of the *Growth Opportunities Fund*. Mr. Van Harte is Chairman and Chief Investment Officer of Jackson Square, which manages large-cap growth, smid-cap growth, all-cap growth, and global growth portfolios. Prior to joining Jackson Square, he was the chief investment officer for Delaware Investments' Focus Growth Equity team from April 2005 to April 2014. The Focus Growth Equity team managed large-cap growth, smid-cap growth, all-cap growth, and global growth portfolios. Prior to joining Delaware Investments, Mr. Van Harte was a principal and executive vice president at Transamerica Investment Management. He has been managing portfolios and separate accounts for 35 years. Before becoming a portfolio manager, Mr. Van Harte was a securities analyst and trader for Transamerica Investment Services, which he joined in 1980.

Loomis, Sayles & Company, L.P. ("Loomis Sayles"), located at One Financial Center, Boston, Massachusetts 02111, manages a portion of the portfolio of the *Blue Chip Growth Fund*. Loomis Sayles is an indirect subsidiary of Natixis Investment Managers, L.P. which owns, in addition to Loomis Sayles, a number of other asset management and distribution and service entities. Natixis Investment Managers, L.P. is part of Natixis Investment Managers, an international asset management group based in Paris, France, that is in turn principally owned by Natixis, a French investment banking and financial services firm. As of September 30, 2019, Loomis Sayles managed approximately \$286 billion in assets.

Aziz V. Hamzaogullari, CFA

is the portfolio manager of a portion of the *Blue Chip Growth Fund*. Mr. Hamzaogullari is the Chief Investment Officer of the Growth Equity Strategies Team at Loomis Sayles. He is the portfolio manager of the Loomis Sayles large cap, global, and all cap growth strategies, including the Loomis Sayles Growth and Global Growth mutual funds and products outside the U.S. Mr. Hamzaogullari is also an Executive Vice President and a member of the Board of Directors at Loomis Sayles. Mr. Hamzaogullari joined Loomis Sayles in 2010 from Evergreen Investments where he was a senior portfolio manager and managing director. He joined Evergreen in 2001, was promoted to director of research in 2003 and portfolio manager in 2006. He was head of Evergreen's Berkeley Street Growth Equity team and was founder of the research and investment process. Prior to Evergreen, Mr. Hamzaogullari was a senior equity analyst and portfolio manager at Manning & Napier Advisors. Mr. Hamzaogullari has 26 years of investment industry experience.

Massachusetts Financial Services Company ("MFS"), located at 111 Huntington Avenue, Boston, Massachusetts 02199, manages a portion of the portfolio of the *Overseas Fund*. MFS is a subsidiary of Sun Life of Canada (U.S.) Financial Services Holdings, Inc., which in turn is an indirect majority-owned subsidiary of Sun Life Financial Inc. (a diversified financial services company). As of September 30, 2019, the MFS organization had approximately \$494 billion in net assets under management.

Filipe Benzinho

is a portfolio manager of a portion of the *Overseas Fund*. Mr. Benzinho, an Investment Officer of MFS, has been employed in the investment area of MFS since 2009.

Daniel Ling

is a portfolio manager of a portion of the *Overseas Fund*. Mr. Ling, an Investment Officer of MFS, has been employed in the investment area of MFS since 2006.

Metropolitan West Asset Management, LLC (“MetWest”), located at 865 S. Figueroa Street, Suite 1800, Los Angeles, California 90017, manages the investments of the *Total Return Bond Fund*. A team of investment professionals manages the Fund. The team consists of Tad Rivelle, MetWest’s Chief Investment Officer and Generalist Portfolio Manager, who is responsible for developing the firm’s long-term economic outlook that guides strategies; Laird Landmann, President and Generalist Portfolio Manager, Stephen Kane, CFA, Group Managing Director and Generalist Portfolio Manager, and Bryan Whalen, CFA, Group Managing Director and Generalist Portfolio Manager, who co-manage security selection and the trade execution process. Messrs. Rivelle, Landmann, and Kane founded MetWest in August 1996. Mr. Whalen has been with MetWest since May 2004. MetWest is an indirect wholly-owned subsidiary of The TCW Group, Inc. (“TCW”). MetWest, together with TCW and its other subsidiaries, which provide a variety of investment management and investment advisory services, had approximately \$210.6 billion in assets under management or committed to management, including \$177 billion of U.S. fixed income investments, as of September 30, 2019.

Stephen M. Kane, CFA

is a portfolio manager of the *Total Return Bond Fund*. Mr. Kane, a Group Managing Director, is a Generalist Portfolio Manager in the U.S. Fixed Income Group. He joined TCW in 2009 during the acquisition of MetWest. At MetWest, Mr. Kane was responsible for leading MetWest’s AlphaTrak, Ultra Short and Liability Driven Investment (LDI) products, and he co-manages many of the firm’s mutual funds. Under his co-leadership, the MetWest investment team was recognized as Morningstar’s Fixed Income Manager of the Year for 2005. Prior to establishing MetWest, Mr. Kane was a fixed income portfolio manager at Hotchkis and Wiley. He also served as a Vice President at PIMCO.

Laird R. Landmann

is a portfolio manager of the *Total Return Bond Fund*. Mr. Landmann, a Group Managing Director, is the President of MetWest and a Generalist Portfolio Manager in the U.S. Fixed Income Group. He joined TCW in 2009 during the acquisition of MetWest. Mr. Landmann currently serves on the boards of the TCW and Metropolitan West Mutual Funds. Mr. Landmann currently co-manages many of TCW and MetWest’s mutual funds, including the MetWest Total Return Bond Fund, MetWest High Yield Bond Fund, and TCW Core Fixed Income Fund, and leads the fixed income group’s risk management efforts. He is a leader of the MetWest investment team that was recognized as Morningstar’s Fixed Income Manager of the Year for 2005 and has been nominated for the award eight times. Prior to founding MetWest in 1996, Mr. Landmann was a principal and the co-director of fixed income at Hotchkis and Wiley. He also served as a portfolio manager and vice president at PIMCO.

Tad Rivelle

is a portfolio manager of the *Total Return Bond Fund*. Mr. Rivelle, a Group Managing Director, is Chief Investment Officer, Fixed Income, overseeing over \$177 billion in fixed income assets, including nearly \$94.4 billion of mutual fund assets under the TCW and MetWest Funds brand. Prior to joining TCW, he served as Chief Investment Officer for MetWest, an independent institutional investment manager that he cofounded. The MetWest investment team has been recognized for a number of performance related awards, including Morningstar’s Fixed Income Manager of the Year. Mr. Rivelle was also the co-director of fixed income at Hotchkis & Wiley and a portfolio manager at Pacific Investment Management Company LLC (“PIMCO”).

Bryan T. Whalen, CFA

is a portfolio manager of the *Total Return Bond Fund*. Mr. Whalen, a Group Managing Director, is a Generalist Portfolio Manager in the U.S. Fixed Income Group. He joined TCW in 2009 during the acquisition of MetWest as co-head of the Securitized Products division. Prior to joining TCW, Mr. Whalen was a partner and co-head of MetWest’s Securitized Products division. Prior to joining MetWest in 2004, he was a director in the fixed income department at Credit Suisse First Boston in New York. Previously, he was a vice president at Donaldson, Lufkin & Jenrette.

Northern Trust Investments, Inc. (“NTI”), located at 50 South LaSalle Street, Chicago, Illinois 60603, manages the investments of the *S&P 500 Index Fund*, *S&P Mid Cap Index Fund*, *Russell 2000 Small Cap Index Fund*, and *MSCI EAFE International Index Fund*. NTI, a subsidiary of Northern Trust Corporation, is an Illinois State Banking Corporation and an investment adviser registered under the Investment Advisers Act of 1940, as amended. It primarily manages assets for institutional and individual separately managed accounts, investment companies, and bank common and collective funds. Northern Trust Corporation is regulated by the Board of Governors of the Federal Reserve System as a financial holding company under the U.S. Bank Holding Company Act of 1956, as amended. As of September 30, 2019, Northern Trust Corporation, through its affiliates, had assets under custody of \$8.76 trillion and assets under investment management of \$1.20 trillion.

Brent Reeder

is primarily responsible for the day-to-day management of the *S&P 500 Index Fund*, *S&P Mid Cap Index Fund*, and *Russell 2000 Small Cap Index Fund*. Mr. Reeder is a Senior Vice President at NTI where he is responsible for index equity management in the United States. Mr. Reeder joined NTI in 1998.

Steven Santiccioli

is primarily responsible for the day-to-day management of the *MSCI EAFE International Index Fund*. Mr. Santiccioli is a Vice President at NTI. Mr. Santiccioli joined NTI in 2003 and manages various quantitative equity portfolios.

Sands Capital Management, LLC (“Sands Capital”), located at 1000 Wilson Boulevard, Suite 3000, Arlington, Virginia 22209, manages a portion of the portfolio of the *Growth Opportunities Fund*. As of September 30, 2019, Sands Capital had approximately \$40.1 billion in assets under management.

Wesley A. Johnston, CFA

is a portfolio manager of a portion of the *Growth Opportunities Fund*. Mr. Johnston, Portfolio Manager and Senior Research Analyst, has been with Sands Capital since 2004.

Frank M. Sands, CFA

is a portfolio manager of a portion of the *Growth Opportunities Fund*. Mr. Sands, Chief Investment Officer and Chief Executive Officer, has been with Sands Capital since June 2000. Before joining Sands Capital, he was a Research Analyst, Portfolio Manager, and Principal at Faye Sarofim & Co. from August 1994 to June 2000.

A. Michael Sramek, CFA

is a portfolio manager of a portion of the *Growth Opportunities Fund*. Mr. Sramek, Research Analyst, Senior Portfolio Manager, and Managing Director, has been with Sands Capital since 2001. Prior to joining Sands Capital, he was a Research Analyst at Mastrapasqua & Associates during 2000. Prior to obtaining his MBA in 2000, he was an Associate, Plan Sponsor Services at BARRA/Rogers Casey from 1995 to 1998.

Thomas H. Trentman, CFA

is a portfolio manager of a portion of the *Growth Opportunities Fund*. Mr. Trentman, Portfolio Manager and Research Analyst, has been with Sands Capital since 2005.

T. Rowe Price Associates, Inc. (“T. Rowe Price”), located at 100 East Pratt Street, Baltimore, Maryland 21202, manages the investments of the *Select T. Rowe Price International Equity Fund* and a portion of the portfolio of the *Diversified Value Fund*, *Equity Opportunities Fund*, *Blue Chip Growth Fund*, and *Mid Cap Growth Fund*. T. Rowe Price, a wholly-owned subsidiary of T. Rowe Price Group, Inc., a publicly-traded financial services holding company, has been managing assets since 1937. In addition, T. Rowe Price International Ltd (“T. Rowe Price International”) serves as sub-subadviser for the *Select T. Rowe Price International Equity Fund* and subject to the supervision of T. Rowe Price, is authorized to trade securities and make discretionary investment decisions on behalf of the Fund (which includes selecting foreign investments in developed and emerging market countries). T. Rowe Price International is a direct subsidiary of T. Rowe Price and its address is 60 Queen Victoria Street, London EC4N 4TZ, United Kingdom. As of September 30, 2019, T. Rowe Price and its affiliates had approximately \$1.126 trillion in assets under management.

Brian W. H. Berghuis, CFA

is the portfolio manager of a portion of the *Mid Cap Growth Fund*. Mr. Berghuis is a Vice President and Portfolio Manager for T. Rowe Price. He joined T. Rowe Price in 1985 and his investment experience dates from 1983. Mr. Berghuis has served as a portfolio manager for T. Rowe Price throughout the past five years.

Richard N. Clattenburg, CFA

is a portfolio manager of the *Select T. Rowe Price International Equity Fund*. Mr. Clattenburg is a Vice President and Portfolio Manager for T. Rowe Price. He joined T. Rowe Price in 2005 and his investment experience dates from 2003. Mr. Clattenburg has served as an equity research analyst and portfolio manager (beginning in 2015) for T. Rowe Price.

John D. Linehan, CFA

is the portfolio manager of a portion of the *Diversified Value Fund* and *Equity Opportunities Fund*. Mr. Linehan is a Vice President and Portfolio Manager for T. Rowe Price. He joined T. Rowe Price in 1998 and his investment experience dates from 1989. During the past five years, Mr. Linehan has served as a portfolio manager and the head of U.S. Equity for T. Rowe Price (from February 2010 – June 2014).

Colin McQueen

is a portfolio manager of the *Select T. Rowe Price International Equity Fund*. Mr. McQueen is a Vice President and Portfolio Manager for T. Rowe Price International. He joined T. Rowe Price International in 2019 and his investment experience dates from 1990. Prior to joining T. Rowe Price International, Mr. McQueen served as Head of the Global Value team at Sanlam Investments (Pty) Ltd (formerly Sanlam FOUR Investments UK Limited), where he also had portfolio management responsibilities for two global value funds.

Raymond A. Mills, Ph.D., CFA

is a portfolio manager of the *Select T. Rowe Price International Equity Fund*. Mr. Mills is a Vice President and Portfolio Manager for T. Rowe Price. He joined T. Rowe Price in 1997 and his investment experience dates from that time. Mr. Mills has served as a portfolio manager for T. Rowe Price throughout the past five years.

Gonzalo Pangaro, CPA

is a portfolio manager of the *Select T. Rowe Price International Equity Fund*. Mr. Pangaro is a Vice President and Portfolio Manager for T. Rowe Price International. He joined T. Rowe Price International in 1998 and his investment experience dates from 1991. Mr. Pangaro has served as a portfolio manager for T. Rowe Price International throughout the past five years.

Larry J. Puglia, CFA, CPA

is the portfolio manager of a portion of the *Blue Chip Growth Fund*. Mr. Puglia is a Vice President and Portfolio Manager for T. Rowe Price. He joined T. Rowe Price in 1990 and his investment experience dates from 1989. Mr. Puglia has served as a portfolio manager for T. Rowe Price throughout the past five years.

Wellington Management Company LLP (“Wellington Management”), a Delaware limited liability partnership with principal offices located at 280 Congress Street, Boston, Massachusetts 02210, manages the investments of the *Fundamental Growth Fund* and a portion of the portfolio of the *Equity Opportunities Fund*, *Small Cap Value Equity Fund*, and *Small Cap Growth Equity Fund*. Wellington Management is a professional investment counseling firm which provides investment services to investment companies, employee benefit plans, endowments, foundations, and other institutions. Wellington Management and its predecessor organizations have provided investment advisory services for over 80 years. Wellington Management is owned by the partners of Wellington Management Group LLP, a Massachusetts limited liability partnership. As of September 30, 2019, Wellington Management and its investment advisory affiliates had investment management authority with respect to approximately \$1,102 billion in assets.

Mario E. Abularach, CFA, CMT

has been involved in portfolio management and securities analysis for the portion of the *Small Cap Growth Equity Fund* managed in the small capitalization growth style since 2006. Mr. Abularach is a Senior Managing Director and Equity Research Analyst of Wellington Management and joined the firm as an investment professional in 2001.

Steven C. Angeli, CFA

has been involved in portfolio management and securities analysis for the portion of the *Small Cap Growth Equity Fund* managed in the small capitalization growth style since 2004. Mr. Angeli is a Senior Managing Director and Equity Portfolio Manager of Wellington Management and joined the firm as an investment professional in 1994.

Daniel J. Fitzpatrick, CFA

has been involved in portfolio management and securities analysis for the portion of the *Small Cap Growth Equity Fund* managed in the small capitalization opportunities style since 2001. Mr. Fitzpatrick is a Senior Managing Director and Equity Portfolio Manager of Wellington Management and joined the firm as an investment professional in 1998.

Edmond C. Griffin, CFA

has served as a portfolio manager of a portion of the *Small Cap Value Equity Fund* since 2020. Mr. Griffin is a Managing Director and Equity Portfolio Manager of Wellington Management and joined the firm as an investment professional in 2008.

Donald J. Kilbride

has served as the portfolio manager of a portion of the *Equity Opportunities Fund* since 2017. Mr. Kilbride is a Senior Managing Director and Equity Portfolio Manager of Wellington Management and joined the firm as an investment professional in 2002.

Timothy J. McCormack, CFA

has served as portfolio manager of a portion of the *Small Cap Value Equity Fund* since 2009. Mr. McCormack is a Senior Managing Director and Equity Portfolio Manager of Wellington Management and joined the firm as an investment professional in 2000.

Stephen Mortimer

has been involved in portfolio management and securities analysis for the portion of the *Small Cap Growth Equity Fund* managed in the small capitalization growth style since 2006. Mr. Mortimer is a Senior Managing Director and Equity Portfolio Manager of Wellington Management and joined the firm as an investment professional in 2001.

Shaun F. Pedersen

has served as portfolio manager of a portion of the *Small Cap Value Equity Fund* since 2009. Mr. Pedersen is a Senior Managing Director and Equity Portfolio Manager of Wellington Management and joined the firm as an investment professional in 2004.

John V. Schneider, CFA

has been involved in portfolio management and securities analysis for the portion of the *Small Cap Growth Equity Fund* managed in the small capitalization growth style since 2018. Mr. Schneider is a Vice President and Equity Research Analyst of Wellington Management and joined the firm as an investment professional in 2016. Prior to joining Wellington Management, Mr. Schneider worked as a portfolio manager and equity research analyst specializing in the consumer discretionary and consumer staples sectors at Granahan Investment Management (2006 – 2016).

Joel Thomson, CFA

has served as the portfolio manager of the *Fundamental Growth Fund* since 2019. Mr. Thomson is a Managing Director and Equity Portfolio Manager of Wellington Management and joined the firm as an investment professional in 2008.

Western Asset Management Company, LLC (formerly known as Western Asset Management Company) (“Western Asset”), established in 1971, is located at 385 E. Colorado Boulevard, Pasadena, California 91101. **Western Asset Management Company Limited** (“Western Asset Limited”) was founded in 1984 and is located at 10 Exchange Square, Primrose Street, London, EC 2A2EN, United Kingdom. As of September 30, 2019, total assets under management by Western Asset and Western Asset Limited were approximately \$452.9 billion and \$36.7 billion, respectively. Western Asset Limited is affiliated with Western Asset, jointly managing the *Strategic Bond Fund*. Western Asset Limited provides certain subadvisory services relating to currency

transactions and investments in non-U.S. dollar denominated securities and related foreign currency instruments. Expertise from Western Asset Limited's investment professionals add local sector investment experience as well as the ability to trade in local markets. Western Asset and Western Asset Limited maintain constant interaction and coordination between their investment professionals to maintain a unified and cohesive investment management approach.

John L. Bellows, CFA, PhD

is a portfolio manager of the *Strategic Bond Fund*. Mr. Bellows is a Portfolio Manager at the Firm. He joined the Firm in 2012 as an Investment Management Strategy Analyst before assuming his current role. Prior to joining the Firm, Mr. Bellows served at the U.S. Department of the Treasury, as the Acting Assistant Secretary for Economic Policy.

S. Kenneth Leech

is a portfolio manager of the *Strategic Bond Fund*. Mr. Leech is the Chief Investment Officer and a Portfolio Manager at the Firm. Prior to joining the Firm in 1990, he worked as a portfolio manager at Greenwich Capital Markets, The First Boston Corporation, and National Bank of Detroit.

Mark S. Lindbloom

is a portfolio manager of the *Strategic Bond Fund*. Mr. Lindbloom is a Portfolio Manager at the Firm. Prior to joining the Firm in 2005, he worked as a portfolio manager at Citigroup Asset Management and Brown Brothers Harriman & Co.

Frederick R. Marki, CFA

is a portfolio manager of the *Strategic Bond Fund*. Mr. Marki is a Portfolio Manager at the Firm. Prior to joining the Firm in 2005, Mr. Marki was Senior Portfolio Manager with Citigroup Asset Management, Portfolio Manager with UBS, and Vice President with Merrill Lynch.

Julien A. Scholnick, CFA

is a portfolio manager of the *Strategic Bond Fund*. Mr. Scholnick is a Portfolio Manager at the Firm. Prior to joining the Firm in 2003, Mr. Scholnick served as an Associate in the Private Client Group with Salomon Smith Barney, as a Senior Analyst with Digital Coast Partners and as a Senior Analyst with Arthur Andersen, LLP.

The Funds' SAI provides additional information about each portfolio manager's compensation, other accounts managed by the portfolio managers, and each portfolio manager's ownership of securities in the relevant Fund.

MML Advisers has received exemptive relief from the Securities and Exchange Commission ("SEC") to permit it to change subadvisers or hire new subadvisers for a number of the series of the Trust from time to time without obtaining shareholder approval. (In the absence of that exemptive relief, shareholder approval might otherwise be required.) Several other mutual fund companies have received similar relief. MML Advisers believes having this authority is important, because it allows MML Advisers to remove and replace a subadviser in a quick, efficient, and cost-effective fashion when, for example, the subadviser's performance is inadequate or the subadviser no longer is able to meet a Trust series' investment objective and strategies. Pursuant to the exemptive relief, MML Advisers will provide to a Fund's shareholders, within 90 days of the hiring of a new subadviser, an information statement describing the new subadviser. MML Advisers will not rely on this authority for any Fund unless the Fund's shareholders have approved this arrangement. As of the date of this Prospectus, this exemptive relief is available to each Fund.

Other Information

On December 7, 2010, the Trust was named as a defendant and putative member of the proposed defendant class of shareholders named in an adversary proceeding brought by The Official Committee of Unsecured Creditors of Tribune Company (the "Official Committee") in the U.S. Bankruptcy Court for the District of Delaware, in connection with Tribune Company's Chapter 11 bankruptcy proceeding (In re Tribune Company). The proceeding relates to a leveraged buyout ("LBO") transaction by which Tribune Company converted to a privately-held company in 2007, and the putative defendant class is comprised of beneficial owners of shares of Tribune Company who received proceeds (the "Proceeds") of the LBO. The Official Committee seeks to recover payments of those Proceeds. On April 5, 2012, the adversary proceeding was transferred to the Southern District of New York for consolidated pretrial proceedings. The action is now being prosecuted by the litigation trustee ("Trustee") for the Tribune Litigation Trust.

The potential amounts sought to be recovered from the Diversified Value Fund and S&P 500 Index Fund are approximately \$1,621,800 and \$1,186,430, respectively, plus interest and the Official Committee's court costs.

In addition, on June 2, 2011, the Diversified Value Fund and S&P 500 Index Fund were named as defendants in a closely related, parallel adversary proceeding brought in connection with the Tribune Company's LBO by Deutsche Bank Trust Company Americas, in its capacity as successor indenture trustee for a certain series of Senior Notes, Law Debenture Trust Company of New York, in its capacity as successor indenture trustee for a certain series of Senior Notes, and Wilmington Trust Company, in its capacity as successor indenture trustee for the PHONES Notes (together, the "Plaintiffs"), in the United States District Court for the District of Massachusetts. The Plaintiffs also seek to recover payments of the Proceeds. On December 20, 2011, this action was transferred to the Southern District of New York for consolidated pretrial proceedings.

The Funds cannot predict the outcome of these proceedings. If the proceedings were to be decided in a manner adverse to the Funds, or if the Funds were to enter into a settlement agreement with the Trustee or the Plaintiffs, as applicable, the payment of such judgment or settlement could potentially have a material adverse effect on the Funds' NAVs depending on the net assets of each applicable Fund at the time of such judgment or settlement.

About the Classes of Shares – I, R5, Service, Administrative, A, R4, and R3 Shares

Each Fund (other than the Select T. Rowe Price International Equity Fund) offers seven Classes of shares. The Select T. Rowe Price International Equity Fund only offers Class I shares. The only differences among the various Classes are that (a) each Class is subject to different expenses specific to that Class, including any expenses under a Rule 12b-1 Plan and administrative and shareholder service expenses; (b) each Class has a different Class designation; (c) each Class has exclusive voting rights with respect to matters solely affecting such Class; and (d) each Class has different exchange privileges. Not all of the Classes of a Fund are available in every state.

Shares of all Classes, except Class I shares, are subject to an administrative and shareholder services fee described above under “Management of the Funds – Investment Adviser.” In addition, Class A, Class R3, and Class R4 shares are subject to servicing or distribution fees paid under a Rule 12b-1 Plan. Class A, Administrative Class, and Service Class shares are subject to an additional supplemental shareholder services fee, described under “Distribution Plan, Shareholder Servicing, and Payments to Intermediaries,” below. Different fees and expenses of a Class will affect performance of that Class. For actual past expenses of each share Class, see the “Financial Highlights” tables later in this Prospectus. Investors may receive different levels of service in connection with investments in different Classes of shares, and intermediaries may receive different levels of compensation in connection with each share Class. For additional information, call us toll free at 1-888-309-3539 or contact a sales representative or financial intermediary who offers the Classes.

Class I, Class R5, Service Class, and Administrative Class shares are offered primarily to institutional investors through institutional distribution channels, such as employer-sponsored retirement plans or through broker-dealers, financial institutions, or insurance companies. Class A, Class R4, and Class R3 shares are offered primarily through other distribution channels, such as broker-dealers or financial institutions. All Classes of shares are available for purchase by insurance company separate investment accounts, qualified plans under Section 401(a) of the Code, Code Section 403(b) plans, Code Section 457 plans,

non-qualified deferred compensation plans, and other institutional investors.

Mutual funds and collective trust funds may purchase Class I, Class R5, and Service Class shares. Class A, Class R3, Class R4, and Class R5 shares may be purchased by voluntary employees’ beneficiary associations described in Code Section 501(c)(9). Class A shares of any Fund, with the exception of the Total Return Bond Fund and S&P 500 Index Fund may be purchased by individual retirement accounts described in Code Section 408. Class R4 shares of the Total Return Bond Fund and S&P 500 Index Fund may also be purchased by individual retirement accounts described in Code Section 408.

Class I and Class A shares may also be purchased by individual investors through a financial intermediary or through a product sponsored by a financial intermediary.

Additional Information.

A plan or institutional investor will be permitted to purchase shares of a class based upon the expected size (over time), servicing needs, or distribution or servicing costs for the plan or institutional investor as determined by MML Distributors, LLC (the “Distributor”) or MassMutual, as applicable. A financial intermediary may, by agreement with the Distributor or MassMutual, make available to its plan or institutional clients shares of one class or a limited number of classes of the Funds. An investor should consult its financial intermediary for information (including expense information) regarding the share class(es) the intermediary will make available for purchase by the investor.

Eligible purchasers must generally (except for certain individual investors and individual retirement accounts) have an agreement with MassMutual or a MassMutual affiliate to purchase shares. There is no minimum plan or institutional investor size to purchase Class A, Class R4, and Class R3 shares.

Class A shares may be offered to present or former officers, directors, trustees, and employees (and their spouses, parents, children, and siblings) of the Funds, MassMutual, and its affiliates and retirement plans established by them for their employees.

Sales Charges by Class

Initial Sales Charges

Class A shares are sold at their offering price, which is normally NAV plus an initial sales charge. However, in some cases, as described below, purchases are not subject to an initial sales charge, and the offering price will be the NAV. In other cases, reduced sales charges may be available, as described below. Out of the amount you invest, the Fund receives the NAV to invest for your account.

The sales charge varies depending on the amount of your purchase. A portion of the sales charge may be retained by the Distributor or allocated to your dealer as a concession. The Distributor reserves the right to reallocate the entire sales charge as a concession to dealers. The current sales charge rates and concessions paid to dealers and brokers are as follows:

Front-End Sales Charge (As a Percentage of Offering Price)/Front-End Sales Charge (As a Percentage of Net Amount Invested)/Concession (As a Percentage of Offering Price) for Different Purchase Amounts:

| Price Breakpoints | General Equity | General Taxable Bond | Shorter-Term Bond |
|-----------------------|----------------|----------------------|-------------------|
| Less than \$25,000 | 5.50%/ | 4.25%/ | 2.50%/ |
| | 5.82%/ | 4.44%/ | 2.56%/ |
| | 4.50% | 3.50% | 2.00% |
| \$25,000 – \$49,999 | 5.25%/ | 4.25%/ | 2.25%/ |
| | 5.54%/ | 4.44%/ | 2.30%/ |
| | 4.25% | 3.50% | 1.75% |
| \$50,000 – \$99,999 | 4.50%/ | 4.00%/ | 2.00%/ |
| | 4.71%/ | 4.17%/ | 2.04%/ |
| | 3.50% | 3.25% | 1.50% |
| \$100,000 – \$249,999 | 3.50%/ | 3.00%/ | 1.75%/ |
| | 3.63%/ | 3.09%/ | 1.78%/ |
| | 2.50% | 2.25% | 1.25% |
| \$250,000 – \$499,999 | 2.25%/ | 1.75%/ | 1.25%/ |
| | 2.30%/ | 1.78%/ | 1.27%/ |
| | 1.75% | 1.50% | 0.75% |
| \$500,000 – \$999,999 | 1.75%/ | 1.00%/ | 0.75%/ |
| | 1.78%/ | 1.01%/ | 0.76%/ |
| | 1.10% | 0.75% | 0.50% |
| \$1,000,000 or more | None/ | None/ | None/ |
| | None/ | None/ | None/ |
| | 0.75% | 0.50% | 0.50% |

A reduced sales charge may be obtained for Class A shares under the Funds' "Rights of Accumulation" because of the economies of sales efforts and reduction in expenses realized by the Distributor, dealers, and brokers making such sales.

To qualify for the lower sales charge rates that apply to larger purchases of Class A shares, you can add together:

- Current purchases of Class A shares of more than one Fund subject to an initial sales charge to reduce the sales charge rate that applies to current purchases of Class A shares; and
- Class A shares of Funds you previously purchased subject to an initial or contingent deferred sales charge to reduce the sales charge rate for current purchases of Class A shares, provided that you still hold your investment in the previously purchased Funds.

The Distributor will add the value, at current offering price, of the Class A shares you previously purchased and currently own to the value of current purchases to determine the sales charge rate that applies. The reduced sales charge will apply only to current purchases. You must request the reduced sales charge when you buy Class A shares and inform your broker-dealer or other financial intermediary of Class A shares of any other Funds that you own. Information regarding reduced sales charges can be found on the MassMutual website at <http://www.massmutual.com/funds>.

Contingent Deferred Sales Charges

There is no initial sales charge on purchases of Class A shares of any one or more of the Funds aggregating \$1 million or more. The Distributor pays dealers of record concessions in an amount equal to .75%, or .50% of purchases of \$1 million or more, as shown in the above table. The concession will not be paid on purchases of shares by exchange or that were previously subject to a front-end sales charge and dealer concession.

If you redeem any of those shares within a holding period of 18 months from the date of their purchase, a contingent deferred sales charge of 1.0% will be deducted from the redemption proceeds (unless you are eligible for a waiver of that sales charge based on the categories listed below and you advise the transfer agent, MassMutual, or another intermediary of your eligibility for the waiver when you place your redemption request).

All contingent deferred sales charges will be based on the lesser of the NAV of the redeemed shares at the time of redemption or the original NAV. A contingent deferred sales charge is not imposed on:

- the amount of your account value represented by an increase in NAV over the initial purchase price,
- shares purchased by the reinvestment of dividends or capital gains distributions, or
- shares redeemed in the special circumstances described below.

To determine whether a contingent deferred sales charge applies to a redemption, the Fund redeems shares in the following order:

1. shares acquired by reinvestment of dividends and capital gains distributions, and

Sales Charge Waivers by Class

Waivers of Class A Initial Sales Charges

The Class A sales charges will be waived for shares purchased in the following types of transactions:

- Purchases into insurance company separate investment accounts.
- Purchases into Retirement Plans or other employee benefit plans.
- Purchases of Class A shares aggregating \$1 million or more of any one or more of the Funds.
- Purchases into accounts for which the broker-dealer of record has entered into a special agreement with the Distributor allowing this waiver.
- Purchases into accounts for which no sales concession is paid to any broker-dealer or other financial intermediary at the time of sale.
- Shares sold to MassMutual or its affiliates.
- Shares sold to registered management investment companies or separate accounts of insurance companies having an agreement with MassMutual or the Distributor for that purpose.
- Shares issued in plans of reorganization to which the Fund is a party.
- Shares sold to present or former officers, directors, trustees, or employees (and their “immediate families⁽¹⁾”) of the Fund, MassMutual, and its affiliates.
- Shares sold to a portfolio manager of the Fund.

2. shares held the longest.

Contingent deferred sales charges are not charged when you exchange shares of the Fund for shares of any other Fund. However, if you exchange them within the applicable contingent deferred sales charge holding period, the holding period will carry over to the Fund whose shares you acquire. Similarly, if you acquire shares of a Fund by exchanging shares of another Fund that are still subject to a contingent deferred sales charge holding period, that holding period will carry over to the acquired Fund.

Waivers of Class A Contingent Deferred Sales Charges

The Class A contingent deferred sales charges will not be applied to shares purchased in certain types of transactions or redeemed in certain circumstances described below.

A. Waivers for Redemptions in Certain Cases.

The Class A contingent deferred sales charges will be waived for redemptions of shares in the following cases:

- Redemptions from insurance company separate investment accounts.
- Redemptions from Retirement Plans or other employee benefit plans.
- Redemptions from accounts other than Retirement Plans following the death or disability of the last surviving shareholder, including a trustee of a grantor trust or revocable living trust for which the trustee is also the sole beneficiary. The death or disability must have occurred after the account was established, and for disability you must provide evidence of a determination of disability by the Social Security Administration.
- Redemptions from accounts for which the broker-dealer of record has entered into a special agreement with the Distributor allowing this waiver.
- Redemptions from accounts for which no sales concession was paid to any broker-dealer or other financial intermediary at the time of sale.
- Redemptions of Class A shares under an Automatic Withdrawal Plan from an account

other than a Retirement Plan if the aggregate value of the redeemed shares does not exceed 10% of the account's value annually.

- In the case of an IRA, to make distributions required under a divorce or separation agreement described in Section 71(b) of the Code.

B. Waivers for Shares Sold or Issued in Certain Transactions.

The contingent deferred sales charge is also waived on Class A shares sold or issued in the following cases:

- Shares sold to MassMutual or its affiliates.
- Shares sold to registered management investment companies or separate accounts of insurance companies having an agreement

with MassMutual or the Distributor for that purpose.

- Shares issued in plans of reorganization to which the Fund is a party.
- Shares sold to present or former officers, directors, trustees, or employees (and their "immediate families⁽¹⁾") of the Fund, MassMutual, and its affiliates.
- Shares sold to a present or former portfolio manager of the Fund.

(1) *The term "immediate family" refers to one's spouse, children, grandchildren, grandparents, parents, parents-in-law, brothers and sisters, sons- and daughters-in-law, a sibling's spouse, a spouse's siblings, aunts, uncles, nieces, and nephews; relatives by virtue of a remarriage (step-children, step-parents, etc.) are included.*

Distribution Plan, Shareholder Servicing, and Payments to Intermediaries

Shares of all classes of the Funds, other than Class A shares, are sold without a front-end sales charge, and none of the Funds' shares are subject to a deferred sales charge. Class A shares are sold at NAV per share plus an initial sales charge.

Rule 12b-1 fees. The Funds have adopted a Rule 12b-1 Plan (the "Plan") for their Class A, Class R3, and Class R4 shares. Under the Plan, a Fund may make payments at an annual rate of up to .25% of the average daily net assets attributable to its Class A shares and Class R4 shares, and up to .50% of the average daily net assets attributable to its Class R3 shares. The Plan is a compensation plan, under which the Funds make payments to the Distributor for the services it provides and for the expenses it bears in connection with the distribution of shares of those classes and for the servicing of shareholders of those classes. Because Rule 12b-1 fees are paid out of the Funds' Class A, Class R3, and Class R4 assets on an ongoing basis, they will increase the cost of your investment and may cost you more than paying other types of sales loads. All shareholders of Class A, Class R3, and Class R4 shares share in the expense of Rule 12b-1 fees paid by those classes. A Fund may pay distribution fees and other amounts described in this Prospectus at a time when shares of that Fund are unavailable for purchase.

Shareholder servicing payments. MML Advisers pays all or a portion of the administrative and shareholder services fee it receives from each Fund,

as described above under "Management of the Funds – Investment Adviser," to MassMutual as compensation for, or reimbursement of expenses relating to, services provided to shareholders of the Funds. In addition, each Fund makes payments to MassMutual under a Supplemental Shareholder Services Agreement with respect to its Class A shares, Administrative Class shares, and Service Class shares, based on the average daily net assets attributable to the share classes, at an annual rate of .15% for Class A shares and Administrative Class shares and .05% for Service Class shares.

Payments to Intermediaries

Payment for recordkeeping services provided by MassMutual. MassMutual provides recordkeeping services and other shareholder services to retirement plans and other employee benefit plans. Each plan agrees a level of service to be provided by MassMutual, and specifies the Funds and share classes of the Funds that will be offered to plan participants. Plans typically select the share classes with the intention of ensuring that MassMutual will receive a level of compensation, from the Rule 12b-1 fees and shareholder servicing payments made with respect to those share classes, sufficient to compensate MassMutual for the recordkeeping services the plans desire. All amounts retained by MassMutual from Rule 12b-1 fees and shareholder services fees paid by a Fund are intended as compensation to MassMutual for recordkeeping services provided by it.

Payments to other service providers. The Distributor and MassMutual may make payments to financial intermediaries for distribution and/or shareholder services provided by them. Financial intermediaries are firms that, for compensation, sell shares of mutual funds, including the Funds, and/or provide certain administrative and account maintenance services to mutual fund shareholders. Financial intermediaries may include, among others, brokers, financial planners or advisers, banks, and insurance companies. In some cases, a financial intermediary may hold its clients' Fund shares in nominee or street name. Shareholder services provided by a financial intermediary may (though they will not necessarily) include, among other things: processing and mailing trade confirmations, periodic statements, prospectuses, annual reports, semiannual reports, shareholder notices, and other SEC-required communications; capturing and processing tax data; issuing and mailing dividend checks to shareholders who have selected cash distributions; preparing record date shareholder lists for proxy solicitations; collecting and posting distributions to shareholder accounts; and establishing and maintaining systematic withdrawals and automated investment plans and shareholder account registrations.

The Distributor and MassMutual may retain a portion of the Rule 12b-1 payments and/or shareholder servicing payments received by them, or they may pay the full amount to intermediaries. Rule 12b-1 fees may be paid to financial intermediaries in advance for the first year after Class A, Class R4, and Class R3 shares are sold. After the first year, those fees will be paid on a quarterly basis.

The compensation paid to a financial intermediary is typically paid continually over time, during the period when the intermediary's clients hold investments in the Funds. The amount of continuing compensation paid to different financial intermediaries for distribution and/or shareholder services varies. The compensation is typically a percentage of the value of the financial intermediary's clients' investments in the Funds or a per account fee. The variation in compensation may, but will not necessarily, reflect enhanced or additional services provided by the intermediary.

Additional information. The Distributor may directly, or through an affiliate, pay a sales concession of up to 1.00% of the purchase price of Service Class, Administrative Class, Class A, Class

R4, and Class R3 shares to broker-dealers or other financial intermediaries at the time of sale. However, the total amount paid to broker-dealers or other financial intermediaries at the time of sale, including any advance of Rule 12b-1 service fees or shareholder services fees, may not be more than 1.00% of the purchase price.

In addition to the various payments described above, MML Advisers in its discretion may directly, or through an affiliate, pay up to .35% of the amount invested to MassMutual or other intermediaries who provide services on behalf of Class I (except for the Total Return Bond Fund and the Select T. Rowe Price International Equity Fund), Class R5 (except for the S&P 500 Index Fund), Service Class, Administrative Class, Class A, Class R4, and Class R3 shares. This compensation is paid by MML Advisers from its own assets. The payments on account of Class I (except for the Total Return Bond Fund and the Select T. Rowe Price International Equity Fund), Class R5 (except for the S&P 500 Index Fund), Service Class, Administrative Class, Class A, Class R4, and Class R3 shares will be based on criteria established by MML Advisers. In the event that amounts paid by the Funds to MML Advisers as administrative or management fees are deemed indirect financing of distribution or servicing costs for Class I (except for the Total Return Bond Fund and the Select T. Rowe Price International Equity Fund), Class R5 (except for the S&P 500 Index Fund), Service Class, or Administrative Class shares, the Funds have adopted a Rule 12b-1 Plan authorizing such payments. No additional fees are paid by the Funds under this plan. Annual compensation paid on account of Class I (except for the Total Return Bond Fund and the Select T. Rowe Price International Equity Fund), Class R5 (except for the S&P 500 Index Fund), Service Class, Administrative Class, Class A, Class R4, and Class R3 shares will be paid quarterly, in arrears.

The Distributor, MML Advisers, or MassMutual may also directly, or through an affiliate, make payments, out of its own assets, to intermediaries, including broker-dealers, insurance agents, and other service providers, that relate to the sale of shares of the Funds or certain of MassMutual's variable annuity contracts for which the Funds are

underlying investment options. This compensation may take the form of:

- Payments to administrative service providers that provide enrollment, recordkeeping, and other services to pension plans;
- Cash and non-cash benefits, such as bonuses and allowances or prizes and awards, for certain broker-dealers, administrative service providers, and MassMutual insurance agents;
- Payments to intermediaries for, among other things, training of sales personnel, conference support, marketing, or other services provided to promote awareness of MassMutual's products;
- Payments to broker-dealers and other intermediaries that enter into agreements providing the Distributor with access to representatives of those firms or with other marketing or administrative services; and
- Payments under agreements with MassMutual not directly related to the sale of specific variable annuity contracts or the Funds, such as educational seminars and training or pricing services.

Buying, Redeeming, and Exchanging Shares

The Funds sell their shares at a price equal to their NAV plus any initial sales charge that applies (see "Determining Net Asset Value" below). The Funds have authorized one or more broker-dealers or other intermediaries to receive purchase orders on their behalf. Such broker-dealers or other intermediaries may themselves designate other intermediaries to receive purchase orders on the Funds' behalf. Your purchase order will be priced at the next NAV calculated after your order is received in good order by the transfer agent, MML Advisers, such a broker-dealer, or another intermediary authorized for this purpose. If you purchase shares through a broker-dealer or other intermediary, then, in order for your purchase to be based on a Fund's next determined NAV, the broker-dealer or other intermediary must receive your request before the close of regular trading on the NYSE (normally, 4:00 p.m. Eastern time), and the broker-dealer or other intermediary must subsequently communicate the request properly to the Funds. Shares purchased through a broker-dealer or other intermediary may be subject to transaction and/or other fees. The Funds will suspend selling their shares during any period when the determination of NAV is suspended. The

In some instances, compensation may be made available only to certain financial intermediaries whose representatives have sold or are expected to sell significant amounts of shares. Dealers may not use sales of the Funds' shares to qualify for this compensation to the extent prohibited by the laws or rules of any state or any self-regulatory agency, such as the Financial Industry Regulatory Authority.

These compensation arrangements are not offered to all intermediaries and the terms of the arrangements may differ among intermediaries. These arrangements may provide an intermediary with an incentive to recommend one mutual fund over another, one share class over another, or one insurance or annuity contract over another. You may want to take these compensation arrangements into account when evaluating any recommendations regarding the Funds or any contract using the Funds as investment options. You may contact your intermediary to find out more information about the compensation they may receive in connection with your investment.

Funds can reject any purchase order and can suspend purchases if they believe it is in their best interest.

The Funds have authorized one or more broker-dealers or other intermediaries to receive redemption requests on their behalf. Such broker-dealers or other intermediaries may themselves designate other intermediaries to receive redemption requests on the Funds' behalf. The Funds redeem their shares at their next NAV computed after your redemption request is received by the transfer agent, MML Advisers, such a broker-dealer, or another intermediary. If you redeem shares through a broker-dealer or other intermediary, then, in order for your redemption price to be based on a Fund's next determined NAV, the broker-dealer or other intermediary must receive your request before the close of regular trading on the NYSE, and the broker-dealer or other intermediary must subsequently communicate the request properly to the Funds. Shares redeemed through a broker-dealer or other intermediary may be subject to transaction and/or other fees. You will usually receive payment for your shares within seven days after your redemption request is received in good order. If,

however, you request redemption of shares recently purchased by check, you may not receive payment until the check has been collected, which may take up to 15 days from time of purchase. Under unusual circumstances, the Funds can also suspend or postpone payment, when permitted by applicable law and regulations. The Funds' transfer agent may temporarily delay for more than seven days the disbursement of redemption proceeds from the Fund account of a "Specified Adult" (as defined in Financial Industry Regulatory Authority Rule 2165) based on a reasonable belief that financial exploitation of the Specified Adult has occurred, is occurring, has been attempted, or will be attempted, subject to certain conditions. Under normal circumstances, each Fund expects to meet redemption requests by using cash or cash equivalents in its portfolio and/or selling portfolio assets to generate cash. Under stressed market conditions, a Fund may pay redemption proceeds using cash obtained through borrowing arrangements that may be available from time to time. To the extent consistent with applicable laws and regulations, the Funds reserve the right to satisfy all or a portion of a redemption request by distributing securities or other property in lieu of cash ("in-kind" redemptions), under both normal and stressed market conditions. Some Funds may be limited in their ability to use assets other than cash to meet redemption requests due to restrictions on ownership of their portfolio assets. The securities distributed in an in-kind redemption will be valued in the same manner as they are valued for purposes of computing the Fund's NAV. These securities are subject to market risk until they are sold and may increase or decrease in value prior to converting them into cash. You may incur brokerage and other transaction costs, and could incur a taxable gain or loss for income tax purposes when converting the securities to cash.

Risk of Substantial Redemptions. If substantial numbers of shares in a Fund were to be redeemed at the same time or at approximately the same time, the Fund might be required to liquidate a significant portion of its investment portfolio quickly to meet the redemptions. A Fund might be forced to sell portfolio securities at prices or at times when it would otherwise not have sold them, resulting in a reduction in the Fund's NAV; in addition, a substantial reduction in the size of a Fund may make it difficult for the investment adviser or subadviser to execute its investment

program successfully for the Fund for a period following the redemptions. Similarly, the prices of the portfolio securities of a Fund might be adversely affected if one or more other investment accounts managed by the investment adviser or subadviser in an investment style similar to that of the Fund were to experience substantial redemptions and those accounts were required to sell portfolio securities quickly or at an inopportune time.

Exchanges

Generally, you can exchange shares of one Fund for the same class of shares of another series of the Trust or the MassMutual Premier Funds, except in the case of the Total Return Bond Fund and S&P 500 Index Fund. For individual retirement accounts described in Code Section 408, Class R4 shares of the Total Return Bond Fund and S&P 500 Index Fund may only be exchanged for Class A shares of another series (in which case any sales charge applicable to those Class A shares will typically apply), and Class A shares of any other series may only be exchanged for Class R4 shares of the Total Return Bond Fund and S&P 500 Index Fund. An exchange is treated as a sale of shares in one series and a purchase of shares in another series at the NAV next determined after the exchange request is received and accepted by the transfer agent, MML Advisers, a broker-dealer, or another intermediary authorized for this purpose. You can only exchange into shares of another series if you meet any qualification requirements of the series into which you seek to exchange (for example, shares of some series are not available to purchasers through certain investment channels, and some may be available only to certain types of shareholders). In addition, in limited circumstances, such as those described above, for certain series the share class available for exchange may not be the same share class as the series from which you are exchanging. Exchange requests involving a purchase into any series (except the Strategic Bond Fund), however, will not be accepted if you have already made a purchase followed by a redemption involving the same series within the last 60 days. This restriction does not apply to rebalancing trades executed by any of the MassMutual RetireSMARTSM by JPMorgan Funds, MassMutual Select T. Rowe Price Retirement Funds, and MassMutual Select Allocation Funds. This restriction also does not apply to exchanges made pursuant to certain asset allocation programs, systematic exchange

programs, and dividend exchange programs. If you place an order to exchange shares of one series for another through a broker-dealer or other intermediary then, in order for your exchange to be effected based on the series' next determined NAVs, the broker-dealer or other intermediary must receive your request before the close of regular trading on the NYSE, and the broker-dealer or other intermediary must subsequently communicate the request properly to the Trust or the MassMutual Premier Funds.

Your right to exchange shares is subject to applicable regulatory requirements or contractual obligations. The Funds may limit, restrict, or refuse exchange purchases, if, in the opinion of MML Advisers:

- you have engaged in excessive trading;
- a Fund receives or expects simultaneous orders affecting significant portions of the Fund's assets;
- a pattern of exchanges occurs which coincides with a market timing strategy; or
- the Fund would be unable to invest the funds effectively based on its investment objectives and policies or if the Fund would be adversely affected.

Cost Basis Reporting

In the case of individuals holding shares in a Fund directly, upon the redemption or exchange of shares in a Fund, the Fund or, if a shareholder purchased shares through a financial intermediary, the financial intermediary generally will be required to provide the shareholder and the Internal Revenue Service ("IRS") with cost basis and certain other related tax information about the

Frequent Trading Policies

Purchases and exchanges of shares of the Funds should be made for investment purposes only. The Funds discourage, and do not accommodate, excessive trading and/or market timing activity. Excessive trading and/or market timing activity involving the Funds can disrupt the management of the Funds. These disruptions, in turn, can result in increased expenses and can have an adverse effect on Fund performance.

The Trustees, on behalf of the Funds, have approved the policies and procedures adopted by MML Advisers to help identify those individuals or entities MML Advisers determines may be

The Funds reserve the right to modify or terminate the exchange privilege as described above on 60 days written notice.

The Funds do not accept purchase, redemption, or exchange orders or compute their NAVs on days when the NYSE is closed. This includes: weekends, Good Friday, and all federal holidays other than Columbus Day and Veterans Day. Certain foreign markets may be open on days when the Funds do not accept orders or price their shares. As a result, the NAV of a Fund's shares may change on days when you will not be able to buy or sell shares.

How to Invest

When you buy shares of a Fund through an agreement with MML Advisers, your agreement will describe how you need to submit buy, sell, and exchange orders. Purchase orders must be accompanied by sufficient funds. You can pay by check or Federal Funds wire transfer. You must submit any buy, sell, or exchange orders in "good order" as described in your agreement.

Fund shares redeemed or exchanged. Please contact the Funds by calling 1-888-309-3539 or consult your financial intermediary, as appropriate, for more information regarding available methods for cost basis reporting and how to select or change a particular method. Please consult your tax adviser to determine which available cost basis method is best for you.

engaging in excessive trading and/or market timing activities. MML Advisers monitors trading activity to uniformly enforce its procedures. However, those who engage in such activities may employ a variety of techniques to avoid detection. Therefore, despite MML Advisers' efforts to prevent excessive trading and/or market timing trading activities, there can be no assurance that MML Advisers will be able to identify all those who trade excessively or employ a market timing strategy and curtail their trading in every instance.

The monitoring process involves scrutinizing transactions in fund shares that exceed certain monetary thresholds or numerical limits within a specified period of time. Trading activity identified by either, or a combination, of these factors, or as a result of any other information actually available at the time, will be evaluated to determine whether such activity might constitute excessive trading and/or market timing activity. When trading activity is determined by a Fund or MML Advisers, in their sole discretion, to be excessive in nature, certain account-related privileges, such as the ability to place purchase, redemption, and exchange orders over the internet, may be suspended for such account.

Omnibus Account Limitations. Omnibus accounts, in which shares are held in the name of an intermediary on behalf of multiple investors, are a common form of holding shares among retirement plans and other financial intermediaries such as broker-dealers, advisers, and third-party administrators. Not all omnibus accounts apply the policies and procedures adopted by the Funds and MML Advisers. Some omnibus accounts, including accounts traded on certain of MassMutual's retirement platforms, may have different or less restrictive policies and procedures regarding frequent trading, or no trading restrictions at all. If you hold your Fund shares through an omnibus account, including accounts traded on certain of MassMutual's retirement platforms, that financial intermediary may impose its own restrictions or limitations to discourage excessive trading and/or market timing activity. You should consult your financial intermediary to find out what trading restrictions, including limitations

Determining Net Asset Value

The NAV of each Fund's shares is determined once daily as of the close of regular trading on the NYSE, on each Business Day. A "Business Day" is every day the NYSE is open. The NYSE normally closes at 4:00 p.m. Eastern Time, but may close earlier on some days. If the NYSE is scheduled to close early, the Business Day will be considered to end as of the time of the NYSE's scheduled close. A Fund will not treat an intraday disruption in NYSE trading or other event that causes an unscheduled closing of the NYSE as a close of business of the NYSE for these purposes and will instead fair value securities in accordance with procedures approved annually by the Trustees, and under the general oversight of the Trustees. The

on exchanges, may apply. The Funds' ability to identify and deter excessive trading and/or market timing activities through omnibus accounts is limited, and the Funds' success in accomplishing the objectives of the policies concerning frequent trading of Fund shares in this context depends significantly upon the cooperation of the financial intermediaries. Because the Funds receive these orders on an aggregated basis and because the omnibus accounts may trade with numerous fund families with differing frequent trading policies, the Funds are limited in their ability to identify or deter those individuals or entities that may be engaging in excessive trading and/or market timing activities. While the Funds and MML Advisers encourage those financial intermediaries to apply the Funds' policies to their customers who invest indirectly in the Funds, the Funds and MML Advisers may need to rely on those intermediaries to monitor trading in good faith in accordance with its or the Funds' policies, since individual trades in omnibus accounts are often not disclosed to the Funds. While the Funds will generally monitor trading activity at the omnibus account level to attempt to identify excessive trading and/or market timing activity, reliance on intermediaries increases the risk that excessive trading and/or market timing activity may go undetected. If evidence of possible excessive trading and/or market timing activity is observed by the Funds, the financial intermediary that is the registered owner will be asked to review the account activity, and to confirm to the Funds that appropriate action has been taken to limit any excessive trading and/or market timing activity.

NYSE currently is not open for trading on New Year's Day, Martin Luther King, Jr. Day, President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Each Fund calculates the NAV of each of its classes of shares by dividing the total value of the assets attributable to that class, less the liabilities attributable to that class, by the number of shares of that class that are outstanding. On holidays and other days when the NYSE is closed, each Fund's NAV generally is not calculated and the Funds do not anticipate accepting buy or sell orders. However, the value of each Fund's assets may still be affected on such days to the

extent that a Fund holds foreign securities that trade on days that foreign securities markets are open.

Equity securities and derivative contracts that are actively traded on a national securities exchange or contract market are valued on the basis of information furnished by a pricing service, which provides the last reported sale price, or, in the case of futures contracts, the settlement price, for securities or derivatives listed on the exchange or contract market or the official closing price on the NASDAQ National Market System ("NASDAQ System"), or in the case of OTC securities for which an official closing price is unavailable or not reported on the NASDAQ System, the last reported bid price. Portfolio securities traded on more than one national securities exchange are valued at the last price at the close of the exchange representing the principal market for such securities. Debt securities are valued on the basis of valuations furnished by a pricing service, which generally determines valuations taking into account factors such as institutional-size trading in similar securities, yield, quality, coupon rate, maturity, type of issue, trading characteristics, and other market data. Shares of other open-end mutual funds are valued at their closing NAVs as reported on each Business Day.

Investments for which market quotations are readily available are marked to market daily based on those quotations. Market quotations may be provided by third-party vendors or market makers, and may be determined on the basis of a variety of factors, such as broker quotations, financial modeling, and other market data, such as market indexes and yield curves, counterparty information, and foreign exchange rates. U.S. Government and agency securities may be valued on the basis of market quotations or using a model that may incorporate market observable data such as reported sales of similar securities, broker quotes, yields, bids, offers, quoted market prices, and reference data. The fair values of OTC derivative contracts, including forward, swap, and option contracts related to interest rates, foreign currencies, credit standing of reference entities, equity prices, or commodity prices, may be based on market quotations or may be modeled using a series of techniques, including simulation models, depending on the contract and the terms of the transaction. The fair values of asset-backed securities and mortgage-backed securities are

estimated based on models that consider the estimated cash flows of each debt tranche of the issuer, established benchmark yield, and estimated tranche-specific spread to the benchmark yield based on the unique attributes of the tranche including, but not limited to, prepayment speed assumptions and attributes of the collateral. Restricted securities are generally valued at a discount to similar publicly traded securities.

Investments for which market quotations are not available or for which a pricing service or vendor does not provide a value, or for which such market quotations or values are considered by the investment adviser or subadviser to be unreliable (including, for example, certain foreign securities, thinly-traded securities, certain restricted securities, certain initial public offerings, or securities whose values may have been affected by a significant event) are stated at fair valuations determined in good faith by the Funds' Valuation Committee in accordance with procedures approved annually by the Trustees, and under the general oversight of the Trustees. It is possible that fair value prices will be used by the Funds to a significant extent. The value determined for an investment using the Funds' fair value procedures may differ from recent market prices for the investment and may be significantly different from the value realized upon the sale of such investment.

The Funds may invest in securities that are traded principally in foreign markets and that trade on weekends and other days when the Funds do not price their shares. As a result, the values of the Funds' portfolio securities may change on days when the prices of the Funds' shares are not calculated. The prices of the Funds' shares will reflect any such changes when the prices of the Funds' shares are next calculated, which is the next Business Day. The Funds may use fair value pricing more frequently for securities primarily traded in foreign markets because, among other things, most foreign markets close well before the Funds value their securities. The earlier close of these foreign markets gives rise to the possibility that significant events, including broad market moves, may have occurred in the interim. The Funds' investments may be priced based on fair values provided by a third-party vendor, based on certain factors and methodologies applied by such vendor, in the event that there is movement in the U.S. market, between the close of the foreign market and the time the Funds calculate their NAVs. All assets and liabilities expressed in foreign currencies are

converted into U.S. dollars at the mean between the buying and selling rates of such currencies against the U.S. dollar at the end of each Business Day.

Taxation and Distributions

Each Fund intends to qualify each year for treatment as a regulated investment company under Subchapter M of the Code. As a regulated investment company, a Fund will not be subject to Federal income taxes on its ordinary income and net realized capital gains that are distributed in a timely manner to its shareholders. A Fund's failure to qualify as a regulated investment company would result in corporate level taxation, and consequently, a reduction in income available for distribution to shareholders. In addition, a Fund that fails to distribute at least 98% of its ordinary income for a calendar year plus 98.2% of its capital gain net income recognized during the one-year period ending October 31 plus any retained amount from the prior year generally will be subject to a non-deductible 4% excise tax on the undistributed amount.

Certain investors, including most tax-advantaged plan investors, may be eligible for preferential Federal income tax treatment on distributions received from a Fund and dispositions of Fund shares. This Prospectus does not attempt to describe such preferential tax treatment. Any prospective investor that is a trust or other entity eligible for special tax treatment under the Code that is considering purchasing shares of a Fund, including either directly or in connection with a life insurance company separate investment account, should consult its tax advisers about the Federal, state, local, and foreign tax consequences particular to it, as should persons considering whether to have amounts held for their benefit by such trusts or other entities in shares of a Fund.

Investors are generally subject to Federal income taxes on distributions received in respect of their shares. Distributions are taxed to investors in the manner described herein whether distributed in cash or additional shares. Taxes on distributions of capital gains are determined by how long a Fund owned (or is deemed to have owned) the investments that generated them, rather than by how long the shareholder held the shares. Distributions of a Fund's ordinary income and short-term capital gains (i.e., gains from capital assets held for one year or less) are taxable to a shareholder as ordinary income. Certain dividends

The Funds' valuation methods are also described in the SAI.

may be eligible for the dividends-received deduction for corporate shareholders to the extent they are reported as such. Dividends properly reported as capital gain dividends (relating to gains from the sale of capital assets held by a Fund for more than one year) are taxable in the hands of an investor as long-term gain includible in net capital gain and taxed to individuals at reduced rates. Distributions of investment income reported by a Fund as derived from "qualified dividend income" will be taxed in the hands of individuals at the rates applicable to long-term capital gain, provided that holding period and other requirements are met at both the shareholder and Fund level. Distributions from REITs generally do not qualify as qualified dividend income. Funds investing primarily in fixed income instruments generally do not expect a significant portion of their distributions to be derived from qualified dividend income.

The Code generally imposes a 3.8% Medicare contribution tax on the net investment income of certain individuals, trusts, and estates to the extent their income exceeds certain threshold amounts. Net investment income generally includes for this purpose dividends paid by a Fund, including any capital gain dividends, and net capital gains recognized on the sale, redemption, exchange, or other taxable disposition of shares of a Fund. Shareholders are advised to consult their tax advisers regarding the possible implications of this additional tax on their investment in a Fund.

The nature of each Fund's distributions will be affected by its investment strategies. A Fund whose investment return consists largely of interest, dividends, and capital gains from short-term holdings will distribute largely ordinary income. A Fund whose return comes largely from the sale of long-term holdings will distribute largely capital gain dividends. Distributions are taxable to a shareholder even though they are paid from income or gains earned by a Fund prior to the shareholder's investment and thus were included in the price paid by the shareholder for his or her shares.

Each Fund intends to pay out as dividends substantially all of its net investment income (which comes from dividends and any interest it receives from its investments). Each Fund also intends to distribute substantially all of its net realized long- and short-term capital gains, if any, after giving effect to any available capital loss carryforwards. For each Fund, distributions, if any, are declared and paid at least annually. Distributions may be taken either in cash or in additional shares of the respective Fund at the Fund's NAV on the first Business Day after the record date for the distribution, at the option of the shareholder. A shareholder that itself qualifies as a regulated investment company is permitted to report a portion of its distributions as "qualified dividend income," provided certain requirements are met.

Any gain resulting from an exchange or redemption of an investor's shares in a Fund will generally be subject to tax as long-term or short-term capital gain. A loss incurred with respect to shares of a Fund held for six months or less will be treated as a long-term capital loss to the extent of long-term capital gains dividends received with respect to such shares.

A Fund's investments in foreign securities may be subject to foreign withholding or other taxes. In that case, the Fund's yield on those securities would be decreased. Shareholders of the Funds other than a Fund that makes the election referred to below generally will not be entitled to claim a credit or deduction with respect to such foreign taxes. If more than 50% of a Fund's assets at taxable year end consists of the securities of foreign corporations, the Fund may be able to elect to "pass through" to its shareholders foreign income taxes that it pays directly or, under certain circumstances, indirectly through its investments in ETFs or other investment companies that are regulated investment companies for U.S. federal income tax purposes. If any of these Funds makes this election, a shareholder of the Fund must include its share of those taxes in gross income as a distribution from the Fund and the shareholder will be allowed to claim a credit (or a deduction, if the shareholder itemizes deductions) for such amounts on its federal tax return subject to certain limitations. Shareholders that are not subject to U.S. federal income tax, and those who invest in a Fund through tax-advantaged accounts (including those who invest through individual retirement accounts or other tax-advantaged retirement

plans), generally will receive no benefit from any tax credit or deduction passed through by a Fund. A shareholder that itself qualifies for treatment as a regulated investment company and that qualifies as a "qualified fund of funds" may elect to pass through to its shareholders a tax credit or deduction passed through by a Fund.

In addition, a Fund's investments in foreign securities, fixed income securities, derivatives, or foreign currencies may increase or accelerate the Fund's recognition of ordinary income and may affect the timing, amount, or character of the Fund's distributions.

Certain of a Fund's investments, including certain debt instruments, could cause the Fund to recognize taxable income in excess of the cash generated by such investments; a Fund could be required to sell other investments, including when not otherwise advantageous to do so, in order to make required distributions.

Distributions by a Fund to shareholders that are not "United States persons" within the meaning of the Code ("foreign persons") properly reported by the Fund as (i) capital gain dividends, (ii) "interest-related dividends" (i.e., U.S.-source interest income that, in general, would not be subject to U.S. federal income tax if earned directly by an individual foreign person), and (iii) "short-term capital gain dividends" (i.e., net short-term capital gains in excess of net long-term capital losses), in each case to the extent such distributions were properly reported as such by the Fund generally are not subject to withholding of U.S. federal income tax. Distributions by a Fund to foreign persons other than capital gain dividends, interest-related dividends, and short-term capital gain dividends generally are subject to withholding of U.S. federal income tax at a rate of 30% (or lower applicable treaty rate). Foreign persons should refer to the SAI for further information, and should consult their tax advisors as to the tax consequences to them of owning Fund shares.

In order to qualify for the special tax treatment accorded regulated investment companies and their shareholders, a Fund must, among other things, derive at least 90% of its gross income from certain specified sources (such income, "qualifying income"). Direct investment in commodities and certain commodities-related investments generally do not, under published IRS guidance, produce qualifying income. The Select BlackRock Global Allocation Fund intends to gain exposure to the

commodities markets indirectly through its investments in the Select Cayman Fund, which, in turn, may hold various types of commodities-related investments.

It is expected that the Select Cayman Fund generally will not be subject to U.S. federal income tax. It will, however, be considered a controlled foreign corporation for U.S. federal income tax purposes, and the Select BlackRock Global Allocation Fund will be required to include in its income annually amounts earned by the Select Cayman Fund during that year to the extent such earnings constitute subpart F income of the Select Cayman Fund, regardless of whether such income is distributed by the Select Cayman Fund to the Select BlackRock Global Allocation Fund. Gains from the sales of investments by the Select Cayman Fund will not be eligible for capital gain treatment, but instead will be treated as ordinary income when included in income by the Select BlackRock Global Allocation Fund. Furthermore, whether or not the Select Cayman Fund makes a distribution to the Select BlackRock Global Allocation Fund during the taxable year, the Select BlackRock Global Allocation Fund generally will be required to distribute the Select Cayman

Fund's income annually to its shareholders in order to avoid any tax liability at the Fund level and continue to be eligible to be treated as a regulated investment company. As a result, the Select BlackRock Global Allocation Fund may be required to sell assets (including when it is not advantageous to do so) to generate the cash necessary to meet these distribution requirements.

Under Treasury regulations, subpart F income, if any, realized by a wholly-owned non-U.S. subsidiary of the Fund and included in the Fund's annual income for U.S. federal income purposes, will constitute qualifying income to the extent it is either (i) timely and currently repatriated or (ii) derived with respect to the Fund's business of investing in stock, securities or currencies.

The discussion above is very general. Shareholders should consult their tax advisers for more information about the effect that an investment in a Fund could have on their own tax situations, including possible federal, state, local, and foreign taxes. Also, as noted above, this discussion does not apply to Fund shares held through tax-advantaged retirement plans.

Financial Highlights

The financial highlights tables are intended to help you understand the Funds' financial performance for the past 5 years (or shorter periods for newer Funds). Certain information reflects financial results for a single Fund share. The total returns in the tables represent the rate that an investor would have earned on an investment in the Fund (assuming reinvestment of all dividends and distributions). This information has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, whose reports, along with each Fund's financial statements, are included in the Trust's Annual Reports, and are incorporated by reference into the SAI, and are available on request.

MASSMUTUAL SELECT TOTAL RETURN BOND FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | Ratios / Supplemental Data | | | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|---|---|---|---|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers (including interest expense) | Ratio of expenses to average daily net assets after expense waivers (including interest expense) ^j | Ratio of expenses to average daily net assets after expense waivers (excluding interest expense) ^j | Net investment income (loss) to average daily net assets (including interest expense) |
| Class I | | | | | | | | | | | | | | |
| 9/30/19 | \$ 9.62 | \$0.30 | \$ 0.67 | \$ 0.97 | \$(0.29) | \$ - | \$(0.29) | \$10.30 | 10.42% | \$479,295 | 0.36% | N/A | N/A | 3.03% |
| 9/30/18 | 9.99 | 0.25 | (0.34) | (0.09) | (0.28) | - | (0.28) | 9.62 | (0.98%) | 426,828 | 0.34% | N/A | N/A | 2.62% |
| 9/30/17 | 10.43 | 0.22 | (0.18) | 0.04 | (0.27) | (0.21) | (0.48) | 9.99 | 0.57% | 361,805 | 0.35% | N/A | N/A | 2.18% |
| 9/30/16 | 10.17 | 0.21 | 0.30 | 0.51 | (0.22) | (0.03) | (0.25) | 10.43 | 5.10% | 303,783 | 0.37% | 0.34% | 0.34% | 2.02% |
| 9/30/15 ⁱ | 10.10 | 0.14 | (0.06) | 0.08 | (0.00) ^d | (0.01) | (0.01) | 10.17 | 0.79% ^b | 534,131 | 0.39% ^a | 0.34% ^a | 0.34% ^a | 1.81% ^a |
| 12/31/14 | 10.12 | 0.21 | 0.23 | 0.44 | (0.31) | (0.15) | (0.46) | 10.10 | 4.39% | 459,950 | 0.41% ^p | 0.40% ^p | 0.40% ⁿ | 2.07% |
| Class R5 | | | | | | | | | | | | | | |
| 9/30/19 | \$ 9.60 | \$0.29 | \$ 0.67 | \$ 0.96 | \$(0.28) | \$ - | \$(0.28) | \$10.28 | 10.32% | \$ 44,973 | 0.46% | N/A | N/A | 2.93% |
| 9/30/18 | 9.96 | 0.24 | (0.34) | (0.10) | (0.26) | - | (0.26) | 9.60 | (1.01%) | 51,708 | 0.44% | N/A | N/A | 2.49% |
| 9/30/17 | 10.41 | 0.20 | (0.18) | 0.02 | (0.26) | (0.21) | (0.47) | 9.96 | 0.36% | 68,491 | 0.45% | N/A | N/A | 2.04% |
| 9/30/16 | 10.15 | 0.20 | 0.30 | 0.50 | (0.21) | (0.03) | (0.24) | 10.41 | 5.01% | 115,428 | 0.47% | 0.44% | 0.44% | 1.94% |
| 9/30/15 ⁱ | 10.08 | 0.13 | (0.05) | 0.08 | (0.00) ^d | (0.01) | (0.01) | 10.15 | 0.79% ^b | 166,482 | 0.49% ^a | 0.44% ^a | 0.44% ^a | 1.70% ^a |
| 12/31/14 | 10.10 | 0.21 | 0.22 | 0.43 | (0.30) | (0.15) | (0.45) | 10.08 | 4.26% | 148,821 | 0.52% ^p | 0.51% ^p | 0.51% ⁿ | 1.98% |
| Service Class | | | | | | | | | | | | | | |
| 9/30/19 | \$ 9.63 | \$0.28 | \$ 0.68 | \$ 0.96 | \$(0.27) | \$ - | \$(0.27) | \$10.32 | 10.24% | \$116,389 | 0.56% | N/A | N/A | 2.83% |
| 9/30/18 | 10.00 | 0.23 | (0.34) | (0.11) | (0.26) | - | (0.26) | 9.63 | (1.17%) | 131,813 | 0.54% | N/A | N/A | 2.41% |
| 9/30/17 | 10.45 | 0.19 | (0.19) | - | (0.24) | (0.21) | (0.45) | 10.00 | 0.25% | 158,965 | 0.55% | N/A | N/A | 1.95% |
| 9/30/16 | 10.17 | 0.19 | 0.31 | 0.50 | (0.19) | (0.03) | (0.22) | 10.45 | 5.04% | 193,887 | 0.57% | 0.54% | 0.54% | 1.83% |
| 9/30/15 ⁱ | 10.12 | 0.12 | (0.06) | 0.06 | (0.00) ^d | (0.01) | (0.01) | 10.17 | 0.59% ^b | 209,728 | 0.59% ^a | 0.54% ^a | 0.54% ^a | 1.54% ^a |
| 12/31/14 | 10.13 | 0.19 | 0.23 | 0.42 | (0.28) | (0.15) | (0.43) | 10.12 | 4.23% | 316,778 | 0.62% ^p | 0.62% ^{k,p} | 0.62% ^{k,n} | 1.86% |
| Administrative Class | | | | | | | | | | | | | | |
| 9/30/19 | \$ 9.57 | \$0.27 | \$ 0.67 | \$ 0.94 | \$(0.26) | \$ - | \$(0.26) | \$10.25 | 10.10% | \$ 21,183 | 0.66% | N/A | N/A | 2.77% |
| 9/30/18 | 9.93 | 0.22 | (0.34) | (0.12) | (0.24) | - | (0.24) | 9.57 | (1.21%) | 53,849 | 0.64% | N/A | N/A | 2.30% |
| 9/30/17 | 10.37 | 0.18 | (0.18) | - | (0.23) | (0.21) | (0.44) | 9.93 | 0.19% | 63,399 | 0.65% | N/A | N/A | 1.86% |
| 9/30/16 | 10.11 | 0.17 | 0.31 | 0.48 | (0.19) | (0.03) | (0.22) | 10.37 | 4.80% | 80,444 | 0.67% | 0.64% | 0.64% | 1.73% |
| 9/30/15 ⁱ | 10.06 | 0.11 | (0.05) | 0.06 | (0.00) ^d | (0.01) | (0.01) | 10.11 | 0.59% ^b | 89,080 | 0.69% ^a | 0.64% ^a | 0.64% ^a | 1.49% ^a |
| 12/31/14 | 10.07 | 0.18 | 0.23 | 0.41 | (0.27) | (0.15) | (0.42) | 10.06 | 4.14% | 86,220 | 0.72% ^p | 0.71% ^p | 0.71% ⁿ | 1.74% |
| Class A | | | | | | | | | | | | | | |
| 9/30/19 | \$ 9.56 | \$0.24 | \$ 0.68 | \$ 0.92 | \$(0.25) | \$ - | \$(0.25) | \$10.23 | 9.89% | \$ 8,464 | 0.91% | N/A | N/A | 2.48% |
| 9/30/18 | 9.93 | 0.20 | (0.35) | (0.15) | (0.22) | - | (0.22) | 9.56 | (1.51%) | 4,327 | 0.89% | N/A | N/A | 2.07% |
| 9/30/17 | 10.38 | 0.17 | (0.19) | (0.02) | (0.22) | (0.21) | (0.43) | 9.93 | (0.01%) | 4,703 | 0.90% | N/A | N/A | 1.68% |
| 9/30/16 | 10.13 | 0.15 | 0.31 | 0.46 | (0.18) | (0.03) | (0.21) | 10.38 | 4.62% | 1,943 | 0.92% | 0.89% | 0.89% | 1.47% |
| 9/30/15 ⁱ | 10.10 | 0.11 | (0.07) | 0.04 | (0.00) ^d | (0.01) | (0.01) | 10.13 | 0.39% ^b | 1,998 | 0.94% ^a | 0.89% ^a | 0.89% ^a | 1.45% ^a |
| 12/31/14 ^h | 10.25 | 0.11 | 0.16 | 0.27 | (0.27) | (0.15) | (0.42) | 10.10 | 2.65% ^b | 119 | 0.96% ^{a,p} | 0.95% ^{a,p} | 0.95% ^{a,n} | 1.36% ^a |
| Class R4 | | | | | | | | | | | | | | |
| 9/30/19 | \$ 9.63 | \$0.25 | \$ 0.69 | \$ 0.94 | \$(0.25) | \$ - | \$(0.25) | \$10.32 | 9.96% | \$160,788 | 0.81% | N/A | N/A | 2.58% |
| 9/30/18 | 9.99 | 0.21 | (0.35) | (0.14) | (0.22) | - | (0.22) | 9.63 | (1.42%) | 172,390 | 0.79% | N/A | N/A | 2.15% |
| 9/30/17 | 10.43 | 0.17 | (0.19) | (0.02) | (0.21) | (0.21) | (0.42) | 9.99 | 0.02% | 221,969 | 0.80% | N/A | N/A | 1.71% |
| 9/30/16 | 10.16 | 0.16 | 0.31 | 0.47 | (0.17) | (0.03) | (0.20) | 10.43 | 4.70% | 295,696 | 0.82% | 0.79% | 0.79% | 1.58% |
| 9/30/15 ⁱ | 10.12 | 0.10 | (0.05) | 0.05 | (0.00) ^d | (0.01) | (0.01) | 10.16 | 0.49% ^b | 336,956 | 0.84% ^a | 0.79% ^a | 0.79% ^a | 1.33% ^a |
| 12/31/14 | 10.14 | 0.17 | 0.22 | 0.39 | (0.26) | (0.15) | (0.41) | 10.12 | 3.88% | 385,955 | 0.86% ^p | 0.85% ^p | 0.85% ⁿ | 1.62% |
| Class R3 | | | | | | | | | | | | | | |
| 9/30/19 | \$ 9.55 | \$0.23 | \$ 0.67 | \$ 0.90 | \$(0.22) | \$ - | \$(0.22) | \$10.23 | 9.63% | \$ 30,478 | 1.06% | N/A | N/A | 2.33% |
| 9/30/18 | 9.90 | 0.18 | (0.34) | (0.16) | (0.19) | - | (0.19) | 9.55 | (1.61%) | 33,583 | 1.04% | N/A | N/A | 1.91% |
| 9/30/17 | 10.35 | 0.14 | (0.19) | (0.05) | (0.19) | (0.21) | (0.40) | 9.90 | (0.27%) | 35,633 | 1.05% | N/A | N/A | 1.46% |
| 9/30/16 | 10.08 | 0.13 | 0.32 | 0.45 | (0.15) | (0.03) | (0.18) | 10.35 | 4.49% | 46,206 | 1.07% | 1.04% | 1.04% | 1.33% |
| 9/30/15 ⁱ | 10.06 | 0.08 | (0.05) | 0.03 | (0.00) ^d | (0.01) | (0.01) | 10.08 | 0.29% ^b | 48,998 | 1.09% ^a | 1.04% ^a | 1.04% ^a | 1.09% ^a |
| 12/31/14 | 10.08 | 0.14 | 0.22 | 0.36 | (0.23) | (0.15) | (0.38) | 10.06 | 3.66% | 49,462 | 1.11% ^p | 1.10% ^p | 1.10% ⁿ | 1.37% |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended | Year ended |
|-------------------------|-------------------------|------|------|------|---------------------------------|-------------------|
| | 2019 | 2018 | 2017 | 2016 | September 30, 2015 ^b | December 31, 2014 |
| | 217% | 243% | 289% | 264% | 264% | 453% ^u |

- a Annualized.*
- b Percentage represents the results for the period and is not annualized.*
- c Per share amount calculated on the average shares method.*
- d Amount is less than \$0.005 per share.*
- h For the period April 1, 2014 (commencement of operations) through December 31, 2014.*
- i For the period January 1, 2015 through September 30, 2015.*
- j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.*
- k Amount waived had no impact on the ratio of expenses to average daily net assets.*
- l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.*
- m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.*
- n Amount of interest expense had no impact on the ratio of expenses to average daily net assets.*
- p Interest expense incurred as a result of entering into reverse repurchase agreements and Treasury roll transactions is included in the Fund's net expenses in the Statements of Operations. Income earned on investing proceeds from reverse repurchase agreements and Treasury roll transactions is included in interest income in the Statements of Operations.*
- u Excludes dollar roll transactions. Including these transactions, the portfolio turnover would have been 456%, as of December 31, 2014.*

MASSMUTUAL SELECT BLACKROCK GLOBAL ALLOCATION FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|---|---|---|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers (including short sale dividend and loan expense) ^y | Ratio of expenses to average daily net assets after expense waivers (including short sale dividend and loan expense) ^{j,y} | Ratio of expenses to average daily net assets after expense waivers (excluding short sale dividend and loan expense) ^j | Net investment income (loss) to average daily net assets (including short sale dividend and loan expense) |
| Class I | | | | | | | | | | | | | | |
| 9/30/19 | \$11.18 | \$0.17 | \$ 0.11 | \$ 0.28 | \$(0.12) | \$(0.34) | \$(0.46) | \$11.00 | 2.99% | \$539,538 | 0.93% | 0.80% | 0.79% | 1.61% |
| 9/30/18 | 11.17 | 0.17 | 0.12 | 0.29 | (0.25) | (0.03) | (0.28) | 11.18 | 2.61% | 537,404 | 0.97% | 0.79% | 0.79% ^z | 1.51% |
| 9/30/17 | 10.16 | 0.14 | 0.97 | 1.11 | (0.10) | - | (0.10) | 11.17 | 10.99% | 545,487 | 1.00% | 0.81% | 0.79% | 1.33% |
| 9/30/16 | 10.11 | 0.14 | 0.53 | 0.67 | (0.08) | (0.54) | (0.62) | 10.16 | 6.91% | 519,733 | 0.97% | 0.80% | 0.79% | 1.39% |
| 9/30/15 ⁱ | 10.73 | 0.11 | (0.48) | (0.37) | (0.07) | (0.18) | (0.25) | 10.11 | (3.53%) ^b | 590,934 | 0.96% ^a | 0.79% ^a | 0.79% ^{a,z} | 1.39% ^a |
| 12/31/14 ^h | 11.80 | 0.13 | 0.06 | 0.19 | (0.28) | (0.98) | (1.26) | 10.73 | 1.57% ^b | 611,549 | 0.96% ^a | 0.79% ^a | 0.79% ^{a,z} | 1.40% ^a |
| Class R5 | | | | | | | | | | | | | | |
| 9/30/19 | \$11.33 | \$0.16 | \$ 0.12 | \$ 0.28 | \$(0.11) | \$(0.34) | \$(0.45) | \$11.16 | 2.89% | \$ 4,637 | 1.03% | 0.90% | 0.89% | 1.50% |
| 9/30/18 | 11.31 | 0.16 | 0.13 | 0.29 | (0.24) | (0.03) | (0.27) | 11.33 | 2.57% | 6,466 | 1.06% | 0.89% | 0.89% ^z | 1.41% |
| 9/30/17 | 10.29 | 0.13 | 0.98 | 1.11 | (0.09) | - | (0.09) | 11.31 | 10.83% | 7,554 | 1.10% | 0.91% | 0.89% | 1.23% |
| 9/30/16 | 10.23 | 0.13 | 0.54 | 0.67 | (0.07) | (0.54) | (0.61) | 10.29 | 6.81% | 7,390 | 1.07% | 0.90% | 0.89% | 1.33% |
| 9/30/15 ⁱ | 10.87 | 0.10 | (0.49) | (0.39) | (0.07) | (0.18) | (0.25) | 10.23 | (3.67%) ^b | 7,340 | 1.06% ^a | 0.89% ^a | 0.89% ^{a,z} | 1.26% ^a |
| 12/31/14 | 11.74 | 0.25 | (0.02) | 0.23 | (0.12) | (0.98) | (1.10) | 10.87 | 1.89% | 12,994 | 1.01% | 0.88% | 0.88% ^z | 2.12% |
| Service Class | | | | | | | | | | | | | | |
| 9/30/19 | \$11.16 | \$0.15 | \$ 0.11 | \$ 0.26 | \$(0.10) | \$(0.34) | \$(0.44) | \$10.98 | 2.74% | \$ 3,965 | 1.13% | 1.00% | 0.99% | 1.40% |
| 9/30/18 | 11.14 | 0.13 | 0.15 | 0.28 | (0.23) | (0.03) | (0.26) | 11.16 | 2.50% | 4,587 | 1.16% | 0.99% | 0.99% ^z | 1.20% |
| 9/30/17 | 10.14 | 0.12 | 0.95 | 1.07 | (0.07) | - | (0.07) | 11.14 | 10.66% | 11,011 | 1.20% | 1.01% | 0.99% | 1.12% |
| 9/30/16 | 10.08 | 0.12 | 0.54 | 0.66 | (0.06) | (0.54) | (0.60) | 10.14 | 6.79% | 11,890 | 1.17% | 1.00% | 0.99% | 1.23% |
| 9/30/15 ⁱ | 10.72 | 0.10 | (0.49) | (0.39) | (0.07) | (0.18) | (0.25) | 10.08 | (3.72%) ^b | 15,267 | 1.16% ^a | 0.99% ^a | 0.99% ^{a,z} | 1.21% ^a |
| 12/31/14 | 11.74 | 0.19 | 0.03 | 0.22 | (0.26) | (0.98) | (1.24) | 10.72 | 1.80% | 11,605 | 1.14% | 0.99% | 0.99% ^z | 1.61% |
| Administrative Class | | | | | | | | | | | | | | |
| 9/30/19 | \$11.50 | \$0.14 | \$ 0.13 | \$ 0.27 | \$(0.09) | \$(0.34) | \$(0.43) | \$11.34 | 2.71% | \$ 7,466 | 1.23% | 1.10% | 1.09% | 1.31% |
| 9/30/18 | 11.48 | 0.14 | 0.13 | 0.27 | (0.22) | (0.03) | (0.25) | 11.50 | 2.32% | 8,687 | 1.26% | 1.09% | 1.09% ^z | 1.19% |
| 9/30/17 | 10.44 | 0.11 | 0.99 | 1.10 | (0.06) | - | (0.06) | 11.48 | 10.59% | 9,916 | 1.30% | 1.11% | 1.09% | 1.03% |
| 9/30/16 | 10.36 | 0.11 | 0.55 | 0.66 | (0.04) | (0.54) | (0.58) | 10.44 | 6.61% | 9,991 | 1.27% | 1.10% | 1.09% | 1.11% |
| 9/30/15 ⁱ | 11.02 | 0.09 | (0.50) | (0.41) | (0.07) | (0.18) | (0.25) | 10.36 | (3.80%) ^b | 14,055 | 1.26% ^a | 1.09% ^a | 1.09% ^{a,z} | 1.09% ^a |
| 12/31/14 | 12.03 | 0.18 | 0.03 | 0.21 | (0.24) | (0.98) | (1.22) | 11.02 | 1.70% | 16,936 | 1.25% | 1.10% | 1.10% ^z | 1.50% |
| Class A | | | | | | | | | | | | | | |
| 9/30/19 | \$11.10 | \$0.11 | \$ 0.12 | \$ 0.23 | \$(0.05) | \$(0.34) | \$(0.39) | \$10.94 | 2.42% | \$ 2,523 | 1.49% | 1.35% | 1.34% | 1.04% |
| 9/30/18 | 11.08 | 0.11 | 0.11 | 0.22 | (0.17) | (0.03) | (0.20) | 11.10 | 2.00% | 3,836 | 1.52% | 1.34% | 1.34% ^z | 0.96% |
| 9/30/17 | 10.07 | 0.08 | 0.97 | 1.05 | (0.04) | - | (0.04) | 11.08 | 10.42% | 3,873 | 1.55% | 1.36% | 1.34% | 0.77% |
| 9/30/16 | 10.01 | 0.09 | 0.52 | 0.61 | (0.01) | (0.54) | (0.55) | 10.07 | 6.26% | 5,748 | 1.52% | 1.35% | 1.34% | 0.87% |
| 9/30/15 ⁱ | 10.67 | 0.07 | (0.48) | (0.41) | (0.07) | (0.18) | (0.25) | 10.01 | (3.93%) ^b | 6,922 | 1.51% ^a | 1.34% ^a | 1.34% ^{a,z} | 0.85% ^a |
| 12/31/14 | 11.69 | 0.15 | 0.03 | 0.18 | (0.22) | (0.98) | (1.20) | 10.67 | 1.42% | 8,694 | 1.50% | 1.35% | 1.35% ^z | 1.26% |
| Class R4 | | | | | | | | | | | | | | |
| 9/30/19 | \$11.00 | \$0.12 | \$ 0.12 | \$ 0.24 | \$(0.07) | \$(0.34) | \$(0.41) | \$10.83 | 2.57% | \$ 7,021 | 1.39% | 1.25% | 1.24% | 1.17% |
| 9/30/18 | 11.00 | 0.12 | 0.11 | 0.23 | (0.20) | (0.03) | (0.23) | 11.00 | 2.10% | 9,324 | 1.41% | 1.24% | 1.24% ^z | 1.05% |
| 9/30/17 | 10.01 | 0.08 | 0.97 | 1.05 | (0.06) | - | (0.06) | 11.00 | 10.53% | 10,527 | 1.45% | 1.26% | 1.24% | 0.82% |
| 9/30/16 | 9.99 | 0.11 | 0.51 | 0.62 | (0.06) | (0.54) | (0.60) | 10.01 | 6.46% | 16,392 | 1.42% | 1.25% | 1.24% | 1.10% |
| 9/30/15 ⁱ | 10.65 | 0.08 | (0.49) | (0.41) | (0.07) | (0.18) | (0.25) | 9.99 | (3.84%) ^b | 2,642 | 1.41% ^a | 1.24% ^a | 1.24% ^{a,z} | 0.93% ^a |
| 12/31/14 ^h | 11.73 | 0.11 | 0.03 | 0.14 | (0.24) | (0.98) | (1.22) | 10.65 | 1.15% ^b | 101 | 1.41% ^a | 1.24% ^a | 1.24% ^{a,z} | 1.20% ^a |
| Class R3 | | | | | | | | | | | | | | |
| 9/30/19 | \$10.95 | \$0.10 | \$ 0.11 | \$ 0.21 | \$(0.04) | \$(0.34) | \$(0.38) | \$10.78 | 2.31% | \$ 10,533 | 1.63% | 1.50% | 1.49% | 0.92% |
| 9/30/18 | 10.95 | 0.09 | 0.12 | 0.21 | (0.18) | (0.03) | (0.21) | 10.95 | 1.88% | 14,074 | 1.67% | 1.49% | 1.49% ^z | 0.82% |
| 9/30/17 | 9.98 | 0.07 | 0.95 | 1.02 | (0.05) | - | (0.05) | 10.95 | 10.23% | 14,001 | 1.70% | 1.51% | 1.49% | 0.64% |
| 9/30/16 | 9.98 | 0.08 | 0.52 | 0.60 | (0.06) | (0.54) | (0.60) | 9.98 | 6.16% | 10,403 | 1.67% | 1.50% | 1.49% | 0.83% |
| 9/30/15 ⁱ | 10.65 | 0.06 | (0.48) | (0.42) | (0.07) | (0.18) | (0.25) | 9.98 | (4.03%) ^b | 2,587 | 1.66% ^a | 1.49% ^a | 1.49% ^{a,z} | 0.73% ^a |
| 12/31/14 ^h | 11.73 | 0.08 | 0.04 | 0.12 | (0.22) | (0.98) | (1.20) | 10.65 | 0.97% ^b | 101 | 1.66% ^a | 1.49% ^a | 1.49% ^{a,z} | 0.95% ^a |

Year ended September 30

Portfolio turnover rate

| 2019 | 2018 | 2017 | 2016 |
|------|------|------|------|
| 174% | 145% | 153% | 171% |

Period ended September 30, 2015^b
90%

Year ended December 31 2014
94%

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

y Short sale dividend and loan expense incurred as a result of entering into short sales is included in the Fund's net expenses in the Consolidated Statement of Operations.

z Amount of short sale dividend and loan expense had no impact on the ratio of expenses to average daily net assets.

MASSMUTUAL SELECT DIVERSIFIED VALUE FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|---|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^c | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets | Net investment income (loss) to average daily net assets |
| | | | | | | | | | | | | |
| Class I | | | | | | | | | | | | |
| 9/30/19 | \$13.48 | \$0.26 | \$(0.33) | \$(0.07) | \$(0.26) | \$(1.67) | \$(1.93) | \$11.48 | 1.59% | \$210,652 | 0.58% | 2.31% |
| 9/30/18 | 16.69 | 0.25 | 1.70 | 1.95 | (0.42) | (4.74) | (5.16) | 13.48 | 13.43% | 202,121 | 0.57% | 1.85% |
| 9/30/17 | 14.90 | 0.30 | 2.47 | 2.77 | (0.35) | (0.63) | (0.98) | 16.69 | 19.25% | 145,732 | 0.58% | 1.90% |
| 9/30/16 | 13.64 | 0.27 | 1.20 | 1.47 | (0.21) | - | (0.21) | 14.90 | 10.89% | 251,684 | 0.57% | 1.90% |
| 9/30/15 ⁱ | 14.86 | 0.18 | (1.35) | (1.17) | (0.05) | - | (0.05) | 13.64 | (7.91%) ^b | 75,827 | 0.58% ^a | 1.66% ^a |
| 12/31/14 ^h | 13.89 | 0.17 | 1.10 | 1.27 | (0.30) | - | (0.30) | 14.86 | 9.20% ^b | 97,877 | 0.55% ^a | 1.56% ^a |
| Class R5 | | | | | | | | | | | | |
| 9/30/19 | \$13.50 | \$0.25 | \$(0.33) | \$(0.08) | \$(0.25) | \$(1.67) | \$(1.92) | \$11.50 | 1.48% | \$ 74,403 | 0.68% | 2.19% |
| 9/30/18 | 16.71 | 0.24 | 1.69 | 1.93 | (0.40) | (4.74) | (5.14) | 13.50 | 13.28% | 143,091 | 0.67% | 1.80% |
| 9/30/17 | 14.90 | 0.29 | 2.47 | 2.76 | (0.32) | (0.63) | (0.95) | 16.71 | 19.16% | 50,361 | 0.68% | 1.83% |
| 9/30/16 | 13.64 | 0.28 | 1.18 | 1.46 | (0.20) | - | (0.20) | 14.90 | 10.78% | 46,830 | 0.67% | 2.00% |
| 9/30/15 ⁱ | 14.87 | 0.17 | (1.35) | (1.18) | (0.05) | - | (0.05) | 13.64 | (7.98%) ^b | 207,187 | 0.68% ^a | 1.58% ^a |
| 12/31/14 | 13.56 | 0.29 | 1.30 | 1.59 | (0.28) | - | (0.28) | 14.87 | 11.82% ^b | 235,941 | 0.63% | 2.07% |
| Service Class | | | | | | | | | | | | |
| 9/30/19 | \$13.49 | \$0.24 | \$(0.32) | \$(0.08) | \$(0.23) | \$(1.67) | \$(1.90) | \$11.51 | 1.40% | \$ 10,046 | 0.78% | 2.08% |
| 9/30/18 | 16.69 | 0.22 | 1.70 | 1.92 | (0.38) | (4.74) | (5.12) | 13.49 | 13.21% | 13,564 | 0.77% | 1.64% |
| 9/30/17 | 14.90 | 0.27 | 2.47 | 2.74 | (0.32) | (0.63) | (0.95) | 16.69 | 18.97% | 11,721 | 0.78% | 1.71% |
| 9/30/16 | 13.63 | 0.25 | 1.21 | 1.46 | (0.19) | - | (0.19) | 14.90 | 10.75% | 8,656 | 0.77% | 1.78% |
| 9/30/15 ⁱ | 14.88 | 0.16 | (1.36) | (1.20) | (0.05) | - | (0.05) | 13.63 | (8.11%) ^b | 14,983 | 0.78% ^a | 1.49% ^a |
| 12/31/14 | 13.57 | 0.25 | 1.33 | 1.58 | (0.27) | - | (0.27) | 14.88 | 11.72% ^b | 16,147 | 0.73% | 1.76% |
| Administrative Class | | | | | | | | | | | | |
| 9/30/19 | \$13.58 | \$0.23 | \$(0.33) | \$(0.10) | \$(0.22) | \$(1.67) | \$(1.89) | \$11.59 | 1.29% | \$ 20,346 | 0.88% | 2.01% |
| 9/30/18 | 16.76 | 0.21 | 1.70 | 1.91 | (0.35) | (4.74) | (5.09) | 13.58 | 13.07% | 15,165 | 0.87% | 1.61% |
| 9/30/17 | 14.96 | 0.26 | 2.48 | 2.74 | (0.31) | (0.63) | (0.94) | 16.76 | 18.92% | 5,176 | 0.88% | 1.63% |
| 9/30/16 | 13.68 | 0.24 | 1.20 | 1.44 | (0.16) | - | (0.16) | 14.96 | 10.57% | 6,903 | 0.87% | 1.66% |
| 9/30/15 ⁱ | 14.93 | 0.15 | (1.35) | (1.20) | (0.05) | - | (0.05) | 13.68 | (8.08%) ^b | 6,206 | 0.88% ^a | 1.38% ^a |
| 12/31/14 | 13.63 | 0.24 | 1.32 | 1.56 | (0.26) | - | (0.26) | 14.93 | 11.52% ^b | 9,579 | 0.84% | 1.69% |
| Class A | | | | | | | | | | | | |
| 9/30/19 | \$13.45 | \$0.20 | \$(0.32) | \$(0.12) | \$(0.20) | \$(1.67) | \$(1.87) | \$11.46 | 1.03% | \$ 37,170 | 1.13% | 1.75% |
| 9/30/18 | 16.64 | 0.18 | 1.69 | 1.87 | (0.32) | (4.74) | (5.06) | 13.45 | 12.82% | 45,319 | 1.12% | 1.36% |
| 9/30/17 | 14.85 | 0.21 | 2.48 | 2.69 | (0.27) | (0.63) | (0.90) | 16.64 | 18.64% | 16,573 | 1.13% | 1.36% |
| 9/30/16 | 13.58 | 0.20 | 1.20 | 1.40 | (0.13) | - | (0.13) | 14.85 | 10.33% | 19,968 | 1.12% | 1.43% |
| 9/30/15 ⁱ | 14.86 | 0.13 | (1.36) | (1.23) | (0.05) | - | (0.05) | 13.58 | (8.32%) ^b | 20,926 | 1.13% ^a | 1.14% ^a |
| 12/31/14 | 13.55 | 0.21 | 1.31 | 1.52 | (0.21) | - | (0.21) | 14.86 | 11.27% ^b | 23,963 | 1.10% | 1.47% |
| Class R4 | | | | | | | | | | | | |
| 9/30/19 | \$13.32 | \$0.21 | \$(0.32) | \$(0.11) | \$(0.23) | \$(1.67) | \$(1.90) | \$11.31 | 1.18% | \$ 6,570 | 1.03% | 1.88% |
| 9/30/18 | 16.56 | 0.19 | 1.68 | 1.87 | (0.37) | (4.74) | (5.11) | 13.32 | 12.93% | 4,523 | 1.02% | 1.44% |
| 9/30/17 | 14.81 | 0.23 | 2.46 | 2.69 | (0.31) | (0.63) | (0.94) | 16.56 | 18.74% | 861 | 1.03% | 1.47% |
| 9/30/16 | 13.57 | 0.22 | 1.18 | 1.40 | (0.16) | - | (0.16) | 14.81 | 10.38% | 711 | 1.02% | 1.57% |
| 9/30/15 ⁱ | 14.83 | 0.14 | (1.35) | (1.21) | (0.05) | - | (0.05) | 13.57 | (8.20%) ^b | 279 | 1.03% ^a | 1.26% ^a |
| 12/31/14 ^h | 13.86 | 0.12 | 1.10 | 1.22 | (0.25) | - | (0.25) | 14.83 | 8.85% ^b | 109 | 1.00% ^a | 1.13% ^a |
| Class R3 | | | | | | | | | | | | |
| 9/30/19 | \$13.37 | \$0.18 | \$(0.31) | \$(0.13) | \$(0.18) | \$(1.67) | \$(1.85) | \$11.39 | 0.91% | \$ 1,387 | 1.28% | 1.59% |
| 9/30/18 | 16.59 | 0.15 | 1.68 | 1.83 | (0.31) | (4.74) | (5.05) | 13.37 | 12.56% | 2,177 | 1.27% | 1.13% |
| 9/30/17 | 14.83 | 0.19 | 2.46 | 2.65 | (0.26) | (0.63) | (0.89) | 16.59 | 18.44% | 2,046 | 1.28% | 1.22% |
| 9/30/16 | 13.62 | 0.19 | 1.19 | 1.38 | (0.17) | - | (0.17) | 14.83 | 10.17% | 1,635 | 1.27% | 1.36% |
| 9/30/15 ⁱ | 14.91 | 0.12 | (1.36) | (1.24) | (0.05) | - | (0.05) | 13.62 | (8.36%) ^b | 247 | 1.28% ^a | 1.06% ^a |
| 12/31/14 | 13.61 | 0.18 | 1.31 | 1.49 | (0.19) | - | (0.19) | 14.91 | 11.02% ^b | 194 | 1.28% | 1.26% |

| | Year ended September 30 | | | | Period ended | Year ended |
|-------------------------|-------------------------|------|------|------|---------------------------------|-------------------|
| | 2019 | 2018 | 2017 | 2016 | September 30, 2015 ^b | December 31, 2014 |
| Portfolio turnover rate | 42% | 75% | 71% | 39% | 29% | 49% |

^a Annualized.

^b Percentage represents the results for the period and is not annualized.

^c Per share amount calculated on the average shares method.

^h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

ⁱ For the period January 1, 2015 through September 30, 2015.

^l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

^m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

MASSMUTUAL SELECT FUNDAMENTAL VALUE FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | Ratios / Supplemental Data | | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$11.93 | \$0.20 | \$(0.39) | \$(0.19) | \$(0.23) | \$(1.18) | \$(1.41) | \$10.33 | (0.07%) | \$353,302 | 0.64% | N/A | 1.96% |
| 9/30/18 | 13.01 | 0.23 | 0.81 | 1.04 | (0.24) | (1.88) | (2.12) | 11.93 | 8.56% | 632,974 | 0.63% | N/A | 1.91% |
| 9/30/17 | 12.39 | 0.23 | 1.60 | 1.83 | (0.25) | (0.96) | (1.21) | 13.01 | 15.49% | 594,578 | 0.64% | N/A | 1.82% |
| 9/30/16 | 12.46 | 0.25 | 1.27 | 1.52 | (0.23) | (1.36) | (1.59) | 12.39 | 13.21% | 500,270 | 0.63% | N/A | 2.04% |
| 9/30/15 ⁱ | 13.97 | 0.17 | (1.28) | (1.11) | - | (0.40) | (0.40) | 12.46 | (8.06%) ^b | 422,026 | 0.63% ^a | N/A | 1.65% ^a |
| 12/31/14 | 13.60 | 0.23 | 1.28 | 1.51 | (0.24) | (0.90) | (1.14) | 13.97 | 11.45% | 408,068 | 0.65% | 0.62% | 1.65% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$11.98 | \$0.19 | \$(0.38) | \$(0.19) | \$(0.22) | \$(1.18) | \$(1.40) | \$10.39 | (0.13%) | \$196,887 | 0.74% | N/A | 1.85% |
| 9/30/18 | 13.06 | 0.22 | 0.80 | 1.02 | (0.22) | (1.88) | (2.10) | 11.98 | 8.39% | 309,004 | 0.73% | N/A | 1.80% |
| 9/30/17 | 12.43 | 0.21 | 1.61 | 1.82 | (0.23) | (0.96) | (1.19) | 13.06 | 15.41% | 368,686 | 0.74% | N/A | 1.72% |
| 9/30/16 | 12.49 | 0.23 | 1.29 | 1.52 | (0.22) | (1.36) | (1.58) | 12.43 | 13.12% | 372,531 | 0.73% | N/A | 1.95% |
| 9/30/15 ⁱ | 14.01 | 0.16 | (1.28) | (1.12) | - | (0.40) | (0.40) | 12.49 | (8.10%) ^b | 423,631 | 0.73% ^a | N/A | 1.53% ^a |
| 12/31/14 | 13.64 | 0.22 | 1.27 | 1.49 | (0.22) | (0.90) | (1.12) | 14.01 | 11.27% | 564,826 | 0.78% | 0.74% | 1.53% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$11.93 | \$0.18 | \$(0.38) | \$(0.20) | \$(0.21) | \$(1.18) | \$(1.39) | \$10.34 | (0.25%) | \$ 30,115 | 0.84% | N/A | 1.75% |
| 9/30/18 | 13.00 | 0.20 | 0.81 | 1.01 | (0.20) | (1.88) | (2.08) | 11.93 | 8.36% | 49,551 | 0.83% | N/A | 1.69% |
| 9/30/17 | 12.38 | 0.20 | 1.60 | 1.80 | (0.22) | (0.96) | (1.18) | 13.00 | 15.24% | 60,852 | 0.84% | N/A | 1.59% |
| 9/30/16 | 12.44 | 0.22 | 1.29 | 1.51 | (0.21) | (1.36) | (1.57) | 12.38 | 13.06% | 124,126 | 0.83% | N/A | 1.86% |
| 9/30/15 ⁱ | 13.97 | 0.15 | (1.28) | (1.13) | - | (0.40) | (0.40) | 12.44 | (8.20%) ^b | 158,634 | 0.83% ^a | N/A | 1.44% ^a |
| 12/31/14 | 13.60 | 0.20 | 1.28 | 1.48 | (0.21) | (0.90) | (1.11) | 13.97 | 11.22% | 208,770 | 0.86% | 0.83% | 1.44% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$12.00 | \$0.17 | \$(0.38) | \$(0.21) | \$(0.20) | \$(1.18) | \$(1.38) | \$10.41 | (0.36%) | \$ 58,983 | 0.94% | N/A | 1.65% |
| 9/30/18 | 13.07 | 0.19 | 0.81 | 1.00 | (0.19) | (1.88) | (2.07) | 12.00 | 8.21% | 85,905 | 0.93% | N/A | 1.60% |
| 9/30/17 | 12.44 | 0.19 | 1.61 | 1.80 | (0.21) | (0.96) | (1.17) | 13.07 | 15.16% | 92,380 | 0.94% | N/A | 1.51% |
| 9/30/16 | 12.49 | 0.21 | 1.29 | 1.50 | (0.19) | (1.36) | (1.55) | 12.44 | 12.93% | 94,316 | 0.93% | N/A | 1.75% |
| 9/30/15 ⁱ | 14.04 | 0.14 | (1.29) | (1.15) | - | (0.40) | (0.40) | 12.49 | (8.30%) ^b | 102,932 | 0.93% ^a | N/A | 1.34% ^a |
| 12/31/14 | 13.65 | 0.19 | 1.29 | 1.48 | (0.19) | (0.90) | (1.09) | 14.04 | 11.14% | 123,885 | 0.97% | 0.94% | 1.33% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$11.83 | \$0.14 | \$(0.37) | \$(0.23) | \$(0.16) | \$(1.18) | \$(1.34) | \$10.26 | (0.58%) | \$ 66,407 | 1.19% | N/A | 1.38% |
| 9/30/18 | 12.90 | 0.16 | 0.80 | 0.96 | (0.15) | (1.88) | (2.03) | 11.83 | 7.94% | 84,733 | 1.18% | N/A | 1.34% |
| 9/30/17 | 12.28 | 0.16 | 1.59 | 1.75 | (0.17) | (0.96) | (1.13) | 12.90 | 14.90% | 108,447 | 1.19% | N/A | 1.26% |
| 9/30/16 | 12.35 | 0.18 | 1.26 | 1.44 | (0.15) | (1.36) | (1.51) | 12.28 | 12.58% | 161,322 | 1.18% | N/A | 1.50% |
| 9/30/15 ⁱ | 13.90 | 0.11 | (1.26) | (1.15) | - | (0.40) | (0.40) | 12.35 | (8.39%) ^b | 170,054 | 1.18% ^a | N/A | 1.08% ^a |
| 12/31/14 | 13.53 | 0.15 | 1.27 | 1.42 | (0.15) | (0.90) | (1.05) | 13.90 | 10.78% | 215,519 | 1.23% | 1.19% | 1.08% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$11.67 | \$0.15 | \$(0.37) | \$(0.22) | \$(0.16) | \$(1.18) | \$(1.34) | \$10.11 | (0.47%) | \$ 9,055 | 1.09% | N/A | 1.48% |
| 9/30/18 | 12.77 | 0.17 | 0.79 | 0.96 | (0.18) | (1.88) | (2.06) | 11.67 | 8.06% | 9,172 | 1.08% | N/A | 1.45% |
| 9/30/17 | 12.21 | 0.17 | 1.57 | 1.74 | (0.22) | (0.96) | (1.18) | 12.77 | 14.98% | 16,370 | 1.09% | N/A | 1.37% |
| 9/30/16 | 12.32 | 0.20 | 1.26 | 1.46 | (0.21) | (1.36) | (1.57) | 12.21 | 12.78% | 6,905 | 1.08% | N/A | 1.66% |
| 9/30/15 ⁱ | 13.86 | 0.12 | (1.26) | (1.14) | - | (0.40) | (0.40) | 12.32 | (8.34%) ^b | 1,846 | 1.08% ^a | N/A | 1.25% ^a |
| 12/31/14 ^h | 13.74 | 0.12 | 1.10 | 1.22 | (0.20) | (0.90) | (1.10) | 13.86 | 9.16% ^b | 109 | 1.07% ^a | N/A | 1.11% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$11.63 | \$0.12 | \$(0.37) | \$(0.25) | \$(0.15) | \$(1.18) | \$(1.33) | \$10.05 | (0.77%) | \$ 2,362 | 1.34% | N/A | 1.23% |
| 9/30/18 | 12.72 | 0.14 | 0.79 | 0.93 | (0.14) | (1.88) | (2.02) | 11.63 | 7.84% | 2,831 | 1.33% | N/A | 1.21% |
| 9/30/17 | 12.14 | 0.14 | 1.57 | 1.71 | (0.17) | (0.96) | (1.13) | 12.72 | 14.72% | 2,936 | 1.34% | N/A | 1.14% |
| 9/30/16 | 12.25 | 0.16 | 1.25 | 1.41 | (0.16) | (1.36) | (1.52) | 12.14 | 12.41% | 1,512 | 1.33% | N/A | 1.34% |
| 9/30/15 ⁱ | 13.81 | 0.10 | (1.26) | (1.16) | - | (0.40) | (0.40) | 12.25 | (8.51%) ^b | 896 | 1.33% ^a | N/A | 0.95% ^a |
| 12/31/14 | 13.45 | 0.12 | 1.27 | 1.39 | (0.13) | (0.90) | (1.03) | 13.81 | 10.63% | 977 | 1.41% | 1.37% | 0.88% |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended | Year ended |
|-------------------------|-------------------------|------|------|------|---------------------------------|-------------------|
| | 2019 | 2018 | 2017 | 2016 | September 30, 2015 ^b | December 31, 2014 |
| | 103% | 46% | 13% | 16% | 15% | 19% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

MM S&P 500 INDEX FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{e,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$20.48 | \$0.32 | \$(0.00) ^{d,aa} | \$ 0.32 | \$(0.37) | \$(2.51) | \$(2.88) | \$17.92 | 4.17% | \$1,083,523 | 0.12% | N/A | 1.86% |
| 9/30/18 | 21.59 | 0.37 | 3.00 | 3.37 | (0.48) | (4.00) | (4.48) | 20.48 | 17.77% | 819,557 | 0.12% | N/A | 1.86% |
| 9/30/17 | 19.40 | 0.39 | 3.03 | 3.42 | (0.44) | (0.79) | (1.23) | 21.59 | 18.44% | 541,131 | 0.12% | N/A | 1.95% |
| 9/30/16 | 17.50 | 0.38 | 2.24 | 2.62 | (0.36) | (0.36) | (0.72) | 19.40 | 15.30% | 1,078,531 | 0.12% | N/A | 2.05% |
| 9/30/15 ⁱ | 18.54 | 0.27 | (1.26) | (0.99) | - | (0.05) | (0.05) | 17.50 | (5.35%) ^b | 860,720 | 0.12% ^a | N/A | 1.93% ^a |
| 12/31/14 | 16.99 | 0.34 | 1.94 | 2.28 | (0.34) | (0.39) | (0.73) | 18.54 | 13.55% | 619,847 | 0.13% | 0.11% | 1.90% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$20.53 | \$0.31 | \$(0.01) ^{aa} | \$ 0.30 | \$(0.34) | \$(2.51) | \$(2.85) | \$17.98 | 4.05% | \$ 487,312 | 0.22% | N/A | 1.76% |
| 9/30/18 | 21.63 | 0.35 | 3.01 | 3.36 | (0.46) | (4.00) | (4.46) | 20.53 | 17.65% | 532,163 | 0.22% | N/A | 1.75% |
| 9/30/17 | 19.43 | 0.38 | 3.03 | 3.41 | (0.42) | (0.79) | (1.21) | 21.63 | 18.33% | 710,184 | 0.22% | N/A | 1.88% |
| 9/30/16 | 17.52 | 0.37 | 2.24 | 2.61 | (0.34) | (0.36) | (0.70) | 19.43 | 15.20% | 828,915 | 0.22% | N/A | 1.95% |
| 9/30/15 ⁱ | 18.58 | 0.25 | (1.26) | (1.01) | - | (0.05) | (0.05) | 17.52 | (5.44%) ^b | 872,011 | 0.22% ^a | N/A | 1.82% ^a |
| 12/31/14 ^p | 17.02 | 0.32 | 1.95 | 2.27 | (0.32) | (0.39) | (0.71) | 18.58 | 13.46% | 1,003,654 | 0.23% | 0.22% | 1.79% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$20.55 | \$0.28 | \$(0.01) ^{aaa} | \$ 0.27 | \$(0.31) | \$(2.51) | \$(2.82) | \$18.00 | 3.84% | \$ 395,249 | 0.37% | N/A | 1.61% |
| 9/30/18 | 21.64 | 0.32 | 3.02 | 3.34 | (0.43) | (4.00) | (4.43) | 20.55 | 17.48% | 481,405 | 0.37% | N/A | 1.59% |
| 9/30/17 | 19.43 | 0.35 | 3.03 | 3.38 | (0.38) | (0.79) | (1.17) | 21.64 | 18.17% | 508,135 | 0.37% | N/A | 1.72% |
| 9/30/16 | 17.52 | 0.34 | 2.24 | 2.58 | (0.31) | (0.36) | (0.67) | 19.43 | 15.03% | 499,673 | 0.37% | N/A | 1.80% |
| 9/30/15 ⁱ | 18.60 | 0.23 | (1.26) | (1.03) | - | (0.05) | (0.05) | 17.52 | (5.54%) ^b | 636,417 | 0.37% ^a | N/A | 1.66% ^a |
| 12/31/14 | 17.05 | 0.29 | 1.94 | 2.23 | (0.29) | (0.39) | (0.68) | 18.60 | 13.21% | 736,040 | 0.39% | 0.38% | 1.63% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$20.19 | \$0.26 | \$(0.01) ^{aaa} | \$ 0.25 | \$(0.30) | \$(2.51) | \$(2.81) | \$17.63 | 3.77% | \$ 476,225 | 0.47% | N/A | 1.51% |
| 9/30/18 | 21.34 | 0.29 | 2.97 | 3.26 | (0.41) | (4.00) | (4.41) | 20.19 | 17.34% | 606,359 | 0.47% | N/A | 1.50% |
| 9/30/17 | 19.19 | 0.32 | 3.00 | 3.32 | (0.38) | (0.79) | (1.17) | 21.34 | 18.03% | 572,199 | 0.47% | N/A | 1.62% |
| 9/30/16 | 17.30 | 0.32 | 2.22 | 2.54 | (0.29) | (0.36) | (0.65) | 19.19 | 14.96% | 506,085 | 0.47% | N/A | 1.70% |
| 9/30/15 ⁱ | 18.39 | 0.22 | (1.26) | (1.04) | - | (0.05) | (0.05) | 17.30 | (5.66%) ^b | 493,479 | 0.47% ^a | N/A | 1.57% ^a |
| 12/31/14 | 16.86 | 0.27 | 1.93 | 2.20 | (0.28) | (0.39) | (0.67) | 18.39 | 13.18% | 557,940 | 0.48% | 0.47% | 1.54% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$19.82 | \$0.21 | \$(0.02) ^{aaa} | \$ 0.19 | \$(0.24) | \$(2.51) | \$(2.75) | \$17.26 | 3.46% | \$ 28,147 | 0.72% | N/A | 1.26% |
| 9/30/18 | 21.03 | 0.24 | 2.92 | 3.16 | (0.37) | (4.00) | (4.37) | 19.82 | 17.06% | 34,494 | 0.72% | N/A | 1.25% |
| 9/30/17 | 18.92 | 0.27 | 2.96 | 3.23 | (0.33) | (0.79) | (1.12) | 21.03 | 17.80% | 27,907 | 0.72% | N/A | 1.37% |
| 9/30/16 | 17.12 | 0.27 | 2.19 | 2.46 | (0.30) | (0.36) | (0.66) | 18.92 | 14.63% | 21,320 | 0.72% | N/A | 1.46% |
| 9/30/15 ⁱ | 18.23 | 0.18 | (1.24) | (1.06) | - | (0.05) | (0.05) | 17.12 | (5.82%) ^b | 11,784 | 0.72% ^a | N/A | 1.33% ^a |
| 12/31/14 ^h | 17.01 | 0.19 | 1.68 | 1.87 | (0.26) | (0.39) | (0.65) | 18.23 | 11.10% ^b | 3,314 | 0.72% ^a | N/A | 1.43% ^a |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$19.95 | \$0.23 | \$(0.02) ^{aaa} | \$ 0.21 | \$(0.26) | \$(2.51) | \$(2.77) | \$17.39 | 3.61% | \$ 594,415 | 0.62% | N/A | 1.36% |
| 9/30/18 | 21.13 | 0.26 | 2.93 | 3.19 | (0.37) | (4.00) | (4.37) | 19.95 | 17.15% | 681,097 | 0.62% | N/A | 1.35% |
| 9/30/17 | 19.01 | 0.29 | 2.97 | 3.26 | (0.35) | (0.79) | (1.14) | 21.13 | 17.88% | 670,521 | 0.62% | N/A | 1.47% |
| 9/30/16 | 17.16 | 0.29 | 2.19 | 2.48 | (0.27) | (0.36) | (0.63) | 19.01 | 14.72% | 632,838 | 0.62% | N/A | 1.55% |
| 9/30/15 ⁱ | 18.25 | 0.19 | (1.23) | (1.04) | - | (0.05) | (0.05) | 17.16 | (5.70%) ^b | 534,856 | 0.62% ^a | N/A | 1.41% ^a |
| 12/31/14 | 16.74 | 0.24 | 1.90 | 2.14 | (0.24) | (0.39) | (0.63) | 18.25 | 12.92% | 547,665 | 0.66% | 0.63% | 1.37% |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$19.45 | \$0.18 | \$(0.02) ^{aaa} | \$ 0.16 | \$(0.23) | \$(2.51) | \$(2.74) | \$16.87 | 3.34% | \$ 222,503 | 0.87% | N/A | 1.11% |
| 9/30/18 | 20.72 | 0.21 | 2.87 | 3.08 | (0.35) | (4.00) | (4.35) | 19.45 | 16.90% | 251,216 | 0.87% | N/A | 1.10% |
| 9/30/17 | 18.70 | 0.24 | 2.91 | 3.15 | (0.34) | (0.79) | (1.13) | 20.72 | 17.54% | 208,410 | 0.87% | N/A | 1.21% |
| 9/30/16 | 16.95 | 0.24 | 2.17 | 2.41 | (0.30) | (0.36) | (0.66) | 18.70 | 14.49% | 95,197 | 0.87% | N/A | 1.29% |
| 9/30/15 ⁱ | 18.06 | 0.16 | (1.22) | (1.06) | - | (0.05) | (0.05) | 16.95 | (5.88%) ^b | 24,643 | 0.87% ^a | N/A | 1.21% ^a |
| 12/31/14 | 16.58 | 0.19 | 1.90 | 2.09 | (0.22) | (0.39) | (0.61) | 18.06 | 12.68% ^b | 3,736 | 0.92% | 0.89% | 1.12% |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|-----------------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 4% | 3% ^a | 5% | 4% | 2% | 5% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

p Class I shares were renamed Class R5 shares on April 1, 2014.

q Portfolio turnover excludes securities received from subscriptions in-kind. Amount would be 12% including securities received from subscriptions in-kind.

aa The amount shown for a share outstanding does not correspond with the aggregate net realized and unrealized gain (loss) for the period due to the timing of purchases and redemptions of Fund shares in relation to the fluctuating market values of the Fund.

MASSMUTUAL SELECT EQUITY OPPORTUNITIES FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$18.41 | \$0.27 | \$ 1.36 | \$ 1.63 | \$(0.28) | \$(1.43) | \$(1.71) | \$18.33 | 10.82% | \$274,970 | 0.74% | N/A | 1.60% |
| 9/30/18 | 22.45 | 0.27 | 2.75 | 3.02 | (0.51) | (6.55) | (7.06) | 18.41 | 16.23% | 268,240 | 0.74% | N/A | 1.50% |
| 9/30/17 | 18.40 | 0.41 | 4.27 | 4.68 | (0.27) | (0.36) | (0.63) | 22.45 | 25.85% | 228,919 | 0.74% | N/A | 2.00% |
| 9/30/16 | 19.31 | 0.25 | 2.13 | 2.38 | (0.36) | (2.93) | (3.29) | 18.40 | 13.56% | 213,648 | 0.73% | N/A | 1.43% |
| 9/30/15 ⁱ | 22.69 | 0.28 | (3.41) | (3.13) | - | (0.25) | (0.25) | 19.31 | (13.85%) ^b | 216,254 | 0.73% ^a | N/A | 1.70% ^a |
| 12/31/14 | 23.34 | 0.46 | 2.34 | 2.80 | (0.47) | (2.98) | (3.45) | 22.69 | 12.54% | 222,925 | 0.74% | 0.71% | 1.94% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$18.47 | \$0.26 | \$ 1.37 | \$ 1.63 | \$(0.26) | \$(1.43) | \$(1.69) | \$18.41 | 10.76% | \$180,002 | 0.84% | N/A | 1.50% |
| 9/30/18 | 22.50 | 0.25 | 2.75 | 3.00 | (0.48) | (6.55) | (7.03) | 18.47 | 16.09% | 188,418 | 0.84% | N/A | 1.38% |
| 9/30/17 | 18.44 | 0.39 | 4.28 | 4.67 | (0.25) | (0.36) | (0.61) | 22.50 | 25.73% | 207,798 | 0.84% | N/A | 1.87% |
| 9/30/16 | 19.34 | 0.23 | 2.14 | 2.37 | (0.34) | (2.93) | (3.27) | 18.44 | 13.44% | 203,817 | 0.83% | N/A | 1.32% |
| 9/30/15 ⁱ | 22.74 | 0.27 | (3.42) | (3.15) | - | (0.25) | (0.25) | 19.34 | (13.91%) ^b | 240,748 | 0.83% ^a | N/A | 1.62% ^a |
| 12/31/14 | 23.38 | 0.45 | 2.33 | 2.78 | (0.44) | (2.98) | (3.42) | 22.74 | 12.44% | 336,501 | 0.84% | 0.82% | 1.89% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$18.10 | \$0.24 | \$ 1.33 | \$ 1.57 | \$(0.24) | \$(1.43) | \$(1.67) | \$18.00 | 10.61% | \$ 53,931 | 0.94% | N/A | 1.41% |
| 9/30/18 | 22.17 | 0.23 | 2.71 | 2.94 | (0.46) | (6.55) | (7.01) | 18.10 | 16.00% | 50,746 | 0.94% | N/A | 1.28% |
| 9/30/17 | 18.18 | 0.35 | 4.23 | 4.58 | (0.23) | (0.36) | (0.59) | 22.17 | 25.59% | 61,849 | 0.94% | N/A | 1.74% |
| 9/30/16 | 19.11 | 0.21 | 2.10 | 2.31 | (0.31) | (2.93) | (3.24) | 18.18 | 13.31% | 69,632 | 0.93% | N/A | 1.22% |
| 9/30/15 ⁱ | 22.49 | 0.25 | (3.38) | (3.13) | - | (0.25) | (0.25) | 19.11 | (14.02%) ^b | 76,245 | 0.93% ^a | N/A | 1.50% ^a |
| 12/31/14 | 23.16 | 0.44 | 2.29 | 2.73 | (0.42) | (2.98) | (3.40) | 22.49 | 12.33% | 98,642 | 0.94% | 0.92% | 1.87% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$17.84 | \$0.21 | \$ 1.31 | \$ 1.52 | \$(0.22) | \$(1.43) | \$(1.65) | \$17.71 | 10.46% | \$ 55,316 | 1.04% | N/A | 1.29% |
| 9/30/18 | 21.94 | 0.21 | 2.68 | 2.89 | (0.44) | (6.55) | (6.99) | 17.84 | 15.92% | 75,215 | 1.04% | N/A | 1.19% |
| 9/30/17 | 17.99 | 0.33 | 4.19 | 4.52 | (0.21) | (0.36) | (0.57) | 21.94 | 25.50% | 82,359 | 1.04% | N/A | 1.66% |
| 9/30/16 | 18.94 | 0.20 | 2.07 | 2.27 | (0.29) | (2.93) | (3.22) | 17.99 | 13.19% | 89,646 | 1.03% | N/A | 1.12% |
| 9/30/15 ⁱ | 22.31 | 0.23 | (3.35) | (3.12) | - | (0.25) | (0.25) | 18.94 | (14.04%) ^b | 97,736 | 1.03% ^a | N/A | 1.42% ^a |
| 12/31/14 | 23.00 | 0.38 | 2.30 | 2.68 | (0.39) | (2.98) | (3.37) | 22.31 | 12.20% | 111,776 | 1.05% | 1.03% | 1.63% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$16.98 | \$0.16 | \$ 1.24 | \$ 1.40 | \$(0.17) | \$(1.43) | \$(1.60) | \$16.78 | 10.19% | \$ 63,914 | 1.29% | N/A | 1.04% |
| 9/30/18 | 21.17 | 0.16 | 2.56 | 2.72 | (0.36) | (6.55) | (6.91) | 16.98 | 15.62% | 78,457 | 1.29% | N/A | 0.92% |
| 9/30/17 | 17.37 | 0.28 | 4.02 | 4.30 | (0.14) | (0.36) | (0.50) | 21.17 | 25.13% | 107,667 | 1.29% | N/A | 1.42% |
| 9/30/16 | 18.38 | 0.15 | 2.01 | 2.16 | (0.24) | (2.93) | (3.17) | 17.37 | 12.93% | 146,239 | 1.28% | N/A | 0.87% |
| 9/30/15 ⁱ | 21.69 | 0.18 | (3.24) | (3.06) | - | (0.25) | (0.25) | 18.38 | (14.16%) ^b | 181,803 | 1.28% ^a | N/A | 1.16% ^a |
| 12/31/14 | 22.46 | 0.33 | 2.21 | 2.54 | (0.33) | (2.98) | (3.31) | 21.69 | 11.86% | 227,294 | 1.30% | 1.28% | 1.45% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$16.74 | \$0.17 | \$ 1.21 | \$ 1.38 | \$(0.21) | \$(1.43) | \$(1.64) | \$16.48 | 10.30% | \$ 6,921 | 1.19% | N/A | 1.13% |
| 9/30/18 | 21.00 | 0.17 | 2.54 | 2.71 | (0.42) | (6.55) | (6.97) | 16.74 | 15.70% | 9,409 | 1.19% | N/A | 1.04% |
| 9/30/17 | 17.28 | 0.31 | 3.99 | 4.30 | (0.22) | (0.36) | (0.58) | 21.00 | 25.27% | 8,146 | 1.19% | N/A | 1.58% |
| 9/30/16 | 18.35 | 0.16 | 2.02 | 2.18 | (0.32) | (2.93) | (3.25) | 17.28 | 13.11% | 6,065 | 1.18% | N/A | 0.98% |
| 9/30/15 ⁱ | 21.65 | 0.24 | (3.29) | (3.05) | - | (0.25) | (0.25) | 18.35 | (14.14%) ^b | 1,683 | 1.18% ^a | N/A | 1.52% ^a |
| 12/31/14 ^h | 22.25 | 0.10 | 2.67 | 2.77 | (0.39) | (2.98) | (3.37) | 21.65 | 13.01% ^b | 113 | 1.17% ^a | N/A | 0.55% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$15.77 | \$0.13 | \$ 1.12 | \$ 1.25 | \$(0.17) | \$(1.43) | \$(1.60) | \$15.42 | 10.01% | \$ 3,297 | 1.44% | N/A | 0.92% |
| 9/30/18 | 20.10 | 0.12 | 2.41 | 2.53 | (0.31) | (6.55) | (6.86) | 15.77 | 15.43% | 2,679 | 1.44% | N/A | 0.78% |
| 9/30/17 | 16.55 | 0.24 | 3.83 | 4.07 | (0.16) | (0.36) | (0.52) | 20.10 | 25.00% | 3,087 | 1.44% | N/A | 1.28% |
| 9/30/16 | 17.72 | 0.12 | 1.93 | 2.05 | (0.29) | (2.93) | (3.22) | 16.55 | 12.76% | 3,539 | 1.43% | N/A | 0.74% |
| 9/30/15 ⁱ | 20.95 | 0.14 | (3.12) | (2.98) | - | (0.25) | (0.25) | 17.72 | (14.28%) ^b | 2,317 | 1.44% ^a | N/A | 0.94% ^a |
| 12/31/14 | 21.80 | 0.29 | 2.13 | 2.42 | (0.29) | (2.98) | (3.27) | 20.95 | 11.67% | 721 | 1.49% | 1.47% | 1.31% |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended | Year ended |
|-------------------------|-------------------------|------|------|------|---------------------------------|-------------------|
| | 2019 | 2018 | 2017 | 2016 | September 30, 2015 ^b | December 31, 2014 |
| | 33% | 35% | 131% | 36% | 39% | 35% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

MASSMUTUAL SELECT FUNDAMENTAL GROWTH FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|---|
| | Net asset value, beginning of the period | Net investment income (loss) ^{e,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$9.81 | \$0.02 | \$(0.00) ^{d,aa} | \$ 0.02 | \$(0.05) | \$(1.75) | \$(1.80) | \$8.03 | 4.27% | \$67,992 | 0.82% | 0.78% | 0.31% |
| 9/30/18 | 8.44 | 0.05 | 1.95 | 2.00 | (0.07) | (0.56) | (0.63) | 9.81 | 24.98% | 64,876 | 0.78% | 0.70% | 0.56% |
| 9/30/17 | 8.01 | 0.08 | 1.37 | 1.45 | (0.08) | (0.94) | (1.02) | 8.44 | 20.59% | 75,206 | 0.84% | 0.70% | 1.09% |
| 9/30/16 | 8.02 | 0.07 | 0.86 | 0.93 | (0.08) | (0.86) | (0.94) | 8.01 | 12.02% | 56,680 | 0.82% | 0.70% | 0.86% |
| 9/30/15 ⁱ | 8.18 | 0.05 | (0.18) | (0.13) | - | (0.03) | (0.03) | 8.02 | (1.60%) ^b | 75,265 | 0.81% ^a | 0.70% ^a | 0.80% ^a |
| 12/31/14 ^h | 8.42 | 0.07 | 0.78 | 0.85 | (0.09) | (1.00) | (1.09) | 8.18 | 10.42% ^b | 86,370 | 0.75% ^a | 0.70% ^a | 1.03% ^a |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$9.83 | \$0.02 | \$(0.01) ^{aa} | \$ 0.01 | \$(0.04) | \$(1.75) | \$(1.79) | \$8.05 | 4.13% | \$31,014 | 0.92% | 0.88% | 0.21% |
| 9/30/18 | 8.46 | 0.04 | 1.95 | 1.99 | (0.06) | (0.56) | (0.62) | 9.83 | 24.80% | 32,604 | 0.88% | 0.80% | 0.45% |
| 9/30/17 | 8.02 | 0.08 | 1.38 | 1.46 | (0.08) | (0.94) | (1.02) | 8.46 | 20.56% | 26,201 | 0.94% | 0.80% | 0.99% |
| 9/30/16 | 8.03 | 0.06 | 0.86 | 0.92 | (0.07) | (0.86) | (0.93) | 8.02 | 11.88% | 23,154 | 0.92% | 0.80% | 0.76% |
| 9/30/15 ⁱ | 8.20 | 0.04 | (0.18) | (0.14) | - | (0.03) | (0.03) | 8.03 | (1.71%) ^b | 20,054 | 0.91% ^a | 0.80% ^a | 0.71% ^a |
| 12/31/14 | 8.35 | 0.06 | 0.86 | 0.92 | (0.07) | (1.00) | (1.07) | 8.20 | 11.38% | 21,110 | 0.87% | 0.80% | 0.75% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$9.62 | \$0.01 | \$(0.02) ^{aa} | \$(0.01) | \$(0.03) | \$(1.75) | \$(1.78) | \$7.83 | 3.97% | \$ 9,805 | 1.02% | 0.98% | 0.11% |
| 9/30/18 | 8.29 | 0.03 | 1.92 | 1.95 | (0.06) | (0.56) | (0.62) | 9.62 | 24.72% | 9,630 | 0.98% | 0.90% | 0.35% |
| 9/30/17 | 7.88 | 0.07 | 1.35 | 1.42 | (0.07) | (0.94) | (1.01) | 8.29 | 20.41% | 8,668 | 1.04% | 0.90% | 0.88% |
| 9/30/16 | 7.91 | 0.05 | 0.84 | 0.89 | (0.06) | (0.86) | (0.92) | 7.88 | 11.69% | 6,561 | 1.02% | 0.90% | 0.67% |
| 9/30/15 ⁱ | 8.07 | 0.04 | (0.17) | (0.13) | - | (0.03) | (0.03) | 7.91 | (1.62%) ^b | 5,627 | 1.01% ^a | 0.90% ^a | 0.62% ^a |
| 12/31/14 | 8.25 | 0.06 | 0.83 | 0.89 | (0.07) | (1.00) | (1.07) | 8.07 | 11.13% | 6,829 | 0.94% | 0.90% | 0.76% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$9.38 | \$ 0.00 ^d | \$(0.02) ^{aa} | \$(0.02) | \$(0.02) | \$(1.75) | \$(1.77) | \$7.59 | 3.97% | \$14,315 | 1.12% | 1.09% | 0.01% |
| 9/30/18 | 8.10 | 0.02 | 1.87 | 1.89 | (0.05) | (0.56) | (0.61) | 9.38 | 24.56% | 12,307 | 1.08% | 1.00% | 0.25% |
| 9/30/17 | 7.72 | 0.06 | 1.32 | 1.38 | (0.06) | (0.94) | (1.00) | 8.10 | 20.31% | 10,889 | 1.14% | 1.00% | 0.77% |
| 9/30/16 | 7.77 | 0.04 | 0.83 | 0.87 | (0.06) | (0.86) | (0.92) | 7.72 | 11.54% | 10,205 | 1.12% | 1.00% | 0.56% |
| 9/30/15 ⁱ | 7.93 | 0.03 | (0.16) | (0.13) | - | (0.03) | (0.03) | 7.77 | (1.65%) ^b | 10,157 | 1.11% ^a | 1.00% ^a | 0.50% ^a |
| 12/31/14 | 8.13 | 0.05 | 0.81 | 0.86 | (0.06) | (1.00) | (1.06) | 7.93 | 10.93% | 9,696 | 1.06% | 1.01% | 0.64% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$8.95 | \$(0.02) | \$(0.03) ^{aa} | \$(0.05) | \$ - | \$(1.75) | \$(1.75) | \$7.15 | 3.67% | \$14,997 | 1.37% | 1.33% | (0.23%) |
| 9/30/18 | 7.75 | 0.00 ^d | 1.79 | 1.79 | (0.03) | (0.56) | (0.59) | 8.95 | 24.31% | 18,868 | 1.33% | 1.25% | 0.00% ^c |
| 9/30/17 | 7.43 | 0.04 | 1.26 | 1.30 | (0.04) | (0.94) | (0.98) | 7.75 | 19.91% | 15,687 | 1.39% | 1.25% | 0.53% |
| 9/30/16 | 7.50 | 0.02 | 0.80 | 0.82 | (0.03) | (0.86) | (0.89) | 7.43 | 11.30% | 16,594 | 1.37% | 1.25% | 0.31% |
| 9/30/15 ⁱ | 7.68 | 0.02 | (0.17) | (0.15) | - | (0.03) | (0.03) | 7.50 | (1.96%) ^b | 17,774 | 1.36% ^a | 1.25% ^a | 0.26% ^a |
| 12/31/14 | 7.89 | 0.03 | 0.80 | 0.83 | (0.04) | (1.00) | (1.04) | 7.68 | 10.86% | 24,193 | 1.31% | 1.26% | 0.38% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$8.86 | \$(0.01) | \$(0.03) ^{aa} | \$(0.04) | \$(0.01) | \$(1.75) | \$(1.76) | \$7.06 | 3.87% | \$ 1,217 | 1.27% | 1.22% | (0.08%) |
| 9/30/18 | 7.68 | 0.01 | 1.77 | 1.78 | (0.04) | (0.56) | (0.60) | 8.86 | 24.48% | 2,757 | 1.23% | 1.15% | 0.10% |
| 9/30/17 | 7.39 | 0.05 | 1.25 | 1.30 | (0.07) | (0.94) | (1.01) | 7.68 | 20.10% | 2,908 | 1.29% | 1.15% | 0.63% |
| 9/30/16 | 7.49 | 0.03 | 0.79 | 0.82 | (0.06) | (0.86) | (0.92) | 7.39 | 11.33% | 720 | 1.27% | 1.15% | 0.42% |
| 9/30/15 ⁱ | 7.66 | 0.02 | (0.16) | (0.14) | - | (0.03) | (0.03) | 7.49 | (1.84%) ^b | 193 | 1.26% ^a | 1.15% ^a | 0.32% ^a |
| 12/31/14 ^h | 7.95 | 0.04 | 0.73 | 0.77 | (0.06) | (1.00) | (1.06) | 7.66 | 10.03% ^b | 110 | 1.20% ^a | 1.15% ^a | 0.59% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$8.34 | \$(0.03) | \$(0.05) ^{aa} | \$(0.08) | \$ - | \$(1.75) | \$(1.75) | \$6.51 | 3.54% | \$ 2,794 | 1.52% | 1.48% | (0.40%) |
| 9/30/18 | 7.27 | (0.01) | 1.67 | 1.66 | (0.03) | (0.56) | (0.59) | 8.34 | 24.08% | 3,307 | 1.48% ^a | 1.40% | (0.15%) |
| 9/30/17 | 7.04 | 0.03 | 1.19 | 1.22 | (0.05) | (0.94) | (0.99) | 7.27 | 19.93% | 2,301 | 1.54% | 1.40% | 0.39% |
| 9/30/16 | 7.19 | 0.01 | 0.76 | 0.77 | (0.06) | (0.86) | (0.92) | 7.04 | 11.15% | 1,343 | 1.52% | 1.40% | 0.20% |
| 9/30/15 ⁱ | 7.38 | (0.00) ^d | (0.16) | (0.16) | - | (0.03) | (0.03) | 7.19 | (2.18%) ^b | 100 | 1.51% ^a | 1.40% ^a | (0.06%) ^a |
| 12/31/14 | 7.64 | 0.02 | 0.76 | 0.78 | (0.04) | (1.00) | (1.04) | 7.38 | 10.51% | 3 | 1.49% | 1.44% | 0.24% |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended | Year ended |
|-------------------------|-------------------------|------|------|------|---------------------------------|-------------------|
| | 2019 | 2018 | 2017 | 2016 | September 30, 2015 ^b | December 31, 2014 |
| | 123% | 47% | 52% | 49% | 37% | 59% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

e Amount is less than 0.005%.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

aa The amount shown for a share outstanding does not correspond with the aggregate net realized and unrealized gain (loss) for the period due to the timing of purchases and redemptions of Fund shares in relation to the fluctuating market values of the Fund.

MASSMUTUAL SELECT BLUE CHIP GROWTH FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | Ratios / Supplemental Data | | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{e,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$23.37 | \$ 0.07 | \$0.59 | \$0.66 | \$(0.11) | \$(1.19) | \$(1.30) | \$22.73 | 3.82% | \$1,947,695 | 0.64% | N/A | 0.34% |
| 9/30/18 | 19.78 | 0.06 | 4.45 | 4.51 | (0.11) | (0.81) | (0.92) | 23.37 | 23.49% | 1,799,107 | 0.64% | N/A | 0.30% |
| 9/30/17 | 16.66 | 0.07 | 3.81 | 3.88 | (0.10) | (0.66) | (0.76) | 19.78 | 24.41% | 1,081,072 | 0.65% | N/A | 0.38% |
| 9/30/16 | 17.24 | 0.05 | 2.33 | 2.38 | (0.10) | (2.86) | (2.96) | 16.66 | 14.57% | 511,543 | 0.66% | N/A | 0.34% |
| 9/30/15 ⁱ | 17.24 | 0.03 | 0.13 | 0.16 | - | (0.16) | (0.16) | 17.24 | 0.87% ^b | 317,029 | 0.67% ^a | N/A | 0.24% ^a |
| 12/31/14 ^h | 16.75 | 0.01 | 1.73 | 1.74 | - | (1.25) | (1.25) | 17.24 | 10.55% ^b | 268,755 | 0.66% ^a | N/A | 0.05% ^a |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$23.32 | \$ 0.05 | \$0.59 | \$0.64 | \$(0.08) | \$(1.19) | \$(1.27) | \$22.69 | 3.75% | \$ 456,222 | 0.74% | N/A | 0.24% |
| 9/30/18 | 19.75 | 0.04 | 4.43 | 4.47 | (0.09) | (0.81) | (0.90) | 23.32 | 23.31% | 503,294 | 0.74% | N/A | 0.19% |
| 9/30/17 | 16.63 | 0.05 | 3.81 | 3.86 | (0.08) | (0.66) | (0.74) | 19.75 | 24.33% | 443,867 | 0.75% | N/A | 0.28% |
| 9/30/16 | 17.22 | 0.04 | 2.31 | 2.35 | (0.08) | (2.86) | (2.94) | 16.63 | 14.38% | 367,547 | 0.76% | N/A | 0.23% |
| 9/30/15 ⁱ | 17.23 | 0.02 | 0.13 | 0.15 | - | (0.16) | (0.16) | 17.22 | 0.81% ^b | 491,897 | 0.77% ^a | N/A | 0.14% ^a |
| 12/31/14 | 16.94 | (0.01) | 1.55 | 1.54 | - | (1.25) | (1.25) | 17.23 | 9.25% | 560,395 | 0.76% | 0.76% ^a | (0.05%) |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$23.10 | \$ 0.03 | \$0.58 | \$0.61 | \$(0.05) | \$(1.19) | \$(1.24) | \$22.47 | 3.61% | \$ 114,021 | 0.84% | N/A | 0.14% |
| 9/30/18 | 19.57 | 0.02 | 4.39 | 4.41 | (0.07) | (0.81) | (0.88) | 23.10 | 23.21% | 122,916 | 0.84% | N/A | 0.09% |
| 9/30/17 | 16.49 | 0.03 | 3.77 | 3.80 | (0.06) | (0.66) | (0.72) | 19.57 | 24.14% | 133,658 | 0.85% | N/A | 0.18% |
| 9/30/16 | 17.09 | 0.02 | 2.31 | 2.33 | (0.07) | (2.86) | (2.93) | 16.49 | 14.37% | 212,993 | 0.86% | N/A | 0.14% |
| 9/30/15 ⁱ | 17.12 | 0.01 | 0.12 | 0.13 | - | (0.16) | (0.16) | 17.09 | 0.70% ^b | 197,891 | 0.87% ^a | N/A | 0.04% ^a |
| 12/31/14 | 16.85 | (0.02) | 1.54 | 1.52 | - | (1.25) | (1.25) | 17.12 | 9.18% | 158,076 | 0.85% | 0.85% ^a | (0.14%) |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$22.78 | \$ 0.01 | \$0.57 | \$0.58 | \$(0.04) | \$(1.19) | \$(1.23) | \$22.13 | 3.51% | \$ 312,815 | 0.94% | N/A | 0.04% |
| 9/30/18 | 19.31 | (0.00) ^d | 4.33 | 4.33 | (0.05) | (0.81) | (0.86) | 22.78 | 23.08% | 315,952 | 0.94% | N/A | (0.01)% |
| 9/30/17 | 16.28 | 0.01 | 3.73 | 3.74 | (0.05) | (0.66) | (0.71) | 19.31 | 24.05% | 257,730 | 0.95% | N/A | 0.08% |
| 9/30/16 | 16.90 | 0.01 | 2.27 | 2.28 | (0.04) | (2.86) | (2.90) | 16.28 | 14.23% | 232,088 | 0.96% | N/A | 0.04% |
| 9/30/15 ⁱ | 16.94 | (0.01) | 0.13 | 0.12 | - | (0.16) | (0.16) | 16.90 | 0.64% ^b | 226,193 | 0.97% ^a | N/A | (0.05%) ^a |
| 12/31/14 | 16.71 | (0.04) | 1.52 | 1.48 | - | (1.25) | (1.25) | 16.94 | 9.01% | 262,694 | 0.96% | 0.96% ^a | (0.26%) |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$21.82 | \$(0.04) | \$0.54 | \$0.50 | \$ - | \$(1.19) | \$(1.19) | \$21.13 | 3.27% | \$ 181,457 | 1.19% | N/A | (0.21)% |
| 9/30/18 | 18.53 | (0.05) | 4.15 | 4.10 | - | (0.81) | (0.81) | 21.82 | 22.76% | 198,284 | 1.19% ^a | N/A | (0.26)% |
| 9/30/17 | 15.65 | (0.03) | 3.58 | 3.55 | (0.01) | (0.66) | (0.67) | 18.53 | 23.73% | 162,073 | 1.20% | N/A | (0.16)% |
| 9/30/16 | 16.35 | (0.03) | 2.20 | 2.17 | (0.01) | (2.86) | (2.87) | 15.65 | 13.93% | 161,079 | 1.21% | N/A | (0.22)% |
| 9/30/15 ⁱ | 16.42 | (0.04) | 0.13 | 0.09 | - | (0.16) | (0.16) | 16.35 | 0.48% ^b | 150,749 | 1.22% ^a | N/A | (0.30%) ^a |
| 12/31/14 | 16.27 | (0.08) | 1.48 | 1.40 | - | (1.25) | (1.25) | 16.42 | 8.77% | 157,200 | 1.21% | 1.20% | (0.50%) |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$21.78 | \$(0.02) | \$0.54 | \$0.52 | \$(0.02) | \$(1.19) | \$(1.21) | \$21.09 | 3.38% | \$ 106,445 | 1.09% | N/A | (0.11)% |
| 9/30/18 | 18.51 | (0.03) | 4.15 | 4.12 | (0.04) | (0.81) | (0.85) | 21.78 | 22.92% | 107,811 | 1.09% | N/A | (0.16)% |
| 9/30/17 | 15.66 | (0.01) | 3.57 | 3.56 | (0.05) | (0.66) | (0.71) | 18.51 | 23.81% | 67,035 | 1.10% | N/A | (0.07)% |
| 9/30/16 | 16.38 | (0.02) | 2.21 | 2.19 | (0.05) | (2.86) | (2.91) | 15.66 | 14.08% | 44,451 | 1.11% | N/A | (0.11)% |
| 9/30/15 ⁱ | 16.44 | (0.03) | 0.13 | 0.10 | - | (0.16) | (0.16) | 16.38 | 0.54% ^b | 19,816 | 1.12% ^a | N/A | (0.23%) ^a |
| 12/31/14 ^h | 16.08 | (0.06) | 1.67 | 1.61 | - | (1.25) | (1.25) | 16.44 | 10.18% ^b | 776 | 1.11% ^a | N/A | (0.44%) ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$20.41 | \$(0.07) | \$0.49 | \$0.42 | \$ - | \$(1.19) | \$(1.19) | \$19.64 | 3.10% | \$ 61,141 | 1.34% | N/A | (0.36)% |
| 9/30/18 | 17.41 | (0.08) | 3.90 | 3.82 | (0.01) | (0.81) | (0.82) | 20.41 | 22.57% | 60,560 | 1.34% | N/A | (0.41)% |
| 9/30/17 | 14.78 | (0.05) | 3.37 | 3.32 | (0.03) | (0.66) | (0.69) | 17.41 | 23.59% | 40,705 | 1.35% | N/A | (0.32)% |
| 9/30/16 | 15.65 | (0.05) | 2.09 | 2.04 | (0.05) | (2.86) | (2.91) | 14.78 | 13.77% | 22,853 | 1.36% | N/A | (0.36)% |
| 9/30/15 ⁱ | 15.75 | (0.06) | 0.12 | 0.06 | - | (0.16) | (0.16) | 15.65 | 0.38% ^b | 3,937 | 1.37% ^a | N/A | (0.47%) ^a |
| 12/31/14 | 15.68 | (0.11) | 1.43 | 1.32 | - | (1.25) | (1.25) | 15.75 | 8.52% | 900 | 1.39% | 1.39% ^a | (0.70%) |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 25% | 17% | 27% | 30% | 48% | 34% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

n Expenses incurred during the period fell under the expense cap.

MASSMUTUAL SELECT GROWTH OPPORTUNITIES FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | |
|-----------------------------|--|---|--|--|------------------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net investment income (loss) to average daily net assets |
| | | | | | | | | | | | | |
| Class I | | | | | | | | | | | | |
| 9/30/19 | \$13.19 | \$(0.03) | \$(0.29) ^{aa} | \$(0.32) | \$(2.66) | \$(2.66) | \$10.21 | 1.63% | \$168,427 | 0.76% | N/A | (0.24%) |
| 9/30/18 | 11.97 | (0.04) | 2.81 | 2.77 | (1.55) | (1.55) | 13.19 | 25.79% | 390,266 | 0.74% | N/A | (0.30%) |
| 9/30/17 | 10.82 | (0.02) | 1.95 | 1.93 | (0.78) | (0.78) | 11.97 | 19.63% | 378,731 | 0.74% | N/A | (0.18%) |
| 9/30/16 | 10.98 | (0.01) | 1.07 | 1.06 | (1.22) | (1.22) | 10.82 | 9.61% | 352,915 | 0.74% | N/A | (0.10%) |
| 9/30/15 ⁱ | 11.90 | 0.00 ^d | (0.64) | (0.64) | (0.28) | (0.28) | 10.98 | (5.48%) ^b | 352,117 | 0.74% ^a | N/A | 0.05% ^a |
| 12/31/14 | 11.43 | 0.01 | 1.20 | 1.21 | (0.74) | (0.74) | 11.90 | 10.75% | 312,757 | 0.75% | 0.72% | 0.10% |
| Class R5 | | | | | | | | | | | | |
| 9/30/19 | \$13.04 | \$(0.04) | \$(0.29) ^{aa} | \$(0.33) | \$(2.66) | \$(2.66) | \$10.05 | 1.56% | \$127,577 | 0.86% | N/A | (0.36%) |
| 9/30/18 | 11.87 | (0.05) | 2.77 | 2.72 | (1.55) | (1.55) | 13.04 | 25.58% | 153,460 | 0.84% | N/A | (0.40%) |
| 9/30/17 | 10.74 | (0.03) | 1.94 | 1.91 | (0.78) | (0.78) | 11.87 | 19.59% | 185,795 | 0.84% | N/A | (0.28%) |
| 9/30/16 | 10.92 | (0.01) | 1.05 | 1.04 | (1.22) | (1.22) | 10.74 | 9.47% | 192,509 | 0.84% | N/A | (0.14%) |
| 9/30/15 ⁱ | 11.85 | (0.00) ^d | (0.65) | (0.65) | (0.28) | (0.28) | 10.92 | (5.58%) ^b | 220,721 | 0.84% ^a | N/A | (0.03%) ^a |
| 12/31/14 | 11.39 | 0.00 ^d | 1.20 | 1.20 | (0.74) | (0.74) | 11.85 | 10.70% | 272,981 | 0.87% | 0.83% | 0.04% |
| Service Class | | | | | | | | | | | | |
| 9/30/19 | \$12.67 | \$(0.05) | \$(0.30) ^{aa} | \$(0.35) | \$(2.66) | \$(2.66) | \$ 9.66 | 1.40% | \$ 73,129 | 0.96% | N/A | (0.47%) |
| 9/30/18 | 11.58 | (0.06) | 2.70 | 2.64 | (1.55) | (1.55) | 12.67 | 25.52% | 68,041 | 0.94% | N/A | (0.50%) |
| 9/30/17 | 10.50 | (0.04) | 1.90 | 1.86 | (0.78) | (0.78) | 11.58 | 19.55% | 74,058 | 0.94% | N/A | (0.38%) |
| 9/30/16 | 10.72 | (0.03) | 1.03 | 1.00 | (1.22) | (1.22) | 10.50 | 9.26% | 149,667 | 0.94% | N/A | (0.31%) |
| 9/30/15 ⁱ | 11.64 | (0.01) | (0.63) | (0.64) | (0.28) | (0.28) | 10.72 | (5.60%) ^b | 149,543 | 0.94% ^a | N/A | (0.15%) ^a |
| 12/31/14 | 11.22 | (0.01) | 1.17 | 1.16 | (0.74) | (0.74) | 11.64 | 10.51% | 158,891 | 0.96% | 0.93% | (0.08%) |
| Administrative Class | | | | | | | | | | | | |
| 9/30/19 | \$12.19 | \$(0.05) | \$(0.31) ^{aa} | \$(0.36) | \$(2.66) | \$(2.66) | \$ 9.17 | 1.38% | \$ 48,666 | 1.06% | N/A | (0.56%) |
| 9/30/18 | 11.21 | (0.07) | 2.60 | 2.53 | (1.55) | (1.55) | 12.19 | 25.36% | 56,625 | 1.04% | N/A | (0.60%) |
| 9/30/17 | 10.21 | (0.05) | 1.83 | 1.78 | (0.78) | (0.78) | 11.21 | 19.31% | 89,663 | 1.04% | N/A | (0.48%) |
| 9/30/16 | 10.46 | (0.04) | 1.01 | 0.97 | (1.22) | (1.22) | 10.21 | 9.21% | 90,616 | 1.04% | N/A | (0.43%) |
| 9/30/15 ⁱ | 11.37 | (0.02) | (0.61) | (0.63) | (0.28) | (0.28) | 10.46 | (5.64%) ^b | 107,017 | 1.04% ^a | N/A | (0.26%) ^a |
| 12/31/14 | 10.98 | (0.02) | 1.15 | 1.13 | (0.74) | (0.74) | 11.37 | 10.46% | 146,975 | 1.07% | 1.04% | (0.19%) |
| Class A | | | | | | | | | | | | |
| 9/30/19 | \$11.30 | \$(0.07) | \$(0.33) ^{aa} | \$(0.40) | \$(2.66) | \$(2.66) | \$ 8.24 | 1.06% | \$ 36,629 | 1.31% | N/A | (0.81%) |
| 9/30/18 | 10.52 | (0.09) | 2.42 | 2.33 | (1.55) | (1.55) | 11.30 | 25.08% | 49,746 | 1.29% | N/A | (0.85%) |
| 9/30/17 | 9.65 | (0.07) | 1.72 | 1.65 | (0.78) | (0.78) | 10.52 | 19.07% | 76,756 | 1.29% | N/A | (0.73%) |
| 9/30/16 | 9.97 | (0.07) | 0.97 | 0.90 | (1.22) | (1.22) | 9.65 | 8.93% | 103,902 | 1.29% | N/A | (0.72%) |
| 9/30/15 ⁱ | 10.88 | (0.04) | (0.59) | (0.63) | (0.28) | (0.28) | 9.97 | (5.90%) ^b | 140,896 | 1.29% ^a | N/A | (0.49%) ^a |
| 12/31/14 | 10.56 | (0.05) | 1.11 | 1.06 | (0.74) | (0.74) | 10.88 | 10.21% | 178,641 | 1.33% | 1.29% | (0.44%) |
| Class R4 | | | | | | | | | | | | |
| 9/30/19 | \$11.37 | \$(0.06) | \$(0.33) ^{aa} | \$(0.39) | \$(2.66) | \$(2.66) | \$ 8.32 | 1.17% | \$ 9,775 | 1.21% | N/A | (0.71%) |
| 9/30/18 | 10.57 | (0.08) | 2.43 | 2.35 | (1.55) | (1.55) | 11.37 | 25.17% | 16,920 | 1.19% | N/A | (0.75%) |
| 9/30/17 | 9.68 | (0.06) | 1.73 | 1.67 | (0.78) | (0.78) | 10.57 | 19.22% | 9,200 | 1.19% | N/A | (0.63%) |
| 9/30/16 | 9.99 | (0.05) | 0.96 | 0.91 | (1.22) | (1.22) | 9.68 | 9.02% | 6,861 | 1.19% | N/A | (0.58%) |
| 9/30/15 ⁱ | 10.88 | (0.04) | (0.57) | (0.61) | (0.28) | (0.28) | 9.99 | (5.71%) ^b | 2,794 | 1.19% ^a | N/A | (0.46%) ^a |
| 12/31/14 ^h | 10.57 | (0.03) | 1.08 | 1.05 | (0.74) | (0.74) | 10.88 | 10.11% ^b | 110 | 1.18% ^a | N/A | (0.40%) ^a |
| Class R3 | | | | | | | | | | | | |
| 9/30/19 | \$10.41 | \$(0.07) | \$(0.35) ^{aa} | \$(0.42) | \$(2.66) | \$(2.66) | \$ 7.33 | 0.95% | \$ 925 | 1.46% | N/A | (0.97%) |
| 9/30/18 | 9.82 | (0.10) | 2.24 | 2.14 | (1.55) | (1.55) | 10.41 | 24.93% | 976 | 1.44% | N/A | (1.00%) |
| 9/30/17 | 9.08 | (0.08) | 1.60 | 1.52 | (0.78) | (0.78) | 9.82 | 18.82% | 1,035 | 1.44% | N/A | (0.88%) |
| 9/30/16 | 9.46 | (0.07) | 0.91 | 0.84 | (1.22) | (1.22) | 9.08 | 8.77% | 859 | 1.44% | N/A | (0.81%) |
| 9/30/15 ⁱ | 10.34 | (0.05) | (0.55) | (0.60) | (0.28) | (0.28) | 9.46 | (5.92%) ^b | 751 | 1.44% ^a | N/A | (0.70%) ^a |
| 12/31/14 | 10.09 | (0.07) | 1.06 | 0.99 | (0.74) | (0.74) | 10.34 | 9.99% | 127 | 1.45% | 1.44% | (0.65%) |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 33% | 28% | 19% | 22% | 28% | 25% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

aa The amount shown for a share outstanding does not correspond with the aggregate net realized and unrealized gain (loss) for the period due to the timing of purchases and redemptions of Fund shares in relation to the fluctuating market values of the Fund.

MASSMUTUAL SELECT MID-CAP VALUE FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$14.05 | \$0.21 | \$(0.11) ^{aa} | \$ 0.10 | \$(0.16) | \$(1.57) | \$(1.73) | \$12.42 | 2.92% | \$ 93,413 | 1.00% | 0.80% | 1.73% |
| 9/30/18 | 15.20 | 0.18 | 0.99 | 1.17 | (0.21) | (2.11) | (2.32) | 14.05 | 8.30% | 91,004 | 0.98% | 0.80% | 1.28% |
| 9/30/17 | 13.59 | 0.21 | 1.87 | 2.08 | (0.21) | (0.26) | (0.47) | 15.20 | 15.51% | 81,793 | 0.92% | 0.80% | 1.46% |
| 9/30/16 | 13.71 | 0.15 | 1.93 | 2.08 | (0.20) | (2.00) | (2.20) | 13.59 | 17.08% | 106,786 | 0.94% | 0.80% | 1.19% |
| 9/30/15 ⁱ | 15.25 | 0.11 | (1.49) | (1.38) | - | (0.16) | (0.16) | 13.71 | (9.12%) ^b | 128,581 | 0.84% ^a | 0.80% ^a | 1.00% ^a |
| 12/31/14 | 14.68 | 0.21 | 0.77 | 0.98 | (0.18) | (0.23) | (0.41) | 15.25 | 6.75% | 132,365 | 0.80% | 0.79% | 1.37% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$14.15 | \$0.20 | \$(0.10) ^{aa} | \$ 0.10 | \$(0.13) | \$(1.57) | \$(1.70) | \$12.55 | 2.78% | \$ 1,332 | 1.10% | 0.90% | 1.68% |
| 9/30/18 | 15.28 | 0.16 | 1.02 | 1.18 | (0.20) | (2.11) | (2.31) | 14.15 | 8.26% | 949 | 1.08% | 0.90% | 1.10% |
| 9/30/17 | 13.67 | 0.20 | 1.87 | 2.07 | (0.20) | (0.26) | (0.46) | 15.28 | 15.32% | 7,290 | 1.02% | 0.90% | 1.34% |
| 9/30/16 | 13.75 | 0.15 | 1.93 | 2.08 | (0.16) | (2.00) | (2.16) | 13.67 | 17.03% | 7,072 | 1.04% | 0.90% | 1.12% |
| 9/30/15 ⁱ | 15.32 | 0.09 | (1.50) | (1.41) | - | (0.16) | (0.16) | 13.75 | (9.22%) ^b | 8,406 | 0.94% ^a | 0.90% ^a | 0.83% ^a |
| 12/31/14 | 14.71 | 0.12 | 0.85 | 0.97 | (0.13) | (0.23) | (0.36) | 15.32 | 6.59% | 18,333 | 0.88% | 0.88% ^k | 0.79% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$14.09 | \$0.18 | \$(0.10) ^{aa} | \$ 0.08 | \$(0.14) | \$(1.57) | \$(1.71) | \$12.46 | 2.73% | \$ 215 | 1.20% | 1.00% | 1.53% |
| 9/30/18 | 15.24 | 0.17 | 0.97 | 1.14 | (0.18) | (2.11) | (2.29) | 14.09 | 8.03% | 255 | 1.18% | 1.00% | 1.14% |
| 9/30/17 | 13.62 | 0.19 | 1.87 | 2.06 | (0.18) | (0.26) | (0.44) | 15.24 | 15.29% | 1,998 | 1.12% | 1.00% | 1.29% |
| 9/30/16 | 13.72 | 0.12 | 1.94 | 2.06 | (0.16) | (2.00) | (2.16) | 13.62 | 16.87% | 2,158 | 1.14% | 1.00% | 0.95% |
| 9/30/15 ⁱ | 15.29 | 0.08 | (1.49) | (1.41) | - | (0.16) | (0.16) | 13.72 | (9.30%) ^b | 2,689 | 1.04% ^a | 1.00% ^a | 0.72% ^a |
| 12/31/14 | 14.71 | 0.15 | 0.81 | 0.96 | (0.15) | (0.23) | (0.38) | 15.29 | 6.57% | 5,022 | 0.99% | 0.99% ^k | 0.96% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$14.32 | \$0.18 | \$(0.10) ^{aa} | \$ 0.08 | \$(0.12) | \$(1.57) | \$(1.69) | \$12.71 | 2.62% | \$ 889 | 1.30% | 1.10% | 1.44% |
| 9/30/18 | 15.43 | 0.14 | 1.03 | 1.17 | (0.17) | (2.11) | (2.28) | 14.32 | 8.08% | 888 | 1.28% | 1.10% | 0.97% |
| 9/30/17 | 13.81 | 0.17 | 1.90 | 2.07 | (0.19) | (0.26) | (0.45) | 15.43 | 15.15% | 811 | 1.22% | 1.10% | 1.14% |
| 9/30/16 | 13.81 | 0.13 | 1.94 | 2.07 | (0.07) | (2.00) | (2.07) | 13.81 | 16.74% | 656 | 1.24% | 1.10% | 0.97% |
| 9/30/15 ⁱ | 15.40 | 0.06 | (1.49) | (1.43) | - | (0.16) | (0.16) | 13.81 | (9.36%) ^b | 270 | 1.14% ^a | 1.10% ^a | 0.56% ^a |
| 12/31/14 | 14.81 | 0.10 | 0.84 | 0.94 | (0.12) | (0.23) | (0.35) | 15.40 | 6.39% | 1,147 | 1.10% | 1.10% ^k | 0.69% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$14.07 | \$0.14 | \$(0.09) ^{aa} | \$ 0.05 | \$(0.08) | \$(1.57) | \$(1.65) | \$12.47 | 2.41% | \$ 2,788 | 1.55% | 1.35% | 1.18% |
| 9/30/18 | 15.21 | 0.10 | 1.00 | 1.10 | (0.13) | (2.11) | (2.24) | 14.07 | 7.73% | 2,464 | 1.53% | 1.35% | 0.73% |
| 9/30/17 | 13.61 | 0.13 | 1.87 | 2.00 | (0.14) | (0.26) | (0.40) | 15.21 | 14.83% | 2,178 | 1.47% | 1.35% | 0.90% |
| 9/30/16 | 13.67 | 0.08 | 1.93 | 2.01 | (0.07) | (2.00) | (2.07) | 13.61 | 16.46% | 1,755 | 1.49% | 1.35% | 0.62% |
| 9/30/15 ⁱ | 15.27 | 0.04 | (1.48) | (1.44) | - | (0.16) | (0.16) | 13.67 | (9.51%) ^b | 2,287 | 1.39% ^a | 1.35% ^a | 0.36% ^a |
| 12/31/14 | 14.69 | 0.09 | 0.81 | 0.90 | (0.09) | (0.23) | (0.32) | 15.27 | 6.18% | 5,759 | 1.35% | 1.35% ^k | 0.58% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$13.97 | \$0.16 | \$(0.11) ^{aa} | \$ 0.05 | \$(0.14) | \$(1.57) | \$(1.71) | \$12.31 | 2.48% | \$ 1,050 | 1.45% | 1.25% | 1.36% |
| 9/30/18 | 15.11 | 0.13 | 0.99 | 1.12 | (0.15) | (2.11) | (2.26) | 13.97 | 7.89% | 307 | 1.43% | 1.25% | 0.90% |
| 9/30/17 | 13.54 | 0.14 | 1.85 | 1.99 | (0.16) | (0.26) | (0.42) | 15.11 | 14.90% | 130 | 1.37% | 1.25% | 0.98% |
| 9/30/16 | 13.65 | 0.10 | 1.92 | 2.02 | (0.13) | (2.00) | (2.13) | 13.54 | 16.62% | 94 | 1.39% | 1.25% | 0.75% |
| 9/30/15 ⁱ | 15.24 | 0.06 | (1.49) | (1.43) | - | (0.16) | (0.16) | 13.65 | (9.46%) ^b | 93 | 1.29% ^a | 1.25% ^a | 0.54% ^a |
| 12/31/14 ^h | 15.01 | 0.09 | 0.50 | 0.59 | (0.13) | (0.23) | (0.36) | 15.24 | 3.98% ^b | 104 | 1.25% ^a | 1.25% ^{a,n} | 0.79% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$13.90 | \$0.13 | \$(0.11) ^{aa} | \$ 0.02 | \$(0.07) | \$(1.57) | \$(1.64) | \$12.28 | 2.19% | \$ 503 | 1.70% | 1.50% | 1.06% |
| 9/30/18 | 15.06 | 0.08 | 1.00 | 1.08 | (0.13) | (2.11) | (2.24) | 13.90 | 7.66% | 383 | 1.68% | 1.50% | 0.57% |
| 9/30/17 | 13.48 | 0.12 | 1.84 | 1.96 | (0.12) | (0.26) | (0.38) | 15.06 | 14.70% | 333 | 1.62% | 1.50% | 0.80% |
| 9/30/16 | 13.60 | 0.07 | 1.90 | 1.97 | (0.09) | (2.00) | (2.09) | 13.48 | 16.25% | 102 | 1.64% | 1.50% | 0.52% |
| 9/30/15 ⁱ | 15.21 | 0.03 | (1.48) | (1.45) | - | (0.16) | (0.16) | 13.60 | (9.61%) ^b | 89 | 1.54% ^a | 1.50% ^a | 0.28% ^a |
| 12/31/14 | 14.64 | 0.06 | 0.81 | 0.87 | (0.07) | (0.23) | (0.30) | 15.21 | 5.99% | 106 | 1.53% | 1.53% ^k | 0.42% |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 54% | 98% | 88% | 96% | 105% | 112% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

k Amount waived had no impact on the ratio of expenses to average daily net assets.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

n Expenses incurred during the period fell under the expense cap.

aa The amount shown for a share outstanding does not correspond with the aggregate net realized and unrealized gain (loss) for the period due to the timing of purchases and redemptions of Fund shares in relation to the fluctuating market values of the Fund.

MASSMUTUAL SELECT SMALL CAP VALUE EQUITY FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{k,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^l | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$18.11 | \$0.05 | \$(2.20) | \$(2.15) | \$(0.06) | \$(4.73) | \$(4.79) | \$11.17 | (8.20)% | \$ 47,894 | 0.97% | 0.93% | 0.44% |
| 9/30/18 | 18.07 | 0.06 | 2.07 | 2.13 | (0.09) | (2.00) | (2.09) | 18.11 | 12.92% | 51,328 | 0.89% | 0.80% | 0.32% |
| 9/30/17 | 16.19 | 0.09 | 2.76 | 2.85 | (0.08) | (0.89) | (0.97) | 18.07 | 17.90% | 113,321 | 0.86% | 0.80% | 0.55% |
| 9/30/16 | 14.62 | 0.08 | 2.08 | 2.16 | (0.09) | (0.50) | (0.59) | 16.19 | 15.20% | 122,745 | 0.87% | 0.80% | 0.55% |
| 9/30/15 ⁱ | 15.76 | 0.07 | (1.21) | (1.14) | (0.00) ^d | - | (0.00) ^d | 14.62 | (7.23)% ^b | 65,868 | 0.87% ^a | 0.80% ^a | 0.62% ^a |
| 12/31/14 ^h | 15.09 | 0.09 | 0.69 | 0.78 | (0.11) | - | (0.11) | 15.76 | 5.19% ^b | 60,528 | 0.83% ^a | 0.80% ^a | 0.80% ^a |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$18.12 | \$0.04 | \$(2.20) | \$(2.16) | \$(0.04) | \$(4.73) | \$(4.77) | \$11.19 | (8.26)% | \$ 16,680 | 1.07% | 1.01% | 0.31% |
| 9/30/18 | 18.08 | 0.04 | 2.08 | 2.12 | (0.08) | (2.00) | (2.08) | 18.12 | 12.80% | 42,389 | 0.99% | 0.90% | 0.24% |
| 9/30/17 | 16.20 | 0.08 | 2.75 | 2.83 | (0.06) | (0.89) | (0.95) | 18.08 | 17.76% | 43,715 | 0.96% | 0.90% | 0.44% |
| 9/30/16 | 14.62 | 0.06 | 2.09 | 2.15 | (0.07) | (0.50) | (0.57) | 16.20 | 15.15% | 49,774 | 0.97% | 0.90% | 0.43% |
| 9/30/15 ⁱ | 15.77 | 0.06 | (1.21) | (1.15) | (0.00) ^d | - | (0.00) ^d | 14.62 | (7.29)% ^b | 93,458 | 0.97% ^a | 0.90% ^a | 0.52% ^a |
| 12/31/14 | 14.93 | 0.11 | 0.82 | 0.93 | (0.09) | - | (0.09) | 15.77 | 6.27% | 97,987 | 0.90% | 0.88% | 0.73% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$18.15 | \$0.03 | \$(2.20) | \$(2.17) | \$(0.01) | \$(4.73) | \$(4.74) | \$11.24 | (8.39)% | \$ 4,730 | 1.17% | 1.12% | 0.23% |
| 9/30/18 | 18.11 | 0.02 | 2.08 | 2.10 | (0.06) | (2.00) | (2.06) | 18.15 | 12.66% | 5,773 | 1.09% | 1.00% | 0.14% |
| 9/30/17 | 16.22 | 0.06 | 2.77 | 2.83 | (0.05) | (0.89) | (0.94) | 18.11 | 17.71% | 8,940 | 1.06% | 1.00% | 0.34% |
| 9/30/16 | 14.66 | 0.06 | 2.07 | 2.13 | (0.07) | (0.50) | (0.57) | 16.22 | 14.97% | 7,326 | 1.07% | 1.00% | 0.37% |
| 9/30/15 ⁱ | 15.82 | 0.05 | (1.21) | (1.16) | (0.00) ^d | - | (0.00) ^d | 14.66 | (7.33)% ^b | 3,272 | 1.07% ^a | 1.00% ^a | 0.46% ^a |
| 12/31/14 | 14.93 | 0.10 | 0.83 | 0.93 | (0.04) | - | (0.04) | 15.82 | 6.21% | 1,472 | 1.00% | 0.98% | 0.66% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$18.07 | \$ 0.02 | \$(2.19) | \$(2.17) | \$(0.01) | \$(4.73) | \$(4.74) | \$11.16 | (8.45)% | \$ 3,240 | 1.27% | 1.22% | 0.13% |
| 9/30/18 | 18.00 | (0.00) ^d | 2.07 | 2.07 | (0.00) ^d | (2.00) | (2.00) | 18.07 | 12.57% | 5,162 | 1.19% | 1.10% | (0.01)% |
| 9/30/17 | 16.15 | 0.04 | 2.75 | 2.79 | (0.05) | (0.89) | (0.94) | 18.00 | 17.57% | 8,977 | 1.16% | 1.10% | 0.26% |
| 9/30/16 | 14.57 | 0.03 | 2.08 | 2.11 | (0.03) | (0.50) | (0.53) | 16.15 | 14.89% | 4,908 | 1.17% | 1.10% | 0.22% |
| 9/30/15 ⁱ | 15.74 | 0.04 | (1.21) | (1.17) | (0.00) ^d | - | (0.00) ^d | 14.57 | (7.43)% ^b | 6,020 | 1.17% ^a | 1.10% ^a | 0.34% ^a |
| 12/31/14 | 14.90 | 0.08 | 0.82 | 0.90 | (0.06) | - | (0.06) | 15.74 | 6.05% | 3,790 | 1.12% | 1.10% | 0.52% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$17.93 | \$(0.01) | \$(2.18) | \$(2.19) | \$ - | \$(4.73) | \$(4.73) | \$11.01 | (8.68)% | \$ 7,990 | 1.52% | 1.47% | (0.11)% ^c |
| 9/30/18 | 17.92 | (0.03) | 2.04 | 2.01 | (0.00) ^d | (2.00) | (2.00) | 17.93 | 12.26% | 11,623 | 1.44% | 1.35% | (0.20)% |
| 9/30/17 | 16.08 | 0.00 ^d | 2.73 | 2.73 | (0.00) ^d | (0.89) | (0.89) | 17.92 | 17.25% | 10,493 | 1.41% | 1.35% | 0.01% |
| 9/30/16 | 14.52 | 0.00 ^d | 2.07 | 2.07 | (0.01) | (0.50) | (0.51) | 16.08 | 14.59% | 8,850 | 1.42% | 1.35% | 0.00% ^c |
| 9/30/15 ⁱ | 15.71 | 0.01 | (1.20) | (1.19) | (0.00) ^d | - | (0.00) ^d | 14.52 | (7.57)% ^b | 6,458 | 1.42% ^a | 1.35% ^a | 0.07% ^a |
| 12/31/14 | 14.87 | 0.04 | 0.82 | 0.86 | (0.02) | - | (0.02) | 15.71 | 5.82% | 6,467 | 1.37% | 1.35% | 0.26% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$17.83 | \$(0.00) ^d | \$(2.17) | \$(2.17) | \$ - | \$(4.73) | \$(4.73) | \$10.93 | (8.59)% | \$ 4,301 | 1.42% | 1.38% | (0.00)% ^c |
| 9/30/18 | 17.85 | (0.01) | 2.03 | 2.02 | (0.04) | (2.00) | (2.04) | 17.83 | 12.37% | 3,350 | 1.34% | 1.25% | (0.08)% |
| 9/30/17 | 16.01 | 0.01 | 2.73 | 2.74 | (0.01) | (0.89) | (0.90) | 17.85 | 17.42% | 2,491 | 1.31% | 1.25% | 0.07% |
| 9/30/16 | 14.51 | 0.02 | 2.05 | 2.07 | (0.07) | (0.50) | (0.57) | 16.01 | 14.66% | 1,748 | 1.32% | 1.25% | 0.12% |
| 9/30/15 ⁱ | 15.69 | 0.02 | (1.20) | (1.18) | (0.00) ^d | - | (0.00) ^d | 14.51 | (7.51)% ^b | 639 | 1.32% ^a | 1.25% ^a | 0.19% ^a |
| 12/31/14 ^h | 15.02 | 0.04 | 0.69 | 0.73 | (0.06) | - | (0.06) | 15.69 | 4.85% ^b | 105 | 1.28% ^a | 1.25% ^a | 0.35% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$17.79 | \$(0.03) | \$(2.17) | \$(2.20) | \$ - | \$(4.73) | \$(4.73) | \$10.86 | (8.84)% | \$ 856 | 1.67% | 1.61% | (0.27)% |
| 9/30/18 | 17.81 | (0.06) | 2.04 | 1.98 | - | (2.00) | (2.00) | 17.79 | 12.14% | 1,544 | 1.59% | 1.50% | (0.34)% |
| 9/30/17 | 16.00 | (0.03) | 2.73 | 2.70 | - | (0.89) | (0.89) | 17.81 | 17.14% | 1,214 | 1.56% | 1.50% | (0.18)% |
| 9/30/16 | 14.48 | (0.02) | 2.05 | 2.03 | (0.01) | (0.50) | (0.51) | 16.00 | 14.37% | 440 | 1.57% | 1.50% | (0.12)% |
| 9/30/15 ⁱ | 15.69 | (0.01) | (1.20) | (1.21) | (0.00) ^d | - | (0.00) ^d | 14.48 | (7.70)% ^b | 123 | 1.57% ^a | 1.50% ^a | (0.07)% ^a |
| 12/31/14 ^h | 15.02 | 0.01 | 0.69 | 0.70 | (0.03) | - | (0.03) | 15.69 | 4.66% ^b | 105 | 1.53% ^a | 1.50% ^a | 0.10% ^a |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 30% | 24% | 21% | 26% | 18% | 22% |

- a Annualized.
- b Percentage represents the results for the period and is not annualized.
- c Per share amount calculated on the average shares method.
- d Amount is less than \$0.005 per share.
- e Amount is less than 0.005%.
- h For the period April 1, 2014 (commencement of operations) through December 31, 2014.
- i For the period January 1, 2015 through September 30, 2015.
- j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.
- l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.
- m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

MASSMUTUAL SELECT SMALL COMPANY VALUE FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|--|--|--|---|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,d} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period ('000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$12.04 | \$0.07 | \$(1.28) | \$(1.21) | \$(0.04) | \$(1.57) | \$(1.61) | \$ 9.22 | (8.59%) | \$ 95,423 | 0.98% | 0.98% ^k | 0.73% |
| 9/30/18 | 13.45 | 0.06 | 0.93 | 0.99 | (0.09) | (2.31) | (2.40) | 12.04 | 8.45% | 103,334 | 0.95% | 0.93% | 0.47% |
| 9/30/17 | 11.30 | 0.09 | 2.27 | 2.36 | (0.13) | (0.08) | (0.21) | 13.45 | 20.96% | 112,070 | 0.95% | 0.93% | 0.72% |
| 9/30/16 | 13.03 | 0.10 | 1.26 | 1.36 | (0.09) | (3.00) | (3.09) | 11.30 | 13.23% | 125,482 | 0.94% | 0.92% | 0.96% |
| 9/30/15 ⁱ | 14.38 | 0.04 | (1.18) | (1.14) | - | (0.21) | (0.21) | 13.03 | (7.99%) ^b | 125,447 | 0.94% ^a | 0.92% ^a | 0.39% ^a |
| 12/31/14 | 16.37 | 0.08 | 0.47 | 0.55 | (0.15) | (2.39) | (2.54) | 14.38 | 4.10% | 132,465 | 0.91% | 0.89% | 0.50% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$12.10 | \$0.06 | \$(1.28) | \$(1.22) | \$(0.03) | \$(1.57) | \$(1.60) | \$ 9.28 | (8.67%) | \$ 78,145 | 1.08% | 1.08% ^k | 0.64% |
| 9/30/18 | 13.50 | 0.04 | 0.95 | 0.99 | (0.08) | (2.31) | (2.39) | 12.10 | 8.35% | 74,247 | 1.05% | 1.03% | 0.37% |
| 9/30/17 | 11.35 | 0.08 | 2.27 | 2.35 | (0.12) | (0.08) | (0.20) | 13.50 | 20.77% | 84,951 | 1.05% | 1.03% | 0.63% |
| 9/30/16 | 13.06 | 0.09 | 1.27 | 1.36 | (0.07) | (3.00) | (3.07) | 11.35 | 13.18% | 106,993 | 1.04% | 1.02% | 0.85% |
| 9/30/15 ⁱ | 14.43 | 0.03 | (1.19) | (1.16) | - | (0.21) | (0.21) | 13.06 | (8.11%) ^b | 128,043 | 1.04% ^a | 1.02% ^a | 0.27% ^a |
| 12/31/14 | 16.41 | 0.06 | 0.47 | 0.53 | (0.12) | (2.39) | (2.51) | 14.43 | 4.01% | 207,540 | 1.03% | 1.01% | 0.38% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$12.03 | \$0.05 | \$(1.27) | \$(1.22) | \$(0.01) | \$(1.57) | \$(1.58) | \$ 9.23 | (8.70%) | \$ 6,847 | 1.18% | 1.18% ^k | 0.52% |
| 9/30/18 | 13.43 | 0.03 | 0.94 | 0.97 | (0.06) | (2.31) | (2.37) | 12.03 | 8.25% | 8,664 | 1.15% | 1.13% | 0.27% |
| 9/30/17 | 11.29 | 0.06 | 2.26 | 2.32 | (0.10) | (0.08) | (0.18) | 13.43 | 20.65% | 12,810 | 1.15% | 1.13% | 0.50% |
| 9/30/16 | 13.00 | 0.08 | 1.26 | 1.34 | (0.05) | (3.00) | (3.05) | 11.29 | 13.05% | 15,783 | 1.14% | 1.12% | 0.77% |
| 9/30/15 ⁱ | 14.38 | 0.02 | (1.19) | (1.17) | - | (0.21) | (0.21) | 13.00 | (8.20%) ^b | 16,672 | 1.14% ^a | 1.12% ^a | 0.17% ^a |
| 12/31/14 | 16.36 | 0.05 | 0.47 | 0.52 | (0.11) | (2.39) | (2.50) | 14.38 | 3.92% | 37,270 | 1.12% | 1.09% | 0.30% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$11.80 | \$ 0.04 | \$(1.26) | \$(1.22) | \$(0.00) ^d | \$(1.57) | \$(1.57) | \$ 9.01 | (8.88%) | \$ 11,363 | 1.28% | 1.28% ^k | 0.42% |
| 9/30/18 | 13.22 | 0.02 | 0.92 | 0.94 | (0.05) | (2.31) | (2.36) | 11.80 | 8.14% | 14,411 | 1.25% | 1.23% | 0.17% |
| 9/30/17 | 11.12 | 0.05 | 2.23 | 2.28 | (0.10) | (0.08) | (0.18) | 13.22 | 20.53% | 14,943 | 1.25% | 1.23% | 0.41% |
| 9/30/16 | 12.85 | 0.07 | 1.24 | 1.31 | (0.04) | (3.00) | (3.04) | 11.12 | 12.95% | 16,447 | 1.24% | 1.22% | 0.66% |
| 9/30/15 ⁱ | 14.22 | 0.01 | (1.17) | (1.16) | - | (0.21) | (0.21) | 12.85 | (8.23%) ^b | 18,220 | 1.24% ^a | 1.22% ^a | 0.08% ^a |
| 12/31/14 | 16.21 | 0.03 | 0.46 | 0.49 | (0.09) | (2.39) | (2.48) | 14.22 | 3.74% | 24,796 | 1.23% | 1.21% | 0.16% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$11.40 | \$ 0.01 | \$(1.20) | \$(1.19) | \$ - | \$(1.57) | \$(1.57) | \$ 8.64 | (9.03%) | \$ 16,723 | 1.53% | 1.53% ^k | 0.17% |
| 9/30/18 | 12.85 | (0.01) | 0.89 | 0.88 | (0.02) | (2.31) | (2.33) | 11.40 | 7.84% | 21,061 | 1.50% | 1.48% | (0.08%) |
| 9/30/17 | 10.80 | 0.02 | 2.17 | 2.19 | (0.06) | (0.08) | (0.14) | 12.85 | 20.31% | 23,325 | 1.50% | 1.48% | 0.15% |
| 9/30/16 | 12.56 | 0.04 | 1.20 | 1.24 | (0.00) ^d | (3.00) | (3.00) | 10.80 | 12.59% | 26,790 | 1.49% | 1.47% | 0.40% |
| 9/30/15 ⁱ | 13.93 | (0.02) | (1.14) | (1.16) | - | (0.21) | (0.21) | 12.56 | (8.40%) ^b | 30,820 | 1.49% ^a | 1.47% ^a | (0.17%) ^a |
| 12/31/14 | 15.92 | (0.01) | 0.45 | 0.44 | (0.04) | (2.39) | (2.43) | 13.93 | 3.51% | 43,390 | 1.48% | 1.46% | (0.08%) |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$11.26 | \$ 0.02 | \$(1.19) | \$(1.17) | \$(0.00) ^d | \$(1.57) | \$(1.57) | \$ 8.52 | (8.96%) | \$ 541 | 1.43% | 1.43% ^k | 0.27% |
| 9/30/18 | 12.73 | 0.00 ^d | 0.88 | 0.88 | (0.04) | (2.31) | (2.35) | 11.26 | 7.95% | 663 | 1.40% | 1.38% | 0.02% |
| 9/30/17 | 10.74 | 0.03 | 2.15 | 2.18 | (0.11) | (0.08) | (0.19) | 12.73 | 20.33% | 525 | 1.40% | 1.38% | 0.28% |
| 9/30/16 | 12.52 | 0.05 | 1.21 | 1.26 | (0.04) | (3.00) | (3.04) | 10.74 | 12.80% | 184 | 1.39% | 1.37% | 0.51% |
| 9/30/15 ⁱ | 13.88 | (0.01) | (1.14) | (1.15) | - | (0.21) | (0.21) | 12.52 | (8.36%) ^b | 92 | 1.39% ^a | 1.37% ^a | (0.06%) ^a |
| 12/31/14 ^h | 16.27 | (0.01) | 0.11 | 0.10 | (0.10) | (2.39) | (2.49) | 13.88 | 1.34% ^b | 101 | 1.35% ^a | N/A | (0.05%) ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$10.57 | \$ 0.00 ^d | \$(1.14) | \$(1.14) | \$ - | \$(1.57) | \$(1.57) | \$ 7.86 | (9.30%) | \$ 422 | 1.68% | 1.68% ^k | 0.04% |
| 9/30/18 | 12.09 | (0.02) | 0.83 | 0.81 | (0.02) | (2.31) | (2.33) | 10.57 | 7.76% | 418 | 1.65% | 1.63% | (0.19%) |
| 9/30/17 | 10.19 | (0.00) ^d | 2.05 | 2.05 | (0.07) | (0.08) | (0.15) | 12.09 | 20.14% | 180 | 1.65% | 1.63% | (0.03%) |
| 9/30/16 | 12.03 | 0.03 | 1.13 | 1.16 | - | (3.00) | (3.00) | 10.19 | 12.42% | 84 | 1.64% | 1.62% | 0.28% |
| 9/30/15 ⁱ | 13.36 | (0.03) | (1.09) | (1.12) | - | (0.21) | (0.21) | 12.03 | (8.46%) ^b | 57 | 1.64% ^a | 1.62% ^a | (0.33%) ^a |
| 12/31/14 | 15.37 | (0.04) | 0.44 | 0.40 | (0.02) | (2.39) | (2.41) | 13.36 | 3.34% | 80 | 1.67% | 1.65% | (0.27%) |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 146% | 65% | 57% | 60% | 86% | 38% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

k Amount waived had no impact on the ratio of expenses to average daily net assets.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

MM S&P MID CAP INDEX FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ⁱ | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$15.27 | \$0.20 | \$(0.75) | \$(0.55) | \$(0.22) | \$(0.74) | \$(0.96) | \$13.76 | (2.62%) | \$ 81,697 | 0.18% | 0.18% ⁿ | 1.48% |
| 9/30/18 | 14.31 | 0.21 | 1.72 | 1.93 | (0.17) | (0.80) | (0.97) | 15.27 | 14.06% | 64,388 | 0.16% | 0.16% ⁿ | 1.43% |
| 9/30/17 | 13.56 | 0.17 | 2.02 | 2.19 | (0.22) | (1.22) | (1.44) | 14.31 | 17.06% | 48,408 | 0.18% | 0.18% ⁿ | 1.22% |
| 9/30/16 | 12.44 | 0.19 | 1.61 | 1.80 | (0.16) | (0.52) | (0.68) | 13.56 | 15.15% | 73,807 | 0.20% | 0.20% ⁿ | 1.49% |
| 9/30/15 ⁱ | 13.11 | 0.13 | (0.75) | (0.62) | - | (0.05) | (0.05) | 12.44 | (4.77%) ^b | 137,654 | 0.22% ^a | 0.20% ^a | 1.26% ^a |
| 12/31/14 | 12.47 | 0.17 | 1.00 | 1.17 | (0.15) | (0.38) | (0.53) | 13.11 | 9.55% | 144,235 | 0.20% | 0.19% | 1.35% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$15.22 | \$0.19 | \$(0.76) | \$(0.57) | \$(0.20) | \$(0.74) | \$(0.94) | \$13.71 | (2.77%) | \$ 32,207 | 0.28% | 0.28% ⁿ | 1.41% |
| 9/30/18 | 14.26 | 0.19 | 1.73 | 1.92 | (0.16) | (0.80) | (0.96) | 15.22 | 13.99% | 22,023 | 0.26% | 0.26% ⁿ | 1.31% |
| 9/30/17 | 13.52 | 0.15 | 2.02 | 2.17 | (0.21) | (1.22) | (1.43) | 14.26 | 16.94% | 25,668 | 0.28% | 0.28% ⁿ | 1.13% |
| 9/30/16 | 12.41 | 0.18 | 1.60 | 1.78 | (0.15) | (0.52) | (0.67) | 13.52 | 15.01% | 21,499 | 0.30% | 0.30% ⁿ | 1.44% |
| 9/30/15 ⁱ | 13.09 | 0.12 | (0.75) | (0.63) | - | (0.05) | (0.05) | 12.41 | (4.86%) ^b | 11,433 | 0.32% ^a | 0.30% ^a | 1.18% ^a |
| 12/31/14 | 12.46 | 0.15 | 0.99 | 1.14 | (0.13) | (0.38) | (0.51) | 13.09 | 9.38% | 5,628 | 0.30% | 0.29% | 1.20% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$15.14 | \$0.16 | \$(0.74) | \$(0.58) | \$(0.18) | \$(0.74) | \$(0.92) | \$13.64 | (2.87%) | \$ 21,397 | 0.43% | 0.43% ⁿ | 1.22% |
| 9/30/18 | 14.19 | 0.17 | 1.72 | 1.89 | (0.14) | (0.80) | (0.94) | 15.14 | 13.82% | 27,225 | 0.41% | 0.41% ⁿ | 1.18% |
| 9/30/17 | 13.46 | 0.13 | 2.01 | 2.14 | (0.19) | (1.22) | (1.41) | 14.19 | 16.78% | 25,968 | 0.43% | 0.43% ⁿ | 0.99% |
| 9/30/16 | 12.36 | 0.16 | 1.59 | 1.75 | (0.13) | (0.52) | (0.65) | 13.46 | 14.77% | 23,328 | 0.45% | 0.45% ⁿ | 1.26% |
| 9/30/15 ⁱ | 13.05 | 0.10 | (0.74) | (0.64) | - | (0.05) | (0.05) | 12.36 | (4.95%) ^b | 16,533 | 0.47% ^a | 0.45% ^a | 1.02% ^a |
| 12/31/14 | 12.43 | 0.15 | 0.98 | 1.13 | (0.13) | (0.38) | (0.51) | 13.05 | 9.31% | 12,480 | 0.45% | 0.44% | 1.16% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$15.13 | \$0.15 | \$(0.75) | \$(0.60) | \$(0.16) | \$(0.74) | \$(0.90) | \$13.63 | (3.00%) | \$ 54,062 | 0.53% | 0.53% ⁿ | 1.12% |
| 9/30/18 | 14.19 | 0.16 | 1.70 | 1.86 | (0.12) | (0.80) | (0.92) | 15.13 | 13.64% | 66,044 | 0.51% | 0.51% ⁿ | 1.07% |
| 9/30/17 | 13.45 | 0.12 | 2.01 | 2.13 | (0.17) | (1.22) | (1.39) | 14.19 | 16.73% | 60,979 | 0.53% | 0.53% ⁿ | 0.90% |
| 9/30/16 | 12.35 | 0.15 | 1.59 | 1.74 | (0.12) | (0.52) | (0.64) | 13.45 | 14.69% | 62,951 | 0.55% | 0.55% ⁿ | 1.17% |
| 9/30/15 ⁱ | 13.05 | 0.09 | (0.74) | (0.65) | - | (0.05) | (0.05) | 12.35 | (5.03%) ^b | 50,069 | 0.57% ^a | 0.55% ^a | 0.92% ^a |
| 12/31/14 | 12.43 | 0.13 | 0.98 | 1.11 | (0.11) | (0.38) | (0.49) | 13.05 | 9.15% | 42,628 | 0.55% | 0.54% | 1.02% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$15.09 | \$0.12 | \$(0.74) | \$(0.62) | \$(0.13) | \$(0.74) | \$(0.87) | \$13.60 | (3.24%) | \$ 36,013 | 0.78% | 0.78% ⁿ | 0.88% |
| 9/30/18 | 14.14 | 0.12 | 1.71 | 1.83 | (0.08) | (0.80) | (0.88) | 15.09 | 13.42% | 36,885 | 0.76% | 0.76% ⁿ | 0.83% |
| 9/30/17 | 13.42 | 0.09 | 1.99 | 2.08 | (0.14) | (1.22) | (1.36) | 14.14 | 16.34% | 33,142 | 0.78% | 0.78% ⁿ | 0.65% |
| 9/30/16 | 12.32 | 0.11 | 1.61 | 1.72 | (0.10) | (0.52) | (0.62) | 13.42 | 14.49% | 42,316 | 0.80% | 0.80% ⁿ | 0.91% |
| 9/30/15 ⁱ | 13.04 | 0.07 | (0.74) | (0.67) | - | (0.05) | (0.05) | 12.32 | (5.18%) ^b | 32,378 | 0.82% ^a | 0.80% ^a | 0.67% ^a |
| 12/31/14 | 12.43 | 0.10 | 0.97 | 1.07 | (0.08) | (0.38) | (0.46) | 13.04 | 8.83% | 28,715 | 0.81% | 0.80% | 0.76% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$15.02 | \$0.13 | \$(0.74) | \$(0.61) | \$(0.14) | \$(0.74) | \$(0.88) | \$13.53 | (3.13%) | \$109,915 | 0.68% | 0.68% ⁿ | 0.97% |
| 9/30/18 | 14.10 | 0.13 | 1.70 | 1.83 | (0.11) | (0.80) | (0.91) | 15.02 | 13.51% | 137,402 | 0.66% | 0.66% ⁿ | 0.92% |
| 9/30/17 | 13.39 | 0.10 | 2.00 | 2.10 | (0.17) | (1.22) | (1.39) | 14.10 | 16.52% | 130,620 | 0.68% | 0.68% ⁿ | 0.76% |
| 9/30/16 | 12.32 | 0.13 | 1.59 | 1.72 | (0.13) | (0.52) | (0.65) | 13.39 | 14.56% | 36,917 | 0.70% | 0.70% ⁿ | 1.04% |
| 9/30/15 ⁱ | 13.04 | 0.09 | (0.76) | (0.67) | - | (0.05) | (0.05) | 12.32 | (5.18%) ^b | 14,014 | 0.72% ^a | 0.70% ^a | 0.86% ^a |
| 12/31/14 ^h | 12.77 | 0.09 | 0.66 | 0.75 | (0.10) | (0.38) | (0.48) | 13.04 | 6.04% ^b | 132 | 0.69% ^a | 0.69% ^{a,n} | 0.89% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$14.94 | \$0.10 | \$(0.74) | \$(0.64) | \$(0.10) | \$(0.74) | \$(0.84) | \$13.46 | (3.38%) | \$127,756 | 0.93% | 0.93% ⁿ | 0.72% |
| 9/30/18 | 14.04 | 0.10 | 1.69 | 1.79 | (0.09) | (0.80) | (0.89) | 14.94 | 13.20% | 153,657 | 0.91% | 0.91% ⁿ | 0.67% |
| 9/30/17 | 13.35 | 0.07 | 1.98 | 2.05 | (0.14) | (1.22) | (1.36) | 14.04 | 16.22% | 144,122 | 0.93% | 0.93% ⁿ | 0.51% |
| 9/30/16 | 12.31 | 0.10 | 1.58 | 1.68 | (0.12) | (0.52) | (0.64) | 13.35 | 14.25% | 33,905 | 0.95% | 0.95% ⁿ | 0.81% |
| 9/30/15 ⁱ | 13.04 | 0.06 | (0.74) | (0.68) | - | (0.05) | (0.05) | 12.31 | (5.26%) ^b | 8,746 | 0.97% ^a | 0.95% ^a | 0.61% ^a |
| 12/31/14 ^h | 12.77 | 0.06 | 0.66 | 0.72 | (0.07) | (0.38) | (0.45) | 13.04 | 5.84% ^b | 142 | 0.95% ^a | 0.95% ^{a,n} | 0.60% ^a |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 15% | 13% | 33% | 48% | 18% | 12% |

- a Annualized.
- b Percentage represents the results for the period and is not annualized.
- c Per share amount calculated on the average shares method.
- h For the period April 1, 2014 (commencement of operations) through December 31, 2014.
- i For the period January 1, 2015 through September 30, 2015.
- j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.
- l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.
- m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.
- n Expenses incurred during the period fell under the expense cap.

MM RUSSELL 2000 SMALL CAP INDEX FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | Ratios / Supplemental Data | | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ⁱ | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$14.72 | \$0.17 | \$(1.60) | \$(1.43) | \$(0.15) | \$(0.82) | \$(0.97) | \$12.32 | (8.94%) | \$ 74,592 | 0.21% | 0.20% | 1.34% |
| 9/30/18 | 14.16 | 0.17 | 1.81 | 1.98 | (0.18) | (1.24) | (1.42) | 14.72 | 15.17% | 68,359 | 0.20% | 0.20% ⁿ | 1.24% |
| 9/30/17 | 12.57 | 0.17 | 2.34 | 2.51 | (0.19) | (0.73) | (0.92) | 14.16 | 20.64% | 49,853 | 0.22% | 0.20% | 1.28% |
| 9/30/16 | 11.28 | 0.17 | 1.54 | 1.71 | (0.14) | (0.28) | (0.42) | 12.57 | 15.62% | 127,660 | 0.21% | 0.20% | 1.48% |
| 9/30/15 ⁱ | 12.24 | 0.13 | (1.08) | (0.95) | - | (0.01) | (0.01) | 11.28 | (7.79%) ^b | 185,516 | 0.29% ^a | 0.20% ^a | 1.40% ^a |
| 12/31/14 | 13.20 | 0.17 | 0.40 | 0.57 | (0.16) | (1.37) | (1.53) | 12.24 | 4.94% | 97,737 | 0.27% | 0.20% | 1.33% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$14.71 | \$0.15 | \$(1.60) | \$(1.45) | \$(0.13) | \$(0.82) | \$(0.95) | \$12.31 | (9.06%) | \$ 15,613 | 0.31% | 0.30% | 1.23% |
| 9/30/18 | 14.15 | 0.16 | 1.81 | 1.97 | (0.17) | (1.24) | (1.41) | 14.71 | 15.07% | 22,393 | 0.30% | 0.30% ⁿ | 1.13% |
| 9/30/17 | 12.56 | 0.15 | 2.35 | 2.50 | (0.18) | (0.73) | (0.91) | 14.15 | 20.57% | 16,566 | 0.32% | 0.30% | 1.18% |
| 9/30/16 | 11.28 | 0.16 | 1.53 | 1.69 | (0.13) | (0.28) | (0.41) | 12.56 | 15.42% | 15,287 | 0.31% | 0.30% | 1.40% |
| 9/30/15 ⁱ | 12.24 | 0.12 | (1.07) | (0.95) | - | (0.01) | (0.01) | 11.28 | (7.79%) ^b | 7,948 | 0.39% ^a | 0.30% ^a | 1.27% ^a |
| 12/31/14 | 13.19 | 0.15 | 0.40 | 0.55 | (0.13) | (1.37) | (1.50) | 12.24 | 4.80% | 4,343 | 0.38% | 0.30% | 1.16% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$14.58 | \$0.13 | \$(1.58) | \$(1.45) | \$(0.10) | \$(0.82) | \$(0.92) | \$12.21 | (9.15%) | \$ 9,013 | 0.46% | 0.45% | 1.06% |
| 9/30/18 | 14.04 | 0.14 | 1.78 | 1.92 | (0.14) | (1.24) | (1.38) | 14.58 | 14.86% | 19,285 | 0.45% | 0.45% ⁿ | 0.98% |
| 9/30/17 | 12.48 | 0.13 | 2.32 | 2.45 | (0.16) | (0.73) | (0.89) | 14.04 | 20.33% | 19,390 | 0.47% | 0.45% | 1.03% |
| 9/30/16 | 11.21 | 0.14 | 1.52 | 1.66 | (0.11) | (0.28) | (0.39) | 12.48 | 15.23% | 13,347 | 0.46% | 0.45% | 1.22% |
| 9/30/15 ⁱ | 12.17 | 0.10 | (1.05) | (0.95) | - | (0.01) | (0.01) | 11.21 | (7.84%) ^b | 8,110 | 0.54% ^a | 0.45% ^a | 1.09% ^a |
| 12/31/14 | 13.16 | 0.15 | 0.37 | 0.52 | (0.14) | (1.37) | (1.51) | 12.17 | 4.55% | 6,499 | 0.52% | 0.45% | 1.14% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$14.61 | \$0.12 | \$(1.58) | \$(1.46) | \$(0.10) | \$(0.82) | \$(0.92) | \$12.23 | (9.27%) | \$ 50,106 | 0.56% | 0.55% | 0.99% |
| 9/30/18 | 14.06 | 0.12 | 1.80 | 1.92 | (0.13) | (1.24) | (1.37) | 14.61 | 14.80% | 53,624 | 0.55% | 0.55% ⁿ | 0.87% |
| 9/30/17 | 12.50 | 0.12 | 2.32 | 2.44 | (0.15) | (0.73) | (0.88) | 14.06 | 20.16% | 52,240 | 0.57% | 0.55% | 0.93% |
| 9/30/16 | 11.23 | 0.13 | 1.52 | 1.65 | (0.10) | (0.28) | (0.38) | 12.50 | 15.11% | 44,061 | 0.56% | 0.55% | 1.14% |
| 9/30/15 ⁱ | 12.20 | 0.09 | (1.05) | (0.96) | - | (0.01) | (0.01) | 11.23 | (7.90%) ^b | 30,993 | 0.64% ^a | 0.55% ^a | 1.00% ^a |
| 12/31/14 | 13.18 | 0.13 | 0.39 | 0.52 | (0.13) | (1.37) | (1.50) | 12.20 | 4.52% | 25,705 | 0.62% | 0.55% | 1.02% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$14.51 | \$0.09 | \$(1.56) | \$(1.47) | \$(0.07) | \$(0.82) | \$(0.89) | \$12.15 | (9.45%) | \$ 23,469 | 0.81% | 0.80% | 0.74% |
| 9/30/18 | 13.97 | 0.09 | 1.79 | 1.88 | (0.10) | (1.24) | (1.34) | 14.51 | 14.52% | 29,287 | 0.80% | 0.80% ⁿ | 0.63% |
| 9/30/17 | 12.43 | 0.09 | 2.30 | 2.39 | (0.12) | (0.73) | (0.85) | 13.97 | 19.85% | 23,317 | 0.82% | 0.80% | 0.68% |
| 9/30/16 | 11.16 | 0.10 | 1.52 | 1.62 | (0.07) | (0.28) | (0.35) | 12.43 | 14.91% | 19,806 | 0.81% | 0.80% | 0.89% |
| 9/30/15 ⁱ | 12.16 | 0.07 | (1.06) | (0.99) | - | (0.01) | (0.01) | 11.16 | (8.18%) ^b | 14,478 | 0.89% ^a | 0.80% ^a | 0.73% ^a |
| 12/31/14 | 13.15 | 0.10 | 0.38 | 0.48 | (0.10) | (1.37) | (1.47) | 12.16 | 4.24% | 15,338 | 0.88% | 0.81% | 0.76% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$14.46 | \$0.10 | \$(1.56) | \$(1.46) | \$(0.08) | \$(0.82) | \$(0.90) | \$12.10 | (9.38%) | \$ 60,168 | 0.71% | 0.70% | 0.84% |
| 9/30/18 | 13.94 | 0.10 | 1.78 | 1.88 | (0.12) | (1.24) | (1.36) | 14.46 | 14.60% | 74,670 | 0.70% | 0.70% ⁿ | 0.73% |
| 9/30/17 | 12.40 | 0.10 | 2.31 | 2.41 | (0.14) | (0.73) | (0.87) | 13.94 | 20.08% | 63,118 | 0.72% | 0.70% | 0.76% |
| 9/30/16 | 11.17 | 0.11 | 1.51 | 1.62 | (0.11) | (0.28) | (0.39) | 12.40 | 14.93% | 29,129 | 0.71% | 0.70% | 1.00% |
| 9/30/15 ⁱ | 12.16 | 0.09 | (1.07) | (0.98) | - | (0.01) | (0.01) | 11.17 | (8.09%) ^b | 9,367 | 0.79% ^a | 0.70% ^a | 0.96% ^a |
| 12/31/14 ^h | 13.27 | 0.08 | 0.30 | 0.38 | (0.12) | (1.37) | (1.49) | 12.16 | 3.42% ^b | 151 | 0.76% ^a | 0.70% ^a | 0.88% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$14.38 | \$0.07 | \$(1.56) | \$(1.49) | \$(0.04) | \$(0.82) | \$(0.86) | \$12.03 | (9.63%) | \$ 55,627 | 0.96% | 0.95% | 0.59% |
| 9/30/18 | 13.87 | 0.07 | 1.77 | 1.84 | (0.09) | (1.24) | (1.33) | 14.38 | 14.38% | 70,230 | 0.95% | 0.95% ⁿ | 0.48% |
| 9/30/17 | 12.36 | 0.07 | 2.29 | 2.36 | (0.12) | (0.73) | (0.85) | 13.87 | 19.73% | 57,433 | 0.97% | 0.95% | 0.51% |
| 9/30/16 | 11.16 | 0.09 | 1.49 | 1.58 | (0.10) | (0.28) | (0.38) | 12.36 | 14.60% | 22,081 | 0.96% | 0.95% | 0.75% |
| 9/30/15 ⁱ | 12.16 | 0.07 | (1.06) | (0.99) | - | (0.01) | (0.01) | 11.16 | (8.18%) ^b | 5,873 | 1.04% ^a | 0.95% ^a | 0.71% ^a |
| 12/31/14 ^h | 13.27 | 0.06 | 0.29 | 0.35 | (0.09) | (1.37) | (1.46) | 12.16 | 3.20% ^b | 138 | 1.01% ^a | 0.95% ^a | 0.61% ^a |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 16% | 20% | 38% | 37% | 13% | 33% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

n Expenses incurred during the period fell under the expense cap.

MASSMUTUAL SELECT MID CAP GROWTH FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{e,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^l | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$24.10 | \$ 0.03 | \$1.14 | \$1.17 | \$(0.01) | \$(1.92) | \$(1.93) | \$23.34 | 6.66% | \$5,925,776 | 0.71% | N/A | 0.15% |
| 9/30/18 | 21.92 | 0.01 | 3.59 | 3.60 | - | (1.42) | (1.42) | 24.10 | 17.21% | 5,436,930 | 0.71% | N/A | 0.06% |
| 9/30/17 | 19.16 | (0.00) ^d | 3.64 | 3.64 | (0.03) | (0.85) | (0.88) | 21.92 | 19.83% | 3,055,936 | 0.72% | N/A | (0.00)% ^c |
| 9/30/16 | 18.74 | 0.01 | 1.91 | 1.92 | - | (1.50) | (1.50) | 19.16 | 10.74% | 1,668,899 | 0.73% | N/A | 0.07% |
| 9/30/15 ⁱ | 18.65 | (0.01) | 0.24 | 0.23 | - | (0.14) | (0.14) | 18.74 | 1.22% ^b | 816,703 | 0.75% ^a | N/A | (0.08)% ^a |
| 12/31/14 | 18.42 | (0.02) | 2.33 | 2.31 | - | (2.08) | (2.08) | 18.65 | 13.00% | 441,065 | 0.77% | 0.74% | (0.11)% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$23.87 | \$ 0.01 | \$1.12 | \$1.13 | \$ - | \$(1.92) | \$(1.92) | \$23.08 | 6.54% | \$1,533,487 | 0.81% | N/A | 0.05% |
| 9/30/18 | 21.75 | (0.01) | 3.55 | 3.54 | - | (1.42) | (1.42) | 23.87 | 17.06% | 1,517,553 | 0.81% | N/A | (0.04)% |
| 9/30/17 | 19.01 | (0.02) | 3.62 | 3.60 | (0.01) | (0.85) | (0.86) | 21.75 | 19.76% | 1,167,243 | 0.82% | N/A | (0.11)% |
| 9/30/16 | 18.63 | (0.00) ^d | 1.88 | 1.88 | - | (1.50) | (1.50) | 19.01 | 10.58% | 826,289 | 0.83% | N/A | (0.03)% |
| 9/30/15 ⁱ | 18.56 | (0.03) | 0.24 | 0.21 | - | (0.14) | (0.14) | 18.63 | 1.12% ^b | 641,170 | 0.85% ^a | N/A | (0.18)% ^a |
| 12/31/14 | 18.36 | (0.04) | 2.32 | 2.28 | - | (2.08) | (2.08) | 18.56 | 12.88% | 668,005 | 0.87% | 0.85% | (0.22)% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$23.31 | \$(0.01) | \$1.09 | \$1.08 | \$ - | \$(1.92) | \$(1.92) | \$22.47 | 6.48% | \$ 373,475 | 0.91% | N/A | (0.05)% |
| 9/30/18 | 21.30 | (0.03) | 3.46 | 3.43 | - | (1.42) | (1.42) | 23.31 | 16.90% | 405,725 | 0.91% | N/A | (0.14)% |
| 9/30/17 | 18.64 | (0.04) | 3.55 | 3.51 | - | (0.85) | (0.85) | 21.30 | 19.65% | 252,898 | 0.92% | N/A | (0.20)% |
| 9/30/16 | 18.30 | (0.02) | 1.86 | 1.84 | - | (1.50) | (1.50) | 19.01 | 10.55% | 234,465 | 0.93% | N/A | (0.13)% |
| 9/30/15 ⁱ | 18.25 | (0.04) | 0.23 | 0.19 | - | (0.14) | (0.14) | 18.30 | 1.03% ^b | 238,436 | 0.95% ^a | N/A | (0.28)% ^a |
| 12/31/14 | 18.10 | (0.06) | 2.29 | 2.23 | - | (2.08) | (2.08) | 18.25 | 12.79% | 243,292 | 0.97% | 0.95% | (0.31)% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$22.32 | \$(0.03) | \$1.01 | \$0.98 | \$ - | \$(1.92) | \$(1.92) | \$21.38 | 6.31% | \$ 290,024 | 1.01% | N/A | (0.15)% |
| 9/30/18 | 20.46 | (0.05) | 3.33 | 3.28 | - | (1.42) | (1.42) | 22.32 | 16.85% | 337,284 | 1.01% | N/A | (0.25)% |
| 9/30/17 | 17.96 | (0.06) | 3.41 | 3.35 | - | (0.85) | (0.85) | 20.46 | 19.49% | 339,090 | 1.02% | N/A | (0.30)% |
| 9/30/16 | 17.71 | (0.04) | 1.79 | 1.75 | - | (1.50) | (1.50) | 17.96 | 10.38% | 340,187 | 1.03% | N/A | (0.23)% |
| 9/30/15 ⁱ | 17.68 | (0.05) | 0.22 | 0.17 | - | (0.14) | (0.14) | 17.71 | 0.95% ^b | 364,801 | 1.05% ^a | N/A | (0.38)% ^a |
| 12/31/14 | 17.61 | (0.08) | 2.23 | 2.15 | - | (2.08) | (2.08) | 17.68 | 12.70% | 364,385 | 1.09% | 1.06% | (0.43)% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$20.67 | \$(0.07) | \$0.90 | \$0.83 | \$ - | \$(1.92) | \$(1.92) | \$19.58 | 6.06% | \$ 226,723 | 1.26% | N/A | (0.40)% |
| 9/30/18 | 19.10 | (0.10) | 3.09 | 2.99 | - | (1.42) | (1.42) | 20.67 | 16.52% | 272,769 | 1.26% | N/A | (0.50)% |
| 9/30/17 | 16.86 | (0.10) | 3.19 | 3.09 | - | (0.85) | (0.85) | 19.10 | 19.21% | 274,719 | 1.27% | N/A | (0.55)% |
| 9/30/16 | 16.75 | (0.08) | 1.69 | 1.61 | - | (1.50) | (1.50) | 16.86 | 10.12% | 297,498 | 1.28% | N/A | (0.48)% |
| 9/30/15 ⁱ | 16.76 | (0.08) | 0.21 | 0.13 | - | (0.14) | (0.14) | 16.75 | 0.76% ^b | 306,259 | 1.30% ^a | N/A | (0.63)% ^a |
| 12/31/14 | 16.84 | (0.12) | 2.12 | 2.00 | - | (2.08) | (2.08) | 16.76 | 12.38% | 322,121 | 1.34% | 1.31% | (0.68)% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$20.80 | \$(0.06) | \$0.92 | \$0.86 | \$ - | \$(1.92) | \$(1.92) | \$19.74 | 6.18% | \$ 222,247 | 1.16% | N/A | (0.29)% |
| 9/30/18 | 19.19 | (0.08) | 3.11 | 3.03 | - | (1.42) | (1.42) | 20.80 | 16.65% | 229,517 | 1.16% | N/A | (0.39)% |
| 9/30/17 | 16.92 | (0.08) | 3.20 | 3.12 | - | (0.85) | (0.85) | 19.19 | 19.33% | 125,717 | 1.17% | N/A | (0.46)% |
| 9/30/16 | 16.79 | (0.06) | 1.69 | 1.63 | - | (1.50) | (1.50) | 16.92 | 10.22% | 54,177 | 1.18% | N/A | (0.39)% |
| 9/30/15 ⁱ | 16.78 | (0.07) | 0.22 | 0.15 | - | (0.14) | (0.14) | 16.79 | 0.88% ^b | 11,441 | 1.20% ^a | N/A | (0.53)% ^a |
| 12/31/14 ^h | 17.37 | (0.07) | 1.56 | 1.49 | - | (2.08) | (2.08) | 16.78 | 9.07% ^b | 2,860 | 1.20% ^a | N/A | (0.50)% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$19.14 | \$(0.09) | \$0.80 | \$0.71 | \$ - | \$(1.92) | \$(1.92) | \$17.93 | 5.91% | \$ 32,770 | 1.41% | N/A | (0.54)% |
| 9/30/18 | 17.81 | (0.12) | 2.87 | 2.75 | - | (1.42) | (1.42) | 19.14 | 16.36% | 35,471 | 1.41% | N/A | (0.64)% |
| 9/30/17 | 15.80 | (0.11) | 2.97 | 2.86 | - | (0.85) | (0.85) | 17.81 | 19.04% | 27,527 | 1.42% | N/A | (0.70)% |
| 9/30/16 | 15.81 | (0.10) | 1.59 | 1.49 | - | (1.50) | (1.50) | 15.80 | 9.95% | 14,056 | 1.43% | N/A | (0.63)% |
| 9/30/15 ⁱ | 15.84 | (0.10) | 0.21 | 0.11 | - | (0.14) | (0.14) | 15.81 | 0.68% ^b | 4,788 | 1.45% ^a | N/A | (0.78)% ^a |
| 12/31/14 | 16.05 | (0.14) | 2.01 | 1.87 | - | (2.08) | (2.08) | 15.84 | 12.18% | 2,445 | 1.51% | 1.49% | (0.86)% |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 37% | 34% | 36% | 36% | 31% | 33% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

e Amount is less than 0.005%.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

MASSMUTUAL SELECT SMALL CAP GROWTH EQUITY FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-----------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net realized gains | Tax return of capital | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ⁱ | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$19.08 | \$(0.01) | \$(1.04) | \$(1.05) | \$(2.73) | \$ - | \$(2.73) | \$15.30 | (2.31)% | \$269,356 | 0.86% | N/A | (0.05)% |
| 9/30/18 | 15.74 | (0.03) | 4.24 | 4.21 | (0.87) | - | (0.87) | 19.08 | 27.96% | 385,194 | 0.85% | N/A | (0.15)% |
| 9/30/17 | 13.05 | (0.01) | 2.70 | 2.69 | - | - | - | 15.74 | 20.61% | 306,490 | 0.86% | N/A | (0.05)% |
| 9/30/16 | 15.17 | (0.00) ^d | 1.05 | 1.05 | (3.17) | (0.00) ^d | (3.17) | 13.05 | 8.25% | 276,267 | 0.87% | N/A | (0.03)% |
| 9/30/15 ⁱ | 16.37 | (0.01) | (0.95) | (0.96) | (0.24) | - | (0.24) | 15.17 | (5.92%) ^b | 237,215 | 0.85% ^a | N/A | (0.08)% ^a |
| 12/31/14 | 19.02 | (0.03) | 1.03 | 1.00 | (3.65) | - | (3.65) | 16.37 | 6.16% | 523,725 | 0.85% | 0.84% | (0.19)% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$18.85 | \$(0.02) | \$(1.04) | \$(1.06) | \$(2.73) | \$ - | \$(2.73) | \$15.06 | (2.40)% | \$128,280 | 0.96% | N/A | (0.14)% |
| 9/30/18 | 15.57 | (0.04) | 4.19 | 4.15 | (0.87) | - | (0.87) | 18.85 | 27.87% | 142,284 | 0.95% | N/A | (0.25)% |
| 9/30/17 | 12.93 | (0.02) | 2.66 | 2.64 | - | - | - | 15.57 | 20.42% | 119,338 | 0.96% | N/A | (0.15)% |
| 9/30/16 | 15.07 | (0.02) | 1.05 | 1.03 | (3.17) | (0.00) ^d | (3.17) | 12.93 | 8.16% | 119,577 | 0.97% | N/A | (0.15)% |
| 9/30/15 ⁱ | 16.28 | (0.02) | (0.95) | (0.97) | (0.24) | - | (0.24) | 15.07 | (6.07%) ^b | 168,987 | 0.95% ^a | N/A | (0.18)% ^a |
| 12/31/14 | 18.94 | (0.06) | 1.05 | 0.99 | (3.65) | - | (3.65) | 16.28 | 6.14% | 212,669 | 0.97% | 0.94% | (0.30)% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$17.89 | \$(0.03) | \$(1.01) | \$(1.04) | \$(2.73) | \$ - | \$(2.73) | \$14.12 | (2.43)% | \$ 34,404 | 1.06% | N/A | (0.23)% |
| 9/30/18 | 14.84 | (0.06) | 3.98 | 3.92 | (0.87) | - | (0.87) | 17.89 | 27.69% | 33,978 | 1.05% | N/A | (0.34)% |
| 9/30/17 | 12.33 | (0.03) | 2.54 | 2.51 | - | - | - | 14.84 | 20.36% | 34,017 | 1.06% | N/A | (0.25)% |
| 9/30/16 | 14.53 | (0.03) | 1.00 | 0.97 | (3.17) | (0.00) ^d | (3.17) | 12.33 | 8.02% | 36,718 | 1.07% | N/A | (0.23)% |
| 9/30/15 ⁱ | 15.71 | (0.03) | (0.91) | (0.94) | (0.24) | - | (0.24) | 14.53 | (6.10%) ^b | 36,194 | 1.05% ^a | N/A | (0.28)% ^a |
| 12/31/14 | 18.43 | (0.07) | 1.00 | 0.93 | (3.65) | - | (3.65) | 15.71 | 5.98% | 39,757 | 1.08% | 1.05% | (0.41)% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$16.87 | \$(0.04) | \$(1.00) | \$(1.04) | \$(2.73) | \$ - | \$(2.73) | \$13.10 | (2.60)% | \$ 28,372 | 1.16% | N/A | (0.34)% |
| 9/30/18 | 14.05 | (0.07) | 3.76 | 3.69 | (0.87) | - | (0.87) | 16.87 | 27.60% | 35,642 | 1.15% | N/A | (0.45)% |
| 9/30/17 | 11.69 | (0.04) | 2.40 | 2.36 | - | - | - | 14.05 | 20.19% | 30,295 | 1.16% | N/A | (0.35)% |
| 9/30/16 | 13.95 | (0.04) | 0.95 | 0.91 | (3.17) | (0.00) ^d | (3.17) | 11.69 | 7.92% | 29,335 | 1.17% | N/A | (0.34)% |
| 9/30/15 ⁱ | 15.10 | (0.04) | (0.87) | (0.91) | (0.24) | - | (0.24) | 13.95 | (6.15%) ^b | 33,350 | 1.15% ^a | N/A | (0.38)% ^a |
| 12/31/14 | 17.87 | (0.09) | 0.97 | 0.88 | (3.65) | - | (3.65) | 15.10 | 5.88% | 30,069 | 1.18% | 1.16% | (0.52)% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$15.14 | \$(0.07) | \$(0.96) | \$(1.03) | \$(2.73) | \$ - | \$(2.73) | \$11.38 | (2.87)% | \$ 33,997 | 1.41% | N/A | (0.59)% |
| 9/30/18 | 12.72 | (0.09) | 3.38 | 3.29 | (0.87) | - | (0.87) | 15.14 | 27.33% | 43,682 | 1.40% | N/A | (0.70)% |
| 9/30/17 | 10.61 | (0.07) | 2.18 | 2.11 | - | - | - | 12.72 | 19.89% | 35,240 | 1.41% | N/A | (0.60)% |
| 9/30/16 | 12.97 | (0.06) | 0.87 | 0.81 | (3.17) | (0.00) ^d | (3.17) | 10.61 | 7.70% | 40,045 | 1.42% | N/A | (0.59)% |
| 9/30/15 ⁱ | 14.09 | (0.07) | (0.81) | (0.88) | (0.24) | - | (0.24) | 12.97 | (6.31%) ^b | 46,014 | 1.40% ^a | N/A | (0.63)% ^a |
| 12/31/14 | 16.96 | (0.13) | 0.91 | 0.78 | (3.65) | - | (3.65) | 14.09 | 5.60% | 56,296 | 1.43% | 1.41% | (0.77)% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$15.23 | \$(0.06) | \$(0.96) | \$(1.02) | \$(2.73) | \$ - | \$(2.73) | \$11.48 | (2.76)% | \$ 12,843 | 1.31% | N/A | (0.49)% |
| 9/30/18 | 12.78 | (0.08) | 3.40 | 3.32 | (0.87) | - | (0.87) | 15.23 | 27.44% | 13,972 | 1.30% | N/A | (0.60)% |
| 9/30/17 | 10.65 | (0.06) | 2.19 | 2.13 | - | - | - | 12.78 | 20.00% | 5,081 | 1.31% | N/A | (0.50)% |
| 9/30/16 | 13.00 | (0.05) | 0.87 | 0.82 | (3.17) | (0.00) ^d | (3.17) | 10.65 | 7.78% | 1,781 | 1.32% | N/A | (0.45)% |
| 9/30/15 ⁱ | 14.10 | (0.06) | (0.80) | (0.86) | (0.24) | - | (0.24) | 13.00 | (6.23%) ^b | 438 | 1.30% ^a | N/A | (0.54)% ^a |
| 12/31/14 ^h | 17.12 | (0.08) | 0.71 | 0.63 | (3.65) | - | (3.65) | 14.10 | 4.67% ^b | 105 | 1.29% ^a | N/A | (0.62)% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$13.51 | \$(0.07) | \$(0.92) | \$(0.99) | \$(2.73) | \$ - | \$(2.73) | \$ 9.79 | (2.94)% | \$ 2,728 | 1.56% | N/A | (0.73)% |
| 9/30/18 | 11.46 | (0.10) | 3.02 | 2.92 | (0.87) | - | (0.87) | 13.51 | 27.10% | 2,622 | 1.55% | N/A | (0.85)% |
| 9/30/17 | 9.57 | (0.08) | 1.97 | 1.89 | - | - | - | 11.46 | 19.75% | 2,199 | 1.56% | N/A | (0.75)% |
| 9/30/16 | 12.02 | (0.06) | 0.78 | 0.72 | (3.17) | (0.00) ^d | (3.17) | 9.57 | 7.52% | 1,254 | 1.57% | N/A | (0.69)% |
| 9/30/15 ⁱ | 13.09 | (0.08) | (0.75) | (0.83) | (0.24) | - | (0.24) | 12.02 | (6.41%) ^b | 315 | 1.55% ^a | N/A | (0.80)% ^a |
| 12/31/14 | 16.04 | (0.16) | 0.86 | 0.70 | (3.65) | - | (3.65) | 13.09 | 5.35% | 104 | 1.66% | 1.63% | (1.02)% |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended | Year ended |
|-------------------------|-------------------------|------|------|------|---------------------------------|-------------------|
| | 2019 | 2018 | 2017 | 2016 | September 30, 2015 ^b | December 31, 2014 |
| | 71% | 85% | 86% | 85% | 82% | 76% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

MM MSCI EAFE INTERNATIONAL INDEX FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000)'s | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net investment income (loss) to average daily net assets |
| | | | | | | | | | | | | | |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | 13.12 | \$0.39 | \$(0.61) | \$(0.22) | \$(0.34) | \$(0.22) | \$(0.56) | 12.34 | (1.15%) | \$ 56,770 | 0.23% | 0.23% ⁿ | 3.20% |
| 9/30/18 | 13.40 | 0.38 | (0.05) | 0.33 | (0.43) | (0.18) | (0.61) | 13.12 | 2.49% | 46,834 | 0.32% | 0.25% | 2.82% |
| 9/30/17 | 12.10 | 0.32 | 1.80 | 2.12 | (0.61) | (0.21) | (0.82) | 13.40 | 18.96% | 39,255 | 0.31% | 0.25% | 2.72% |
| 9/30/16 | 11.68 | 0.34 | 0.38 | 0.72 | (0.27) | (0.03) | (0.30) | 12.10 | 6.26% | 93,913 | 0.24% | 0.24% ⁿ | 2.89% |
| 9/30/15 ⁱ | 12.20 | 0.31 | (0.83) | (0.52) | - | - | - | 11.68 | (4.26%) ^b | 278,051 | 0.29% ^a | 0.25% ^a | 3.22% ^a |
| 12/31/14 | 13.51 | 0.46 | (1.23) | (0.77) | (0.40) | (0.14) | (0.54) | 12.20 | (5.64%) | 213,384 | 0.26% | 0.25% | 3.38% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | 13.11 | \$0.36 | \$(0.60) | \$(0.24) | \$(0.32) | \$(0.22) | \$(0.54) | 12.33 | (1.26%) | \$ 22,402 | 0.33% | 0.33% ⁿ | 3.00% |
| 9/30/18 | 13.39 | 0.36 | (0.04) | 0.32 | (0.42) | (0.18) | (0.60) | 13.11 | 2.38% | 12,947 | 0.42% | 0.35% | 2.69% |
| 9/30/17 | 12.09 | 0.26 | 1.85 | 2.11 | (0.60) | (0.21) | (0.81) | 13.39 | 18.87% | 13,724 | 0.41% | 0.35% | 2.13% |
| 9/30/16 | 11.68 | 0.34 | 0.36 | 0.70 | (0.26) | (0.03) | (0.29) | 12.09 | 6.11% | 32,195 | 0.34% | 0.34% ⁿ | 2.96% |
| 9/30/15 ⁱ | 12.21 | 0.32 | (0.85) | (0.53) | - | - | - | 11.68 | (4.34%) ^b | 16,010 | 0.39% ^a | 0.35% ^a | 3.36% ^a |
| 12/31/14 | 13.50 | 0.59 | (1.37) | (0.78) | (0.37) | (0.14) | (0.51) | 12.21 | (5.68%) | 4,052 | 0.36% | 0.34% | 4.35% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | 13.05 | \$0.32 | \$(0.56) | \$(0.24) | \$(0.31) | \$(0.22) | \$(0.53) | 12.28 | (1.31%) | \$ 3,340 | 0.48% | 0.48% ⁿ | 2.66% |
| 9/30/18 | 13.33 | 0.31 | (0.01) | 0.30 | (0.40) | (0.18) | (0.58) | 13.05 | 2.26% | 27,218 | 0.57% | 0.50% | 2.31% |
| 9/30/17 | 12.05 | 0.32 | 1.75 | 2.07 | (0.58) | (0.21) | (0.79) | 13.33 | 18.58% | 25,208 | 0.56% | 0.50% | 2.62% |
| 9/30/16 | 11.64 | 0.32 | 0.36 | 0.68 | (0.24) | (0.03) | (0.27) | 12.05 | 5.94% | 16,897 | 0.49% | 0.49% ⁿ | 2.79% |
| 9/30/15 ⁱ | 12.17 | 0.29 | (0.82) | (0.53) | - | - | - | 11.64 | (4.35%) ^b | 14,896 | 0.54% ^a | 0.50% ^a | 3.00% ^a |
| 12/31/14 | 13.49 | 0.35 | (1.15) | (0.80) | (0.38) | (0.14) | (0.52) | 12.17 | (5.88%) | 5,988 | 0.50% | 0.50% ^k | 2.61% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | 13.03 | \$0.33 | \$(0.59) | \$(0.26) | \$(0.29) | \$(0.22) | \$(0.51) | 12.26 | (1.49%) | \$ 40,745 | 0.58% | 0.58% ⁿ | 2.78% |
| 9/30/18 | 13.31 | 0.31 | (0.03) | 0.28 | (0.38) | (0.18) | (0.56) | 13.03 | 2.15% | 38,753 | 0.67% | 0.60% | 2.31% |
| 9/30/17 | 12.03 | 0.29 | 1.77 | 2.06 | (0.57) | (0.21) | (0.78) | 13.31 | 18.48% | 43,896 | 0.66% | 0.60% | 2.39% |
| 9/30/16 | 11.62 | 0.32 | 0.35 | 0.67 | (0.23) | (0.03) | (0.26) | 12.03 | 5.87% | 39,646 | 0.59% | 0.59% ⁿ | 2.72% |
| 9/30/15 ⁱ | 12.17 | 0.28 | (0.83) | (0.55) | - | - | - | 11.62 | (4.52%) ^b | 33,128 | 0.64% ^a | 0.60% ^a | 2.93% ^a |
| 12/31/14 | 13.49 | 0.32 | (1.13) | (0.81) | (0.37) | (0.14) | (0.51) | 12.17 | (5.90%) | 22,634 | 0.60% | 0.60% ^k | 2.43% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | 12.98 | \$0.31 | \$(0.59) | \$(0.28) | \$(0.26) | \$(0.22) | \$(0.48) | 12.22 | (1.66%) | \$ 23,948 | 0.83% | 0.83% ⁿ | 2.59% |
| 9/30/18 | 13.27 | 0.28 | (0.03) | 0.25 | (0.36) | (0.18) | (0.54) | 12.98 | 1.87% | 22,344 | 0.92% | 0.85% | 2.15% |
| 9/30/17 | 12.00 | 0.26 | 1.76 | 2.02 | (0.54) | (0.21) | (0.75) | 13.27 | 18.16% | 18,255 | 0.91% | 0.85% | 2.17% |
| 9/30/16 | 11.59 | 0.27 | 0.38 | 0.65 | (0.21) | (0.03) | (0.24) | 12.00 | 5.63% | 13,495 | 0.84% | 0.84% ⁿ | 2.35% |
| 9/30/15 ⁱ | 12.16 | 0.25 | (0.82) | (0.57) | - | - | - | 11.59 | (4.69%) ^b | 12,681 | 0.89% ^a | 0.85% ^a | 2.65% ^a |
| 12/31/14 | 13.47 | 0.34 | (1.18) | (0.84) | (0.33) | (0.14) | (0.47) | 12.16 | (6.20%) | 7,253 | 0.86% | 0.86% ^k | 2.56% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | 12.92 | \$0.31 | \$(0.58) | \$(0.27) | \$(0.27) | \$(0.22) | \$(0.49) | 12.16 | (1.56%) | \$ 41,622 | 0.73% | 0.73% ⁿ | 2.65% |
| 9/30/18 | 13.21 | 0.30 | (0.04) | 0.26 | (0.37) | (0.18) | (0.55) | 12.92 | 1.95% | 48,486 | 0.82% | 0.75% | 2.25% |
| 9/30/17 | 11.96 | 0.29 | 1.74 | 2.03 | (0.57) | (0.21) | (0.78) | 13.21 | 18.31% | 45,031 | 0.81% | 0.75% | 2.39% |
| 9/30/16 | 11.59 | 0.32 | 0.33 | 0.65 | (0.25) | (0.03) | (0.28) | 11.96 | 5.66% | 25,933 | 0.74% | 0.74% ⁿ | 2.74% |
| 9/30/15 ⁱ | 12.15 | 0.19 | (0.75) | (0.56) | - | - | - | 11.59 | (4.69%) ^b | 6,697 | 0.79% ^a | 0.75% ^a | 2.03% ^a |
| 12/31/14 ^h | 13.53 | 0.22 | (1.11) | (0.89) | (0.35) | (0.14) | (0.49) | 12.15 | (6.48%) ^b | 141 | 0.75% ^a | 0.75% ^{a,k} | 2.22% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | 12.87 | \$0.28 | \$(0.58) | \$(0.30) | \$(0.24) | \$(0.22) | \$(0.46) | 12.11 | (1.86%) | \$ 40,853 | 0.98% | 0.98% ⁿ | 2.39% |
| 9/30/18 | 13.17 | 0.26 | (0.04) | 0.22 | (0.34) | (0.18) | (0.52) | 12.87 | 1.69% | 45,563 | 1.07% | 1.00% | 2.01% |
| 9/30/17 | 11.93 | 0.25 | 1.75 | 2.00 | (0.55) | (0.21) | (0.76) | 13.17 | 18.05% | 40,921 | 1.06% | 1.00% | 2.06% |
| 9/30/16 | 11.58 | 0.28 | 0.34 | 0.62 | (0.24) | (0.03) | (0.27) | 11.93 | 5.44% | 24,798 | 0.99% | 0.99% ⁿ | 2.46% |
| 9/30/15 ⁱ | 12.16 | 0.22 | (0.80) | (0.58) | - | - | - | 11.58 | (4.69%) ^b | 5,031 | 1.04% ^a | 1.00% ^a | 2.32% ^a |
| 12/31/14 ^h | 13.53 | 0.21 | (1.12) | (0.91) | (0.32) | (0.14) | (0.46) | 12.16 | (6.73%) ^b | 97 | 1.00% ^a | 1.00% ^{a,k} | 2.09% ^a |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 7% | 15% | 35% | 26% | 6% | 28% |

a Annualized.

b Percentage represents the results for the period and is not annualized.

c Per share amount calculated on the average shares method.

h For the period April 1, 2014 (commencement of operations) through December 31, 2014.

i For the period January 1, 2015 through September 30, 2015.

j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.

k Amount waived had no impact on the ratio of expenses to average daily net assets.

l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

n Expenses incurred during the period fell under the expense cap.

MASSMUTUAL SELECT OVERSEAS FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | | Ratios / Supplemental Data | | | | |
|-----------------------------|--|---|--|-------------------------------------|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{c,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000's) | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$9.42 | \$0.20 | \$(0.34) | \$(0.14) | \$(0.15) | \$(0.78) | \$(0.93) | \$8.35 | 0.01% | \$348,467 | 0.87% | N/A | 2.42% |
| 9/30/18 | 9.61 | 0.16 | (0.16) | 0.00 ^d | (0.19) | - | (0.19) | 9.42 | (0.02%) | 362,074 | 0.92% | N/A | 1.68% |
| 9/30/17 | 7.88 | 0.15 | 1.76 | 1.91 | (0.18) | - | (0.18) | 9.61 | 24.71% | 318,534 | 0.93% | N/A | 1.70% |
| 9/30/16 | 7.68 | 0.14 | 0.19 | 0.33 | (0.13) | - | (0.13) | 7.88 | 4.28% | 328,518 | 0.92% | N/A | 1.88% |
| 9/30/15 ⁱ | 8.29 | 0.13 | (0.53) | (0.40) | (0.21) | - | (0.21) | 7.68 | (5.00%) ^b | 290,692 | 0.93% ^a | N/A | 1.95% ^a |
| 12/31/14 | 9.05 | 0.20 | (0.75) | (0.55) | (0.21) | - | (0.21) | 8.29 | (6.25%) | 305,063 | 0.97% | 0.90% | 2.22% |
| Class R5 | | | | | | | | | | | | | |
| 9/30/19 | \$9.45 | \$0.19 | \$(0.34) | \$(0.15) | \$(0.14) | \$(0.78) | \$(0.92) | \$8.38 | (0.14%) | \$122,168 | 0.97% | N/A | 2.34% |
| 9/30/18 | 9.64 | 0.15 | (0.16) | (0.01) | (0.18) | - | (0.18) | 9.45 | (0.11%) | 134,803 | 1.02% | N/A | 1.54% |
| 9/30/17 | 7.90 | 0.13 | 1.78 | 1.91 | (0.17) | - | (0.17) | 9.64 | 24.64% | 154,039 | 1.03% | N/A | 1.52% |
| 9/30/16 | 7.70 | 0.13 | 0.19 | 0.32 | (0.12) | - | (0.12) | 7.90 | 4.15% | 138,668 | 1.02% | N/A | 1.71% |
| 9/30/15 ⁱ | 8.31 | 0.12 | (0.54) | (0.42) | (0.19) | - | (0.19) | 7.70 | (5.13%) ^b | 161,529 | 1.03% ^a | N/A | 1.85% ^a |
| 12/31/14 | 9.06 | 0.19 | (0.76) | (0.57) | (0.18) | - | (0.18) | 8.31 | (6.40%) | 164,096 | 1.13% | 1.05% | 2.18% |
| Service Class | | | | | | | | | | | | | |
| 9/30/19 | \$9.39 | \$0.18 | \$(0.33) | \$(0.15) | \$(0.13) | \$(0.78) | \$(0.91) | \$8.33 | (0.15%) | \$ 36,489 | 1.07% | N/A | 2.27% |
| 9/30/18 | 9.58 | 0.14 | (0.16) | (0.02) | (0.17) | - | (0.17) | 9.39 | (0.22%) | 39,149 | 1.12% | N/A | 1.45% |
| 9/30/17 | 7.86 | 0.11 | 1.77 | 1.88 | (0.16) | - | (0.16) | 9.58 | 24.39% | 45,240 | 1.13% | N/A | 1.26% |
| 9/30/16 | 7.66 | 0.12 | 0.19 | 0.31 | (0.11) | - | (0.11) | 7.86 | 4.07% | 69,873 | 1.12% | N/A | 1.63% |
| 9/30/15 ⁱ | 8.26 | 0.11 | (0.52) | (0.41) | (0.19) | - | (0.19) | 7.66 | (5.10%) ^b | 77,184 | 1.13% ^a | N/A | 1.74% ^a |
| 12/31/14 | 9.01 | 0.17 | (0.75) | (0.58) | (0.17) | - | (0.17) | 8.26 | (6.52%) | 76,131 | 1.21% | 1.13% | 1.95% |
| Administrative Class | | | | | | | | | | | | | |
| 9/30/19 | \$9.46 | \$0.17 | \$(0.33) | \$(0.16) | \$(0.12) | \$(0.78) | \$(0.90) | \$8.40 | (0.32%) | \$ 21,563 | 1.17% | N/A | 2.03% |
| 9/30/18 | 9.65 | 0.13 | (0.16) | (0.03) | (0.16) | - | (0.16) | 9.46 | (0.33%) | 31,199 | 1.22% | N/A | 1.31% |
| 9/30/17 | 7.92 | 0.12 | 1.76 | 1.88 | (0.15) | - | (0.15) | 9.65 | 24.22% | 40,543 | 1.23% | N/A | 1.40% |
| 9/30/16 | 7.72 | 0.12 | 0.18 | 0.30 | (0.10) | - | (0.10) | 7.92 | 3.93% | 37,189 | 1.22% | N/A | 1.54% |
| 9/30/15 ⁱ | 8.32 | 0.11 | (0.52) | (0.41) | (0.19) | - | (0.19) | 7.72 | (5.08%) ^b | 35,607 | 1.23% ^a | N/A | 1.70% ^a |
| 12/31/14 | 9.09 | 0.17 | (0.76) | (0.59) | (0.18) | - | (0.18) | 8.32 | (6.59%) | 29,655 | 1.29% | 1.22% | 1.90% |
| Class A | | | | | | | | | | | | | |
| 9/30/19 | \$9.25 | \$0.15 | \$(0.32) | \$(0.17) | \$(0.09) | \$(0.78) | \$(0.87) | \$8.21 | (0.48%) | \$ 29,537 | 1.42% | N/A | 1.86% |
| 9/30/18 | 9.44 | 0.11 | (0.16) | (0.05) | (0.14) | - | (0.14) | 9.25 | (0.60%) | 41,179 | 1.47% | N/A | 1.11% |
| 9/30/17 | 7.75 | 0.09 | 1.73 | 1.82 | (0.13) | - | (0.13) | 9.44 | 23.89% | 49,218 | 1.48% | N/A | 1.09% |
| 9/30/16 | 7.55 | 0.10 | 0.18 | 0.28 | (0.08) | - | (0.08) | 7.75 | 3.73% | 58,816 | 1.47% | N/A | 1.31% |
| 9/30/15 ⁱ | 8.14 | 0.09 | (0.52) | (0.43) | (0.16) | - | (0.16) | 7.55 | (5.39%) ^b | 58,523 | 1.48% ^a | N/A | 1.40% ^a |
| 12/31/14 | 8.89 | 0.15 | (0.75) | (0.60) | (0.15) | - | (0.15) | 8.14 | (6.80%) | 60,890 | 1.55% | 1.47% | 1.72% |
| Class R4 | | | | | | | | | | | | | |
| 9/30/19 | \$9.10 | \$0.17 | \$(0.34) | \$(0.17) | \$(0.12) | \$(0.78) | \$(0.90) | \$8.03 | (0.51%) | \$ 14,876 | 1.32% | N/A | 2.14% |
| 9/30/18 | 9.30 | 0.12 | (0.16) | (0.04) | (0.16) | - | (0.16) | 9.10 | (0.48%) | 12,903 | 1.37% | N/A | 1.23% |
| 9/30/17 | 7.64 | 0.10 | 1.70 | 1.80 | (0.14) | - | (0.14) | 9.30 | 24.05% | 7,779 | 1.38% | N/A | 1.26% |
| 9/30/16 | 7.47 | 0.12 | 0.16 | 0.28 | (0.11) | - | (0.11) | 7.64 | 3.79% | 6,660 | 1.37% | N/A | 1.57% |
| 9/30/15 ⁱ | 8.09 | 0.08 | (0.49) | (0.41) | (0.21) | - | (0.21) | 7.47 | (5.24%) ^b | 3,422 | 1.38% ^a | N/A | 1.28% ^a |
| 12/31/14 ^h | 8.80 | 0.11 | (0.61) | (0.50) | (0.21) | - | (0.21) | 8.09 | (5.81%) ^b | 94 | 1.37% ^a | N/A | 1.63% ^a |
| Class R3 | | | | | | | | | | | | | |
| 9/30/19 | \$9.17 | \$0.15 | \$(0.34) | \$(0.19) | \$(0.09) | \$(0.78) | \$(0.87) | \$8.11 | (0.72%) | \$ 3,382 | 1.57% | N/A | 1.86% |
| 9/30/18 | 9.37 | 0.10 | (0.17) | (0.07) | (0.13) | - | (0.13) | 9.17 | (0.75%) | 3,947 | 1.62% | N/A | 1.08% |
| 9/30/17 | 7.70 | 0.08 | 1.72 | 1.80 | (0.13) | - | (0.13) | 9.37 | 23.73% | 3,267 | 1.63% | N/A | 1.00% |
| 9/30/16 | 7.52 | 0.09 | 0.18 | 0.27 | (0.09) | - | (0.09) | 7.70 | 3.63% | 1,918 | 1.62% | N/A | 1.25% |
| 9/30/15 ⁱ | 8.15 | 0.10 | (0.55) | (0.45) | (0.18) | - | (0.18) | 7.52 | (5.60%) ^b | 1,257 | 1.63% ^a | N/A | 1.51% ^a |
| 12/31/14 | 8.76 | 0.17 | (0.78) | (0.61) | - | - | - | 8.15 | (6.96%) | 182 | 1.82% | 1.69% | 2.02% |

| Portfolio turnover rate | Year ended September 30 | | | | Period ended September 30, 2015 ^b | Year ended December 31, 2014 |
|-------------------------|-------------------------|------|------|------|--|------------------------------|
| | 2019 | 2018 | 2017 | 2016 | | |
| | 27% | 46% | 29% | 38% | 39% | 42% |

- a Annualized.
- b Percentage represents the results for the period and is not annualized.
- c Per share amount calculated on the average shares method.
- d Amount is less than \$0.005 per share.
- h For the period April 1, 2014 (commencement of operations) through December 31, 2014.
- i For the period January 1, 2015 through September 30, 2015.
- j Computed after giving effect to an agreement by MML Advisers and/or MassMutual to waive certain fees and expenses of the Fund.
- l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.
- m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

MASSMUTUAL SELECT T. ROWE PRICE INTERNATIONAL EQUITY FUND

| | Income (loss) from investment operations | | | | Less distributions to shareholders | | | Ratios / Supplemental Data | | | | | |
|----------------------|--|---|--|--|------------------------------------|-------------------------|---------------------|------------------------------------|-----------------------------|---------------------------------------|--|--|--|
| | Net asset value, beginning of the period | Net investment income (loss) ^{e,j} | Net realized and unrealized gain (loss) on investments | Total income (loss) from investment operations | From net investment income | From net realized gains | Total distributions | Net asset value, end of the period | Total return ^{l,m} | Net assets, end of the period (000)'s | Ratio of expenses to average daily net assets before expense waivers | Ratio of expenses to average daily net assets after expense waivers ^j | Net investment income (loss) to average daily net assets |
| Class I | | | | | | | | | | | | | |
| 9/30/19 | \$ 9.70 | \$0.26 | \$(0.39) | \$(0.13) | \$ (0.14) | \$ - | \$ (0.14) | \$9.43 | (1.17%) | \$1,135,941 | 0.79% | 0.67% | 2.80% |
| 9/30/18 ^e | 10.00 | 0.19 | (0.49) | (0.30) | - | - | - | 9.70 | (3.00%) ^b | 809,616 | 0.89% ^a | 0.67% ^a | 3.03% ^a |

| | | |
|--------------------------------|--|--|
| Portfolio turnover rate | Year ended September 30, 2019 | Period ended September 30, 2018^b |
| | 26% | 24% ^q |

- a Annualized.
- b Percentage represents the results for the period and is not annualized.
- c Per share amount calculated on the average shares method.
- g For the period February 9, 2018 (commencement of operations) through September 30, 2018.
- j Computed after giving effect to an agreement by MML Advisers to waive certain fees and expenses of the Fund.
- l Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.
- m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.
- q Portfolio turnover excludes securities received from subscriptions in-kind. Securities received from subscriptions in-kind had no impact on portfolio turnover.

Index Descriptions

The **Bloomberg Barclays U.S. Aggregate Bond Index** measures the performance of the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, mortgage-backed securities (MBS) (agency fixed-rate and hybrid ARM pass-throughs), asset-backed securities (ABS), and commercial mortgage-backed securities (CMBS). It rolls up into other Bloomberg Barclay's flagship indexes, such as the multi-currency Global Aggregate Index and the U.S. Universal Index, which includes high yield and emerging markets debt. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **Custom Global Allocation Index** comprises the S&P 500, FTSE World ex U.S., ICE BofAML Current 5-Year U.S. Treasury, and FTSE Non-U.S. Dollar World Government Bond Indexes. The weightings of each index are 36%, 24%, 24%, and 16%, respectively. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **FTSE Non-U.S. Dollar World Government Bond Index** measures the performance of fixed-rate, local currency, investment-grade sovereign bonds of all WGBI countries except the United States and is stated in U.S. dollar terms. It is a subset of the FTSE World Government Bond Index (WGBI). The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **FTSE World Index** measures the performance of the large- and mid-capitalization universe for Developed and Advanced Emerging market segments. It is part of the FTSE Global Equity Index Series. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **FTSE World ex U.S. Index** is an unmanaged, market-capitalization-weighted index representing the performance of the large and mid cap stocks from the Developed and Advanced Emerging segments of the FTSE Global Equity Index Series excluding the United States. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **FTSE World Government Bond Index** measures the performance of fixed-rate, local currency, investment-grade sovereign bonds. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **ICE BofAML Current 5-Year U.S. Treasury Index** is an unmanaged index designed to track the total return of the current coupon five-year U.S. Treasury bond. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **MSCI All Country World Index (ACWI) ex USA** measures the performance of the large- and mid-cap segments of the particular regions, excluding U.S. equity securities, including developed and emerging markets. It is free float-adjusted market-capitalization weighted. The Index does not reflect any deduction for fees or expenses and cannot be purchased directly by investors.

The **MSCI EAFE Index** measures the performance of the large- and mid-cap segments of developed markets, excluding the U.S. and Canada equity securities. It is free float-adjusted market-capitalization weighted. The Index does not reflect any deduction for fees or expenses and cannot be purchased directly by investors.

The **Russell 1000 Index** measures the performance of the large-cap segment of U.S. equity securities. It is a subset of the Russell 3000[®] Index and includes approximately 1000 of the largest securities based on a combination of their market cap and current index membership. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **Russell 1000 Growth Index** measures the performance of the large-cap growth segment of U.S. equity securities. It includes the Russell 1000 Index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **Russell 1000 Value Index** measures the performance of the large-cap value segment of U.S. equity securities. It includes the Russell 1000 Index companies with lower price-to-book ratios and lower expected growth values. It is market-capitalization weighted. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **Russell 2000 Index** measures the performance of the small-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 Index and includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **Russell 2000 Growth Index** measures the performance of the small- to mid-cap growth segment of the U.S. equity universe. It includes Russell 2000 Index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **Russell 2000 Value Index** measures the performance of the small-cap value segment of the U.S. equity universe. It includes those Russell 2000 Index companies with lower price-to-book ratios and lower forecasted growth values. It is market-capitalization weighted. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **Russell Midcap Growth Index** measures the performance of the mid-cap growth segment of the U.S. equity universe. It includes Russell Midcap Index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **Russell Midcap Value Index** measures the performance of the mid-cap value segment of the U.S. equity universe. It includes Russell Midcap Index companies with lower price-to-book ratios and lower forecasted growth values. It is market-capitalization weighted. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **S&P 500 Index** measures the performance of 500 widely held stocks in the U.S. equity market. Standard and Poor's chooses member companies for the index based on market size, liquidity, and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid-1989, this composition has been more flexible and the number of issues in each sector has varied. It is market capitalization-weighted. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

The **S&P MidCap 400 Index** measures the performance of mid-sized U.S. companies, reflecting the distinctive risk and return characteristics of this market segment. It comprises stocks in the middle capitalization range, covering approximately 7% of the U.S. equity market. The Index does not reflect any deduction for fees, expenses, or taxes and cannot be purchased directly by investors.

MASSMUTUAL SELECT FUNDS

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Learning More About the Funds

You can learn more about the Funds by reading the Funds' **Annual and Semiannual Reports** and the **SAI**. You may obtain free copies of this information from the Funds or from the SEC using one or more of the methods set forth below. In the Annual and Semiannual Reports, you will find a discussion of market conditions and investment strategies that significantly affected each Fund's performance during the period covered by the Report and a listing of each Fund's portfolio securities as of the end of such period. The SAI provides additional information about the Funds and will provide you with more detail regarding the organization and operation of the Funds, including their investment strategies. The SAI is incorporated by reference into this Prospectus and is therefore legally considered a part of this Prospectus.

How to Obtain Information

From MassMutual Select Funds: You may request information about the Funds free of charge (including the Annual/Semiannual Reports and the SAI) or make shareholder inquiries by calling **1-888-309-3539** or by writing MassMutual Select Funds, c/o Massachusetts Mutual Life Insurance Company, 100 Bright Meadow Blvd., Enfield, Connecticut 06082-1981, **Attention: MassMutual U.S. Product and Marketing**. You may also obtain copies of the Annual/Semiannual Reports and the SAI free of charge at <http://www.massmutual.com/funds>.

From the SEC: Information about the Funds (including the Annual/Semiannual Reports and the SAI) is available on the SEC's EDGAR database on its Internet site at <http://www.sec.gov>. You can also get copies of this information, upon payment of a copying fee, by electronic request at publicinfo@sec.gov.

When obtaining information about the Funds from the SEC, you may find it useful to reference the **Funds' SEC file number: 811-8274**.