



Annual Report

MassMutual Select Funds

September 30, 2021



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This material must be preceded or accompanied by a current prospectus (or summary prospectus, if available) for the MassMutual Select Funds. Investors should consider a Fund's investment objective, risks, and charges and expenses carefully before investing. This and other information about the investment company is available in the prospectus (or summary prospectus, if available). Read it carefully before investing.

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*MassMutual Select Funds – President's Letter to Shareholders (Unaudited)**To Our Shareholders***Paul LaPiana**

"MassMutual recognizes that talking about your future can be uncomfortable. That's why we're here – to help you build the future you want for yourself and your family. For nearly 170 years, through ups and downs and good times and bad, we have helped our clients protect their loved ones and prepare for a better tomorrow."

September 30, 2021

The return of market volatility challenges retirement investors

I am pleased to present you with the MassMutual Select Funds Annual Report. During the fiscal year ended September 30, 2021, U.S. stocks were up over 30%, with investors seeing an end in sight to the global economic recession brought on by the COVID-19 pandemic. Foreign stocks in developed markets and emerging markets also experienced strong gains in the fiscal year, aided by increasing economic activity, generous fiscal and monetary stimulus, and strong corporate earnings throughout the reporting period. U.S. bond investors experienced negative returns in the rising interest rate environment, fueled by an increase in economic growth expectations, heightened inflationary pressures, and a lessening of monetary and fiscal policy support.

The return of volatility and the reality of market sell-offs can test an investor's mettle, but also serve to remind investors that it's important to maintain perspective and have realistic expectations about the future performance of your investment accounts. As described in this report, financial markets can reverse suddenly with little or no notice. That's why we continue to believe that retirement investors should create and maintain a plan that focuses on their goals, how long they have to invest, and how comfortable they are with market volatility.

Suggestions for retirement investors under any market conditions

- **You are likely in it for the long term.** Retirement planning involves what financial professionals refer to as "long-term investing," since most people save and invest for retirement throughout their working years. Although the financial markets will go up and down, individuals who take a long-term approach to investing realize that they have time to ride out the downturns as they work toward their retirement income goals.
- **Keep contributing.** While you have no control over the investment markets, you can control how often and how much you contribute to your retirement account. Saving as much as possible and increasing your contributions regularly is one way retirement investors can help boost their retirement savings, *regardless* of the performance of the stock and bond markets.
- **Invest continually.*** Financial professionals often advise their clients to stay in the market, regardless of short-term results. *Here's why:* Retirement investors who can invest in all market conditions have the potential to be rewarded even during market downturns, when more favorable prices may enable them to accumulate larger positions.
- **Monitor your asset allocation and diversify.** Stocks, bonds, and short-term/money market investments are asset classes that tend to behave differently, depending upon the economic and market environment. These broad asset classes contain an even greater array of asset sub-categories (such as small-cap stocks, international stocks, and high-yield bonds). Most financial professionals agree that investors can take advantage of different opportunities in the market and reduce the risk of over-exposure to one or two poorly performing asset types by selecting a number of investments that represent a mix of asset classes and sub-categories.

**Systematic investing and asset allocation do not ensure a profit or protect against loss in a declining market. Systematic investing involves continuous investment in securities regardless of fluctuating price levels. Investors should consider their ability to continue investing through periods of low price levels.*

(Continued)

*MassMutual Select Funds – President’s Letter to Shareholders (Unaudited) (Continued)**Is it time to track your progress?*

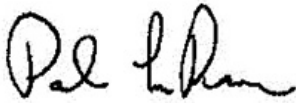
If you work with a financial professional, you may wish to consider checking in with him or her to help you determine if:

- you are saving enough for retirement;
- your retirement account is invested appropriately for all market conditions, based on your goals and objectives, as well as your investment time horizon; and
- you are taking steps to help reduce your longevity risk, which is the chance that you could “run out” of retirement savings during your lifetime.

Get to where you want to be

MassMutual recognizes that talking about your future can be uncomfortable. That’s why we’re here – to help you build the future you want for yourself and your family. For nearly 170 years, through ups and downs and good times and bad, we have helped our clients protect their loved ones and prepare for a better tomorrow. So we continue to encourage you to maintain perspective when it comes to retirement investing, regardless of any short-term changes in the markets or headline-making events that may be unsettling. MassMutual’s view is that changing market conditions have the potential to reward patient investors. Thank you for your continued confidence and trust in MassMutual.

Sincerely,



Paul LaPiana
President

The information provided is the opinion of MML Investment Advisers, LLC (MML Advisers) and is subject to change without notice. It is not to be construed as tax, legal, or investment advice. Of course, past performance does not guarantee future results.

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MassMutual Select Funds Annual Report – Economic and Market Overview (Unaudited)

September 30, 2021

Market Highlights

- For the reporting period from October 1, 2020 through September 30, 2021, U.S. stocks were up over 30%, with investors seeing an end in sight to the global economic recession brought on by the COVID-19 pandemic.
- In the fourth quarter of 2020, investors looked past rising COVID-19 cases and responded positively to global plans to roll out COVID-19 vaccinations, further fiscal stimulus, and a post-Brexit trade agreement between the U.K. and the European Union. (“Brexit” – an abbreviation for “British exit” – refers to the United Kingdom’s withdrawal from the European Union on January 31, 2020.)
- In the first quarter of 2021, investors embraced falling COVID-19 case counts, a faster-than-expected vaccination rollout, another round of fiscal stimulus, and upgrades to economic growth and corporate earnings forecasts.
- The second quarter of 2021 was a continuation of the prior quarter, with a significant percentage of the U.S. population receiving at least one dose of the vaccine and the widescale reopening of the economy. Concerns about inflation began to emerge, as the sharp rise in the demand for goods, services, homes, and labor outpaced supply.
- In the third quarter of 2021, another wave of rising COVID-19 case counts slowed economic growth and heightened supply shortages and inflationary pressures. Expectations for the tightening of monetary policy and the U.S. Congress’s procrastination to pass a bill to avert a government shutdown in October added to the uncertainty.
- Foreign stocks in developed markets and emerging markets also experienced strong gains in the fiscal year, aided by increasing economic activity, generous fiscal and monetary stimulus, and strong corporate earnings throughout the reporting period.
- U.S. bond investors experienced negative returns in the rising interest rate environment, fueled by an increase in economic growth expectations, heightened inflationary pressures, and a lessening of monetary and fiscal policy support.

Market Environment

Global stock investors experienced declining levels of volatility and strong positive returns for the fiscal year beginning October 1, 2020. U.S. stocks rose steadily in the period, buoyed by the Federal Reserve Board’s commitment to low interest rates, additional rounds of fiscal stimulus, rising expectations for strong economic growth, and rebounding corporate earnings. As a result, the broad market S&P 500[®] Index* (the “S&P 500”) delivered a strong 30.00% return for the fiscal year. The Dow Jones Industrial AverageSM was also up a respectable 24.15%. The technology-heavy NASDAQ Composite Index was also a big winner, advancing 30.26% for the fiscal year. Small- and mid-cap stocks outperformed their larger peers, as small-caps gained 47.68% – while value stocks outperformed their growth counterparts by approximately 8% during the period.

The continued market recovery, additional fiscal stimulus, conclusion of the U.S. presidential election, expectations for the tightening of monetary policy, and heightened inflationary pressures affected sectors differently, though all 11 sectors were in positive territory for the fiscal year. The energy, financial, and communication services sectors led in performance, enjoying double-digit growth, as they outperformed the S&P 500. The energy sector was the strongest performer for the fiscal year, up over 80%, aided by an 87% increase in the price of West Texas Intermediate (WTI) crude oil during the period. The utilities and consumer staples sectors trailed the S&P 500, each by nearly 20%.

Developed international markets, as measured by the MSCI EAFE[®] Index, trailed their domestic peers, ending the fiscal year up 25.73%. Emerging-market stocks, as measured by the MSCI Emerging Markets Index, ended up 18.20% for the period. Developed international and emerging-market stocks benefited from increasing economic activity, generous fiscal and monetary stimulus, and strong corporate earnings during the fiscal year.

** Indexes referenced, other than the MSCI Indexes, are unmanaged, do not incur fees, expenses, or taxes, and cannot be purchased directly for investment. The MSCI Indexes are unmanaged, do not incur fees or expenses, and cannot be purchased directly for investment.*

MassMutual Select Funds Annual Report – Economic and Market Overview (Unaudited) (Continued)

Bond yields rose sharply during the fiscal year, with the 10-year U.S. Treasury bond yield rising from a low of 0.68% on October 1, 2020 to close the period at 1.52%. Rising yields generally produce falling bond prices; consequently, bond index returns suffered. The Bloomberg U.S. Aggregate Bond Index ended the period down 0.90%. Investment-grade corporate bonds fared somewhat better. The Bloomberg U.S. Corporate Bond Index, which tracks investment-grade corporate bonds, ended the period with a 1.74% gain. The Bloomberg U.S. Corporate High Yield Bond Index also ended in positive territory, advancing 11.28%, aided by a sharp increase in commodity prices.

Review and maintain your strategy

MassMutual is committed to helping people secure their financial future and protect the ones they love. While the return of volatility and the reality of market sell-offs can test an investor's mettle, we'd like to remind you as a retirement investor that it's important to maintain perspective and have realistic expectations about the future performance of your investment accounts. As described in this report, financial markets can reverse suddenly with little or no notice. Our multi-managed and sub-advised mutual funds tap into the deep expertise of seasoned asset managers who are committed to helping long-term investors prepare for retirement – in all market conditions. As always, we recommend that you work with a personal financial professional, who can help you define an investment strategy that aligns with your comfort level with respect to market volatility, how long you have to save and invest, and your specific financial goals. Thank you for your confidence in MassMutual.

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MassMutual Total Return Bond Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Total Return Bond Fund*, and who is the Fund's subadviser?

The Fund seeks maximum total return, consistent with preservation of capital and prudent investment management, by investing, under normal circumstances, 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 to be of comparable quality). The Fund's subadviser is Metropolitan West Asset Management, LLC (MetWest).

** Prior to 05/01/2021, the Fund's name was MassMutual Select Total Return Bond Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class I shares returned 0.24%, outperforming the -0.90% return of the Bloomberg U.S. Aggregate Bond Index (the "benchmark"), which measures the performance of the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market securities, 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).

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

For the year ended September 30, 2021, credit issue selection delivered a boost to the Fund's returns, with notable contributions coming from finance companies, communications such as wirelines, and non-cyclical health care, as these also outpaced the benchmark. Further benefiting returns was the Fund's allocation to high yield, as that sector was one of the best-performing in the fixed income universe. In securitized products, residential mortgage sectors rewarded the Fund, supported by a strong housing market characterized by annualized double-digit home price appreciation, scant supply, and robust demand. Notable contributors included Fund holdings such as Alt-A and option ARM legacy non-agency MBS as well as low-coupon agency MBS TBAs. ("Agency" refers to debt issued by U.S. federal government agencies or government-sponsored entities for financing purposes. In a TBA or "to be announced" trade, the seller of MBS agrees on a sale price, but does not specify which securities will be delivered to the buyer on settlement day.) The MBS TBAs continued to benefit from significant purchases by the Federal Reserve Board (the "Fed"), evidenced by their ongoing "specialness," which represents the additional yield an investor receives by holding TBAs versus specific mortgage pools. Adding to relative returns were Fund holdings in CMBS as well as ABS, particularly floating-rate government guaranteed student loans. Finally, amid loftier rates, a shorter-than-benchmark duration profile bolstered the Fund's relative performance. Duration is a measure of a bond fund's sensitivity to interest rates. The longer the duration, the greater the price impact on the bond or portfolio when interest rates rise or fall.

Turning to the downside, hampering the Fund's performance was its defensive posture, as those with more macro risk generally outperformed given the strong economic rebound from COVID-19-induced volatility. Specifically, an underweight allocation to credit sensitive industries, such as energy and cyclicals detracted from performance.

The Fund's use of derivatives to manage duration and yield curve positioning had a minimal impact on performance. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Most derivatives are used for hedging, speculation, or both.

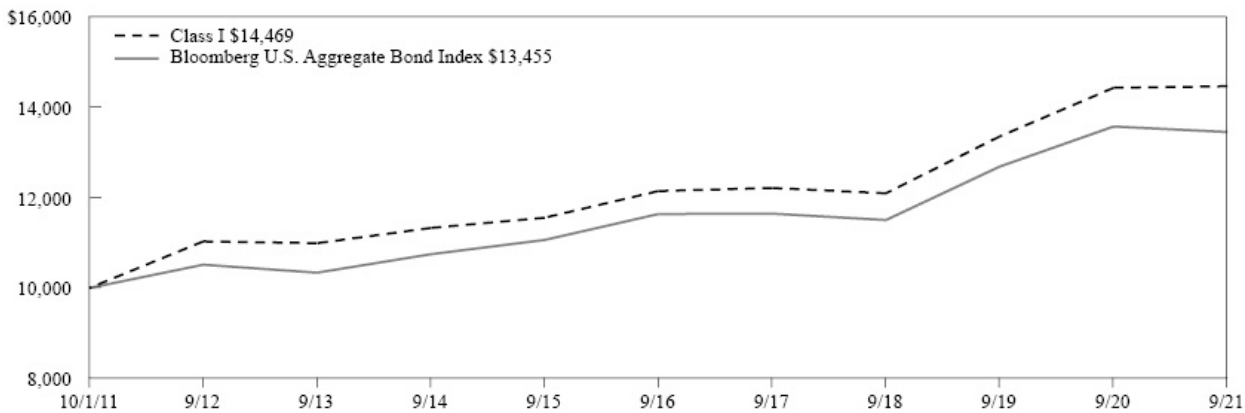
Subadviser outlook

Looking ahead, MetWest believes that the record-setting equity gains and historically tight fixed income spreads are unsustainable, particularly considering the massive debt and deficit overhang that will have to be dealt with. Additionally, the Fed (along with central banks globally) will likely have a difficult job in trying to manage stimulus withdrawal, especially as the list of "unknowns" grows. In MetWest's view, risks include the potential for meaningful volatility due to a possible Fed mistake, higher inflation, slowing growth, elevated leverage, and a change in the course of COVID-19. As such, Fund management believes that the Fed could be quicker to increase accommodation than to reduce it. Despite this vulnerable environment, in MetWest's opinion, caution is warranted (especially in credit) as the disparate indicators will need to be reconciled. While it's hard to know exactly how that will happen, in Fund management's view, it won't be a smooth process.

MassMutual Total Return Bond Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Total Return Bond Fund Portfolio Characteristics (% of Net Assets) on 9/30/21</i>	
U.S. Treasury Obligations	37.4%
U.S. Government Agency Obligations and Instrumentalities*	32.4%
Corporate Debt	22.6%
Non-U.S. Government Agency Obligations	11.1%
Mutual Funds	1.9%
Bank Loans	1.8%
Sovereign Debt Obligations	0.9%
Municipal Obligations	0.6%
Purchased Options	0.0%
Total Long-Term Investments	108.7%
Short-Term Investments and Other Assets and Liabilities	(8.7)%
Net Assets	100.0%

* May contain securities that are issued by a U.S. Government Agency, but are unsecured and are not guaranteed by a U.S. Government Agency.

*MassMutual Total Return Bond Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class I**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	07/06/2010	0.24%	3.56%	3.76%	
Class R5	07/06/2010	0.06%	3.45%	3.65%	
Service Class	07/06/2010	0.02%	3.35%	3.54%	
Administrative Class	07/06/2010	-0.07%	3.26%	3.45%	
Class A	04/01/2014	-0.33%	2.99%		3.01%
Class A (sales load deducted)*	04/01/2014	-4.56%	2.10%		2.42%
Class R4	07/06/2010	-0.20%	3.10%	3.30%	
Class R3	07/06/2010	-0.47%	2.82%	3.04%	
Bloomberg U.S. Aggregate Bond Index		-0.90%	2.94%	3.01%	3.34%

* Class A (sales load deducted) returns include the 4.25% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Strategic Bond Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Strategic Bond Fund*, and who are the Fund's subadvisers?

The Fund seeks a superior total rate of return by investing in fixed income instruments. 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's subadvisers are Western Asset Management Company, LLC (Western Asset) and its affiliate, Western Asset Management Company Limited (Western Asset Limited), which were responsible for approximately 59% of the Fund's portfolio (Western Asset Limited manages the non-U.S. dollar denominated investments of the Fund); and Brandywine Global Investment Management, LLC (Brandywine Global), which was responsible for approximately 41% of the Fund's portfolio, as of September 30, 2021. Effective August 10, 2021, Brandywine Global was added as a subadviser of the Fund.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Strategic Bond Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 1.61%, outperforming the -0.90% return of the Bloomberg U.S. Aggregate Bond Index (the "benchmark"), which measures the performance of the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market securities, 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).

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

With respect to the Western Asset component of the Fund, both investment-grade and high-yield credit exposures contributed positively to performance, as spreads tightened considerably during the period ended September 30, 2021. Credit spreads represent the difference in yields between nearly identical bonds with comparable maturities, but different quality ratings. Exposures to structured products, including non-agency residential and CMBS, as well as ABS, also contributed over the 12-month period. "Agency" refers to debt issued by U.S. federal government agencies or government-sponsored entities for financing purposes. Western Asset's emerging markets exposures, which included both local currency and U.S. dollar-denominated positions, also meaningfully contributed to performance over the period, led by local currency exposures, given a generally weaker U.S. dollar.

In aggregate, Western Asset's top-down macro strategies detracted from performance. For most of the period, the Western Asset Fund component had more interest rate exposure (duration) than the benchmark, which detracted from performance as interest rates rose meaningfully from the beginning to the end of the period. (Duration is a measure of a bond fund's sensitivity to interest rates. The longer the duration, the greater the price impact on the bond or portfolio when interest rates rise or fall.) Over the period, the 10-year U.S. Treasury yield rose from 0.69% to 1.52%. In addition, the 5s-30s section of the curve, which compares 5-year rates to 30-year rates, ended the period slightly flatter than it began. Thus, Western Asset's yield curve positioning, which was biased toward a yield curve flattening environment, modestly contributed to returns. (The yield curve is a graph showing the term structure of interest rates by plotting the yields of all bonds of comparable quality with maturities ranging from the shortest – typically one month – to the longest – typically 30 years – available. The resulting curve shows whether short-term interest rates are higher or lower than long-term rates.) Finally, Western Asset used derivative instruments mainly for hedging purposes during the period, including adjusting duration and term structure exposures. The portfolio also used currency forwards and options to adjust exposure to various foreign currencies. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Most derivatives are used for hedging, speculation, or both. Overall, the portfolio's use of derivatives contributed to performance during the period.

During the portion of the period that Brandywine Global served as a subadviser of the Fund (August 10, 2021–September 30, 2021), the Brandywine Global Fund component benefited from its notable underweight allocations to both benchmark duration and corporate credit exposure. Brandywine Global was invested in highly liquid positions with limited interest rate sensitivity (such as treasury floaters), paired with a small amount of corporate credit exposure. The Fund component's corporate credit holdings and its underweight allocation to U.S. Treasury duration drove performance during the reporting period. Conversely,

MassMutual Strategic Bond Fund – Portfolio Manager Report (Unaudited) (Continued)

while relatively small in their allocation size and overall impact, the limited number of Fund component holdings in MBS worked against Brandywine Global in absolute and relative terms, over the period. Brandywine Global used U.S. Ultra Bond Futures to add an average of 0.86 years of U.S. Treasury duration into its portfolio. The performance result of these positions was benign, although this derivative use did detract modestly from the Brandywine Global's absolute performance during the reporting period.

Subadviser outlook

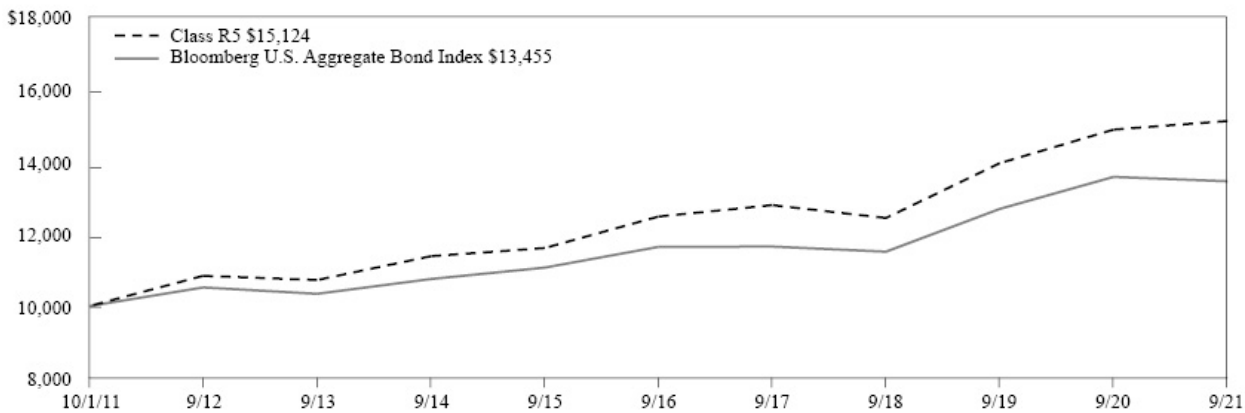
Western Asset's base case outlook is for continued improvement in global gross domestic product growth in the coming year as well as higher inflation as the world economy recovers on continued progress with the COVID-19 vaccination rollout. That stated, Western Asset is cautious about extrapolating short-term cyclical boosts into a presumption of a higher secular trend rate of growth or inflation. After the reopening bounce, Western Asset believes that the uncertainty of what lies ahead necessitates policy caution. Slowly rising long-term core inflation rates, with a broadening economic recovery, is the objective. The secular challenges that have kept U.S. and global growth to a moderate pace at best over the last several decades persist. These include the stagnation of Western societies' middle-class wages, aging demographics, and rising global debt burdens. Given this backdrop, Western Asset expects central banks could remain extraordinarily accommodative for the foreseeable future and that strategic portfolio diversification should remain paramount.

Looking ahead, Brandywine Global expects either a spread-widening event in corporate credit, a sharp rise in Treasury yields, or a mix of both, which could create forward-looking value anomalies worthy of more material investment weightings. Were such market conditions to unfold, Brandywine Global would look to reposition from its currently reserved absolute risk posture towards higher-conviction weightings in the affected asset segments.

MassMutual Strategic Bond Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Strategic Bond Fund Portfolio Characteristics (% of Net Assets) on 9/30/21</i>	
Corporate Debt	31.5%
U.S. Government Agency Obligations and Instrumentalities*	12.4%
Non-U.S. Government Agency Obligations	9.4%
U.S. Treasury Obligations	6.9%
Sovereign Debt Obligations	5.2%
Bank Loans	4.1%
Purchased Options	0.0%
Municipal Obligations	0.0%
Total Long-Term Investments	69.5%
Short-Term Investments and Other Assets and Liabilities	30.5%
Net Assets	100.0%

* May contain securities that are issued by a U.S. Government Agency, but are unsecured and are not guaranteed by a U.S. Government Agency.

*MassMutual Strategic Bond Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	04/01/2014	1.79%	4.03%		4.36%
Class R5	12/31/2004	1.61%	3.92%	4.22%	
Service Class	12/31/2004	1.59%	3.81%	4.14%	
Administrative Class	12/31/2004	1.49%	3.71%	4.02%	
Class A	12/31/2004	1.12%	3.44%	3.76%	
Class A (sales load deducted)*	12/31/2004	-3.18%	2.54%	3.31%	
Class R4	04/01/2014	1.31%	3.56%		3.90%
Class R3	12/31/2004	1.03%	3.29%	3.56%	
Bloomberg U.S. Aggregate Bond Index		-0.90%	2.94%	3.01%	3.34%

* Class A (sales load deducted) returns include the 4.25% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

*MassMutual Diversified Value Fund – Portfolio Manager Report (Unaudited)***What is the investment approach of MassMutual Diversified Value Fund*, and who are the Fund's subadvisers?**

The 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. 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's subadvisers are T. Rowe Price Associates, Inc. (T. Rowe Price), which was responsible for approximately 35% of the Fund's portfolio; and Brandywine Global Investment Management, LLC (Brandywine Global), which managed approximately 65% of the Fund's portfolio, as of September 30, 2021.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Diversified Value Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 39.38%, outperforming the 35.01% return of the Russell 1000[®] Value Index (the "benchmark"), which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

With respect to the Brandywine Global component of the Fund, Brandywine notes that the reporting period began with strong performance from higher-priced companies within the value benchmark. Eventually, however, there was a pronounced rotation into lower-valuation companies. The Brandywine Global Fund component benefited by maintaining an underweight allocation to the safety of higher dividend-yielding sectors, such as utilities and consumer staples, while maintaining substantial exposure to banking and consumer finance industries within the financial sector. The technology sector was another area of strength for Brandywine Global. Despite maintaining a substantial overweight allocation to this underperforming sector, the strong performance by Fund component holding Oracle in the software industry helped to drive performance. Elsewhere, the global shortage of chips benefited semiconductor equipment manufacturers, such as Fund component holding Applied Materials. On the downside, health care is a defensive sector that lagged the broader market. Brandywine Global held an overweight allocation to this underperforming sector and to the biotechnology industry, which also underperformed. Biopharmaceutical company Amgen was a top detractor from the Fund component's performance after it published a disappointing earnings release from weaker drug sales.

Within the T. Rowe Price component of the Fund, stock selection in the financial sector was the biggest contributor to relative performance, led by Fund holding Wells Fargo. Shares of the bank ended the period higher as consumer credit resilience and other factors boosted performance. The materials sector also aided relative results, due to Fund holdings like CF Industries, a manufacturer and distributor of agricultural fertilizers. Shares of the company ended the period higher, driven by an earnings report that showed the company executed well in an uncertain environment driven by unfavorable weather. Fund holdings in the industrials and business services sector also contributed to relative performance, led by General Electric. On the downside, Fund component holding Las Vegas Sands in the consumer discretionary sector was the largest relative detractor. Shares fell over the period due to coronavirus-driven uncertainty as vaccine distribution began and a return to leisure travel was uncertain. The energy sector also detracted from relative results for the period, driven by unfavorable stock selection, although a favorable overweight allocation to the sector partially offset losses.

The T. Rowe Price component of the Fund held warrants during the period, which generated minimal exposure and had a minimal impact on performance. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Derivatives can be used for hedging, speculation, or both.

*MassMutual Diversified Value Fund – Portfolio Manager Report (Unaudited) (Continued)***Subadviser outlook**

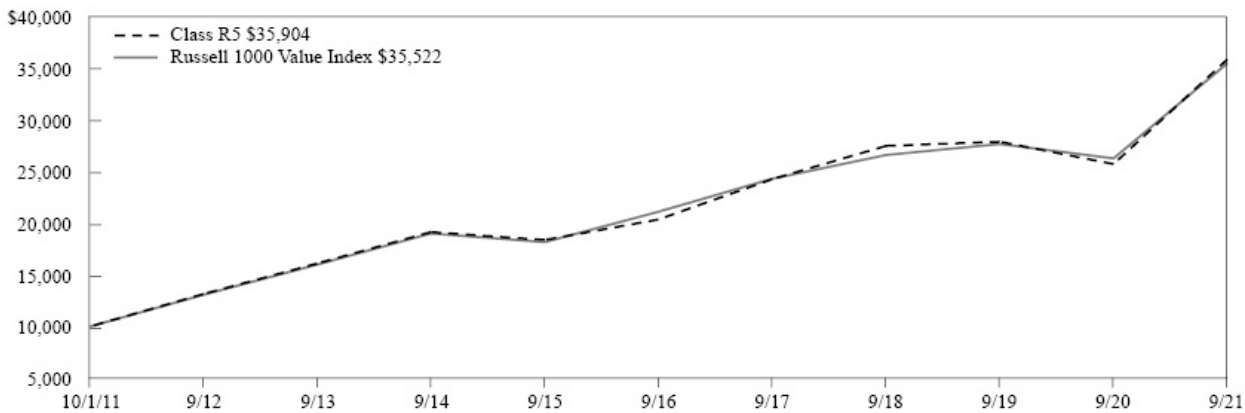
Brandywine Global observes that the world has gone through a tremendous amount of change over the last 18 months. Nevertheless, Brandywine Global has adhered to its investment philosophy of dispassionately focusing on undervalued companies and avoiding companies with unattractive quantitative and fundamental characteristics. The long overdue rebound in value only began during the last quarter of 2020 and has slowed recently. Brandywine Global believes in mean reversion over longer cycles and staunchly believes this could simply signal a pause in the rotation away from growth.

T. Rowe Price believes the potential exists for a decent recovery for the economy. They do ponder one key question, however: How much of this good news is already priced into the markets? While the market is historically on the expensive side, there are few realistic alternatives to equities, and equities within the value universe may benefit due to the regulatory and valuation concerns of big technology companies. As of September 30, 2021, the outlook for COVID-19 was improving, although the pace of global vaccine progress and “immune escape” variants created near-term market concerns. Looking ahead, T. Rowe Price believes selectivity will be key in investing, as certain areas of the market have become expensive due to the strong rebound since March 2020.

MassMutual Diversified Value Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Diversified Value Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
JP Morgan Chase & Co.	3.3%
Johnson & Johnson	3.2%
Comcast Corp. Class A	2.9%
Bank of America Corp.	2.6%
Anthem, Inc.	2.5%
Oracle Corp.	2.4%
Wells Fargo & Co.	2.2%
United Parcel Service, Inc. Class B	2.1%
Exxon Mobil Corp.	1.8%
The Southern Co.	1.8%
	<u>24.8%</u>

<i>MassMutual Diversified Value Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Financial	27.8%
Consumer, Non-cyclical	21.1%
Industrial	10.0%
Technology	9.9%
Consumer, Cyclical	9.0%
Communications	6.1%
Energy	5.8%
Utilities	5.3%
Basic Materials	4.0%
Mutual Funds	0.9%
Total Long-Term Investments	<u>99.9%</u>
Short-Term Investments and Other Assets and Liabilities	0.1%
Net Assets	<u>100.0%</u>

*MassMutual Diversified Value Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	04/01/2014	39.59%	12.12%		9.50%
Class R5	10/15/2004	39.38%	11.98%	13.64%	
Service Class	10/15/2004	39.28%	11.87%	13.53%	
Administrative Class	10/15/2004	39.24%	11.78%	13.43%	
Class A	10/15/2004	38.84%	11.50%	13.13%	
Class A (sales load deducted)*	10/15/2004	31.20%	10.24%	12.49%	
Class R4	04/01/2014	39.00%	11.61%		9.01%
Class R3	10/15/2004	38.73%	11.33%	12.92%	
Russell 1000 Value Index		35.01%	10.94%	13.51%	9.37%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Fundamental Value Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Fundamental Value Fund*, and who are the Fund's subadvisers?

The Fund seeks long-term total return by investing primarily in equity securities of issuers 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, with a focus on companies with large market capitalizations (which the subadvisers believe are generally above \$1 billion). The Fund's subadvisers are Boston Partners Global Investors, Inc. (Boston Partners), which managed approximately 49% of the Fund's portfolio; and Barrow, Hanley, Mewhinney & Strauss, LLC (Barrow Hanley), which managed approximately 51% of the Fund's portfolio, as of September 30, 2021.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Fundamental Value Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 41.74%, significantly outperforming the 35.01% return of the Russell 1000[®] Value Index (the "benchmark"), which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

For the period ended September 30, 2021, within the Boston Partners component of the Fund, the primary driver of performance was stock selection within the information technology, communication services, and industrial sectors. Within information technology, semiconductor equipment companies Applied Materials, Lam Research, and KLA were three Fund component holdings that benefited from increased capital spending by manufacturers. Avoiding underperforming benchmark constituent Intel also contributed. Fund component holdings in the communication services sector that were standouts were internet-related companies Alphabet and Facebook, which both continued to report strong earnings. Within the industrial sector, machinery company Deere aided relative performance, as agriculture fundamentals were extremely strong, as was equipment demand. Stock selection detracted within the materials and financial sectors. In materials, Boston Partners' positions in gold miners Yamana and Kinross underperformed relative to more economically sensitive materials companies that are expected to benefit more from the reopening of the global economies. In the financial sector, an overweight allocation to auto insurer Progressive detracted on a relative basis, as the company experienced outsized margins in 2020. Boston Partners' overweight allocation to the health care and information technology sectors also detracted from relative performance.

Within the Fund's Barrow Hanley component, an underweight allocation to and stock selection within the consumer staples sector, and stock selection within the health care and industrial sectors added to Barrow Hanley's relative performance during the period. On the other hand, stock selection in the communication services, energy, and real estate sectors detracted from the Barrow Hanley Fund component's performance.

Subadviser outlook

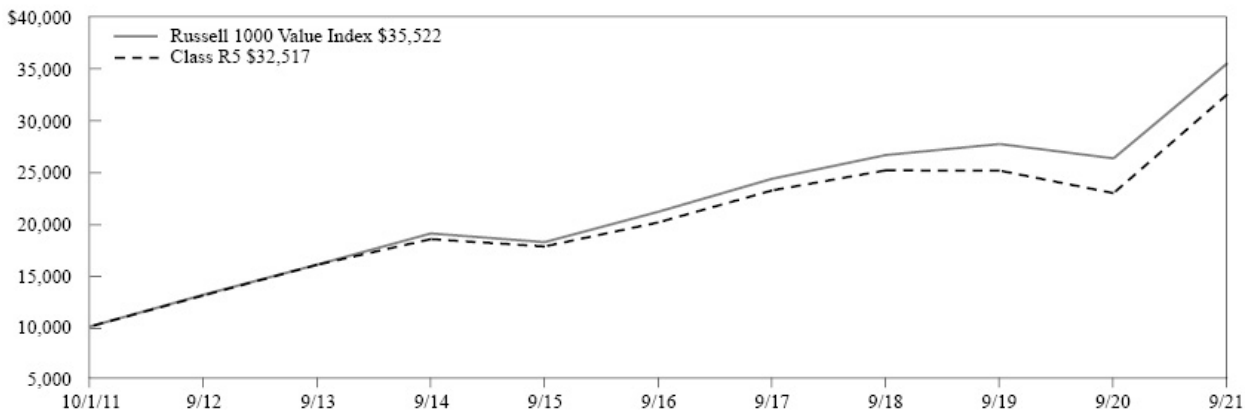
Boston Partners plans to continue to maintain a focus on finding investments that have not only attractive valuation characteristics and solid business fundamentals, but also improving business momentum and catalysts to help drive stock prices higher. Boston Partners' view is that the global economy could see a steady cyclical recovery over the next few years.

In Barrow Hanley's opinion, the primary conditions needed for a sustained, impactful value run – including higher inflation, rising interest rates, and reasonable economic growth – are not only potentially present, but they are also more pronounced than they were in the fourth quarter of 2020. Barrow Hanley's view is that not only has the value set-up improved, but value stocks have the potential to outperform their growth counterparts over the next four quarters.

MassMutual Fundamental Value Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Fundamental Value Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
JP Morgan Chase & Co.	3.0%
Wells Fargo & Co.	2.8%
Johnson & Johnson	2.1%
UnitedHealth Group, Inc.	2.0%
General Dynamics Corp.	1.9%
Deere & Co.	1.7%
Cigna Corp.	1.7%
CVS Health Corp.	1.6%
Coca-Cola Europacific Partners PLC	1.5%
Chubb Ltd.	1.5%
	<u>19.8%</u>

<i>MassMutual Fundamental Value Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Consumer, Non-cyclical	23.6%
Financial	23.3%
Industrial	12.9%
Consumer, Cyclical	9.9%
Technology	9.0%
Energy	7.2%
Communications	6.2%
Basic Materials	3.8%
Utilities	3.4%
Mutual Funds	0.0%
Total Long-Term Investments	<u>99.3%</u>
Short-Term Investments and Other Assets and Liabilities	0.7%
Net Assets	<u>100.0%</u>

*MassMutual Fundamental Value Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	11/15/2010	41.76%	10.20%	12.66%	
Class R5	12/31/2001	41.74%	10.09%	12.51%	
Service Class	12/31/2001	41.43%	9.96%	12.41%	
Administrative Class	12/31/2001	41.33%	9.87%	12.30%	
Class A	12/31/2001	40.98%	9.59%	12.02%	
Class A (sales load deducted)*	12/31/2001	33.23%	8.36%	11.39%	
Class R4	04/01/2014	41.10%	9.69%		8.09%
Class R3	12/31/2002	40.82%	9.43%	11.81%	
Russell 1000 Value Index		35.01%	10.94%	13.51%	9.37%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MM S&P 500[®] Index Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MM S&P 500[®] Index Fund, and who is the Fund's subadviser?

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. 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* (the "Index"), in weightings that approximate the relative composition of the securities contained in the Index, and in Index futures contracts. The Fund's subadviser is Northern Trust Investments, Inc. (NTI).

** The "S&P 500 Index" is a product of S&P Dow Jones Indices LLC or its affiliates ("SPDJI") and has been licensed for use by MassMutual. Standard & Poor's[®], S&P[®] and S&P 500[®] are registered trademarks of Standard & Poor's Financial Services LLC ("S&P") and Dow Jones[®] is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"). 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.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Service Class shares returned 29.63%, underperforming the 30.00% return of the Index, which measures the performance of 500 widely held stocks in the U.S. equity market.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

Generally, the Fund's underperformance versus the Index was mainly attributable to the impact of fees and expenses necessary for the management and operation of the Fund. The Index is not subject to fees, expenses, or taxes and it is not possible to invest directly in the Index.

During the period ended September 30, 2021, global equities continued to rally from the 2020 lows brought on by COVID-19. The fourth quarter of 2020 was strongly positive, with a major boost from positive news around vaccine development and distribution. During the first quarter of 2021, continued rising interest rates and inflation concerns weighed on equity returns – but inoculation, economic reopening, and stimulus tailwinds proved powerful enough to result in modestly positive returns. In the second quarter, government bond yields settled, while U.S. equities – and growth stocks in particular – rebounded from mid-quarter pressure. Global equities advanced, as improving economic growth, policy support, and strong earnings overcame peak growth and excess inflation. Global equities were flat in the third quarter due to investor concerns on peak growth, inflation, and unwinding stimulus in September. U.S. small-cap value stocks were the strongest-performing market segment for the year, while emerging markets were the weakest, although still in positive territory.

The top-performing sectors within the Index were energy and financial, returning 82.95% and 59.14%, respectively. The energy sector benefited as prices moved sharply higher over the last six months, with natural gas at the forefront. The financial sector was helped by a rally in interest rates late in the third quarter.

Utilities and consumer staples were the worst-performing sectors for this period, with returns of 10.97% and 11.34%, respectively. Defensive sectors, such as utilities and consumer staples, were impacted, as investor worries began to fade.

The Fund uses equity futures to equitize/gain market exposure for relatively small amounts of cash in the Fund in order to minimize the uninvested cash balances and reduce the impact of any cash drag. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Derivatives can be used for hedging, speculation, or both.

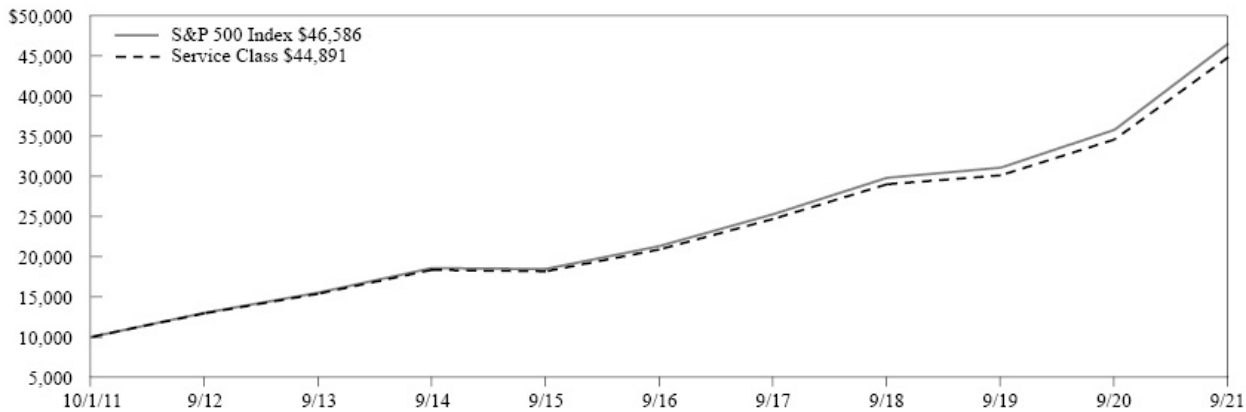
Subadviser outlook

Looking ahead, NTI believes that the uncertainty concerning inflation and unwinding of stimulus measures is likely to prevail.

MM S&P 500[®] Index Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MM S&P 500 Index Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Apple, Inc.	6.1%
Microsoft Corp.	5.8%
Amazon.com , Inc.	3.9%
Facebook, Inc. Class A	2.2%
Alphabet, Inc. Class A	2.2%
Alphabet, Inc. Class C	2.0%
Tesla, Inc.	1.7%
NVIDIA Corp.	1.4%
Berkshire Hathaway, Inc. Class B	1.4%
JP Morgan Chase & Co.	1.3%
	<hr/>
	28.0%
	<hr/>

<i>MM S&P 500 Index Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Technology	23.4%
Consumer, Non-cyclical	19.9%
Communications	16.4%
Financial	15.2%
Consumer, Cyclical	9.7%
Industrial	7.8%
Energy	2.8%
Utilities	2.4%
Basic Materials	2.0%
Total Long-Term Investments	<hr/>
	99.6%
Short-Term Investments and Other Assets and Liabilities	<hr/>
	0.4%
Net Assets	<hr/>
	100.0%
	<hr/>

MM S&P 500[®] Index Fund – Portfolio Manager Report (Unaudited) (Continued)**GROWTH OF \$10,000 INVESTMENT - Service Class**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)						
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 12/07/2011	Since Inception 04/01/2014
Class I	12/07/2011	29.93%	16.78%		15.54%	
Class R5	05/01/2001	29.78%	16.66%	16.40%		
Service Class	03/01/1998	29.63%	16.49%	16.20%		
Administrative Class	03/01/1998	29.45%	16.36%	16.11%		
Class A	04/01/2014	29.14%	16.08%			13.16%
Class A (sales load deducted)*	04/01/2014	22.03%	14.78%			12.31%
Class R4	03/01/1998	29.26%	16.19%	15.91%		
Class R3	12/31/2002	28.96%	15.91%	15.63%		
S&P 500 Index		30.00%	16.90%	16.63%	15.65%	13.96%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

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Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Equity Opportunities Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Equity Opportunities Fund*, and who are the Fund's subadvisers?

The Fund seeks growth of capital over the long-term by investing 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. 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. The Fund's subadvisers are T. Rowe Price Associates, Inc. (T. Rowe Price), which was responsible for approximately 28% of the Fund's portfolio; and Wellington Management Company LLP (Wellington Management), which managed approximately 72% of the Fund's portfolio, as of September 30, 2021.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Equity Opportunities Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 25.48%, significantly underperforming the 30.96% return of the Russell 1000[®] Index (the "benchmark"), which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

Within the Wellington Management component of the Fund, weak stock selection drove relative results, particularly within the industrial, consumer discretionary, and materials sectors. This was partially offset by stock selection within the consumer staples sector. Sector allocation also detracted from the Fund component's relative performance. Wellington Management's overweight allocation to consumer staples and lack of exposure to the energy and communication services sectors detracted the most. This was partially offset by the Fund component's overweight allocation to the financial sector and lack of exposure to utilities. Top relative detractors for the period included Fund component holding consumer products company Colgate-Palmolive (consumer staples) and not holding Alphabet (communication services), a leading internet search provider (and parent company of Google). Shares of Colgate-Palmolive declined over the period as organic growth reported for the second quarter fell short of consensus expectations and management noted that the civil unrest and political disruptions in Columbia and Myanmar acted as headwinds to sales. Alphabet reported strong earnings in the second quarter, driven by accelerating Cloud and YouTube revenues. Although Alphabet's stock traded up over the period, near the close of the fiscal year, shares came under pressure after the Australian Competition and Consumer Commission found that Google used its position to preference its own services and shield them from competition in ad-tech services. The commission subsequently called for new regulatory solutions. Top relative contributors for the period were globally integrated payments company American Express (financial) and not holding e-commerce retailer [Amazon.com](https://www.amazon.com) (consumer discretionary). Shares of American Express benefited from a significant reserve release in the second quarter. Revenue beat consensus estimates, driven by strong consumer spending. Management revised revenue guidance upward for 2021, as travel and expense spending recovered faster than previously expected. Amazon was a major COVID-19 beneficiary, however, in anticipation of economies reopening and the continuation of challenging year-over-year comparisons shares began to decline.

For the T. Rowe Price component of the Fund, adverse stock selection in the consumer discretionary sector detracted from relative returns for the year ended September 30, 2021. Shares of casino owner Las Vegas Sands fell over the period due to coronavirus-driven uncertainty as vaccine distribution began and the timing for a return to leisure travel was unclear. Later in the period, reported earnings for this Fund component holding continued to show uncertainty – particularly with respect to when Macau and Singapore, from which Las Vegas Sands derives a majority of its revenue, would return to more normal operations. Detrimental stock choices in the energy sector also had a negative impact on relative results, although this was largely offset by the Fund component's advantageous overweight exposure to the top-performing sector. Turning to the positive, the financial sector was the top contributor to T. Rowe Price's performance for the period due to favorable stock selection. Shares of Fund component holding Wells Fargo ended the period higher, as consumer credit resilience, among other factors, boosted performance. Strong stock choices in the materials sector, such as CF Industries, a manufacturer and distributor of nitrogen fertilizer, also contributed to relative performance. Shares of this Fund component holding ended the period higher, as the company executed well in an uncertain environment driven by unfavorable weather. The T. Rowe Price component of the Fund held warrants during the

MassMutual Equity Opportunities Fund – Portfolio Manager Report (Unaudited) (Continued)

period, which generated minimal exposure and had a minimal impact on performance. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Derivatives can be used for hedging, speculation, or both.

Subadviser outlook

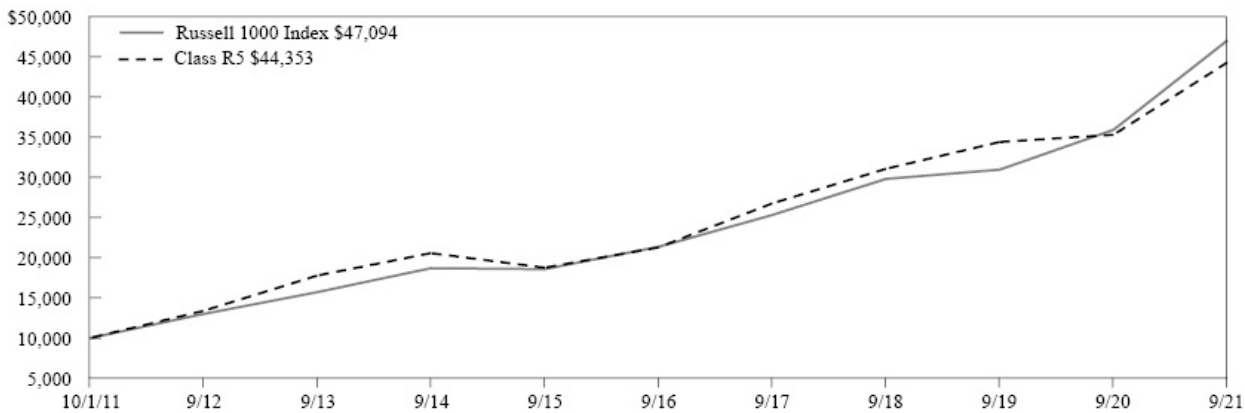
Wellington Management believes that the degree of confidence prevailing from market observers and participants alike seems extreme. In Fund management's view, those who are generally more upbeat continue to express the positive narrative with a strong voice, buoyed by several years of success. Many of the more cautious observers, like Wellington Management, remain equally confident that the clouds on the horizon are dark and many. In Wellington Management's view, these are the most uncertain of times. Management believes that growth, low rates, productivity, and the cycle remain constructive factors for markets, while COVID-19, China, inflation, and the political environment remain challenges. Wellington Management believes that, while it is important to have a view and execute accordingly, it would be folly to do so with excessive confidence. At the end of the period, the Wellington Management Fund component had its largest overweight allocation to the consumer staples and health care sectors, and its greatest underweight allocation to the information technology sector.

T. Rowe Price believes the potential exists for a decent recovery for the economy. They do ponder one key question, however: How much of this good news is already priced into the markets? While the market is historically on the expensive side, there are few realistic alternatives to equities, and equities within the value universe may benefit due to the regulatory and valuation concerns of big technology companies. As of September 30, 2021, the outlook for COVID-19 was improving, although the pace of global vaccine progress and "immune escape" variants created near-term market concerns. Looking ahead, T. Rowe Price believes selectivity will be key in investing, as certain areas of the market have become expensive due to the strong rebound since March 2020.

MassMutual Equity Opportunities Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Equity Opportunities Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Chubb Ltd.	4.1%
Johnson & Johnson	3.9%
The TJX Cos., Inc.	3.8%
Colgate-Palmolive Co.	3.8%
Marsh & McLennan Cos., Inc.	3.7%
Medtronic PLC	3.6%
Northrop Grumman Corp.	3.5%
McDonald's Corp.	3.5%
PepsiCo, Inc.	3.4%
UnitedHealth Group, Inc.	3.4%
	<u>36.7%</u>

<i>MassMutual Equity Opportunities Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Consumer, Non-cyclical	37.0%
Financial	20.8%
Industrial	11.7%
Consumer, Cyclical	10.5%
Technology	6.4%
Basic Materials	6.1%
Utilities	2.5%
Energy	1.8%
Communications	1.3%
Mutual Funds	0.2%
Total Long-Term Investments	<u>98.3%</u>
Short-Term Investments and Other Assets and Liabilities	1.7%
Net Assets	<u>100.0%</u>

*MassMutual Equity Opportunities Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	11/15/2010	25.67%	15.92%	16.18%	
Class R5	05/01/2000	25.48%	15.79%	16.06%	
Service Class	05/01/2000	25.44%	15.69%	15.95%	
Administrative Class	05/01/2000	25.26%	15.57%	15.82%	
Class A	05/01/2000	24.94%	15.27%	15.52%	
Class A (sales load deducted)*	05/01/2000	18.07%	13.98%	14.87%	
Class R4	04/01/2014	25.07%	15.38%		11.38%
Class R3	12/31/2002	24.79%	15.10%	15.31%	
Russell 1000 Index		30.96%	17.11%	16.76%	13.94%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Fundamental Growth Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Fundamental Growth Fund*, and who are the Fund's subadvisers?

The Fund seeks long-term growth of capital by investing primarily in domestic equity securities that the Fund's subadvisers believe offer the potential for long-term growth. While the Fund may invest in issuers of any size, the Fund currently focuses on securities of mid-capitalization companies. The Fund's subadvisers are Westfield Capital Management Company, L.P. (Westfield), which was responsible for approximately 48% of the Fund's portfolio; and Wellington Management Company LLP (Wellington Management), which managed approximately 52% of the Fund's portfolio, as of September 30, 2021.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Fundamental Growth Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 28.29%, underperforming the 30.45% return of the Russell Midcap[®] Growth Index (the "benchmark"), which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

In the Wellington Management component of the Fund, sector allocation, a residual of Wellington Management's bottom-up stock selection process, weighed on performance, driven by underweight allocations, relative to the benchmark, to information technology and real estate, and overweight allocations to communication services and consumer discretionary. Weak security selection within the health care, financial, and information technology sectors also detracted from relative performance. This was partially offset by stronger security selection within the consumer discretionary and communication services sectors. Fund component holdings that were top detractors from relative returns included Incyte and BWX Technologies. Incyte is a U.S.-based biopharmaceutical company with leading blood-cancer drug Jakafi. The stock price fell amid FDA approval headwinds in the company's new dermatology cream, Ruxolitinib Cream. Wellington Management subsequently exited the position. The share price of BWX Technologies, a nuclear component and product supplier, also fell over the period. In its most recent quarterly release, BWX Technologies management announced results below expectations due to headwinds in its Navy division, as temporary COVID-19- and capital expenditure-related disruptions pressured results. Fund component holdings that were top contributors to relative performance included KLA and CDW. The share price of KLA, a supplier of process controls for the semiconductor industry, rose as management topped expectations on consecutive earnings releases and delivered fiscal third-quarter guidance above consensus. Shares of CDW, a dominant value-added reseller of IT products and services, rose during the period, as CDW management reported strong earnings that beat consensus in all four reporting periods. Wellington Management trimmed its position in CDW but retained an overweight position as of September 30, 2021.

Within the Westfield component of the Fund, Fund component holdings in the health care sector were the top detractors from relative results. Targeted therapeutics company Ascendis Pharma was the largest detractor, due to a volatile first quarter in the biotech industry, in tandem with the absence of material fundamental news flow for the company. Fund component holdings within the financial sector were the primary drivers of Westfield's for positive relative performance to the benchmark. For example, Synchrony Financial, a leading U.S. consumer lender, was the sector's top contributor over the period. Fund component holdings within the consumer discretionary sector also added to Westfield's performance during the period. Williams-Sonoma, Inc., a home products retailer, was the top contributor. The company experienced robust demand across its key brands, driven by increased consumer interest in investing in their homes and the company's strong omni-channel capabilities.

Subadviser outlook

Wellington Management remains constructive, overall, on the macroeconomic backdrop in the U.S., recognizing there could be some bumps along the way. While Wellington Management notes that historically, they have tended to have overweight allocations to software, recently, they have been very selective, given generally unattractive valuations – and have used this underweight as a source of funds for what Wellington Management views as long-term opportunities, particularly in the

MassMutual Fundamental Growth Fund – Portfolio Manager Report (Unaudited) (Continued)

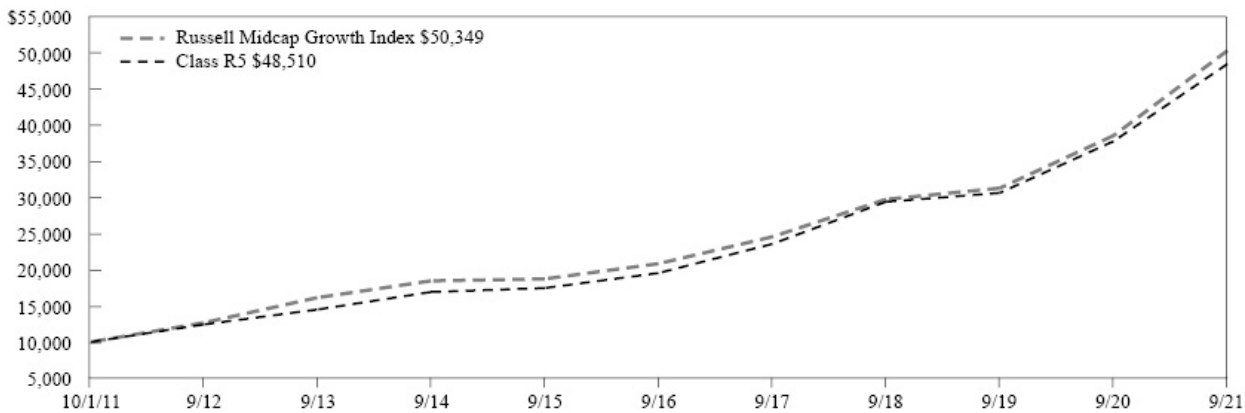
communication services and consumer sectors. As of September 30, 2021, Wellington Management held its largest overweight allocations to the consumer discretionary, communication services, and financial sectors, and its greatest underweight allocations to the health care, information technology, and real estate sectors.

Looking forward, Westfield believes that companies with strong underlying earnings growth that trade at reasonable valuations could be favored at the expense of high multiple momentum growth stocks. Westfield believes that, with persistent inflation likely for the foreseeable future, their focus will remain on high-quality operators with pricing power that are advantageously positioned for uncertain input costs and continued supply chain disruptions.

MassMutual Fundamental Growth Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Fundamental Growth Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
ICON PLC	3.8%
Seagen, Inc.	3.5%
TransUnion	3.3%
KLA Corp.	2.3%
Avalara, Inc.	2.1%
Etsy, Inc.	2.1%
Fortune Brands Home & Security, Inc.	2.0%
Match Group, Inc.	2.0%
ZoomInfo Technologies, Inc. Class A	2.0%
Omniceil, Inc.	2.0%
	<u>25.1%</u>

<i>MassMutual Fundamental Growth Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Consumer, Non-cyclical	28.7%
Technology	24.4%
Consumer, Cyclical	15.6%
Communications	11.5%
Industrial	10.9%
Financial	5.7%
Energy	0.9%
Mutual Funds	0.8%
Basic Materials	0.7%
Total Long-Term Investments	<u>99.2%</u>
Short-Term Investments and Other Assets and Liabilities	0.8%
Net Assets	<u>100.0%</u>

*MassMutual Fundamental Growth Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	04/01/2014	28.46%	20.00%		15.92%
Class R5	05/01/2000	28.29%	19.91%	17.11%	
Service Class	05/01/2000	28.05%	19.79%	16.97%	
Administrative Class	05/01/2000	28.10%	19.72%	16.87%	
Class A	05/01/2000	27.60%	19.37%	16.57%	
Class A (sales load deducted)*	05/01/2000	20.58%	18.03%	15.91%	
Class R4	04/01/2014	27.79%	19.53%		15.43%
Class R3	12/31/2002	27.69%	19.28%	16.36%	
Russell Midcap Growth Index		30.45%	19.27%	17.54%	14.83%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Blue Chip Growth Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Blue Chip Growth Fund*, and who are the Fund's subadvisers?

The Fund seeks growth of capital over the long term by investing, under normal circumstances, at least 80% of its 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's subadvisers 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. The Fund's subadvisers are T. Rowe Price Associates, Inc. (T. Rowe Price), which was responsible for approximately 55% of the Fund's portfolio; and Loomis, Sayles & Company, L.P. (Loomis Sayles), which managed approximately 45% of the Fund's portfolio, as of September 30, 2021.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Blue Chip Growth Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 21.46%, significantly underperforming the 27.32% return of the Russell 1000[®] Growth Index, which 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 Fund also significantly underperformed the 30.00% return of the S&P 500[®] Index, which measures the performance of 500 widely held stocks in the U.S. equity market.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

For the T. Rowe Price component of the Fund, security selection hampered relative results for the reporting period, although the effect was partially offset by favorable sector allocation. Consumer discretionary, information technology, and health care detracted the most from the Fund component's relative performance, while communication services and consumer staples contributed the most to relative returns. With respect to specific Fund holdings, continued waves of regulatory pressure weighed on shares of Alibaba Group Holding. Most recently, the Chinese government announced new guidelines that seek to prevent unfair competition and limit the extent to which companies can utilize user data. Within the information technology sector, Global Payments, which provides payment processing services to merchants, detracted. Despite a strong rebound for merchant and consumer businesses in the U.S., stay-at-home dynamics in the second half of 2020 and an uneven global recovery weighed on overall payment volumes, sending shares lower. In health care, Vertex Pharmaceuticals declined in value after the discontinuation of two key developmental treatments following disappointing clinical results. Communication services was the biggest relative contributor for the year ended September 30, 2021, owing to a favorable overweight allocation to the sector, while weak stock selection partially offset the gains. Within the sector, several interactive media and services companies benefited from impressive earnings reports. T. Rowe Price's underweight allocation to the consumer staples sector helped relative performance, as the defensive haven fell out of favor due in part to the continued rollout of COVID-19 vaccines, which is expected to reduce stay-at-home behaviors.

Within the Loomis Sayles component of the Fund, stock selection in the consumer discretionary, health care, information technology, financial, consumer staples, and energy sectors – along with the Fund component's allocations to the industrial, information technology, consumer staples, and financial sectors – detracted from relative performance. Fund component holdings Alibaba (China) and Vertex Pharmaceuticals were the largest detractors from performance, whereas Alphabet and Nvidia were the top contributors. Alibaba is the world's largest retail platform. During the period, Alibaba reported solid fundamentals and continued market share gains, but shares have been under pressure since late 2020 due to investor concerns regarding increasing regulatory intervention by the Chinese government. Due to its conviction to the long-term value of the Fund component holding, Loomis Sayles added to its position in Alibaba in July. Vertex Pharmaceuticals, the leader in creating therapies for patients suffering from cystic fibrosis, declined modestly during the Fund component's holding period. On the positive side, Alphabet, the parent company of Google (the global leader in online search and advertising) reported financial results that reflected a strong recovery in advertising spending, which had been depressed due to COVID-19, while revenue growth accelerated and adjusted operating margins expanded. Nvidia is the world leader in graphic processing units, which enable computers to produce and utilize highly realistic 3D graphic imagery and models. Nvidia reported financial results during the period that were better than consensus expectations, driven by broad-based strength that included quarterly revenue records in the company's gaming, data center, and professional visualization segments in the second half of the year.

*MassMutual Blue Chip Growth Fund – Portfolio Manager Report (Unaudited) (Continued)***Subadviser outlook**

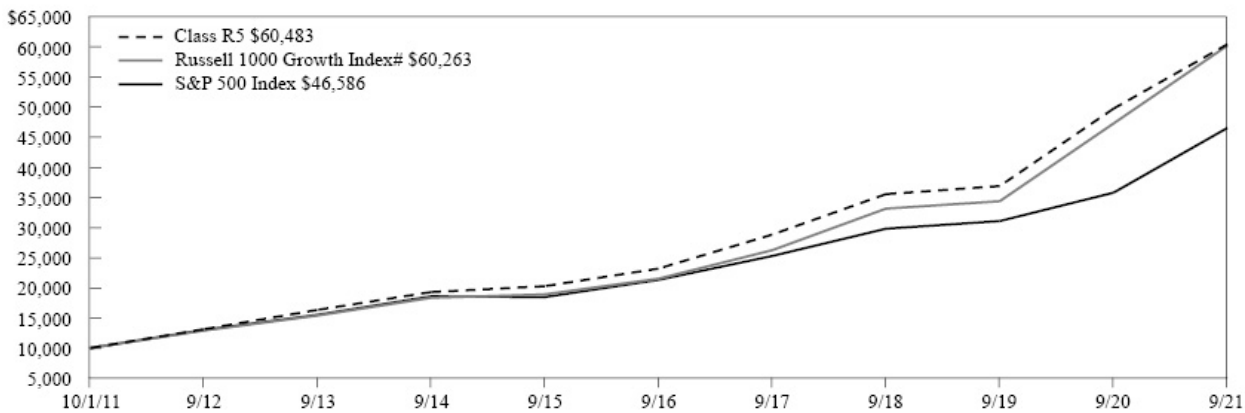
T. Rowe Price notes that, despite the strength and speed of the global economic recovery, potential risks to growth seem to persist. Vaccine progress remains slow in parts of the world, and new variants remain a potential threat. While the Biden administration is seeking to raise the U.S. corporate tax rate, T. Rowe Price believes that any increase is likely to be moderate and neutral for U.S. equity markets. However, they believe that proposed increases in capital gains and dividend taxes could be negative for after-tax returns on most asset classes. The U.S. debt ceiling impasse in Congress has injected uncertainty into financial markets. In China, a tightening regulatory environment threatens to constrain the growth prospects of large technology firms.

The Loomis Sayles investment process is characterized by bottom-up, fundamental research and a long-term investment time horizon. The nature of the process leads to a lower turnover portfolio, where sector positioning is the result of stock selection. At the end of the fiscal year, the Loomis Sayles Fund component held overweight allocations to the health care, communication services, industrial, energy, consumer staples, and financial sectors – and underweight allocations to the information technology and consumer discretionary sectors. Loomis Sayles held no positions in the real estate, materials, or utilities sectors.

MassMutual Blue Chip Growth Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Blue Chip Growth Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Amazon.com , Inc.	8.9%
Facebook, Inc. Class A	7.0%
Alphabet, Inc. Class C	5.9%
Microsoft Corp.	5.6%
Visa, Inc. Class A	4.0%
NVIDIA Corp.	3.8%
Alphabet, Inc. Class A	2.8%
Apple, Inc.	2.7%
Oracle Corp.	2.0%
salesforce.com , Inc.	2.0%
	<u>44.7%</u>

<i>MassMutual Blue Chip Growth Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Communications	35.8%
Technology	28.3%
Consumer, Non-cyclical	17.5%
Financial	6.8%
Consumer, Cyclical	5.7%
Industrial	4.1%
Energy	0.6%
Basic Materials	0.2%
Total Long-Term Investments	<u>99.0%</u>
Short-Term Investments and Other Assets and Liabilities	<u>1.0%</u>
Net Assets	<u>100.0%</u>

*MassMutual Blue Chip Growth Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	04/01/2014	21.60%	21.22%		17.46%
Class R5	06/01/2001	21.46%	21.10%	19.72%	
Service Class	06/01/2001	21.36%	20.97%	19.61%	
Administrative Class	06/01/2001	21.21%	20.86%	19.47%	
Class A	06/01/2001	20.91%	20.55%	19.18%	
Class A (sales load deducted)*	06/01/2001	14.26%	19.19%	18.51%	
Class R4	04/01/2014	21.05%	20.67%		16.94%
Class R3	12/31/2002	20.72%	20.38%	18.96%	
Russell 1000 Growth Index#		27.32%	22.84%	19.68%	18.18%
S&P 500 Index		30.00%	16.90%	16.63%	13.96%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Benchmark

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

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Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Growth Opportunities Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Growth Opportunities Fund*, and who are the Fund's subadvisers?

The Fund seeks long-term capital appreciation 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. The Fund's subadvisers are Sands Capital Management, LLC (Sands Capital), which managed approximately 51% of the Fund's portfolio; and Jackson Square Partners, LLC (Jackson Square), which was responsible for approximately 49% of the Fund's portfolio, as of September 30, 2021.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Growth Opportunities Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 28.64%, outperforming the 27.32% return of the Russell 1000[®] Growth Index (the "benchmark"), which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

For the period ended September 30, 2021, the Sands Capital component of the Fund benefited from both sector allocation and security selection. The communication services sector accounted for over 50% of the Fund component's outperformance for the period. On a relative basis, the Fund component holdings that were the largest contributors to performance included Sea, a leading gaming, ecommerce, and digital payments platform in Southeast Asia; Square, a digital financial services provider; Align Technology, the market-leading producer of orthodontic clear aligners; Match Group, a leader in online dating applications; and Atlassian, a leading vendor of workplace collaboration and productivity software. On the downside, Fund component holdings that were the largest relative detractors from performance were all businesses that Sands Capital sold during the period. They included Microsoft, a leading global software business; Alphabet, the operator of Google and YouTube; Adobe, a leading content creation and editing software provider; Grocery Outlet, the largest U.S. grocery discounter by market share; and Coupa Software, a leading provider of enterprise procurement software.

Within the Jackson Square component of the Fund, from a sector perspective, strong relative performance in health care partially offset weak relative performance in the information technology sector. Fund component holdings that were the top contributors to performance included KKR & Co. Inc., Datadog Inc., and Paycom Software, Inc. Specifically, KKR, a global investment firm that manages multiple alternative asset classes across private and public markets, reported strong earnings during the period. The firm's fundraising tailwinds showed no signs of slowing and the company was able to deploy capital quickly. On the other hand, Fund component holdings that were the largest detractors from performance were [Wix.com](#) Ltd., Coupa Software, Inc., and Zoom Video Communications, Inc. The share price of top detractor [Wix.com](#) Ltd., a cloud-based web development platform, reversed after the company reduced its 2021 guidance. The company, like most other internet businesses, saw weakness in demand during the summer of 2021.

Subadviser outlook

Sands Capital notes that the factors that drove market returns over the course of 2021 demonstrates how unpredictable markets can be in the short term. Over longer time periods, Sands Capital believes that history shows us that stock prices tend to follow compounded earnings growth, and that most value creation accrues to a select group of winners. Therefore, Sands Capital plans to continue to focus on finding the select companies that Fund management believes can generate above-average growth over the next five or more years.

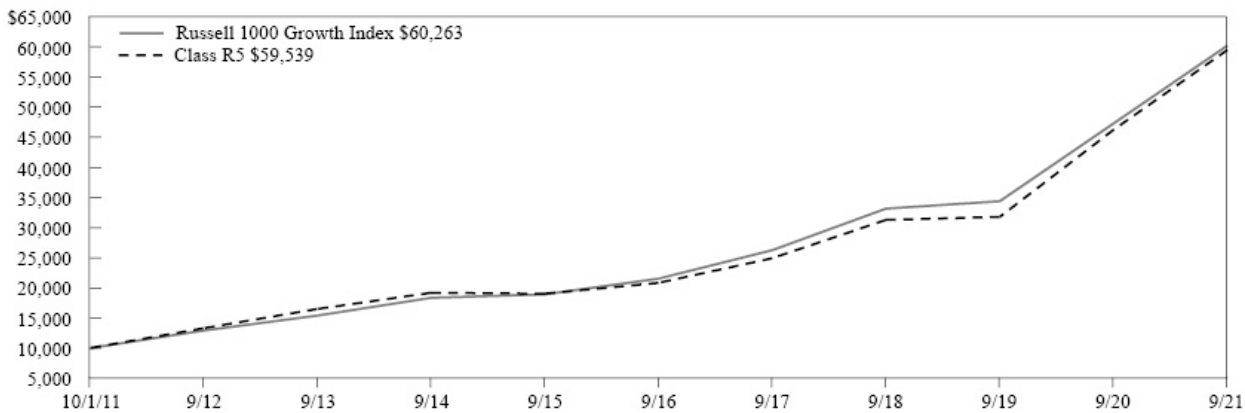
MassMutual Growth Opportunities Fund – Portfolio Manager Report (Unaudited) (Continued)

In the view of Jackson Square, the economic backdrop remains accommodative to equity prices, although with a sustained higher level of volatility and market concerns over the potential inflation impact of a return to normal business activity. Jackson Square believes that the U.S. market may have passed the peak of negative impacts brought on by the Delta variant of COVID-19 – and that investors have turned their attention to assessing the level and profile of economic recovery. Furthermore, Jackson Square notes there is increasing investor focus on assessing the impact of potential Biden Administration policy changes, and the latest political battles – including how far to go on aggressive spending programs in infrastructure and social services. Nevertheless, Jackson Square remains consistent in its long-term investment philosophy of owning strong secular growth companies with competitive positions that have the potential to grow market share and possibly deliver shareholder value in a variety of market environments.

MassMutual Growth Opportunities Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Growth Opportunities Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Visa, Inc. Class A	5.6%
Sea Ltd. ADR	5.3%
Netflix, Inc.	5.2%
ServiceNow, Inc.	5.1%
Amazon.com , Inc.	4.9%
Microsoft Corp.	4.4%
Uber Technologies, Inc.	4.3%
Twilio, Inc. Class A	4.0%
Match Group, Inc.	3.7%
Charter Communications, Inc. Class A	3.5%
	<hr/> 46.0%
	<hr/>

<i>MassMutual Growth Opportunities Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Communications	35.4%
Technology	28.0%
Consumer, Non-cyclical	19.9%
Financial	9.3%
Consumer, Cyclical	4.7%
Industrial	1.2%
Mutual Funds	0.0%
Total Long-Term Investments	<hr/> 98.5%
Short-Term Investments and Other Assets and Liabilities	<hr/> 1.5%
Net Assets	<hr/> 100.0%
	<hr/>

*MassMutual Growth Opportunities Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)						
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 12/07/2011	Since Inception 04/01/2014
Class I	12/07/2011	28.69%	23.47%		18.83%	
Class R5	05/01/2000	28.64%	23.35%	19.53%		
Service Class	05/01/2000	28.53%	23.26%	19.42%		
Administrative Class	05/01/2000	28.30%	23.10%	19.28%		
Class A	05/01/2000	27.99%	22.80%	18.99%		
Class A (sales load deducted)*	05/01/2000	20.95%	21.41%	18.32%		
Class R4	04/01/2014	28.08%	22.91%			16.65%
Class R3	12/31/2002	27.84%	22.64%	18.77%		
Russell 1000 Growth Index		27.32%	22.84%	19.68%	18.73%	18.18%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Mid Cap Value Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Mid Cap Value Fund*, and who are the Fund's subadvisers?

The Fund seeks growth of capital over the long-term by investing primarily in equity securities of mid-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 the stocks of mid-cap companies. The Fund's subadvisers are American Century Investment Management, Inc. (American Century), which managed approximately 34% of the Fund's portfolio; PanAgora Asset Management, Inc. (PanAgora), which oversaw approximately 30% of the Fund's portfolio; and Thompson, Siegel & Walmsley LLC (TSW), which was responsible for approximately 36% of the Fund's portfolio, as of September 30, 2021. Effective March 31, 2021, PanAgora and TSW were added as subadvisers of the Fund.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Mid Cap Value Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 36.22%, significantly underperforming the 42.40% return of the Russell Midcap[®] Value Index (the "benchmark"), which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

Within the American Century component of the Fund, stock selection in the financial sector detracted from relative results. American Century's preference for owning higher-quality banks and not owning companies in the consumer finance industry weighed on performance for the year ended September 30, 2021. An overweight allocation (relative to the benchmark) to and stock selection within the typically defensive consumer staples sector also weighed on returns, as investors favored lower-quality stocks or those benefiting more directly from economic reopening. The share price of Fund component holding Conagra Brands, a food products company, lagged after standing out as one of the primary beneficiaries of stay-at-home directives and surging grocery store sales. On the other hand, Fund component holdings within the information technology sector, particularly in the semiconductors and semiconductor equipment industry, helped to drive American Century's absolute returns. Semiconductor company Applied Materials was a top contributor, as it benefited from strong product demand. American Century exited the position on the strong outperformance. American Century buys foreign exchange forward hedge contracts to offset the inherent currency risks of holding foreign securities. Exposure to derivatives did not have a material effect on performance in the period. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Derivatives can be used for hedging, speculation, or both.

Within the Fund's TSW component during the period March 31, 2021 through September 30, 2021, the primary detractors for the year were the real estate and basic materials sectors. Within real estate, an underweight allocation to the sector was the primary detractor. Within basic materials, TSW's underweight allocation to the sector and position in Kinross Gold Corp. were the primary detractors. Kinross, a gold exploration company, had a fire at one of their mines impacting production in the short term, negatively impacting the stock price. From a traditional attribution lens, the primary contributors for TSW were the consumer discretionary and telecommunications sectors. Within consumer discretionary, an underweight allocation to and stock selection within the sector contributed to returns. Fund component holdings LKQ, an auto parts distributor, and eBay Inc., an e-commerce provider, were the top contributors. Within telecommunications, Fund component holdings Liberty Broadband Corp., a company providing cable and broadband services, and DISH Network Corp., a pay-tv provider with meaningful wireless spectrum ownership, were the top contributors.

Within the Fund's PanAgora component during the period March 31, 2021 through September 30, 2021 the top detractors were the financial and utilities sectors. Within the financial sector, the largest detractor was PanAgora's underweight allocation to Discover Financial Services, an American financial services company whose share price appreciated over 25% for the period. On the other hand, top contributions within the PanAgora Fund component came from the health care, real estate, and materials sectors due to strong stock selection. Within health care, an overweight allocation to Waters Corp., an analytical laboratory instrument and software company headquartered in Milford, Massachusetts, helped to drive PanAgora's returns, as the share

MassMutual Mid Cap Value Fund – Portfolio Manager Report (Unaudited) (Continued)

price of the stock advanced over 20% for the year. PanAgora subsequently exited the position. Within the real estate sector, the top contributor was Jones Lang LaSalle Inc., a global commercial real estate services company whose stock price surged at the beginning of August due to earnings beating estimates.

Subadviser outlook

American Century believes that high-quality stocks are trading at a discount, and that easy monetary and fiscal policies have encouraged investors to hold lower-quality and more volatile stocks. Their metrics show low-quality stocks are now trading at the widest premium to high-quality stocks in more than a decade. In American Century's view, higher-quality and lower-volatility stocks have the potential to outperform if interest rates rise, inflation increases, and the economy enters a mid-cycle phase.

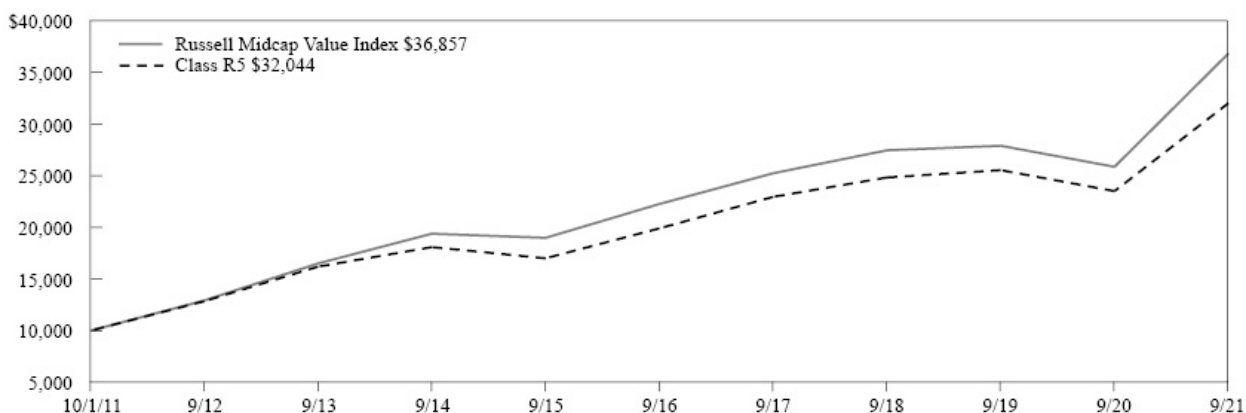
The economy remains, in TSW's estimation, on track for a potentially meaningful recovery, driven by continued vaccine deployment; however, TSW believes that persistent supply chain disruption and inflationary concerns warrant a watchful eye. In TSW's view the market has become overly optimistic; but TSW also notes that, over longer periods of time, markets generally act rationally and efficiently.

PanAgora does not attempt to forecast its excess returns. In their view, PanAgora's investment process and stock selection methodology enhances their U.S. Mid Cap Stock Selector strategy. The strategy's focus on company fundamentals plays a critical role during periods of market turbulence. PanAgora believes that preferring companies that are profitable, well managed, and competitive within their industry will give their strategy the potential to prevail during periods of extreme market stress.

MassMutual Mid Cap Value Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Mid Cap Value Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Dollar Tree, Inc.	1.3%
Cerner Corp.	1.2%
McKesson Corp.	1.1%
Zimmer Biomet Holdings, Inc.	1.1%
Centene Corp.	1.0%
Jones Lang LaSalle, Inc.	0.9%
NiSource, Inc.	0.9%
Axalta Coating Systems Ltd.	0.9%
HP, Inc.	0.9%
Evergy, Inc.	0.9%
	<u>10.2%</u>

<i>MassMutual Mid Cap Value Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Financial	25.7%
Consumer, Non-cyclical	17.8%
Industrial	13.5%
Consumer, Cyclical	11.5%
Utilities	9.0%
Communications	6.9%
Technology	6.1%
Energy	4.5%
Basic Materials	2.6%
Mutual Funds	0.2%
Total Long-Term Investments	<u>97.8%</u>
Short-Term Investments and Other Assets and Liabilities	2.2%
Net Assets	<u>100.0%</u>

*MassMutual Mid Cap Value Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)						
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 12/07/2011	Since Inception 04/01/2014
Class I	12/07/2011	36.36%	10.09%		11.24%	
Class R5	08/29/2006	36.22%	9.98%	12.35%		
Service Class	08/29/2006	36.08%	9.87%	12.23%		
Administrative Class	08/29/2006	35.93%	9.77%	12.12%		
Class A	08/29/2006	35.51%	9.47%	11.83%		
Class A (sales load deducted)*	08/29/2006	28.06%	8.24%	11.20%		
Class R4	04/01/2014	35.64%	9.59%			7.63%
Class R3	08/29/2006	35.39%	9.34%	11.64%		
Russell Midcap Value Index		42.40%	10.59%	13.93%	12.81%	9.34%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Small Cap Value Equity Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Small Cap Value Equity Fund*, and who are the Fund's subadvisers?

The Fund seeks to maximize total return through investment primarily in small capitalization equity securities 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. The Fund's subadvisers are Wellington Management Company LLP (Wellington Management), which managed approximately 55% of the Fund's portfolio; and Barrow, Hanley, Mewhinney & Strauss, LLC (Barrow Hanley), which was responsible for approximately 45% of the Fund's portfolio, as of September 30, 2021.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Small Cap Value Equity Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 54.14%, significantly underperforming the 63.92% return of the Russell 2000 Value Index (the "benchmark"), which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

In the Wellington Management Fund component, sector allocation and stock selection in the financial, materials, and energy sectors both detracted from performance for the period ended September 30, 2021. From the sector perspective, an underweight allocation to the energy sector and an overweight allocation to the consumer staples sector hampered performance for the reporting period. Fund component holdings that were among the top relative detractors included American Woodmark (industrial) and CDK Global (information technology). Shares of American Woodmark ended the period lower after the cabinet maker experienced earnings disruption from supply chain issues and cost pressures. Shares of CDK Global, which sells subscription-based software and technology solutions to automotive retailers, ended the period lower after reporting disappointing guidance for the upcoming fiscal year. Strong security selection in the health care, information technology, and industrial sectors helped to fuel the Wellington Management Fund component's strong absolute performance for the year, and a positive contribution from an underweight allocation to the health care sector was also additive. Fund component holdings that were among the top relative contributors for the period included Magnolia Oil & Gas (energy) and Onto Innovation (information technology). Shares of Magnolia Oil & Gas, an independent oil and gas exploration and production business focused on the Eagle Ford basin in South Texas, rose on increased commodity prices and management guidance for stronger-than-expected production volumes and lower costs on a per-well basis. Shares of Onto Innovation, an equipment manufacturer that makes process control equipment used in both the front and back ends of the manufacturing process, rose as the company benefited from strong new product introductions that both won the company market share and expanded their market. As a result of continued strength, the stock reached Fund management's price target and Wellington Management eliminated the position.

Within the Barrow Hanley component of the Fund, Fund management's heavy concentration in economically sensitive stocks, such as those in the industrial sector, materially underperformed since the beginning of the new year as interest rates and the COVID-19-affected economy began to temporarily soften. Defensive and high-yielding stocks such as those found in the utilities and real estate sectors (which Barrow Hanley has traditionally avoided due to their lower longer-term return potential) underperformed to the Fund component's relative advantage. One Fund component holding that contributed to Barrow Hanley's strong absolute performance for the reporting period is Greenbriar Companies, Inc., which is the largest global manufacturer of railroad cars and barges for the maritime transportation of goods. Barrow Hanley purchased this stock less than a year before the March 2020 bear market lows, at prices in the low \$20s. Then at prices about 40% below those initial levels, Fund management leveraged an outstanding opportunity to add to the Fund component's exposure. As economic expectations deteriorated during the late bear market, Barrow Hanley began to significantly increase its stake in Greenbriar Companies, and shares have risen from about \$13 at their lows to \$45 as of the end of the reporting period.

*MassMutual Small Cap Value Equity Fund – Portfolio Manager Report (Unaudited) (Continued)***Subadviser outlook**

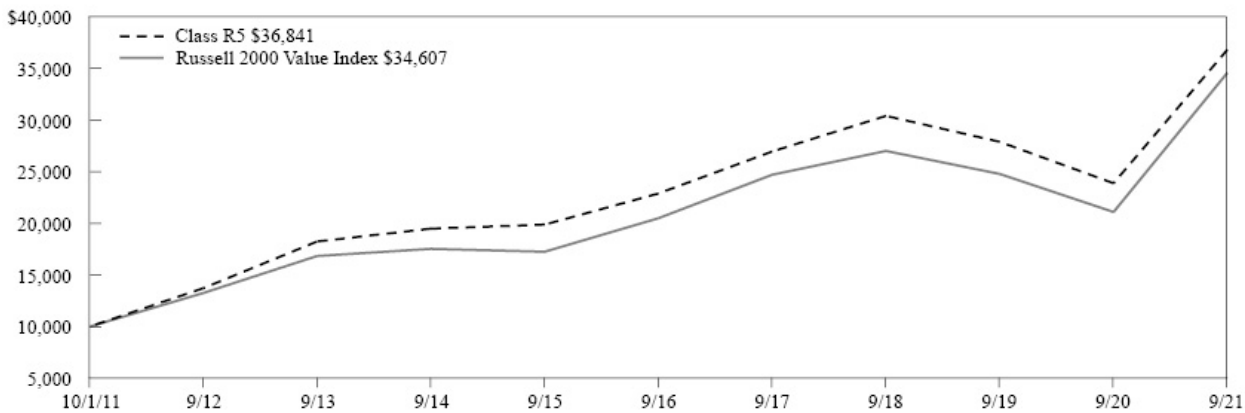
Based on Wellington Management's three- to-five year time horizon, Fund management believes they will be able to continue to find attractively valued investment opportunities created by the inefficiencies frequently found among small- and mid-cap companies. At the end of the period, the Fund component had its largest overweight allocations to the industrial, consumer staples, and financial sectors. During the period, Wellington Management added bank holding company First Citizens (financial), hydrocarbon exploration company Chesapeake Energy (energy), and Syneos Health (health care), a biopharmaceutical company, to the Fund component. As of the end of the reporting period, the Wellington Management Fund component held its largest underweight allocations to the real estate, communication services, and health care sectors.

Barrow Hanley does not try to predict absolute returns. Instead, it strives to provide for the highest level of relative returns possible, regardless of market conditions. Consistent with this objective, its view is that the market's desire for certainty and "the company of the crowd" will provide a high level of individual stock-specific opportunity for longer-term, lower-risk investing. Barrow Hanley believes that, when this occurs, those with the discipline to remain apart from the crowd and seek out unpopular opportunities could benefit disproportionately.

MassMutual Small Cap Value Equity Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Small Cap Value Equity Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Darling Ingredients, Inc.	1.8%
Adient PLC	1.7%
Texas Capital Bancshares, Inc.	1.7%
WillScot Mobile Mini Holdings Corp.	1.6%
MGIC Investment Corp.	1.6%
Gentherm, Inc.	1.6%
OFG Bancorp	1.5%
Brooks Automation, Inc.	1.5%
Air Transport Services Group, Inc.	1.5%
Umpqua Holdings Corp.	1.4%
	<u>15.9%</u>

<i>MassMutual Small Cap Value Equity Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Industrial	26.3%
Financial	25.1%
Consumer, Non-cyclical	14.5%
Consumer, Cyclical	9.9%
Technology	9.0%
Basic Materials	6.9%
Utilities	2.6%
Communications	2.2%
Energy	1.3%
Total Long-Term Investments	<u>97.8%</u>
Short-Term Investments and Other Assets and Liabilities	<u>2.2%</u>
Net Assets	<u>100.0%</u>

*MassMutual Small Cap Value Equity Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	04/01/2014	54.27%	10.08%		8.29%
Class R5	03/31/2006	54.14%	9.97%	13.93%	
Service Class	03/31/2006	53.95%	9.88%	13.83%	
Administrative Class	03/31/2006	53.93%	9.76%	13.69%	
Class A	03/31/2006	53.40%	9.48%	13.41%	
Class A (sales load deducted)*	03/31/2006	44.96%	8.25%	12.77%	
Class R4	04/01/2014	53.54%	9.60%		7.81%
Class R3	04/01/2014	53.27%	9.32%		7.54%
Russell 2000 Value Index		63.92%	11.03%	13.22%	8.52%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Small Company Value Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Small Company Value Fund*, and who are the Fund's subadvisers?

The Fund seeks to achieve long-term growth of capital by investing primarily in a diversified portfolio of equity securities of smaller companies 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. The Fund's subadvisers are AllianceBernstein L.P. (AllianceBernstein), which managed approximately 68% of the Fund's portfolio; and American Century Investment Management, Inc. (American Century), which oversaw approximately 32% of the Fund's portfolio, as of September 30, 2021.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Small Company Value Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 73.32%, significantly outperforming the 63.92% return of the Russell 2000 Value Index (the "benchmark"), which 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 Fund also significantly outperformed the 47.68% return of the Russell 2000 Index, which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

For the year ended September 30, 2021, with respect to the AllianceBernstein component of the Fund, security selection and sector allocations both contributed to the Fund's remarkable performance in both relative and absolute terms. Security selection in the industrial sector helped to drive the Fund component's performance, more than offsetting its less-than-favorable stock selection in the energy sector. An underweight allocation to the health care sector also contributed, while an underweight allocation to the energy sector detracted. Equipment rental company Herc Holdings was one Fund component holding that contributed to returns, after management outlined strategic initiatives, a capital allocation plan and introduced forecasts with strong revenue and cash flow growth over the next three years. Another Fund component holding, textbook and education technology company Houghton Mifflin Harcourt (HMH), rose after agreeing to sell its HMH Books & Media trade publishing business for \$349 million. Internet marketing company Criteo was another Fund component holding that outperformed after its fourth-quarter 2020 earnings beat expectations and it provided 2021 revenue and earnings guidance that exceeded consensus expectations. On the downside, the AllianceBernstein component of the Fund did not hold any shares in GameStop or AMC Entertainment, and this lack of exposure detracted over the 12-month period, as both stocks were driven up by speculative fervor. Homebuilder KB Home was one Fund component holding that hampered performance, due to increased investor concerns that demand growth in the housing market, spurred by the pandemic, would wane.

Within the American Century component of the Fund, an overweight allocation to the financial sector proved beneficial, especially in banks. Stock selection was advantageous as well. For example, shares of Fund component holding Signature Bank, a higher-quality New York-based commercial bank, were driven by a strengthening economy, rising interest rates, a steepening yield curve, and notable cryptocurrency deposits. (The yield curve is a graph showing the term structure of interest rates by plotting the yields of all bonds of comparable quality with maturities ranging from the shortest – typically one month – to the longest – typically 30 years – available. The resulting curve shows whether short-term interest rates are higher or lower than long-term rates.) Exposure to the capital markets industry also supported returns. An overweight allocation to consumer discretionary was beneficial, with stock selection in household durables contributing most. Positions in the textiles, apparel and luxury goods industry also added to performance for the American Century Fund component. On the downside, Fund component holdings in the materials sector detracted, particularly in the containers and packaging industry. Pactiv Evergreen, a large producer of fresh food and beverage packaging, underperformed due to this Fund component's lower-than-expected guidance for the year, driven by transitory challenges caused by the pandemic. Also hampering American Century's performance was an underweight allocation to the energy sector, particularly in the oil, gas, and consumable fuels industry. Fund component holdings in this industry also hindered performance. The American Century Fund component's exposure to derivatives did not have a material

MassMutual Small Company Value Fund – Portfolio Manager Report (Unaudited) (Continued)

effect on performance during the period. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Derivatives can be used for hedging, speculation, or both.

Subadviser outlook

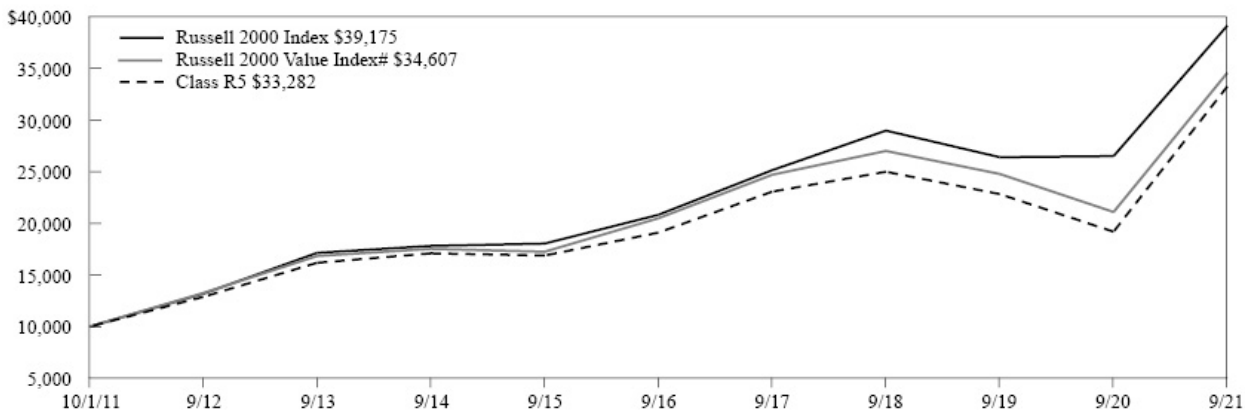
AllianceBernstein observes that the most recent quarter did little to resolve investor uncertainty about the post-pandemic U.S. economic recovery. Positive trends in mobility data and consumer demand were offset by supply-chain bottlenecks and labor shortages. Investors continue to grapple with how these supply-chain issues and spiraling inflation will affect company earnings. Despite this uncertainty, AllianceBernstein remains focused on holding companies that combine value and quality, with a focus on those companies with strong business models and management teams that AllianceBernstein believes will be able to navigate supply-chain shortages and pass along input cost increases.

Looking ahead, American Century believes that attractive valuations could come from information technology, since certain Fund component holdings within that sector have been driven down to compelling valuations due to cyclical factors, trade war fears, or operational miscues. In addition, American Century is optimistic about its large overweight allocation to the consumer discretionary sector, which is dispersed across higher-quality specialty retail companies (boat and automobile dealers), leisure product manufacturers, attractively valued restaurant and leisure companies, and household durables providers. American Century continues to hold these positions on their belief that they have the potential to perform well as the economy continues to recover from the COVID-19 crisis.

MassMutual Small Company Value Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Small Company Value Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Herc Holdings, Inc.	1.4%
BankUnited, Inc.	1.4%
Korn Ferry	1.4%
The Goodyear Tire & Rubber Co.	1.3%
Independent Bank Group, Inc.	1.2%
Pacific Premier Bancorp, Inc.	1.1%
Physicians Realty Trust	1.1%
The Hain Celestial Group, Inc.	1.0%
Independence Realty Trust, Inc.	1.0%
MEDNAX, Inc.	1.0%
	<u>11.9%</u>

<i>MassMutual Small Company Value Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Financial	32.8%
Consumer, Cyclical	20.4%
Industrial	14.6%
Consumer, Non-cyclical	12.6%
Technology	5.6%
Basic Materials	5.1%
Communications	3.4%
Energy	2.5%
Utilities	1.8%
Mutual Funds	1.1%
Total Long-Term Investments	<u>99.9%</u>
Short-Term Investments and Other Assets and Liabilities	0.1%
Net Assets	<u>100.0%</u>

*MassMutual Small Company Value Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	11/15/2010	73.67%	11.84%	12.91%	
Class R5	12/31/2001	73.32%	11.73%	12.78%	
Service Class	12/31/2001	73.14%	11.61%	12.67%	
Administrative Class	12/31/2001	73.10%	11.51%	12.56%	
Class A	12/31/2001	72.61%	11.22%	12.26%	
Class A (sales load deducted)*	12/31/2001	63.12%	9.97%	11.63%	
Class R4	04/01/2014	72.68%	11.33%		8.08%
Class R3	12/31/2002	72.23%	11.05%	12.06%	
Russell 2000 Value Index#		63.92%	11.03%	13.22%	8.52%
Russell 2000 Index		47.68%	13.45%	14.63%	10.24%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Benchmark

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MM S&P[®] Mid Cap Index Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MM S&P[®] Mid Cap Index Fund, and who is the Fund's subadviser?

The Fund seeks to provide investment results approximating (before fees and expenses) the aggregate price and dividend performance of the securities included in the S&P MidCap 400[®] Index* (the "Index"). 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 Index, in weightings that approximate the relative composition of the securities contained in the Index, and in Index futures contracts. The Fund's subadviser is Northern Trust Investments, Inc. (NTI).

** The "S&P MidCap 400 Index" is a product of S&P Dow Jones Indices LLC or its affiliates ("SPDJI") and has been licensed for use by MassMutual. Standard & Poor's[®], S&P[®], and S&P MidCap 400[®] are registered trademarks of Standard & Poor's Financial Services LLC ("S&P") and Dow Jones[®] is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"). 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.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class I shares returned 43.51%, underperforming the 43.68% return of the Index, which 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 of U.S. equity market.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

Generally, the Fund's underperformance versus the Index was mainly attributable to the impact of fees and expenses necessary for the management and operation of the Fund. The Index is not subject to fees or expenses and it is not possible to invest directly in the Index.

During the period ended September 30, 2021, global equities continued to rally from the 2020 lows brought on by COVID-19. The fourth quarter of 2020 was strongly positive, with a major boost from positive news around vaccine development and distribution. During the first quarter of 2021, continued rising interest rates and inflation concerns weighed on equity returns – but inoculation, economic reopening, and stimulus tailwinds proved powerful enough to result in modestly positive returns. In the second quarter, government bond yields settled, while U.S. equities – and growth stocks in particular – rebounded from mid-quarter pressure. Global equities advanced, as improving economic growth, policy support, and strong earnings overcame peak growth and excess inflation. Global equities were flat in the third quarter due to investor concerns over peak growth, inflation, and unwinding stimulus in September. U.S. small-cap value stocks were the strongest-performing market segment for the year. Emerging markets were the weakest performing segment, but were still in positive territory.

The top-performing sectors within the Index were energy and financial, returning 105.64% and 63.78%, respectively. The energy sector benefited as prices moved sharply higher over the last six months, with natural gas at the forefront. The financial sector was helped by a rally in interest rates late in the third quarter.

Consumer staples and utilities were the worst-performing sectors for this period, with returns of 14.81% and 22.69%, respectively. Defensive sectors, such as consumer staples and utilities, were impacted as investor worries began to fade.

The Fund uses equity futures to equitize/gain market exposure for relatively small amounts of cash in the Fund in order to minimize the uninvested cash balances and reduce the impact of any cash drag. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Derivatives can be used for hedging, speculation, or both.

Subadviser outlook

Looking ahead, NTI believes that uncertainty concerning inflation and unwinding of stimulus measures is likely to prevail.

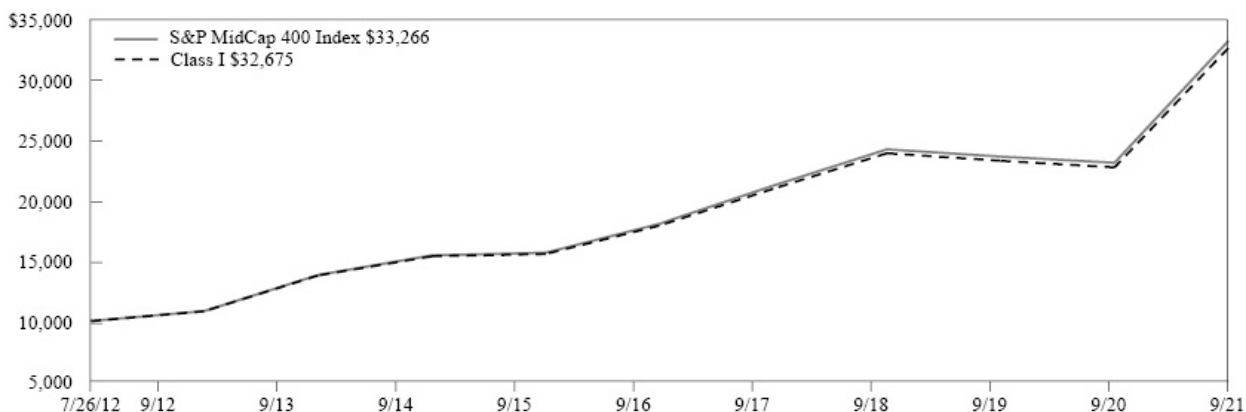
MM S&P® Mid Cap Index Fund – Portfolio Manager Report (Unaudited) (Continued)

*MM S&P Mid Cap
Index Fund
Largest Holdings
(% of Net Assets) on 9/30/21*

Signature Bank	0.7%
Molina Healthcare, Inc.	0.7%
FactSet Research Systems, Inc.	0.6%
Camden Property Trust	0.6%
Repligen Corp.	0.6%
Cognex Corp.	0.6%
SolarEdge Technologies, Inc.	0.6%
Masimo Corp.	0.6%
Williams-Sonoma, Inc.	0.6%
Nordson Corp.	0.6%
	<u>6.2%</u>

*MM S&P Mid Cap
Index Fund
Sector Table
(% of Net Assets) on 9/30/21*

Financial	23.9%
Industrial	19.4%
Consumer, Non-cyclical	17.2%
Consumer, Cyclical	16.4%
Technology	8.4%
Basic Materials	4.1%
Energy	3.9%
Utilities	2.9%
Communications	2.9%
Mutual Funds	0.2%
Total Long-Term Investments	<u>99.3%</u>
Short-Term Investments and Other Assets and Liabilities	<u>0.7%</u>
Net Assets	<u>100.0%</u>

MM S&P[®] Mid Cap Index Fund – Portfolio Manager Report (Unaudited) (Continued)**GROWTH OF \$10,000 INVESTMENT - Class I**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	Since Inception 07/26/2012	Since Inception 04/01/2014
Class I	07/26/2012	43.51%	12.75%	13.76%	
Class R5	07/26/2012	43.33%	12.65%	13.64%	
Service Class	07/26/2012	43.09%	12.48%	13.48%	
Administrative Class	07/26/2012	42.96%	12.36%	13.36%	
Class A	07/26/2012	42.61%	12.08%	13.08%	
Class A (sales load deducted)*	07/26/2012	34.76%	10.82%	12.38%	
Class R4	04/01/2014	42.84%	12.20%		10.03%
Class R3	04/01/2014	42.50%	11.92%		9.76%
S&P MidCap 400 Index		43.68%	12.97%	13.98%	10.78%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MM Russell 2000[®] Small Cap Index Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MM Russell 2000[®] Small Cap Index Fund, and who is the Fund's subadviser?

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* (the "Index"). 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 Index, in weightings that approximate the relative composition of the securities contained in the Index, and in Index futures contracts. The Fund's subadviser is Northern Trust Investments, Inc. (NTI).

** The Fund is sponsored solely by MassMutual. The Fund is not in any way connected to or sponsored, endorsed, sold or promoted by the London Stock Exchange Group plc and its group undertakings (collectively, the "LSE Group"). FTSE Russell is a trading name of certain of the LSE Group companies.*

All rights in the Russell 2000[®] Index (the "Index") vest in the relevant LSE Group company which owns the Index. "Russell 2000[®]" and "Russell[®]" are trade marks of the relevant LSE Group company and are used by any other LSE Group company under license.

The Index is calculated by or on behalf of FTSE International Limited or its affiliate, agent or partner. The LSE Group does not accept any liability whatsoever to any person arising out of (a) the use of, reliance on or any error in the Index or (b) investment in or operation of the Fund. The LSE Group makes no claim, prediction, warranty or representation either as to the results to be obtained from the Fund or the suitability of the Index for the purpose to which it is being put by the Fund.

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class I shares returned 47.46%, underperforming the 47.68% return of the Index, which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

Generally, the Fund's underperformance versus the Index was mainly attributable to the impact of fees and expenses necessary for the management and operation of the Fund. The Index is not subject to fees, expenses, or taxes and it is not possible to invest directly in the Index.

During the period ended September 30, 2021, global equities continued to rally from the 2020 lows brought on by COVID-19. The fourth quarter of 2020 was strongly positive, with a major boost from positive news around vaccine development and distribution. During the first quarter of 2021, continued rising interest rates and inflation concerns weighed on equity returns – but inoculation, economic reopening, and stimulus tailwinds proved powerful enough to result in modestly positive returns. In the second quarter, government bond yields settled, while U.S. equities – and growth stocks in particular – rebounded from mid-quarter pressure. Global equities advanced, as improving economic growth, policy support, and strong earnings overcame peak growth and excess inflation. Global equities were flat in the third quarter due to investor concerns on peak growth, inflation, and unwinding stimulus in September. U.S. small-cap value stocks were the strongest-performing market segment for the year, while emerging markets were the weakest, although still in positive territory.

The top-performing sectors within the Index were energy and communication services, returning 154.77% and 75.73%, respectively. The energy sector benefited as prices moved sharply higher over the last six months, with natural gas at the forefront. Communication services benefited from pandemic-related stay-at-home behaviors.

Utilities and health care were the worst-performing sectors for this period, with returns of 18.86% and 19.74%, respectively. Defensive sectors, such as utilities and health care, were impacted, as investor worries began to fade.

The Fund uses equity futures to equitize/gain market exposure for relatively small amounts of cash in the Fund in order to minimize the uninvested cash balances and reduce the impact of any cash drag. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Derivatives can be used for hedging, speculation, or both.

Subadviser outlook

Looking ahead, NTI believes that the uncertainty concerning inflation and unwinding of stimulus measures is likely to prevail.

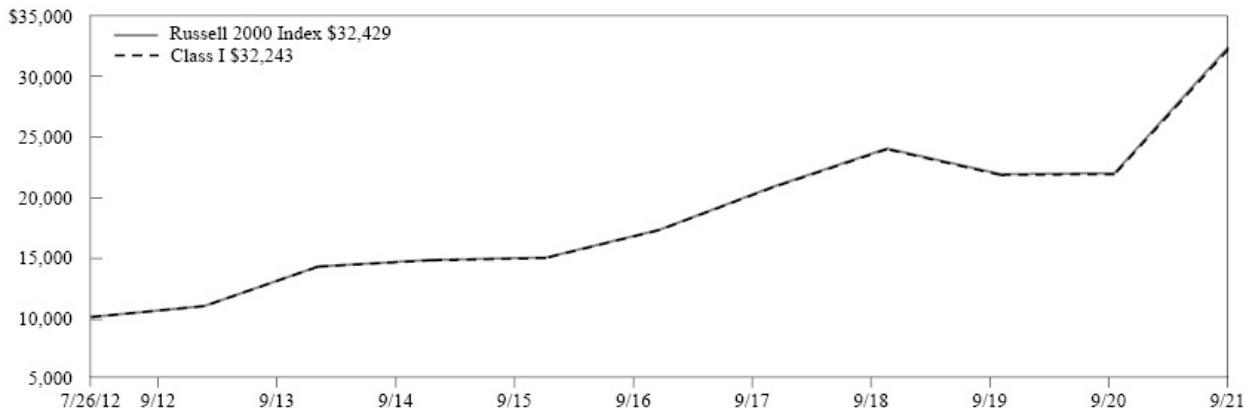
MM Russell 2000® Small Cap Index Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MM Russell 2000 Small Cap Index Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
AMC Entertainment Holdings, Inc. Class A	0.7%
Intellia Therapeutics, Inc.	0.3%
Crocs, Inc.	0.3%
Lattice Semiconductor Corp.	0.3%
Ovintiv, Inc.	0.3%
Tetra Tech, Inc.	0.3%
Scientific Games Corp. Class A	0.3%
Zurn Water Solutions Corp.	0.3%
Biohaven Pharmaceutical Holding Co. Ltd.	0.3%
Asana, Inc. Class A	0.3%
	3.4%

<i>MM Russell 2000 Small Cap Index Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Consumer, Non-cyclical	25.7%
Financial	21.7%
Consumer, Cyclical	13.2%
Industrial	12.3%
Technology	11.5%
Communications	4.6%
Energy	4.5%
Basic Materials	3.0%
Utilities	2.5%
Mutual Funds	2.5%
Government	0.0%
Corporate Debt	0.0%
Total Long-Term Investments	101.5%
Short-Term Investments and Other Assets and Liabilities	(1.5)%
Net Assets	100.0%

MM Russell 2000[®] Small Cap Index Fund – Portfolio Manager Report (Unaudited) (Continued)

GROWTH OF \$10,000 INVESTMENT - Class I



The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	Since Inception 07/26/2012	Since Inception 04/01/2014
Class I	07/26/2012	47.46%	13.35%	13.60%	
Class R5	07/26/2012	47.29%	13.23%	13.48%	
Service Class	07/26/2012	47.09%	13.06%	13.30%	
Administrative Class	07/26/2012	46.99%	12.94%	13.19%	
Class A	07/26/2012	46.55%	12.66%	12.89%	
Class A (sales load deducted)*	07/26/2012	38.49%	11.39%	12.20%	
Class R4	04/01/2014	46.67%	12.78%		9.63%
Class R3	04/01/2014	46.38%	12.51%		9.37%
Russell 2000 Index		47.68%	13.45%	13.69%	10.24%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

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Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

*MassMutual Mid Cap Growth Fund – Portfolio Manager Report (Unaudited)***What is the investment approach of MassMutual Mid Cap Growth Fund*, and who are the Fund's subadvisers?**

The Fund seeks growth of capital over the long-term by investing primarily in equity securities of mid-capitalization companies that the Fund's subadvisers believe offer the 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 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 are T. Rowe Price Associates, Inc. (T. Rowe Price), which oversaw approximately 74% of the Fund's portfolio; and Frontier Capital Management Company, LLC (Frontier), which was responsible for approximately 26% of the Fund's portfolio, as of September 30, 2021.

Except as noted below, the MassMutual 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 and by Empower Retirement, LLC or their respective 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.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Mid Cap Growth Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 29.44%, underperforming the 30.45% return of the Russell Midcap[®] Growth Index (the "benchmark"), which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

Within the T. Rowe Price component of the Fund, a meaningful underweight allocation to the information technology (IT) sector drove relative underperformance for the period ended September 30, 2021. Stock selection in IT services and an underweight allocation to software also weighed on relative performance in a period where richly valued, aggressive growth companies delivered exceptional returns. Additionally, security selection in the health care sector hampered relative performance for the period. With respect to specific Fund component holdings, despite strong performance on the back of Pfizer's positive vaccine news, shares of medical supply company Teleflex had been volatile since the spring, when a resurgence of coronavirus cases prompted fears that elective and noncritical medical visits and procedures would be cancelled or postponed, curtailing demand for the company's products. On the other hand, stock selection, coupled with a favorable underweight allocation to the communication services sector, contributed to T. Rowe Price's relative performance during the period. Specifically, shares of Liberty Media Formula One Corp, which controls the exclusive commercialization of the immensely popular F1 motorsport races, gained ground over the period, as the widespread availability of vaccines enabled the return of in-person sporting events. Finally, consumer staples also contributed due to an underweight allocation to the sector.

For the Frontier component of the Fund, an underweight allocation to technology, due to high valuations across software companies, detracted from the Fund's relative performance despite favorable stock selection within the sector. The strongest returns from Frontier's Fund component holdings came from the consumer discretionary and financial sectors, although this was offset partially by headwinds in health care. With respect to specific Fund component holdings, in health care patient care service provider Amedisys Inc. was hurt by lower-than-expected occupancy in their hospice business, resulting from a higher member death rate during the pandemic. Within real estate, cellular tower operator SBA Communications declined due to muted 5G installations. Turning to the positive, Casino operator Caesars Entertainment Inc. reported a record profit margin as business improved dramatically with rising vaccination rates and operating costs that remained low due to the changes implemented during the pandemic. In the financial sector, SVB Financial Group rallied on earnings that trounced Wall Street's expectations on strong capital markets and robust loan growth, fueled by a nearly 90% jump in the asset base.

*MassMutual Mid Cap Growth Fund – Portfolio Manager Report (Unaudited) (Continued)***Subadviser outlook**

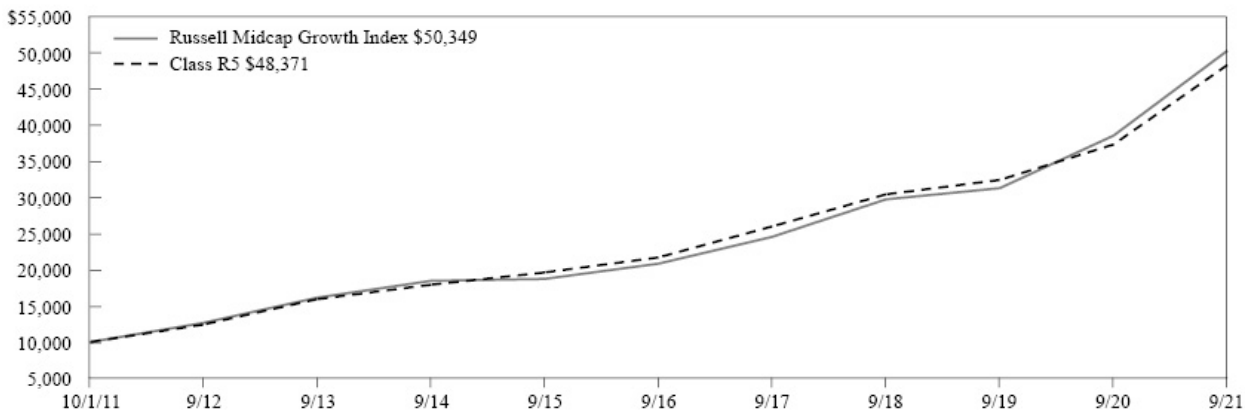
T. Rowe Price notes that 2021 has been a good year for equity markets, but continues to be a frustrating environment for valuation-conscious growth investors. While the high-flying growth stocks have taken a pause in recent months, Fund management has yet to see multiples contract in recognition that the persistently high-growth expectations being priced into entire industries that management believes is unlikely to come to fruition for many constituents. As the global economy slowly moves beyond the coronavirus-induced hardships of the past 18 months, T. Rowe Price believes there is a potential path for growth to broaden out to attractively valued, but ignored, companies that feature fundamentally sound but temporarily impaired businesses ready to participate in economic reacceleration and a “return to normalcy.”

In Frontier’s view, while demand remains strong, persistent supply-chain pressures and paradoxical labor shortages limit the U.S. economy’s potential. Frontier believes that these factors are likely to temper earnings growth, particularly among the companies that lack pricing power. Also, Frontier believes that concerns about high energy prices, combined with the looming fears of Federal Reserve tapering and escalating debt ceiling contention, could weaken market sentiment. Nevertheless, Frontier observes that economies are reopening on firmer footings despite recent virus spikes; companies are finding ways to post record profits even in the face of increasing input costs – and consumer finances remain healthy. As we get past the peak holiday season, Frontier is optimistic that supply-chain bottlenecks and labor shortages could eventually subside.

MassMutual Mid Cap Growth Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Mid Cap Growth Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Microchip Technology, Inc.	2.2%
Hologic, Inc.	2.1%
Ball Corp.	2.0%
Catalent, Inc.	1.9%
Agilent Technologies, Inc.	1.8%
Teleflex, Inc.	1.8%
Textron, Inc.	1.6%
Marvell Technology, Inc.	1.6%
Bruker Corp.	1.4%
Ingersoll Rand, Inc.	1.4%
	<u>17.8%</u>

<i>MassMutual Mid Cap Growth Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Consumer, Non-cyclical	30.5%
Technology	20.4%
Consumer, Cyclical	17.2%
Industrial	15.9%
Financial	6.2%
Communications	5.9%
Utilities	1.0%
Basic Materials	0.8%
Mutual Funds	0.7%
Energy	0.2%
Total Long-Term Investments	<u>98.8%</u>
Short-Term Investments and Other Assets and Liabilities	1.2%
Net Assets	<u>100.0%</u>

*MassMutual Mid Cap Growth Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	11/15/2010	29.52%	17.46%	17.20%	
Class R5	06/01/2000	29.44%	17.35%	17.07%	
Service Class	06/01/2000	29.29%	17.23%	16.95%	
Administrative Class	06/01/2000	29.16%	17.11%	16.82%	
Class A	06/01/2000	28.80%	16.82%	16.53%	
Class A (sales load deducted)*	06/01/2000	21.72%	15.50%	15.88%	
Class R4	04/01/2014	28.92%	16.93%		13.88%
Class R3	12/31/2002	28.60%	16.65%	16.31%	
Russell Midcap Growth Index		30.45%	19.27%	17.54%	14.83%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Small Cap Growth Equity Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Small Cap Growth Equity Fund*, and who are the Fund's subadvisers?

The Fund seeks long-term capital appreciation by investing 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. The Fund's subadvisers are Wellington Management Company LLP (Wellington Management), which managed approximately 60% of the Fund's portfolio; and Invesco Advisers, Inc. (Invesco), which oversaw approximately 40% of the Fund's portfolio, as of September 30, 2021.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Small Cap Growth Equity Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 36.53%, outperforming the 33.27% return of the Russell 2000 Growth Index (the "benchmark"), which measures the performance of the small-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 Fund underperformed the 47.68% return of the Russell 2000 Index, which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

In the Wellington Management component of the Fund, favorable security selection within the financial and information technology sectors was a primary driver of performance for the period ended September 30, 2021. Sector allocation, a residual of Wellington Management's bottom-up stock selection process, also contributed to relative performance due to the Fund's underweight allocations to the health care and utilities sectors, and overweight allocation to the financial sector. An underweight allocation to the energy sector detracted, partially offsetting results. Fund component holdings that were among the top relative contributors for the period included SunPower (information technology) and Western Alliance (financial). Shares of solar panel maker SunPower ended the period higher after shares soared in January. To meet the growing demand for solar, SunPower announced substantial expansion plans for its SunPower Residential Installation program, which helps homeowners access the renewable energy sector. Shares of Western Alliance ended the period higher, as the stock price surged in the first quarter of 2021 after the company reported strong fourth-quarter earnings. Wellington Management eliminated both positions from the Fund component's portfolio. Fund component holdings that were top detractors from relative returns included DraftKings and Ollie's Bargain Outlet (both in the consumer discretionary sector). The share price of DraftKings, an online sports entertainment service that includes online sports betting, fell in the second quarter of 2021 after setting all-time highs in March. Wellington Management eliminated DraftKings from its portfolio. Shares of Ollie's Bargain Outlet fell during the period, as investors reacted negatively to the discount retailer's second-quarter earnings report. Results were weak against last year's record results when the company benefited from the initial COVID-19 retail backdrop by keeping its stores open. Wellington Management trimmed its position but continued to hold the name as of the end of the reporting period.

With respect to the Invesco component of the Fund, strong stock selection within the information technology and industrial sectors, as well as stock selection and an underweight allocation to the health care sector were the primary performance drivers during the reporting period. This was partially offset by weaker stock selection within the consumer discretionary and communication services sectors. The top-performing Fund component holdings were Repligen Corporation, Lattice Semiconductor, and Kornit Digital. Repligen Corporation, a supplier of bioprocessing equipment, reported strong third-quarter 2020 financial results in part due to accelerated orders for equipment that will be used to help manufacture COVID-19 vaccines and therapeutics. Lattice Semiconductor's revenue growth accelerated as a result of its new Field Programmable Gate Arrays semiconductor devices, combined with strong global demand. Kornit Digital's printers offer significant costs savings compared to analog printers and provide greater customization capabilities for sports apparel companies. Fund component holdings that were among the top detractors from Invesco's performance included iRhythm Technologies, Bandwidth, and Magnite. iRhythm Technologies' stock

MassMutual Small Cap Growth Equity Fund – Portfolio Manager Report (Unaudited) (Continued)

underperformed due to a surprising cut to Medicare reimbursement for its ambulatory cardiac monitor, which was announced in February. Bandwidth, which offers voice-over internet, integrated phone systems, smartphones, and business-grade internet connectivity solutions through cloud-based communications, experienced decelerating revenue growth. Finally, Magnite is a leading sell-side platform for digital programmatic advertising on the internet with a strong position in CTV (streaming TV). The company, which helps publishers monetize digital ad inventory, detracted from performance for a number of reasons, including a high valuation that weighed on the name.

Subadviser outlook

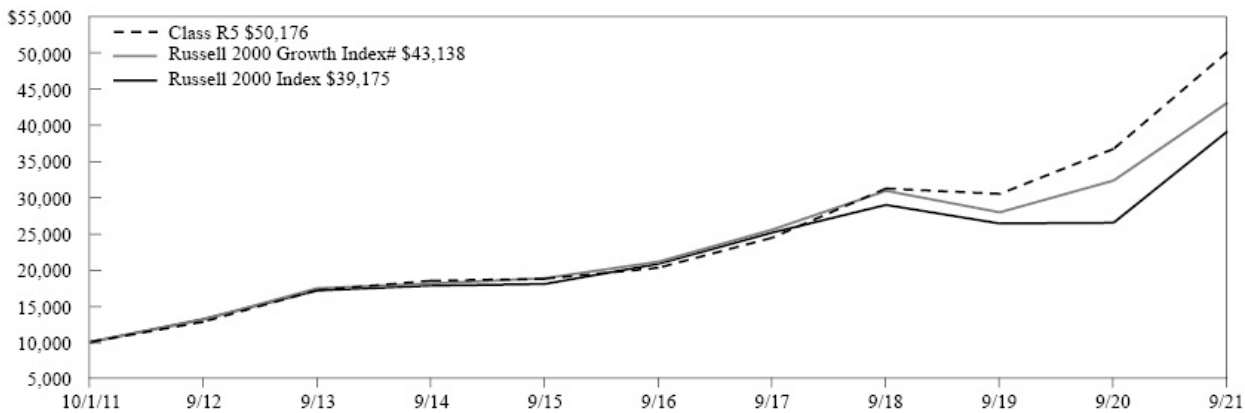
Wellington Management's investment approach emphasizes individual stock selection; sector weights are a residual of its bottom-up investment process. Wellington Management strives to find attractively valued investment opportunities created by the inefficiencies frequently found among small-cap companies.

Invesco notes that, although the Delta variant of COVID-19 reduced the pace of growth this past summer, fiscal and monetary stimulus remains robust and COVID-19 cases seem to be receding. As a result, Invesco anticipates economic activity to gain strength in the final months of 2021 and into early 2022. Invesco also believe rates of economic and corporate earnings growth have peaked for this cycle, with headwinds from supply chain difficulties, inflationary pressures, and labor shortages gaining strength. Invesco plans to continue to focus on harnessing the power of compound growth by identifying companies best positioned to thrive in an ever-changing environment.

MassMutual Small Cap Growth Equity Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Small Cap Growth Equity Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Inspire Medical Systems, Inc.	1.3%
Kornit Digital Ltd.	1.2%
Varonis Systems, Inc.	1.2%
Medpace Holdings, Inc.	1.2%
Manhattan Associates, Inc.	1.1%
Sprout Social, Inc. Class A	1.1%
Chart Industries, Inc.	1.1%
Lattice Semiconductor Corp.	1.0%
Repligen Corp.	1.0%
iShares Russell 2000 Growth ETF	1.0%
	11.2%

<i>MassMutual Small Cap Growth Equity Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Consumer, Non-cyclical	24.1%
Technology	19.4%
Industrial	16.6%
Consumer, Cyclical	13.8%
Financial	12.5%
Communications	5.0%
Mutual Funds	4.1%
Energy	2.4%
Basic Materials	2.0%
Utilities	0.3%
Total Long-Term Investments	100.2%
Short-Term Investments and Other Assets and Liabilities	(0.2)%
Net Assets	100.0%

*MassMutual Small Cap Growth Equity Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	11/15/2010	36.68%	19.98%	17.62%	
Class R5	05/03/1999	36.53%	19.85%	17.50%	
Service Class	05/03/1999	36.36%	19.73%	17.37%	
Administrative Class	05/03/1999	36.23%	19.60%	17.24%	
Class A	05/03/1999	35.83%	19.31%	16.95%	
Class A (sales load deducted)*	05/03/1999	28.36%	17.97%	16.29%	
Class R4	04/01/2014	36.11%	19.44%		13.41%
Class R3	12/31/2002	35.63%	19.13%	16.72%	
Russell 2000 Growth Index#		33.27%	15.34%	15.74%	11.57%
Russell 2000 Index		47.68%	13.45%	14.63%	10.24%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Benchmark

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MM MSCI EAFE[®] International Index Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MM MSCI EAFE[®] International Index Fund, and who is the Fund's subadviser?

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* (the "Index"). 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 Index, in weightings that approximate the relative composition of the securities contained in the Index, and in Index futures contracts. The Fund's subadviser is Northern Trust Investments, Inc. (NTI).

** 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 MassMutual. 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.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class I shares returned 24.95%, underperforming the 25.73% return of the Index, which measures the performance of large- and mid-cap segments of developed markets, excluding the U.S. and Canada equity securities. It is free float-adjusted market-capitalization weighted.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

Generally, the Fund's underperformance versus the Index was mainly attributable to the impact of fees and expenses necessary for the management and operation of the Fund. The Index is not subject to fees or expenses and it is not possible to invest directly in the Index.

During the period ended September 30, 2021, global equities continued to rally from the 2020 lows brought on by COVID-19. The fourth quarter of 2020 was strongly positive, with a major boost from positive news around vaccine development and distribution. During the first quarter of 2021, continued rising interest rates and inflation concerns weighed on equity returns – but inoculation, economic reopening, and stimulus tailwinds proved powerful enough to result in modestly positive returns. In the second quarter, government bond yields settled, while U.S. equities – and growth stocks in particular – rebounded from mid-quarter pressure. Global equities advanced, as improving economic growth, policy support, and strong earnings overcame peak growth and excess inflation. Global equities were flat in the third quarter due to investor concerns on peak growth, inflation, and unwinding stimulus in September. U.S. small-cap value stocks were the strongest-performing market segment for the year, while emerging markets were the weakest, although still in positive territory.

The top-performing sectors within the Index were energy and financial, returning 63.97% and 45.04%, respectively. Utilities and consumer staples were the worst-performing sectors for this period, with returns of 4.71% and 9.09%, respectively.

The top-performing countries were Austria and Norway, returning 99.82% and 47.05%, respectively. New Zealand and Hong Kong were the worst-performing countries for this period, with returns of -1.97% and 15.02%, respectively.

The Fund uses equity futures to equitize/gain market exposure for relatively small amounts of cash in the Fund in order to minimize the uninvested cash balances and reduce the impact of any cash drag. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Derivatives can be used for hedging, speculation, or both.

Subadviser outlook

Looking ahead, NTI believes that the uncertainty concerning inflation and unwinding of stimulus measures is likely to prevail.

MM MSCI EAFE[®] International Index Fund – Portfolio Manager Report (Unaudited) (Continued)

*MM MSCI EAFE
International Index Fund
Largest Holdings
(% of Net Assets) on 9/30/21*

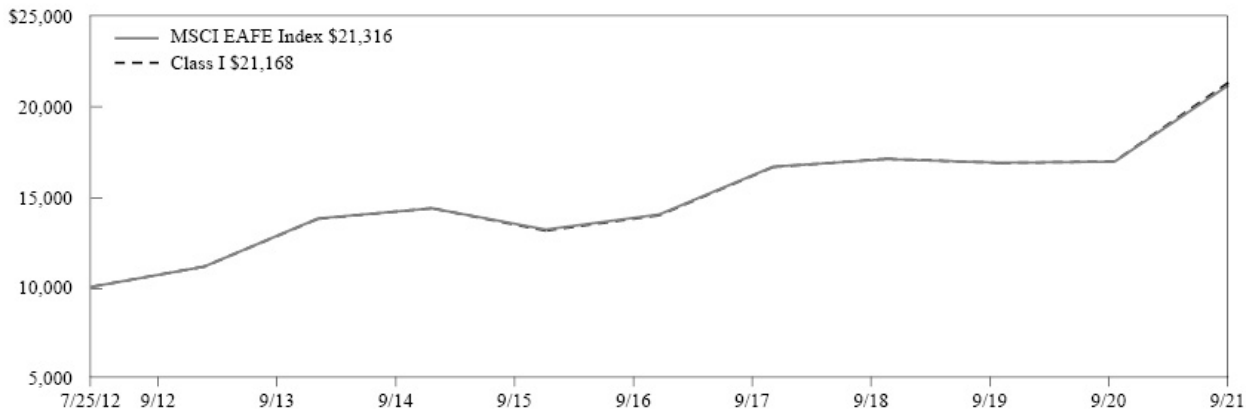
Nestle SA Registered	2.0%
ASML Holding NV	1.8%
Roche Holding AG	1.5%
LVMH Moet Hennessy Louis Vuitton SE	1.2%
Toyota Motor Corp.	1.1%
AstraZeneca PLC	1.1%
Novartis AG Registered	1.1%
Novo Nordisk A/S Class B	0.9%
Unilever PLC	0.8%
SAP SE	0.8%
	<hr/>
	12.3%
	<hr/>

*MM MSCI EAFE
International Index Fund
Sector Table
(% of Net Assets) on 9/30/21*

Consumer, Non-cyclical	25.1%
Financial	19.6%
Industrial	14.3%
Consumer, Cyclical	13.6%
Technology	6.5%
Basic Materials	6.4%
Communications	5.5%
Energy	3.7%
Utilities	3.1%
Mutual Funds	1.7%
Diversified	0.2%
Total Long-Term Investments	<hr/>
	99.7%
Short-Term Investments and Other Assets and Liabilities	<hr/>
	0.3%
Net Assets	<hr/>
	100.0%
	<hr/>

MM MSCI EAFE[®] International Index Fund – Portfolio Manager Report (Unaudited) (Continued)

GROWTH OF \$10,000 INVESTMENT - Class I



The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	Since Inception 07/25/2012	Since Inception 04/01/2014
Class I	07/25/2012	24.95%	8.59%	8.51%	
Class R5	07/25/2012	24.83%	8.51%	8.40%	
Service Class	07/25/2012	24.68%	8.34%	8.24%	
Administrative Class	07/25/2012	24.54%	8.22%	8.12%	
Class A	07/25/2012	24.25%	7.96%	7.85%	
Class A (sales load deducted)*	07/25/2012	17.41%	6.74%	7.19%	
Class R4	04/01/2014	24.37%	8.07%		4.48%
Class R3	04/01/2014	24.02%	7.79%		4.22%
MSCI EAFE Index		25.73%	8.81%	8.59%	5.12%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Overseas Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Overseas Fund*, and who are the Fund's subadvisers?

The Fund seeks growth of capital over the long-term by investing in foreign equity securities. 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. The Fund's subadvisers are Massachusetts Financial Services Company (MFS), which was responsible for approximately 65% of the Fund's portfolio; and Harris Associates L.P. (Harris), which oversaw approximately 35% of the Fund's portfolio, as of September 30, 2021.

** Prior to 05/01/2021, the Fund's name was MassMutual Select Overseas Fund.*

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class R5 shares returned 30.07%, outperforming the 25.73% return of the MSCI EAFE Index (the "benchmark"), which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

For the period ended September 30, 2021, with respect to the MFS component of the Fund, stock selection and an overweight allocation to the industrial sector, relative to the benchmark, contributed to relative returns. Overweight allocations to certain Fund component holdings – including electronics company Hitachi (Japan), diversified industrial manufacturer Rolls-Royce (United Kingdom), and electrical distribution equipment manufacturer Schneider Electric (France) were primary drivers of performance. Stock selection in the consumer discretionary sector further strengthened relative returns. There, the Fund's overweight allocation to shares of luxury goods company LVMH (France) bolstered relative results. Elsewhere, the Fund's overweight allocations to consulting services provider Capgemini (France), financial services firm ING (Netherlands), banking firm KBC (Belgium), and pharmaceutical company Merck (United States) aided relative results.

On the downside, security selection and an underweight allocation to the financial sector weakened relative results for the MFS component of the Fund, led by its overweight allocation to stock exchange Deutsche Boerse (Germany). Fund component holdings in other sectors that weighed on relative results included overweight allocations to industrial and medical gas supplier Air Liquide (France), cosmetic products manufacturer Beiersdorf (Germany), telecommunications services provider Koninklijke Philips (Netherlands), life sciences company Bayer (Germany), and household products manufacturer Reckitt Benckiser (United Kingdom).

For the Harris Fund component of the Fund, the U.K. provided the best relative performance, as all 18 underlying holdings posted positive returns. Switzerland produced the next-best result, owing to share price advances for seven of eight underlying holdings in this geography, followed by France, where seven of nine underlying holdings produced positive absolute returns. Fund component holdings in Australia detracted most from relative performance, driven by share price declines from materials company Orica and financial firm AMP. The next largest negative relative results came from Fund component holdings in China and South Africa. From a sector perspective, the financial sector furnished the best relative result, owing to positive outcomes from both stock selection (as 12 of 14 underlying holdings advanced) as well as a greater-than-benchmark weighting. Fund component holdings in the industrial and materials sectors delivered the next-best relative returns. Technology sector holdings had the largest negative relative performance, due in large part to a less-than-benchmark weighting. The Harris Fund component holds hedges on the Swiss franc. Over the past 12 months, hedges contributed to the Harris Fund component's performance. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Derivatives can be used for hedging, speculation, or both.

Subadviser outlook

MFS observes that while arguably, equity markets have enjoyed the tailwinds of a near-perfect investment world – strong earnings growth, abundant liquidity, low interest rates, and volatility at new post-COVID lows – perhaps behavioral themes have reconditioned investors. MFS questions whether equity markets will keep going up just because of FOMO (the "fear of missing

MassMutual Overseas Fund – Portfolio Manager Report (Unaudited) (Continued)

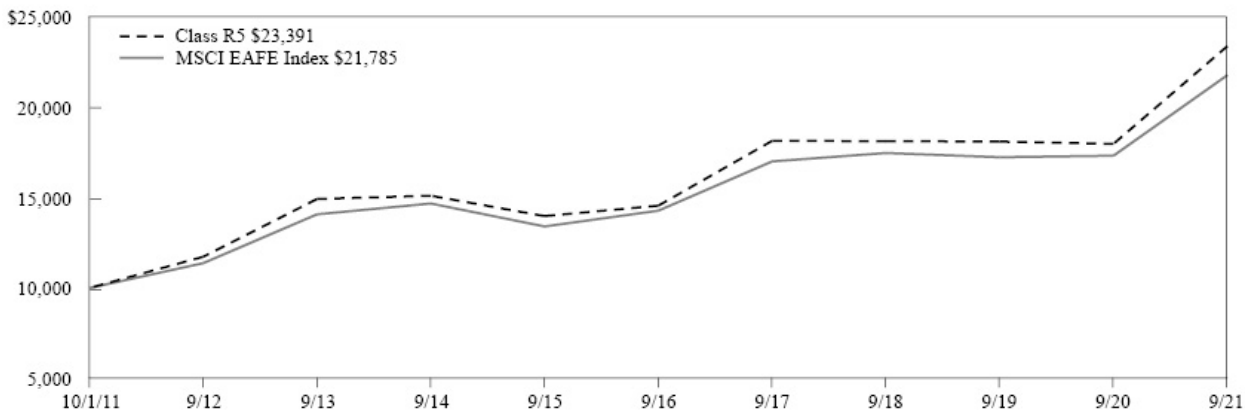
out”), or because there is no viable alternative to owning equities when bond yields are so low. One of the hallmarks of MFS’s strategy for long-term investing has been to adopt a patient approach, while avoiding overpaying for assets. MFS believes the macro environment remains supportive for equity markets as investors await a change in the direction of monetary policy. While equities offer value relative to bonds provided there is profitable growth, MFS believes they look expensive in absolute terms.

Despite the macro noise, Harris remains committed to focusing on finding investments that Fund management believes will provide shareholder value over the long term.

MassMutual Overseas Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Overseas Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Nestle SA Registered	2.3%
Roche Holding AG	2.3%
Schneider Electric SE	2.1%
Bayer AG Registered	2.1%
SAP SE	2.0%
Intesa Sanpaolo SpA	1.9%
Capgemini SE	1.8%
Air Liquide SA	1.6%
AIA Group Ltd.	1.5%
LVMH Moet Hennessy Louis Vuitton SE	1.5%
	<u>19.1%</u>

<i>MassMutual Overseas Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Consumer, Non-cyclical	28.7%
Financial	18.6%
Industrial	15.1%
Consumer, Cyclical	14.2%
Technology	7.7%
Basic Materials	6.1%
Communications	5.3%
Mutual Funds	3.4%
Energy	1.4%
Utilities	0.6%
Total Long-Term Investments	<u>101.1%</u>
Short-Term Investments and Other Assets and Liabilities	<u>(1.1)%</u>
Net Assets	<u>100.0%</u>

*MassMutual Overseas Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class R5**

The graph above illustrates a representative class of the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable. The performance of other share classes will be greater than or less than the class depicted above.

Average Annual Total Returns (for the periods ended 09/30/2021)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	11/15/2010	30.17%	10.04%	9.03%	
Class R5	05/01/2001	30.07%	9.94%	8.87%	
Service Class	05/01/2001	29.91%	9.82%	8.78%	
Administrative Class	05/01/2001	29.72%	9.70%	8.68%	
Class A	05/01/2001	29.45%	9.41%	8.41%	
Class A (sales load deducted)*	05/01/2001	22.33%	8.18%	7.80%	
Class R4	04/01/2014	29.46%	9.52%		5.17%
Class R3	12/31/2002	29.29%	9.27%	8.21%	
MSCI EAFE Index		25.73%	8.81%	8.10%	5.12%

* Class A (sales load deducted) returns include the 5.50% maximum sales charge.

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

Performance results in the graph and table are shown both with and without the imposition of the maximum applicable sales charge (if applicable) and reflect the percentage change in net asset value, including reinvestment of dividends and capital gains distributions. Investors should note that the Fund is a professionally managed mutual fund, while the index or indexes shown above are unmanaged, cannot be purchased directly, and, with the exception of any peer group index, do not incur expenses.

Performance data quoted in the graph and table represents past performance; past performance is not predictive of future results. The investment return and principal value of shares of the Fund fluctuate, so your shares, when sold, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. The performance shown does not reflect the deduction of taxes, if any, that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance data current to the most recent month end may be obtained by calling 1-888-309-3539.

Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Select T. Rowe Price International Equity Fund – Portfolio Manager Report (Unaudited)

What is the investment approach of MassMutual Select T. Rowe Price International Equity Fund, and who are the Fund's subadvisers?

The Fund seeks long-term capital growth and current income primarily through investments in non-U.S. stocks. 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. 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's subadviser is T. Rowe Price Associates, Inc. (T. Rowe Price). 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. serves as a sub-subadviser for the Fund. T. Rowe Price Singapore Private Ltd. was added as a sub-subadviser to the Fund on April 1, 2021.

Except as noted below, the MassMutual Select T. Rowe Price International Equity Fund has not been available for purchase by new or existing investors since October 29, 2020. 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.

How did the Fund perform during the 12 months ended September 30, 2021?

The Fund's Class I shares returned 25.11%, outperforming the 23.92% return of the MSCI All Country World Index (ACWI) ex USA (the "benchmark"), which 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2021, please see the Economic and Market Overview, beginning on page 3.

Subadviser discussion of factors that contributed to the Fund's performance

T. Rowe Price takes a core approach to investing, which provides exposure to both growth and value styles of investing. For the year ended September 30, 2021, stock selection in international developed value allocation was the largest contributor to relative returns. Fund holdings in the emerging markets value equity allocation also added value, while stock selection in the emerging markets stock allocation negatively impacted relative results. An overweight allocation to emerging markets equities, which trailed international developed stocks, detracted from the Fund's relative performance.

Within the international equity value allocation, favorable stock selection in the industrial and business services sectors contributed to relative results, led by Fund holdings in the aerospace and defense industry. Conversely, the consumer discretionary sector detracted from relative performance, due to unfavorable security selection. Regionally, favorable security selection in developed Europe lifted relative returns, driven by holdings in the Netherlands.

Within the emerging markets value equity allocation, an underweight allocation to, and security selection within, the consumer discretionary sector contributed to relative performance, driven by holdings within the internet and direct marketing retail industry. However, an underweight allocation to, and security selection within, the health care sector detracted from relative performance. From a regional perspective, security selection in Pacific ex-Japan was the largest contributor to relative performance, led by Fund holdings in China. However, an out-of-benchmark exposure to the developed Europe region held back relative results.

In the international core equity allocation, security selection in the industrial and business services sector contributed the most to relative performance, led by holdings in the aerospace and defense industry. Conversely, stock selection within the consumer discretionary sector detracted from relative returns. Regionally, stock selection in Japan added value for the period. However, security selection and an underweight allocation to developed Europe weighed on relative results.

The international equity growth allocation posted positive absolute returns, but less-than-favorable stock selection in the consumer discretionary sector was the largest detractor from relative returns, driven by holdings within the internet and direct marketing retail industry. Conversely, security selection and a favorable overweight allocation to the financial sector lifted relative results, led by holdings in the banking industry. Regionally, unfavorable security selection in developed Europe detracted. However, an out-of-benchmark allocation to Canada added value for the period.

MassMutual Select T. Rowe Price International Equity Fund – Portfolio Manager Report (Unaudited) (Continued)

The emerging markets equity allocation delivered positive absolute returns, but an underweight allocation to, coupled with security selection within the materials sector detracted from relative results, driven by holdings in the metals and mining industry. Conversely, a favorable overweight allocation coupled with security selection in the financial sector contributed to relative results. From a country perspective, unfavorable stock selection in China weighed on relative returns, although the negative impact was partially offset by an underweight allocation. However, an overweight allocation and security selection in Argentina added value.

As of September 30, 2021, the Fund held equity options and rights. The use of rights detracted slightly from performance, whereas the estimated return impact from employing equity options was negligible. Derivatives are securities that derive their value from the performance of one or more other investments and take the form of a contract between two or more parties. Derivatives can be used for hedging, speculation, or both.

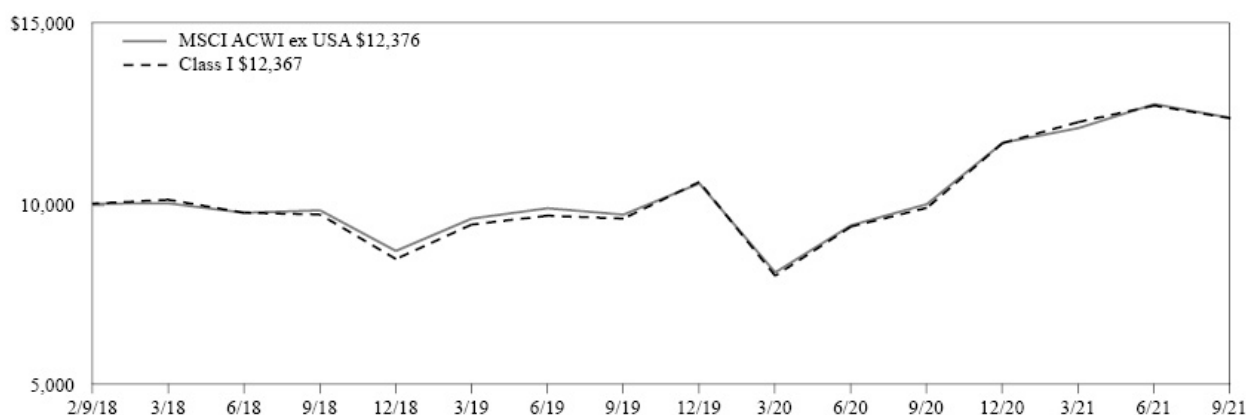
Subadviser outlook

T. Rowe Price notes that global equity markets have posted strong returns for the year, although the pace of gains has slowed in recent months. While in Fund management's view the global recovery could continue and the economic environment remain favorable, T. Rowe Price believes that there are reasons to be cautious. In Fund management's opinion, a more modest allocation to equities may be prudent, as valuations are elevated in key markets and looming headwinds could potentially cause volatility in the near term.

MassMutual Select T. Rowe Price International Equity Fund – Portfolio Manager Report (Unaudited) (Continued)

<i>MassMutual Select T. Rowe Price International Equity Fund Largest Holdings (% of Net Assets) on 9/30/21</i>	
Taiwan Semiconductor Manufacturing Co. Ltd.	3.1%
Samsung Electronics Co. Ltd.	2.1%
ASML Holding NV	1.5%
Nestle SA Registered	1.3%
Nippon Telegraph & Telephone Corp.	1.3%
AstraZeneca PLC Sponsored ADR	1.3%
Roche Holding AG	1.2%
Sanofi	1.1%
Tencent Holdings Ltd.	1.1%
Prosus NV	1.0%
	<u>15.0%</u>

<i>MassMutual Select T. Rowe Price International Equity Fund Sector Table (% of Net Assets) on 9/30/21</i>	
Financial	22.8%
Consumer, Non-cyclical	21.0%
Communications	11.0%
Consumer, Cyclical	10.7%
Technology	10.7%
Industrial	10.6%
Basic Materials	5.6%
Energy	3.0%
Utilities	2.0%
Mutual Funds	1.2%
Diversified	0.1%
Total Long-Term Investments	<u>98.7%</u>
Short-Term Investments and Other Assets and Liabilities	<u>1.3%</u>
Net Assets	<u>100.0%</u>

*MassMutual Select T. Rowe Price International Equity Fund – Portfolio Manager Report (Unaudited) (Continued)***GROWTH OF \$10,000 INVESTMENT - Class I**

The graph above illustrates the Fund's historical performance for the past 10 fiscal years or since inception (for Funds lacking 10-year records) in comparison to its benchmark index, as well as one or more additional indexes, if applicable.

Average Annual Total Returns (for the periods ended 09/30/2021)

	Inception Date of Class	1 Year	Since Inception 02/09/2018
Class I	02/09/2018	25.11%	6.01%
MSCI ACWI ex USA		23.92%	6.03%

Generally accepted accounting principles require adjustments to be made to the net assets of the Fund at period end for financial reporting purposes only, and as such, the total return based on the unadjusted net asset value per share may differ from the total return reported in the financial highlights.

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Investors should read the Fund's prospectus with regard to the Fund's investment objectives, risks, and charges and expenses in conjunction with these financial statements. 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.

MassMutual Total Return Bond Fund – Portfolio of Investments

September 30, 2021

	<u>Principal Amount</u>	<u>Value</u>
BONDS & NOTES — 106.8%		
BANK LOANS — 1.8%		
Aerospace & Defense — 0.0%		
TransDigm, Inc., 2020 Term Loan E, 1 mo. USD LIBOR + 2.250%		
2.334% VRN 5/30/25	\$ 292,770	\$ 289,081
Airlines — 0.0%		
American Airlines, Inc., 2017 1st Lien Term Loan, 1 mo. USD LIBOR + 1.750%		
1.837% VRN 1/29/27	87,750	84,065
Auto Parts & Equipment — 0.0%		
Clarios Global LP, 2021 USD Term Loan B, 1 mo. USD LIBOR + 3.250%		
3.334% VRN 4/30/26	211,302	210,245
Chemicals — 0.1%		
Zep, Inc., 2017 1st Lien Term Loan, 3 mo. USD LIBOR + 4.000%		
5.000% VRN 8/12/24	710,750	690,906
Commercial Services — 0.0%		
Spin Holdco, Inc., 2021 Term Loan, 3 mo. USD LIBOR + 4.000%		
4.750% VRN 3/04/28	199,500	199,977
Diversified Financial Services — 0.0%		
Avolon TLB Borrower 1 (US) LLC, Term Loan B3, 1 mo. USD LIBOR + 1.750%		
2.500% VRN 1/15/25	70,325	70,018
Entertainment — 0.0%		
Churchill Downs, Inc., 2017 Term Loan B, 1 mo. USD LIBOR + 2.000%		
2.086% VRN 12/27/24	96,734	96,492
Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. USD LIBOR + 2.250%		
3.000% VRN 10/15/25	152,796	152,499
		248,991
Environmental Controls — 0.0%		
Clean Harbors, Inc., 2017 Term Loan B, 1 mo. USD LIBOR + 1.750%		
1.834% VRN 6/28/24	96,717	96,623
GFL Environmental, Inc., 2020 Term Loan, 3 mo. USD LIBOR + 3.000%		
3.500% VRN 5/30/25	159,509	159,709
		256,332
	<u>Principal Amount</u>	<u>Value</u>
Food — 0.0%		
Hostess Brands LLC, 2019 Term Loan, 1 mo. USD LIBOR + 2.250%, 3 mo. USD LIBOR + 2.250%		
3.000% VRN 8/03/25	\$ 319,298	\$ 318,142
Health Care – Products — 0.1%		
Avantor Funding, Inc., 2021 Term Loan B5, 1 mo. USD LIBOR + 2.250%		
2.750% VRN 11/08/27	671,625	672,465
Health Care – Services — 0.1%		
Gentiva Health Services, Inc., 2020 Term Loan, 1 mo. USD LIBOR + 2.750%		
2.875% VRN 7/02/25	296,141	296,017
ICON Luxembourg S.A.R.L., LUX Term Loan, 3 mo. USD LIBOR + 2.500%		
3.000% VRN 7/03/28	367,330	368,501
IQVIA, Inc., 2017 USD Term Loan B2, 1 mo. USD LIBOR + 1.750%		
1.834% VRN 1/17/25	148,567	148,047
		812,565
Insurance — 0.1%		
AmWINS Group, Inc., 2021 Term Loan B, 1 mo. USD LIBOR + 2.250%		
3.000% VRN 2/19/28	970,125	963,945
Lodging — 0.0%		
Caesars Resort Collection LLC, 2017 1st Lien Term Loan B, 1 mo. USD LIBOR + 2.750%		
2.834% VRN 12/23/24	1,250	1,242
Media — 0.1%		
Charter Communications Operating LLC, 2019 Term Loan B2, 1 mo. USD LIBOR + 1.750%		
1.840% VRN 2/01/27	98,246	97,604
CSC Holdings LLC, 2017 Term Loan B1, 1 mo. USD LIBOR + 2.250%		
2.334% VRN 7/17/25	173,640	171,035
Diamond Sports Group LLC, Term Loan, 1 mo. USD LIBOR + 3.250%		
3.340% VRN 8/24/26	174,112	108,069
DirecTV Financing, LLC, Term Loan, 3 mo. USD LIBOR + 5.000%		
5.750% VRN 7/22/27	450,000	450,140

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

MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

	Principal Amount	Value
Sinclair Television Group, Inc., 2021 Term Loan B3, 1 mo. USD LIBOR + 3.000% 3.090% VRN 4/01/28	\$ 399,000	\$ 394,412
		<u>1,221,260</u>
Packaging & Containers — 0.1%		
Berry Global, Inc., 2021 Term Loan Z, 2 mo. USD LIBOR + 1.750% 1.856% VRN 7/01/26	985,634	979,474
Pharmaceuticals — 0.5%		
Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. USD LIBOR + 2.500%, 3 mo. USD LIBOR + 2.500% 3.500% VRN 3/01/24	261,471	261,158
Elanco Animal Health, Inc., Term Loan B, 1 mo. USD LIBOR + 1.750% 1.836% VRN 8/01/27	1,041,029	1,027,641
Grifols Worldwide Operations USA, Inc., USD 2019 Term Loan B, 1 Week USD LIBOR + 2.000% 2.072% VRN 11/15/27	767,888	755,088
Horizon Therapeutics USA, Inc., 2021 Term Loan B, 1 mo. USD LIBOR + 2.000% 2.500% VRN 3/15/28	820,875	818,971
ICON Luxembourg S.A.R.L., US Term Loan, 3 mo. USD LIBOR + 2.500% 3.000% VRN 7/03/28	91,520	91,812
Jazz Financing Lux S.a.r.l., USD Term Loan, 1 mo. USD LIBOR + 3.500% 4.000% VRN 5/05/28	413,963	414,430
Organon & Co, USD Term Loan, 3 mo. USD LIBOR + 3.000% 3.500% VRN 6/02/28	750,000	751,207
		<u>4,120,307</u>
Retail — 0.1%		
1011778 B.C. Unlimited Liability Co., Term Loan B4, 1 mo. USD LIBOR + 1.750% 1.837% VRN 11/19/26	370,712	365,922
Software — 0.0%		
SS&C Technologies European Holdings S.A.R.L., 2018 Term Loan B4, 1 mo. USD LIBOR + 1.750% 1.834% VRN 4/16/25	25,320	25,044
	Principal Amount	Value
SS&C Technologies, Inc., 2018 Term Loan B3, 1 mo. USD LIBOR + 1.750% 1.834% VRN 4/16/25	\$ 32,977	\$ 32,619
		<u>57,663</u>
Telecommunications — 0.6%		
CenturyLink, Inc.		
2020 Term Loan A, 1 mo. USD LIBOR + 2.000% 2.084% VRN 1/31/25	228,125	226,211
2020 Term Loan B, 1 mo. USD LIBOR + 2.250% 2.334% VRN 3/15/27	643,235	635,638
CommScope, Inc., 2019 Term Loan B, 1 mo. USD LIBOR + 3.250% 3.334% VRN 4/06/26	294,000	292,224
Intelsat Jackson Holdings S.A.		
2017 Term Loan B5, 0.000% 1/02/24 ^(a)	250,000	253,543
2021 DIP Term Loan, 3 mo. USD LIBOR + 4.750% 5.750% VRN 10/13/22 ^(b)	640,000	643,731
Level 3 Financing, Inc., 2019 Term Loan B, 1 mo. USD LIBOR + 1.750% 1.834% VRN 3/01/27	1,460,000	1,441,487
SBA Senior Finance II LLC, 2018 Term Loan B, 1 mo. USD LIBOR + 1.750% 1.840% VRN 4/11/25	483,750	478,912
Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. USD LIBOR + 2.000% 2.084% VRN 4/30/28	300,000	296,376
Zayo Group Holdings, Inc., USD Term Loan, 1 mo. USD LIBOR + 3.000% 3.084% VRN 3/09/27	962,204	953,227
		<u>5,221,349</u>
TOTAL BANK LOANS (Cost \$16,628,018)		<u>16,783,949</u>
CORPORATE DEBT — 22.6%		
Aerospace & Defense — 0.2%		
The Boeing Co. 1.167% 2/04/23	1,855,000	1,859,269
Agriculture — 0.4%		
BAT Capital Corp. 4.390% 8/15/37	340,000	364,564
4.540% 8/15/47	2,165,000	2,238,211

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

MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

	Principal Amount	Value
Reynolds American, Inc. 5.850% 8/15/45	\$ 1,160,000	\$ 1,389,249
		<u>3,992,024</u>
Airlines — 0.3%		
Continental Airlines, Inc. 5.983% 10/19/23	1,704,703	1,726,886
US Airways, Inc. 7.125% 4/22/25	724,823	771,374
		<u>2,498,260</u>
Auto Manufacturers — 0.7%		
Ford Motor Credit Co. LLC 3 mo. USD LIBOR + .880% 0.999% FRN 10/12/21 3.219% 1/09/22 3.339% 3/28/22 3.813% 10/12/21 4.250% 9/20/22	455,000 1,050,000 955,000 520,000 435,000	455,000 1,052,625 960,377 520,260 444,896
General Motors Co. 4.875% 10/02/23	150,000	162,116
General Motors Financial Co., Inc. 3.150% 6/30/22 3.450% 4/10/22 3.550% 7/08/22 4.200% 11/06/21	805,000 1,720,000 410,000 245,000	819,480 1,737,989 419,764 245,864
		<u>6,818,371</u>
Banks — 5.8%		
Bank of America Corp. SOFR + .910% 1.658% VRN 3/11/27 SOFR + .960% 1.734% VRN 7/22/27 SOFR + 1.060% 2.087% VRN 6/14/29 3 mo. USD LIBOR + 1.070% 3.970% VRN 3/05/29	3,465,000 1,900,000 1,835,000 1,670,000	3,483,426 1,907,565 1,829,351 1,858,448
Citigroup, Inc. SOFR + .770% 1.462% VRN 6/09/27	2,225,000	2,213,775
Credit Suisse Group AG SOFR + .980% 1.305% VRN 2/02/27 ^(c) ^(d) SOFR + 2.044% 2.193% VRN 6/05/26 ^(c) SOFR + 1.730% 3.091% VRN 5/14/32 ^(c) 4.282% 1/09/28 ^(c) 4.550% 4/17/26	1,315,000 885,000 975,000 345,000 785,000	1,285,092 901,298 996,322 383,282 881,451
Discover Bank 4.200% 8/08/23	1,120,000	1,194,833
	Principal Amount	Value
DNB Bank ASA 1 year CMT + .680% 1.605% VRN 3/30/28 ^(c)	\$ 1,400,000	\$ 1,392,930
Global Bank Corp. 3 mo. USD LIBOR + 3.300% 5.250% VRN 4/16/29 ^(c)	200,000	211,000
The Goldman Sachs Group, Inc. SOFR + .789% 1.093% VRN 12/09/26 SOFR + .798% 1.431% VRN 3/09/27 3 mo. USD LIBOR + 1.201% 3.272% VRN 9/29/25	485,000 2,295,000 885,000	477,738 2,287,926 944,886
HSBC Holdings PLC SOFR + 1.290% 1.589% VRN 5/24/27 SOFR + 1.732% 2.013% VRN 9/22/28 SOFR + 1.929% 2.099% VRN 6/04/26 SOFR + 1.285% 2.206% VRN 8/17/29	1,695,000 1,370,000 1,480,000 1,135,000	1,682,842 1,368,909 1,511,870 1,124,739
JP Morgan Chase & Co. SOFR + .580% 0.969% VRN 6/23/25 SOFR + .885% 1.578% VRN 4/22/27 SOFR + 1.850% 2.083% VRN 4/22/26	2,650,000 1,360,000 440,000	2,652,869 1,362,138 452,275
JPMorgan Chase & Co. SOFR + .490% 0.768% VRN 8/09/25 SOFR + .765% 1.470% VRN 9/22/27	880,000 1,400,000	876,292 1,390,388
Lloyds Banking Group PLC 1 year CMT + .850% 1.627% VRN 5/11/27 3 mo. USD LIBOR + 1.249% 2.858% VRN 3/17/23 3 mo. USD LIBOR + .810% 2.907% VRN 11/07/23 1 year CMT + 3.500% 3.870% VRN 7/09/25	1,000,000 885,000 445,000 415,000	999,615 894,832 456,545 447,385
Macquarie Group Ltd.		

SOFR + 1.069% 1.340% VRN 1/12/27 ^(c)	920,000	911,595
SOFR + 1.440% 2.691% VRN 6/23/32 ^(c)	5,000	4,987
Morgan Stanley		
SOFR + .858% 1.512% VRN 7/20/27	2,665,000	2,651,127
SOFR + .879% 1.593% VRN 5/04/27	1,365,000	1,368,014

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

MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

	Principal Amount	Value
Natwest Group PLC 3 mo. USD LIBOR + 1.762% 4.269% VRN 3/22/25	\$ 1,710,000	\$ 1,845,097
Santander UK Group Holdings PLC SOFR + .787% 1.089% VRN 3/15/25	1,825,000	1,827,965
1 year CMT + 1.250% 1.532% VRN 8/21/26	295,000	294,299
SOFR + .989% 1.673% VRN 6/14/27	340,000	338,402
3 mo. USD LIBOR + 1.570% 4.796% VRN 11/15/24	525,000	568,375
Santander UK PLC 5.000% 11/07/23 ^(c)	1,390,000	1,502,409
UBS AG 0.700% 8/09/24 ^(c)	1,355,000	1,353,157
Wells Fargo & Co. 3 mo. USD LIBOR + .750% 2.164% VRN 2/11/26	620,000	639,358
SOFR + 2.100% 2.393% VRN 6/02/28	1,060,000	1,091,804
SOFR + 1.432% 2.879% VRN 10/30/30	75,000	78,112
3 mo. USD LIBOR + 1.310% 3.584% VRN 5/22/28	1,345,000	1,471,855
		<u>53,416,578</u>
Beverages — 0.3%		
Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46	2,215,000	2,748,332
Bacardi Ltd. 5.300% 5/15/48 ^(c)	275,000	357,823
		<u>3,106,155</u>
Chemicals — 0.2%		
International Flavors & Fragrances, Inc. 2.300% 11/01/30 ^(c)	1,685,000	1,668,203
5.000% 9/26/48	430,000	554,801
		<u>2,223,004</u>
Commercial Services — 0.4%		
IHS Markit Ltd. 4.000% 3/01/26 ^(c)	399,000	438,984
4.750% 2/15/25 ^(c)	930,000	1,028,878
4.750% 8/01/28	750,000	878,137
5.000% 11/01/22 ^(c)	845,000	875,504
		<u>3,221,503</u>
	Principal Amount	Value
Diversified Financial Services — 1.1%		
AerCap Ireland Capital DAC/AerCap Global Aviation Trust 3.875% 1/23/28 ^(d)	\$ 265,000	\$ 284,295
4.125% 7/03/23	220,000	231,426
Air Lease Corp. 3.250% 3/01/25	950,000	1,002,381
Avolon Holdings Funding Ltd. 2.528% 11/18/27 ^(c)	999,000	981,974
2.875% 2/15/25 ^(c)	860,000	883,957
3.950% 7/01/24 ^(c)	380,000	403,242
5.250% 5/15/24 ^(c)	110,000	120,122
Discover Financial Services 3.950% 11/06/24	150,000	162,448
GE Capital Funding LLC 4.400% 5/15/30	875,000	1,015,484
GE Capital International Funding Co. Unlimited Co. 4.418% 11/15/35	3,238,000	3,878,459
Park Aerospace Holdings Ltd. 4.500% 3/15/23 ^(c)	700,000	731,823
5.500% 2/15/24 ^(c)	75,000	81,834
		<u>9,777,445</u>
Electric — 1.1%		
Ameren Illinois Co. 3.700% 12/01/47	480,000	544,100
Consolidated Edison Co. of New York, Inc. 4.650% 12/01/48	1,000,000	1,234,469
Duke Energy Carolinas LLC 3.700% 12/01/47	738,000	817,689
Duke Energy Corp.		

2.550% 6/15/31	560,000	566,745
Entergy Louisiana LLC		
3.780% 4/01/25	1,250,000	1,349,459
FirstEnergy Transmission LLC		
2.866% 9/15/28 ^(c)	1,401,000	1,461,004
5.450% 7/15/44 ^(c)	600,000	763,147
Metropolitan Edison Co.		
4.000% 4/15/25 ^(c)	985,000	1,037,971
MidAmerican Energy Co.		
4.400% 10/15/44	1,905,000	2,327,480
Mong Duong Finance Holdings BV		
5.125% 5/07/29 ^(c)	250,000	248,878
		<u>10,350,942</u>
Engineering & Construction — 0.0%		
Artera Services LLC		
9.033% 12/04/25 ^(c)	257,000	<u>278,845</u>

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

MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

	Principal Amount	Value
Food — 0.2%		
Kraft Heinz Foods Co.		
4.875% 10/01/49	\$ 815,000	\$ 991,821
5.200% 7/15/45	750,000	939,312
Pilgrim's Pride Corp.		
5.875% 9/30/27 ^(c)	75,000	79,744
		<u>2,010,877</u>
Gas — 0.2%		
KeySpan Gas East Corp.		
5.819% 4/01/41 ^(c)	1,337,000	1,767,889
Health Care – Products — 0.1%		
Mozart Debt Merger Sub		
3.875% 4/01/29 ^(e)	643,000	643,000
Health Care – Services — 1.0%		
Aetna, Inc.		
3.500% 11/15/24	500,000	537,522
Catalent Pharma Solutions, Inc.		
3.500% 4/01/30 ^(c)	280,000	280,000
Centene Corp.		
2.450% 7/15/28	1,951,000	1,960,755
4.250% 12/15/27	435,000	455,293
CommonSpirit Health		
2.782% 10/01/30	455,000	468,052
HCA, Inc.		
2.375% 7/15/31	230,000	225,768
4.125% 6/15/29	1,262,000	1,411,014
5.000% 3/15/24	975,000	1,069,908
5.125% 6/15/39	650,000	805,177
5.250% 4/15/25	644,000	729,774
5.250% 6/15/49	485,000	617,686
Molina Healthcare, Inc.		
3.875% 11/15/30 ^(c)	417,000	435,765
5.375% STEP 11/15/22	460,000	474,237
		<u>9,470,951</u>
Household Products & Wares — 0.0%		
Central Garden & Pet Co.		
5.125% 2/01/28	22,000	23,210
Insurance — 1.2%		
Athene Global Funding		
1.985% 8/19/28 ^(c)	2,200,000	2,168,493
Farmers Exchange Capital		
3 mo. USD LIBOR + 3.454% 5.454% VRN 10/15/54 ^(c)	3,290,000	4,072,616
3 mo. USD LIBOR + 3.744% 6.151% VRN 11/01/53 ^(c)	350,000	447,945
	Principal Amount	Value
Teachers Insurance & Annuity Association of America 3 mo. USD LIBOR + 2.661%		
4.375% VRN 9/15/54 ^(c)	\$ 4,000,000	\$ 4,199,428
		<u>10,888,482</u>
Internet — 0.2%		
Tencent Holdings Ltd.		
3.680% 4/22/41 ^(c)	455,000	470,997
3.840% 4/22/51 ^(c)	455,000	471,997
3.975% 4/11/29 ^(c)	410,000	448,601
		<u>1,391,595</u>
Lodging — 0.1%		
Hyatt Hotels Corp.		
1.800% 10/01/24 ^(c)	930,000	931,923
Media — 0.8%		
Cable One, Inc.		
4.000% 11/15/30 ^(c)	900,000	896,625
Charter Communications Operating LLC		
3.750% 2/15/28	500,000	547,159
4.908% 7/23/25	1,105,000	1,242,306
5.375% 4/01/38	5,000	6,025
5.375% 5/01/47	180,000	216,102
5.750% 4/01/48	1,088,000	1,371,686

CSC Holdings LLC 5.375% 2/01/28 ^(c)	125,000	130,625
Diamond Sports Group LLC/Diamond Sports Finance Co. 5.375% 8/15/26 ^(c)	1,175,000	775,500
ViacomCBS, Inc. 4.200% 5/19/32	655,000	748,350
Virgin Media Secured Finance PLC 4.500% 8/15/30 ^(c)	1,200,000	1,219,500
The Walt Disney Co. 3.600% 1/13/51	385,000	430,144
		<u>7,584,022</u>
Mining — 0.1%		
Corp. Nacional del Cobre de Chile 3.150% 1/14/30 ^(c)	400,000	<u>412,353</u>
Miscellaneous - Manufacturing — 0.1%		
General Electric Co. 6.750% 3/15/32	890,000	<u>1,217,130</u>
Oil & Gas — 0.8%		
Antero Resources Corp. 8.375% 7/15/26 ^(c)	81,000	91,751
Exxon Mobil Corp. 3.452% 4/15/51	1,020,000	1,085,509

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

MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

	Principal Amount	Value
4.327% 3/19/50	\$ 550,000	\$ 672,103
KazMunayGas National Co. JSC		
3.500% 4/14/33 ^(c) (d)	200,000	205,876
3.500% 4/14/33 ^(c)	200,000	205,876
Occidental Petroleum Corp.		
0.000% 10/10/36	499,000	270,707
4.500% 7/15/44	400,000	401,924
Pertamina Persero PT		
3.100% 8/27/30 ^(c)	875,000	893,117
Petroleos Mexicanos		
6.625% 6/15/35	2,100,000	1,988,553
7.690% 1/23/50	295,000	279,011
Petronas Capital Ltd.		
3.500% 4/21/30 ^(c)	200,000	216,408
Saudi Arabian Oil Co.		
1.625% 11/24/25 ^(c)	200,000	200,010
Transocean Guardian Ltd.		
5.875% 1/15/24 ^(c)	227,800	226,661
Transocean Pontus Ltd.		
6.125% 8/01/25 ^(c)	269,340	269,340
Transocean Poseidon Ltd.		
6.875% 2/01/27 ^(c)	233,000	231,819
		<u>7,238,665</u>
Oil & Gas Services — 0.0%		
Transocean Proteus Ltd.		
6.250% 12/01/24 ^(c)	94,050	94,050
USA Compression Partners LP/USA Compression Finance Corp.		
6.875% 4/01/26	70,000	72,884
6.875% 9/01/27	217,000	229,486
		<u>396,420</u>
Packaging & Containers — 0.2%		
Mauser Packaging Solutions Holding Co.		
5.500% 4/15/24 ^(c)	70,000	70,613
OI European Group BV		
4.000% 3/15/23 ^(c)	75,000	76,500
Sealed Air Corp.		
1.573% 10/15/26 ^(c)	1,200,000	1,192,659
4.000% 12/01/27 ^(c)	70,000	74,543
		<u>1,414,315</u>
Pharmaceuticals — 1.6%		
AbbVie, Inc.		
4.450% 5/14/46	1,395,000	1,677,452
4.500% 5/14/35	234,000	279,392
4.550% 3/15/35	576,000	689,507
Bayer US Finance II LLC		
4.250% 12/15/25 ^(c)	955,000	1,055,314
	Principal Amount	Value
4.375% 12/15/28 ^(c)	\$ 2,735,000	\$ 3,093,883
4.625% 6/25/38 ^(c)	1,310,000	1,542,151
4.875% 6/25/48 ^(c)	220,000	268,617
Cigna Corp.		
3.400% 3/15/51	210,000	216,162
4.125% 11/15/25	2,000,000	2,221,363
CVS Health Corp.		
3.250% 8/15/29	5,000	5,369
5.050% 3/25/48	2,695,000	3,471,873
Endo DAC / Endo Finance LLC / Endo Finco, Inc.		
6.000% 6/30/28 ^(c) (d)	423,000	307,513
		<u>14,828,596</u>
Pipelines — 0.9%		
Energy Transfer LP		
4.950% 6/15/28	1,291,000	1,480,092
5.350% 5/15/45	370,000	430,685
5.400% 10/01/47	1,275,000	1,516,225

5.500% 6/01/27	264,000	309,571
5.950% 10/01/43	750,000	912,950
Galaxy Pipeline Assets Bidco Ltd.		
2.160% 3/31/34 ^(c)	400,000	392,540
Kinder Morgan, Inc.		
5.550% 6/01/45	565,000	723,152
Plains All American Pipeline LP / PAA Finance Corp.		
4.500% 12/15/26	228,000	254,850
Rockies Express Pipeline LLC		
4.950% 7/15/29 ^(c)	1,000,000	1,040,000
6.875% 4/15/40 ^(c)	745,000	826,950
Southern Gas Corridor CJSC		
6.875% 3/24/26 ^(c)	400,000	470,624
		<u>8,357,639</u>
Real Estate Investment Trusts (REITS) — 1.3%		
Boston Properties LP		
3.850% 2/01/23	1,000,000	1,036,860
CyrusOne LP/CyrusOne Finance Corp.		
2.150% 11/01/30	920,000	864,506
GLP Capital LP/GLP Financing II, Inc.		
4.000% 1/15/30	60,000	64,429
5.250% 6/01/25	680,000	758,254
5.300% 1/15/29	620,000	724,880
5.375% 4/15/26	1,755,000	1,995,347
Healthpeak Properties, Inc.		
4.000% 6/01/25	1,675,000	1,828,528
Hudson Pacific Properties LP		
4.650% 4/01/29	1,185,000	1,358,794

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MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

	Principal Amount	Value
SL Green Operating Partnership LP		
3.250% 10/15/22	\$ 1,000,000	\$ 1,025,756
Ventas Realty LP		
2.500% 9/01/31	530,000	522,549
3.750% 5/01/24	1,050,000	1,116,964
3.850% 4/01/27	165,000	182,692
		<u>11,479,559</u>
Retail — 0.1%		
Michaels Cos., Inc.		
5.250% 5/01/28 ^(c)	895,000	<u>923,193</u>
Savings & Loans — 0.2%		
Nationwide Building Society		
3 mo. USD LIBOR + 1.181% 3.622% VRN 4/26/23 ^(c)	620,000	630,766
3 mo. USD LIBOR + 1.064% 3.766% VRN 3/08/24 ^(c)	1,215,000	1,266,615
3 mo. USD LIBOR + 1.392% 4.363% VRN 8/01/24 ^(c)	300,000	319,257
		<u>2,216,638</u>
Semiconductors — 0.1%		
Intel Corp.		
3.050% 8/12/51	1,129,000	<u>1,126,145</u>
Software — 0.3%		
Change Healthcare Holdings LLC/Change Healthcare Finance, Inc.		
5.750% 3/01/25 ^(c)	325,000	327,437
Oracle Corp.		
2.875% 3/25/31	350,000	360,447
3.950% 3/25/51	1,588,000	1,682,780
		<u>2,370,664</u>
Telecommunications — 2.6%		
AT&T, Inc.		
2.550% 12/01/33	1,385,000	1,360,628
3.800% 12/01/57	4,820,000	4,927,996
4.500% 5/15/35	110,000	128,589
4.750% 5/15/46	100,000	119,367
4.850% 3/01/39	366,000	437,852
5.250% 3/01/37	850,000	1,052,826
Intelsat Jackson Holdings SA		
8.500% 10/15/24 ^{(c) (f)}	378,000	215,460
9.750% 7/15/25 ^{(c) (f)}	1,379,000	748,108
Level 3 Financing, Inc.		
3.400% 3/01/27 ^(c)	170,000	179,070
Sprint Corp.		
7.875% 9/15/23	74,000	82,695
Sprint Spectrum Co. LLC		
4.738% 3/20/25 ^(c)	3,014,375	3,219,352
	Principal Amount	Value
5.152% 9/20/29 ^(c)	\$ 2,015,000	\$ 2,302,137
T-Mobile USA, Inc.		
2.250% 2/15/26	840,000	849,450
2.250% 2/15/26 ^(c)	377,000	381,241
2.550% 2/15/31	955,000	957,328
3.750% 4/15/27	1,155,000	1,271,840
3.875% 4/15/30	420,000	464,482
4.375% 4/15/40	840,000	965,983
4.750% 2/01/28	175,000	185,938
Verizon Communications, Inc.		
2.355% 3/15/32 ^(c)	925,000	914,071
2.550% 3/21/31	410,000	414,977
Vodafone Group PLC		
4.875% 6/19/49	1,260,000	1,569,666
5.250% 5/30/48	1,000,000	1,294,829
		<u>24,043,885</u>
Transportation — 0.0%		
Empresa de Transporte de Pasajeros Metro SA		
3.650% 5/07/30 ^(c)	200,000	<u>216,610</u>
TOTAL CORPORATE DEBT (Cost \$200,724,548)		208,496,157

MUNICIPAL OBLIGATIONS — 0.6%		
City of New York NY, General Obligation		
3.000% 8/01/34	945,000	986,906
County of Miami-Dade FL Aviation Revenue, Revenue Bond		
2.707% 10/01/33	375,000	384,309
New York City Transitional Finance Authority, Revenue Bond		
5.508% 8/01/37	985,000	1,315,869
New York State Dormitory Authority, Revenue Bond		
5.051% 9/15/27	600,000	715,969
Regents of the University of California Medical Center Pooled, Revenue Bond		
3.256% 5/15/60	1,990,000	2,138,121
		<u>5,541,174</u>
TOTAL MUNICIPAL OBLIGATIONS (Cost \$5,321,090)		<u>5,541,174</u>

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MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

	Principal Amount	Value
NON-U.S. GOVERNMENT AGENCY OBLIGATIONS — 11.1%		
Commercial Mortgage-Backed Securities — 1.8%		
BAMLL Commercial Mortgage Securities Trust		
Series 2019-BPR, Class AMP, 3.287% 11/05/32 ^(c)	\$ 1,920,000	\$ 1,997,719
Series 2018-PARK, Class A, 4.227% VRN 8/10/38 ^{(c) (g)}	1,280,000	1,453,658
BX Trust, Series 2019-OC11, Class A		
3.202% 12/09/41 ^(c)	420,000	448,017
CALI Mortgage Trust, Series 2019-101C, Class A		
3.957% 3/10/39 ^(c)	945,000	1,066,412
COMM Mortgage Trust, Series 2015-CR27, Class A3		
3.349% 10/10/48	2,631,946	2,814,396
CPT Mortgage Trust, Series 2019-CPT, Class A		
2.865% 11/13/39 ^(c)	805,000	849,276
DC Office Trust, Series 2019-MTC, Class A		
2.965% 9/15/45 ^(c)	860,000	908,359
Hudson Yards Mortgage Trust		
Series 2019-55HY, Class A, 3.041% VRN 12/10/41 ^{(c) (g)}	860,000	914,776
Series 2019-30HY, Class A, 3.228% 7/10/39 ^(c)	880,000	952,211
JP Morgan Chase Commercial Mortgage Securities Trust, Series 2019-OSB, Class A		
3.397% 6/05/39 ^(c)	900,000	985,461
MKT Mortgage Trust, Series 2020-525M, Class A		
2.694% 2/12/40 ^(c)	1,030,000	1,070,857
Natixis Commercial Mortgage Securities Trust, Series 2020-2PAC, Class A		
2.966% 12/15/38 ^(c)	840,000	876,476
One Bryant Park Trust, Series 2019-OBP, Class A		
2.516% 9/15/54 ^(c)	1,085,000	1,117,328
RBS Commercial Funding, Inc. Trust, Series 2013-GSP, Class A,		
3.961% VRN 1/15/32 ^{(c) (g)}	640,000	674,010
SFAVE Commercial Mortgage Securities Trust, Series 2015-5AVE, Class A2B,		
4.144% VRN 1/05/43 ^{(c) (g)}	50,000	54,395
		<u>16,183,351</u>
	Principal Amount	Value
Home Equity Asset-Backed Securities — 0.5%		
Argent Securities, Inc., Series 2005-W2, Class M1, 1 mo. USD LIBOR + .735%		
0.821% FRN 10/25/35	\$ 3,584,443	\$ 3,582,730
Option One Mortgage Loan Trust, Series 2006-1, Class 1A1, 1 mo. USD LIBOR + .440%		
0.526% FRN 1/25/36	861,356	860,120
		<u>4,442,850</u>
Other Asset-Backed Securities — 3.9%		
AGL CLO 13 Ltd., Series 2021-13A, Class A1, 3 mo. USD LIBOR + 1.160%		
1.000% FRN 10/20/34 ^{(c) (e)}	2,400,000	2,400,000
Aimco CLO Ltd., Series 2020-11A, Class A1, 3 mo. USD LIBOR + 1.380%		
1.506% FRN 10/15/31 ^(c)	2,075,000	2,075,542
Ajax Mortgage Loan Trust, Series 2019-, Class A1,		
2.860% STEP 7/25/59 ^(c)	2,636,807	2,592,656
Barings CLO Ltd., Series 2013-IA, Class AR, 3 mo. USD LIBOR + .800%		
0.934% FRN 1/20/28 ^(c)	3,132,093	3,132,403
BSPRT Issuer Ltd.		
Series 2018-FL4, Class A, 1 mo. USD LIBOR + 1.050% 1.134% FRN 9/15/35 ^(c)	772,524	772,525
Series 2018-FL3, Class A, 1 mo. USD LIBOR + 1.350% 1.434% FRN 3/15/28 ^(c)	1,983,551	1,983,551
Countrywide Asset-Backed Certificates Trust, Series 2004-5, Class M1, 1 mo. USD LIBOR + .855%		
0.941% FRN 8/25/34	213,880	211,823
Dryden 33 Senior Loan Fund, Series 2014-33A, Class AR3, 3 mo. USD LIBOR + 1.000%		
1.126% FRN 4/15/29 ^(c)	1,457,255	1,457,319
First Franklin Mortgage Loan Trust, Series 2005-FF9, Class A4, 1 mo. USD LIBOR + .720%		
0.806% FRN 10/25/35	374,212	372,749
Flatiron CLO 21 Ltd., Series 2021-1A, Class B, 3 mo. USD LIBOR + 1.600%		
1.751% FRN 7/19/34 ^(c)	2,400,000	2,396,230

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MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

	Principal Amount	Value
GoldenTree Loan Opportunities Ltd., Series 2014-9A, Class AR2, 3 mo. USD LIBOR + 1.110% 1.240% FRN 10/29/29 ^(c)	\$ 2,100,000	\$ 2,100,876
GSAMP Trust, Series 2006-HE1, Class M1, 1 mo. USD LIBOR + .585% 0.671% FRN 1/25/36	2,470,238	2,443,446
LCM Ltd., Series 19A, Class AR, 3 mo. USD LIBOR + 1.240% 1.366% FRN 7/15/27 ^(c)	743,713	743,964
Lehman XS Trust, Series 2005-4, Class 1A3, 1 mo. USD LIBOR + .800% 0.886% FRN 10/25/35	122,692	122,056
Magnetite Ltd., Series 2012-7A, Class A1R2, 3 mo. USD LIBOR + .800% 0.926% FRN 1/15/28 ^(c)	1,470,966	1,472,321
Morgan Stanley Capital, Inc. Trust Series 2006-HE1, Class A4, 1 mo. USD LIBOR + .580% 0.666% FRN 1/25/36	2,837,598	2,762,931
Series 2006-NC2, Class A2D, 1 mo. USD LIBOR + .580% 0.666% FRN 2/25/36	2,529,629	2,528,956
Rockford Tower Ltd., Series 2019-1A, Class AR, 3 mo. USD LIBOR + 1.120% 1.254% FRN 4/20/34 ^(c)	2,435,000	2,432,290
Tricon American Homes Trust, Series 2017-SFR1, Class A 2.716% 9/17/34 ^(c)	2,607,973	2,605,274
TRTX Issuer Ltd., Series 2019-FL3, Class A, SOFR30A + 1.264% 1.315% FRN 10/15/34 ^(c)	1,609,000	1,608,997
		36,215,909
Student Loans Asset-Backed Securities — 2.1%		
Access Group, Inc., Series 2015-1, Class A, 1 mo. USD LIBOR + .700% 0.786% FRN 7/25/56 ^(c)	1,769,163	1,756,134
Education Loan Asset-Backed Trust, Series 2013-1, Class A2, 1 mo. USD LIBOR + .800% 0.886% FRN 4/26/32 ^(c)	3,490,441	3,490,008
SLM Student Loan Trust Series 2014-1, Class A3, 1 mo. USD LIBOR + .600% 0.686% FRN 2/26/29	1,446,901	1,446,901
Series 2012-7, Class A3, 1 mo. USD LIBOR + .650% 0.736% FRN 5/26/26	2,696,459	2,723,952
	Principal Amount	Value
Series 2008-5, Class B, 3 mo. USD LIBOR + 1.850% 1.975% FRN 7/25/73	\$ 3,735,000	\$ 3,749,408
Series 2008-9, Class B, 3 mo. USD LIBOR + 2.250% 2.375% FRN 10/25/83	3,630,000	3,655,965
Wachovia Student Loan Trust, Series 2006-1, Class A6, 3 mo. USD LIBOR + .170% 0.295% FRN 4/25/40 ^(c)	2,379,592	2,343,385
		19,165,753
Whole Loan Collateral Collateralized Mortgage Obligations — 2.8%		
American Home Mortgage Investment Trust, Series 2006-1, Class 12A1, 1 mo. USD LIBOR + .400% 0.486% FRN 3/25/46	1,849,288	1,789,348
Bear Stearns ALT-A Trust, Series 2005-4, Class 25A1, 2.503% VRN 5/25/35 ^(g)	1,203,639	1,153,213
Citigroup Mortgage Loan Trust, Series 2006-AR2, Class 1A2, 2.557% VRN 3/25/36 ^(g)	4,250	4,047
Credit Suisse Mortgage Trust, Series 2018-RPL9, Class A, 3.850% VRN 9/25/57 ^{(c) (g)}	2,157,763	2,268,513
First Horizon Alternative Mortgage Securities Trust, Series 2005-AA9, Class 2A1, 2.345% VRN 11/25/35 ^(g)	1,835,842	1,656,121
HarborView Mortgage Loan Trust Series 2006-10, Class 1A1A, 1 mo. USD LIBOR + .200% 0.287% FRN 11/19/36	3,025,811	2,755,182
Series 2007-6, Class 1A1A, 1 mo. USD LIBOR + .200% 0.287% FRN 8/19/37	3,119,197	2,712,640
HomeBanc Mortgage Trust, Series 2005-5, Class A1, 1 mo. USD LIBOR + .520% 0.606% FRN 1/25/36	3,550,810	3,471,027
JP Morgan Mortgage Trust, Series 2005-A5, Class 1A2, 2.374% VRN 8/25/35 ^(g)	165,279	164,846
MASTR Adjustable Rate Mortgages Trust, Series 2004-3, Class 4A1, 2.206% VRN 4/25/34 ^(g)	499,141	492,902
Morgan Stanley Resecuritization Trust, Series 2014-R8, Class 3A, 12 mo. MTA + .750% 0.849% FRN 6/26/47 ^(c)	333,327	330,829

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

MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

	Principal Amount	Value
RALI Trust, Series 2006-QA7, Class 2A1, 1 mo. USD LIBOR + .370% 0.454% FRN 8/25/36	\$ 630,121	\$ 605,789
Residential Asset Securitization Trust, Series 2006-A14C, Class 1A1 6.250% 12/25/36	2,247,472	2,183,441
Structured Asset Mortgage Investments Trust, Series 2006-AR1, Class 3A1, 1 mo. USD LIBOR + .460% 0.546% FRN 2/25/36	2,647,551	2,469,733
Washington Mutual Mortgage Pass-Through Certificates Trust Series 2005-AR2, Class 2A1A, 1 mo. USD LIBOR + .620% 0.706% FRN 1/25/45	761,561	756,823
Series 2005-7, Class 4CB, 7.000% 8/25/35	2,803,413	2,372,256
Wells Fargo Mortgage-Backed Securities Trust, Series 2007-AR3, Class A4, 2.671% VRN 4/25/37 ^(g)	1,020,469	989,259
		<u>26,175,969</u>
TOTAL NON-U.S. GOVERNMENT AGENCY OBLIGATIONS (Cost \$100,286,721)		<u>102,183,832</u>

SOVEREIGN DEBT OBLIGATIONS — 0.9%

Abu Dhabi Government International Bond 2.500% 9/30/29 ^(c)	647,000	675,145
Brazilian Government International Bond 3.875% 6/12/30	730,000	706,939
Chile Government International Bond 2.550% 1/27/32	200,000	198,180
Colombia Government International Bond 3.000% 1/30/30 ^(d)	600,000	564,684
4.500% 1/28/26	200,000	214,344
Dominican Republic International Bond 4.500% 1/30/30 ^(c)	440,000	447,704
Egypt Government International Bond 7.600% 3/01/29 ^(c)	200,000	207,126
Indonesia Government International Bond 2.850% 2/14/30	300,000	309,693
Mexico Government International Bond 2.659% 5/24/31 ^(d)	613,000	590,442
3.750% 1/11/28 ^(d)	420,000	457,136

	Principal Amount	Value
4.750% 4/27/32	\$ 200,000	\$ 224,840
Panama Government International Bond 2.252% 9/29/32	200,000	187,842
3.160% 1/23/30 ^(d)	400,000	411,328
Peruvian Government International Bond 4.125% 8/25/27	254,000	280,673
Philippine Government International Bond 2.457% 5/05/30	200,000	204,074
Qatar Government International Bond 4.500% 4/23/28 ^(c)	600,000	699,323
Republic of South Africa Government International Bond 4.850% 9/30/29	400,000	411,060
4.875% 4/14/26	200,000	213,792
Republic of Turkey International Bond 3.250% 3/23/23	200,000	199,080
Romanian Government International Bond 3.000% 2/14/31 ^(c)	270,000	275,241
Saudi Government International Bond 3.250% 10/26/26 ^(c)	400,000	431,036
3.625% 3/04/28 ^(c)	200,000	219,500
		<u>8,129,182</u>
TOTAL SOVEREIGN DEBT OBLIGATIONS (Cost \$8,252,758)		<u>8,129,182</u>

U.S. GOVERNMENT AGENCY OBLIGATIONS AND INSTRUMENTALITIES^(h) — 32.4%**Collateralized Mortgage Obligations — 0.9%**

Federal Home Loan Mortgage Corp. Multifamily Structured Pass-Through Certificates Series K155, Class A3 3.750% 4/25/33	2,115,000	2,484,659
Federal National Mortgage Association REMICS Series 2018-43, Class CT, 3.000% 6/25/48	876,627	920,827

Series 2018-55, Class PA, 3.500% 1/25/47	1,038,765	1,070,588
Series 2018-54, Class KA, 3.500% 1/25/47	1,001,066	1,030,458
Series 2018-38, Class PA, 3.500% 6/25/47	1,290,209	1,339,242
Government National Mortgage Association		
Series 2018-124, Class NW, 3.500% 9/20/48	799,881	851,581

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

MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

Series 2019-15, Class GT, 3.500% 2/20/49

Principal Amount	Value
\$ 965,826	\$ 1,028,717
	8,726,072

Pass-Through Securities — 31.5%

Federal Home Loan Mortgage Corp.

Pool #G18596 3.000% 4/01/31	357,826	378,038
Pool #G18691 3.000% 6/01/33	133,028	140,174
Pool #G08710 3.000% 6/01/46	78,525	82,883
Pool #G08715 3.000% 8/01/46	1,658,931	1,750,999
Pool #G08721 3.000% 9/01/46	224,997	237,484
Pool #G08726 3.000% 10/01/46	3,017,601	3,183,187
Pool #G08732 3.000% 11/01/46	2,135,026	2,252,182
Pool #G08741 3.000% 1/01/47	1,416,995	1,494,750
Pool #G18713 3.500% 11/01/33	1,006,588	1,076,506
Pool #G16756 3.500% 1/01/34	400,549	429,373
Pool #G60038 3.500% 1/01/44	706,001	766,136
Pool #G07848 3.500% 4/01/44	5,412,940	5,938,697
Pool #G07924 3.500% 1/01/45	1,560,495	1,698,838
Pool #G60138 3.500% 8/01/45	3,133,232	3,435,603
Pool #G08711 3.500% 6/01/46	1,365,114	1,462,193
Pool #G08716 3.500% 8/01/46	1,996,233	2,138,194
Pool #G67703 3.500% 4/01/47	2,222,351	2,413,119
Pool #G67706 3.500% 12/01/47	1,787,626	1,940,519
Pool #G08792 3.500% 12/01/47	1,669,825	1,772,071
Pool #G67707 3.500% 1/01/48	2,043,322	2,232,211
Pool #G67708 3.500% 3/01/48	3,922,006	4,238,452
Pool #G67709 3.500% 3/01/48	5,067,182	5,494,631
Pool #G67711 4.000% 3/01/48	602,204	662,999
Pool #G67713 4.000% 6/01/48	1,597,232	1,744,315
Pool #G67714 4.000% 7/01/48	2,207,465	2,430,316
Pool #G67717 4.000% 11/01/48	1,923,691	2,117,894
Pool #G08843 4.500% 10/01/48	870,454	941,007
Pool #G08826 5.000% 6/01/48	324,994	357,685
Pool #G08844 5.000% 10/01/48	106,823	117,135

Federal National Mortgage Association

Pool #MA4093 2.000% 8/01/40	1,039,437	1,057,216
Pool #MA4152 2.000% 10/01/40	3,780,168	3,844,828
Pool #MA4176 2.000% 11/01/40	2,766,850	2,814,178
Pool #MA4333 2.000% 5/01/41	779,024	795,757
Pool #BL6060 2.455% 4/01/40	1,265,000	1,260,683
Pool #MA3029 3.000% 6/01/32	364,309	384,558
Pool #MA1607 3.000% 10/01/33	2,418,478	2,576,824
Pool #BN7755 3.000% 9/01/49	2,368,854	2,515,253
Pool #BO2259 3.000% 10/01/49	4,037,026	4,265,075
Pool #MA3811 3.000% 10/01/49	743,552	768,999
Pool #AB4262 3.500% 1/01/32	1,624,702	1,740,742
Pool #MA1148 3.500% 8/01/42	3,529,411	3,818,988
Pool #CA0996 3.500% 1/01/48	107,817	116,469
Pool #MA3276 3.500% 2/01/48	260,157	275,912

	Principal Amount	Value
Pool #MA3305 3.500% 3/01/48	\$ 876,297	\$ 929,367
Pool #MA3332 3.500% 4/01/48	35,092	37,218
Pool #CA3633 3.500% 6/01/49	959,663	1,040,875
Pool #MA2995 4.000% 5/01/47	759,299	820,154
Pool #AS9830 4.000% 6/01/47	471,617	509,414
Pool #MA3027 4.000% 6/01/47	687,789	742,912
Pool #AS9972 4.000% 7/01/47	419,519	453,142
Pool #AL9106 4.500% 2/01/46	363,044	401,307
Pool #CA1710 4.500% 5/01/48	1,487,403	1,607,841
Pool #CA1711 4.500% 5/01/48	25,937	28,129
Pool #CA2208 4.500% 8/01/48	1,137,502	1,230,107

Government National Mortgage Association II

Pool #MA4126 3.000% 12/20/46	2,093,262	2,201,271
Pool #MA4836 3.000% 11/20/47	1,523,410	1,601,777
Pool #MA6209 3.000% 10/20/49	732,861	755,102
Pool #MA4127 3.500% 12/20/46	1,439,992	1,527,973
Pool #MA4382 3.500% 4/20/47	251,765	266,911
Pool #MA4719 3.500% 9/20/47	2,305,255	2,443,221
Pool #MA4837 3.500% 11/20/47	311,415	330,052

Pool #MA4962 3.500% 1/20/48	794,736	841,989
Pool #MA5019 3.500% 2/20/48	1,073,146	1,136,114
Pool #MA4838 4.000% 11/20/47	675,856	723,073
Pool #MA4901 4.000% 12/20/47	550,247	588,345
Pool #MA5078 4.000% 3/20/48	467,936	499,677
Pool #MA5466 4.000% 9/20/48	313,231	333,744
Pool #MA5528 4.000% 10/20/48	1,270,080	1,352,859
Pool #MA4264 4.500% 2/20/47	322,593	350,556
Pool #MA4512 4.500% 6/20/47	2,062,195	2,235,149
Pool #MA3666 5.000% 5/20/46	39,324	44,222
Pool #MA3806 5.000% 7/20/46	260,728	293,203
Pool #MA4072 5.000% 11/20/46	51,963	58,091
Pool #MA4454 5.000% 5/20/47	1,044,393	1,154,242
Government National Mortgage Association TBA		
2.000% 1/04/51 ^(e)	8,625,000	8,725,064
2.500% 1/02/51 ^(e)	12,675,000	13,055,250
Uniform Mortgage Backed Securities TBA		
1.500% 1/08/36 ^(e)	11,300,000	11,387,839
2.000% 1/04/36 ^(e)	15,525,000	15,960,428
2.000% 1/07/51 ^(e)	67,950,000	67,963,271
2.500% 1/07/51 ^(e)	65,650,000	67,522,049
		<u>290,315,011</u>
TOTAL U.S. GOVERNMENT AGENCY OBLIGATIONS AND INSTRUMENTALITIES (Cost \$295,842,517)		<u>299,041,083</u>

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

MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)

	Principal Amount	Value
U.S. TREASURY OBLIGATIONS — 37.4%		
U.S. Treasury Bonds & Notes — 37.4%		
U.S. Treasury Bond		
2.000% 8/15/51	\$ 46,916,000	\$ 45,985,013
2.250% 5/15/41	10,435,000	10,826,947
2.375% 5/15/51	6,715,000	7,147,314
U.S. Treasury Inflation Index		
0.125% 2/15/51	1,997,259	2,176,232
U.S. Treasury Note		
0.125% 7/31/23	51,645,000	51,534,025
0.125% 8/31/23	59,490,000	59,329,734
0.250% 9/30/23	36,150,000	36,121,760
0.625% 7/31/26	21,665,000	21,309,997
0.750% 8/31/26	41,805,000	41,341,537
0.875% 9/30/26	48,566,000	48,292,816
1.250% 8/15/31 ^(d)	21,415,000	20,876,280
		<u>344,941,655</u>
TOTAL U.S. TREASURY OBLIGATIONS (Cost \$347,736,824)		344,941,655
TOTAL BONDS & NOTES (Cost \$974,792,476)		985,117,032
TOTAL PURCHASED OPTIONS (#) — 0.0% (Cost \$252,009)		395,621
	Number of Shares	
MUTUAL FUNDS — 1.9%		
Diversified Financial Services — 1.9%		
State Street Navigator Securities Lending Government Money Market Portfolio ⁽ⁱ⁾	17,208,525	17,208,525
TOTAL MUTUAL FUNDS (Cost \$17,208,525)		17,208,525
TOTAL LONG-TERM INVESTMENTS (Cost \$992,253,010)		1,002,721,178
	Principal Amount	
SHORT-TERM INVESTMENTS — 11.4%		
Repurchase Agreement — 0.5%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ⁽ⁱ⁾	\$ 4,336,978	4,336,978
	Principal Amount	Value
U.S. Treasury Bill — 10.9%		
U.S. Treasury Bill		
0.018% 11/04/21 ^(k)	\$ 5,940,000	\$ 5,939,658
0.023% 3/03/22 ^(k)	2,625,000	2,624,498
0.025% 10/05/21 ^(k)	1,850,000	1,849,995
0.036% 3/03/22 ^(k)	2,960,000	2,959,434
0.037% 3/03/22 ^(k)	7,440,000	7,438,577
0.041% 12/02/21 ^(k)	19,160,000	19,159,010
0.041% 1/06/22 ^(k)	7,115,000	7,114,371
0.042% 3/03/22 ^(k)	3,990,000	3,989,237
0.046% 2/03/22 ^(k)	7,480,000	7,478,831
0.046% 2/10/22 ^(k)	5,575,000	5,574,131
0.046% 1/13/22 ^(k)	2,885,000	2,884,696
0.047% 1/20/22 ^(k)	5,965,000	5,964,322
0.049% 1/20/22 ^(k)	2,555,000	2,554,710
0.051% 2/17/22 ^(k)	2,270,000	2,269,606
United States Cash Management Bill		
0.036% 12/14/21 ^(k)	3,920,000	3,919,774
0.037% 12/14/21 ^(k)	15,795,000	15,794,091
0.043% 12/21/21 ^(k)	3,180,000	3,179,821
		<u>100,694,762</u>
TOTAL SHORT-TERM INVESTMENTS (Cost \$105,031,372)		105,031,740
TOTAL INVESTMENTS — 120.1% (Cost \$1,097,284,382) ^(l)		1,107,752,918

Less Unfunded Loan Commitments (0.00%)	(87,607)
NET INVESTMENTS — 120.1% (Cost \$1,097,196,775)	1,107,665,311
Other Assets/(Liabilities) — (20.1)%	(185,647,816)
NET ASSETS — 100.0%	\$ 922,017,495

Abbreviation Legend
CLO Collateralized Loan Obligation
DIP Debtor In Possession
FRN Floating Rate Note
REMICSReal Estate Mortgage Investment Conduits
STEP Step Up Bond
TBA To Be Announced
VRN Variable Rate Note

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

*MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)***Notes to Portfolio of Investments**

Percentages are stated as a percent of net assets.

- (a) All or a portion of the security represents unsettled loan commitments at September 30, 2021 where the rate will be determined at time of settlement.
- (b) Unfunded or partially unfunded loan commitments.
- (c) Security is exempt from registration under Regulation S or Rule 144A of the Securities Act of 1933. These securities are considered restricted and may be resold in transactions exempt from registration. At September 30, 2021, the aggregate market value of these securities amounted to \$117,559,318 or 12.75% of net assets.
- (d) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$19,400,252 or 2.10% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$2,592,395 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. (Note 2).
- (e) A portion of this security is purchased on a when-issued, delayed-delivery or forward commitment basis. (Note 2).
- (f) Security is currently in default due to bankruptcy or failure to make payment of principal or interest of the issuer. Income is not being accrued. At September 30, 2021, these securities amounted to a value of \$963,568 or 0.10% of net assets.
- (g) Certain variable rate securities are not based on a published reference rate and spread but are determined by the issuer or agent and are based on current market conditions. These securities do not indicate a reference rate and spread in their description above. The rates shown are the current interest rates at September 30, 2021.
- (h) May contain securities that are issued by a U.S. Government Agency, but are unsecured and are not guaranteed by a U.S. Government Agency.
- (i) Represents investment of security lending cash collateral. (Note 2).
- (j) Maturity value of \$4,336,978. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 5/15/27, and an aggregate market value, including accrued interest, of \$4,423,779.
- (k) The rate shown represents yield-to-maturity.
- (l) See Note 6 for aggregate cost for federal tax purposes.

(#) Exchange-Traded Options Purchased

Description	Expiration Date	Exercise Price	No. of Contracts	Notional Amount	Value	Premiums Paid (Received)	Unrealized Appreciation/ (Depreciation)
Put							
Eurodollar 2 Year Mid Curve Future	12/10/21	99.13	360	USD	88,969,500	\$ 270,000	\$ 127,436

(#) Interest Rate Swaptions Purchased

				Paid by Fund		Received by Fund					
		Expiration								Premium Paid	Unrealized
Description	Counterparty	Date	Rate	Frequency	Rate	Frequency	Notional Amount	Value	(Received)	Appreciation/	
Put											
30-Year	Goldman				3-Month						
Interest	Sachs & Co.*				USD						
Rate Swap,				Semi-	LIBOR						
1/23/54		1/19/24	2.75% ^{##}	Annually	BBA	Quarterly	USD	3,710,000	\$ 125,621	\$ 109,445	\$ 16,176

Exchange-Traded Options Written

Description	Expiration Date	Exercise Price	No. of Contracts	Notional Amount	Value	Premiums Paid (Received)	Unrealized Appreciation/ (Depreciation)
Put							
Eurodollar 2 Year Mid Curve Future	12/10/21	98.75	720	USD	177,939,000	\$ (139,500)	\$ (53,377)

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

*MassMutual Total Return Bond Fund – Portfolio of Investments (Continued)***Futures contracts**

	Expiration Date	Number of Contracts	Notional Amount	Value/ Net Unrealized Appreciation/ (Depreciation)
Long				
U.S. Treasury Ultra Bond	12/21/21	31	\$ 6,099,675	\$ (176,737)
Short				
U.S. Treasury Note 2 Year	12/31/21	40	\$ (8,807,675)	\$ 5,487

Centrally Cleared Interest Rate Swaps

Paid by the Fund		Received by the Fund						Upfront Premium Paid/ (Received)	Unrealized Appreciation (Depreciation)
Rate/ Reference	Frequency	Rate/ Reference	Frequency	Termination Date	Notional Amount	Value			
3-Month USD LIBOR BBA	Quarterly	Fixed 1.073%	Semi-Annually	7/24/25	USD 10,155,000	\$ (50,481)	\$	—	\$ (50,481)
3-Month USD LIBOR BBA	Quarterly	Fixed 1.034%	Semi-Annually	7/24/25	USD 15,025,000	(86,228)		—	(86,228)
3-Month USD LIBOR BBA	Quarterly	Fixed 1.026%	Semi-Annually	7/24/25	USD 20,310,000	(119,758)		—	(119,758)
3-Month USD LIBOR BBA	Quarterly	Fixed 1.390%	Semi-Annually	9/28/25	USD 25,970,000	(6,531)		—	(6,531)
Fixed 1.808%	Semi-Annually	3-Month USD LIBOR BBA	Quarterly	7/24/53	USD 850,000	25,250		—	25,250
Fixed 1.785%	Semi-Annually	3-Month USD LIBOR BBA	Quarterly	7/24/53	USD 1,250,000	43,726		—	43,726
Fixed 1.773%	Semi-Annually	3-Month USD LIBOR BBA	Quarterly	7/24/53	USD 1,700,000	64,448		—	64,448
Fixed 1.870%	Semi-Annually	3-Month USD LIBOR BBA	Quarterly	9/28/53	USD 2,215,000	36,798		—	36,798
						<u>\$ (92,776)</u>		<u>\$ —</u>	<u>\$ (92,776)</u>

* Contracts are subject to a Master Netting Agreement.

Exercise Rate.

Currency Legend

USD U.S. Dollar

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

MassMutual Strategic Bond Fund — Portfolio of Investments

September 30, 2021

	<u>Principal Amount</u>	<u>Value</u>
BONDS & NOTES — 69.5%		
BANK LOANS — 4.1%		
Advertising — 0.1%		
Terrier Media Buyer, Inc., 2021 Term Loan, 1 mo. USD LIBOR + 3.500% 3.584% VRN 12/17/26	\$ 442,011	\$ 440,906
Airlines — 0.1%		
United Airlines, Inc., 2021 Term Loan B, 3 mo. USD LIBOR + 3.750% 4.500% VRN 4/21/28	487,425	490,418
Auto Parts & Equipment — 0.1%		
Clarios Global LP, 2021 USD Term Loan B, 1 mo. USD LIBOR + 3.250% 3.337% VRN 4/30/26	380,344	378,442
Beverages — 0.1%		
Triton Water Holdings, Inc., Term Loan, 3 mo. USD LIBOR + 3.500% 4.000% VRN 3/31/28	490,000	489,084
Building Materials — 0.0%		
Quikrete Holdings, Inc., 2021 Term Loan B1, 0.000% 2/21/28 ^(a)	290,000	288,950
Chemicals — 0.1%		
INEOS Styrolution US Holding LLC, 2021 USD Term Loan B, 1 mo. USD LIBOR + 2.750% 3.250% VRN 1/29/26	329,175	329,175
Commercial Services — 0.3%		
API Group DE, Inc., Term Loan B, 1 mo. USD LIBOR + 2.500% 2.587% VRN 10/01/26	491,803	488,424
Parexel International Corp., Term Loan B, 1 mo. USD LIBOR + 2.750% 2.834% VRN 9/27/24	390,000	389,669
Prime Security Services Borrower LLC, 2021 Term Loan, 1 mo. USD LIBOR + 2.750%, 6 mo. USD LIBOR + 2.750%, 12 mo. USD LIBOR + 2.750% 3.500% VRN 9/23/26	487,521	486,800
Trans Union LLC, 2019 Term Loan B5, 1 mo. USD LIBOR + 1.750% 1.834% VRN 11/16/26	422,528	419,688
	<u>Principal Amount</u>	<u>Value</u>
Verscend Holding Corp., 2021 Term Loan B, 1 mo. USD LIBOR + 4.000% 4.084% VRN 8/27/25	\$ 508,827	\$ 509,249
		2,293,830
Computers — 0.2%		
Dell International LLC, 2021 Term Loan B, 1 mo. USD LIBOR + 1.750% 2.000% VRN 9/19/25	374,733	374,549
Magenta Buyer LLC, 2021 USD 1st Lien Term Loan, 3 mo. USD LIBOR + 5.000% 5.750% VRN 7/27/28	490,000	489,848
Peraton Corp., Term Loan B, 1 mo. USD LIBOR + 3.750% 4.500% VRN 2/01/28	486,777	486,855
		1,351,252
Diversified Financial Services — 0.4%		
Avolon TLB Borrower 1 (US) LLC, 2021 Term Loan B5, 1 mo. USD LIBOR + 2.250% 2.750% VRN 12/01/27	188,575	188,575
Citadel Securities LP, 2021 Term Loan B, 1 mo. USD LIBOR + 2.500% 2.584% VRN 2/02/28	453,978	449,602
Deerfield Dakota Holding LLC, 2020 USD Term Loan B, 1 mo. USD LIBOR + 3.750% 4.750% VRN 4/09/27	492,354	493,353
Focus Financial Partners LLC, 2020 Term Loan, 1 mo. USD LIBOR + 2.000% 2.084% VRN 7/03/24	391,727	388,625
Hudson River Trading LLC, 2021 Term Loan, 1 mo. USD LIBOR + 3.000% 3.084% VRN 3/20/28	309,225	307,237
Jane Street Group LLC, 2021 Term Loan, 1 mo. USD LIBOR + 2.750% 2.834% VRN 1/26/28	350,987	347,302
Zebra Buyer LLC, Term Loan B, 0.000% 4/21/28 ^(a)	370,000	370,991
		2,545,685
Entertainment — 0.1%		
PCI Gaming Authority, Term Loan, 1 mo. USD LIBOR + 2.500% 2.584% VRN 5/29/26	273,662	272,498

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Scientific Games International, Inc., 2018 Term Loan B5, 1 mo. USD LIBOR + 2.750% 2.834% VRN 8/14/24	\$ 300,868	\$ 299,403 <u>571,901</u>
Food — 0.1%		
Froneri International Ltd., 2020 USD Term Loan, 1 mo. USD LIBOR + 2.250% 2.334% VRN 1/29/27	306,125	302,299
US Foods, Inc., 2019 Term Loan B, 1 mo. USD LIBOR + 2.000% 2.084% VRN 9/13/26	433,088	427,024 <u>729,323</u>
Forest Products & Paper — 0.0%		
Asplundh Tree Expert LLC, 2021 Term Loan B, 1 mo. USD LIBOR + 1.750% 1.834% VRN 9/07/27	282,485	281,386
Health Care – Products — 0.1%		
Sotera Health Holdings LLC, 2021 Term Loan, 1 mo. USD LIBOR + 2.750% 3.250% VRN 12/11/26	490,000	488,368
Health Care – Services — 0.3%		
Global Medical Response, Inc., 2020 Term Loan B, 3 mo. USD LIBOR + 4.750% 5.750% VRN 10/02/25	386,885	388,045
Phoenix Guarantor, Inc., 2020 Term Loan B, 1 mo. USD LIBOR + 3.250% 3.336% VRN 3/05/26	494,940	491,767
PPD, Inc., Initial Term Loan, 1 mo. USD LIBOR + 2.000% 2.500% VRN 1/13/28	496,777	495,744
RegionalCare Hospital Partners Holdings, Inc., 2018 Term Loan B, 1 mo. USD LIBOR + 3.750% 3.835% VRN 11/16/25	495,677	494,750 <u>1,870,306</u>
Household Products & Wares — 0.1%		
Reynolds Consumer Products LLC, Term Loan, 1 mo. USD LIBOR + 1.750% 1.834% VRN 2/04/27	491,494	489,990
Insurance — 0.2%		
AmWINS Group, Inc., 2021 Term Loan B, 1 mo. USD LIBOR + 2.250% 3.000% VRN 2/19/28	308,450	306,485
	Principal Amount	Value
Asurion LLC 2018 Term Loan B7, 1 mo. USD LIBOR + 3.000% 3.084% VRN 11/03/24 2020 Term Loan B8, 1 mo. USD LIBOR + 3.250% 3.334% VRN 12/23/26	\$ 340,767 415,641	\$ 336,934 409,257 <u>1,052,676</u>
Leisure Time — 0.1%		
Alterra Mountain Co, 2021 Series B-2 Consenting Term Loan, 1 mo. USD LIBOR + 3.500% 4.000% VRN 8/17/28	370,404	369,015
Lodging — 0.3%		
Caesars Resort Collection LLC, 2017 1st Lien Term Loan B, 1 mo. USD LIBOR + 2.750% 2.834% VRN 12/23/24	495,041	491,814
Four Seasons Hotels Ltd., New 1st Lien Term Loan, 1 mo. USD LIBOR + 2.000% 2.087% VRN 11/30/23	404,621	403,103
Golden Nugget, Inc., 2017 Incremental Term Loan B, 2 mo. USD LIBOR + 2.500% 3.250% VRN 10/04/23	348,905	347,066
Hilton Worldwide Finance LLC, 2019 Term Loan B2, 1 mo. USD LIBOR + 1.750% 1.836% VRN 6/22/26	496,204	491,828
Station Casinos LLC, 2020 Term Loan B, 1 mo. USD LIBOR + 2.250% 2.500% VRN 2/08/27	467,563	462,812 <u>2,196,623</u>
Media — 0.2%		
iHeartCommunications, Inc., 2020 Term Loan, 1 mo. USD LIBOR + 3.000% 3.084% VRN 5/01/26	495,927	492,103
Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. USD LIBOR + 2.500% 2.586% VRN 9/18/26	492,275	491,537
Virgin Media Bristol LLC, USD Term Loan N, 1 mo. USD LIBOR + 2.500% 2.584% VRN 1/31/28	493,954	490,437 <u>1,474,077</u>

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	<u>Principal Amount</u>	<u>Value</u>
Packaging & Containers — 0.1%		
Berry Global, Inc., 2021 Term Loan Z, 2 mo. USD LIBOR + 1.750% 1.856% VRN 7/01/26	\$ 461,100	\$ 458,218
Pharmaceuticals — 0.4%		
Bausch Health Cos., Inc. Term Loan B, 1 mo. USD LIBOR + 2.750% 2.834% VRN 11/27/25	225,424	224,748
2018 Term Loan B, 1 mo. USD LIBOR + 3.000% 3.084% VRN 6/02/25	241,230	240,868
Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. USD LIBOR + 2.500%, 3 mo. USD LIBOR + 2.500% 3.500% VRN 3/01/24	479,315	478,740
Grifols Worldwide Operations USA, Inc., USD 2019 Term Loan B, 1 Week USD LIBOR + 2.000% 2.072% VRN 11/15/27	496,576	488,298
HC Group Holdings II, Inc., Term Loan B, 1 mo. USD LIBOR + 3.750% 3.834% VRN 8/06/26	343,875	343,703
Horizon Therapeutics USA, Inc., 2021 Term Loan B, 1 mo. USD LIBOR + 2.000% 2.500% VRN 3/15/28	477,600	476,492
Jazz Financing Lux S.a.r.l., USD Term Loan, 1 mo. USD LIBOR + 3.500% 4.000% VRN 5/05/28	488,775	489,327
		<u>2,742,176</u>
Retail — 0.3%		
1011778 B.C. Unlimited Liability Co., Term Loan B4, 1 mo. USD LIBOR + 1.750% 1.837% VRN 11/19/26	500,994	494,521
Harbor Freight Tools USA, Inc., 2021 Term Loan B, 1 mo. USD LIBOR + 2.750% 3.250% VRN 10/19/27	377,324	376,924
Michaels Cos., Inc., 2021 Term Loan B, 3 mo. USD LIBOR + 4.250% 5.000% VRN 4/15/28	99,750	99,795
Petco Health & Wellness Co., Inc., 2021 Term Loan B, 3 mo. USD LIBOR + 3.250% 4.000% VRN 3/03/28	407,950	407,803
	<u>Principal Amount</u>	<u>Value</u>
Pilot Travel Centers LLC, 2021 Term Loan B, 1 mo. USD LIBOR 0.000% FRN 7/28/28 ^(a)	\$ 500,000	\$ 498,215
		<u>1,877,258</u>
Software — 0.2%		
Athenahealth, Inc., 2021 Term Loan B1, 3 mo. USD LIBOR + 4.250% 4.377% VRN 2/11/26	479,654	480,613
Cloudera, Inc., 2021 Term Loan, 0.000% 8/10/28 ^(a)	200,000	199,626
DCert Buyer, Inc., 2019 Term Loan B, 1 mo. USD LIBOR + 4.000% 4.084% VRN 10/16/26	488,454	488,317
Rackspace Hosting, Inc., 2021 Term Loan, 3 mo. USD LIBOR + 2.750% 3.500% VRN 2/15/28	448,875	445,459
		<u>1,614,015</u>
Telecommunications — 0.1%		
Level 3 Financing, Inc., 2019 Term Loan B, 1 mo. USD LIBOR + 1.750% 1.834% VRN 3/01/27	498,362	492,043
Zayo Group Holdings, Inc., USD Term Loan, 1 mo. USD LIBOR + 3.000% 3.084% VRN 3/09/27	430,000	425,988
		<u>918,031</u>
Transportation — 0.1%		
Genesee & Wyoming, Inc., Term Loan, 3 mo. USD LIBOR + 2.000% 2.132% VRN 12/30/26	498,822	495,535
XPO Logistics, Inc., 2018 Term Loan B, 1 mo. USD LIBOR + 1.750% 1.833% VRN 2/24/25	380,000	377,864
		<u>873,399</u>
TOTAL BANK LOANS (Cost \$26,683,280)		<u>26,614,504</u>
CORPORATE DEBT — 31.5%		
Aerospace & Defense — 1.6%		
The Boeing Co. 2.196% 2/04/26	230,000	231,999
2.700% 2/01/27	90,000	93,107
2.800% 3/01/27	150,000	156,136
3.100% 5/01/26	80,000	84,548
3.200% 3/01/29	450,000	467,734
3.250% 2/01/35	730,000	728,845

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MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
3.750% 2/01/50	\$ 240,000	\$ 243,123
3.950% 8/01/59	990,000	1,013,315
5.150% 5/01/30	160,000	187,392
5.705% 5/01/40	770,000	980,749
5.805% 5/01/50	1,920,000	2,550,203
5.930% 5/01/60	1,010,000	1,375,699
General Dynamics Corp.		
3.250% 4/01/25	140,000	150,219
3.500% 5/15/25	50,000	54,252
4.250% 4/01/40	20,000	24,329
4.250% 4/01/50	110,000	139,207
L3Harris Technologies, Inc.		
5.054% 4/27/45	130,000	169,436
Lockheed Martin Corp.		
3.550% 1/15/26	90,000	98,900
4.500% 5/15/36	60,000	74,222
Northrop Grumman Corp.		
2.930% 1/15/25	160,000	169,453
3.250% 1/15/28	290,000	313,502
5.250% 5/01/50	200,000	279,824
Raytheon Technologies Corp.		
2.250% 7/01/30	280,000	282,432
4.125% 11/16/28	160,000	181,957
4.500% 6/01/42	80,000	98,109
		<u>10,229,803</u>
Agriculture — 0.4%		
Altria Group, Inc.		
2.450% 2/04/32	140,000	133,765
4.400% 2/14/26	192,000	215,545
5.800% 2/14/39	430,000	527,875
5.950% 2/14/49	100,000	126,391
6.200% 2/14/59	56,000	72,329
BAT Capital Corp.		
3.557% 8/15/27	300,000	323,068
4.540% 8/15/47	270,000	279,130
Cargill, Inc.		
1.375% 7/23/23 ^(b)	180,000	183,307
Philip Morris International, Inc.		
1.125% 5/01/23	190,000	192,397
2.100% 5/01/30	110,000	109,184
4.500% 3/20/42	80,000	93,964
Reynolds American, Inc.		
5.850% 8/15/45	110,000	131,739
		<u>2,388,694</u>
Airlines — 1.1%		
Delta Air Lines, Inc.		
3.625% 3/15/22	250,000	252,217
3.800% 4/19/23	90,000	93,689
	Principal Amount	Value
2.900% 10/28/24	\$ 180,000	\$ 184,300
7.000% 5/01/25 ^(b)	1,670,000	1,947,534
7.375% 1/15/26	380,000	447,531
Delta Air Lines, Inc./SkyMiles IP Ltd.		
4.500% 10/20/25 ^(b)	320,000	342,386
4.750% 10/20/28 ^(b)	2,750,000	3,065,997
Mileage Plus Holdings LLC / Mileage Plus Intellectual Property Assets Ltd.		
6.500% 6/20/27 ^(b)	330,000	358,759
Spirit Loyalty Cayman Ltd. / Spirit IP Cayman Ltd.		
8.000% 9/20/25 ^(b)	240,000	269,160
United Airlines, Inc.		
4.375% 4/15/26 ^(b)	10,000	10,263
4.625% 4/15/29 ^(b)	270,000	279,032
		<u>7,250,868</u>
Apparel — 0.1%		
NIKE, Inc.		
2.850% 3/27/30	280,000	300,782

3.250% 3/27/40	130,000	141,995
3.375% 3/27/50	40,000	44,518
		<u>487,295</u>
Auto Manufacturers — 0.5%		
Ford Motor Co.		
4.750% 1/15/43	90,000	94,332
Ford Motor Credit Co. LLC		
2.900% 2/16/28	390,000	389,512
3.339% 3/28/22	370,000	372,083
3.625% 6/17/31	220,000	221,375
4.000% 11/13/30	200,000	208,000
4.125% 8/17/27	200,000	212,200
5.125% 6/16/25	200,000	217,250
General Motors Co.		
5.150% 4/01/38	40,000	47,642
5.400% 10/02/23	130,000	141,762
5.950% 4/01/49	110,000	144,972
6.125% 10/01/25	20,000	23,426
6.250% 10/02/43	120,000	161,315
General Motors Financial Co., Inc.		
4.250% 5/15/23	10,000	10,564
Nissan Motor Co. Ltd.		
3.043% 9/15/23 ^(b)	200,000	208,037
3.522% 9/17/25 ^(b)	410,000	435,740
4.345% 9/17/27 ^(b)	500,000	549,052
		<u>3,437,262</u>

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MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Banks — 8.8%		
ABN AMRO Bank NV		
4.750% 7/28/25 ^(b)	\$ 260,000	\$ 288,238
Banco Santander SA		
3 mo. USD LIBOR + 1.120% 1.239% FRN 4/12/23	200,000	202,719
2.746% 5/28/25	600,000	629,165
Bank of America Corp.		
SOFR + 2.150% 2.592% VRN 4/29/31	360,000	367,036
3 mo. USD LIBOR + 1.040% 3.419% VRN 12/20/28	570,000	617,445
3 mo. USD LIBOR + 1.370% 3.593% VRN 7/21/28	270,000	295,846
3 mo. USD LIBOR + 1.070% 3.970% VRN 3/05/29	600,000	667,706
3 mo. USD LIBOR + 1.210% 3.974% VRN 2/07/30	630,000	704,671
4.000% 4/01/24	270,000	292,251
4.000% 1/22/25	270,000	293,354
3 mo. USD LIBOR + 3.150% 4.083% VRN 3/20/51	480,000	566,622
4.200% 8/26/24	380,000	415,598
4.250% 10/22/26	50,000	56,260
3 mo. USD LIBOR + 1.520% 4.330% VRN 3/15/50	250,000	305,815
4.450% 3/03/26	50,000	55,973
5.000% 1/21/44	130,000	170,168
3 mo. USD LIBOR + 3.705% 6.250% VRN ^(c)	170,000	187,000
Bank of Montreal		
SOFR + .680% 0.730% FRN 3/10/23	4,610,000	4,644,263
1.850% 5/01/25	200,000	205,729
5 year USD Swap + 1.432% 3.803% VRN 12/15/32	90,000	98,555
The Bank of New York Mellon Corp.		
1.600% 4/24/25	170,000	173,687
The Bank of Nova Scotia		
SOFR + .550% 0.600% FRN 9/15/23	5,430,000	5,466,688
1.300% 6/11/25	320,000	322,055
Barclays Bank PLC		
1.700% 5/12/22	240,000	241,894
Barclays PLC		
3 mo. USD LIBOR + 1.902% 4.972% VRN 5/16/29	230,000	267,190
3 mo. USD LIBOR + 3.054% 5.088% VRN 6/20/30	510,000	587,949
	Principal Amount	Value
BNP Paribas SA		
SOFR + 2.074% 2.219% VRN 6/09/26 ^(b)	\$ 400,000	\$ 410,357
5 year USD Swap + 1.483% 4.375% VRN 3/01/33 ^(b)	220,000	241,002
4.400% 8/14/28 ^(b)	640,000	728,903
4.625% 3/13/27 ^(b)	260,000	292,113
Canadian Imperial Bank of Commerce		
SOFR + .800% 0.850% FRN 3/17/23	3,790,000	3,823,579
0.950% 6/23/23	300,000	302,632
Citigroup, Inc.		
SOFR + 2.107% 2.572% VRN 6/03/31	340,000	346,191
3 mo. USD LIBOR + 1.338% 3.980% VRN 3/20/30	180,000	201,983
4.125% 7/25/28	360,000	401,767
4.300% 11/20/26	670,000	752,267
SOFR + 3.914% 4.412% VRN 3/31/31	410,000	472,937
4.450% 9/29/27	480,000	545,712
4.650% 7/30/45	281,000	356,732
4.650% 7/23/48	70,000	90,465
4.750% 5/18/46	40,000	50,245
5.300% 5/06/44	16,000	21,268
3 mo. USD LIBOR + 3.905% 5.950% VRN ^(c)	320,000	349,200
3 mo. USD LIBOR + 4.068% 5.950% VRN ^(c)	50,000	52,125
3 mo. USD LIBOR + 3.423% 6.300% VRN ^(c)	60,000	64,770
6.625% 6/15/32	20,000	26,853
8.125% 7/15/39	190,000	324,148
Commonwealth Bank of Australia SOFR + .400%		
0.450% FRN 7/07/25 ^{(b) (d)}	5,380,000	5,388,124
Cooperatieve Rabobank UA		
1 year CMT + 1.000% 1.339% VRN 6/24/26 ^(b)	250,000	249,628
4.375% 8/04/25	470,000	520,873
4.625% 12/01/23	250,000	270,876

Credit Agricole SA SOFR + 1.676%		
1.907% VRN 6/16/26 ^(b)	270,000	275,040
Credit Suisse Group AG		
SOFR + 2.044% 2.193% VRN 6/05/26 ^(b)	850,000	865,653
SOFR + 1.730% 3.091% VRN 5/14/32 ^(b)	350,000	357,654
SOFR + 3.730% 4.194% VRN 4/01/31 ^(b)	250,000	279,732

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Danske Bank A/S		
5.375% 1/12/24 ^(b)	\$ 240,000	\$ 263,370
Goldman Sachs Capital II 3 mo. USD LIBOR + .768%		
4.000% VRN ^(c)	8,000	7,863
The Goldman Sachs Group, Inc.		
SOFR + 1.472% 2.908% VRN 7/21/42	80,000	78,737
SOFR + 1.513% 3.210% VRN 4/22/42	40,000	41,274
3.500% 4/01/25	370,000	397,662
3.500% 11/16/26	200,000	216,042
3 mo. USD LIBOR + 1.510% 3.691% VRN 6/05/28	830,000	913,144
3.850% 7/08/24	90,000	96,882
4.000% 3/03/24	100,000	107,710
3 mo. USD LIBOR + 1.301% 4.223% VRN 5/01/29	490,000	554,177
4.250% 10/21/25	260,000	287,858
4.750% 10/21/45	130,000	167,508
5.150% 5/22/45	390,000	510,542
6.250% 2/01/41	130,000	188,994
6.750% 10/01/37	80,000	114,299
HSBC Holdings PLC		
SOFR + 1.929% 2.099% VRN 6/04/26	510,000	520,982
4.250% 8/18/25	330,000	361,874
Intesa Sanpaolo SpA		
3.375% 1/12/23 ^(b)	550,000	568,854
5.017% 6/26/24 ^(b)	900,000	971,608
5.710% 1/15/26 ^(b)	200,000	224,312
JP Morgan Chase & Co.		
SOFR + 1.850% 2.083% VRN 4/22/26	540,000	555,065
SOFR + 2.040% 2.522% VRN 4/22/31	300,000	305,736
SOFR + 2.440% 3.109% VRN 4/22/51	80,000	81,053
3 mo. USD LIBOR + .945% 3.509% VRN 1/23/29	230,000	250,331
3.875% 9/10/24	300,000	326,111
3 mo. USD LIBOR + 1.260% 4.203% VRN 7/23/29	310,000	352,348
4.250% 10/01/27	70,000	79,574
3 mo. USD LIBOR + 1.330% 4.452% VRN 12/05/29	610,000	702,005
4.950% 6/01/45	140,000	182,642
Lloyds Banking Group PLC		
4.375% 3/22/28	200,000	227,167
4.550% 8/16/28	370,000	426,107
	Principal Amount	Value
Mitsubishi UFJ Financial Group, Inc.		
2.998% 2/22/22	\$ 160,000	\$ 161,689
Morgan Stanley		
SOFR + 1.143% 2.699% VRN 1/22/31	10,000	10,310
SOFR + 3.120% 3.622% VRN 4/01/31	990,000	1,090,030
3 mo. USD LIBOR + 1.140% 3.772% VRN 1/24/29	350,000	386,977
3 mo. USD LIBOR + 1.628% 4.431% VRN 1/23/30	10,000	11,537
National Securities Clearing Corp.		
1.500% 4/23/25 ^(b)	250,000	253,764
Natwest Group PLC		
3 mo. USD LIBOR + 1.762% 4.269% VRN 3/22/25	430,000	463,972
3 mo. USD LIBOR + 1.550% 4.519% VRN 6/25/24	200,000	212,860
Royal Bank of Canada		
1.150% 6/10/25	310,000	310,480
1.600% 4/17/23	30,000	30,577
Santander Holdings USA, Inc.		
4.500% 7/17/25	50,000	55,067
The Toronto-Dominion Bank		
1.150% 6/12/25	300,000	300,557
UBS Group AG		
3 mo. USD LIBOR + .954% 2.859% VRN 8/15/23 ^(b)	200,000	204,202
4.125% 9/24/25 ^(b)	210,000	231,920
4.253% 3/23/28 ^(b)	340,000	382,060
5 year USD Swap + 4.344% 7.000% VRN ^{(b) (c)}	500,000	545,480
UniCredit SpA		
6.572% 1/14/22 ^(b)	640,000	650,350
US Bancorp		

1.450% 5/12/25	280,000	284,388
Wells Fargo & Co.		
SOFR + 2.000% 2.188% VRN 4/30/26	570,000	588,118
SOFR + 2.100% 2.393% VRN 6/02/28	360,000	370,801
SOFR + 1.432% 2.879% VRN 10/30/30	150,000	156,223
3.000% 10/23/26	350,000	374,945
4.300% 7/22/27	370,000	419,990
4.400% 6/14/46	180,000	213,613
SOFR + 4.032% 4.478% VRN 4/04/31	210,000	244,757
4.650% 11/04/44	80,000	97,864
4.750% 12/07/46	270,000	337,678
4.900% 11/17/45	250,000	316,081

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
SOFR + 4.502% 5.013% VRN 4/04/51	\$ 1,480,000	\$ 1,983,850
5.375% 11/02/43	110,000	145,558
3 mo. USD LIBOR + 3.990% 5.875% VRN ^(c)	50,000	55,726
		<u>57,159,961</u>
Beverages — 0.4%		
Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc.		
3.650% 2/01/26	470,000	515,313
4.900% 2/01/46	50,000	62,039
Anheuser-Busch InBev Worldwide, Inc.		
3.500% 6/01/30	130,000	142,510
4.000% 4/13/28	80,000	90,323
4.350% 6/01/40	30,000	34,882
4.500% 6/01/50	360,000	428,503
4.750% 1/23/29	460,000	540,652
5.550% 1/23/49	80,000	107,926
The Coca-Cola Co.		
1.450% 6/01/27	250,000	252,232
2.500% 6/01/40	10,000	9,698
2.600% 6/01/50	80,000	76,243
Molson Coors Beverage Co.		
3.000% 7/15/26	50,000	53,391
3.500% 5/01/22	20,000	20,371
4.200% 7/15/46	50,000	55,218
PepsiCo, Inc.		
1.625% 5/01/30	170,000	166,368
3.625% 3/19/50	50,000	57,701
3.875% 3/19/60	80,000	96,998
		<u>2,710,368</u>
Biotechnology — 0.1%		
Amgen, Inc.		
4.663% 6/15/51	24,000	30,209
Gilead Sciences, Inc.		
3.700% 4/01/24	130,000	138,884
4.500% 2/01/45	10,000	12,087
4.750% 3/01/46	120,000	150,582
		<u>331,762</u>
Building Materials — 0.0%		
Carrier Global Corp.		
3.577% 4/05/50	20,000	21,197
Chemicals — 0.2%		
Equate Petrochemical BV		
4.250% 11/03/26 ^(b)	230,000	253,000
OCP SA		
3.750% 6/23/31 ^(b)	260,000	259,038
	Principal Amount	Value
5.125% 6/23/51 ^(b)	\$ 220,000	\$ 217,800
Orbia Advance Corp. SAB de CV		
2.875% 5/11/31 ^(b)	490,000	493,062
		<u>1,222,900</u>
Commercial Services — 0.2%		
Cintas Corp. No 2		
2.900% 4/01/22	100,000	101,104
3.700% 4/01/27	160,000	178,493
DP World Ltd.		
5.625% 9/25/48 ^(b)	330,000	406,791
PayPal Holdings, Inc.		
1.650% 6/01/25	270,000	276,781
United Rentals North America, Inc.		
3.875% 11/15/27	60,000	62,850
		<u>1,026,019</u>
Computers — 1.0%		
Apple, Inc.		
2.450% 8/04/26	480,000	507,681
Dell International LLC/EMC Corp.		
5.300% 10/01/29	4,610,000	5,567,616
International Business Machines Corp.		

3.000% 5/15/24	540,000	572,745
		<u>6,648,042</u>
Cosmetics & Personal Care — 0.0%		
The Procter & Gamble Co.		
3.000% 3/25/30	100,000	109,321
Diversified Financial Services — 0.6%		
AerCap Ireland Capital DAC / AerCap Global Aviation Trust		
3.150% 2/15/24	190,000	198,095
Air Lease Corp.		
3.375% 7/01/25	200,000	212,318
Blue Owl Finance LLC		
3.125% 6/10/31 ^(b)	1,800,000	1,778,267
GE Capital International Funding Co. Unlimited Co.		
4.418% 11/15/35	380,000	455,162
ILFC E-Capital Trust II		
3.710% VRN 12/21/65 ^{(b) (e)}	10,000	8,337
International Lease Finance Corp.		
5.875% 8/15/22	70,000	73,213
KKR Group Finance Co. II LLC		
5.500% 2/01/43 ^(b)	20,000	26,471
Mastercard, Inc.		
3.850% 3/26/50	50,000	59,311
Park Aerospace Holdings Ltd.		
4.500% 3/15/23 ^(b)	10,000	10,455
5.250% 8/15/22 ^(b)	16,000	16,575

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
5.500% 2/15/24 ^(b)	\$ 50,000	\$ 54,556
Vanguard Group, Inc.		
3.050% 8/22/50	450,000	431,009
Visa, Inc.		
3.150% 12/14/25	350,000	379,392
4.300% 12/14/45	160,000	200,417
		<u>3,903,578</u>
Electric — 1.1%		
The AES Corp.		
3.950% 7/15/30 ^(b)	2,340,000	2,573,111
AES Panama Generation Holdings SRL		
4.375% 5/31/30 ^(b)	1,980,000	2,041,380
Consolidated Edison Co. of New York, Inc.		
3.350% 4/01/30	70,000	76,520
3.950% 4/01/50	50,000	56,917
Duke Energy Ohio, Inc.		
3.650% 2/01/29	260,000	285,086
Exelon Corp.		
5.625% 6/15/35	170,000	219,719
FirstEnergy Corp.		
7.375% 11/15/31	760,000	1,038,207
Pacific Gas and Electric Co.		
1.750% 6/16/22	450,000	449,281
2.100% 8/01/27	140,000	136,554
2.500% 2/01/31	180,000	171,032
3.300% 8/01/40	50,000	46,040
3.500% 8/01/50	80,000	72,399
		<u>7,166,246</u>
Electronics — 0.0%		
Honeywell International, Inc.		
1.350% 6/01/25	210,000	213,365
Environmental Controls — 0.0%		
Republic Services, Inc.		
2.500% 8/15/24	230,000	240,816
Food — 0.3%		
Danone SA		
2.077% 11/02/21 ^(b)	250,000	250,000
2.589% 11/02/23 ^(b)	310,000	321,892
2.947% 11/02/26 ^(b)	330,000	351,804
The Hershey Co.		
0.900% 6/01/25	50,000	49,958
Mars, Inc.		
2.700% 4/01/25 ^(b)	140,000	147,796
3.200% 4/01/30 ^(b)	80,000	86,870
	Principal Amount	Value
Mondelez International, Inc.		
1.500% 5/04/25	\$ 390,000	\$ 395,742
		<u>1,604,062</u>
Forest Products & Paper — 0.1%		
Suzano Austria GmbH		
3.125% 1/15/32	80,000	77,260
3.750% 1/15/31	430,000	441,718
		<u>518,978</u>
Health Care – Products — 0.1%		
Abbott Laboratories		
3.750% 11/30/26	139,000	155,853
4.750% 11/30/36	80,000	101,632
4.900% 11/30/46	100,000	134,988
Medtronic, Inc.		
3.500% 3/15/25	86,000	93,294
4.625% 3/15/45	18,000	23,461
		<u>509,228</u>
Health Care – Services — 0.3%		
Aetna, Inc.		
2.800% 6/15/23	40,000	41,409
Anthem, Inc.		

3.350% 12/01/24	120,000	128,620
3.650% 12/01/27	140,000	155,439
CommonSpirit Health		
4.350% 11/01/42	20,000	22,907
Fresenius Medical Care US Finance II, Inc.		
4.750% 10/15/24 ^(b)	70,000	77,185
5.875% 1/31/22 ^(b)	50,000	50,870
HCA, Inc.		
4.500% 2/15/27	40,000	45,084
4.750% 5/01/23	150,000	159,370
5.000% 3/15/24	50,000	54,867
5.250% 6/15/26	60,000	68,825
5.500% 6/15/47	80,000	103,528
Humana, Inc.		
4.500% 4/01/25	50,000	55,513
4.625% 12/01/42	70,000	85,600
4.800% 3/15/47	10,000	12,594
4.950% 10/01/44	40,000	51,128
UnitedHealth Group, Inc.		
1.250% 1/15/26	110,000	110,667
2.000% 5/15/30	100,000	100,107
3.125% 5/15/60	30,000	30,607
3.700% 8/15/49	120,000	135,980
3.875% 12/15/28	110,000	124,952
3.875% 8/15/59	210,000	245,632
4.250% 6/15/48	110,000	134,957

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MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
4.450% 12/15/48	\$ 50,000	\$ 63,258
5.800% 3/15/36	70,000	97,170
		<u>2,156,269</u>
Home Builders — 0.1%		
Lennar Corp.		
4.500% 4/30/24	100,000	108,123
4.750% 11/29/27	160,000	185,392
MDC Holdings, Inc.		
6.000% 1/15/43	20,000	25,180
NVR, Inc.		
3.950% 9/15/22	100,000	102,430
		<u>421,125</u>
Insurance — 0.9%		
Ambac Assurance Corp.		
5.100% (b) (c)	4,362	6,172
American International Group, Inc.		
6.250% 3/15/87	234,000	274,357
Athene Global Funding SOFR + .700%		
0.750% FRN 5/24/24 (b)	4,350,000	4,371,802
Berkshire Hathaway Finance Corp.		
4.250% 1/15/49	190,000	232,635
Brighthouse Financial, Inc.		
4.700% 6/22/47	13,000	14,669
Chubb INA Holdings, Inc.		
3.350% 5/03/26	120,000	130,840
Guardian Life Global Funding		
1.100% 6/23/25 (b)	120,000	120,279
MetLife Capital Trust IV		
7.875% 12/15/67 (b)	200,000	277,982
MetLife, Inc.		
6.400% 12/15/66	50,000	64,125
New York Life Global Funding		
0.950% 6/24/25 (b)	100,000	99,664
Principal Life Global Funding II		
1.250% 6/23/25 (b)	110,000	110,144
Teachers Insurance & Annuity Association of America		
4.900% 9/15/44 (b)	50,000	64,934
6.850% 12/16/39 (b)	22,000	33,067
Voya Financial, Inc.		
5.700% 7/15/43	160,000	219,767
		<u>6,020,437</u>
Internet — 0.5%		
Alphabet, Inc.		
0.450% 8/15/25	50,000	49,326
0.800% 8/15/27	90,000	87,890
1.100% 8/15/30	100,000	94,287
2.050% 8/15/50	160,000	139,338
	Principal Amount	Value
Amazon.com , Inc.	\$ 190,000	\$ 192,194
2.100% 5/12/31	60,000	56,040
2.500% 6/03/50	470,000	516,505
3.150% 8/22/27	210,000	254,199
4.050% 8/22/47	70,000	88,685
4.250% 8/22/57	180,000	242,085
4.950% 12/05/44		
Prosus NV		
3.061% 7/13/31 (b)	570,000	555,911
3.832% 2/08/51 (b)	210,000	190,709
4.027% 8/03/50 (b)	310,000	289,798
Tencent Holdings Ltd.		
3.680% 4/22/41 (b)	210,000	217,383
3.840% 4/22/51 (b)	520,000	539,425
		<u>3,513,775</u>
Investment Companies — 0.3%		
Golub Capital BDC, Inc.		

2.500% 8/24/26	2,160,000	2,172,593
Iron & Steel — 0.1%		
ArcelorMittal SA		
7.000% STEP 10/15/39	60,000	85,118
Vale Overseas Ltd.		
6.875% 11/21/36	174,000	233,403
		<u>318,521</u>
Leisure Time — 0.0%		
VOC Escrow Ltd.		
5.000% 2/15/28 ^(b)	210,000	207,207
Lodging — 1.1%		
Las Vegas Sands Corp.		
2.900% 6/25/25	100,000	100,506
3.200% 8/08/24	630,000	646,760
Marriott International, Inc. /MD		
3.500% 10/15/32	4,990,000	5,294,977
Sands China Ltd.		
3.800% 1/08/26	280,000	288,596
5.125% 8/08/25	750,000	807,570
		<u>7,138,409</u>
Machinery – Diversified — 0.1%		
Deere & Co.		
3.100% 4/15/30	60,000	65,199
3.750% 4/15/50	260,000	309,571
Otis Worldwide Corp.		
2.056% 4/05/25	140,000	144,615
		<u>519,385</u>
Media — 0.8%		
CCO Holdings LLC/CCO Holdings Capital Corp.		
4.500% 8/15/30 ^(b)	30,000	30,952

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MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
4.500% 5/01/32	\$ 830,000	\$ 853,862
Charter Communications Operating LLC		
3.500% 3/01/42 ^(d)	60,000	58,580
4.200% 3/15/28	190,000	212,056
4.800% 3/01/50	100,000	111,975
4.908% 7/23/25	270,000	303,550
5.050% 3/30/29	510,000	596,641
5.375% 4/01/38	100,000	120,488
6.484% 10/23/45	160,000	217,127
6.834% 10/23/55	60,000	88,480
Comcast Corp.		
2.800% 1/15/51	110,000	103,821
2.887% 11/01/51 ^(b)	200,000	191,227
3.150% 3/01/26	280,000	302,382
3.250% 11/01/39	30,000	31,627
3.300% 4/01/27	120,000	131,336
3.400% 4/01/30	180,000	198,111
3.400% 7/15/46	30,000	31,740
3.450% 2/01/50	60,000	63,454
3.750% 4/01/40	40,000	44,881
4.000% 3/01/48	50,000	57,132
4.150% 10/15/28	180,000	206,834
4.200% 8/15/34	160,000	187,306
4.250% 10/15/30	190,000	221,088
4.250% 1/15/33	20,000	23,499
6.500% 11/15/35	41,000	58,801
Fox Corp.		
5.476% 1/25/39	90,000	115,174
Time Warner Cable, Inc.		
6.550% 5/01/37	10,000	13,472
6.750% 6/15/39	120,000	163,965
7.300% 7/01/38	210,000	300,765
Time Warner Entertainment Co. LP		
8.375% 7/15/33	20,000	29,668
ViacomCBS, Inc.		
3.875% 4/01/24	30,000	32,007
The Walt Disney Co.		
6.200% 12/15/34	20,000	28,273
6.650% 11/15/37	120,000	178,671
		<u>5,308,945</u>
Mining — 0.4%		
Anglo American Capital PLC		
3.625% 9/11/24 ^(b)	200,000	214,624
4.750% 4/10/27 ^(b)	230,000	261,636
Barrick Gold Corp.		
5.250% 4/01/42	20,000	25,817
	Principal Amount	Value
Barrick North America Finance LLC	\$ 80,000	\$ 107,825
5.700% 5/30/41	80,000	109,972
5.750% 5/01/43		
BHP Billiton Finance USA Ltd.		
5.000% 9/30/43	100,000	132,916
Freeport-McMoRan, Inc.		
3.875% 3/15/23	10,000	10,317
4.550% 11/14/24	10,000	10,813
4.625% 8/01/30	120,000	129,750
5.450% 3/15/43	426,000	524,512
Glencore Funding LLC		
3.875% 10/27/27 ^(b)	90,000	98,109
4.000% 3/27/27 ^(b)	370,000	406,711
4.125% 5/30/23 ^(b)	130,000	137,384
4.125% 3/12/24 ^(b)	130,000	139,258
Southern Copper Corp.		
5.250% 11/08/42	450,000	559,125
Teck Resources Ltd.		
6.000% 8/15/40	20,000	25,906

		2,894,675
Miscellaneous - Manufacturing — 0.2%		
3M Co.		
2.375% 8/26/29	140,000	145,128
3.050% 4/15/30	60,000	64,781
3.700% 4/15/50	150,000	170,873
Eaton Corp.		
2.750% 11/02/22	240,000	246,186
4.150% 11/02/42	40,000	47,062
General Electric Co.		
3.450% 5/01/27	60,000	65,820
3.625% 5/01/30	130,000	144,380
6.750% 3/15/32	210,000	287,188
6.875% 1/10/39	184,000	273,692
		<u>1,445,110</u>
Oil & Gas — 4.6%		
Apache Corp.		
4.250% 1/15/44	570,000	572,850
4.750% 4/15/43	150,000	162,409
5.100% 9/01/40	120,000	134,398
6.000% 1/15/37	17,000	20,698
BP Capital Markets America, Inc.		
3.000% 2/24/50	340,000	326,244
3.119% 5/04/26	290,000	313,201
3.588% 4/14/27	200,000	220,769
3.633% 4/06/30	120,000	133,582
BP Capital Markets PLC		
3.506% 3/17/25	330,000	357,105

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MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Chevron Corp.		
1.995% 5/11/27	\$ 110,000	\$ 113,442
3.078% 5/11/50	20,000	20,648
Chevron USA, Inc.		
3.850% 1/15/28	300,000	338,543
4.950% 8/15/47	70,000	93,254
Cimarex Energy Co.		
3.900% 5/15/27	440,000	481,182
4.375% 3/15/29	220,000	248,403
ConocoPhillips		
4.300% 8/15/28 ^(b)	370,000	425,848
ConocoPhillips Co.		
6.950% 4/15/29	75,000	100,164
Devon Energy Corp.		
4.750% 5/15/42	10,000	11,350
5.000% 6/15/45	440,000	514,827
5.250% 10/15/27 ^(b)	32,000	34,011
5.600% 7/15/41	270,000	335,808
5.850% 12/15/25	120,000	138,798
5.875% 6/15/28 ^(b)	26,000	28,652
8.250% 8/01/23 ^(b)	30,000	33,575
Diamondback Energy, Inc.		
3.250% 12/01/26	10,000	10,704
3.500% 12/01/29	100,000	106,841
Ecopetrol SA		
5.875% 5/28/45	770,000	774,966
EOG Resources, Inc.		
3.900% 4/01/35	200,000	226,163
4.150% 1/15/26	70,000	78,079
4.375% 4/15/30	60,000	69,981
4.950% 4/15/50	40,000	52,837
EQT Corp.		
3.000% 10/01/22	560,000	569,856
3.900% 10/01/27	70,000	75,756
6.625% STEP 2/01/25	20,000	22,891
Exxon Mobil Corp.		
2.992% 3/19/25	440,000	469,247
3.043% 3/01/26	130,000	140,252
3.452% 4/15/51	185,000	196,882
3.482% 3/19/30	190,000	211,267
4.114% 3/01/46	310,000	362,380
4.327% 3/19/50	20,000	24,440
KazMunayGas National Co. JSC		
5.375% 4/24/30 ^(b)	200,000	235,750
Marathon Oil Corp.		
6.600% 10/01/37	4,860,000	6,442,762
Occidental Petroleum Corp.		
3.200% 8/15/26	300,000	306,282
4.100% 2/15/47	590,000	561,031

	Principal Amount	Value
4.200% 3/15/48	\$ 120,000	\$ 114,900
4.400% 4/15/46	40,000	39,832
4.625% 6/15/45	80,000	81,800
6.450% 9/15/36	240,000	301,950
6.600% 3/15/46	630,000	790,650
7.875% 9/15/31	160,000	213,323
Petrobras Global Finance BV		
5.299% 1/27/25	451,000	503,947
5.500% 6/10/51	610,000	567,635
5.999% 1/27/28	900,000	1,015,200
7.375% 1/17/27	260,000	313,702
Petroleos Mexicanos		
6.375% 1/23/45	220,000	187,024
6.625% 6/15/35	303,000	286,920
6.875% 8/04/26	160,000	174,016
7.690% 1/23/50	6,935,000	6,559,123
Pioneer Natural Resources Co.		

1.125% 1/15/26	40,000	39,476
2.150% 1/15/31	190,000	184,685
Qatar Petroleum		
3.125% 7/12/41 ^(b)	380,000	379,818
3.300% 7/12/51 ^(b)	390,000	393,900
Shell International Finance BV		
2.750% 4/06/30	160,000	169,705
2.875% 5/10/26	230,000	247,577
3.250% 4/06/50	230,000	243,737
4.000% 5/10/46	180,000	211,444
4.550% 8/12/43	100,000	125,127
Sinopec Group Overseas Development 2014 Ltd.		
4.375% 4/10/24 ^(b)	330,000	357,673
		<u>29,601,292</u>
Oil & Gas Services — 0.0%		
Halliburton Co.		
3.800% 11/15/25	5,000	5,474
4.850% 11/15/35	20,000	23,555
5.000% 11/15/45	110,000	131,528
Schlumberger Holdings Corp.		
3.900% 5/17/28 ^(b)	31,000	34,146
		<u>194,703</u>
Packaging & Containers — 0.0%		
Ball Corp.		
3.125% 9/15/31	100,000	98,758
WestRock RKT LLC		
4.000% 3/01/23	30,000	31,176
		<u>129,934</u>

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Pharmaceuticals — 1.6%		
AbbVie, Inc.		
2.600% 11/21/24	\$ 740,000	\$ 777,792
2.950% 11/21/26	260,000	278,447
3.200% 11/21/29	670,000	721,868
3.600% 5/14/25	130,000	140,593
3.800% 3/15/25	180,000	195,460
4.250% 11/21/49	20,000	23,724
4.550% 3/15/35	90,000	107,735
Becton Dickinson and Co.		
3.363% 6/06/24	82,000	87,177
4.685% 12/15/44	20,000	24,868
Bristol-Myers Squibb Co.		
2.900% 7/26/24	366,000	388,493
3.200% 6/15/26	310,000	338,110
3.400% 7/26/29	150,000	165,790
3.875% 8/15/25	38,000	41,894
5.000% 8/15/45	146,000	195,788
Cigna Corp.		
3.750% 7/15/23	161,000	170,167
4.125% 11/15/25	100,000	111,068
4.375% 10/15/28	740,000	854,449
CVS Health Corp.		
2.125% 9/15/31	210,000	206,061
3.750% 4/01/30	150,000	166,478
4.125% 4/01/40	120,000	137,258
4.250% 4/01/50	30,000	35,398
4.300% 3/25/28	578,000	657,396
5.050% 3/25/48	100,000	128,826
5.125% 7/20/45	100,000	128,613
CVS Pass-Through Trust		
5.298% 1/11/27 ^(b)	5,634	6,153
5.880% 1/10/28	68,469	79,260
6.036% 12/10/28	61,985	72,323
6.943% 1/10/30	56,041	67,773
GlaxoSmithKline Capital PLC		
2.850% 5/08/22	10,000	10,154
Johnson & Johnson		
0.550% 9/01/25	120,000	118,492
0.950% 9/01/27	250,000	244,946
3.625% 3/03/37	410,000	470,668
Merck & Co., Inc.		
0.750% 2/24/26	200,000	197,304
1.450% 6/24/30	120,000	115,905
Pfizer, Inc.		
0.800% 5/28/25	270,000	268,914
1.700% 5/28/30	280,000	276,259
Teva Pharmaceutical Finance Co. BV		
2.950% 12/18/22	110,000	110,825
3.650% 11/10/21	\$ 50,000	\$ 50,062
Teva Pharmaceutical Finance Netherlands III BV		
2.800% 7/21/23	420,000	417,497
3.150% 10/01/26	900,000	862,875
6.000% 4/15/24	350,000	368,375
7.125% 1/31/25	390,000	426,562
		<u>10,247,800</u>
Pipelines — 1.2%		
Cameron LNG LLC		
2.902% 7/15/31 ^(b)	40,000	42,362
3.302% 1/15/35 ^(b)	260,000	277,299
Cheniere Energy Partners LP		
3.250% 1/31/32 ^(b)	170,000	170,561
El Paso Natural Gas Co. LLC		
8.375% 6/15/32	289,000	422,852
Energy Transfer LP		
2.900% 5/15/25	170,000	178,134

3.750% 5/15/30	500,000	539,740
4.950% 6/15/28	50,000	57,323
5.250% 4/15/29	80,000	93,693
5.300% 4/01/44	20,000	23,128
6.250% 4/15/49	260,000	340,956
5 year CMT + 5.134% 6.750% VRN ^(c)	120,000	122,550
Enterprise Products Operating LLC		
3.700% 1/31/51	10,000	10,552
4.150% 10/16/28	1,040,000	1,183,093
5.700% 2/15/42	40,000	52,890
Kinder Morgan Energy Partners LP		
5.500% 3/01/44	30,000	37,375
Kinder Morgan, Inc.		
4.300% 3/01/28	140,000	158,565
5.200% 3/01/48	20,000	24,912
MPLX LP		
4.500% 4/15/38	70,000	78,668
4.700% 4/15/48	270,000	311,453
4.800% 2/15/29	190,000	220,250
4.875% 12/01/24	90,000	99,674
5.500% 2/15/49	100,000	126,492
Southern Natural Gas Co. LLC		
8.000% 3/01/32	148,000	209,152
Tennessee Gas Pipeline Co. LLC		
2.900% 3/01/30 ^(b)	170,000	175,624
Transcontinental Gas Pipe Line Co. LLC		
7.850% 2/01/26	60,000	74,782

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Western Midstream Operating LP		
3 mo. USD LIBOR + 2.100% 2.229% FRN 1/13/23	\$ 90,000	\$ 90,000
4.350% STEP 2/01/25	240,000	253,251
5.300% STEP 2/01/30	900,000	994,500
5.500% 8/15/48	20,000	23,400
6.500% STEP 2/01/50	230,000	270,658
The Williams Cos., Inc.		
3.750% 6/15/27	170,000	187,105
7.500% 1/15/31	200,000	277,856
7.750% 6/15/31	350,000	486,563
		<u>7,615,413</u>
Real Estate Investment Trusts (REITS) — 0.1%		
GLP Capital LP/GLP Financing II, Inc.		
5.250% 6/01/25	10,000	11,151
5.375% 4/15/26	40,000	45,478
WEA Finance LLC/Westfield UK & Europe Finance PLC		
3.750% 9/17/24 ^(b)	220,000	233,988
4.750% 9/17/44 ^(b)	250,000	271,537
		<u>562,154</u>
Retail — 0.4%		
Costco Wholesale Corp.		
1.375% 6/20/27	310,000	311,964
1.600% 4/20/30	110,000	107,372
Dollar General Corp.		
3.250% 4/15/23	30,000	31,104
The Home Depot, Inc.		
2.700% 4/15/30	200,000	211,395
3.300% 4/15/40	120,000	129,754
3.350% 4/15/50	220,000	237,559
3.900% 12/06/28	30,000	34,295
3.900% 6/15/47	40,000	46,960
Lowe's Cos., Inc.		
4.500% 4/15/30	130,000	152,243
McDonald's Corp.		
3.300% 7/01/25	210,000	226,053
3.500% 7/01/27	180,000	198,763
3.600% 7/01/30	190,000	211,104
3.625% 9/01/49	40,000	43,510
3.800% 4/01/28	110,000	122,841
4.200% 4/01/50	140,000	166,504
Target Corp.		
2.250% 4/15/25	290,000	302,410
Walmart, Inc.		
1.500% 9/22/28	80,000	79,625
1.800% 9/22/31	40,000	39,563
		<u>2,653,019</u>
	Principal Amount	Value
Semiconductors — 0.4%		
Broadcom, Inc.		
3.137% 11/15/35	\$ 750,000	\$ 746,468
Intel Corp.		
1.600% 8/12/28	190,000	189,144
3.050% 8/12/51	90,000	89,772
3.700% 7/29/25	40,000	43,765
4.750% 3/25/50	160,000	208,766
Micron Technology, Inc.		
2.497% 4/24/23	170,000	174,978
NVIDIA Corp.		
2.850% 4/01/30	90,000	96,345
3.500% 4/01/40	240,000	265,617
3.500% 4/01/50	170,000	189,997
3.700% 4/01/60	170,000	197,354
NXP BV / NXP Funding LLC / NXP USA, Inc.		
2.700% 5/01/25 ^(b)	120,000	125,298
Texas Instruments, Inc.		
1.750% 5/04/30	110,000	108,841
		<u>2,436,345</u>

Software — 0.4%

Microsoft Corp.

2.400% 8/08/26	600,000	637,094
2.525% 6/01/50	133,000	127,971
2.675% 6/01/60	17,000	16,397
2.921% 3/17/52	107,000	110,976
3.041% 3/17/62	83,000	87,327
3.300% 2/06/27	290,000	320,602

Oracle Corp.

1.650% 3/25/26	450,000	456,386
2.875% 3/25/31	490,000	504,625

[salesforce.com](https://www.salesforce.com), Inc.

3.250% 4/11/23	160,000	166,827
3.700% 4/11/28	50,000	56,221
		<u>2,484,426</u>

Telecommunications — 1.2%

AT&T, Inc.

1.650% 2/01/28	280,000	277,520
2.300% 6/01/27	540,000	558,603
2.550% 12/01/33	80,000	78,592
3.100% 2/01/43	240,000	229,578
3.550% 9/15/55	153,000	150,432
4.350% 6/15/45	101,000	114,045

Sprint Spectrum Co. LLC

4.738% 9/20/29 ^(b)	192,500	205,590
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The accompanying notes are an integral part of the financial statements.

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
T-Mobile USA, Inc.		
2.050% 2/15/28	\$ 70,000	\$ 70,585
2.250% 2/15/26	70,000	70,788
2.250% 11/15/31	70,000	68,556
2.550% 2/15/31	200,000	200,488
2.625% 2/15/29	230,000	232,806
2.875% 2/15/31	170,000	171,445
3.000% 2/15/41	60,000	57,928
3.300% 2/15/51	20,000	19,289
3.500% 4/15/25	350,000	376,936
3.500% 4/15/31	240,000	253,112
3.500% 4/15/31 ^(b)	210,000	221,473
3.750% 4/15/27	50,000	55,058
Telefonica Emisiones SA		
5.213% 3/08/47	150,000	186,818
Verizon Communications, Inc.		
1.750% 1/20/31	280,000	265,824
2.550% 3/21/31	800,000	809,711
2.650% 11/20/40	440,000	412,511
2.875% 11/20/50	530,000	492,986
3.850% 11/01/42	40,000	43,921
3.875% 2/08/29	130,000	145,679
4.000% 3/22/50	120,000	135,861
4.125% 8/15/46	180,000	206,223
4.329% 9/21/28	820,000	941,816
4.400% 11/01/34	270,000	319,314
5.250% 3/16/37	170,000	219,380
5.500% 3/16/47	30,000	41,409
Vodafone Group PLC		
4.375% 5/30/28	70,000	80,329
		<u>7,714,606</u>
Transportation — 0.2%		
Union Pacific Corp.		
2.150% 2/05/27	50,000	51,768
2.891% 4/06/36 ^(b)	370,000	383,553
3.750% 7/15/25	190,000	208,103
3.750% 2/05/70	150,000	168,072
3.839% 3/20/60	180,000	205,848
		<u>1,017,344</u>
TOTAL CORPORATE DEBT (Cost \$193,625,831)		<u>203,953,252</u>
MUNICIPAL OBLIGATIONS — 0.0%		
Northeast Ohio Regional Sewer District, Revenue Bond		
5.000% 11/15/43	50,000	53,865
State of California		
General Obligation, 5.000% 4/01/42	70,000	71,599
General Obligation, 5.000% 11/01/43	\$ 50,000	\$ 54,529
TOTAL MUNICIPAL OBLIGATIONS (Cost \$173,256)		<u>179,993</u>
NON-U.S. GOVERNMENT AGENCY OBLIGATIONS — 9.4%		
Auto Floor Plan Asset-Backed Securities — 0.2%		
Ford Credit Floorplan Master, Series 2018-4, Class A		
4.060% 11/15/30	1,100,000	1,247,525
Automobile Asset-Backed Securities — 0.4%		
Hertz Vehicle Financing III LP, Series 2021-2A, Class C		
2.520% 12/27/27 ^(b)	2,500,000	2,531,985
Commercial Mortgage-Backed Securities — 3.8%		
Banc of America Merrill Lynch Trust, Series 2016-GG10, Class AJA,		
5.968% VRN 8/10/45 ^{(b) (e)}	708,576	289,134
BANK, Series 2017-BNK4, Class XA,		
1.545% VRN 5/15/50 ^(e)	3,599,207	200,201
Benchmark Mortgage Trust, Series 2021-B29, Class XA,		
1.050% VRN 9/15/54 ^{(b) (e)}	2,520,000	195,205

BX Trust, Series 2018-IND, Class G, 1 mo. USD LIBOR + 2.050% 2.134% FRN 11/15/35 ^(b)	357,000	357,000
Citigroup Commercial Mortgage Trust, Series 2014-GC23, Class B, 4.175% VRN 7/10/47 ^(e)	350,000	375,455
Credit Suisse Mortgage Trust Series 2014-USA, Class A2, 3.953% 9/15/37 ^(b)	190,000	203,851
Series 2019-RIO Class A, 1 mo. USD LIBOR + 3.024% 4.024% FRN 12/15/21 ^(b)	2,500,000	2,450,844
Series 2014-USA, Class E, 4.373% 9/15/37 ^(b)	140,000	125,902
Series 2014-USA, Class F, 4.373% 9/15/37 ^(b)	2,440,000	1,929,681
Series 2017-CHOP, Class G, 1 mo. USD LIBOR + 5.600% 5.684% FRN 7/15/32 ^(b)	1,700,000	1,471,020
Grace Trust, Series 2020-GRCE, Class D, 2.769% VRN 12/10/40 ^{(b) (e)}	4,500,000	4,353,160
GS Mortgage Securities Trust Series 2014-2R, Class 3B 0.702% 11/26/37 ^(b)	1,220,000	1,065,884

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Series 2021-ROSS, Class A, 1 mo. USD LIBOR + 1.150% 1.234% FRN 5/15/26 ^(b)	\$ 370,000	\$ 370,039
Series 2018-SRP5, Class A, 1 mo. USD LIBOR + 1.550% 1.634% FRN 9/15/31 ^(b)	1,350,000	1,272,008
JPMBB Commercial Mortgage Securities Trust		
Series 2014-C19, Class XA, 0.814% VRN 4/15/47 ^(e)	1,076,102	13,407
Series 2015-C31, Class B, 4.773% VRN 8/15/48 ^(e)	160,000	175,018
Series 2013-C17, Class B, 5.049% VRN 1/15/47 ^(e)	30,000	32,055
JPMDB Commercial Mortgage Securities Trust, Series 2017-C7, Class XA, 0.992% VRN 10/15/50 ^(e)	7,547,463	310,875
ML-CFC Commercial Mortgage Trust, Series 2007-9, Class AJ, 6.193% VRN 9/12/49 ^(e)	5,016	4,787
Morgan Stanley Capital I Trust		
Series 2019-L2, Class B, 4.494% VRN 3/15/52 ^(e)	850,000	962,325
Series 2006-IQ12, Class AJ, 5.399% 12/15/43	11,634	7,562
Series 2007-IQ13, Class AJ, 5.438% 3/15/44	818	815
PFP Ltd., Series 2021-8, Class A, 1 mo. USD LIBOR + 1.000% 1.100% FRN 8/09/37 ^(b)	790,000	790,000
Shops at Crystals Trust, Series 2016-CSTL, Class A 3.126% 7/05/36 ^(b)	320,000	334,000
UBS Commercial Mortgage Trust, Series 2017-C1, Class A4 3.460% 6/15/50	170,000	184,470
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 ^{(b) (e)}	80,172	80,886
Wells Fargo Commercial Mortgage Trust		
Series 2019-C52, Class XA, 1.741% VRN 8/15/52 ^(e)	5,706,288	557,728
Series 2016-BNK1, Class B, 2.967% 8/15/49	780,000	802,747
Series 2013-LC12, Class B, 4.443% VRN 7/15/46 ^(e)	140,000	139,974
WFRBS Commercial Mortgage Trust Series 2014-C24, Class B, 4.204% VRN 11/15/47 ^(e)	190,000	190,768
Series 2014-C24, Class C, 4.290% VRN 11/15/47 ^(e)	\$ 190,000	\$ 172,567
Series 2014-LC14, Class D, 4.586% VRN 3/15/47 ^{(b) (e)}	5,000,000	5,094,652
		24,514,020
Home Equity Asset-Backed Securities — 0.5%		
Accredited Mortgage Loan Trust, Series 2006-2, Class M1, 1 mo. USD LIBOR + .270% 0.356% FRN 9/25/36	420,000	398,023
Asset Backed Securities Corp. Home Equity Loan Trust, Series 2003-HE6, Class A3B, 1 mo. USD LIBOR + .960% 1.046% FRN 11/25/33	1,249,236	1,125,990
GSAA Home Equity Trust, Series 2006-5, Class 2A3, 1 mo. USD LIBOR + .540% 0.626% FRN 3/25/36	358,240	215,186
RBSSP Resecuritization Trust, Series 2010-4, Class 6A2, 5.825% STEP 2/26/36 ^(b)	1,028,244	1,036,651
		2,775,850
Manufactured Housing Asset-Backed Securities — 0.1%		
Conseco Finance Corp., Series 1996-4, Class M1, 7.750% VRN 6/15/27 ^(e)	691,825	726,450
Other Asset-Backed Securities — 2.5%		
Arbor Realty Commercial Real Estate Notes Ltd., Series 2021-FL3, Class A, 1 mo. USD LIBOR + 1.070% 1.155% FRN 8/15/34 ^(b)	790,000	790,002
Dividend Solar Loans LLC, Series 2019-1, Class A 3.670% 8/22/39 ^(b)	942,481	997,897
First Franklin Mortgage Loan Trust, Series 2006-FF15, Class A2, 1 mo. USD LIBOR + .120% 0.206% FRN 11/25/36	356,111	338,872
HGI CRE CLO Ltd., Series 2021-FL2, Class A, 1 mo. USD LIBOR + 1.000% 1.100% FRN 9/19/26 ^(b)	790,000	790,003
InStar Leasing III LLC, Series 2021-1A, Class A 2.300% 2/15/54 ^(b)	610,229	608,293
ITE Rail Fund Levered LP, Series 2021-1A, Class A 2.250% 2/28/51 ^(b)	757,590	760,850

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Legacy Mortgage Asset Trust		
Series 2019-GS5, Class A1, 3.200% STEP 5/25/59 ^(b)	\$ 1,251,790	\$ 1,254,833
Series 2019-GS1, Class A1, 4.000% STEP 1/25/59 ^(b)	778,939	779,393
Magnolia Finance XI DAC, Series 2019-IOTF, Class A1, 3 mo. USD LIBOR + 2.900% 3.029% FRN 8/09/24 ^(b)	965,000	933,223
PFCA Home Equity Investment Trust, Series 2003-IFC6, Class A, 4.656% VRN 4/22/35 ^{(b) (e)}	543,790	540,745
Popular ABS Mortgage Pass-Through Trust, Series 2005-2, Class M2 (ABS), 6.217% STEP 4/25/35	1,516,935	1,246,590
Saxon Asset Securities Trust, Series 2006-3, Class A4, 1 mo. USD LIBOR + .240% 0.326% FRN 10/25/46	440,000	393,863
SBA Small Business Investment Cos.		
Series 2019-25G, Class 1, 2.690% 7/01/44	237,113	251,622
Series 2019-20D, Class 1, 2.980% 4/01/39	169,186	181,166
Series 2019-10A, Class 1, 3.113% 3/10/29	419,430	440,076
Series 2018-10B, Class 1, 3.548% 9/10/28	286,293	306,286
Structured Asset Investment Loan Trust, Series 2004-8, Class A9, 1 mo. USD LIBOR + 1.000% 1.086% FRN 9/25/34	935,525	913,566
Taco Bell Funding LLC, Series 2021-1A, Class A23 2.542% 8/25/51 ^(b)	4,000,000	4,002,994
Towd Point Mortgage Trust, Series 2017-4, Class B2, 3.427% VRN 6/25/57 ^{(b) (e)}	740,000	785,219
		<u>16,315,493</u>
Student Loans Asset-Backed Securities — 0.2%		
College Ave Student Loans LLC, Series 2019-A, Class A2 3.280% 12/28/48 ^(b)	314,776	323,416
SLM Student Loan Trust, Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.316% FRN 12/15/33 ^(b)	395,358	396,490
SMB Private Education Loan Trust, Series 2021-A, Class B 2.310% 1/15/53 ^(b)	600,000	609,351
		<u>1,329,257</u>
	Principal Amount	Value
Whole Loan Collateral Collateralized Mortgage Obligations — 1.7%		
Bear Stearns Asset -Backed Securities I Trust, Series 2005-AC8, Class A3, 1 mo. USD LIBOR + 7.650% 7.564% FRN 11/25/35	\$ 696,586	\$ 212,252
Citigroup Mortgage Loan Trust, Series 2007-6, Class 2A4, 1 mo. USD LIBOR + .350% 0.436% FRN 5/25/37	1,669,213	717,301
Credit Suisse Mortgage Trust		
Series 2015-4R, Class 3A3, 1 mo. USD LIBOR + .310% 0.704% FRN 10/27/36 ^(b)	773,932	389,308
Series 2021-2R, Class 1A1, 1 mo. USD LIBOR + 1.750% 1.833% FRN 7/25/47 ^(b)	849,171	855,641
Series 2015-2R, Class 7A2, 2.324% VRN 8/27/36 ^{(b) (e)}	2,268,120	1,976,735
Flagstar Mortgage Trust, Series 2018-2, Class A4, 3.500% VRN 4/25/48 ^{(b) (e)}	94,811	95,295
GSR Mortgage Loan Trust, Series 2005-AR5, Class 2A3, 2.626% VRN 10/25/35 ^(e)	52,170	36,515
HarborView Mortgage Loan Trust, Series 2006-2, Class 1A, 2.623% VRN 2/25/36 ^(e)	27,508	12,326
JP Morgan Mortgage Trust		
Series 2018-3, Class A1, 3.500% VRN 9/25/48 ^{(b) (e)}	422,432	428,618
Series 2018-4, Class A1, 3.500% VRN 10/25/48 ^{(b) (e)}	177,691	180,540
Series 2018-5, Class A1, 3.500% VRN 10/25/48 ^{(b) (e)}	232,464	236,651
Morgan Stanley Resecuritization Trust, Series 2015-R3, Class 7A2, 12 mo. MTA + .770% 0.869% FRN 4/26/47 ^(b)	300,000	293,739
MRA Issuance Trust, Series 2021-EB01, Class A1X, 1 mo. USD LIBOR + 1.750% 1.834% FRN 2/16/22 ^(b)	1,110,000	1,109,577
New Residential Mortgage Loan Trust		
Series 2018-RPL1, Class M2, 3.500% VRN 12/25/57 ^{(b) (e)}	730,000	783,421
Series 2017-4A, Class A1, 4.000% VRN 5/25/57 ^{(b) (e)}	324,250	344,844

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Prime Mortgage Trust		
Series 2006-DR1, Class 1A1, 5.500% 5/25/35 ^(b)	\$ 7,888	\$ 7,573
Series 2006-DR1, Class 2A2, 6.000% 5/25/35 ^(b)	582,333	519,386
RBSP Resecuritization Trust, Series 2013-4, Class 1A2, 1 mo. USD LIBOR + 1.500%		
1.648% FRN 12/26/37 ^(b)	2,069,616	1,968,307
Structured Adjustable Rate Mortgage Loan Trust, Series 2006-7, Class 1A1,		
2.809% VRN 8/25/36 ^(c)	183,795	141,106
Structured Asset Mortgage Investments, Inc., Series 2005-AR7, Class 4A1, 12 mo. MTA + 2.150%		
2.242% FRN 3/25/46	190,167	185,640
Washington Mutual Mortgage Pass-Through Certificates, Series 2006-AR3, Class A1B, 12 mo. MTA + 1.000%		
1.092% FRN 2/25/46	589,846	568,778
		<u>11,063,553</u>
Whole Loan Collateral Planned Amortization Classes — 0.0%		
Alternative Loan Trust, Series 2006-18CB, Class A6, 1 mo. USD LIBOR + 28.600%		
28.256% FRN 7/25/36	45,828	<u>62,387</u>
TOTAL NON-U.S. GOVERNMENT AGENCY OBLIGATIONS (Cost \$60,255,053)		<u>60,566,520</u>
SOVEREIGN DEBT OBLIGATIONS — 5.2%		
Abu Dhabi Government International Bond		
3.125% 9/30/49 ^(b)	1,530,000	1,535,318
Argentine Republic Government International Bond		
1.125% STEP 7/09/35	1,927,319	626,398
2.500% STEP 7/09/41	110,000	40,401
Brazil Notas do Tesouro Nacional Serie F		
10.000% 1/01/23 BRL ^(f)	5,801,000	1,072,787
10.000% 1/01/25 BRL ^(f)	7,440,000	1,360,472
10.000% 1/01/27 BRL ^(f)	1,935,000	347,595
Brazilian Government International Bond		
4.625% 1/13/28	420,000	441,815
5.000% 1/27/45	510,000	475,228
5.625% 1/07/41	900,000	910,827
	Principal Amount	Value
Colombia Government International Bond		
3.250% 4/22/32	\$ 430,000	\$ 400,493
4.125% 2/22/42	440,000	394,777
Egypt Government International Bond		
5.577% 2/21/23 ^(b)	370,000	380,593
Indonesia Government International Bond		
3.500% 1/11/28	400,000	433,630
5.125% 1/15/45	1,360,000	1,643,035
6.500% 2/15/31 IDR ^(f)	58,983,000,000	4,164,354
Kuwait Government International Bond		
3.500% 3/20/27 ^(b)	320,000	354,000
Mexican Bonos		
7.750% 11/13/42 MXN ^(f)	34,785,600	1,665,796
8.000% 11/07/47 MXN ^(f)	76,980,000	3,754,777
8.500% 5/31/29 MXN ^(f)	60,540,000	3,136,999
Mexico Government International Bond		
4.750% 3/08/44	630,000	671,542
Nigeria Government International Bond		
7.143% 2/23/30 ^(b)	210,000	213,938
Panama Government International Bond		
4.500% 4/01/56	350,000	379,173
Peruvian Government International Bond		
6.550% 3/14/37	460,000	620,158
Provincia de Buenos Aires/Government Bonds,		
3.900% STEP 9/01/37 ^(b)	540,019	240,308
Qatar Government International Bond		
4.000% 3/14/29 ^(b)	380,000	431,775
4.817% 3/14/49 ^(b)	640,000	822,157
Republic of Kenya Government International Bond		
6.300% 1/23/34 ^(b)	370,000	364,927
Republic of Poland Government International Bond		

4.000% 1/22/24	540,000	582,216
Russian Federal Bond— OFZ		
6.900% 5/23/29 RUB ^(f)	269,798,000	3,652,533
7.250% 5/10/34 RUB ^(f)	60,500,000	823,689
7.700% 3/16/39 RUB ^(f)	86,260,000	1,224,127
7.750% 9/16/26 RUB ^(f)	8,260,000	116,337

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
State of Israel		
2.750% 7/03/30	\$ 310,000	\$ 329,465
		33,611,640
TOTAL SOVEREIGN DEBT OBLIGATIONS (Cost \$36,872,424)		33,611,640
U.S. GOVERNMENT AGENCY OBLIGATIONS AND INSTRUMENTALITIES ^(g) — 12.4%		
Collateralized Mortgage Obligations — 1.7%		
Federal Home Loan Mortgage Corp.		
Series 3422, Class AI, 0.250% STEP 1/15/38	9,309	71
Series 5018, Class MI, 2.000% 10/25/50	377,995	50,614
Series 5010, Class IK, 2.500% 9/25/50	248,812	34,867
Series 5010, Class JI, 2.500% 9/25/50	552,970	86,819
Series 5013, Class IN, 2.500% 9/25/50	285,416	47,198
Series 5040, Class IB, 2.500% 11/25/50	182,162	25,804
Series 5059, Class IB, 2.500% 1/25/51	768,706	125,364
Series 5069, Class MI, 2.500% 2/25/51	93,856	13,718
Series 4793, Class CB, 3.000% 5/15/48	316,096	331,218
Series 4793, Class CD, 3.000% 6/15/48	201,026	210,649
Series 4813, Class CJ, 3.000% 8/15/48	153,195	159,274
Series 353, Class S1, 1 mo. USD LIBOR + 6.000% 5.916% FRN 12/15/46	286,591	53,994
Series R007, Class ZA, 6.000% 5/15/36	74,744	86,794
Series 334, Class S7, 1 mo. USD LIBOR + 6.100% 6.016% FRN 8/15/44	121,978	24,010
Series 3621, Class SB, 1 mo. USD LIBOR + 6.230% 6.146% FRN 1/15/40	26,959	5,278
Series 4203, Class PS, 1 mo. USD LIBOR + 6.250% 6.166% FRN 9/15/42	118,674	17,144
Series 3973, Class SA, 1 mo. USD LIBOR + 6.490% 6.406% FRN 12/15/41	176,904	37,116
	Principal Amount	Value
Federal Home Loan Mortgage Corp. Multifamily Structured Pass-Through Certificates		
Series 2012-K20, Class X2A, 0.200% 5/25/45 ^(b)	\$ 2,896,220	\$ 1,958
Series K741, Class X1, 0.657% VRN 12/25/27 ^(e)	2,999,240	95,975
Series K094, Class X1, 1.015% VRN 6/25/29 ^(e)	997,698	60,078
Series K743, Class X1, 1.028% VRN 5/25/28 ^(e)	4,000,000	224,280
Series KC05, Class X1, 1.340% VRN 6/25/27 ^(e)	1,573,380	67,925
Series K736, Class X1, 1.437% VRN 7/25/26 ^(e)	2,186,695	112,921
Series K110, Class X1, 1.814% VRN 4/25/30 ^(e)	1,297,682	159,647
Series 2019-KF58, Class B, 1 mo. USD LIBOR + 2.150% 2.233% FRN 1/25/26 ^(b)	827,547	833,929
Federal National Mortgage Association		
Series 2006-118, Class IP1, 0.149% FRN 12/25/36 ^(e)	66,506	3,948
Series 2006-118, Class IP2, 0.149% FRN 12/25/36 ^(e)	49,509	3,413
Series 2005-88, Class IP, 1.604% FRN 10/25/35 ^(e)	25,931	1,234
Series 2006-88, Class IP, 1.857% 3/25/36	36,519	1,896
Series 2020-47, Class GZ, 2.000% 7/25/50	307,588	285,747
Series 2020-97, Class AI, 2.000% 1/25/51	194,175	25,859
Series 2020-56, Class DI, 2.500% 8/25/50	451,895	72,324
Series 2020-57, Class NI, 2.500% 8/25/50	373,828	56,990
Series 2020-74, Class EI, 2.500% 10/25/50	179,102	29,130
Series 2020-89, Class DI, 2.500% 12/25/50	1,265,355	176,772
Series 2021-3, Class QI, 2.500% 2/25/51	855,982	116,696
Series 2021-3, Class IB, 2.500% 2/25/51	290,916	48,962
Series 2006-59, Class IP, 2.550% FRN 7/25/36 ^(e)	75,246	5,956
Series 409, Class C2, 3.000% 4/25/27	64,001	3,398
Series 409, Class C13, 3.500% 11/25/41	69,659	8,711
Series 409, Class C18, 4.000% 4/25/42	79,682	12,334

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Series 409, Class C22, 4.500% 11/25/39	\$ 53,714	\$ 8,447
Series 2011-59, Class NZ, 5.500% 7/25/41	338,590	378,895
Series 2013-9, Class CB, 5.500% 4/25/42	280,692	316,948
Series 2013-124, Class SB, 1 mo. USD LIBOR + 5.950% 5.864% FRN 12/25/43	293,952	53,545
Series 2012-46, Class BA, 6.000% 5/25/42	70,532	80,984
Series 2016-61, Class BS, 1 mo. USD LIBOR + 6.100% 6.014% FRN 9/25/46	100,846	18,038
Series 2017-76, Class SB, 1 mo. USD LIBOR + 6.100% 6.014% FRN 10/25/57	596,048	127,297
Series 2012-134, Class SK, 1 mo. USD LIBOR + 6.150% 6.064% FRN 12/25/42	169,514	35,707
Series 2012-133, Class CS, 1 mo. USD LIBOR + 6.150% 6.064% FRN 12/25/42	87,850	17,544
Series 2013-54, Class BS, 1 mo. USD LIBOR + 6.150% 6.064% FRN 6/25/43	229,736	45,747
Series 2017-85, Class SC, 1 mo. USD LIBOR + 6.200% 6.114% FRN 11/25/47	175,518	33,377
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.414% FRN 4/25/42	79,531	15,509
Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.464% FRN 4/25/40	102,565	8,313
Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.464% FRN 10/25/41	175,794	33,254
Series 2012-28, Class B, 6.500% 6/25/39	9,157	9,885
Series 2013-9, Class BC, 6.500% 7/25/42	83,022	96,009
Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.564% FRN 3/25/42	44,312	7,895
Series 2012-51, Class B, 7.000% 5/25/42	60,915	72,883
Federal National Mortgage Association ACES		
Series 2020-M36, Class X1, 1.560% VRN 9/25/34 ^(e)	1,291,500	128,089
Series 2019-M28, Class AV, 2.232% 2/25/27	112,897	117,681
	Principal Amount	Value
Series 2020-M6, Class A, 2.500% 10/25/37	\$ 93,158	\$ 98,210
Series 2019-M19, Class A2, 2.560% 9/25/29	489,655	519,720
Series 2017-M8, Class A2, 3.061% VRN 5/25/27 ^(e)	100,000	108,427
Series 2019-M5, Class A2, 3.273% 2/25/29	270,000	299,551
Series 2019-M4, Class A2, 3.610% 2/25/31	130,000	150,091
Federal National Mortgage Association Grantor Trust Series 2017-T1, Class A 2.898% 6/25/27	99,550	107,310
Government National Mortgage Association		
Series 2012-144, Class IO, 0.355% VRN 1/16/53 ^(e)	2,536,515	41,570
Series 2018-H07, Class FD, 1 mo. USD LIBOR + .300% 0.390% FRN 5/20/68	365,038	365,739
Series 2010-H28, Class FE, 1 mo. USD LIBOR + .400% 0.490% FRN 12/20/60	104,206	104,745
Series 2014-H20, Class FA, 1 mo. USD LIBOR + .430% 0.520% FRN 10/20/64	1,103,078	1,109,821
Series 2020-H13, Class FA, 1 mo. USD LIBOR + .450% 0.537% FRN 7/20/70	177,399	178,832
Series 2020-H13, Class FC, 1 mo. USD LIBOR + .450% 0.537% FRN 7/20/70	76,495	77,115
Series 2012-135, Class IO, 0.538% VRN 1/16/53 ^(e)	3,334,131	75,390
Series 2014-186, Class IO, 0.550% VRN 8/16/54 ^(e)	846,792	17,811
Series 2011-H08, Class FG, 1 mo. USD LIBOR + .480% 0.570% FRN 3/20/61	82,840	83,595
Series 2011-H09, Class AF, 1 mo. USD LIBOR + .500% 0.590% FRN 3/20/61	61,621	62,130
Series 2017-41, Class IO, 0.672% VRN 7/16/58 ^(e)	1,231,452	53,804
Series 2021-60, Class IO, 0.836% VRN 5/16/63 ^(e)	2,479,275	194,110
Series 2020-H09, Class FL, 1 mo. USD LIBOR + 1.150% 1.237% FRN 5/20/70	531,565	563,989
Series 2020-H09, Class NF, 1 mo. USD LIBOR + 1.250% 1.337% FRN 4/20/70	156,420	163,328

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MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Series 2014-22, Class IA, 1.370% FRN 11/20/42 ^(e)	\$ 24,163	\$ 771
Series 2017-H18, Class BI, 1.508% VRN 9/20/67 ^(e)	3,663,345	245,177
Series 2012-H27, Class AI, 1.744% VRN 10/20/62 ^(e)	458,479	21,760
Series 2020-181, Class WI, 2.000% 12/20/50	1,512,413	166,135
Series 2017-H20, Class IB, 2.028% VRN 10/20/67 ^(e)	75,627	6,451
Series 2017-H15, Class KI, 2.201% VRN 7/20/67 ^(e)	149,289	14,910
Series 2020-123, Class NI, 2.500% 8/20/50	471,180	63,757
Series 2020-123, Class IL, 2.500% 8/20/50	190,938	26,027
Series 2020-127, Class IN, 2.500% 8/20/50	187,946	25,330
Series 2020-129, Class IE, 2.500% 9/20/50	190,767	26,144
Series 2020-160, Class IH, 2.500% 10/20/50	192,930	26,913
Series 2020-160, Class YI, 2.500% 10/20/50	760,963	106,490
Series 2020-160, Class VI, 2.500% 10/20/50	286,985	40,382
Series 2013-107, Class AD, 2.768% VRN 11/16/47 ^(e)	220,183	228,993
Series 2019-123, Class A, 3.000% 10/20/49	12,679	12,632
Series 2012-66, Class CI, 3.500% 2/20/38	13,657	75
Series 2013-53, Class OI, 3.500% 4/20/43	470,214	49,210
Series 2020-47, Class MI, 3.500% 4/20/50	359,129	54,516
Series 2020-47, Class NI, 3.500% 4/20/50	89,602	14,901
Series 2014-176, Class IA, 4.000% 11/20/44	50,741	7,299
Series 2015-167, Class OI, 4.000% 4/16/45	62,483	10,256
Series 2016-84, Class IG, 4.500% 11/16/45	278,922	51,793
Series 2014-117, Class SJ, 1 mo. USD LIBOR + 5.600% 5.513% FRN 8/20/44	77,312	13,739
Series 2016-135, Class SB, 1 mo. USD LIBOR + 6.100% 6.015% FRN 10/16/46	115,690	30,396
Series 2016-21, Class ST, 1 mo. USD LIBOR + 6.150% 6.063% FRN 2/20/46	78,277	17,233

	Principal Amount	Value
Series 2010-85, Class HS, 1 mo. USD LIBOR + 6.650% 6.563% FRN 1/20/40	\$ 12,920	\$ 728
		10,963,368

Pass-Through Securities — 10.0%

Federal Home Loan Mortgage Corp.

Pool #RB5125 2.000% 9/01/41	995,812	1,017,514
Pool #RA3882 2.000% 11/01/50	374,474	376,111
Pool #QB8602 2.000% 2/01/51	97,080	97,962
Pool #QB8604 2.000% 2/01/51	94,778	95,525
Pool #QB8773 2.000% 2/01/51	96,203	96,961
Pool #QB9087 2.000% 2/01/51	482,179	485,733
Pool #QB9090 2.000% 2/01/51	98,614	99,137
Pool #QB8975 2.000% 3/01/51	98,480	98,980
Pool #SD0552 2.000% 3/01/51	482,346	484,417
Pool #QB9482 2.000% 3/01/51	96,509	96,998
Pool #QB9961 2.000% 3/01/51	97,330	97,823
Pool #QC0041 2.000% 3/01/51	96,320	96,809
Pool #QC0160 2.000% 3/01/51	96,541	97,151
Pool #QC0161 2.000% 3/01/51	95,656	96,141
Pool #QB9290 2.000% 3/01/51	292,390	294,555
Pool #QC0297 2.000% 4/01/51	197,668	198,718
Pool #SD0573 2.000% 4/01/51	196,511	198,214
Pool #QC0885 2.000% 4/01/51	98,789	99,646
Pool #QC1164 2.000% 4/01/51	98,623	99,308
Pool #RA5155 2.000% 5/01/51	196,874	198,334
Pool #840698 5 year CMT + 1.286% 2.058% FRN 3/01/47	27,836	27,792
Pool #QK0701 2.500% 4/01/41	96,054	100,204
Pool #QB5092 2.500% 11/01/50	186,389	193,930
Pool #QB5093 2.500% 11/01/50	90,751	94,093
Pool #QB8934 2.500% 2/01/51	186,381	192,964
Pool #QC0165 2.500% 3/01/51	95,765	99,549
Pool #QC6551 2.500% 9/01/51	99,906	103,644
Pool #ZS8669 3.000% 9/01/32	95,844	101,081
Pool #ZS8673 3.000% 10/01/32	66,912	70,568
Pool #ZT1257 3.000% 1/01/46	181,585	195,744
Pool #G67701 3.000% 10/01/46	740,827	795,427
Pool #G60985 3.000% 5/01/47	1,471,895	1,578,995
Pool #ZT1493 3.000% 9/01/48	160,795	171,838
Pool #RA1293 3.000% 9/01/49	510,434	544,731
Pool #QA5770 3.000% 1/01/50	57,034	60,473
Pool #RA3175 3.000% 7/01/50	851,710	901,486
Pool #RA3474 3.000% 9/01/50	339,276	359,104

Pool #ZT1970 3.500% 4/01/33	224,317	241,458
Pool #ZS9316 3.500% 1/01/38	365,410	393,678
Pool #Q41209 3.500% 6/01/46	175,473	189,768
Pool #ZA5433 3.500% 6/01/48	824,788	890,977
Pool #Q19135 4.000% 6/01/43	28,964	32,147

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Pool #Q19236 4.000% 6/01/43	\$ 21,600	\$ 23,798
Pool #Q19615 4.000% 7/01/43	29,641	32,898
Pool #Q19985 4.000% 7/01/43	962,313	1,062,386
Pool #C09071 4.000% 2/01/45	201,997	219,635
Pool #V83342 4.000% 8/01/47	126,894	138,301
Pool #G67713 4.000% 6/01/48	680,478	743,140
Pool #ZA6680 4.000% 4/01/49	489,858	534,016
Pool #RA2358 4.000% 3/01/50	85,081	91,339
Pool #U92272 4.500% 12/01/43	4,307	4,766
Pool #V83157 4.500% 4/01/47	1,177,802	1,289,737
Pool #Q49177 4.500% 6/01/47	196,814	217,364
Pool #Q55401 5.000% 4/01/48	231,157	254,663
Pool #Q56002 5.000% 5/01/48	39,039	43,124
Pool #ZM7733 5.000% 8/01/48	153,916	169,360
Pool #ZN1436 5.000% 11/01/48	84,902	93,209
Pool #G06875 5.500% 12/01/38	5,740	6,629
Pool #G07509 6.500% 9/01/39	10,933	13,208
Pool #G06669 6.500% 9/01/39	11,824	14,196
Pool #G07335 7.000% 3/01/39	27,377	33,739
Federal National Mortgage Association		
Pool #CA8377 1.500% 12/01/35	93,043	94,181
Pool #BQ0254 2.000% 8/01/50	86,520	87,158
Pool #BQ1528 2.000% 9/01/50	86,825	87,465
Pool #BQ9226 2.000% 1/01/51	189,698	190,660
Pool #BQ9224 2.000% 1/01/51	192,666	193,357
Pool #BR2641 2.000% 2/01/51	95,035	95,736
Pool #BR2643 2.000% 2/01/51	93,474	94,065
Pool #BR2644 2.000% 2/01/51	95,514	95,999
Pool #BR2664 2.000% 2/01/51	380,094	382,896
Pool #BR3500 2.000% 2/01/51	96,336	96,653
Pool #BR3256 2.000% 2/01/51	94,551	95,492
Pool #BR3257 2.000% 2/01/51	95,558	96,426
Pool #BR4056 2.000% 2/01/51	190,740	191,707
Pool #BR3290 2.000% 3/01/51	391,004	392,683
Pool #BR3286 2.000% 3/01/51	95,490	95,972
Pool #BR4722 2.000% 3/01/51	96,007	96,494
Pool #BR4753 2.000% 3/01/51	96,585	97,297
Pool #BR4756 2.000% 3/01/51	96,292	96,781
Pool #BR5458 2.000% 3/01/51	98,255	98,777
Pool #BR5487 2.000% 3/01/51	97,427	97,921
Pool #BR5587 2.000% 3/01/51	97,355	97,971
Pool #BR5577 2.000% 3/01/51	95,556	96,041
Pool #BR5649 2.000% 3/01/51	97,702	98,198
Pool #BR5633 2.000% 3/01/51	98,629	99,129
Pool #BR6462 2.000% 3/01/51	98,780	99,134
Pool #FM6343 2.000% 3/01/51	97,038	97,530
Pool #BQ9453 2.000% 3/01/51	189,452	190,854
Pool #BR4080 2.000% 3/01/51	96,804	97,152
Pool #BR5589 2.000% 3/01/51	97,663	98,013
	Principal Amount	Value
Pool #FM6184 2.000% 3/01/51	\$ 856,430	\$ 863,184
Pool #FM6418 2.000% 3/01/51	96,051	96,808
Pool #BR7191 2.000% 4/01/51	586,313	589,425
Pool #BR7745 2.000% 4/01/51	95,958	96,625
Pool #BR7744 2.000% 4/01/51	96,599	97,331
Pool #BR8478 2.000% 4/01/51	96,268	96,997
Pool #BR8518 2.000% 4/01/51	96,624	97,296
Pool #BL5850 2.260% 4/01/30	388,748	403,895
Pool #MA2749 2.500% 9/01/36	56,237	58,341
Pool #FM3123 2.500% 3/01/38	549,241	570,312
Pool #CA9358 2.500% 3/01/41	96,308	101,296
Pool #CB0100 2.500% 4/01/41	194,039	204,333
Pool #CB0101 2.500% 4/01/41	97,369	102,412
Pool #CB0114 2.500% 4/01/41	386,485	405,418
Pool #CB0470 2.500% 5/01/41	780,890	817,925
Pool #BQ1150 2.500% 10/01/50	182,742	189,073
Pool #FM4577 2.500% 10/01/50	274,830	284,815
Pool #BQ5876 2.500% 11/01/50	94,085	97,551

Pool #BQ5882 2.500% 11/01/50	456,693	472,202
Pool #BR0001 2.500% 12/01/50	93,114	96,340
Pool #BR0757 2.500% 1/01/51	96,441	99,636
Pool #FM5423 2.500% 1/01/51	467,855	484,853
Pool #FM5944 2.500% 1/01/51	275,688	285,705
Pool #FM5713 2.500% 2/01/51	176,227	182,093
Pool #FM5743 2.500% 2/01/51	93,888	97,380
Pool #FM5904 2.500% 2/01/51	185,639	192,543
Pool #FM6460 2.500% 3/01/51	195,299	202,684
Pool #BR6496 2.500% 4/01/51	96,374	100,182
Pool #BR7222 2.500% 4/01/51	197,809	205,228
Pool #FM6871 2.500% 4/01/51	196,709	205,255
Pool #FM7304 2.500% 5/01/51	198,306	205,774
Pool #FM7741 2.500% 5/01/51	194,946	201,984
Pool #FM7675 2.500% 6/01/51	296,721	307,942
Pool #FM7676 2.500% 6/01/51	98,830	102,495
Pool #FM7900 2.500% 7/01/51	198,648	206,322
Pool #BT3303 2.500% 8/01/51	99,721	103,498
Pool #BU0051 2.500% 9/01/51 ^(d)	600,000	620,815
Pool #AM8674 2.810% 4/01/25	50,000	52,957
Pool #MA2320 3.000% 7/01/35	53,914	57,275
Pool #MA2523 3.000% 2/01/36	369,247	391,577
Pool #MA2579 3.000% 4/01/36	273,855	290,416
Pool #MA2707 3.000% 8/01/36	327,691	347,508
Pool #MA2773 3.000% 10/01/36	1,210,905	1,282,620
Pool #MA2832 3.000% 12/01/36	617,916	654,511
Pool #AQ7306 3.000% 1/01/43	33,243	35,690
Pool #AR1202 3.000% 1/01/43	37,950	40,744
Pool #AS7738 3.000% 8/01/46	461,240	492,737
Pool #BC1509 3.000% 8/01/46	44,406	47,299
Pool #AS7844 3.000% 9/01/46	79,511	84,692

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Pool #BC2817 3.000% 9/01/46	\$ 59,786	\$ 63,663
Pool #BD8104 3.000% 10/01/46	205,272	220,123
Pool #AL9397 3.000% 10/01/46	88,301	94,027
Pool #BM1565 3.000% 4/01/47	815,509	874,510
Pool #CA4979 3.000% 1/01/50	189,035	199,536
Pool #BO8932 3.000% 1/01/50	42,302	44,766
Pool #FM8576 3.000% 2/01/50	106,102	111,888
Pool #FM3830 3.000% 4/01/50	198,513	209,727
Pool #FM8210 3.000% 4/01/50	48,691	51,442
Pool #BP7009 3.000% 8/01/50	145,153	153,636
Pool #AN8048 3.080% 1/01/28	210,000	227,811
Pool #BL2454 3.160% 5/01/29	87,284	95,328
Pool #MA2110 3.500% 12/01/34	83,260	89,441
Pool #MA2138 3.500% 1/01/35	42,822	46,000
Pool #AS8740 3.500% 2/01/37	87,936	94,052
Pool #FM5754 3.500% 3/01/37	77,070	82,719
Pool #890827 3.500% 12/01/37	51,756	55,760
Pool #FM6015 3.500% 8/01/39	72,385	77,419
Pool #FM0068 3.500% 2/01/40	264,162	287,816
Pool #FM0071 3.500% 2/01/40	58,705	63,008
Pool #MA1177 3.500% 9/01/42	23,670	25,612
Pool #MA1213 3.500% 10/01/42	147,077	159,144
Pool #AL3026 3.500% 12/01/42	43,122	46,781
Pool #BM4751 3.500% 3/01/43	480,782	520,980
Pool #AY6181 3.500% 4/01/45	110,331	118,866
Pool #AS6340 3.500% 12/01/45	112,973	122,136
Pool #AS6328 3.500% 12/01/45	467,023	497,781
Pool #AS6562 3.500% 1/01/46	97,850	105,787
Pool #AS6541 3.500% 1/01/46	120,906	131,317
Pool #AL9546 3.500% 11/01/46	239,684	257,672
Pool #BC9096 3.500% 12/01/46	100,573	107,693
Pool #FM3347 3.500% 5/01/47	392,112	419,872
Pool #CA0907 3.500% 12/01/47	46,612	50,357
Pool #CA1526 3.500% 4/01/48	433,146	467,906
Pool #FM3469 3.500% 8/01/48	522,491	559,972
Pool #FM3773 3.500% 11/01/48	544,012	582,527
Pool #FM3278 3.500% 11/01/48	150,388	159,602
Pool #CA5164 3.500% 2/01/50	361,428	384,774
Pool #FM7929 3.500% 8/01/50 ^(d)	91,817	98,410
Pool #AK8441 4.000% 4/01/42	19,880	21,790
Pool #AO2711 4.000% 5/01/42	10,552	11,566
Pool #AO6086 4.000% 6/01/42	24,905	27,297
Pool #AP0692 4.000% 7/01/42	17,902	19,622
Pool #AP5333 4.000% 7/01/42	151,337	165,878
Pool #AP2530 4.000% 8/01/42	19,432	21,299
Pool #AP4903 4.000% 9/01/42	32,175	35,266
Pool #AP7399 4.000% 9/01/42	47,268	51,810
Pool #MA1217 4.000% 10/01/42	113,659	125,183
Pool #AP9229 4.000% 10/01/42	14,158	15,518

	Principal Amount	Value
Pool #AP9766 4.000% 10/01/42	\$ 86,243	\$ 94,988
Pool #MA1253 4.000% 11/01/42	67,015	73,810
Pool #AQ3599 4.000% 11/01/42	19,453	21,322
Pool #AQ4555 4.000% 12/01/42	38,600	42,309
Pool #AQ7003 4.000% 12/01/42	39,214	42,981
Pool #AQ7082 4.000% 1/01/43	47,937	52,542
Pool #AL3508 4.000% 4/01/43	31,223	34,613
Pool #AQ4078 4.000% 6/01/43	33,129	36,758
Pool #AQ4080 4.000% 6/01/43	23,001	25,333
Pool #AT8394 4.000% 6/01/43	30,643	34,000
Pool #AB9683 4.000% 6/01/43	45,054	49,425
Pool #AT9637 4.000% 7/01/43	94,297	103,859
Pool #AT9653 4.000% 7/01/43	68,577	76,088
Pool #AT9657 4.000% 7/01/43	54,089	59,337
Pool #AS0070 4.000% 8/01/43	28,032	30,857
Pool #MA1547 4.000% 8/01/43	32,330	35,588
Pool #AS4347 4.000% 1/01/45	53,270	58,721
Pool #AS9453 4.000% 4/01/47	59,542	64,946

Pool #AS9588 4.000% 5/01/47	126,363	137,754
Pool #FM2173 4.000% 9/01/48	63,476	68,444
Pool #FM3158 4.000% 11/01/48	161,211	175,555
Pool #FM3542 4.000% 5/01/49	54,372	59,307
Pool #FM3978 4.000% 7/01/50	106,574	115,366
Pool #BF0104 4.000% 2/01/56	100,248	111,759
Pool #BF0183 4.000% 1/01/57	56,305	62,771
Pool #BF0191 4.000% 6/01/57	103,240	115,063
Pool #MA0706 4.500% 4/01/31	14,915	16,454
Pool #MA0734 4.500% 5/01/31	50,683	55,913
Pool #MA0776 4.500% 6/01/31	17,050	18,810
Pool #MA0913 4.500% 11/01/31	12,515	13,838
Pool #MA0939 4.500% 12/01/31	13,294	14,699
Pool #993117 4.500% 1/01/39	1,091	1,202
Pool #AA0856 4.500% 1/01/39	7,341	8,133
Pool #AA3495 4.500% 2/01/39	7,090	7,842
Pool #935520 4.500% 8/01/39	11,915	13,191
Pool #AD5481 4.500% 5/01/40	333,739	369,804
Pool #AD6914 4.500% 6/01/40	36,724	40,686
Pool #AD8685 4.500% 8/01/40	91,852	102,480
Pool #MA1591 4.500% 9/01/43	61,530	68,053
Pool #MA1629 4.500% 10/01/43	56,267	62,232
Pool #AL4341 4.500% 10/01/43	3,181	3,540
Pool #MA1664 4.500% 11/01/43	29,485	32,611
Pool #MA1711 4.500% 12/01/43	61,984	68,555
Pool #AL4741 4.500% 1/01/44	26,550	29,365
Pool #AW0318 4.500% 2/01/44	47,628	52,990
Pool #AL5562 4.500% 4/01/44	11,641	12,966
Pool #890604 4.500% 10/01/44	248,649	277,186
Pool #AS4271 4.500% 1/01/45	31,763	36,094
Pool #AS9760 4.500% 6/01/47	133,177	145,674

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Pool #BJ9257 4.500% 6/01/48	\$ 204,839	\$ 225,803
Pool #CA2047 4.500% 7/01/48	257,374	283,716
Pool #CA2199 4.500% 8/01/48	422,665	465,791
Pool #CA2482 4.500% 10/01/48	337,840	372,206
Pool #BK7700 4.500% 10/01/48	482,148	531,194
Pool #BN1623 4.500% 11/01/48	201,861	222,331
Pool #BM5119 4.500% 12/01/48	323,271	353,866
Pool #FM3572 4.500% 9/01/49	106,578	117,453
Pool #CA5379 4.500% 3/01/50	258,933	285,617
Pool #BF0148 4.500% 4/01/56	462,048	525,617
Pool #BF0222 4.500% 9/01/57	525,970	594,718
Pool #BF0301 4.500% 8/01/58	54,459	61,560
Pool #BF0338 4.500% 1/01/59	133,576	150,994
Pool #915154 5.000% 4/01/37	36,716	41,402
Pool #974965 5.000% 4/01/38	105,626	119,249
Pool #983077 5.000% 5/01/38	29,426	33,254
Pool #310088 5.000% 6/01/38	26,554	29,978
Pool #AE2266 5.000% 3/01/40	63,670	71,787
Pool #BM3904 5.000% 5/01/48	78,430	86,704
Pool #MA3501 5.000% 10/01/48	231,705	254,665
Pool #CA2652 5.000% 11/01/48	397,689	437,095
Pool #BN0341 5.000% 12/01/48	139,115	152,726
Pool #FM1727 5.000% 9/01/49	827,810	930,273
Pool #937948 5.500% 6/01/37	7,990	9,313
Pool #995072 5.500% 8/01/38	13,824	16,100
Pool #BF0141 5.500% 9/01/56	514,122	615,551
Pool #481473 6.000% 2/01/29	14	15
Pool #867557 6.000% 2/01/36	1,721	1,941
Pool #AE0469 6.000% 12/01/39	113,420	133,715
Pool #BM1948 6.000% 7/01/41	127,230	149,325
Pool #AL4324 6.500% 5/01/40	71,194	86,048
Pool #AE0758 7.000% 2/01/39	39,825	49,222
Government National Mortgage Association		
Pool #AB2892 3.000% 9/15/42	103,425	110,347
Pool #783669 3.000% 9/15/42	186,156	198,615
Pool #AA5649 3.000% 9/15/42	97,882	104,433
Pool #AB9108 3.000% 10/15/42	682,625	728,311
Pool #AB9109 3.000% 10/15/42	59,867	63,874
Pool #AB9207 3.000% 11/15/42	54,262	57,893
Pool #784571 3.500% 6/15/48	226,626	244,874
Pool #BS8439 3.500% 5/15/50	226,264	239,321
Pool #487588 6.000% 4/15/29	994	1,110
Pool #595077 6.000% 10/15/32	244	278
Pool #596620 6.000% 10/15/32	198	227
Pool #604706 6.000% 10/15/33	33,586	38,608
Pool #636251 6.000% 3/15/35	3,857	4,465
Pool #782034 6.000% 1/15/36	35,538	41,046
Pool #658029 6.000% 7/15/36	12,253	14,188
	Principal Amount	Value
Government National Mortgage Association II		
Pool #785220 2.000% 12/20/50	\$ 289,055	\$ 293,668
Pool #785221 2.000% 12/20/50	378,024	384,294
Pool #785359 2.000% 3/20/51	287,734	292,327
Pool #785360 2.000% 3/20/51	98,734	100,310
Pool #BS8546 2.500% 12/20/50	96,201	99,446
Pool #BT1888 2.500% 12/20/50	187,955	194,118
Pool #MA4068 3.000% 11/20/46	28,496	29,966
Pool #MA1995 3.500% 6/20/44	69,654	75,020
Pool #MA2678 3.500% 3/20/45	30,480	32,590
Pool #784106 3.500% 1/20/46	80,634	85,888
Pool #MA3597 3.500% 4/20/46	175,928	187,062
Pool #MA3663 3.500% 5/20/46	89,909	95,599
Pool #MA3736 3.500% 6/20/46	186,008	197,780
Pool #MA3803 3.500% 7/20/46	93,406	99,318
Pool #MA4451 3.500% 5/20/47	149,507	158,502
Pool #BC4732 3.500% 10/20/47	296,273	316,875
Pool #BD0384 3.500% 10/20/47	199,014	212,853
Pool #784985 3.500% 9/20/48	40,505	42,904

Pool #784825 3.500% 10/20/49	108,643	113,142
Pool #BM7534 3.500% 2/20/50	105,980	114,476
Pool #MA4511 4.000% 6/20/47	854,861	917,123
Pool #MA4720 4.000% 9/20/47	573,410	614,097
Pool #BM9734 4.000% 10/20/49	59,242	63,612
Pool #BM9743 4.000% 11/20/49	69,264	74,373
Pool #BS1728 4.000% 1/20/50	72,258	77,589
Pool #BS1742 4.000% 2/20/50	61,867	66,431
Pool #BS1757 4.000% 3/20/50	60,013	64,478
Pool #BS8420 4.000% 4/20/50	263,396	282,991
Pool #783298 4.500% 4/20/41	106,006	117,978
Pool #783368 4.500% 7/20/41	15,609	17,372
Pool #MA4654 4.500% 8/20/47	191,454	207,332
Pool #MA5138 4.500% 4/20/48	309,442	332,179
Pool #MA5193 4.500% 5/20/48	319,286	342,148
Pool #MA5265 4.500% 6/20/48	282,106	302,217
Pool #MA5331 4.500% 7/20/48	71,456	76,511
Pool #MA5818 4.500% 3/20/49	96,539	103,256
Pool #4747 5.000% 7/20/40	66,306	74,627
Government National Mortgage Association II TBA 3.000% 1/07/49 ^(d)	100,000	104,445
Uniform Mortgage Backed Securities TBA		
1.500% 1/08/36 ^(d)	1,100,000	1,110,484
2.500% 1/07/51 ^(d)	500,000	514,258
2.500% 1/07/51 ^(d)	1,000,000	1,030,547
3.000% 1/05/49 ^(d)	100,000	104,477
		<u>64,499,318</u>

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Whole Loans — 0.7%		
Federal Home Loan Mortgage Corp. Structured Agency Credit Risk Debt Notes		
Series 2020-DNA2, Class M2, 1 mo. USD LIBOR + 1.850% 1.936% FRN 2/25/50 ^(b)	\$ 682,106	\$ 687,509
Series 2020-DNA6, Class M2, SOFR30A + 2.000% 2.050% FRN 12/25/50 ^(b)	780,000	785,982
Series 2020-DNA1, Class B1, 1 mo. USD LIBOR + 2.300% 2.386% FRN 1/25/50 ^(b)	380,000	379,002
Series 2017-DNA1, Class B1, 1 mo. USD LIBOR + 4.950% 5.036% FRN 7/25/29	1,450,000	1,559,863
Federal National Mortgage Association Connecticut Avenue Securities Trust		
Series 2019-R07, Class 1M2, 1 mo. USD LIBOR + 2.100% 2.186% FRN 10/25/39 ^(b)	238,238	239,261
Series 2019-R02, Class 1M2, 1 mo. USD LIBOR + 2.300% 2.386% FRN 8/25/31 ^(b)	379,045	381,490
Series 2018-C05, Class 1B1, 1 mo. USD LIBOR + 4.250% 4.336% FRN 1/25/31	370,000	389,257
		<u>4,422,364</u>
TOTAL U.S. GOVERNMENT AGENCY OBLIGATIONS AND INSTRUMENTALITIES (Cost \$79,122,000)		<u>79,885,050</u>
U.S. TREASURY OBLIGATIONS — 6.9%		
U.S. Treasury Bonds & Notes — 6.9%		
U.S. Treasury Bond		
1.250% 5/15/50	1,190,000	970,529
1.625% 11/15/50	710,000	636,049
1.750% 8/15/41	20,000	19,078
1.875% 2/15/51	5,350,000	5,087,905
2.000% 2/15/50	1,730,000	1,694,761
2.000% 8/15/51	1,920,000	1,881,900
2.250% 5/15/41	300,000	311,268
2.250% 8/15/49	530,000	547,950
2.375% 5/15/51	2,060,000	2,192,623
2.875% 5/15/49	330,000	384,974
3.000% 2/15/48	16,000	18,971
3.750% 11/15/43	1,560,000	2,035,012
U.S. Treasury Inflation Index		
1.375% 2/15/44	691,008	944,881
U.S. Treasury Note		
0.250% 11/15/23	\$ 70,000	\$ 69,906
0.250% 5/31/25	2,350,000	2,309,782
0.250% 10/31/25	200,000	195,359
0.625% 12/31/27	155,100	149,537
0.750% 4/30/26	2,460,000	2,440,220
0.750% 1/31/28	4,000,000	3,881,530
1.000% 7/31/28	2,510,000	2,459,573
1.125% 8/31/28	2,090,000	2,063,567
1.250% 5/31/28	3,040,000	3,033,866
1.250% 6/30/28	1,360,000	1,356,226
1.250% 9/30/28	5,170,000	5,144,958
1.250% 8/15/31	2,080,000	2,027,675
1.625% 5/15/31	1,890,000	1,910,281
U.S. Treasury Strip		
0.000% 5/15/49	1,450,000	806,779
		<u>44,575,160</u>
TOTAL U.S. TREASURY OBLIGATIONS (Cost \$44,664,723)		<u>44,575,160</u>
TOTAL BONDS & NOTES (Cost \$441,396,567)		<u>449,386,119</u>
TOTAL PURCHASED OPTIONS (#) — 0.0% (Cost \$315,595)		<u>203,643</u>
TOTAL LONG-TERM INVESTMENTS (Cost \$441,712,162)		<u>449,589,762</u>
SHORT-TERM INVESTMENTS — 29.7%		
Repurchase Agreement — 0.6%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(h)	3,834,843	3,834,843
U.S. Treasury Bill — 29.1%		
U.S. Treasury Bill		
0.046% 12/09/21 ⁽ⁱ⁾	4,040,000	4,039,804
0.047% 2/24/22 ⁽ⁱ⁾	170,000	169,967
	4,790,000	4,789,084

0.053% 3/03/22 ⁽ⁱ⁾		
0.065% 8/11/22 ⁽ⁱ⁾	160,000	159,902
United States Treasury Floating Rate Note		
3 mo. Treasury money market yield + .055% 0.090% FRN 10/31/22	15,500,000	15,506,481

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
3 mo. Treasury money market yield + .049% 0.084% FRN 1/31/23	\$ 54,600,000	\$ 54,615,643
3 mo. Treasury money market yield + .034% 0.069% FRN 4/30/23	54,600,000	54,606,563
3 mo. Treasury money market yield + .029% 0.064% FRN 7/31/23	54,600,000	54,600,022
		<u>188,487,466</u>
TOTAL SHORT-TERM INVESTMENTS (Cost \$192,343,940)		192,322,309
TOTAL INVESTMENTS — 99.2% (Cost \$634,056,102) ^(j)		641,912,071
Other Assets/(Liabilities) — 0.8%		4,914,449
NET ASSETS — 100.0%		\$ 646,826,520

Abbreviation Legend

CLO Collateralized Loan Obligation
FRN Floating Rate Note
STEP Step Up Bond
TBA To Be Announced
VRN Variable Rate Note

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) All or a portion of the security represents unsettled loan commitments at September 30, 2021 where the rate will be determined at time of settlement.
- (b) Security is exempt from registration under Regulation S or Rule 144A of the Securities Act of 1933. These securities are considered restricted and may be resold in transactions exempt from registration. At September 30, 2021, the aggregate market value of these securities amounted to \$97,714,473 or 15.11% of net assets.
- (c) Security is perpetual and has no stated maturity date.
- (d) A portion of this security is purchased on a when-issued, delayed-delivery or forward commitment basis. (Note 2).
- (e) Certain variable rate securities are not based on a published reference rate and spread but are determined by the issuer or agent and are based on current market conditions. These securities do not indicate a reference rate and spread in their description above. The rates shown are the current interest rates at September 30, 2021.
- (f) The principal amount of the security is in foreign currency. The market value is in U.S. dollars.
- (g) May contain securities that are issued by a U.S. Government Agency, but are unsecured and are not guaranteed by a U.S. Government Agency.
- (h) Maturity value of \$3,834,843. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 5/15/27, and an aggregate market value, including accrued interest, of \$3,911,569.
- (i) The rate shown represents yield-to-maturity.
- (j) See Note 6 for aggregate cost for federal tax purposes.

(#) OTC Options Purchased

Description	Counterparty	Expiration Date	Exercise Price	No. of Contracts	Notional Amount	Value	Premiums Paid (Received)	Unrealized Appreciation/ (Depreciation)
Put								
USD Put	BNP Paribas							
CAD Call	SA*	11/22/21	1.27	1,840,000	USD	1,840,000	\$ 19,872	\$ 16,102
USD Put	Goldman							
NZD Call	Sachs & Co.*	11/22/21	0.71	1,430,000	USD	1,430,000	5,863	23,383
USD Put	Goldman							
AUD Call	Sachs & Co.*	11/22/21	0.73	940,000	USD	940,000	10,434	9,452
USD Put	Morgan							
JPY Call	Stanley & Co. LLC*	11/10/21	107.80	6,822,000	USD	6,822,000	5,458	32,050
						<u>\$ 41,627</u>	<u>\$ 80,987</u>	<u>(26,592)</u>
								<u>(39,360)</u>

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

*MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)***(#) Exchange-Traded Options Purchased**

Description	Expiration Date	Exercise Price	No. of Contracts	Notional Amount	Value	Premiums Paid (Received)	Unrealized Appreciation/ (Depreciation)
Call							
U.S. Treasury Bond Future	10/22/21	160.50	97	USD 15,444,219	\$ 83,359	\$ 100,667	\$ (17,308)
U.S. Treasury Bond Future	10/22/21	161.00	20	USD 3,184,375	14,063	30,176	(16,113)
U.S. Treasury Note 10 Year Future	10/22/21	131.50	84	USD 11,055,188	53,813	48,208	5,605
					<u>\$ 151,235</u>	<u>\$ 179,051</u>	<u>\$ (27,816)</u>
Put							
Eurodollar Future	3/14/22	99.63	575	USD 143,541,563	\$ 10,781	\$ 55,557	\$ (44,776)
					<u>\$ 162,016</u>	<u>\$ 234,608</u>	<u>\$ (72,592)</u>

OTC Options Written

Description	Counterparty	Expiration Date	Exercise Price	No. of Contracts	Notional Amount	Value	Premiums Paid (Received)	Unrealized Appreciation/ (Depreciation)
Put								
USD Put	Goldman Sachs & Co.*	11/22/21	0.73	1,430,000	USD 1,430,000	\$ (1,287)	\$ (8,065)	\$ 6,778

Exchange-Traded Options Written

Description	Expiration Date	Exercise Price	No. of Contracts	Notional Amount	Value	Premiums Paid (Received)	Unrealized Appreciation/ (Depreciation)
Call							
U.S. Treasury Bond Future	11/26/21	161.00	65	USD 10,349,219	\$ (89,375)	\$ (100,247)	\$ 10,872
U.S. Treasury Note 10 Year Future	11/26/21	131.50	56	USD 7,370,125	(51,625)	(49,715)	(1,910)
					<u>\$ (141,000)</u>	<u>\$ (149,962)</u>	<u>\$ 8,962</u>
Put							
Eurodollar Future	3/14/22	99.38	484	USD 120,824,550	\$ (6,050)	\$ (24,109)	\$ 18,059
					<u>\$ (147,050)</u>	<u>\$ (174,071)</u>	<u>\$ 27,021</u>

Forward contracts

Counterparty	Settlement Date	Currency Purchased	Currency Sold	Unrealized Appreciation (Depreciation)
BNP Paribas SA*	10/19/21	USD 5,124,121	EUR 4,313,945	\$ 125,676
Citibank N.A.*	10/19/21	USD 781,776	EUR 659,000	18,211
Citibank N.A.*	10/19/21	USD 3,242,970	JPY 358,398,954	22,394
Citibank N.A.*	10/19/21	USD 3,730,792	AUD 5,077,393	59,875
Citibank N.A.*	10/19/21	USD 14,000,591	CAD 17,550,623	144,501
Citibank N.A.*	10/19/21	USD 224,782	MXN 4,615,250	1,713
Citibank N.A.*	10/19/21	AUD 13,089,723	USD 9,786,840	(323,067)
Citibank N.A.*	10/19/21	JPY 1,009,473,733	USD 9,197,427	(126,287)

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

Counterparty	Settlement Date	Currency Purchased		Currency Sold		Unrealized Appreciation (Depreciation)
Citibank N.A.*	10/19/21	EUR	450,000	USD	523,982	\$ (2,580)
Citibank N.A.*	10/19/21	CAD	20,987,369	USD	16,709,343	(139,967)
Citibank N.A.*	1/18/22	MXN	4,555,250	USD	219,020	(1,643)
Goldman Sachs International*	10/19/21	USD	1,404,830	IDR	20,419,198,718	(19,785)
Goldman Sachs International*	10/19/21	USD	1,690,707	GBP	1,222,200	43,889
Goldman Sachs International*	10/19/21	USD	669,671	ZAR	10,000,998	6,849
Goldman Sachs International*	10/19/21	USD	77,155	JPY	8,600,000	(125)
Goldman Sachs International*	10/19/21	IDR	43,443,149,430	USD	2,943,303	87,655
Goldman Sachs International*	10/19/21	EUR	427,045	USD	500,993	(6,187)
Goldman Sachs International*	10/19/21	GBP	3,854,314	USD	5,334,579	(141,193)
Goldman Sachs International*	10/19/21	CAD	12,350,000	USD	9,948,990	(198,755)
Goldman Sachs International*	10/19/21	ZAR	16,890,000	USD	1,161,144	(41,749)
Morgan Stanley & Co. LLC*	10/19/21	USD	3,268,068	RUB	244,402,466	(81,071)
Morgan Stanley & Co. LLC*	10/19/21	USD	694,159	MXN	14,002,957	17,352
Morgan Stanley & Co. LLC*	10/19/21	USD	452,462	ZAR	6,889,002	(4,111)
Morgan Stanley & Co. LLC*	10/19/21	EUR	16,270,174	USD	19,114,497	(262,710)
Morgan Stanley & Co. LLC*	10/19/21	MXN	18,618,207	USD	918,547	(18,670)
Morgan Stanley & Co. LLC*	10/19/21	BRL	3,226,614	USD	614,476	(23,331)
Morgan Stanley & Co. LLC*	10/19/21	USD	1,538,917	BRL	8,090,107	56,735
Morgan Stanley & Co. LLC*	10/19/21	USD	16,923,938	EUR	14,230,000	436,042
Morgan Stanley & Co. LLC*	10/19/21	RUB	602,748,825	USD	7,940,832	318,863
Morgan Stanley & Co. LLC*	1/18/22	ZAR	6,889,002	USD	446,726	4,098
						<u>\$ (47,378)</u>

Futures contracts

	Expiration Date	Number of Contracts	Notional Amount	Value/ Net Unrealized Appreciation/ (Depreciation)
Long				
Euro-OAT	12/08/21	13	\$ 2,543,177	\$ (44,211)
Australia Treasury Bond 10 Year	12/15/21	48	5,000,256	(90,933)
U.S. Treasury Long Bond	12/21/21	155	25,308,578	(629,672)
Ultra Long U.S. Treasury Bond	12/21/21	298	58,841,507	(1,904,882)
U.S. Treasury Note 5 Year	12/31/21	1,479	182,478,959	(943,263)
90 Day Eurodollar	6/19/23	82	20,345,761	(6,686)
90 Day Eurodollar	12/18/23	474	117,255,383	(112,208)
				<u>\$ (3,731,855)</u>
Short				
Euro-Bund	12/08/21	78	\$ (15,635,137)	\$ 291,680
Euro-Buxl 30 Year Bond	12/08/21	2	(485,021)	13,943
90 Day Eurodollar	12/13/21	299	(74,561,897)	(61,028)
Japanese Government Bond 10 Year	12/13/21	4	(5,456,100)	15,784
U.S. Treasury Note 10 Year	12/21/21	709	(94,563,487)	1,252,440
U.S. Treasury Ultra 10 Year	12/21/21	41	(6,081,382)	126,132
U.S. Treasury Note 2 Year	12/31/21	63	(13,871,188)	7,743
				<u>\$ 1,646,694</u>

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

*MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)***Centrally Cleared Credit Default Swap - Sell Protection††**

Reference Obligation/ Index	Rate Received by Fund	Payment Frequency	Termination Date	Credit Rating	Notional Amount	Value	Upfront Premium Paid/ (Received)	Unrealized Appreciation (Depreciation)
CDX.NA.HY Series 36†	5.000%	Quarterly	6/20/26	BB**	USD 1,540,000	\$ 140,366	\$ 131,208	\$ 9,158
CDX.NA.IG Series 37†	1.000%	Quarterly	12/20/26	BBB+**	USD 50,598,000	1,197,655	1,228,261	(30,606)
CDX.NA.HY Series 37†	5.000%	Quarterly	12/20/26	BB**	USD 5,650,000	519,455	541,789	(22,334)
						<u>\$ 1,857,476</u>	<u>\$ 1,901,258</u>	<u>\$ (43,782)</u>

Centrally Cleared Interest Rate Swaps

Paid by the Fund		Received by the Fund							
Rate/ Reference	Frequency	Rate/ Reference	Frequency	Termination Date	Notional Amount		Value	Upfront Premium Paid/ (Received)	Unrealized Appreciation (Depreciation)
28 Day- MXN-TIE- Banxico	Monthly	Fixed 7.450%	Monthly	7/18/29	MXN	88,370,000	\$ 34,705	\$ 37,243	\$ (2,538)
3-Month USD LIBOR	Quarterly	Fixed 0.190%	Semi- Annually	6/15/22	USD	15,757,000	4,844	(71)	4,915
Fixed 0.710%	Annually	12-Month USD SOFR	Annually	5/15/27	USD	17,179,000	230,184	45,132	185,052
Fixed 0.450%	Semi- Annually	3-Month USD LIBOR	Quarterly	5/15/27	USD	8,046,000	323,844	(20,269)	344,113
Fixed 1.350%	Semi- Annually	3-Month USD LIBOR	Quarterly	2/15/28	USD	13,679,000	(62,163)	(29,262)	(32,901)
Fixed 1.250%	Semi- Annually	3-Month USD LIBOR	Quarterly	2/15/28	USD	5,202,000	8,684	5,207	3,477
Fixed 0.560%	Annually	12-Month USD SOFR	Annually	7/20/45	USD	3,470,000	721,226	78,573	642,653
Fixed 0.740%	Annually	12-Month USD SOFR	Annually	8/19/45	USD	2,400,000	412,609	—	412,609
Fixed 1.630%	Semi- Annually	3-Month USD LIBOR	Quarterly	2/15/47	USD	859,000	41,853	(2,885)	44,738
Fixed 1.520%	Annually	12-Month USD SOFR	Annually	2/15/47	USD	1,016,000	14,831	(30,514)	45,345
Fixed 1.000%	Semi- Annually	3-Month USD LIBOR	Quarterly	2/15/47	USD	5,198,000	944,497	54,164	890,333
Fixed 1.225%	Semi- Annually	3-Month USD LIBOR	Quarterly	2/15/47	USD	434,000	58,253	499	57,754
Fixed 1.200%	Semi- Annually	3-Month USD LIBOR	Quarterly	2/15/47	USD	861,000	120,108	4,742	115,366
Fixed 1.600%	Semi- Annually	3-Month USD LIBOR	Quarterly	2/15/47	USD	1,140,000	62,800	6,103	56,697
Fixed 2.000%	Semi- Annually	3-Month USD LIBOR	Quarterly	2/15/47	USD	2,171,000	(63,660)	25,758	(89,418)
Fixed 1.729%	Annually	12-Month USD SOFR	Annually	2/15/47	USD	935,000	(27,968)	—	(27,968)
Fixed 0.900%	Semi- Annually	3-Month USD LIBOR	Quarterly	3/17/50	USD	1,560,000	346,941	1,840	345,101

LIBOR

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

MassMutual Strategic Bond Fund — Portfolio of Investments (Continued)

Paid by the Fund		Received by the Fund		Termination Date	Notional Amount	Value	Upfront Premium Paid/ (Received)	Unrealized Appreciation (Depreciation)
Rate/ Reference	Frequency	Rate/ Reference	Frequency					
Fixed 1.200%	Semi-Annually	3-Month USD LIBOR	Quarterly	10/07/50	USD 2,208,000	\$ 343,148	\$ 17,083	\$ 326,065
Fixed 2.000%	Semi-Annually	3-Month USD LIBOR	Quarterly	6/03/51	USD 199,000	(6,537)	2,070	(8,607)
Fixed 2.050%	Semi-Annually	3-Month USD LIBOR	Quarterly	6/07/51	USD 614,000	(27,506)	76	(27,582)
Fixed 1.671%	Semi-Annually	3-Month USD LIBOR	Quarterly	7/09/51	USD 1,535,000	70,016	(6,842)	76,858
						<u>\$ 3,550,709</u>	<u>\$ 188,647</u>	<u>\$ 3,362,062</u>

OTC Interest Rate Swaps

Paid by the Fund		Received by the Fund		Termination Date	Notional Amount	Value	Upfront Premium Paid/ (Received)	Unrealized Appreciation (Depreciation)
Rate/ Reference	Frequency	Rate/ Reference	Frequency	Counterparty				
BRL CDI	Maturity	Fixed 7.024%	Maturity	Citibank N.A.*	1/04/27	BRL 9,300,000	\$ (104,073)	\$ (104,073)
BRL CDI	Maturity	Fixed 7.024%	Maturity	Citibank N.A.*	1/04/27	BRL 11,000,000	(123,097)	5,820
BRL CDI	Maturity	Fixed 7.024%	Maturity	Citibank N.A.*	1/04/27	BRL 11,846,000	(132,565)	7,253
						<u>\$ (359,735)</u>	<u>\$ 13,073</u>	<u>\$ (372,808)</u>

* Contracts are subject to a Master Netting Agreement.

** Rating is determined by Western Asset Management Company and represents a weighted average of the ratings of all securities included in the underlying index for the credit default swap. Ratings used in the weighted average are from Moody's Investors Service, Inc., S&P Global Ratings, or Fitch Ratings, whichever is the highest for each constituent. All ratings are as of the report date and do not reflect subsequent changes.

† Payment is based on a percentage of the index. Reference entities are a number of individual issuers comprising the index.

†† For each credit derivative with sold protection, the credit ratings of the entities referenced, as rated by any rating organization, are included in the equivalent S&P Global Ratings or Western Asset Management Company's rating category, as applicable. The reference entity rating represents the creditworthiness of the underlying issuer. As the credit rating declines, the likelihood of payment by the fund increases. Notional amounts represent the maximum potential amount of future payments (undiscounted) the Fund could be required to make under the credit derivatives with sold protection.

Currency Legend

AUD	Australian Dollar
BRL	Brazilian Real
CAD	Canadian Dollar
EUR	Euro
GBP	British Pound
IDR	Indonesian Rupiah
JPY	Japanese Yen
MXN	Mexican Peso
RUB	Russian Ruble
USD	U.S. Dollar
ZAR	South African Rand

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

September 30, 2021

	Number of Shares	Value
EQUITIES — 99.0%		
COMMON STOCK — 98.2%		
Basic Materials — 4.0%		
Chemicals — 2.6%		
Celanese Corp.	4,100	\$ 617,624
CF Industries Holdings, Inc.	57,776	3,225,056
Dow, Inc.	13,500	777,060
DuPont de Nemours, Inc.	13,100	890,669
Eastman Chemical Co.	4,700	473,478
International Flavors & Fragrances, Inc.	17,346	2,319,507
LyondellBasell Industries NV Class A	11,700	1,098,045
The Mosaic Co.	13,200	471,504
		<u>9,872,943</u>
Forest Products & Paper — 0.9%		
International Paper Co.	59,352	3,318,964
Iron & Steel — 0.5%		
Nucor Corp.	10,500	1,034,145
Reliance Steel & Aluminum Co.	2,200	313,324
Steel Dynamics, Inc.	7,300	426,904
		<u>1,774,373</u>
		<u>14,966,280</u>
Communications — 6.1%		
Advertising — 0.2%		
The Interpublic Group of Cos., Inc.	7,800	286,026
Omnicom Group, Inc.	7,500	543,450
		<u>829,476</u>
Internet — 0.5%		
eBay, Inc.	24,100	1,679,047
NortonLifeLock, Inc.	14,300	361,790
		<u>2,040,837</u>
Media — 3.7%		
Comcast Corp. Class A	195,656	10,943,040
Fox Corp. Class A	11,800	473,298
Fox Corp. Class B	31,110	1,154,803
The Walt Disney Co. ^(a)	7,881	1,333,229
		<u>13,904,370</u>
Telecommunications — 1.7%		
Cisco Systems, Inc.	104,200	5,671,606
Juniper Networks, Inc.	8,000	220,160
Lumen Technologies, Inc.	27,300	338,247
		<u>6,230,013</u>
		<u>23,004,696</u>
Consumer, Cyclical — 8.6%		
Apparel — 0.1%		
Hanesbrands, Inc.	5,700	97,812
	Number of Shares	Value
PVH Corp. ^(a)	1,700	\$ 174,743
Skechers U.S.A., Inc. Class A ^(a)	3,200	134,784
		<u>407,339</u>
Auto Manufacturers — 1.4%		
Cummins, Inc.	5,200	1,167,712
Ford Motor Co. ^(a)	136,900	1,938,504
General Motors Co. ^(a)	39,000	2,055,690
		<u>5,161,906</u>
Auto Parts & Equipment — 0.1%		
Lear Corp.	1,600	250,368
Distribution & Wholesale — 0.1%		
LKQ Corp. ^(a)	10,600	533,392
Home Builders — 0.8%		
D.R. Horton, Inc.	12,800	1,074,816
Lennar Corp. Class A	9,700	908,696
NVR, Inc. ^(a)	90	431,467
PulteGroup, Inc.	9,400	431,648
Toll Brothers, Inc.	3,000	165,870

		3,012,497
Home Furnishing — 0.2%		
Tempur Sealy International, Inc.	4,700	218,127
Whirlpool Corp.	2,200	448,492
		666,619
Housewares — 0.1%		
Newell Brands, Inc.	14,800	327,672
Leisure Time — 0.1%		
Brunswick Corp.	2,700	257,229
Polaris, Inc.	1,700	203,422
		460,651
Lodging — 0.4%		
Las Vegas Sands Corp. ^(a)	38,844	1,421,691
Retail — 5.2%		
Advance Auto Parts, Inc.	2,300	480,447
AutoNation, Inc. ^(a)	3,000	365,280
AutoZone, Inc. ^(a)	700	1,188,593
BJ's Wholesale Club Holdings, Inc. ^(a)	3,300	181,236
CarMax, Inc. ^(a)	3,900	499,044
Casey's General Stores, Inc.	1,300	244,985
Dick's Sporting Goods, Inc.	1,600	191,632
The Gap, Inc.	9,100	206,570
Genuine Parts Co.	5,100	618,273
The Home Depot, Inc.	10,100	3,315,426
Kohl's Corp.	3,600	169,524
Lowe's Cos., Inc.	25,600	5,193,216
O'Reilly Automotive, Inc. ^(a)	2,500	1,527,650
Target Corp.	17,500	4,003,475

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

MassMutual Diversified Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Walgreens Boots Alliance, Inc.	23,500	\$ 1,105,675
Williams-Sonoma, Inc.	2,100	372,393
		<u>19,663,419</u>
Textiles — 0.1%		
Mohawk Industries, Inc. ^(a)	2,400	425,760
		<u>32,331,314</u>
Consumer, Non-cyclical — 21.0%		
Agriculture — 2.5%		
Altria Group, Inc.	44,500	2,025,640
Archer-Daniels-Midland Co.	19,400	1,164,194
Bunge Ltd.	4,900	398,468
Philip Morris International, Inc.	62,816	5,954,329
		<u>9,542,631</u>
Beverages — 0.1%		
Molson Coors Beverage Co. Class B	5,400	250,452
Biotechnology — 1.4%		
Bio-Rad Laboratories, Inc. Class A ^(a)	900	671,355
Biogen, Inc. ^(a)	3,600	1,018,764
Gilead Sciences, Inc.	30,200	2,109,470
Regeneron Pharmaceuticals, Inc. ^(a)	2,500	1,512,950
		<u>5,312,539</u>
Commercial Services — 0.5%		
AMERCO	700	452,221
Quanta Services, Inc.	3,700	421,134
Service Corp. International	6,100	367,586
United Rentals, Inc. ^(a)	1,900	666,767
		<u>1,907,708</u>
Food — 2.1%		
Conagra Brands, Inc.	39,488	1,337,458
The J.M. Smucker Co.	3,000	360,090
The Kraft Heinz Co.	33,300	1,226,106
The Kroger Co.	17,900	723,697
Tyson Foods, Inc. Class A	54,019	4,264,260
		<u>7,911,611</u>
Health Care – Products — 0.3%		
Henry Schein, Inc. ^(a)	3,500	266,560
Hologic, Inc. ^(a)	4,600	339,526
PerkinElmer, Inc.	2,700	467,883
		<u>1,073,969</u>
Health Care – Services — 4.1%		
Anthem, Inc.	25,397	9,468,001
Centene Corp. ^(a)	14,400	897,264
DaVita, Inc. ^(a)	3,900	453,414
HCA Healthcare, Inc.	11,900	2,888,368
Laboratory Corp. of America Holdings ^(a)	3,400	956,896
Quest Diagnostics, Inc.	4,700	682,957
		<u>15,720,499</u>
Universal Health Services, Inc. Class B	2,700	\$ 373,599
		<u>15,720,499</u>
Household Products & Wares — 0.8%		
Kimberly-Clark Corp.	21,797	2,886,795
Pharmaceuticals — 9.2%		
AbbVie, Inc.	57,107	6,160,132
AmerisourceBergen Corp.	7,100	848,095
Becton Dickinson and Co.	16,793	4,128,055
Cigna Corp.	16,800	3,362,688
CVS Health Corp.	59,663	5,063,002
Johnson & Johnson	75,843	12,248,645
McKesson Corp.	5,600	1,116,528
Sanofi Sponsored ADR	36,003	1,735,705
		<u>34,662,850</u>
		<u>79,269,054</u>
Energy — 5.8%		
Oil & Gas — 5.1%		
Continental Resources, Inc.	12,800	590,720

EOG Resources, Inc.	43,265	3,472,882
Exxon Mobil Corp.	115,200	6,776,064
Marathon Oil Corp.	19,780	270,393
Phillips 66	11,900	833,357
TotalEnergies SE ^(b)	102,591	4,916,066
TotalEnergies SE Sponsored ADR	34,909	1,673,188
Valero Energy Corp.	11,100	783,327
		<u>19,315,997</u>
Pipelines — 0.7%		
Kinder Morgan, Inc.	61,600	1,030,568
ONEOK, Inc.	10,700	620,493
The Williams Cos., Inc.	42,500	1,102,450
		<u>2,753,511</u>
		<u>22,069,508</u>
Financial — 27.8%		
Banks — 15.7%		
Bank of America Corp.	235,600	10,001,220
The Bank of New York Mellon Corp.	24,200	1,254,528
Citizens Financial Group, Inc.	11,600	544,968
Comerica, Inc.	3,800	305,900
Commerce Bancshares, Inc.	3,200	222,976
Cullen/Frost Bankers, Inc.	1,400	166,068
East West Bancorp, Inc.	3,900	302,406
Fifth Third Bancorp	114,638	4,865,237
The Goldman Sachs Group, Inc.	14,601	5,519,616
Huntington Bancshares, Inc.	135,955	2,101,864
JP Morgan Chase & Co.	75,500	12,358,595
KeyCorp.	26,700	577,254

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

MassMutual Diversified Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
M&T Bank Corp.	3,400	\$ 507,756
Morgan Stanley	14,630	1,423,645
Northern Trust Corp.	5,700	614,517
The PNC Financial Services Group, Inc.	11,500	2,249,860
Regions Financial Corp.	26,200	558,322
State Street Corp.	28,700	2,431,464
Truist Financial Corp.	36,500	2,140,725
US Bancorp	40,800	2,425,152
Wells Fargo & Co.	177,531	8,239,214
Western Alliance Bancorp	2,600	282,932
Zions Bancorp NA	4,400	272,316
		<u>59,366,535</u>
Diversified Financial Services — 2.7%		
Ally Financial, Inc.	10,200	520,710
American Express Co.	19,200	3,216,576
Capital One Financial Corp.	12,500	2,024,625
Credit Acceptance Corp. ^(a)	200	117,060
Discover Financial Services	7,500	921,375
LPL Financial Holdings, Inc.	2,200	344,872
OneMain Holdings, Inc.	3,300	182,589
Raymond James Financial, Inc.	5,550	512,154
SEI Investments Co.	3,900	231,270
Synchrony Financial	15,900	777,192
T. Rowe Price Group, Inc.	6,200	1,219,540
		<u>10,067,963</u>
Insurance — 8.1%		
Aflac, Inc.	19,100	995,683
Alleghany Corp. ^(a)	400	249,764
The Allstate Corp.	8,300	1,056,673
American Financial Group, Inc.	2,400	301,992
American International Group, Inc.	88,488	4,857,106
Arch Capital Group Ltd. ^(a)	10,900	416,162
Assurant, Inc.	1,600	252,400
Chubb Ltd.	29,967	5,198,675
Cincinnati Financial Corp.	4,400	502,568
Equitable Holdings, Inc.	12,100	358,644
Everest Re Group Ltd.	1,300	326,014
Fidelity National Financial, Inc.	6,900	312,846
First American Financial Corp.	2,500	167,625
Globe Life, Inc.	2,500	222,575
The Hartford Financial Services Group, Inc.	9,800	688,450
Lincoln National Corp.	5,300	364,375
Loews Corp.	52,353	2,823,397
Markel Corp. ^(a)	390	466,101
MetLife, Inc.	74,677	4,609,811
Old Republic International Corp.	5,700	131,841
	Number of Shares	Value
Principal Financial Group, Inc.	7,500	\$ 483,000
The Progressive Corp.	16,000	1,446,240
Prudential Financial, Inc.	10,800	1,136,160
The Travelers Cos., Inc.	12,700	1,930,527
Voya Financial, Inc.	3,600	221,004
W.R. Berkley Corp.	4,800	351,264
Willis Towers Watson PLC	3,100	720,626
		<u>30,591,523</u>
Real Estate — 0.1%		
Jones Lang LaSalle, Inc. ^(a)	1,800	446,562
Real Estate Investment Trusts (REITS) — 1.2%		
Equity Residential	31,183	2,523,329
Weyerhaeuser Co.	52,455	1,865,824
		<u>4,389,153</u>
		<u>104,861,736</u>
Industrial — 10.0%		
Aerospace & Defense — 2.6%		
The Boeing Co. ^(a)	8,153	1,793,171
General Dynamics Corp.	10,100	1,979,903

L3 Harris Technologies, Inc.	20,729	4,565,355
Northrop Grumman Corp.	3,900	1,404,585
		<u>9,743,014</u>
Building Materials — 0.3%		
Fortune Brands Home & Security, Inc.	4,900	438,158
Masco Corp.	9,200	511,060
Owens Corning	3,800	324,900
		<u>1,274,118</u>
Electronics — 0.2%		
Arrow Electronics, Inc. ^(a)	2,600	291,954
Jabil, Inc.	5,300	309,361
Sensata Technologies Holding PLC ^(a)	3,800	207,936
		<u>809,251</u>
Hand & Machine Tools — 0.1%		
Snap-on, Inc.	1,900	397,005
Machinery – Construction & Mining — 0.0%		
Oshkosh Corp.	1,700	174,029
Machinery – Diversified — 1.1%		
AGCO Corp.	2,600	318,578
Deere & Co.	7,500	2,513,025
Dover Corp.	5,100	793,050
Westinghouse Air Brake Technologies Corp.	6,700	577,607
		<u>4,202,260</u>
Miscellaneous - Manufacturing — 2.9%		
3M Co.	20,200	3,543,484
General Electric Co.	57,288	5,902,383
Parker-Hannifin Corp.	3,100	866,822

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

MassMutual Diversified Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Textron, Inc.	8,000	\$ 558,480
		10,871,169
Packaging & Containers — 0.5%		
Arcor PLC	55,000	637,450
Berry Global Group, Inc. ^(a)	3,100	188,728
Crown Holdings, Inc.	4,700	473,666
Packaging Corp. of America	3,300	453,552
Sealed Air Corp.	5,400	295,866
		2,049,262
Shipbuilding — 0.1%		
Huntington Ingalls Industries, Inc.	1,000	193,060
Transportation — 2.2%		
Expeditors International of Washington, Inc.	1,600	190,608
Knight-Swift Transportation Holdings, Inc.	4,000	204,600
United Parcel Service, Inc. Class B	43,051	7,839,587
		8,234,795
		37,947,963
Technology — 9.9%		
Computers — 1.4%		
Genpact Ltd.	6,600	313,566
Hewlett Packard Enterprise Co.	45,200	644,100
HP, Inc.	45,100	1,233,936
International Business Machines Corp.	22,000	3,056,460
		5,248,062
Semiconductors — 4.7%		
Broadcom, Inc.	9,600	4,655,328
Intel Corp.	97,800	5,210,784
Micron Technology, Inc.	27,200	1,930,656
MKS Instruments, Inc.	1,400	211,274
Qorvo, Inc. ^(a)	2,700	451,413
QUALCOMM, Inc.	35,659	4,599,298
Skyworks Solutions, Inc.	4,000	659,120
		17,717,873
Software — 3.8%		
Citrix Systems, Inc.	12,121	1,301,432
Microsoft Corp.	15,044	4,241,204
Oracle Corp.	103,100	8,983,103
		14,525,739
		37,491,674
	Number of Shares	Value
Utilities — 5.0%		
Electric — 4.5%		
AES Corp.	23,300	\$ 531,939
Alliant Energy Corp.	6,000	335,880
Entergy Corp.	4,800	476,688
Eversource, Inc.	5,700	354,540
Exelon Corp.	34,200	1,653,228
FirstEnergy Corp.	14,800	527,176
NRG Energy, Inc.	5,900	240,897
PPL Corp.	18,600	518,568
Public Service Enterprise Group, Inc.	18,500	1,126,650
Sempra Energy	35,515	4,492,648
The Southern Co.	108,726	6,737,750
		16,995,964
Gas — 0.4%		
NiSource, Inc.	52,692	1,276,727
UGI Corp.	7,300	311,126
		1,587,853
Water — 0.1%		
Essential Utilities, Inc.	5,900	271,872
		18,855,689
TOTAL COMMON STOCK (Cost \$297,663,845)		370,797,914
PREFERRED STOCK — 0.8%		
Consumer, Cyclical — 0.4%		
Auto Manufacturers — 0.4%		

Volkswagen AG 2.560%	6,065	<u>1,358,649</u>
Consumer, Non-cyclical — 0.1%		
Pharmaceuticals — 0.1%		
Becton Dickinson and Co. Convertible 6.000% ^(b)	9,376	<u>506,116</u>
Utilities — 0.3%		
Electric — 0.2%		
The Southern Co. Convertible 6.750%	14,685	<u>749,082</u>
Gas — 0.1%		
NiSource, Inc. 7.750% ^(b)	4,958	<u>512,905</u>
		<u>1,261,987</u>
TOTAL PREFERRED STOCK (Cost \$3,197,896)		<u>3,126,752</u>
TOTAL EQUITIES (Cost \$300,861,741)		<u>373,924,666</u>

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

MassMutual Diversified Value Fund — Portfolio of Investments (Continued)

	<u>Number of Shares</u>	<u>Value</u>
MUTUAL FUNDS — 0.9%		
Diversified Financial Services — 0.9%		
iShares Russell 1000 Value ETF	14,100	\$ 2,206,791
State Street Navigator Securities Lending Government Money Market Portfolio ^(c)	1,130,138	1,130,138
		<u>3,336,929</u>
TOTAL MUTUAL FUNDS (Cost \$3,384,040)		<u>3,336,929</u>
TOTAL LONG-TERM INVESTMENTS (Cost \$304,245,781)		<u>377,261,595</u>
SHORT-TERM INVESTMENTS — 0.6%		
Mutual Fund — 0.0%		
T. Rowe Price Government Reserve Investment Fund	103	103
	<u>Principal Amount</u>	
Repurchase Agreement — 0.6%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(d)	\$ 2,039,001	2,039,001
TOTAL SHORT-TERM INVESTMENTS (Cost \$2,039,104)		<u>2,039,104</u>
TOTAL INVESTMENTS — 100.5% (Cost \$306,284,885) ^(e)		379,300,699
Other Assets/(Liabilities) — (0.5)%		<u>(1,770,647)</u>
NET ASSETS — 100.0%		<u><u>\$ 377,530,052</u></u>

Abbreviation Legend

ADR American Depositary Receipt

ETF Exchange-Traded Fund

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$1,102,333 or 0.29% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. *(Note 2)*.
- (c) Represents investment of security lending cash collateral. *(Note 2)*.
- (d) Maturity value of \$2,039,001. Collateralized by U.S. Government Agency obligations with rates ranging from 0.500% - 2.375%, maturity dates ranging from 5/15/27 - 5/31/27, and an aggregate market value, including accrued interest, of \$2,079,863.
- (e) See Note 6 for aggregate cost for federal tax purposes.

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

MassMutual Fundamental Value Fund — Portfolio of Investments

September 30, 2021

	Number of Shares	Value
EQUITIES — 99.3%		
COMMON STOCK — 99.3%		
Basic Materials — 3.8%		
Chemicals — 3.6%		
Air Products & Chemicals, Inc.	10,912	\$ 2,794,672
Axalta Coating Systems Ltd. ^(a)	144,709	4,224,056
DuPont de Nemours, Inc.	67,118	4,563,353
Element Solutions, Inc.	143,690	3,115,199
International Flavors & Fragrances, Inc.	47,173	6,307,974
		<u>21,005,254</u>
Mining — 0.2%		
Newmont Corp.	26,718	1,450,787
		<u>22,456,041</u>
Communications — 6.2%		
Internet — 2.2%		
Alphabet, Inc. Class A ^(a)	2,566	6,860,252
Facebook, Inc. Class A ^(a)	12,391	4,205,381
NortonLifeLock, Inc.	76,015	1,923,180
		<u>12,988,813</u>
Media — 2.0%		
Altice USA, Inc. Class A ^(a)	84,074	1,742,013
Charter Communications, Inc. Class A ^(a)	3,280	2,386,397
Comcast Corp. Class A	135,170	7,560,058
		<u>11,688,468</u>
Telecommunications — 2.0%		
Cisco Systems, Inc.	133,339	7,257,642
T-Mobile US, Inc. ^(a)	36,892	4,713,322
		<u>11,970,964</u>
		<u>36,648,245</u>
Consumer, Cyclical — 9.9%		
Apparel — 0.7%		
Ralph Lauren Corp.	18,659	2,071,895
Tapestry, Inc.	58,388	2,161,524
		<u>4,233,419</u>
Auto Parts & Equipment — 0.3%		
Allison Transmission Holdings, Inc.	22,930	809,887
Lear Corp.	7,987	1,249,806
		<u>2,059,693</u>
Distribution & Wholesale — 0.4%		
LKQ Corp. ^(a)	48,070	2,418,882
Entertainment — 1.0%		
Marriott Vacations Worldwide Corp.	16,512	2,597,833
SeaWorld Entertainment, Inc. ^(a)	56,180	3,107,878
		<u>5,705,711</u>
	Number of Shares	Value
Food Services — 0.2%		
Aramark	43,558	\$ 1,431,316
Home Builders — 0.8%		
Lennar Corp. Class A	48,050	4,501,324
Home Furnishing — 0.6%		
Sony Group Corp. Sponsored ADR	31,909	3,528,497
Leisure Time — 0.5%		
Harley-Davidson, Inc.	45,625	1,670,331
Polaris, Inc.	9,243	1,106,018
		<u>2,776,349</u>
Lodging — 1.2%		
Las Vegas Sands Corp. ^(a)	110,350	4,038,810
MGM Resorts International	67,043	2,892,906
		<u>6,931,716</u>
Retail — 3.7%		
Advance Auto Parts, Inc.	20,052	4,188,662
AutoZone, Inc. ^(a)	3,761	6,386,140
Kohl's Corp.	27,632	1,301,191

Lowe's Cos., Inc.	39,388	7,990,250
The TJX Cos., Inc.	26,551	1,751,835
		<u>21,618,078</u>
Textiles — 0.5%		
Mohawk Industries, Inc. ^(a)	15,459	2,742,427
		<u>57,947,412</u>
Consumer, Non-cyclical — 23.6%		
Agriculture — 0.9%		
Altria Group, Inc.	43,542	1,982,032
Philip Morris International, Inc.	37,923	3,594,721
		<u>5,576,753</u>
Beverages — 1.9%		
Coca-Cola Europacific Partners PLC	164,612	9,101,397
Molson Coors Beverage Co. Class B	45,125	2,092,898
		<u>11,194,295</u>
Biotechnology — 0.7%		
Corteva, Inc.	98,128	4,129,226
Commercial Services — 1.7%		
FleetCor Technologies, Inc. ^(a)	7,595	1,984,345
Global Payments, Inc.	14,048	2,213,684
PROG Holdings, Inc.	28,678	1,204,763
Quanta Services, Inc.	6,762	769,651
United Rentals, Inc. ^(a)	11,166	3,918,484
		<u>10,090,927</u>
Cosmetics & Personal Care — 0.8%		
The Procter & Gamble Co.	31,716	4,433,897
Food — 0.3%		
US Foods Holding Corp. ^(a)	55,221	1,913,960

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

MassMutual Fundamental Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Health Care – Products — 2.7%		
Avantor, Inc. ^(a)	94,043	\$ 3,846,359
Envista Holdings Corp. ^(a)	37,336	1,561,018
Hologic, Inc. ^(a)	33,756	2,491,530
LivaNova PLC ^(a)	25,088	1,986,719
Medtronic PLC	48,059	6,024,196
		<u>15,909,822</u>
Health Care – Services — 3.5%		
Anthem, Inc.	6,673	2,487,694
Centene Corp. ^(a)	47,425	2,955,052
Humana, Inc.	2,850	1,109,077
ICON PLC ^(a)	8,529	2,234,769
UnitedHealth Group, Inc.	29,708	11,608,104
		<u>20,394,696</u>
Pharmaceuticals — 11.1%		
AbbVie, Inc.	28,206	3,042,581
AmerisourceBergen Corp.	20,375	2,433,794
Becton Dickinson and Co.	8,714	2,142,075
Bristol-Myers Squibb Co.	43,667	2,583,776
Cigna Corp.	50,080	10,024,013
CVS Health Corp.	113,701	9,648,667
Johnson & Johnson	77,242	12,474,583
McKesson Corp.	12,286	2,449,583
Merck & Co., Inc.	111,071	8,342,543
Novartis AG Sponsored ADR	25,970	2,123,827
Perrigo Co. PLC	82,781	3,918,025
Pfizer, Inc.	85,054	3,658,172
Sanofi Sponsored ADR	48,839	2,354,528
		<u>65,196,167</u>
		<u>138,839,743</u>
Energy — 7.2%		
Oil & Gas — 6.7%		
Canadian Natural Resources Ltd.	72,575	2,651,890
ConocoPhillips	106,600	7,224,282
EOG Resources, Inc.	39,495	3,170,264
Hess Corp.	81,401	6,358,232
HollyFrontier Corp.	41,989	1,391,096
Marathon Petroleum Corp.	73,795	4,561,269
Phillips 66	81,874	5,733,636
Pioneer Natural Resources Co.	37,579	6,257,279
Valero Energy Corp.	33,323	2,351,604
		<u>39,699,552</u>
Oil & Gas Services — 0.5%		
Schlumberger NV	91,920	2,724,509
		<u>42,424,061</u>
	Number of Shares	Value
Financial — 23.3%		
Banks — 12.0%		
Bank of America Corp.	132,884	\$ 5,640,926
Citigroup, Inc.	86,806	6,092,045
Fifth Third Bancorp	54,919	2,330,762
The Goldman Sachs Group, Inc.	16,892	6,385,683
JP Morgan Chase & Co.	108,609	17,778,207
Northern Trust Corp.	48,534	5,232,450
Truist Financial Corp.	69,938	4,101,864
US Bancorp	116,313	6,913,645
Wells Fargo & Co.	349,739	16,231,387
		<u>70,706,969</u>
Diversified Financial Services — 3.8%		
AerCap Holdings NV ^(a)	48,344	2,794,767
American Express Co.	34,259	5,739,410
Capital One Financial Corp.	25,120	4,068,687
The Charles Schwab Corp.	55,237	4,023,463
Discover Financial Services	20,552	2,524,813
Navient Corp.	22,510	444,122
SLM Corp.	140,596	2,474,490

		22,069,752
Insurance — 5.8%		
American International Group, Inc.	83,253	4,569,757
Aon PLC Class A	11,340	3,240,632
Axis Capital Holdings Ltd.	22,475	1,034,749
Berkshire Hathaway, Inc. Class B ^(a)	30,156	8,230,779
Chubb Ltd.	49,250	8,543,890
Everest Re Group Ltd.	8,298	2,080,972
Fidelity National Financial, Inc.	35,704	1,618,819
The Progressive Corp.	24,377	2,203,437
Willis Towers Watson PLC	11,052	2,569,148
		<u>34,092,183</u>
Real Estate — 0.3%		
The Howard Hughes Corp. ^(a)	21,398	1,878,959
Real Estate Investment Trusts (REITS) — 1.4%		
American Campus Communities, Inc.	51,712	2,505,446
Corporate Office Properties Trust	98,736	2,663,897
MGM Growth Properties LLC Class A	40,740	1,560,342
VICI Properties, Inc. ^(b)	54,826	1,557,607
		<u>8,287,292</u>
		<u>137,035,155</u>
Industrial — 12.9%		
Aerospace & Defense — 3.6%		
General Dynamics Corp.	57,536	11,278,782
Howmet Aerospace, Inc.	88,635	2,765,412
Raytheon Technologies Corp.	80,516	6,921,155
		<u>20,965,349</u>

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

Building Materials — 0.7%

163/495

		<u>19,657,493</u>
TOTAL COMMON STOCK (Cost \$450,290,606)		<u>583,390,473</u>
TOTAL EQUITIES (Cost \$450,290,606)		<u>583,390,473</u>
MUTUAL FUNDS — 0.0%		
Diversified Financial Services — 0.0%		
State Street Navigator Securities Lending Government Money Market Portfolio ^(c)	14,325	<u>14,325</u>
TOTAL MUTUAL FUNDS (Cost \$14,325)		<u>14,325</u>
TOTAL LONG-TERM INVESTMENTS (Cost \$450,304,931)		<u>583,404,798</u>

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

MassMutual Fundamental Value Fund — Portfolio of Investments (Continued)

	<u>Principal Amount</u>	<u>Value</u>
SHORT-TERM INVESTMENTS — 0.7%		
Repurchase Agreement — 0.7%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(d)	\$ 4,284,657	\$ 4,284,657
TOTAL SHORT-TERM INVESTMENTS (Cost \$4,284,657)		<u>4,284,657</u>
TOTAL INVESTMENTS — 100.0% (Cost \$454,589,588) ^(e)		587,689,455
Other Assets/(Liabilities) — (0.0)%		<u>(74,621)</u>
NET ASSETS — 100.0%		<u><u>\$ 587,614,834</u></u>

Abbreviation Legend

ADR American Depositary Receipt

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$3,027,411 or 0.52% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$3,080,465 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. *(Note 2)*.
- (c) Represents investment of security lending cash collateral. *(Note 2)*.
- (d) Maturity value of \$4,284,657. Collateralized by U.S. Government Agency obligations with rates ranging from 0.500% - 2.375%, maturity dates ranging from 5/15/27 - 5/31/27, and an aggregate market value, including accrued interest of \$4,370,490.
- (e) See Note 6 for aggregate cost for federal tax purposes.

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

September 30, 2021

	Number of Shares	Value
EQUITIES — 99.6%		
COMMON STOCK — 99.6%		
Basic Materials — 2.0%		
Chemicals — 1.6%		
Air Products & Chemicals, Inc.	21,176	\$ 5,423,385
Albemarle Corp.	11,160	2,443,705
Celanese Corp.	10,611	1,598,441
CF Industries Holdings, Inc.	20,800	1,161,056
Dow, Inc.	71,496	4,115,310
DuPont de Nemours, Inc.	50,076	3,404,667
Eastman Chemical Co.	12,694	1,278,794
Ecolab, Inc.	23,608	4,925,101
FMC Corp.	12,389	1,134,337
International Flavors & Fragrances, Inc.	23,689	3,167,693
Linde PLC	49,137	14,415,813
LyondellBasell Industries NV Class A	25,324	2,376,657
The Mosaic Co.	33,235	1,187,154
PPG Industries, Inc.	22,785	3,258,483
The Sherwin-Williams Co.	23,002	6,434,350
		<u>56,324,946</u>
Forest Products & Paper — 0.1%		
International Paper Co.	37,040	2,071,277
Iron & Steel — 0.1%		
Nucor Corp.	28,119	2,769,440
Mining — 0.2%		
Freeport-McMoRan, Inc.	140,315	4,564,447
Newmont Corp.	76,047	4,129,352
		<u>8,693,799</u>
		<u>69,859,462</u>
Communications — 16.4%		
Advertising — 0.1%		
The Interpublic Group of Cos., Inc.	38,072	1,396,100
Omnicom Group, Inc.	20,154	1,460,359
		<u>2,856,459</u>
Internet — 12.0%		
Alphabet, Inc. Class A ^(a)	28,697	76,722,003
Alphabet, Inc. Class C ^(a)	26,854	71,574,235
Amazon.com , Inc. ^(a)	41,513	136,371,865
Booking Holdings, Inc. ^(a)	3,911	9,284,206
CDW Corp./DE	13,200	2,402,664
eBay, Inc.	61,668	4,296,409
Etsy, Inc. ^(a)	12,155	2,527,754
Expedia Group, Inc. ^(a)	13,932	2,283,455
F5 Networks, Inc. ^(a)	5,849	1,162,664
Facebook, Inc. Class A ^(a)	227,211	77,113,141
Match Group, Inc. ^(a)	26,237	4,118,947
	Number of Shares	Value
Netflix, Inc. ^(a)	42,173	\$ 25,739,869
NortonLifeLock, Inc.	56,052	1,418,116
Twitter, Inc. ^(a)	75,946	4,586,379
VeriSign, Inc. ^(a)	9,315	1,909,668
		<u>421,511,375</u>
Media — 2.0%		
Charter Communications, Inc. Class A ^(a)	12,088	8,794,745
Comcast Corp. Class A	436,933	24,437,663
Discovery, Inc. Class A ^(a)	15,277	387,730
Discovery, Inc. Class C ^(a)	28,257	685,797
DISH Network Corp. Class A ^(a)	24,085	1,046,734
Fox Corp. Class A	30,631	1,228,609
Fox Corp. Class B	14,548	540,022
News Corp. Class A	36,485	858,492
News Corp. Class B	10,482	243,497
ViacomCBS, Inc. Class B	57,615	2,276,369

The Walt Disney Co. ^(a)	173,222	29,303,966
		<u>69,803,624</u>
Telecommunications — 2.3%		
Arista Networks, Inc. ^(a)	5,374	1,846,721
AT&T, Inc.	679,847	18,362,667
Cisco Systems, Inc.	401,195	21,837,044
Corning, Inc.	73,569	2,684,533
Juniper Networks, Inc.	31,692	872,164
Lumen Technologies, Inc.	96,268	1,192,761
Motorola Solutions, Inc.	16,175	3,757,776
T-Mobile US, Inc. ^(a)	55,851	7,135,524
Verizon Communications, Inc.	394,741	<u>21,319,961</u>
		<u>79,009,151</u>
		<u>573,180,609</u>
Consumer, Cyclical — 9.7%		
Airlines — 0.3%		
Alaska Air Group, Inc. ^(a)	11,819	692,593
American Airlines Group, Inc. ^(a)	62,457	1,281,618
Delta Air Lines, Inc. ^(a)	60,796	2,590,518
Southwest Airlines Co. ^(a)	56,035	2,881,880
United Airlines Holdings, Inc. ^(a)	30,314	<u>1,442,037</u>
		<u>8,888,646</u>
Apparel — 0.7%		
Hanesbrands, Inc.	33,891	581,569
NIKE, Inc. Class B	121,808	17,690,176
PVH Corp. ^(a)	6,903	709,559
Ralph Lauren Corp.	4,718	523,887
Tapestry, Inc.	25,969	961,372
Under Armour, Inc. Class A ^(a)	17,298	349,074
Under Armour, Inc. Class C ^(a)	19,459	340,922

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

MM S&P 500 Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
VF Corp.	31,184	\$ 2,089,016
		<u>23,245,575</u>
Auto Manufacturers — 2.3%		
Cummins, Inc.	13,755	3,088,823
Ford Motor Co. ^(a)	373,671	5,291,181
General Motors Co. ^(a)	138,190	7,283,995
PACCAR, Inc.	33,369	2,633,481
Tesla, Inc. ^(a)	77,335	59,971,746
		<u>78,269,226</u>
Auto Parts & Equipment — 0.2%		
Aptiv PLC ^(a)	25,763	3,837,914
BorgWarner, Inc.	23,118	998,929
		<u>4,836,843</u>
Distribution & Wholesale — 0.3%		
Copart, Inc. ^(a)	20,424	2,833,217
Fastenal Co.	55,005	2,838,808
LKQ Corp. ^(a)	25,400	1,278,128
Pool Corp.	3,829	1,663,356
W.W. Grainger, Inc.	4,202	1,651,638
		<u>10,265,147</u>
Entertainment — 0.1%		
Caesars Entertainment, Inc. ^(a)	20,520	2,303,986
Live Nation Entertainment, Inc. ^(a)	12,663	1,153,979
Penn National Gaming, Inc. ^(a)	15,073	1,092,190
		<u>4,550,155</u>
Home Builders — 0.2%		
D.R. Horton, Inc.	31,242	2,623,391
Lennar Corp. Class A	26,379	2,471,185
NVR, Inc. ^(a)	323	1,548,488
PulteGroup, Inc.	24,872	1,142,122
		<u>7,785,186</u>
Home Furnishing — 0.1%		
Leggett & Platt, Inc.	12,198	546,958
Whirlpool Corp.	5,945	1,211,948
		<u>1,758,906</u>
Housewares — 0.0%		
Newell Brands, Inc.	36,795	814,641
Leisure Time — 0.1%		
Carnival Corp. ^(a)	76,024	1,901,360
Norwegian Cruise Line Holdings Ltd. ^(a)	34,621	924,727
Royal Caribbean Cruises Ltd. ^(a)	21,323	1,896,681
		<u>4,722,768</u>
Lodging — 0.3%		
Hilton Worldwide Holdings, Inc. ^(a)	26,509	3,502,104
Las Vegas Sands Corp. ^(a)	32,993	1,207,544
Marriott International, Inc. Class A ^(a)	26,009	3,851,673
	Number of Shares	Value
MGM Resorts International	38,464	\$ 1,659,722
Wynn Resorts Ltd. ^(a)	9,962	844,279
		<u>11,065,322</u>
Retail — 5.1%		
Advance Auto Parts, Inc.	6,352	1,326,869
AutoZone, Inc. ^(a)	2,064	3,504,651
Bath & Body Works, Inc.	25,076	1,580,540
Best Buy Co., Inc.	21,622	2,285,662
CarMax, Inc. ^(a)	15,588	1,994,640
Chipotle Mexican Grill, Inc. ^(a)	2,667	4,847,326
Costco Wholesale Corp.	42,089	18,912,692
Darden Restaurants, Inc.	12,323	1,866,565
Dollar General Corp.	22,490	4,771,029
Dollar Tree, Inc. ^(a)	22,358	2,140,108
Domino's Pizza, Inc.	3,522	1,679,853
The Gap, Inc.	20,797	472,092

Genuine Parts Co.	13,460	1,631,756
The Home Depot, Inc.	101,294	33,250,768
Lowe's Cos., Inc.	67,281	13,648,624
McDonald's Corp.	71,189	17,164,380
O'Reilly Automotive, Inc. ^(a)	6,608	4,037,885
Ross Stores, Inc.	33,959	3,696,437
Starbucks Corp.	112,481	12,407,779
Target Corp.	47,139	10,783,989
The TJX Cos., Inc.	114,852	7,577,935
Tractor Supply Co.	10,857	2,199,737
Ulta Beauty, Inc. ^(a)	5,189	1,872,814
Walgreens Boots Alliance, Inc.	68,469	3,221,466
Walmart, Inc.	136,200	18,983,556
Yum! Brands, Inc.	28,297	3,461,006
		<u>179,320,159</u>
Textiles — 0.0%		
Mohawk Industries, Inc. ^(a)	5,352	<u>949,445</u>
Toys, Games & Hobbies — 0.0%		
Hasbro, Inc.	12,388	<u>1,105,257</u>
		<u>337,577,276</u>
Consumer, Non-cyclical — 19.9%		
Agriculture — 0.7%		
Altria Group, Inc.	175,385	7,983,525
Archer-Daniels-Midland Co.	53,122	3,187,851
Philip Morris International, Inc.	148,451	<u>14,071,671</u>
		<u>25,243,047</u>
Beverages — 1.4%		
Brown-Forman Corp. Class B	17,092	1,145,335
The Coca-Cola Co.	370,091	19,418,675
Constellation Brands, Inc. Class A	16,134	3,399,272
Molson Coors Beverage Co. Class B	17,808	825,935

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

MM S&P 500 Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Monster Beverage Corp. ^(a)	35,961	\$ 3,194,416
PepsiCo, Inc.	131,622	19,797,265
		<u>47,780,898</u>
Biotechnology — 1.7%		
Amgen, Inc.	54,180	11,521,377
Bio-Rad Laboratories, Inc. Class A ^(a)	2,051	1,529,943
Biogen, Inc. ^(a)	14,133	3,999,498
Corteva, Inc.	70,382	2,961,674
Gilead Sciences, Inc.	119,521	8,348,542
Illumina, Inc. ^(a)	13,981	5,670,833
Incyte Corp. ^(a)	17,601	1,210,597
Moderna, Inc. ^(a)	33,467	12,880,110
Regeneron Pharmaceuticals, Inc. ^(a)	10,015	6,060,878
Vertex Pharmaceuticals, Inc. ^(a)	24,712	4,482,510
		<u>58,665,962</u>
Commercial Services — 2.4%		
Automatic Data Processing, Inc.	40,333	8,063,373
Cintas Corp.	8,397	3,196,402
Equifax, Inc.	11,551	2,927,254
FleetCor Technologies, Inc. ^(a)	7,913	2,067,429
Gartner, Inc. ^(a)	8,029	2,439,853
Global Payments, Inc.	27,869	4,391,597
IHS Markit Ltd.	37,789	4,406,953
MarketAxess Holdings, Inc.	3,671	1,544,353
Moody's Corp.	15,382	5,462,302
Nielsen Holdings PLC	34,604	664,051
PayPal Holdings, Inc. ^(a)	111,977	29,137,535
Quanta Services, Inc.	13,413	1,526,668
Robert Half International, Inc.	10,847	1,088,280
Rollins, Inc.	21,786	769,699
S&P Global, Inc.	22,946	9,749,526
United Rentals, Inc. ^(a)	6,919	2,428,085
Verisk Analytics, Inc.	15,481	3,100,380
		<u>82,963,740</u>
Cosmetics & Personal Care — 1.3%		
Colgate-Palmolive Co.	80,332	6,071,492
The Estee Lauder Cos., Inc. Class A	22,103	6,629,353
The Procter & Gamble Co.	231,450	32,356,710
		<u>45,057,555</u>
Food — 0.9%		
Campbell Soup Co.	19,044	796,230
Conagra Brands, Inc.	45,170	1,529,908
General Mills, Inc.	57,695	3,451,315
The Hershey Co.	13,784	2,332,942
Hormel Foods Corp.	26,734	1,096,094
The J.M. Smucker Co.	10,342	1,241,350
Kellogg Co.	24,550	1,569,236
The Kraft Heinz Co.	64,535	2,376,179
	Number of Shares	Value
The Kroger Co.	65,272	\$ 2,638,947
Lamb Weston Holdings, Inc.	13,751	843,899
McCormick & Co., Inc.	23,715	1,921,626
Mondelez International, Inc. Class A	133,570	7,771,102
Sysco Corp.	49,053	3,850,660
Tyson Foods, Inc. Class A	28,121	2,219,872
		<u>33,639,360</u>
Health Care – Products — 4.2%		
Abbott Laboratories	169,008	19,964,915
ABIOMED, Inc. ^(a)	4,261	1,387,041
Align Technology, Inc. ^(a)	6,983	4,646,698
Baxter International, Inc.	47,344	3,807,878
Bio-Techne Corp.	3,722	1,803,569
Boston Scientific Corp. ^(a)	135,403	5,875,136
The Cooper Cos., Inc.	4,737	1,957,849

Danaher Corp.	60,581	18,443,280
Dentsply Sirona, Inc.	21,130	1,226,596
Edwards Lifesciences Corp. ^(a)	59,270	6,709,957
Henry Schein, Inc. ^(a)	13,054	994,193
Hologic, Inc. ^(a)	24,284	1,792,402
IDEXX Laboratories, Inc. ^(a)	8,088	5,029,927
Intuitive Surgical, Inc. ^(a)	11,338	11,271,673
Medtronic PLC	128,200	16,069,870
PerkinElmer, Inc.	10,728	1,859,055
ResMed, Inc.	13,933	3,672,042
Steris PLC	9,563	1,953,530
Stryker Corp.	32,004	8,440,095
Teleflex, Inc.	4,489	1,690,333
Thermo Fisher Scientific, Inc.	37,510	21,430,588
West Pharmaceutical Services, Inc.	7,036	2,987,063
Zimmer Biomet Holdings, Inc.	19,991	2,925,883
		<u>145,939,573</u>
Health Care – Services — 2.0%		
Anthem, Inc.	23,244	8,665,363
Catalent, Inc. ^(a)	16,197	2,155,335
Centene Corp. ^(a)	55,611	3,465,121
Charles River Laboratories International, Inc. ^(a)	4,783	1,973,801
DaVita, Inc. ^(a)	6,407	744,878
HCA Healthcare, Inc.	23,477	5,698,337
Humana, Inc.	12,200	4,747,630
IQVIA Holdings, Inc. ^(a)	18,188	4,356,754
Laboratory Corp. of America Holdings ^(a)	9,148	2,574,613
Quest Diagnostics, Inc.	11,725	1,703,760
UnitedHealth Group, Inc.	89,926	35,137,685

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

MM S&P 500 Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Universal Health Services, Inc. Class B	7,266	\$ 1,005,396
		<u>72,228,673</u>
Household Products & Wares — 0.3%		
Avery Dennison Corp.	7,821	1,620,589
Church & Dwight Co., Inc.	23,284	1,922,560
The Clorox Co.	11,726	1,941,943
Kimberly-Clark Corp.	32,024	4,241,259
		<u>9,726,351</u>
Pharmaceuticals — 5.0%		
AbbVie, Inc.	168,487	18,174,693
AmerisourceBergen Corp.	14,338	1,712,674
Becton Dickinson and Co.	27,344	6,721,702
Bristol-Myers Squibb Co.	212,076	12,548,537
Cardinal Health, Inc.	27,933	1,381,566
Cigna Corp.	32,396	6,484,383
CVS Health Corp.	125,710	10,667,751
DexCom, Inc. ^(a)	9,217	5,040,409
Eli Lilly & Co.	75,691	17,488,406
Johnson & Johnson	251,042	40,543,283
McKesson Corp.	14,846	2,959,995
Merck & Co., Inc.	241,385	18,130,427
Organon & Co.	23,583	773,287
Pfizer, Inc.	534,476	22,987,813
Viatis, Inc.	116,289	1,575,716
Zoetis, Inc.	45,125	8,760,567
		<u>175,951,209</u>
		<u>697,196,368</u>
Energy — 2.8%		
Energy – Alternate Sources — 0.1%		
Enphase Energy, Inc. ^(a)	12,924	1,938,212
Oil & Gas — 2.3%		
APA Corp.	37,156	796,253
Cabot Oil & Gas Corp.	39,314	855,473
Chevron Corp.	184,055	18,672,380
ConocoPhillips	127,208	8,620,886
Devon Energy Corp.	60,359	2,143,348
Diamondback Energy, Inc.	16,301	1,543,216
EOG Resources, Inc.	55,744	4,474,571
Exxon Mobil Corp.	403,027	23,706,048
Hess Corp.	25,901	2,023,127
Marathon Oil Corp.	75,712	1,034,983
Marathon Petroleum Corp.	60,399	3,733,262
Occidental Petroleum Corp.	85,069	2,516,341
Phillips 66	41,969	2,939,089
Pioneer Natural Resources Co.	21,753	3,622,092
Valero Energy Corp.	39,256	2,770,296
		<u>79,451,365</u>
	Number of Shares	Value
Oil & Gas Services — 0.2%		
Baker Hughes Co.	79,340	\$ 1,962,078
Halliburton Co.	85,618	1,851,061
Schlumberger NV	133,931	3,969,715
		<u>7,782,854</u>
Pipelines — 0.2%		
Kinder Morgan, Inc.	186,682	3,123,190
ONEOK, Inc.	42,012	2,436,276
The Williams Cos., Inc.	114,796	2,977,808
		<u>8,537,274</u>
		<u>97,709,705</u>
Financial — 15.2%		
Banks — 5.4%		
Bank of America Corp.	705,671	29,955,734
The Bank of New York Mellon Corp.	76,046	3,942,225
Citigroup, Inc.	193,009	13,545,372
Citizens Financial Group, Inc.	40,726	1,913,307
Comerica, Inc.	12,795	1,029,998
Fifth Third Bancorp	66,354	2,816,064

First Republic Bank	16,749	3,230,547
The Goldman Sachs Group, Inc.	32,095	12,132,873
Huntington Bancshares, Inc.	139,135	2,151,027
JP Morgan Chase & Co.	284,721	46,605,980
KeyCorp.	90,776	1,962,577
M&T Bank Corp.	12,273	1,832,850
Morgan Stanley	139,080	13,533,875
Northern Trust Corp.	20,094	2,166,334
The PNC Financial Services Group, Inc.	40,372	7,898,378
Regions Financial Corp.	91,397	1,947,670
State Street Corp.	34,845	2,952,068
SVB Financial Group ^(a)	5,618	3,634,172
Truist Financial Corp.	126,982	7,447,494
US Bancorp	128,279	7,624,904
Wells Fargo & Co.	391,341	18,162,136
Zions Bancorp NA	15,478	957,933
		<hr/>
		187,443,518
Diversified Financial Services — 3.9%		
American Express Co.	61,365	10,280,478
Ameriprise Financial, Inc.	10,931	2,887,096
BlackRock, Inc.	13,637	11,436,806
Capital One Financial Corp.	42,476	6,879,838
Cboe Global Markets, Inc.	9,988	1,237,114
The Charles Schwab Corp.	143,119	10,424,788
CME Group, Inc.	34,171	6,607,988
Discover Financial Services	28,740	3,530,709
Franklin Resources, Inc.	26,353	783,211
Intercontinental Exchange, Inc.	53,614	6,155,959

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

MM S&P 500 Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Invesco Ltd.	32,725	\$ 789,000
Mastercard, Inc. Class A	83,034	28,869,261
Nasdaq, Inc.	11,187	2,159,315
Raymond James Financial, Inc.	17,811	1,643,599
Synchrony Financial	54,620	2,669,826
T. Rowe Price Group, Inc.	21,586	4,245,966
Visa, Inc. Class A	160,860	35,831,565
The Western Union Co.	39,341	795,475
		<u>137,227,994</u>
Insurance — 3.3%		
Aflac, Inc.	59,100	3,080,883
The Allstate Corp.	28,335	3,607,329
American International Group, Inc.	81,114	4,452,347
Aon PLC Class A	21,464	6,133,767
Arthur J Gallagher & Co.	19,539	2,904,472
Assurant, Inc.	5,696	898,544
Berkshire Hathaway, Inc. Class B ^(a)	176,755	48,243,510
Brown & Brown, Inc.	22,172	1,229,437
Chubb Ltd.	41,797	7,250,944
Cincinnati Financial Corp.	14,106	1,611,187
Everest Re Group Ltd.	3,887	974,782
Globe Life, Inc.	8,817	784,978
The Hartford Financial Services Group, Inc.	33,327	2,341,222
Lincoln National Corp.	16,980	1,167,375
Loews Corp.	19,159	1,033,245
Marsh & McLennan Cos., Inc.	48,286	7,311,949
MetLife, Inc.	69,061	4,263,136
Principal Financial Group, Inc.	23,987	1,544,763
The Progressive Corp.	55,521	5,018,543
Prudential Financial, Inc.	36,743	3,865,364
The Travelers Cos., Inc.	23,919	3,635,927
W.R. Berkley Corp.	13,071	956,536
Willis Towers Watson PLC	12,388	2,879,714
		<u>115,189,954</u>
Real Estate — 0.1%		
CBRE Group, Inc. Class A ^(a)	32,162	3,131,292
Real Estate Investment Trusts (REITS) — 2.5%		
Alexandria Real Estate Equities, Inc.	13,229	2,527,665
American Tower Corp.	43,436	11,528,349
AvalonBay Communities, Inc.	13,259	2,938,725
Boston Properties, Inc.	13,623	1,476,052
Crown Castle International Corp.	41,210	7,142,517
Digital Realty Trust, Inc.	26,816	3,873,571
Duke Realty Corp.	36,369	1,740,984
Equinix, Inc.	8,545	6,751,661
Equity Residential	32,500	2,629,900
Essex Property Trust, Inc.	6,227	1,991,021
	Number of Shares	Value
Extra Space Storage, Inc.	12,616	\$ 2,119,362
Federal Realty Investment Trust	6,831	805,990
Healthpeak Properties, Inc.	52,020	1,741,630
Host Hotels & Resorts, Inc. ^(a)	66,872	1,092,020
Iron Mountain, Inc. ^(b)	27,468	1,193,485
Kimco Realty Corp.	57,518	1,193,498
Mid-America Apartment Communities, Inc.	11,136	2,079,648
Prologis, Inc.	70,592	8,854,355
Public Storage	14,492	4,305,573
Realty Income Corp.	37,397	2,425,569
Regency Centers Corp.	14,659	986,990
SBA Communications Corp.	10,457	3,456,770
Simon Property Group, Inc.	31,400	4,081,058
UDR, Inc.	26,703	1,414,725
Ventas, Inc.	36,763	2,029,685
Vornado Realty Trust	14,944	627,797
Welltower, Inc.	40,009	3,296,742
Weyerhaeuser Co.	72,009	2,561,360
		<u>86,866,702</u>

Savings & Loans — 0.0%

People's United Financial, Inc.

42,044	734,509
	<u>530,593,969</u>

Industrial — 7.8%**Aerospace & Defense — 1.5%**The Boeing Co. ^(a)

52,572	11,562,686
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General Dynamics Corp.

22,024	4,317,365
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Howmet Aerospace, Inc.

36,958	1,153,090
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L3 Harris Technologies, Inc.

19,079	4,201,959
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Lockheed Martin Corp.

23,500	8,109,850
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Northrop Grumman Corp.

14,414	5,191,202
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Raytheon Technologies Corp.

143,872	12,367,237
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Teledyne Technologies, Inc. ^(a)

4,387	1,884,567
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TransDigm Group, Inc. ^(a)

5,024	3,137,840
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<u>51,925,796</u>

Building Materials — 0.4%

Carrier Global Corp.

82,286	4,259,123
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Fortune Brands Home & Security, Inc.

12,947	1,157,721
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Johnson Controls International PLC

67,539	4,598,055
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Martin Marietta Materials, Inc.

5,888	2,011,812
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Masco Corp.

23,615	1,311,813
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Vulcan Materials Co.

12,712	2,150,362
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<u>15,488,886</u>

Electrical Components & Equipment — 0.3%

AMETEK, Inc.

22,215	2,754,882
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Emerson Electric Co.

56,853	5,355,553
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Generac Holdings, Inc. ^(a)

6,021	2,460,602
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<u>10,571,037</u>

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

MM S&P 500 Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Electronics — 1.2%		
Agilent Technologies, Inc.	28,869	\$ 4,547,734
Allegion PLC	8,611	1,138,202
Amphenol Corp. Class A	57,272	4,194,029
Fortive Corp.	34,292	2,419,986
Garmin Ltd.	14,575	2,265,830
Honeywell International, Inc.	65,751	13,957,622
Keysight Technologies, Inc. ^(a)	17,595	2,890,683
Mettler-Toledo International, Inc. ^(a)	2,187	3,012,286
TE Connectivity Ltd.	31,121	4,270,424
Trimble, Inc. ^(a)	23,765	1,954,671
Waters Corp. ^(a)	5,881	2,101,281
		<u>42,752,748</u>
Engineering & Construction — 0.1%		
Jacobs Engineering Group, Inc.	12,225	1,620,179
Environmental Controls — 0.3%		
Pentair PLC	15,957	1,158,957
Republic Services, Inc.	20,204	2,425,692
Waste Management, Inc.	36,761	5,490,623
		<u>9,075,272</u>
Hand & Machine Tools — 0.1%		
Snap-on, Inc.	5,199	1,086,331
Stanley Black & Decker, Inc.	15,536	2,723,616
		<u>3,809,947</u>
Machinery – Construction & Mining — 0.3%		
Caterpillar, Inc.	52,139	10,009,124
Machinery – Diversified — 0.7%		
Deere & Co.	27,036	9,058,953
Dover Corp.	13,767	2,140,768
IDEX Corp.	7,252	1,500,801
Ingersoll Rand, Inc. ^(a)	38,843	1,958,076
Otis Worldwide Corp.	40,868	3,362,619
Rockwell Automation, Inc.	11,075	3,256,493
Westinghouse Air Brake Technologies Corp.	18,120	1,562,125
Xylem, Inc.	17,332	2,143,622
		<u>24,983,457</u>
Miscellaneous - Manufacturing — 1.2%		
3M Co.	55,101	9,665,817
A.O. Smith Corp.	12,885	786,887
Eaton Corp. PLC	37,841	5,650,040
General Electric Co.	104,569	10,773,744
Illinois Tool Works, Inc.	27,224	5,625,295
Parker-Hannifin Corp.	12,224	3,418,075
Textron, Inc.	21,039	1,468,733
Trane Technologies PLC	22,513	3,886,869
		<u>41,275,460</u>
	Number of Shares	Value
Packaging & Containers — 0.2%		
Amcor PLC	147,305	\$ 1,707,265
Ball Corp.	30,872	2,777,554
Packaging Corp. of America	8,895	1,222,529
Sealed Air Corp.	13,858	759,280
WestRock Co.	25,749	1,283,072
		<u>7,749,700</u>
Shipbuilding — 0.0%		
Huntington Ingalls Industries, Inc.	3,801	733,821
Transportation — 1.5%		
C.H. Robinson Worldwide, Inc.	12,573	1,093,851
CSX Corp.	214,417	6,376,762
Expeditors International of Washington, Inc.	16,296	1,941,343
FedEx Corp.	23,401	5,131,605
J.B. Hunt Transport Services, Inc.	8,134	1,360,167
Kansas City Southern	8,744	2,366,476
Norfolk Southern Corp.	23,444	5,608,977
Old Dominion Freight Line, Inc.	9,000	2,573,820
Union Pacific Corp.	62,090	12,170,261

United Parcel Service, Inc. Class B	69,353	12,629,181
		<u>51,252,443</u>
		<u>271,247,870</u>
Technology — 23.4%		
Computers — 7.5%		
Accenture PLC Class A	60,363	19,311,331
Apple, Inc.	1,496,832	211,801,728
Cognizant Technology Solutions Corp. Class A	49,996	3,710,203
DXC Technology Co. ^(a)	23,347	784,693
Fortinet, Inc. ^(a)	12,948	3,781,334
Hewlett Packard Enterprise Co.	122,965	1,752,251
HP, Inc.	113,865	3,115,346
International Business Machines Corp.	85,351	11,857,814
Leidos Holdings, Inc.	13,563	1,303,811
NetApp, Inc.	21,313	1,913,055
Seagate Technology Holdings PLC	20,082	1,657,167
Western Digital Corp. ^(a)	28,765	1,623,497
		<u>262,612,230</u>
Office & Business Equipment — 0.1%		
Zebra Technologies Corp. Class A ^(a)	5,095	2,626,065
Semiconductors — 5.5%		
Advanced Micro Devices, Inc. ^(a)	115,634	11,898,739
Analog Devices, Inc.	51,259	8,584,857
Applied Materials, Inc.	87,100	11,212,383
Broadcom, Inc.	39,111	18,966,097
Intel Corp.	386,730	20,604,974
IPG Photonics Corp. ^(a)	3,428	542,995

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

MM S&P 500 Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
KLA Corp.	14,514	\$ 4,855,078
Lam Research Corp.	13,583	7,730,765
Microchip Technology, Inc.	26,007	3,991,814
Micron Technology, Inc.	107,291	7,615,515
Monolithic Power Systems, Inc.	4,140	2,006,575
NVIDIA Corp.	237,497	49,199,879
NXP Semiconductor NV	25,185	4,932,986
Qorvo, Inc. ^(a)	10,626	1,776,561
QUALCOMM, Inc.	107,582	13,875,926
Skyworks Solutions, Inc.	15,668	2,581,773
Teradyne, Inc.	15,545	1,697,048
Texas Instruments, Inc.	87,999	16,914,288
Xilinx, Inc.	23,715	3,580,728
		<hr/> 192,568,981 <hr/>
Software — 10.3%		
Activision Blizzard, Inc.	74,152	5,738,623
Adobe, Inc. ^(a)	45,394	26,134,234
Akamai Technologies, Inc. ^(a)	15,659	1,637,775
ANSYS, Inc. ^(a)	8,344	2,840,715
Autodesk, Inc. ^(a)	20,883	5,955,205
Broadridge Financial Solutions, Inc.	11,112	1,851,704
Cadence Design Systems, Inc. ^(a)	26,252	3,975,603
Ceridian HCM Holding, Inc. ^(a)	12,943	1,457,641
Cerner Corp.	28,239	1,991,414
Citrix Systems, Inc.	12,022	1,290,802
Electronic Arts, Inc.	27,158	3,863,226
Fidelity National Information Services, Inc.	58,828	7,158,191
Fiserv, Inc. ^(a)	56,643	6,145,765
Intuit, Inc.	26,035	14,046,143
Jack Henry & Associates, Inc.	7,218	1,184,185
Microsoft Corp.	716,237	201,921,535
MSCI, Inc.	7,832	4,764,519
Oracle Corp.	157,010	13,680,281
Paychex, Inc.	30,396	3,418,030
Paycom Software, Inc. ^(a)	4,615	2,287,886
PTC, Inc. ^(a)	10,172	1,218,504
Roper Technologies, Inc.	10,025	4,472,453
salesforce.com , Inc. ^(a)	92,597	25,114,158
ServiceNow, Inc. ^(a)	18,861	11,736,634
Synopsys, Inc. ^(a)	14,482	4,336,056
Take-Two Interactive Software, Inc. ^(a)	11,138	1,716,032
Tyler Technologies, Inc. ^(a)	3,889	1,783,690
		<hr/> 361,721,004 <hr/>
		<hr/> 819,528,280 <hr/>

	Number of Shares	Value
Utilities — 2.4%		
Electric — 2.2%		
AES Corp.	63,853	\$ 1,457,764
Alliant Energy Corp.	23,440	1,312,171
Ameren Corp.	24,460	1,981,260
American Electric Power Co., Inc.	47,635	3,867,009
CenterPoint Energy, Inc.	56,638	1,393,295
CMS Energy Corp.	27,282	1,629,554
Consolidated Edison, Inc.	33,984	2,466,899
Dominion Energy, Inc.	76,782	5,606,622
DTE Energy Co.	18,551	2,072,332
Duke Energy Corp.	73,426	7,165,643
Edison International	35,807	1,986,214
Entergy Corp.	19,093	1,896,126
Eversource Energy	21,724	1,351,233
Exelon Corp.	32,730	2,676,005
FirstEnergy Corp.	93,307	4,510,460
NextEra Energy, Inc.	51,758	1,843,620
NRG Energy, Inc.	187,269	14,704,362
	23,330	952,564

Pinnacle West Capital Corp.	10,509	760,431
PPL Corp.	73,360	2,045,277
Public Service Enterprise Group, Inc.	47,873	2,915,466
Sempra Energy	30,335	3,837,377
The Southern Co.	101,183	6,270,311
WEC Energy Group, Inc.	30,046	2,650,057
Xcel Energy, Inc.	51,347	3,209,187
		<u>80,561,239</u>
Gas — 0.1%		
Atmos Energy Corp.	12,394	1,093,151
NiSource, Inc.	37,316	904,167
		<u>1,997,318</u>
Water — 0.1%		
American Water Works Co., Inc.	17,246	2,915,264
		<u>85,473,821</u>
TOTAL COMMON STOCK (Cost \$1,700,921,954)		<u>3,482,367,360</u>
TOTAL EQUITIES (Cost \$1,700,921,954)		<u>3,482,367,360</u>
TOTAL LONG-TERM INVESTMENTS (Cost \$1,700,921,954)		<u>3,482,367,360</u>

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

MM S&P 500 Index Fund — Portfolio of Investments (Continued)

	<u>Principal Amount</u>	<u>Value</u>
SHORT-TERM INVESTMENTS — 0.6%		
Repurchase Agreement — 0.4%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(c)	\$ 14,001,426	\$ 14,001,426
U.S. Treasury Bill — 0.2%		
U.S. Treasury Bill		
0.038% 1/27/22 ^{(d) (e)}	7,365,000	7,363,974
TOTAL SHORT-TERM INVESTMENTS (Cost \$21,365,521)		21,365,400
TOTAL INVESTMENTS — 100.2% (Cost \$1,722,287,475) ^(f)		3,503,732,760
Other Assets/(Liabilities) — (0.2)%		(5,363,568)
NET ASSETS — 100.0%		\$ 3,498,369,192

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$269,715 or 0.01% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$275,205 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. *(Note 2)*.
- (c) Maturity value of \$14,001,426. Collateralized by U.S. Government Agency obligations with a rate of 0.500%, maturity dates ranging from 5/31/27- 6/30/27, and an aggregate market value, including accrued interest, of \$14,281,534.
- (d) The rate shown represents yield-to-maturity.
- (e) A portion of this security is pledged/held as collateral for open derivatives. *(Note 2)*.
- (f) See Note 6 for aggregate cost for federal tax purposes.

Futures contracts

	Expiration Date	Number of Contracts	Notional Amount	Value/ Net Unrealized Appreciation/ (Depreciation)
Long				
S&P 500 E Mini Index	12/17/21	101	\$ 22,436,028	\$ (732,390)

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

September 30, 2021

	Number of Shares	Value
EQUITIES — 98.1%		
COMMON STOCK — 97.5%		
Basic Materials — 6.1%		
Chemicals — 5.6%		
CF Industries Holdings, Inc.	92,800	\$ 5,180,096
Ecolab, Inc.	76,696	16,000,320
International Flavors & Fragrances, Inc.	27,400	3,663,928
Linde PLC	60,067	17,622,456
		<u>42,466,800</u>
Forest Products & Paper — 0.5%		
International Paper Co.	73,300	4,098,936
		<u>46,565,736</u>
Communications — 1.3%		
Media — 1.3%		
Comcast Corp. Class A	112,500	6,292,125
Fox Corp. Class B	51,200	1,900,544
The Walt Disney Co. ^(a)	12,550	2,123,084
		<u>10,315,753</u>
Consumer, Cyclical — 10.2%		
Apparel — 2.6%		
NIKE, Inc. Class B	139,219	20,218,775
Lodging — 0.3%		
Las Vegas Sands Corp. ^(a)	62,100	2,272,860
Retail — 7.3%		
McDonald's Corp.	109,486	26,398,170
The TJX Cos., Inc.	442,047	29,166,261
		<u>55,564,431</u>
		<u>78,056,066</u>
Consumer, Non-cyclical — 36.9%		
Agriculture — 0.4%		
Philip Morris International, Inc.	32,900	3,118,591
Beverages — 9.1%		
The Coca-Cola Co.	380,085	19,943,060
Diageo PLC	485,668	23,400,967
PepsiCo, Inc.	174,557	26,255,118
		<u>69,599,145</u>
Cosmetics & Personal Care — 6.7%		
Colgate-Palmolive Co.	381,325	28,820,543
The Procter & Gamble Co.	159,902	22,354,300
		<u>51,174,843</u>
Food — 1.1%		
Conagra Brands, Inc.	63,800	2,160,906
Tyson Foods, Inc. Class A	73,900	5,833,666
		<u>7,994,572</u>
	Number of Shares	Value
Health Care – Products — 7.8%		
Baxter International, Inc.	191,350	\$ 15,390,280
Danaher Corp.	26,719	8,134,332
Medtronic PLC	218,031	27,330,186
Stryker Corp.	31,408	8,282,918
		<u>59,137,716</u>
Health Care – Services — 4.7%		
Anthem, Inc.	27,000	10,065,600
UnitedHealth Group, Inc.	66,143	25,844,716
		<u>35,910,316</u>
Household Products & Wares — 0.6%		
Kimberly-Clark Corp.	35,700	4,728,108
Pharmaceuticals — 6.5%		
AbbVie, Inc.	41,100	4,433,457
Becton Dickinson and Co.	27,000	6,637,140
Cigna Corp.	11,700	2,341,872
CVS Health Corp.	40,100	3,402,886
Johnson & Johnson	183,694	29,666,581
Sanofi Sponsored ADR	57,900	2,791,359
		<u>49,273,295</u>

		280,936,586
Energy — 1.8%		
Oil & Gas — 1.8%		
EOG Resources, Inc.	37,000	2,969,990
TotalEnergies SE	164,900	7,901,856
TotalEnergies SE Sponsored ADR	56,400	2,703,252
		13,575,098
Financial — 20.8%		
Banks — 4.1%		
Fifth Third Bancorp	153,000	6,493,320
The Goldman Sachs Group, Inc.	8,650	3,269,959
Huntington Bancshares, Inc.	218,000	3,370,280
Morgan Stanley	22,700	2,208,937
State Street Corp.	30,600	2,592,432
Wells Fargo & Co.	289,900	13,454,259
		31,389,187
Diversified Financial Services — 4.8%		
American Express Co.	140,248	23,495,747
Visa, Inc. Class A	57,045	12,706,774
		36,202,521
Insurance — 10.0%		
American International Group, Inc.	142,300	7,810,847
Chubb Ltd.	179,626	31,161,519
Loews Corp.	73,300	3,953,069
Marsh & McLennan Cos., Inc.	187,263	28,357,236
MetLife, Inc.	80,000	4,938,400
		76,221,071

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

MassMutual Equity Opportunities Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Real Estate Investment Trusts (REITS) — 1.9%		
American Tower Corp.	27,904	\$ 7,406,001
Equity Residential	50,000	4,046,000
Weyerhaeuser Co.	83,800	2,980,766
		<u>14,432,767</u>
		<u>158,245,546</u>
Industrial — 11.7%		
Aerospace & Defense — 7.1%		
The Boeing Co. ^(a)	13,050	2,870,217
L3 Harris Technologies, Inc.	25,200	5,550,048
Lockheed Martin Corp.	55,013	18,984,987
Northrop Grumman Corp.	74,535	26,843,780
		<u>54,249,032</u>
Miscellaneous - Manufacturing — 1.3%		
General Electric Co.	92,250	9,504,517
Transportation — 3.3%		
Union Pacific Corp.	89,361	17,515,650
United Parcel Service, Inc. Class B	42,100	7,666,410
		<u>25,182,060</u>
		<u>88,935,609</u>
Technology — 6.4%		
Computers — 1.8%		
Accenture PLC Class A	42,641	13,641,709
Semiconductors — 1.0%		
QUALCOMM, Inc.	57,200	7,377,656
Software — 3.6%		
Citrix Systems, Inc.	20,350	2,184,979
Microsoft Corp.	89,803	25,317,262
		<u>27,502,241</u>
		<u>48,521,606</u>
Utilities — 2.3%		
Electric — 2.0%		
Sempra Energy	57,135	7,227,577
The Southern Co.	130,000	8,056,100
		<u>15,283,677</u>
Gas — 0.3%		
NiSource, Inc.	84,800	2,054,704
		<u>17,338,381</u>
TOTAL COMMON STOCK (Cost \$588,014,084)		<u>742,490,381</u>
	Number of Shares	Value
PREFERRED STOCK — 0.6%		
Consumer, Cyclical — 0.3%		
Auto Manufacturers — 0.3%		
Volkswagen AG 2.560%	9,750	\$ 2,184,143
Consumer, Non-cyclical — 0.1%		
Pharmaceuticals — 0.1%		
Becton Dickinson and Co. Convertible 6.000% ^(b)	15,000	809,700
Utilities — 0.2%		
Electric — 0.1%		
The Southern Co. Convertible 6.750%	23,100	1,178,331
Gas — 0.1%		
NiSource, Inc. 7.750% ^(b)	8,204	848,704
		<u>2,027,035</u>
TOTAL PREFERRED STOCK (Cost \$5,116,332)		<u>5,020,878</u>
TOTAL EQUITIES (Cost \$593,130,416)		<u>747,511,259</u>
MUTUAL FUNDS — 0.2%		
Diversified Financial Services — 0.2%		
State Street Navigator Securities Lending Government Money Market Portfolio ^(c)	1,677,159	1,677,159
TOTAL MUTUAL FUNDS (Cost \$1,677,159)		<u>1,677,159</u>

TOTAL LONG-TERM INVESTMENTS (Cost \$594,807,575)		749,188,418
SHORT-TERM INVESTMENTS — 1.8%		
Mutual Fund — 0.0%		
T. Rowe Price Government Reserve Investment Fund	157	157

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

MassMutual Equity Opportunities Fund — Portfolio of Investments (Continued)

	<u>Principal Amount</u>	<u>Value</u>
Repurchase Agreement — 1.8%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(d)	\$ 13,685,763	\$ 13,685,763
TOTAL SHORT-TERM INVESTMENTS (Cost \$13,685,920)		<u>13,685,920</u>
TOTAL INVESTMENTS — 100.1% (Cost \$608,493,495) ^(e)		762,874,338
Other Assets/(Liabilities) — (0.1)%		<u>(1,093,040)</u>
NET ASSETS — 100.0%		<u>\$ 761,781,298</u>

Abbreviation Legend

ADR American Depositary Receipt

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$1,641,759 or 0.22% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$2,304 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. *(Note 2)*.
- (c) Represents investment of security lending cash collateral. *(Note 2)*.
- (d) Maturity value of \$13,685,763. Collateralized by U.S. Government Agency obligations with a rate of 0.500%, maturity date of 5/31/27, and an aggregate market value, including accrued interest, of \$13,959,549.
- (e) See Note 6 for aggregate cost for federal tax purposes.

Country weightings, as a percentage of net assets, is as follows:

United States	81.3%
Ireland	7.7%
Switzerland	4.1%
United Kingdom	3.1%
France	1.8%
Germany	0.3%
Total Long-Term Investments	<u>98.3%</u>
Short-Term Investments and Other Assets and Liabilities	<u>1.7%</u>
Net Assets	<u><u>100.0%</u></u>

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

September 30, 2021

	Number of Shares	Value
EQUITIES — 98.4%		
COMMON STOCK — 98.4%		
Basic Materials — 0.7%		
Chemicals — 0.7%		
Celanese Corp.	2,370	\$ 357,017
Communications — 11.5%		
Internet — 9.8%		
CDW Corp./DE	5,147	936,857
Etsy, Inc. ^(a)	5,479	1,139,413
Expedia Group, Inc. ^(a)	2,000	327,800
Match Group, Inc. ^(a)	7,126	1,118,711
Palo Alto Networks, Inc. ^(a)	1,520	728,080
Roku, Inc. ^(a)	1,575	493,526
Zendesk, Inc. ^(a)	5,890	685,537
		<u>5,429,924</u>
Telecommunications — 1.7%		
Juniper Networks, Inc.	13,640	375,373
Nice Ltd. Sponsored ADR ^{(a) (b)}	1,960	556,718
		<u>932,091</u>
		<u>6,362,015</u>
Consumer, Cyclical — 15.6%		
Apparel — 0.9%		
Tapestry, Inc.	13,320	493,106
Distribution & Wholesale — 1.0%		
Copart, Inc. ^(a)	3,930	545,170
Entertainment — 3.3%		
DraftKings, Inc. Class A ^{(a) (b)}	17,031	820,213
Live Nation Entertainment, Inc. ^(a)	6,250	569,562
Vail Resorts, Inc. ^(a)	1,260	420,903
		<u>1,810,678</u>
Lodging — 1.7%		
Hilton Worldwide Holdings, Inc. ^(a)	7,182	948,814
Retail — 8.7%		
Burlington Stores, Inc. ^(a)	2,123	602,019
Chipotle Mexican Grill, Inc. ^(a)	379	688,840
Freshpet, Inc. ^(a)	4,673	666,791
Lululemon Athletica, Inc. ^(a)	1,970	797,259
Ross Stores, Inc.	4,360	474,586
Ulta Beauty, Inc. ^(a)	1,430	516,116
Williams-Sonoma, Inc.	2,440	432,685
Wingstop, Inc.	3,997	655,228
		<u>4,833,524</u>
		<u>8,631,292</u>
Consumer, Non-cyclical — 28.7%		
Biotechnology — 5.5%		
Ascendis Pharma A/S ADR ^(a)	3,670	584,961
	Number of Shares	Value
BioMarin Pharmaceutical, Inc. ^(a)	4,940	\$ 381,813
Rocket Pharmaceuticals, Inc. ^(a)	4,460	133,309
Seagen, Inc. ^(a)	11,378	1,931,985
		<u>3,032,068</u>
Commercial Services — 11.7%		
Chegg, Inc. ^(a)	9,873	671,561
FleetCor Technologies, Inc. ^(a)	1,450	378,841
Gartner, Inc. ^(a)	2,812	854,511
Global Payments, Inc.	3,130	493,225
MarketAxess Holdings, Inc.	1,962	825,394
Repay Holdings Corp. ^(a)	25,257	581,669
Shift4 Payments, Inc. Class A ^(a)	10,381	804,735
TransUnion	16,473	1,850,083

		6,460,019
Health Care – Products — 5.7%		
ABIOMED, Inc. ^(a)	1,741	566,730
Avantor, Inc. ^(a)	8,080	330,472
The Cooper Cos., Inc.	885	365,779
IDEXX Laboratories, Inc. ^(a)	553	343,911
Insulet Corp. ^(a)	1,610	457,610
Omnicell, Inc. ^(a)	7,355	1,091,703
		<u>3,156,205</u>
Health Care – Services — 5.1%		
ICON PLC ^(a)	8,055	2,110,571
Oak Street Health, Inc. ^{(a) (b)}	8,090	344,068
Quest Diagnostics, Inc.	2,570	373,447
		<u>2,828,086</u>
Pharmaceuticals — 0.7%		
DexCom, Inc. ^(a)	690	377,333
		<u>15,853,711</u>
Energy — 0.9%		
Oil & Gas — 0.9%		
Devon Energy Corp.	13,830	491,104
Financial — 5.7%		
Diversified Financial Services — 3.7%		
Hamilton Lane, Inc. Class A	12,364	1,048,714
LPL Financial Holdings, Inc.	3,530	553,363
Synchrony Financial	9,220	450,674
		<u>2,052,751</u>
Insurance — 1.2%		
Arthur J Gallagher & Co.	4,350	646,627
Real Estate Investment Trusts (REITS) — 0.8%		
Essex Property Trust, Inc.	1,470	470,018
		<u>3,169,396</u>
Industrial — 10.9%		
Aerospace & Defense — 3.0%		
Hexcel Corp. ^(a)	12,705	754,550

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

MassMutual Fundamental Growth Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Teledyne Technologies, Inc. ^(a)	800	\$ 343,664
TransDigm Group, Inc. ^(a)	864	539,628
		<u>1,637,842</u>
Building Materials — 2.6%		
The AZEK Co., Inc. ^(a)	7,970	291,144
Fortune Brands Home & Security, Inc.	12,558	1,122,937
		<u>1,414,081</u>
Electrical Components & Equipment — 0.7%		
AMETEK, Inc.	3,200	396,832
Environmental Controls — 0.7%		
Waste Connections, Inc.	3,030	381,568
Machinery – Construction & Mining — 1.6%		
BWX Technologies, Inc.	16,957	913,304
Machinery – Diversified — 1.6%		
IDEX Corp.	1,780	368,371
Rockwell Automation, Inc.	1,835	539,563
		<u>907,934</u>
Miscellaneous - Manufacturing — 0.7%		
Trane Technologies PLC	2,240	386,736
		<u>6,038,297</u>
Technology — 24.4%		
Computers — 4.4%		
Cognizant Technology Solutions Corp. Class A	4,070	302,035
Fortinet, Inc. ^(a)	2,700	788,508
Varonis Systems, Inc. ^(a)	17,172	1,044,916
Western Digital Corp. ^(a)	5,290	298,568
		<u>2,434,027</u>
Semiconductors — 6.7%		
KLA Corp.	3,876	1,296,561
Microchip Technology, Inc.	3,400	521,866
ON Semiconductor Corp. ^(a)	6,010	275,078
Skyworks Solutions, Inc.	4,611	759,800
Teradyne, Inc.	3,180	347,161
Xilinx, Inc.	3,250	490,717
		<u>3,691,183</u>
Software — 13.3%		
Avalara, Inc. ^(a)	6,538	1,142,646
Ceridian HCM Holding, Inc. ^(a)	600	67,572
Digital Turbine, Inc. ^{(a) (b)}	12,449	855,869
Guidewire Software, Inc. ^(a)	5,805	690,040
HubSpot, Inc. ^(a)	835	564,535
Lightspeed Commerce, Inc. ^{(a) (b)}	4,570	440,685
MSCI, Inc.	840	511,006
Nutanix, Inc. Class A ^(a)	12,850	484,445
RingCentral, Inc. Class A ^(a)	1,310	284,925
Splunk, Inc. ^(a)	3,170	458,731
		<u>13,518,724</u>
		<u>54,421,556</u>
TOTAL COMMON STOCK (Cost \$46,500,424)		
TOTAL EQUITIES (Cost \$46,500,424)		<u>54,421,556</u>
MUTUAL FUNDS — 0.8%		
Diversified Financial Services — 0.8%		
State Street Navigator Securities Lending Government Money Market Portfolio ^(c)	445,614	445,614
		<u>445,614</u>
TOTAL MUTUAL FUNDS (Cost \$445,614)		

TOTAL LONG-TERM INVESTMENTS (Cost \$46,946,038)		54,867,170
	Principal Amount	
SHORT-TERM INVESTMENTS — 1.5% Repurchase Agreement — 1.5%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(d)	\$ 860,696	860,696
TOTAL SHORT-TERM INVESTMENTS (Cost \$860,696)		860,696
TOTAL INVESTMENTS — 100.7% (Cost \$47,806,734) ^(e)		55,727,866
Other Assets/(Liabilities) — (0.7)%		(396,613)
NET ASSETS — 100.0%		\$ 55,331,253

Abbreviation Legend

ADR American Depositary Receipt

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

*MassMutual Fundamental Growth Fund — Portfolio of Investments (Continued)***Notes to Portfolio of Investments**

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$2,946,692 or 5.33% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$2,562,627 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. *(Note 2)*.
- (c) Represents investment of security lending cash collateral. *(Note 2)*.
- (d) Maturity value of \$860,696. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 5/15/27, and an aggregate market value, including accrued interest, of \$878,074.
- (e) See Note 6 for aggregate cost for federal tax purposes.

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

MassMutual Blue Chip Growth Fund — Portfolio of Investments

September 30, 2021

	Number of Shares	Value
EQUITIES — 98.8%		
COMMON STOCK — 98.4%		
Basic Materials — 0.2%		
Chemicals — 0.2%		
Linde PLC	20,705	\$ 6,074,433
The Sherwin-Williams Co.	3,154	882,268
		<u>6,956,701</u>
Communications — 35.8%		
Internet — 32.6%		
Alibaba Group Holding Ltd. Sponsored ADR ^(a)	453,550	67,148,077
Alphabet, Inc. Class A ^(a)	44,215	118,209,687
Alphabet, Inc. Class C ^(a)	94,940	253,044,531
Amazon.com , Inc. ^(a)	116,801	383,695,957
Booking Holdings, Inc. ^(a)	5,434	12,899,610
Coupang, Inc. ^(a)	146,648	4,084,147
Delivery Hero SE ^{(a) (b)}	28,090	3,597,069
DoorDash, Inc., Class A ^(a)	102,919	21,199,256
Facebook, Inc. Class A ^(a)	889,991	302,054,045
Netflix, Inc. ^(a)	80,505	49,135,422
Pinterest, Inc. Class A ^(a)	343,481	17,500,357
Roku, Inc. ^(a)	9,806	3,072,710
Sea Ltd. ADR ^(a)	189,675	60,455,113
Shopify, Inc. Class A ^(a)	12,344	16,735,748
Snap, Inc. Class A ^(a)	698,306	51,583,864
Spotify Technology SA ^(a)	34,034	7,669,222
Tencent Holdings Ltd.	403,500	23,658,907
		<u>1,395,743,722</u>
Media — 2.3%		
FactSet Research Systems, Inc.	73,749	29,114,630
The Walt Disney Co. ^(a)	421,372	71,283,502
		<u>100,398,132</u>
Telecommunications — 0.9%		
Cisco Systems, Inc.	617,546	33,613,029
T-Mobile US, Inc. ^(a)	42,460	5,424,689
		<u>39,037,718</u>
		<u>1,535,179,572</u>
Consumer, Cyclical — 5.2%		
Apparel — 0.5%		
NIKE, Inc. Class B	130,371	18,933,780
Distribution & Wholesale — 0.1%		
Copart, Inc. ^(a)	43,076	5,975,503
Retail — 4.6%		
Carvana Co. ^{(a) (c)}	103,882	31,324,578
Chipotle Mexican Grill, Inc. ^(a)	10,712	19,469,274
	Number of Shares	Value
Dollar General Corp.	73,874	\$ 15,671,630
Lululemon Athletica, Inc. ^(a)	50,833	20,572,115
Ross Stores, Inc.	165,708	18,037,316
Starbucks Corp.	471,862	52,051,097
The TJX Cos., Inc.	49,877	3,290,885
Yum China Holdings, Inc.	248,985	14,468,518
Yum! Brands, Inc.	195,634	23,927,995
		<u>198,813,408</u>
		<u>223,722,691</u>
Consumer, Non-cyclical — 17.5%		
Beverages — 1.4%		
Monster Beverage Corp. ^(a)	650,256	57,762,240
Biotechnology — 3.2%		
Exact Sciences Corp. ^(a)	1,153	110,054
Illumina, Inc. ^(a)	104,770	42,495,760

Regeneron Pharmaceuticals, Inc. ^(a)	82,989	50,223,283
Vertex Pharmaceuticals, Inc. ^(a)	239,552	43,452,338
		<u>136,281,435</u>
Commercial Services — 3.8%		
Affirm Holdings, Inc. ^{(a) (c)}	115,672	13,780,005
Ant International Co. Ltd., Class C (Acquired 6/07/18, Cost \$3,358,253) ^{(a) (d) (e) (f)}	598,619	3,226,556
Automatic Data Processing, Inc.	66,770	13,348,659
Cintas Corp.	6,306	2,400,442
CoStar Group, Inc. ^(a)	123,060	10,590,544
Equifax, Inc.	11,573	2,932,830
Global Payments, Inc.	128,704	20,281,176
PayPal Holdings, Inc. ^(a)	205,996	53,602,219
S&P Global, Inc.	37,670	16,005,606
Square, Inc. Class A ^(a)	90,082	21,605,267
Toast, Inc., Class A ^(a)	9,938	496,403
TransUnion	31,757	3,566,629
		<u>161,836,336</u>
Cosmetics & Personal Care — 0.5%		
Colgate-Palmolive Co.	291,217	22,010,181
Health Care – Products — 3.2%		
Align Technology, Inc. ^(a)	6,185	4,115,685
Danaher Corp.	93,258	28,391,465
Intuitive Surgical, Inc. ^(a)	67,998	67,600,212
Stryker Corp.	70,022	18,466,202
Teleflex, Inc.	16,320	6,145,296
Thermo Fisher Scientific, Inc.	24,750	14,140,417
		<u>138,859,277</u>
Health Care – Services — 1.6%		
HCA Healthcare, Inc.	84,672	20,551,588
Humana, Inc.	17,708	6,891,068

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

UnitedHealth Group, Inc.

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Datadog, Inc. Class A ^(a)	39,143	5,532,863
DocuSign, Inc. ^(a)	50,604	13,026,988
Fidelity National Information Services, Inc.	42,453	5,165,681
Fiserv, Inc. ^(a)	176,771	19,179,654
Intuit, Inc.	92,273	49,782,206
Microsoft Corp.	850,691	239,826,807
MongoDB, Inc. ^(a)	32,906	15,515,508
MSCI, Inc.	5,094	3,098,884
Oracle Corp.	975,375	84,984,424
Paycom Software, Inc. ^(a)	4,545	2,253,184
Roper Technologies, Inc.	23,042	10,279,727
salesforce.com , Inc. ^(a)	309,850	84,037,517
ServiceNow, Inc. ^(a)	93,583	58,233,893
Snowflake, Inc. Class A ^(a)	14,711	4,449,048
Synopsys, Inc. ^(a)	74,456	22,292,871
Twilio, Inc. Class A ^(a)	11,856	3,782,657
Veeva Systems, Inc. Class A ^(a)	27,322	7,873,381
Workday, Inc. Class A ^(a)	104,742	26,173,978
Zoom Video Communications, Inc. Class A ^(a)	69,617	18,204,846
		<hr/> 797,288,909
		<hr/> 1,208,612,405
TOTAL COMMON STOCK (Cost \$2,250,054,470)		<hr/> 4,220,351,426

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

MassMutual Blue Chip Growth Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
PREFERRED STOCK — 0.4%		
Consumer, Cyclical — 0.3%		
Auto Manufacturers — 0.3%		
Rivian Automotive, Inc., Series F (Acquired 1/19/21, Cost \$5,922,532) ^{(a) (d) (e) (f)}	160,720	\$ 11,415,942
Technology — 0.1%		
Software — 0.1%		
Databricks, Inc., Series G (Acquired 2/01/21, Cost \$815,183) ^{(a) (d) (e) (f)}	4,596	1,013,199
Databricks, Inc., Series H (Acquired 8/31/21, Cost \$2,202,319) ^{(a) (d) (e) (f)}	9,990	2,202,319
Gusto, Inc., Series E (Acquired 7/13/21, Cost \$1,117,484) ^{(a) (d) (e) (f)}	36,765	1,117,484
		<u>4,333,002</u>
TOTAL PREFERRED STOCK (Cost \$10,057,518)		<u>15,748,944</u>
TOTAL EQUITIES (Cost \$2,260,111,988)		<u>4,236,100,370</u>
	Principal Amount	
BONDS & NOTES — 0.2%		
CORPORATE DEBT — 0.2%		
Consumer, Cyclical — 0.2%		
Auto Manufacturers — 0.2%		
Rivian Automotive, Inc., Promissory Note (Acquired 7/23/21, Cost \$6,956,412) ^{(a) (d) (e) (f)}	\$ 6,956,412	6,956,412
TOTAL CORPORATE DEBT (Cost \$6,956,412)		<u>6,956,412</u>
TOTAL BONDS & NOTES (Cost \$6,956,412)		<u>6,956,412</u>
TOTAL LONG-TERM INVESTMENTS (Cost \$2,267,068,400)		<u>4,243,056,782</u>
	Number of Shares	Value
SHORT-TERM INVESTMENTS — 0.5%		
Mutual Fund — 0.0%		
T. Rowe Price Government Reserve Investment Fund	100	\$ 100
	Principal Amount	
Repurchase Agreement — 0.5%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(g)	\$ 22,419,942	22,419,942
TOTAL SHORT-TERM INVESTMENTS (Cost \$22,420,042)		<u>22,420,042</u>
TOTAL INVESTMENTS — 99.5% (Cost \$2,289,488,442) ^(h)		<u>4,265,476,824</u>
Other Assets/(Liabilities) — 0.5%		<u>22,617,236</u>
NET ASSETS — 100.0%		<u><u>\$ 4,288,094,060</u></u>
Abbreviation Legend		
ADR American Depositary Receipt		

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

*MassMutual Blue Chip Growth Fund — Portfolio of Investments (Continued)***Notes to Portfolio of Investments**

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Security is exempt from registration under Regulation S or Rule 144A of the Securities Act of 1933. These securities are considered restricted and may be resold in transactions exempt from registration. At September 30, 2021, the aggregate market value of these securities amounted to \$3,597,069 or 0.08% of net assets.
- (c) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$14,641,119 or 0.34% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$14,949,749 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. (Note 2).
- (d) Investment was valued using significant unobservable inputs.
- (e) Restricted security. Certain securities are restricted as to resale. At September 30, 2021, these securities amounted to a value of \$26,608,464 or 0.62% of net assets. The Fund generally bears the costs, if any, associated with the disposition of restricted securities.
- (f) This security is fair valued in good faith in accordance with procedures approved by the Board of Trustees. At September 30, 2021, these securities amounted to a value of \$26,608,464 or 0.62% of net assets.
- (g) Maturity value of \$22,419,942. Collateralized by U.S. Government Agency obligations with rates ranging from 2.375% - 0.500%, maturity dates ranging from 5/15/27 - 6/30/27, and an aggregate market value, including accrued interest, of \$22,868,502.
- (h) See Note 6 for aggregate cost for federal tax purposes.

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

MassMutual Growth Opportunities Fund — Portfolio of Investments

September 30, 2021

	Number of Shares	Value
EQUITIES — 98.5%		
COMMON STOCK — 98.5%		
Communications — 35.4%		
Internet — 31.9%		
Airbnb, Inc. Class A ^(a)	53,637	\$ 8,997,607
Amazon.com , Inc. ^(a)	7,638	25,091,135
DoorDash, Inc., Class A ^(a)	34,193	7,043,074
Facebook, Inc. Class A ^(a)	30,929	10,496,993
Fiverr International Ltd. ^{(a) (b)}	16,891	3,085,648
Match Group, Inc. ^(a)	122,724	19,266,441
Netflix, Inc. ^(a)	43,626	26,626,693
Sea Ltd. ADR ^(a)	86,027	27,419,386
Shopify, Inc. Class A ^(a)	4,319	5,855,614
Uber Technologies, Inc. ^(a)	490,817	21,988,602
Wix.com Ltd. ^(a)	24,041	4,711,315
Zillow Group, Inc. Class C ^{(a) (b)}	44,466	3,919,233
		<u>164,501,741</u>
Media — 3.5%		
Charter Communications, Inc. Class A ^{(a) (b)}	24,620	17,912,527
		<u>182,414,268</u>
Consumer, Cyclical — 4.7%		
Apparel — 1.6%		
NIKE, Inc. Class B	54,791	7,957,297
Entertainment — 1.1%		
Warner Music Group Corp. Class A	135,457	5,789,432
Retail — 2.0%		
Carvana Co. ^{(a) (b)}	12,481	3,763,521
Floor & Decor Holdings, Inc. Class A ^(a)	53,253	6,432,430
		<u>10,195,951</u>
		<u>23,942,680</u>
Consumer, Non-cyclical — 19.9%		
Commercial Services — 6.7%		
CoStar Group, Inc. ^(a)	87,161	7,501,075
PayPal Holdings, Inc. ^(a)	41,814	10,880,421
Square, Inc. Class A ^(a)	66,025	15,835,436
		<u>34,216,932</u>
Health Care – Products — 8.5%		
10X Genomics, Inc. Class A ^(a)	33,844	4,927,010
Align Technology, Inc. ^(a)	25,379	16,887,948
Edwards Lifesciences Corp. ^(a)	128,785	14,579,750
Intuitive Surgical, Inc. ^(a)	7,556	7,511,797
		<u>43,906,505</u>
Health Care – Services — 1.3%		
Catalent, Inc. ^(a)	48,698	6,480,243
		<u>6,480,243</u>
	Number of Shares	Value
Pharmaceuticals — 3.4%		
DexCom, Inc. ^(a)	12,585	\$ 6,882,233
Sarepta Therapeutics, Inc. ^(a)	56,718	5,245,281
Zoetis, Inc.	28,547	5,542,114
		<u>17,669,628</u>
		<u>102,273,308</u>
Financial — 9.3%		
Diversified Financial Services — 7.8%		
Mastercard, Inc. Class A	32,577	11,326,371
Visa, Inc. Class A ^(b)	130,514	29,071,994
		<u>40,398,365</u>
Private Equity — 1.5%		
KKR & Co., Inc.	124,485	7,578,647
		<u>47,977,012</u>
Industrial — 1.2%		

Environmental Controls — 1.2%

Waste Management, Inc.

41,626 6,217,259**Technology — 28.0%****Software — 28.0%**Adobe, Inc. ^(a)

8,487 4,886,136

Atlassian Corp. PLC Class A ^(a)

22,369 8,755,674

Cloudflare, Inc. Class A ^(a)

21,012 2,367,002

Coupa Software, Inc. ^(a)

25,373 5,561,254

Datadog, Inc. Class A ^(a)

67,794 9,582,682

Intuit, Inc.

18,399 9,926,444

Microsoft Corp.

80,465 22,684,693

Paycom Software, Inc. ^(a)

16,416 8,138,232

ServiceNow, Inc. ^(a)

41,813 26,018,976

Snowflake, Inc. Class A ^(a)

49,584 14,995,689

Twilio, Inc. Class A ^(a)

64,166 20,472,162

Veeva Systems, Inc. Class A ^(a)

22,746 6,554,715

Zoom Video Communications, Inc. Class A ^(a)16,011 4,186,876144,130,535**TOTAL COMMON STOCK (Cost \$295,855,289)****506,955,062****TOTAL EQUITIES (Cost \$295,855,289)****506,955,062**

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

MassMutual Growth Opportunities Fund — Portfolio of Investments (Continued)

	<u>Number of Shares</u>	<u>Value</u>
MUTUAL FUNDS — 0.0%		
Diversified Financial Services — 0.0%		
State Street Navigator Securities Lending Government Money Market Portfolio ^(c)	4,476	\$ 4,476
TOTAL MUTUAL FUNDS (Cost \$4,476)		4,476
TOTAL LONG-TERM INVESTMENTS (Cost \$295,859,765)		506,959,538
	<u>Principal Amount</u>	
SHORT-TERM INVESTMENTS — 1.1%		
Repurchase Agreement — 1.1%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(d)	\$ 5,752,493	5,752,493
TOTAL SHORT-TERM INVESTMENTS (Cost \$5,752,493)		5,752,493
TOTAL INVESTMENTS — 99.6% (Cost \$301,612,258) ^(e)		512,712,031
Other Assets/(Liabilities) — 0.4%		2,036,362
NET ASSETS — 100.0%		\$ 514,748,393

Abbreviation Legend

ADR American Depositary Receipt

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$36,121,557 or 7.02% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$36,867,092 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. *(Note 2)*.
- (c) Represents investment of security lending cash collateral. *(Note 2)*.
- (d) Maturity value of \$5,752,493. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 5/15/27, and an aggregate market value, including accrued interest, of \$5,867,623.
- (e) See Note 6 for aggregate cost for federal tax purposes.

Country weightings, as a percentage of net assets, is as follows:

United States	88.9%
Cayman Islands	5.3%
United Kingdom	1.7%
Israel	1.5%
Canada	1.1%
Total Long-Term Investments	98.5%
Short-Term Investments and Other Assets and Liabilities	1.5%
Net Assets	100.0%

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

MassMutual Mid Cap Value Fund — Portfolio of Investments

September 30, 2021

	Number of Shares	Value
EQUITIES — 97.6%		
COMMON STOCK — 97.6%		
Basic Materials — 2.6%		
Chemicals — 1.4%		
Axalta Coating Systems Ltd. ^(a)	38,157	\$ 1,113,803
CF Industries Holdings, Inc.	10,632	593,478
Olin Corp.	706	34,064
		<u>1,741,345</u>
Forest Products & Paper — 0.9%		
International Paper Co.	4,481	250,578
Mondi PLC	22,088	539,885
West Fraser Timber Co. Ltd.	3,000	252,690
		<u>1,043,153</u>
Mining — 0.3%		
Kinross Gold Corp.	62,300	333,928
		<u>3,118,426</u>
Communications — 6.9%		
Advertising — 0.6%		
The Interpublic Group of Cos., Inc.	18,605	682,246
Internet — 2.2%		
eBay, Inc.	6,800	473,756
F5 Networks, Inc. ^(a)	2,500	496,950
IAC/InterActiveCorp ^(a)	3,600	469,044
NortonLifeLock, Inc.	657	16,622
Roku, Inc. ^(a)	44	13,787
Twitter, Inc. ^(a)	11,973	723,050
Wayfair, Inc. Class A ^{(a) (b)}	1,868	477,293
Zillow Group, Inc. Class C ^(a)	172	15,160
		<u>2,685,662</u>
Media — 3.5%		
DISH Network Corp. Class A ^(a)	13,300	578,018
Fox Corp. Class A	16,100	645,771
Fox Corp. Class B	17,148	636,534
Liberty Broadband Corp. Class C ^(a)	5,800	1,001,660
Liberty Media Corp-Liberty SiriusXM Class C ^(a)	19,000	901,930
The New York Times Co. Class A	876	43,160
News Corp. Class A	13,717	322,761
		<u>4,129,834</u>
Telecommunications — 0.6%		
Ciena Corp. ^(a)	5,709	293,157
Juniper Networks, Inc.	10,084	277,512
Motorola Solutions, Inc.	529	122,897
		<u>693,566</u>
		<u>8,191,308</u>
	Number of Shares	Value
Consumer, Cyclical — 11.5%		
Airlines — 0.6%		
Southwest Airlines Co. ^(a)	14,225	\$ 731,592
Apparel — 0.7%		
Columbia Sportswear Co.	199	19,072
Deckers Outdoor Corp. ^(a)	188	67,717
PVH Corp. ^(a)	2,653	272,702
Ralph Lauren Corp.	65	7,218
Tapestry, Inc.	13,342	493,921
		<u>860,630</u>
Auto Manufacturers — 1.3%		
Cummins, Inc.	3,783	849,511
Honda Motor Co. Ltd. Sponsored ADR ^{(a) (b)}	12,440	381,535
PACCAR, Inc.	4,445	350,799
		<u>1,581,845</u>
Auto Parts & Equipment — 1.2%		
Aptiv PLC ^(a)	4,824	718,632

BorgWarner, Inc.	12,844	554,989
Bridgestone Corp.	4,300	203,933
		<u>1,477,554</u>
Distribution & Wholesale — 0.8%		
LKQ Corp. ^(a)	14,300	719,576
W.W. Grainger, Inc.	538	211,466
		<u>931,042</u>
Food Services — 0.4%		
Sodexo SA ^(a)	4,760	416,805
Home Builders — 0.8%		
NVR, Inc. ^(a)	100	479,408
PulteGroup, Inc.	10,802	496,028
		<u>975,436</u>
Home Furnishing — 0.2%		
Dolby Laboratories, Inc. Class A	2,380	209,440
Tempur Sealy International, Inc.	458	21,256
		<u>230,696</u>
Leisure Time — 0.5%		
Brunswick Corp.	2,979	283,809
Polaris, Inc.	2,506	299,868
		<u>583,677</u>
Retail — 4.7%		
Advance Auto Parts, Inc.	3,779	789,395
Bath & Body Works, Inc.	8,562	539,663
Beacon Roofing Supply, Inc. ^(a)	3,220	153,787
Cracker Barrel Old Country Store, Inc.	1,488	208,082
Dick's Sporting Goods, Inc. ^(b)	753	90,187
Dollar Tree, Inc. ^(a)	16,329	1,563,012
Kohl's Corp.	3,704	174,421

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

MassMutual Mid Cap Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
MSC Industrial Direct Co., Inc. Class A	7,303	\$ 585,627
O'Reilly Automotive, Inc. ^(a)	1,100	672,166
Ross Stores, Inc.	3,900	424,515
Victoria's Secret & Co. ^(a)	2,854	157,712
Williams-Sonoma, Inc.	1,226	217,407
		<u>5,575,974</u>
Textiles — 0.3%		
Mohawk Industries, Inc. ^(a)	1,950	345,930
		<u>13,711,181</u>
Consumer, Non-cyclical — 17.8%		
Beverages — 0.4%		
Molson Coors Beverage Co. Class B	11,800	547,284
Biotechnology — 0.4%		
Incyte Corp. ^(a)	1,815	124,836
Novavax, Inc. ^(a)	90	18,658
United Therapeutics Corp. ^(a)	1,600	295,328
		<u>438,822</u>
Commercial Services — 1.4%		
Euronet Worldwide, Inc. ^(a)	4,824	613,999
FleetCor Technologies, Inc. ^(a)	2,500	653,175
Gartner, Inc. ^(a)	77	23,399
ManpowerGroup, Inc.	2,187	236,808
Morningstar, Inc.	84	21,758
Robert Half International, Inc.	918	92,103
		<u>1,641,242</u>
Food — 4.4%		
Conagra Brands, Inc.	22,977	778,231
General Mills, Inc.	4,682	280,077
Ingredion, Inc.	356	31,688
The J.M. Smucker Co.	2,593	311,238
Kellogg Co.	4,393	280,801
Koninklijke Ahold Delhaize NV	20,172	668,768
The Kraft Heinz Co.	17,300	636,986
Orkla ASA	33,043	302,817
Post Holdings, Inc. ^(a)	9,500	1,046,520
Sysco Corp.	3,299	258,971
Tyson Foods, Inc. Class A	8,831	697,119
		<u>5,293,216</u>
Health Care – Products — 3.1%		
Baxter International, Inc.	255	20,510
Bruker Corp.	173	13,511
Envista Holdings Corp. ^(a)	6,329	264,615
Henry Schein, Inc. ^(a)	8,686	661,526
Hill-Rom Holdings, Inc.	2,247	337,050
Hologic, Inc. ^(a)	9,049	667,907
ICU Medical, Inc. ^(a)	106	24,738
	Number of Shares	Value
Koninklijke Philips NV ^(b)	7,089	\$ 315,035
ResMed, Inc.	367	96,723
Zimmer Biomet Holdings, Inc.	8,665	1,268,209
		<u>3,669,824</u>
Health Care – Services — 2.6%		
Centene Corp. ^(a)	18,451	1,149,682
Laboratory Corp. of America Holdings ^(a)	2,300	647,312
Quest Diagnostics, Inc.	4,640	674,238
Universal Health Services, Inc. Class B	5,099	705,549
		<u>3,176,781</u>
Household Products & Wares — 0.9%		
Avery Dennison Corp.	68	14,090
The Clorox Co.	1,613	267,129
Kimberly-Clark Corp.	3,050	403,942
Reynolds Consumer Products, Inc.	8,800	240,592
Spectrum Brands Holdings, Inc.	1,586	151,733
		<u>1,077,486</u>

Pharmaceuticals — 4.6%

AmerisourceBergen Corp.	7,500	895,875
Bausch Health Cos., Inc. ^(a)	10,700	297,995
Becton Dickinson and Co.	1,686	414,453
Cardinal Health, Inc.	12,174	602,126
Herbalife Nutrition Ltd. ^(a)	355	15,045
Jazz Pharmaceuticals PLC ^(a)	2,946	383,599
McKesson Corp.	6,396	1,275,234
Organon & Co.	19,000	623,010
Perrigo Co. PLC	6,900	326,577
Viatis, Inc.	47,500	643,625
		<u>5,477,539</u>
		<u>21,322,194</u>

Energy — 4.5%**Oil & Gas — 2.9%**

APA Corp.	14,261	305,613
ConocoPhillips	11,506	779,762
Devon Energy Corp.	24,561	872,161
EQT Corp. ^(a)	14,600	298,716
HollyFrontier Corp.	15,900	526,767
Marathon Oil Corp.	29,759	406,805
Pioneer Natural Resources Co.	1,592	265,084
		<u>3,454,908</u>

Oil & Gas Services — 0.6%

Baker Hughes Co.	28,578	706,734
Pipelines — 1.0%		
Targa Resources Corp.	8,395	413,118

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

MassMutual Mid Cap Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
The Williams Cos., Inc.	32,000	\$ 830,080
		1,243,198
		5,404,840
Financial — 25.7%		
Banks — 6.0%		
The Bank of New York Mellon Corp.	20,059	1,039,859
CIT Group, Inc.	11,200	581,840
Comerica, Inc.	4,250	342,125
Commerce Bancshares, Inc.	1,068	74,418
Eastern Bankshares, Inc.	2,515	51,054
First Hawaiian, Inc.	11,300	331,655
First Horizon Corp.	2,907	47,355
KeyCorp.	33,807	730,907
M&T Bank Corp.	3,096	462,357
Northern Trust Corp.	8,260	890,511
Prosperity Bancshares, Inc.	4,270	303,725
State Street Corp.	10,990	931,073
Synovus Financial Corp.	5,523	242,404
Truist Financial Corp.	12,223	716,879
Umpqua Holdings Corp.	8,312	168,318
Webster Financial Corp.	478	26,032
Westamerica Bancorp.	4,195	236,011
Wintrust Financial Corp.	301	24,191
		7,200,714
Diversified Financial Services — 3.3%		
AerCap Holdings NV ^(a)	8,500	491,385
Affiliated Managers Group, Inc.	1,872	282,841
Ally Financial, Inc.	11,500	587,075
Ameriprise Financial, Inc.	1,599	422,328
Cboe Global Markets, Inc.	3,600	445,896
Discover Financial Services	5,091	625,429
Janus Henderson Group PLC	907	37,486
LPL Financial Holdings, Inc.	194	30,411
Raymond James Financial, Inc.	7,085	653,758
T. Rowe Price Group, Inc.	1,895	372,747
		3,949,356
Insurance — 8.9%		
Aflac, Inc.	12,516	652,459
Alleghany Corp. ^(a)	1,500	936,615
The Allstate Corp.	8,171	1,040,250
American International Group, Inc.	7,900	433,631
Arch Capital Group Ltd. ^(a)	26,300	1,004,134
Arthur J Gallagher & Co.	1,070	159,056
Chubb Ltd.	5,541	961,253
Equitable Holdings, Inc.	11,200	331,968
Fidelity National Financial, Inc.	21,300	965,742
First American Financial Corp.	2,324	155,824
The Hanover Insurance Group, Inc.	140	18,147
	Number of Shares	Value
The Hartford Financial Services Group, Inc.	10,556	\$ 741,559
Loews Corp.	16,100	868,273
Markel Corp. ^(a)	700	836,591
Old Republic International Corp.	14,000	323,820
Reinsurance Group of America, Inc.	9,207	1,024,371
Unum Group	7,341	183,965
		10,637,658
Private Equity — 0.6%		
KKR & Co., Inc.	10,791	656,956
Real Estate — 0.9%		
Jones Lang LaSalle, Inc. ^(a)	4,554	1,129,802
Real Estate Investment Trusts (REITS) — 5.8%		
Annaly Capital Management, Inc.	72,100	607,082
Apartment Income REIT Corp.	2,111	103,038
Duke Realty Corp.	12,397	593,444
Equinix, Inc.	399	315,262
Essex Property Trust, Inc.	1,167	373,137
Gaming and Leisure Properties, Inc.	8,600	398,352

Healthcare Trust of America, Inc. Class A	16,127	478,327
Healthpeak Properties, Inc.	16,136	540,233
JBG SMITH Properties	25,929	767,758
Kilroy Realty Corp.	4,388	290,529
Kimco Realty Corp.	29,222	606,357
MGM Growth Properties LLC Class A	10,041	384,570
Regency Centers Corp.	9,879	665,153
Weyerhaeuser Co.	24,011	854,071
		<u>6,977,313</u>
Savings & Loans — 0.2%		
Capitol Federal Financial, Inc.	15,292	175,705
		<u>30,727,504</u>
Industrial — 13.5%		
Aerospace & Defense — 1.4%		
BAE Systems PLC	58,626	443,121
General Dynamics Corp.	3,077	603,184
Teledyne Technologies, Inc. ^(a)	1,330	571,342
		<u>1,617,647</u>
Building Materials — 1.3%		
Fortune Brands Home & Security, Inc.	6,261	559,859
Johnson Controls International PLC	264	17,973
Lennox International, Inc.	1,809	532,153
Owens Corning	5,180	442,890
		<u>1,552,875</u>
Electrical Components & Equipment — 0.6%		
ChargePoint Holdings, Inc. ^(a)	727	14,533

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

Emerson Electric Co.

	Number of Shares	Value
Emerson Electric Co.	7,287	\$ 686,435
Electronics — 3.3%		700,968
Flex Ltd. ^(a)	27,300	482,664
Garmin Ltd.	4,311	670,188
Hubbell, Inc.	1,719	310,572
Mettler-Toledo International, Inc. ^(a)	13	17,906
nVent Electric PLC	25,212	815,104
SYNNEX Corp.	773	80,469
TE Connectivity Ltd.	715	98,112
Trimble, Inc. ^(a)	7,933	652,489
Vontier Corp.	23,700	796,320
		3,923,824
Environmental Controls — 0.9%		
Clean Harbors, Inc. ^(a)	1,945	202,027
Pentair PLC	8,213	596,510
Republic Services, Inc.	2,662	319,600
		1,118,137
Hand & Machine Tools — 0.3%		
Snap-on, Inc.	2,011	420,199
Machinery – Construction & Mining — 0.5%		
Oshkosh Corp.	5,839	597,738
Machinery – Diversified — 0.1%		
Cognex Corp.	248	19,895
Crane Co.	776	73,572
IMI PLC	3,632	80,930
		174,397
Miscellaneous - Manufacturing — 1.1%		
A.O. Smith Corp.	703	42,932
Axon Enterprise, Inc. ^(a)	95	16,627
Textron, Inc.	9,022	629,826
Trane Technologies PLC	3,726	643,294
		1,332,679
Packaging & Containers — 3.1%		
Amcor PLC	14,397	166,861
Berry Global Group, Inc. ^(a)	6,600	401,808
Graphic Packaging Holding Co.	35,737	680,432
Packaging Corp. of America	2,415	331,918
Sealed Air Corp.	13,000	712,270
Sonoco Products Co.	12,377	737,422
WestRock Co.	12,681	631,894
		3,662,605
Shipbuilding — 0.5%		
Huntington Ingalls Industries, Inc.	3,100	598,486
Transportation — 0.4%		
Heartland Express, Inc.	16,793	269,024

	Number of Shares	Value
Ryder System, Inc.	1,979	\$ 163,683
		432,707
		16,132,262
Technology — 6.1%		
Computers — 1.7%		
Amdocs Ltd.	3,353	253,856
Fortinet, Inc. ^(a)	76	22,195
HP, Inc.	40,304	1,102,717
KBR, Inc.	5,000	197,000
Lumentum Holdings, Inc. ^(a)	2,805	234,330
NCR Corp. ^(a)	7,700	298,452
		2,108,550
Semiconductors — 0.7%		
Cirrus Logic, Inc. ^(a)	2,182	179,688
Qorvo, Inc. ^(a)	3,698	618,268
		797,956
Software — 3.7%		
	148	22,413

Cadence Design Systems, Inc. ^(a)		
CDK Global, Inc.	24,415	1,038,858
Cerner Corp.	19,627	1,384,096
Concentrix Corp. ^(a)	612	108,324
DocuSign, Inc. ^(a)	61	15,703
Dropbox, Inc. Class A ^(a)	736	21,506
HubSpot, Inc. ^(a)	30	20,283
Manhattan Associates, Inc. ^(a)	229	35,044
Open Text Corp.	8,096	394,599
SS&C Technologies Holdings, Inc	8,900	617,660
Synopsys, Inc. ^(a)	2,152	644,330
Take-Two Interactive Software, Inc. ^(a)	681	104,922
Teradata Corp. ^(a)	409	23,456
		<u>4,431,194</u>
		<u>7,337,700</u>
Utilities — 9.0%		
Electric — 6.9%		
CenterPoint Energy, Inc.	30,400	747,840
Edison International	12,598	698,811
Eversource Energy	17,514	1,089,371
NorthWestern Corp.	11,312	924,869
OGE Energy Corp.	10,046	575,636
Pinnacle West Capital Corp.	29,900	985,504
Vistra Corp.	10,615	768,101
WEC Energy Group, Inc.	57,800	988,380
Xcel Energy, Inc.	7,420	654,444
	12,952	809,500
		<u>8,242,456</u>

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

MassMutual Mid Cap Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Gas — 2.1%		
Atmos Energy Corp.	3,464	\$ 305,525
NiSource, Inc.	46,200	1,119,426
Spire, Inc.	4,386	268,335
UGI Corp.	18,300	779,946
		<u>2,473,232</u>
		<u>10,715,688</u>
TOTAL COMMON STOCK (Cost \$110,911,537)		<u>116,661,103</u>
TOTAL EQUITIES (Cost \$110,911,537)		<u>116,661,103</u>
MUTUAL FUNDS — 0.2%		
Diversified Financial Services — 0.2%		
iShares Russell Mid-Cap Value ETF	1,213	137,372
State Street Navigator Securities Lending Government Money Market Portfolio ^(c)	89,959	89,959
		<u>227,331</u>
TOTAL MUTUAL FUNDS (Cost \$231,898)		<u>227,331</u>
TOTAL LONG-TERM INVESTMENTS (Cost \$111,143,435)		<u>116,888,434</u>
	Principal Amount	Value
SHORT-TERM INVESTMENTS — 0.8%		
Repurchase Agreement — 0.8%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(d)	\$ 941,039	\$ <u>941,039</u>
TOTAL SHORT-TERM INVESTMENTS (Cost \$941,039)		<u>941,039</u>
TOTAL INVESTMENTS — 98.6% (Cost \$112,084,474) ^(e)		117,829,473
Other Assets/(Liabilities) — 1.4%		<u>1,615,444</u>
NET ASSETS — 100.0%		<u>\$ 119,444,917</u>

Abbreviation Legend

ADR American Depositary Receipt

ETF Exchange-Traded Fund

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$1,269,882 or 1.06% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$1,208,790 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. *(Note 2)*.
- (c) Represents investment of security lending cash collateral. *(Note 2)*.
- (d) Maturity value of \$941,039. Collateralized by U.S. Government Agency obligations with a rate of 0.500%, maturity date of 5/31/27, and an aggregate market value, including accrued interest, of \$959,900.
- (e) See Note 6 for aggregate cost for federal tax purposes.

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

*MassMutual Mid Cap Value Fund — Portfolio of Investments (Continued)***Forward contracts**

Counterparty	Settlement Date	Currency Purchased		Currency Sold		Unrealized Appreciation (Depreciation)
Bank of America N.A.	12/30/21	JPY	1,558,723	USD	14,063	\$ (44)
Bank of America N.A.	12/30/21	USD	536,226	JPY	58,762,040	7,750
Credit Suisse International	12/31/21	USD	1,237,230	EUR	1,052,433	15,715
JP Morgan Chase Bank N.A.	12/31/21	GBP	22,795	USD	31,244	(523)
JP Morgan Chase Bank N.A.	12/31/21	USD	957,265	GBP	701,137	12,328
UBS AG	12/30/21	USD	252,783	NOK	2,183,448	3,195
						<u>\$ 38,421</u>

Currency Legend

EUR Euro
 GBP British Pound
 JPY Japanese Yen
 NOK Norwegian Krone
 USD U.S. Dollar

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

MassMutual Small Cap Value Equity Fund — Portfolio of Investments

September 30, 2021

	Number of Shares	Value
EQUITIES — 97.8%		
COMMON STOCK — 97.8%		
Basic Materials — 6.9%		
Chemicals — 4.2%		
Axalta Coating Systems Ltd. ^(a)	11,281	\$ 329,293
Element Solutions, Inc.	29,205	633,165
H.B. Fuller Co.	4,421	285,420
Orion Engineered Carbons SA ^(a)	22,153	403,849
Rogers Corp. ^(a)	4,066	758,228
Stepan Co.	1,728	195,160
		<u>2,605,115</u>
Forest Products & Paper — 0.8%		
Neenah, Inc.	10,348	482,320
Iron & Steel — 1.2%		
Allegheny Technologies, Inc. ^(a)	47,319	786,915
Mining — 0.7%		
Ferroglobe PLC ^(a)	48,889	425,334
Ferroglobe Representation & Warranty Insurance Trust ^{(b) (c)}	234,800	—
		<u>425,334</u>
		<u>4,299,684</u>
Communications — 2.2%		
Internet — 0.1%		
Cargurus, Inc. ^(a)	800	25,128
Media — 0.1%		
WideOpenWest, Inc. ^(a)	3,600	70,740
Telecommunications — 2.0%		
Ciena Corp. ^(a)	10,727	550,831
Infinera Corp. ^(a)	84,099	699,704
		<u>1,250,535</u>
		<u>1,346,403</u>
Consumer, Cyclical — 9.9%		
Apparel — 0.8%		
Kontoor Brands, Inc.	9,476	473,326
Auto Parts & Equipment — 4.8%		
Adient PLC ^(a)	26,144	1,083,669
American Axle & Manufacturing Holdings, Inc. ^(a)	75,985	669,428
Gentherm, Inc. ^(a)	11,951	967,194
Visteon Corp. ^(a)	3,211	303,086
		<u>3,023,377</u>
Food Services — 0.9%		
Aramark	16,211	532,694
Home Builders — 0.6%		
TRI Pointe Group, Inc. ^(a)	18,772	394,587
		<u>394,587</u>
Home Furnishing — 1.0%		
Whirlpool Corp.	3,050	\$ 621,773
Lodging — 0.6%		
Wyndham Hotels & Resorts, Inc.	4,721	364,414
Office Furnishings — 0.8%		
Interface, Inc.	31,668	479,770
Textiles — 0.4%		
UniFirst Corp.	1,327	282,147
		<u>6,172,088</u>
Consumer, Non-cyclical — 14.5%		
Agriculture — 1.8%		
Darling Ingredients, Inc. ^(a)	15,692	1,128,255
Beverages — 0.5%		
C&C Group PLC ^(a)	85,414	268,360
Commercial Services — 3.7%		
AMN Healthcare Services, Inc. ^(a)	460	52,785
BrightView Holdings, Inc. ^(a)	20,013	295,392
	15,096	488,205

CBIZ, Inc. ^(a)		
Forrester Research, Inc. ^(a)	4,575	225,364
Huron Consulting Group, Inc. ^(a)	9,876	513,552
ICF International, Inc.	4,373	390,465
Monro, Inc.	5,985	344,197
		<u>2,309,960</u>
Food — 2.6%		
Cranswick PLC	7,143	341,519
Hostess Brands, Inc. ^(a)	24,821	431,141
Post Holdings, Inc. ^(a)	3,526	388,424
SunOpta, Inc. ^(a)	52,804	471,540
		<u>1,632,624</u>
Health Care – Products — 1.8%		
Apria, Inc. ^(a)	2,855	106,063
Haemonetics Corp. ^(a)	3,855	272,124
Invacare Corp. ^(a)	15,672	74,599
Lantheus Holdings, Inc. ^(a)	25,576	656,792
		<u>1,109,578</u>
Health Care – Services — 1.6%		
Encompass Health Corp.	7,180	538,787
MEDNAX, Inc. ^(a)	6,776	192,642
Syneos Health, Inc. ^(a)	2,986	261,215
		<u>992,644</u>
Household Products & Wares — 1.9%		
ACCO Brands Corp.	42,982	369,215
Spectrum Brands Holdings, Inc.	8,414	804,968
		<u>1,174,183</u>

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

MassMutual Small Cap Value Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Pharmaceuticals — 0.6%		
Owens & Minor, Inc.	12,433	\$ 389,029
		9,004,633
Energy — 1.3%		
Oil & Gas — 1.0%		
Chesapeake Energy Corp.	4,291	264,283
Magnolia Oil & Gas Corp. Class A ^(d)	18,889	336,035
		600,318
Oil & Gas Services — 0.3%		
NOW, Inc. ^(a)	28,504	218,056
		818,374
Financial — 25.1%		
Banks — 11.9%		
1st Source Corp.	4,836	228,453
Atlantic Union Bankshares Corp.	8,613	317,389
BancorpSouth Bank	9,649	287,347
Eastern Bankshares, Inc.	15,139	307,322
First Citizens BancShares, Inc. Class A	345	290,894
First Midwest Bancorp, Inc.	14,739	280,188
Great Western Bancorp, Inc.	10,410	340,823
Hancock Whitney Corp.	10,493	494,430
International Bancshares Corp.	10,028	417,566
OFG Bancorp	38,014	958,713
Prosperity Bancshares, Inc.	10,100	718,413
Synovus Financial Corp.	10,703	469,755
Texas Capital Bancshares, Inc. ^(a)	17,200	1,032,344
Umpqua Holdings Corp.	44,136	893,754
Webster Financial Corp.	6,885	374,957
		7,412,348
Insurance — 7.3%		
Alleghany Corp. ^(a)	982	613,171
Argo Group International Holdings Ltd.	4,496	234,781
Assured Guaranty Ltd.	6,719	314,516
Kemper Corp.	7,812	521,763
MGIC Investment Corp.	67,435	1,008,828
NMI Holdings, Inc. Class A ^(a)	13,402	303,019
ProAssurance Corp.	12,341	293,469
Reinsurance Group of America, Inc.	3,037	337,897
SiriusPoint Ltd. ^(a)	34,598	320,377
White Mountains Insurance Group Ltd.	570	609,678
		4,557,499
Real Estate — 0.7%		
Alexander & Baldwin, Inc.	18,890	442,782
Real Estate Investment Trusts (REITS) — 4.0%		
Brandywine Realty Trust	29,272	392,830
	Number of Shares	Value
Corporate Office Properties Trust	8,597	\$ 231,947
Lexington Realty Trust	21,557	274,852
Physicians Realty Trust	23,134	407,621
Piedmont Office Realty Trust, Inc. Class A	23,182	404,063
PotlatchDeltic Corp.	5,297	273,219
RPT Realty	38,358	489,448
		2,473,980
Savings & Loans — 1.2%		
Banc of California, Inc.	26,827	496,031
Northwest Bancshares, Inc.	20,133	267,366
		763,397
		15,650,006
Industrial — 26.3%		
Aerospace & Defense — 0.6%		
Hexcel Corp. ^(a)	6,463	383,837
Building Materials — 4.7%		
American Woodmark Corp. ^(a)	5,438	355,482
Apogee Enterprises, Inc.	20,281	765,810
Cornerstone Building Brands, Inc. ^(a)	34,903	509,933

Gibraltar Industries, Inc. ^(a)	8,169	568,971
Louisiana-Pacific Corp.	1,945	119,365
Tyman PLC	107,444	605,004
		<u>2,924,565</u>
Electrical Components & Equipment — 2.2%		
Belden, Inc.	11,221	653,736
Encore Wire Corp.	7,505	711,699
		<u>1,365,435</u>
Electronics — 2.3%		
FARO Technologies, Inc. ^(a)	8,921	587,091
II-VI, Inc. ^{(a) (d)}	10,262	609,152
Vishay Precision Group, Inc. ^(a)	7,433	258,446
		<u>1,454,689</u>
Engineering & Construction — 2.2%		
Primoris Services Corp.	14,039	343,815
WillScot Mobile Mini Holdings Corp. ^(a)	32,234	1,022,463
		<u>1,366,278</u>
Environmental Controls — 1.7%		
Clean Harbors, Inc. ^(a)	4,509	468,350
Harsco Corp. ^(a)	32,849	556,790
		<u>1,025,140</u>
Hand & Machine Tools — 1.6%		
Kennametal, Inc.	18,188	622,575
Luxfer Holdings PLC	20,360	399,667
		<u>1,022,242</u>

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

Machinery – Diversified — 0.8%

214/495

	<u>Principal Amount</u>	
SHORT-TERM INVESTMENTS — 2.7%		
Repurchase Agreement — 2.7%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(e)	\$ 1,690,118	<u>1,690,118</u>
TOTAL SHORT-TERM INVESTMENTS (Cost \$1,690,118)		<u>1,690,118</u>
TOTAL INVESTMENTS — 100.5% (Cost \$45,847,335) ^(f)		62,604,952
Other Assets/(Liabilities) — (0.5)%		<u>(301,715)</u>
NET ASSETS — 100.0%		<u>\$ 62,303,237</u>
Abbreviation Legend		
ADR American Depositary Receipt		

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

*MassMutual Small Cap Value Equity Fund — Portfolio of Investments (Continued)***Notes to Portfolio of Investments**

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Investment was valued using significant unobservable inputs.
- (c) This security is fair valued in good faith in accordance with procedures approved by the Board of Trustees. At September 30, 2021, these securities amounted to a value of \$0 or 0.00% of net assets.
- (d) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$1,299,853 or 2.09% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$1,327,547 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. (*Note 2*).
- (e) Maturity value of \$1,690,118. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 5/15/27, and an aggregate market value, including accrued interest, of \$1,724,034.
- (f) See Note 6 for aggregate cost for federal tax purposes.

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

MassMutual Small Company Value Fund — Portfolio of Investments

September 30, 2021

	Number of Shares	Value
EQUITIES — 98.8%		
COMMON STOCK — 98.8%		
Basic Materials — 5.1%		
Chemicals — 3.4%		
AdvanSix, Inc. ^(a)	53,120	\$ 2,111,520
GCP Applied Technologies, Inc. ^(a)	53,246	1,167,152
H.B. Fuller Co.	33,440	2,158,887
Innospec, Inc.	14,960	1,259,931
Minerals Technologies, Inc.	12,710	887,666
Orion Engineered Carbons SA ^(a)	107,408	1,958,048
		<u>9,543,204</u>
Iron & Steel — 1.7%		
Carpenter Technology Corp.	64,228	2,102,825
Commercial Metals Co.	56,240	1,713,070
Schnitzer Steel Industries, Inc. Class A	25,670	1,124,603
		<u>4,940,498</u>
Mining — 0.0%		
Ferroglobe Representation & Warranty Insurance Trust ^{(a) (b) (c)}	49,975	—
		<u>14,483,702</u>
Communications — 3.4%		
Internet — 0.8%		
Criteo SA Sponsored ADR ^(a)	59,645	2,185,989
Media — 1.2%		
Entravision Communications Corp. Class A	109,345	776,349
Houghton Mifflin Harcourt Co. ^(a)	188,569	2,532,482
Townsquare Media, Inc. Class A ^(a)	11,287	147,521
		<u>3,456,352</u>
Telecommunications — 1.4%		
A10 Networks, Inc. ^(a)	185,879	2,505,649
Casa Systems, Inc. ^(a)	235,966	1,599,850
		<u>4,105,499</u>
		<u>9,747,840</u>
Consumer, Cyclical — 20.4%		
Airlines — 1.0%		
SkyWest, Inc. ^(a)	56,276	2,776,658
Apparel — 1.1%		
Kontoor Brands, Inc.	37,110	1,853,645
Tapestry, Inc.	38,262	1,416,459
		<u>3,270,104</u>
Auto Manufacturers — 1.5%		
Blue Bird Corp. ^(a)	102,919	2,146,890
REV Group, Inc.	120,990	2,076,189
		<u>4,223,079</u>
	Number of Shares	Value
Auto Parts & Equipment — 2.8%		
Dana, Inc.	79,226	\$ 1,761,986
The Goodyear Tire & Rubber Co. ^(a)	202,720	3,588,144
The Shyft Group, Inc.	66,380	2,523,104
		<u>7,873,234</u>
Distribution & Wholesale — 0.6%		
A-Mark Precious Metals, Inc.	5,433	326,089
KAR Auction Services, Inc. ^(a)	78,613	1,288,467
		<u>1,614,556</u>
Entertainment — 2.1%		
Accel Entertainment, Inc. ^(a)	56,221	682,523
IMAX Corp. ^(a)	146,080	2,772,598
Scientific Games Corp. Class A ^(a)	29,770	2,472,994
		<u>5,928,115</u>
Food Services — 0.2%		
Healthcare Services Group, Inc.	17,439	435,800
Home Builders — 2.2%		
KB Home	69,010	2,685,869

Skyline Champion Corp. ^(a)	20,192	1,212,731
Taylor Morrison Home Corp. ^(a)	97,069	2,502,439
		<u>6,401,039</u>
Home Furnishing — 0.9%		
Herman Miller, Inc.	71,470	2,691,560
Leisure Time — 1.4%		
Brunswick Corp.	13,085	1,246,608
Malibu Boats, Inc. Class A ^(a)	29,852	2,089,043
OneWater Marine, Inc. Class A	19,329	777,219
		<u>4,112,870</u>
Lodging — 0.4%		
Hilton Grand Vacations, Inc. ^(a)	25,060	1,192,104
Retail — 6.1%		
Beacon Roofing Supply, Inc. ^(a)	24,449	1,167,684
BJ's Restaurants, Inc. ^(a)	9,131	381,311
Dave & Buster's Entertainment, Inc. ^(a)	26,264	1,006,699
Dine Brands Global, Inc. ^(a)	25,820	2,096,842
Genesco, Inc. ^(a)	31,560	1,821,959
GMS, Inc. ^(a)	16,335	715,473
MarineMax, Inc. ^(a)	24,619	1,194,514
Papa John's International, Inc.	19,150	2,431,859
Penske Automotive Group, Inc.	20,189	2,031,013
Red Robin Gourmet Burgers, Inc. ^(a)	25,923	597,784
Regis Corp. ^{(a) (d)}	119,462	415,728
Ruth's Hospitality Group, Inc. ^(a)	72,733	1,506,300
Sally Beauty Holdings, Inc. ^(a)	109,630	1,847,266
		<u>17,214,432</u>

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

MassMutual Small Company Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Textiles — 0.1%		
Mohawk Industries, Inc. ^(a)	1,807	\$ 320,562
		<u>58,054,113</u>
Consumer, Non-cyclical — 12.6%		
Commercial Services — 6.0%		
Barrett Business Services, Inc.	6,823	520,322
BrightView Holdings, Inc. ^(a)	125,070	1,846,033
The Brink's Co.	22,555	1,427,732
Deluxe Corp.	33,684	1,208,919
Euronet Worldwide, Inc. ^(a)	3,860	491,301
EVERTEC, Inc.	37,643	1,721,038
GXO Logistics, Inc. ^(a)	1,084	85,029
Herc Holdings, Inc. ^(a)	24,494	4,003,789
Korn Ferry	53,920	3,901,651
Loomis AB	23,852	645,428
Viad Corp. ^(a)	25,930	1,177,481
		<u>17,028,723</u>
Cosmetics & Personal Care — 0.6%		
Edgewell Personal Care Co.	41,370	1,501,731
The Honest Co., Inc. ^{(a) (d)}	12,015	124,716
		<u>1,626,447</u>
Food — 2.0%		
The Hain Celestial Group, Inc. ^{(a) (d)}	69,184	2,959,692
Nomad Foods Ltd. ^(a)	96,238	2,652,319
		<u>5,612,011</u>
Health Care – Products — 0.9%		
Apria, Inc. ^(a)	15,157	563,082
Integra LifeSciences Holdings Corp. ^(a)	29,910	2,048,237
		<u>2,611,319</u>
Health Care – Services — 1.8%		
Acadia Healthcare Co., Inc. ^(a)	30,890	1,970,164
MEDNAX, Inc. ^(a)	102,980	2,927,722
National HealthCare Corp.	5,146	360,117
		<u>5,258,003</u>
Household Products & Wares — 0.9%		
Spectrum Brands Holdings, Inc.	26,434	2,528,941
Pharmaceuticals — 0.4%		
Patterson Cos., Inc.	27,136	817,879
Premier, Inc. Class A	8,136	315,351
		<u>1,133,230</u>
		<u>35,798,674</u>
Energy — 2.5%		
Energy – Alternate Sources — 0.3%		
Enviva Partners LP ^(e)	14,232	769,809
Oil & Gas — 1.3%		
Cimarex Energy Co.	17,800	1,552,160
	Number of Shares	Value
Earthstone Energy, Inc. Class A ^(a)	19,209	\$ 176,723
HollyFrontier Corp.	59,790	1,980,842
		<u>3,709,725</u>
Oil & Gas Services — 0.9%		
ChampionX Corp. ^(a)	45,066	1,007,676
Dril-Quip, Inc. ^(a)	40,806	1,027,495
MRC Global, Inc. ^(a)	87,128	639,520
NCS Multistage Holdings, Inc. ^(a)	1,061	31,140
		<u>2,705,831</u>
		<u>7,185,365</u>
Financial — 32.8%		
Banks — 16.2%		
1st Source Corp.	38,948	1,839,904
Ameris Bancorp	21,653	1,123,358
Associated Banc-Corp.	74,699	1,600,053
Bank of Marin Bancorp	34,136	1,288,634

BankUnited, Inc.	95,664	4,000,668
Carter Bankshares, Inc. ^(a)	92,835	1,320,114
F.N.B. Corp.	92,514	1,075,013
First BanCorp	47,800	628,570
First Hawaiian, Inc.	12,102	355,194
First Mid Bancshares, Inc.	4,801	197,129
HarborOne Bancorp, Inc.	162,807	2,285,810
Heritage Financial Corp.	74,682	1,904,391
Home BancShares, Inc.	43,962	1,034,426
Independent Bank Corp.	7,120	542,188
Independent Bank Group, Inc.	47,134	3,348,399
Old National Bancorp	67,271	1,140,243
Origin Bancorp, Inc.	13,187	558,469
Premier Financial Corp.	56,930	1,812,651
QCR Holdings, Inc.	4,968	255,554
Renasant Corp.	7,714	278,090
Sandy Spring Bancorp, Inc.	37,159	1,702,625
Signature Bank	111	30,223
SouthState Corp.	16,048	1,198,304
Synovus Financial Corp.	59,467	2,610,007
Texas Capital Bancshares, Inc. ^(a)	44,300	2,658,886
Towne Bank	18,859	586,703
TriCo Bancshares	43,696	1,896,406
UMB Financial Corp.	19,073	1,844,550
Umpqua Holdings Corp.	110,564	2,238,921
Valley National Bancorp	136,372	1,815,111
Veritex Holdings, Inc.	7,997	314,762
Webster Financial Corp.	48,332	2,632,161
		<u>46,117,517</u>
Diversified Financial Services — 1.9%		
Enact Holdings, Inc. ^(a)	16,798	368,380
Moelis & Co. Class A	37,267	2,305,710

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

MassMutual Small Company Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Stifel Financial Corp.	39,695	\$ 2,697,672
		5,371,762
Insurance — 2.5%		
Axis Capital Holdings Ltd.	29,131	1,341,191
The Hanover Insurance Group, Inc.	17,560	2,276,127
James River Group Holdings Ltd.	11,708	441,743
ProAssurance Corp.	15,334	364,643
Selective Insurance Group, Inc.	33,432	2,525,119
		6,948,823
Investment Companies — 0.7%		
Compass Diversified Holdings ^(e)	69,349	1,953,561
Real Estate Investment Trusts (REITS) — 8.5%		
Armada Hoffer Properties, Inc.	64,365	860,560
Brandywine Realty Trust	70,210	942,218
Broadstone Net Lease, Inc.	67,770	1,681,374
CareTrust REIT, Inc.	17,352	352,593
Cousins Properties, Inc.	71,237	2,656,428
Easterly Government Properties, Inc.	15,106	312,090
Four Corners Property Trust, Inc.	28,288	759,816
Getty Realty Corp.	12,896	377,982
Healthcare Realty Trust, Inc.	11,106	330,737
Highwoods Properties, Inc.	8,861	388,643
Independence Realty Trust, Inc. ^(d)	144,710	2,944,848
Kite Realty Group Trust	20,518	417,746
Lexington Realty Trust	2,772	35,343
National Health Investors, Inc.	7,784	416,444
National Storage Affiliates Trust	35,974	1,899,067
NETSTREIT Corp.	76,460	1,808,279
Physicians Realty Trust	172,164	3,033,530
RLJ Lodging Trust	120,780	1,794,791
Sabra Health Care REIT, Inc.	8,378	123,324
STAG Industrial, Inc.	73,468	2,883,619
Summit Hotel Properties, Inc. ^(a)	22,291	214,662
		24,234,094
Savings & Loans — 3.0%		
Berkshire Hills Bancorp, Inc.	88,960	2,400,141
Pacific Premier Bancorp, Inc.	76,494	3,169,911
Provident Financial Services, Inc.	18,120	425,277
WSFS Financial Corp.	51,116	2,622,762
		8,618,091
		93,243,848
Industrial — 14.6%		
Building Materials — 1.4%		
Cornerstone Building Brands, Inc. ^(a)	56,343	823,171
Hayward Holdings, Inc. ^(a)	15,368	341,784
Masonite International Corp. ^(a)	19,337	2,052,236
	Number of Shares	Value
Tecnoglass, Inc.	27,865	\$ 605,507
		3,822,698
Electrical Components & Equipment — 1.0%		
Belden, Inc.	45,677	2,661,142
Graham Corp.	12,497	154,963
		2,816,105
Electronics — 2.1%		
Advanced Energy Industries, Inc.	4,260	373,815
Avnet, Inc.	40,372	1,492,553
Coherent, Inc. ^(a)	5,881	1,470,779
II-VI, Inc. ^{(a) (d)}	39,267	2,330,889
Vontier Corp.	12,648	424,973
		6,093,009
Engineering & Construction — 1.4%		
Arcosa, Inc.	14,102	707,497
Dycom Industries, Inc. ^(a)	14,371	1,023,790
Great Lakes Dredge & Dock Corp. ^(a)	112,204	1,693,158
NV5 Global, Inc. ^(a)	6,045	595,856

		4,020,301
Environmental Controls — 0.1%		
CECO Environmental Corp. ^(a)	28,207	198,577
Charah Solutions, Inc. ^{(a) (d)}	33,036	151,966
		<u>350,543</u>
Hand & Machine Tools — 0.7%		
Hurco Cos., Inc.	1,562	50,390
Luxfer Holdings PLC	12,575	246,847
Regal Beloit Corp.	10,350	1,556,019
		<u>1,853,256</u>
Machinery – Construction & Mining — 1.0%		
The Manitowoc Co., Inc. ^(a)	72,150	1,545,453
Terex Corp.	33,249	1,399,783
		<u>2,945,236</u>
Machinery – Diversified — 3.0%		
Albany International Corp. Class A	9,573	735,876
Applied Industrial Technologies, Inc.	2,324	209,462
Cactus, Inc. Class A	75,230	2,837,676
Colfax Corp. ^(a)	31,634	1,452,001
Crane Co.	17,739	1,681,835
DXP Enterprises, Inc. ^(a)	18,578	549,351
Gates Industrial Corp. PLC ^(a)	64,028	1,041,736
		<u>8,507,937</u>
Metal Fabricate & Hardware — 0.5%		
The Timken Co.	22,538	1,474,436
Miscellaneous - Manufacturing — 0.7%		
DIRTT Environmental Solutions ^{(a) (d)}	53,328	165,317
EnPro Industries, Inc.	5,968	519,932

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

MassMutual Small Company Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Trinseo SA	23,949	\$ 1,292,767
		1,978,016
Packaging & Containers — 1.1%		
Graphic Packaging Holding Co.	110,374	2,101,521
Karat Packaging, Inc. ^(a)	5,926	124,624
Pactiv Evergreen, Inc.	81,568	1,021,231
		3,247,376
Transportation — 1.0%		
ArcBest Corp.	33,430	2,733,571
Trucking & Leasing — 0.6%		
GATX Corp.	18,200	1,629,992
		41,472,476
Technology — 5.6%		
Computers — 1.4%		
KBR, Inc.	23,768	936,459
NCR Corp. ^(a)	25,505	988,574
Unisys Corp. ^(a)	83,572	2,101,000
		4,026,033
Semiconductors — 1.6%		
Cohu, Inc. ^(a)	11,012	351,723
Kulicke & Soffa Industries, Inc.	41,303	2,407,139
Magnachip Semiconductor Corp. ^(a)	94,850	1,684,536
		4,443,398
Software — 2.6%		
Avaya Holdings Corp. ^(a)	55,135	1,091,122
Change Healthcare, Inc. ^(a)	84,460	1,768,592
CommVault Systems, Inc. ^(a)	17,417	1,311,674
Donnelley Financial Solutions, Inc. ^(a)	38,672	1,338,825
IBEX Holdings Ltd. ^{(a) (d)}	13,215	224,655
Kaltura, Inc. ^(a)	11,296	116,236
Teradata Corp. ^(a)	25,118	1,440,517
		7,291,621
		15,761,052
Utilities — 1.8%		
Electric — 1.0%		
IDACORP, Inc.	26,030	2,690,981
Gas — 0.8%		
South Jersey Industries, Inc. ^(d)	17,788	378,173
Southwest Gas Holdings, Inc.	27,660	1,849,901
		2,228,074
		4,919,055
TOTAL COMMON STOCK (Cost \$229,882,835)		280,666,125
TOTAL EQUITIES (Cost \$229,882,835)		280,666,125
	Number of Shares	Value
MUTUAL FUNDS — 1.1%		
Diversified Financial Services — 1.1%		
State Street Navigator Securities Lending Government Money Market Portfolio ^(f)	3,217,967	\$ 3,217,967
TOTAL MUTUAL FUNDS (Cost \$3,217,967)		3,217,967
TOTAL LONG-TERM INVESTMENTS (Cost \$233,100,802)		283,884,092
	Principal Amount	
SHORT-TERM INVESTMENTS — 1.2%		
Repurchase Agreement — 1.2%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(g)	\$ 3,430,866	3,430,866
TOTAL SHORT-TERM INVESTMENTS (Cost \$3,430,866)		3,430,866

TOTAL INVESTMENTS — 101.1% (Cost \$236,531,668) ^(h)	287,314,958
Other Assets/(Liabilities) — (1.1)%	<u>(3,048,958)</u>
NET ASSETS — 100.0%	<u>\$ 284,266,000</u>

Abbreviation Legend
ADR American Depositary Receipt

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

*MassMutual Small Company Value Fund — Portfolio of Investments (Continued)***Notes to Portfolio of Investments**

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Investment was valued using significant unobservable inputs.
- (c) This security is fair valued in good faith in accordance with procedures approved by the Board of Trustees. At September 30, 2021, these securities amounted to a value of \$0 or 0.00% of net assets.
- (d) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$6,380,004 or 2.24% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$3,338,359 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. (Note 2).
- (e) Security is a Master Limited Partnership
- (f) Represents investment of security lending cash collateral. (Note 2).
- (g) Maturity value of \$3,430,866. Collateralized by U.S. Government Agency obligations with rates ranging from 0.500% - 2.375%, maturity dates ranging from 5/15/27 - 5/31/27, and an aggregate market value, including accrued interest, of \$3,499,517.
- (h) See Note 6 for aggregate cost for federal tax purposes.

Forward contracts

Counterparty	Settlement Date	Currency Purchased	Currency Sold	Unrealized Appreciation (Depreciation)
UBS AG*	12/30/21	USD	567,110	SEK
			4,904,329	\$ 6,326

* Contracts are subject to a Master Netting Agreement.

Currency Legend

SEK Swedish Krona

USD U.S. Dollar

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

September 30, 2021

	Number of Shares	Value
EQUITIES — 99.1%		
COMMON STOCK — 99.1%		
Basic Materials — 4.1%		
Chemicals — 2.0%		
Ashland Global Holdings, Inc.	11,056	\$ 985,311
Cabot Corp.	11,107	556,683
The Chemours Co.	32,331	939,539
Ingevity Corp. ^(a)	7,737	552,190
Minerals Technologies, Inc.	6,576	459,268
NewMarket Corp.	1,412	478,343
Olin Corp.	28,270	1,364,028
RPM International, Inc.	25,402	1,972,465
Sensient Technologies Corp.	8,252	751,592
Valvoline, Inc.	35,384	1,103,273
		<u>9,162,692</u>
Iron & Steel — 1.7%		
Cleveland-Cliffs, Inc. ^{(a) (b)}	89,023	1,763,546
Commercial Metals Co.	23,611	719,191
Reliance Steel & Aluminum Co.	12,428	1,769,996
Steel Dynamics, Inc.	37,965	2,220,193
United States Steel Corp. ^(b)	52,880	1,161,773
		<u>7,634,699</u>
Mining — 0.4%		
Compass Minerals International, Inc.	6,660	428,904
Royal Gold, Inc.	12,843	1,226,378
		<u>1,655,282</u>
		<u>18,452,673</u>
Communications — 2.9%		
Internet — 0.4%		
Mimecast Ltd. ^(a)	11,968	761,165
TripAdvisor, Inc. ^(a)	19,270	652,290
Yelp, Inc. ^(a)	13,539	504,192
		<u>1,917,647</u>
Media — 1.7%		
Cable One, Inc.	969	1,756,923
FactSet Research Systems, Inc.	7,396	2,919,793
The New York Times Co. Class A	32,710	1,611,621
TEGNA, Inc.	43,283	853,541
World Wrestling Entertainment, Inc. Class A	8,838	497,226
		<u>7,639,104</u>
Telecommunications — 0.8%		
Ciena Corp. ^(a)	30,295	1,555,648
Iridium Communications, Inc. ^(a)	25,828	1,029,246
Telephone & Data Systems, Inc.	19,321	376,759
	Number of Shares	Value
ViaSat, Inc. ^(a)	14,354	\$ 790,475
		<u>3,752,128</u>
		<u>13,308,879</u>
Consumer, Cyclical — 16.4%		
Airlines — 0.2%		
JetBlue Airways Corp. ^(a)	62,260	951,955
Apparel — 1.8%		
Capri Holdings Ltd. ^(a)	29,757	1,440,536
Carter's, Inc.	8,615	837,723
Columbia Sportswear Co.	6,844	655,929
Crocs, Inc. ^(a)	12,212	1,752,178
Deckers Outdoor Corp. ^(a)	5,415	1,950,483
Skechers U.S.A., Inc. Class A ^(a)	26,405	1,112,179
Urban Outfitters, Inc. ^(a)	12,895	382,852
		<u>8,131,880</u>
Auto Parts & Equipment — 1.6%		
Adient PLC ^(a)	18,444	764,504
Dana, Inc.	28,432	632,328

Fox Factory Holding Corp. ^(a)	8,242	1,191,299
Gentex Corp.	46,775	1,542,639
The Goodyear Tire & Rubber Co. ^(a)	55,003	973,553
Lear Corp.	11,695	1,830,033
Visteon Corp. ^(a)	5,479	517,163
		<u>7,451,519</u>
Distribution & Wholesale — 1.1%		
Avient Corp.	17,872	828,367
IAA, Inc. ^(a)	26,387	1,439,939
KAR Auction Services, Inc. ^(a)	23,297	381,838
Univar Solutions, Inc. ^(a)	33,459	796,993
Watseo, Inc.	6,454	1,707,857
		<u>5,154,994</u>
Entertainment — 1.1%		
Churchill Downs, Inc.	6,787	1,629,423
Marriott Vacations Worldwide Corp.	8,360	1,315,279
Scientific Games Corp. Class A ^(a)	18,865	1,567,116
Six Flags Entertainment Corp. ^(a)	15,129	642,982
		<u>5,154,800</u>
Home Builders — 1.0%		
KB Home	17,609	685,342
Taylor Morrison Home Corp. ^(a)	24,529	632,358
Thor Industries, Inc.	10,838	1,330,473
Toll Brothers, Inc.	22,701	1,255,138
TRI Pointe Group, Inc. ^(a)	22,278	468,284
		<u>4,371,595</u>
Home Furnishing — 0.5%		
Herman Miller, Inc.	14,744	555,259

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

MM S&P Mid Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Tempur Sealy International, Inc.	38,466	\$ 1,785,207
		<u>2,340,466</u>
Housewares — 0.3%		
The Scotts Miracle-Gro Co.	7,974	1,167,075
Leisure Time — 1.3%		
Brunswick Corp.	15,171	1,445,341
Callaway Golf Co. ^(a)	22,931	633,584
Harley-Davidson, Inc.	30,116	1,102,547
Polaris, Inc.	11,149	1,334,089
YETI Holdings, Inc. ^(a)	17,117	1,466,756
		<u>5,982,317</u>
Lodging — 0.9%		
Boyd Gaming Corp. ^(a)	16,038	1,014,564
Choice Hotels International, Inc.	6,424	811,801
Travel + Leisure Co.	16,893	921,175
Wyndham Hotels & Resorts, Inc.	18,307	1,413,117
		<u>4,160,657</u>
Retail — 6.3%		
American Eagle Outfitters, Inc. ^(b)	29,876	770,801
AutoNation, Inc. ^(a)	8,549	1,040,926
BJ's Wholesale Club Holdings, Inc. ^(a)	26,845	1,474,327
Casey's General Stores, Inc.	7,248	1,365,886
Cracker Barrel Old Country Store, Inc.	4,645	649,557
Dick's Sporting Goods, Inc. ^(b)	12,829	1,536,529
FirstCash, Inc.	7,919	692,912
Five Below, Inc. ^(a)	10,961	1,938,014
Foot Locker, Inc.	17,634	805,168
GameStop Corp. Class A ^(a)	12,180	2,137,225
Jack in the Box, Inc.	4,241	412,777
Kohl's Corp.	30,583	1,440,153
Lithia Motors, Inc.	5,922	1,877,511
MSC Industrial Direct Co., Inc. Class A	9,199	737,668
Murphy USA, Inc.	4,655	778,595
Nordstrom, Inc. ^{(a) (b)}	21,773	575,896
Nu Skin Enterprises, Inc. Class A	9,810	397,011
Ollie's Bargain Outlet Holdings, Inc. ^{(a) (b)}	11,885	716,428
Papa John's International, Inc.	6,370	808,926
RH ^(a)	3,335	2,224,145
Texas Roadhouse, Inc.	13,669	1,248,390
Victoria's Secret & Co. ^(a)	14,700	812,322
The Wendy's Co.	34,889	756,394
Williams-Sonoma, Inc.	14,705	2,607,638
Wingstop, Inc.	5,823	954,564
		<u>28,759,763</u>
	Number of Shares	Value
Toys, Games & Hobbies — 0.3%		
Mattel, Inc. ^(a)	68,311	\$ 1,267,852
		<u>74,894,873</u>
Consumer, Non-cyclical — 17.2%		
Agriculture — 0.5%		
Darling Ingredients, Inc. ^(a)	31,726	2,281,099
Beverages — 0.2%		
The Boston Beer Co., Inc. Class A ^(a)	1,838	936,921
Biotechnology — 1.4%		
Arrowhead Pharmaceuticals, Inc. ^(a)	20,409	1,274,134
Emergent BioSolutions, Inc. ^(a)	9,356	468,455
Exelixis, Inc. ^(a)	61,672	1,303,746
Halozyne Therapeutics, Inc. ^(a)	27,862	1,133,426
Nektar Therapeutics ^(a)	35,982	646,237
United Therapeutics Corp. ^(a)	8,788	1,622,089
		<u>6,448,087</u>
Commercial Services — 4.2%		
	10,355	1,171,565

ASGN, Inc. ^(a)		
Avis Budget Group, Inc. ^(a)	9,248	1,077,485
The Brink's Co.	9,747	616,985
FTI Consulting, Inc. ^(a)	6,710	903,837
Graham Holdings Co. Class B	790	465,436
Grand Canyon Education, Inc. ^(a)	8,846	778,094
GXO Logistics, Inc. ^(a)	19,297	1,513,657
H&R Block, Inc.	34,855	871,375
HealthEquity, Inc. ^(a)	16,324	1,057,142
Inspireity, Inc.	7,028	778,281
John Wiley & Sons, Inc. Class A	8,521	444,881
LiveRamp Holdings, Inc. ^(a)	13,296	627,970
ManpowerGroup, Inc.	10,616	1,149,501
Paylocity Holding Corp. ^(a)	7,696	2,157,958
PROG Holdings, Inc.	13,019	546,928
Progyny, Inc. ^(a)	13,474	754,544
Sabre Corp. ^{(a) (b)}	63,162	747,838
Service Corp. International	32,804	1,976,769
WEX, Inc. ^(a)	8,769	1,544,572
		<u>19,184,818</u>
Cosmetics & Personal Care — 0.1%		
Coty, Inc. Class A ^(a)	65,481	514,681
Food — 1.8%		
Flowers Foods, Inc.	38,968	920,814
Grocery Outlet Holding Corp. ^(a)	17,075	368,308
The Hain Celestial Group, Inc. ^(a)	16,399	701,549
Ingredion, Inc.	13,118	1,167,633
Lancaster Colony Corp.	3,882	655,320
Performance Food Group Co. ^(a)	30,084	1,397,703
Pilgrim's Pride Corp. ^(a)	9,481	275,707

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

MM S&P Mid Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Post Holdings, Inc. ^(a)	11,474	\$ 1,263,976
Sanderson Farms, Inc.	4,153	781,594
Sprouts Farmers Market, Inc. ^(a)	22,358	518,035
Tootsie Roll Industries, Inc. ^(b)	3,455	105,136
		<u>8,155,775</u>
Health Care – Products — 4.5%		
Envista Holdings Corp. ^(a)	31,567	1,319,816
Globus Medical, Inc. Class A ^(a)	15,328	1,174,431
Haemonetics Corp. ^(a)	9,977	704,276
Hill-Rom Holdings, Inc.	12,884	1,932,600
ICU Medical, Inc. ^(a)	3,902	910,649
Integra LifeSciences Holdings Corp. ^(a)	14,238	975,018
LivaNova PLC ^(a)	10,415	824,764
Masimo Corp. ^(a)	9,915	2,684,090
Neogen Corp. ^(a)	21,038	913,680
NuVasive, Inc. ^(a)	10,114	605,323
Penumbra, Inc. ^(a)	6,731	1,793,812
Quidel Corp. ^(a)	7,416	1,046,768
Repligen Corp. ^(a)	10,008	2,892,212
STAAR Surgical Co. ^(a)	9,278	1,192,501
Tandem Diabetes Care, Inc. ^(a)	12,338	1,472,911
		<u>20,442,851</u>
Health Care – Services — 3.0%		
Acadia Healthcare Co., Inc. ^(a)	17,591	1,121,954
Amedisys, Inc. ^(a)	6,388	952,451
Chemed Corp.	3,079	1,432,104
Encompass Health Corp.	19,478	1,461,629
LHC Group, Inc. ^(a)	6,199	972,685
Medpace Holdings, Inc. ^(a)	5,609	1,061,672
Molina Healthcare, Inc. ^(a)	11,432	3,101,616
R1 RCM, Inc. ^(a)	26,204	576,750
Syneos Health, Inc. ^(a)	20,257	1,772,082
Tenet Healthcare Corp. ^(a)	20,956	1,392,317
		<u>13,845,260</u>
Household Products & Wares — 0.2%		
Helen of Troy Ltd. ^(a)	4,717	1,059,816
Pharmaceuticals — 1.3%		
Jazz Pharmaceuticals PLC ^(a)	11,970	1,558,614
Neurocrine Biosciences, Inc. ^(a)	18,527	1,776,924
Option Care Health, Inc. ^(a)	27,104	657,543
Patterson Cos., Inc.	16,880	508,763
Perrigo Co. PLC	26,175	1,238,863
		<u>5,740,707</u>
		<u>78,610,015</u>
Energy — 3.9%		
Energy – Alternate Sources — 1.6%		
First Solar, Inc. ^(a)	19,355	1,847,628
	Number of Shares	Value
SolarEdge Technologies, Inc. ^(a)	10,232	\$ 2,713,731
Sunrun, Inc. ^{(a) (b)}	40,312	1,773,728
		<u>6,335,087</u>
Oil & Gas — 1.1%		
Cimarex Energy Co.	20,126	1,754,987
CNX Resources Corp. ^(a)	42,660	538,369
DTE Midstream LLC ^(a)	18,962	876,803
EQT Corp. ^(a)	59,166	1,210,536
HollyFrontier Corp.	29,263	969,483
Murphy Oil Corp.	28,419	709,623
		<u>6,059,801</u>
Oil & Gas Services — 0.4%		

ChampionX Corp. ^(a)	39,504	883,310
Nov, Inc. ^(a)	76,484	1,002,705
		<u>1,886,015</u>
Pipelines — 0.8%		
Antero Midstream Corp. ^(b)	63,557	662,264
Equitrans Midstream Corp.	79,590	807,043
Targa Resources Corp.	44,760	2,202,639
		<u>3,671,946</u>
		<u>17,952,849</u>
Financial — 23.9%		
Banks — 6.8%		
Associated Banc-Corp.	29,956	641,657
BancorpSouth Bank	21,264	633,242
Bank of Hawaii Corp.	7,924	651,115
Bank OZK	23,849	1,025,030
Cathay General Bancorp	15,308	633,598
CIT Group, Inc.	19,408	1,008,246
Commerce Bancshares, Inc.	20,805	1,449,692
Cullen/Frost Bankers, Inc.	11,088	1,315,259
East West Bancorp, Inc.	27,773	2,153,518
F.N.B. Corp.	62,571	727,075
First Financial Bankshares, Inc.	25,079	1,152,380
First Horizon Corp.	107,532	1,751,696
Fulton Financial Corp.	31,943	488,089
Glacier Bancorp, Inc.	21,199	1,173,365
Hancock Whitney Corp.	17,002	801,134
Home BancShares, Inc.	29,554	695,406
International Bancshares Corp.	10,418	433,805
PacWest Bancorp	22,944	1,039,822
Pinnacle Financial Partners, Inc.	14,898	1,401,604
Prosperity Bancshares, Inc.	18,190	1,293,855
Signature Bank	11,870	3,231,964
Synovus Financial Corp.	28,667	1,258,195
Texas Capital Bancshares, Inc. ^(a)	9,905	594,498
UMB Financial Corp.	8,423	814,588

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

MM S&P Mid Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Umpqua Holdings Corp.	43,089	\$ 872,552
United Bankshares, Inc.	25,291	920,087
Valley National Bancorp	79,588	1,059,316
Webster Financial Corp.	17,734	965,794
Wintrust Financial Corp.	11,166	897,411
		<u>31,083,993</u>
Diversified Financial Services — 2.7%		
Affiliated Managers Group, Inc.	8,066	1,218,692
Alliance Data Systems Corp.	9,740	982,669
Evercore, Inc. Class A	7,763	1,037,680
Federated Hermes, Inc.	19,100	620,750
Interactive Brokers Group, Inc. Class A	17,099	1,065,952
Janus Henderson Group PLC	33,738	1,394,392
Jefferies Financial Group, Inc.	38,688	1,436,485
LendingTree, Inc. ^(a)	2,235	312,520
Navient Corp.	32,857	648,269
SEI Investments Co.	20,989	1,244,648
SLM Corp.	59,864	1,053,606
Stifel Financial Corp.	20,513	1,394,063
		<u>12,409,726</u>
Insurance — 4.1%		
Alleghany Corp. ^(a)	2,715	1,695,273
American Financial Group, Inc.	12,941	1,628,366
Brighthouse Financial, Inc. ^(a)	16,270	735,892
CNO Financial Group, Inc.	25,025	589,088
Essent Group Ltd.	21,899	963,775
First American Financial Corp.	21,518	1,442,782
The Hanover Insurance Group, Inc.	6,990	906,044
Kemper Corp.	11,708	781,977
Kinsale Capital Group, Inc.	4,197	678,655
Mercury General Corp.	5,177	288,204
MGIC Investment Corp.	66,424	993,703
Old Republic International Corp.	55,667	1,287,578
Primerica, Inc.	7,726	1,186,945
Reinsurance Group of America, Inc.	13,311	1,480,982
RenaissanceRe Holdings Ltd.	9,221	1,285,407
RLI Corp.	7,791	781,204
Selective Insurance Group, Inc.	11,767	888,762
Unum Group	40,013	1,002,726
		<u>18,617,363</u>
Real Estate — 0.5%		
Jones Lang LaSalle, Inc. ^(a)	9,925	2,462,293
Real Estate Investment Trusts (REITS) — 9.2%		
American Campus Communities, Inc.	27,231	1,319,342
Apartment Income REIT Corp.	30,726	1,499,736
Brixmor Property Group, Inc.	58,136	1,285,387
Camden Property Trust	19,687	2,903,242
	Number of Shares	Value
CoreSite Realty Corp.	8,653	\$ 1,198,787
Corporate Office Properties Trust	21,995	593,425
Cousins Properties, Inc.	29,107	1,085,400
CyrusOne, Inc.	24,277	1,879,283
Douglas Emmett, Inc.	34,350	1,085,803
EastGroup Properties, Inc.	7,909	1,317,877
EPR Properties	14,644	723,121
First Industrial Realty Trust, Inc.	25,276	1,316,374
Healthcare Realty Trust, Inc.	28,488	848,373
Highwoods Properties, Inc.	20,400	894,744
Hudson Pacific Properties, Inc.	29,849	784,133
JBG SMITH Properties	22,729	673,006
Kilroy Realty Corp.	20,517	1,358,431
Lamar Advertising Co. Class A	16,984	1,926,835
Life Storage, Inc.	15,330	1,758,964
The Macerich Co.	41,698	696,774
Medical Properties Trust, Inc.	116,611	2,340,383
National Retail Properties, Inc.	34,374	1,484,613
National Storage Affiliates Trust	15,965	842,792

Omega Healthcare Investors, Inc.	46,762	1,400,989
Park Hotels & Resorts, Inc. ^(a)	46,297	886,125
Pebblebrook Hotel Trust	25,723	576,452
Physicians Realty Trust	42,562	749,942
PotlatchDeltic Corp.	13,126	677,039
PS Business Parks, Inc.	3,936	616,929
Rayonier, Inc.	27,665	987,087
Rexford Industrial Realty, Inc.	26,962	1,530,093
Sabra Health Care REIT, Inc.	43,233	636,390
SL Green Realty Corp. ^(b)	13,147	931,333
Spirit Realty Capital, Inc.	23,315	1,073,423
STORE Capital Corp.	47,866	1,533,148
Urban Edge Properties	21,524	394,104
		<u>41,809,879</u>
Savings & Loans — 0.6%		
New York Community Bancorp, Inc.	91,030	1,171,556
Sterling Bancorp	37,723	941,566
Washington Federal, Inc.	13,303	456,426
		<u>2,569,548</u>
		<u>108,952,802</u>
Industrial — 19.4%		
Aerospace & Defense — 0.3%		
Hexcel Corp. ^(a)	16,414	974,827
Mercury Systems, Inc. ^(a)	10,995	521,383
		<u>1,496,210</u>
Building Materials — 2.7%		
Builders FirstSource, Inc. ^(a)	40,562	2,098,678
Eagle Materials, Inc.	8,199	1,075,381
Lennox International, Inc.	6,693	1,968,880

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

MM S&P Mid Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Louisiana-Pacific Corp.	18,642	\$ 1,144,060
MDU Resources Group, Inc.	39,627	1,175,733
Owens Corning	20,189	1,726,159
Simpson Manufacturing Co., Inc.	8,504	909,673
Trex Co., Inc. ^(a)	22,579	2,301,477
		<u>12,400,041</u>
Electrical Components & Equipment — 1.2%		
Acuity Brands, Inc.	6,990	1,211,856
Belden, Inc.	8,781	511,581
Energizer Holdings, Inc.	12,316	480,940
EnerSys	8,323	619,564
Littelfuse, Inc.	4,819	1,316,888
Universal Display Corp.	8,486	1,450,767
		<u>5,591,596</u>
Electronics — 3.1%		
Arrow Electronics, Inc. ^(a)	14,059	1,578,685
Avnet, Inc.	19,478	720,102
Coherent, Inc. ^(a)	4,803	1,201,182
Hubbell, Inc.	10,645	1,923,232
II-VI, Inc. ^{(a) (b)}	20,531	1,218,720
Jabil, Inc.	28,547	1,666,288
National Instruments Corp.	26,030	1,021,157
nVent Electric PLC	32,908	1,063,916
SYNNEX Corp.	8,133	846,645
Vishay Intertechnology, Inc.	25,984	522,019
Vontier Corp.	33,067	1,111,051
Woodward, Inc.	12,451	1,409,453
		<u>14,282,450</u>
Engineering & Construction — 1.4%		
AECOM ^(a)	28,202	1,780,956
Dycom Industries, Inc. ^(a)	6,021	428,936
EMCOR Group, Inc.	10,523	1,214,144
Fluor Corp. ^{(a) (b)}	27,670	441,890
MasTec, Inc. ^(a)	11,202	966,509
TopBuild Corp. ^(a)	6,447	1,320,410
		<u>6,152,845</u>
Environmental Controls — 0.8%		
Clean Harbors, Inc. ^(a)	9,798	1,017,718
Stericycle, Inc. ^(a)	17,982	1,222,237
Tetra Tech, Inc.	10,585	1,580,764
		<u>3,820,719</u>
Hand & Machine Tools — 1.0%		
Kennametal, Inc.	16,371	560,379
Lincoln Electric Holdings, Inc.	11,625	1,497,184
MSA Safety, Inc.	7,135	1,039,570
Regal Beloit Corp.	7,966	1,197,608
		<u>4,294,741</u>
	Number of Shares	Value
Machinery – Construction & Mining — 0.4%		
Oshkosh Corp.	13,436	\$ 1,375,443
Terex Corp.	13,665	575,297
		<u>1,950,740</u>
Machinery – Diversified — 3.7%		
AGCO Corp.	12,101	1,482,736
Cognex Corp.	34,590	2,774,810
Colfax Corp. ^(a)	25,357	1,163,886
Crane Co.	9,756	924,966
Curtiss-Wright Corp.	8,003	1,009,819
Flowserv Corp.	25,500	884,085
Graco, Inc.	33,227	2,324,893
The Middleby Corp. ^(a)	10,889	1,856,684
Nordson Corp.	10,582	2,520,103
The Toro Co.	20,957	2,041,421
		<u>16,983,403</u>

Metal Fabricate & Hardware — 0.5%

The Timken Co.	13,585	888,731
Valmont Industries, Inc.	4,153	976,453
Worthington Industries, Inc.	6,465	340,705
		<u>2,205,889</u>

Miscellaneous - Manufacturing — 1.7%

Axon Enterprise, Inc. ^(a)	12,856	2,250,057
Carlisle Cos., Inc.	10,204	2,028,453
Donaldson Co., Inc.	24,583	1,411,310
ITT, Inc.	16,854	1,446,748
Trinity Industries, Inc.	16,331	443,713
		<u>7,580,281</u>

Packaging & Containers — 0.8%

AptarGroup, Inc.	12,913	1,541,166
Greif, Inc. Class A	5,178	334,499
Silgan Holdings, Inc.	16,431	630,293
Sonoco Products Co.	19,253	1,147,094
		<u>3,653,052</u>

Transportation — 1.7%

Kirby Corp. ^(a)	11,768	564,393
Knight-Swift Transportation Holdings, Inc.	32,490	1,661,864
Landstar System, Inc.	7,492	1,182,387
Ryder System, Inc.	10,526	870,606
Saia, Inc. ^(a)	5,155	1,227,045
Werner Enterprises, Inc.	12,104	535,844
XPO Logistics, Inc. ^(a)	19,297	1,535,655
		<u>7,577,794</u>

Trucking & Leasing — 0.1%

GATX Corp.	6,951	622,532
		<u>88,612,293</u>

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

UGI Corp.

236/495

Water — 0.4%		
Essential Utilities, Inc.	43,777	<u>2,017,244</u>
		<u>13,398,769</u>
TOTAL COMMON STOCK (Cost \$339,241,199)		<u>452,345,676</u>
TOTAL EQUITIES (Cost \$339,241,199)		<u>452,345,676</u>
MUTUAL FUNDS — 0.2%		
Diversified Financial Services — 0.2%		
State Street Navigator Securities Lending Government Money Market Portfolio ^(c)	826,140	<u>826,140</u>
TOTAL MUTUAL FUNDS (Cost \$826,140)		<u>826,140</u>
TOTAL LONG-TERM INVESTMENTS (Cost \$340,067,339)		<u>453,171,816</u>

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

MM S&P Mid Cap Index Fund — Portfolio of Investments (Continued)

	<u>Principal Amount</u>	<u>Value</u>
SHORT-TERM INVESTMENTS — 1.1%		
Repurchase Agreement — 0.7%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(d)	\$ 3,207,377	\$ 3,207,377
U.S. Treasury Bill — 0.4%		
U.S. Treasury Bill		
0.038% 1/27/22 ^{(e) (f)}	1,930,000	1,929,731
TOTAL SHORT-TERM INVESTMENTS (Cost \$5,137,140)		5,137,108
TOTAL INVESTMENTS — 100.4% (Cost \$345,204,479) ^(g)		458,308,924
Other Assets/(Liabilities) — (0.4)%		(1,917,319)
NET ASSETS — 100.0%		\$ 456,391,605

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$12,171,329 or 2.67% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$11,623,777 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. *(Note 2)*.
- (c) Represents investment of security lending cash collateral. *(Note 2)*.
- (d) Maturity value of \$3,207,377. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 5/15/27, and an aggregate market value, including accrued interest, of \$3,271,549.
- (e) The rate shown represents yield-to-maturity.
- (f) A portion of this security is pledged/held as collateral for open derivatives. *(Note 2)*.
- (g) See Note 6 for aggregate cost for federal tax purposes.

Futures contracts

	<u>Expiration Date</u>	<u>Number of Contracts</u>	<u>Notional Amount</u>	<u>Value/ Net Unrealized Appreciation/ (Depreciation)</u>
Long				
S&P Mid Cap 400 E Mini Index	12/17/21	20	\$ 5,344,894	\$ (78,494)

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments

September 30, 2021

	Number of Shares	Value
EQUITIES — 99.0%		
COMMON STOCK — 99.0%		
Basic Materials — 3.0%		
Chemicals — 1.6%		
AdvanSix, Inc. (a)	2,832	\$ 112,571
American Vanguard Corp.	3,117	46,911
Amyris, Inc. (a)	17,705	243,090
Balchem Corp.	3,354	486,565
Cabot Corp.	5,836	292,501
Codexis, Inc. (a)	6,204	144,305
Danimer Scientific, Inc. (a) ^(b)	6,840	111,766
Ecovyst, Inc.	5,273	61,483
Ferro Corp. (a)	8,508	173,053
GCP Applied Technologies, Inc. (a)	5,161	113,129
H.B. Fuller Co.	5,427	350,367
Hawkins, Inc.	1,954	68,155
Ingevity Corp. (a)	4,120	294,044
Innospec, Inc.	2,544	214,256
Intrepid Potash, Inc. (a)	1,061	32,785
Koppers Holdings, Inc. (a)	2,133	66,678
Kraton Corp. (a)	3,241	147,919
Kronos Worldwide, Inc.	2,287	28,382
Marrone Bio Innovations, Inc. (a)	11,187	10,079
Minerals Technologies, Inc.	3,489	243,672
Oil-Dri Corp. of America	568	19,880
Orion Engineered Carbons SA (a)	6,304	114,922
Quaker Chemical Corp. ^(b)	1,399	332,570
Rayonier Advanced Materials, Inc. (a)	6,564	49,230
Rogers Corp. (a)	1,939	361,585
Sensient Technologies Corp.	4,406	401,298
Stepan Co.	2,240	252,986
Tronox Holdings PLC Class A	11,904	293,434
Valhi, Inc.	267	6,229
Zymergen, Inc. (a) ^(b)	1,861	24,509
		<u>5,098,354</u>
Forest Products & Paper — 0.2%		
Clearwater Paper Corp. (a)	1,675	64,203
Domtar Corp. (a)	5,197	283,444
Glatfelter Corp.	4,512	63,619
Neenah, Inc.	1,737	80,962
Schweitzer-Mauduit International, Inc.	3,290	114,031
Verso Corp. Class A	2,820	58,515
		<u>664,774</u>
Iron & Steel — 0.3%		
Allegheny Technologies, Inc. (a)	13,173	219,067
Carpenter Technology Corp.	4,919	161,048
Commercial Metals Co.	12,461	379,562
Schnitzer Steel Industries, Inc. Class A	2,720	\$ 119,163
		<u>878,840</u>
Mining — 0.9%		
Arconic Corp. (a)	11,454	361,259
Century Aluminum Co. (a) ^(b)	5,217	70,169
Coeur Mining, Inc. (a)	26,498	163,493
Compass Minerals International, Inc.	3,554	228,878
Constellium SE (a)	12,758	239,595
Energy Fuels, Inc. (a) ^(b)	15,191	106,641
Ferroglobe Representation & Warranty Insurance Trust (a) ^{(c) (d)}	10,133	—
Gatos Silver, Inc. (a)	4,893	56,905
Hecla Mining Co.	55,102	303,061
Kaiser Aluminum Corp.	1,639	178,585
Livent Corp. (a) ^(b)	16,803	388,317
MP Materials Corp. (a)	7,563	243,755
Novagold Resources, Inc. (a)	24,519	168,691
Perpetua Resources Corp. (a)	2,988	14,880

PolyMet Mining Corp. (a) ^(b)	3,213	9,800
United States Lime & Minerals, Inc.	206	24,885
Ur-Energy, Inc. (a)	19,290	33,179
Uranium Energy Corp. (a) ^(b)	24,376	74,347
		<u>2,666,440</u>
		<u>9,308,408</u>
Communications — 4.6%		
Advertising — 0.1%		
Advantage Solutions, Inc. (a) ^(b)	7,859	67,980
Boston Omaha Corp. Class A (a) ^(b)	1,858	72,053
Clear Channel Outdoor Holdings, Inc. (a)	37,367	101,265
Fluent, Inc. (a) ^(b)	4,648	10,551
National CineMedia, Inc.	6,504	23,154
Quotient Technology, Inc. (a)	9,441	54,947
Stagwell, Inc. (a)	6,483	49,725
		<u>379,675</u>
Internet — 2.3%		
1-800-Flowers.com, Inc. Class A (a)	2,745	83,750
1stdibs.com, Inc. (a)	694	8,606
Bright Health Group, Inc. (a)	5,672	46,284
Cargurus, Inc. (a)	9,791	307,535
CarParts.com , Inc. (a)	5,115	79,845
Cars.com , Inc. (a)	7,066	89,385
ChannelAdvisor Corp. (a)	3,028	76,396
Cogent Communications Holdings, Inc.	4,423	313,325
Comscore, Inc. (a)	7,604	29,656
Couchbase, Inc. (a)	1,014	31,546

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Digital Media Solutions, Inc. Class A (a)	308	\$ 2,233
ePlus, Inc. (a)	1,366	140,165
Eventbrite, Inc. Class A (a) ^(b)	7,748	146,515
Everquote, Inc. Class A (a)	2,044	38,080
fuboTV, Inc. (a) ^(b)	13,628	326,527
Groupon, Inc. (a) ^(b)	2,510	57,253
HealthStream, Inc. (a)	2,609	74,565
HyreCar, Inc. (a)	1,957	16,635
Lands' End, Inc. (a)	1,528	35,969
Limelight Networks, Inc. (a) ^(b)	13,189	31,390
Liquidity Services, Inc. (a)	2,717	58,714
Liveone, Inc. Common Stock Usd.001 (a)	5,679	16,980
Magnite, Inc. (a) ^(b)	13,460	376,880
MediaAlpha, Inc. Class A (a)	2,156	40,274
Mimecast Ltd. (a)	6,319	401,888
Open Lending Corp. Class A (a)	10,826	390,494
Overstock.com , Inc. (a)	4,459	347,445
Perficient, Inc. (a)	3,379	390,950
Q2 Holdings, Inc. (a)	5,663	453,833
QuinStreet, Inc. (a)	5,109	89,714
RealReal, Inc. (a)	8,111	106,903
Revolve Group, Inc. (a)	3,727	230,217
Shutterstock, Inc.	2,430	275,368
Stamps.com , Inc. (a)	1,846	608,792
Stitch Fix, Inc. Class A (a)	6,116	244,334
TechTarget, Inc. (a)	2,650	218,413
TrueCar, Inc. (a)	9,969	41,471
Tucows, Inc. Class A (a)	1,009	79,661
Upwork, Inc. (a)	12,237	551,032
VirnetX Holding Corp. (a) ^(b)	6,322	24,782
Yelp, Inc. (a)	7,403	275,688
Zix Corp. (a)	5,621	39,740
		<u>7,199,233</u>
Media — 0.8%		
AMC Networks, Inc. Class A (a)	3,006	140,050
CuriosityStream, Inc. (a)	2,780	29,301
The E.W. Scripps Co. Class A	5,940	107,276
Entercom Communications Corp. (a)	12,502	46,007
Entravision Communications Corp. Class A	6,248	44,361
Gannett Co., Inc. (a)	14,456	96,566
Gray Television, Inc.	8,834	201,592
Hemisphere Media Group, Inc. (a)	1,570	19,123
Houghton Mifflin Harcourt Co. (a)	13,176	176,954
iHeartMedia, Inc. Class A (a)	11,627	290,908
Liberty Latin America Ltd. Class A (a)	4,416	57,761
Liberty Latin America Ltd. Class C (a)	15,967	209,487
	Number of Shares	Value
Meredith Corp. (a)	4,136	\$ 230,375
Scholastic Corp.	2,754	98,180
Sinclair Broadcast Group, Inc. Class A	4,730	149,846
TEGNA, Inc.	22,989	453,343
Thryv Holdings, Inc. (a)	773	23,221
Value Line, Inc.	150	5,139
WideOpenWest, Inc. (a)	5,502	108,114
		<u>2,487,604</u>
Telecommunications — 1.4%		
A10 Networks, Inc. (a)	6,209	83,697
ADTRAN, Inc.	4,982	93,462
Anterix, Inc. (a) ^(b)	1,195	72,537
ATN International, Inc.	1,129	52,894
Aviat Networks, Inc. (a)	1,027	33,747
CalAmp Corp. (a)	3,605	35,870
Calix, Inc. (a)	5,728	283,135
Cambium Networks Corp. (a)	1,118	40,460
Casa Systems, Inc. (a)	3,388	22,971
Clearfield, Inc. (a)	1,206	53,245

Consolidated Communications Holdings, Inc. (a)	7,489	68,824
DZS, Inc. (a)	1,795	22,007
EchoStar Corp. Class A (a)	4,149	105,841
Extreme Networks, Inc. (a)	12,964	127,695
Globalstar, Inc. (a) ^(b)	62,579	104,507
Gogo, Inc. (a)	6,108	105,668
Harmonic, Inc. (a)	9,164	80,185
IDT Corp. Class B (a)	2,050	85,998
Infinera Corp. (a) ^(b)	18,685	155,459
INNOVATE Corp. (a) ^(b)	5,333	21,865
InterDigital, Inc.	3,203	217,227
Iridium Communications, Inc. (a)	12,253	488,282
KVH Industries, Inc. (a)	1,679	16,169
Loral Space & Communications, Inc. ^(b)	1,370	58,924
Maxar Technologies, Inc.	7,438	210,644
NeoPhotonics Corp. (a)	5,483	47,757
NETGEAR, Inc. (a)	3,122	99,623
Ooma, Inc. (a)	2,281	42,449
Plantronics, Inc. (a)	4,345	111,710
Preformed Line Products Co.	292	18,992
Ribbon Communications, Inc. (a)	7,496	44,826
Shenandoah Telecommunications Co.	5,005	158,058
Telephone & Data Systems, Inc.	10,490	204,555
United States Cellular Corp. (a)	1,603	51,120
Viavi Solutions, Inc. (a)	23,600	371,464

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Vonage Holdings Corp. (a)	25,061	\$ 403,983
		4,195,850
		14,262,362
Consumer, Cyclical — 13.2%		
Airlines — 0.4%		
Allegiant Travel Co. (a)	1,589	310,618
Frontier Group Holdings, Inc. (a)	3,700	58,423
Hawaiian Holdings, Inc. (a)	5,221	113,087
Mesa Air Group, Inc. (a)	3,670	28,112
SkyWest, Inc. (a)	5,156	254,397
Spirit Airlines, Inc. (a)	10,177	263,991
Sun Country Airlines Holdings, Inc. (a)	1,811	60,741
		1,089,369
Apparel — 0.8%		
Crocs, Inc. (a)	6,414	920,281
Fossil Group, Inc. (a)	5,032	59,629
Kontoor Brands, Inc.	5,384	268,931
Oxford Industries, Inc.	1,652	148,961
PLBY Group, Inc. (a)	2,481	58,477
Rocky Brands, Inc.	717	34,136
Steven Madden Ltd.	8,500	341,360
Superior Group of Cos, Inc.	1,160	27,016
Torrid Holdings, Inc. (a)	1,330	20,522
Unifi, Inc. (a)	1,370	30,044
Urban Outfitters, Inc. (a)	7,117	211,304
Wolverine World Wide, Inc.	8,421	251,283
		2,371,944
Auto Manufacturers — 0.3%		
Arcimoto, Inc. (a)	2,930	33,490
Blue Bird Corp. (a)	1,702	35,504
Canoo, Inc. (a) ^(b)	11,212	86,220
Fisker, Inc. (a)	16,914	247,790
Hyllion Holdings Corp. (a)	12,083	101,497
Lordstown Motors Corp. (a) ^(b)	10,153	81,021
Nikola Corp. (a) ^(b)	23,294	248,547
REV Group, Inc.	3,040	52,167
Wabash National Corp.	5,199	78,661
Workhorse Group, Inc. (a) ^(b)	12,377	94,684
XL Fleet Corp. (a) ^(b)	3,621	22,305
		1,081,886
Auto Parts & Equipment — 1.3%		
Adient PLC (a)	9,823	407,163
Aeva Technologies, Inc. (a) ^(b)	8,075	64,116
American Axle & Manufacturing Holdings, Inc. (a)	11,613	102,311
Commercial Vehicle Group, Inc. (a)	3,417	32,325
Cooper-Standard Holding, Inc. (a)	1,787	39,153
	Number of Shares	Value
Dana, Inc.	15,067	\$ 335,090
Dorman Products, Inc. (a)	2,778	262,993
Douglas Dynamics, Inc.	2,315	84,034
Fox Factory Holding Corp. (a)	4,382	633,374
Gentherm, Inc. (a)	3,452	279,370
The Goodyear Tire & Rubber Co. (a)	28,687	507,760
Meritor, Inc. (a)	7,013	149,447
Methode Electronics, Inc.	3,944	165,845
Miller Industries, Inc.	1,166	39,691
Modine Manufacturing Co. (a)	5,125	58,066
Motorcar Parts of America, Inc. (a)	2,006	39,117
Romeo Power, Inc. (a) ^(b)	13,258	65,627
The Shyft Group, Inc.	3,576	135,924
Standard Motor Products, Inc.	2,176	95,113
Tenneco, Inc. Class A (a)	6,959	99,305
Titan International, Inc. (a)	5,441	38,958
Velodyne Lidar, Inc. (a) ^(b)	7,887	46,691
Visteon Corp. (a)	2,875	271,371
XPEL, Inc. (a) ^(b)	1,865	141,479

		4,094,323
Distribution & Wholesale — 0.7%		
A-Mark Precious Metals, Inc.	929	55,759
Avient Corp.	9,430	437,080
EVI Industries, Inc. (a)	606	16,483
G-III Apparel Group Ltd. (a)	4,631	131,057
Global Industrial Co.	1,285	48,689
H&E Equipment Services, Inc.	3,320	115,237
KAR Auction Services, Inc. (a)	12,330	202,089
Resideo Technologies, Inc. (a)	14,989	371,577
ScanSource, Inc. (a)	2,588	90,037
Titan Machinery, Inc. (a)	1,968	50,991
Veritiv Corp. (a)	1,515	135,683
VSE Corp.	1,071	51,590
WESCO International, Inc. (a)	4,621	532,894
		<u>2,239,166</u>
Entertainment — 1.9%		
Accel Entertainment, Inc. (a)	5,752	69,829
AMC Entertainment Holdings, Inc. Class A (a) ^(b)	53,552	2,038,189
Bally's Corp. (a)	3,377	169,323
Chicken Soup For The Soul Entertainment, Inc. (a)	743	16,992
Cinemark Holdings, Inc. (a) ^(b)	11,200	215,152
Eros STX Global Corp. (a) ^(b)	33,599	30,894
Esports Technologies, Inc. (a) ^(b)	1,162	39,008
Everi Holdings, Inc. (a)	8,846	213,896
GAN Ltd. (a)	4,103	61,012
Golden Entertainment, Inc. (a)	1,762	86,497

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Golden Nugget Online Gaming, Inc. (a)	4,208	\$ 73,093
Hall of Fame Resort & Entertainment Co. (a) (b)	6,137	16,263
IMAX Corp. (a)	5,145	97,652
International Game Technology PLC (a) (b)	10,374	273,044
Liberty Media Corp-Liberty Braves Class A (a) (b)	1,062	28,579
Liberty Media Corp-Liberty Braves Class C (a)	3,773	99,683
Lions Gate Entertainment Corp. Class A (a)	5,935	84,218
Lions Gate Entertainment Corp. Class B (a)	12,255	159,315
Madison Square Garden Entertainment Corp. (a) (b)	2,705	196,572
Monarch Casino & Resort, Inc. (a)	1,337	89,566
NEOGAMES SA (a)	599	21,995
RCI Hospitality Holdings, Inc.	888	60,837
Red Rock Resorts, Inc. Class A (a)	6,386	327,091
Rush Street Interactive, Inc. (a)	5,634	108,229
Scientific Games Corp. Class A (a)	9,976	828,706
SeaWorld Entertainment, Inc. (a)	5,337	295,243
		<u>5,700,878</u>
Food Services — 0.1%		
Healthcare Services Group, Inc.	7,786	194,572
Home Builders — 1.3%		
Beazer Homes USA, Inc. (a)	3,102	53,509
Cavco Industries, Inc. (a)	958	226,797
Century Communities, Inc.	3,113	191,294
Forestar Group, Inc. (a)	1,786	33,273
Green Brick Partners, Inc. (a)	3,187	65,397
Hovnanian Enterprises, Inc. Class A (a)	544	52,436
Installed Building Products, Inc.	2,458	263,375
KB Home	8,671	337,475
Landsea Homes Corp. (a)	1,109	9,604
LCI Industries	2,570	345,999
LGI Homes, Inc. (a)	2,272	322,420
M.D.C. Holdings, Inc.	5,916	276,396
M/I Homes, Inc. (a)	2,946	170,279
Meritage Home Corp. (a)	3,890	377,330
Skyline Champion Corp. (a)	5,450	327,327
Taylor Morrison Home Corp. (a)	12,617	325,266
TRI Pointe Group, Inc. (a)	11,732	246,607
Winnebago Industries, Inc.	3,354	242,997
		<u>3,867,781</u>
	Number of Shares	Value
Home Furnishing — 0.6%		
Aterian, Inc. (a) (b)	2,713	\$ 29,382
Casper Sleep, Inc. (a)	3,245	13,856
Daktronics, Inc. (a)	3,757	20,400
Ethan Allen Interiors, Inc.	2,308	54,700
Flexsteel Industries, Inc.	649	20,041
Hamilton Beach Brands Holding Co. Class A	804	12,599
Herman Miller, Inc.	7,721	290,773
Hooker Furnishings Corp.	1,225	33,063
iRobot Corp. (a)	2,901	227,728
Kopin Corp. (a)	8,271	42,430
The Lovesac Co. (a)	1,313	86,776
Purple Innovation, Inc. (a)	5,938	124,817
Sleep Number Corp. (a)	2,399	224,259
Snap One Holdings Corp. (a)	1,379	22,988
Sonos, Inc. (a)	12,473	403,626
Traeger, Inc. (a)	2,367	49,541
Universal Electronics, Inc. (a)	1,339	65,946
VOXX International Corp. (a)	1,734	19,854
Weber, Inc. (a) (b)	1,785	31,398
		<u>1,774,177</u>
Housewares — 0.0%		
Lifetime Brands, Inc.	1,363	24,793
Tupperware Brands Corp. (a)	5,124	108,219
		<u>133,012</u>
Leisure Time — 0.5%		

Acushnet Holdings Corp.	3,561	166,299
Callaway Golf Co. (a)	11,990	331,284
Camping World Holdings, Inc. Class A	4,426	172,039
Clarus Corp.	2,497	63,998
Drive Shack, Inc. (a) ^(b)	8,087	22,724
Escalade, Inc.	991	18,740
F45 Training Holdings, Inc. (a)	2,147	32,119
Johnson Outdoors, Inc. Class A	535	56,603
Liberty TripAdvisor Holdings, Inc. Class A (a)	7,782	24,046
Lindblad Expeditions Holdings, Inc. (a) ^(b)	3,218	46,951
Malibu Boats, Inc. Class A (a)	2,146	150,177
Marine Products Corp.	869	10,871
MasterCraft Boat Holdings, Inc. (a)	2,002	50,210
Nautilus, Inc. (a) ^(b)	3,211	29,894
OneSpaWorld Holdings Ltd. (a)	5,597	55,802
OneWater Marine, Inc. Class A	1,095	44,030
Vista Outdoor, Inc. (a)	5,979	241,013
Xponential Fitness, Inc. (a)	940	11,929
		<hr/>
		1,528,729

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Lodging — 0.2%		
Bluegreen Vacations Holding Corp. (a)	1,611	\$ 41,564
Century Casinos, Inc. (a)	2,889	38,915
Full House Resorts, Inc. (a)	3,496	37,093
Hilton Grand Vacations, Inc. (a)	8,869	421,898
The Marcus Corp. (a)	2,373	41,409
Target Hospitality Corp. (a)	2,836	10,578
		<u>591,457</u>
Office Furnishings — 0.1%		
CompX International, Inc.	230	4,779
HNI Corp.	4,486	164,726
Interface, Inc.	5,984	90,658
Kimball International, Inc. Class B	3,620	40,544
Steelcase, Inc. Class A	9,278	117,645
		<u>418,352</u>
Retail — 4.9%		
Abercrombie & Fitch Co. Class A (a)	6,367	239,590
Academy Sports & Outdoors, Inc. (a)	8,069	322,921
America's Car-Mart, Inc. (a)	657	76,724
American Eagle Outfitters, Inc. (b)	15,777	407,047
Arko Corp. (a)	12,382	125,058
Asbury Automotive Group, Inc. (a)	2,009	395,251
Aspen Aerogels, Inc. (a)	2,273	104,581
Barnes & Noble Education, Inc. (a)	4,085	40,809
Bassett Furniture Industries, Inc.	1,037	18,780
Beacon Roofing Supply, Inc. (a)	5,792	276,626
Bed Bath & Beyond, Inc. (a)	10,904	188,367
Big 5 Sporting Goods Corp.	2,212	50,964
Big Lots, Inc.	3,551	153,971
Biglari Holdings, Inc. Class B (a)	90	15,463
BJ's Restaurants, Inc. (a)	2,313	96,591
BJ's Wholesale Club Holdings, Inc. (a)	14,244	782,281
Bloomin' Brands, Inc. (a)	9,177	229,425
BlueLinx Holdings, Inc. (a)	981	47,951
Boot Barn Holdings, Inc. (a)	3,034	269,632
Brinker International, Inc. (a)	4,703	230,682
The Buckle, Inc.	3,062	121,225
Caleres, Inc.	3,790	84,214
Cannae Holdings, Inc. (a)	8,766	272,710
CarLotz, Inc. (a) (b)	7,474	28,476
Carrols Restaurant Group, Inc.	3,668	13,425
The Cato Corp. Class A	2,117	35,015
The Cheesecake Factory, Inc. (a)	4,774	224,378
Chico's FAS, Inc. (a)	12,721	57,117
The Children's Place, Inc. (a)	1,445	108,751
Chuy's Holdings, Inc. (a)	2,021	63,722
Citi Trends, Inc. (a)	893	65,153
	Number of Shares	Value
Clean Energy Fuels Corp. (a)	15,983	\$ 130,261
Conn's, Inc. (a)	1,897	43,309
The Container Store Group, Inc. (a)	3,386	32,235
Cracker Barrel Old Country Store, Inc.	2,451	342,748
Dave & Buster's Entertainment, Inc. (a)	4,467	171,220
Del Taco Restaurants, Inc.	3,207	27,997
Denny's Corp. (a)	6,424	104,968
Designer Brands, Inc. Class A (a)	6,163	85,851
Dillard's, Inc. Class A	622	107,307
Dine Brands Global, Inc. (a)	1,676	136,108
Duluth Holdings, Inc. Class B (a)	1,290	17,583
El Pollo Loco Holdings, Inc. (a)	1,929	32,600
Fiesta Restaurant Group, Inc. (a)	1,884	20,649
FirstCash, Inc.	4,125	360,938
Franchise Group, Inc.	2,934	103,893
Genesco, Inc. (a)	1,507	86,999
GMS, Inc. (a)	4,435	194,253
Group 1 Automotive, Inc.	1,824	342,693
GrowGeneration Corp. (a) (b)	5,581	137,683

Guess?, Inc.	4,148	87,149
Haverty Furniture Cos., Inc.	1,697	57,206
Hibbett, Inc.	1,656	117,145
Jack in the Box, Inc.	2,258	219,771
JOANN, Inc. ^(b)	1,292	14,393
Kirkland's, Inc. (a) ^(b)	1,491	28,642
Kura Sushi USA, Inc. Class A (a)	429	18,739
La-Z-Boy, Inc.	4,690	151,159
Lazydays Holdings, Inc. (a)	818	17,456
Lumber Liquidators Holdings, Inc. (a)	2,907	54,303
Macy's, Inc.	32,600	736,760
MarineMax, Inc. (a)	2,221	107,763
MedAvail Holdings, Inc. (a) ^(b)	1,307	3,816
Movado Group, Inc.	1,679	52,872
Murphy USA, Inc.	2,516	420,826
National Vision Holdings, Inc. (a)	8,463	480,445
Noodles & Co. (a)	4,286	50,575
Nu Skin Enterprises, Inc. Class A	5,145	208,218
The ODP Corp. (a)	4,946	198,631
The ONE Group Hospitality, Inc. (a)	2,177	23,272
OptimizeRx Corp. (a) ^(b)	1,767	151,167
Papa John's International, Inc.	3,435	436,211
Party City Holdco, Inc. (a)	11,293	80,180
PC Connection, Inc.	1,173	51,647
PetMed Express, Inc. ^(b)	2,055	55,218
PriceSmart, Inc.	2,431	188,524
Red Robin Gourmet Burgers, Inc. (a)	1,616	37,265
Regis Corp. (a) ^(b)	2,657	9,246
Rite Aid Corp. (a)	5,625	79,875

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

Rush Enterprises, Inc. Class A
Rush Enterprises, Inc. Class B
Ruth's Hospitality Group, Inc. (a)
Sally Beauty Holdings, Inc. (a)
Shake Shack, Inc. Class A (a)
Shift Technologies, Inc. (a)
Shoe Carnival, Inc.
Signet Jewelers Ltd.
Sonic Automotive, Inc. Class A
Sportsman's Warehouse Holdings, Inc. (a)
Texas Roadhouse, Inc.
Tilly's, Inc. Class A
TravelCenters of America, Inc. (a)
Vera Bradley, Inc. (a)
Wingstop, Inc.
Winmark Corp.
World Fuel Services Corp.
Zumiez, Inc. (a)

	Number of Shares	Value
Rush Enterprises, Inc. Class A	4,420	\$ 199,607
Rush Enterprises, Inc. Class B	644	29,476
Ruth’s Hospitality Group, Inc. (a)	3,444	71,325
Sally Beauty Holdings, Inc. (a)	11,694	197,044
Shake Shack, Inc. Class A (a)	3,868	303,483
Shift Technologies, Inc. (a)	6,631	46,019
Shoe Carnival, Inc.	1,794	58,161
Signet Jewelers Ltd.	5,411	427,253
Sonic Automotive, Inc. Class A	2,249	118,162
Sportsman’s Warehouse Holdings, Inc. (a)	4,461	78,514
Texas Roadhouse, Inc.	7,258	662,873
Tilly’s, Inc. Class A	2,366	33,148
TravelCenters of America, Inc. (a)	1,325	65,972
Vera Bradley, Inc. (a)	2,551	24,005
Wingstop, Inc.	3,098	507,855
Winmark Corp.	358	76,981
World Fuel Services Corp.	6,498	218,463
Zumiez, Inc. (a)	2,257	89,738
		<u>14,972,748</u>

UniFirst Corp.

Toys, Games & Hobbies — 0.0%		
Funko, Inc. Class A (a)	2,791	50,824

Consumer, Non-cyclical — 25.7%

22nd Century Group, Inc. (a) (b)

22nd Century Group, Inc. (a) (b)	17,119	50,672
The Andersons, Inc.	3,268	100,753
AppHarvest, Inc. (a) (b)	7,337	47,837
Cadiz, Inc. (a) (b)	2,251	15,847
Fresh Del Monte Produce, Inc.	3,488	112,383
Greenlane Holdings, Inc. Class A (a)	1,759	4,169
Limoneira Co.	1,726	27,909
Tejon Ranch Co. (a)	2,205	39,161
Turning Point Brands, Inc.	1,489	71,100
Universal Corp.	2,524	121,985
Vector Group Ltd.	14,893	189,886
Vital Farms, Inc. (a)	2,614	45,928
		<u>827,630</u>

Celsius Holdings, Inc. (a) (b)

Celsius Holdings, Inc. (a) ^(b)	5,594	503,964
Coca-Cola Consolidated, Inc.	488	192,360
The Duckhorn Portfolio, Inc. (a)	2,051	46,947
MGP Ingredients, Inc.	1,467	95,502
National Beverage Corp.	2,420	127,026
NewAge, Inc. (a)	14,842	20,630
Primo Water Corp.	16,299	256,220

	Number of Shares	Value
Zevia PBC (a)	1,025	\$ 11,798
		1,254,447

4D Molecular Therapeutics, Inc. (a)

89bio, Inc. (a) ^(b)	1,074	21,040
9 Meters Biopharma, Inc. (a)	23,684	30,789
Absci Corp. (a)	1,447	16,829
ACADIA Pharmaceuticals, Inc. (a)	12,337	204,918
Acumen Pharmaceuticals, Inc. (a)	996	14,801
Adagio Therapeutics, Inc. (a)	2,171	91,703
Adicet Bio, Inc. (a)	2,334	18,299
Adverum Biotechnologies, Inc. (a) ^(b)	9,256	20,086
Aerovate Therapeutics, Inc. (a)	1,053	22,092
Affirmed NV (a)	11,926	73,703
Agenus, Inc. (a)	21,689	113,867
Akero Therapeutics, Inc. (a)	2,615	58,445
Akouos, Inc. (a)	2,561	29,733
Akoya Biosciences, Inc. (a)	851	11,880

Albireo Pharma, Inc. (a) ^(b)	1,768	55,162
Aldeyra Therapeutics, Inc. (a)	5,074	44,550
Aligos Therapeutics, Inc. (a)	2,181	33,827
Allakos, Inc. (a)	3,618	383,038
Allogene Therapeutics, Inc. (a)	7,018	180,363
Allovir, Inc. (a) ^(b)	3,022	75,731
Alpha Teknova, Inc. (a)	718	17,871
Alpine Immune Sciences, Inc. (a) ^(b)	1,299	13,860
Altimmune, Inc. (a)	4,176	47,231
ALX Oncology Holdings, Inc. (a)	1,831	135,238
Amicus Therapeutics, Inc. (a)	27,202	259,779
AnaptysBio, Inc. (a)	2,049	55,569
Anavex Life Sciences Corp. (a) ^(b)	6,701	120,283
Angion Biomedica Corp. (a)	2,276	22,237
ANI Pharmaceuticals, Inc. (a)	1,057	34,691
Annexon, Inc. (a)	3,303	61,469
Apellis Pharmaceuticals, Inc. (a)	6,716	221,359
Applied Molecular Transport, Inc. (a)	2,641	68,323
Applied Therapeutics, Inc. (a) ^(b)	1,892	31,407
Arbutus Biopharma Corp. (a) ^(b)	8,028	34,440
Arcturus Therapeutics Holdings, Inc. (a)	2,179	104,113
Arcus Biosciences, Inc. (a)	4,687	163,436
Arcutis Biotherapeutics, Inc. (a)	2,817	67,298
Ardelyx, Inc. (a) ^(b)	9,428	12,445
Arena Pharmaceuticals, Inc. (a)	6,326	376,713
Arrowhead Pharmaceuticals, Inc. (a)	10,501	655,577
Atara Biotherapeutics, Inc. (a)	8,518	152,472
Atea Pharmaceuticals, Inc. (a)	6,684	234,341
Athersys, Inc. (a) ^(b)	20,322	27,028
Athira Pharma, Inc. (a) ^(b)	3,436	32,230

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Atossa Therapeutics, Inc. (a)	12,275	\$ 40,016
Atreca, Inc. Class A (a) ^(b)	2,891	18,011
Avalo Therapeutics, Inc. (a) ^(b)	5,904	12,871
Avid Bioservices, Inc. (a)	6,222	134,209
Avidity Biosciences, Inc. (a) ^(b)	3,967	97,707
Avrobio, Inc. (a)	4,070	22,711
Axsome Therapeutics, Inc. (a) ^(b)	2,852	94,002
Beam Therapeutics, Inc. (a)	5,164	449,320
Berkeley Lights, Inc. (a)	5,003	97,859
BioAtla, Inc. (a)	1,632	48,046
BioCryst Pharmaceuticals, Inc. (a)	18,411	264,566
Biodesix, Inc. (a)	1,370	11,261
Biohaven Pharmaceutical Holding Co. Ltd. (a)	5,773	801,927
Biomea Fusion, Inc. (a)	962	11,515
Black Diamond Therapeutics, Inc. (a) ^(b)	2,429	20,549
Bluebird Bio, Inc. (a)	6,949	132,795
Blueprint Medicines Corp. (a)	6,067	623,748
Bolt Biotherapeutics, Inc. (a) ^(b)	2,404	30,411
Bridgebio Pharma, Inc. (a) ^(b)	11,141	522,179
Brooklyn ImmunoTherapeutics, Inc. (a)	3,116	28,979
C4 Therapeutics, Inc. (a)	3,991	178,318
Cara Therapeutics, Inc. (a)	4,665	72,074
Cardiff Oncology, Inc. (a) ^(b)	4,032	26,853
Caribou Biosciences, Inc. (a)	2,020	48,217
Cassava Sciences, Inc. (a) ^(b)	3,959	245,775
CEL-SCI Corp. (a)	3,826	42,048
Celldex Therapeutics, Inc. (a)	4,763	257,154
Century Therapeutics, Inc. (a)	1,241	31,224
Cerevel Therapeutics Holdings, Inc. (a)	4,146	122,307
ChemoCentryx, Inc. (a)	5,553	94,956
Chinook Therapeutics, Inc. (a)	3,507	44,749
ChromaDex Corp. (a) ^(b)	5,003	31,369
Clene, Inc. (a)	2,013	13,749
Codex DNA, Inc. (a)	793	8,826
Codiak Biosciences, Inc. (a) ^(b)	1,592	25,997
Cogent Biosciences, Inc. (a)	3,958	33,287
Cortexyme, Inc. (a)	2,063	189,095
Crinetics Pharmaceuticals, Inc. (a)	3,923	82,579
Cue Biopharma, Inc. (a)	3,154	45,954
Cullinan Management, Inc. (a) ^(b)	2,728	61,571
Curis, Inc. (a)	8,906	69,734
Cymabay Therapeutics, Inc. (a)	7,379	26,933
Cyteir Therapeutics, Inc. (a) ^(b)	870	15,268
Cytek Biosciences, Inc. (a)	1,689	36,161
CytomX Therapeutics, Inc. (a)	6,788	34,551
	Number of Shares	Value
Day One Biopharmaceuticals, Inc. (a)	1,157	\$ 27,456
Deciphera Pharmaceuticals, Inc. (a)	4,032	137,007
Denali Therapeutics, Inc. (a)	9,431	475,794
Design Therapeutics, Inc. (a)	1,502	22,064
Dicerna Pharmaceuticals, Inc. (a)	7,193	145,011
Dynavax Technologies Corp. (a) ^(b)	11,161	214,403
Dyne Therapeutics, Inc. (a) ^(b)	3,169	51,465
Edgewise Therapeutics, Inc. (a)	1,376	22,842
Editas Medicine, Inc. (a) ^(b)	7,084	291,011
Eiger BioPharmaceuticals, Inc. (a)	3,429	22,906
Eliem Therapeutics, Inc. (a)	736	13,233
Emergent BioSolutions, Inc. (a)	5,075	254,105
Epizyme, Inc. (a)	9,502	48,650
Erasca, Inc. (a)	2,179	46,238
Esperion Therapeutics, Inc. (a) ^(b)	2,710	32,655
Evelo Biosciences, Inc. (a) ^(b)	2,969	20,902
Evolus, Inc. (a)	3,221	24,544
Exagen, Inc. (a)	1,106	15,042

EyePoint Pharmaceuticals, Inc. (a)	2,253	23,476
Fate Therapeutics, Inc. (a)	8,406	498,224
FibroGen, Inc. (a)	8,863	90,580
Finch Therapeutics Group, Inc. (a)	843	10,959
Forma Therapeutics Holdings, Inc. (a)	3,476	80,608
Forte Biosciences, Inc. (a) ^(b)	1,258	3,724
Frequency Therapeutics, Inc. (a) ^(b)	3,414	24,103
Gemini Therapeutics, Inc. (a)	2,441	9,862
Generation Bio Co., (a)	4,519	113,291
Geron Corp. (a) ^(b)	31,007	42,480
Global Blood Therapeutics, Inc. (a)	6,145	156,575
Gossamer Bio, Inc. (a)	6,345	79,757
Graphite Bio, Inc. (a)	1,706	27,961
Greenwich Lifesciences, Inc. (a)	450	17,581
GT Biopharma, Inc. (a)	1,834	12,361
Halozyme Therapeutics, Inc. (a)	14,605	594,131
Harvard Bioscience, Inc. (a)	3,891	27,159
Homology Medicines, Inc. (a) ^(b)	4,470	35,179
Humanigen, Inc. (a) ^(b)	4,811	28,529
iBio, Inc. (a) ^(b)	23,046	24,429
Icosavax, Inc. (a)	1,408	41,663
IGM Biosciences, Inc. (a)	822	54,055
Ikena Oncology, Inc. (a)	1,011	12,759
Imago Biosciences, Inc. (a)	1,022	20,471
Immunix, Inc. (a)	1,855	16,417
ImmunityBio, Inc. (a)	7,170	69,836
ImmunoGen, Inc. (a)	20,299	115,095
Immunovant, Inc. (a)	4,165	36,194
Impel Neuropharma, Inc. (a)	604	7,357
Infinity Pharmaceuticals, Inc. (a) ^(b)	9,327	31,898
Inhibrx, Inc. (a)	2,882	95,999

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Innoviva, Inc. (a)	4,509	\$ 75,345
Inovio Pharmaceuticals, Inc. (a)	21,356	152,909
Inozyme Pharma, Inc. (a)	1,608	18,637
Insmmed, Inc. (a)	11,871	326,927
Instil Bio, Inc. (a)	1,801	32,193
Intercept Pharmaceuticals, Inc. (a) ^(b)	2,987	44,357
Intra-Cellular Therapies, Inc. (a)	7,310	272,517
iTeos Therapeutics, Inc. (a)	2,048	55,296
IVERIC bio, Inc. (a)	10,799	175,376
Janux Therapeutics, Inc. (a)	1,392	30,109
Kadmon Holdings, Inc. (a)	17,921	156,092
Kaleido Biosciences, Inc. (a) ^(b)	2,166	11,826
Karuna Therapeutics, Inc. (a) ^(b)	2,295	280,747
Karyopharm Therapeutics, Inc. (a)	7,542	43,894
KemPharm, Inc. (a)	3,044	28,401
Keros Therapeutics, Inc. (a)	1,652	65,353
Kezar Life Sciences, Inc. (a)	3,547	30,646
Kiniksa Pharmaceuticals Ltd. Class A (a)	3,121	35,548
Kinnate Biopharma, Inc. (a) ^(b)	2,698	62,108
Kodiak Sciences, Inc. (a) ^(b)	3,466	332,667
Kronos Bio, Inc. (a) ^(b)	3,997	83,777
Krystal Biotech, Inc. (a)	1,836	95,858
Kymera Therapeutics, Inc. (a)	3,556	208,879
Lexicon Pharmaceuticals, Inc. (a)	7,235	34,800
Ligand Pharmaceuticals, Inc. (a)	1,563	217,757
Lineage Cell Therapeutics, Inc. (a)	13,512	34,050
MacroGenics, Inc. (a)	6,202	129,870
Magenta Therapeutics, Inc. (a)	2,928	21,316
MaxCyte, Inc. (a) ^(b)	1,620	19,780
MEI Pharma, Inc. (a)	11,608	32,038
MeiraGTx Holdings PLC (a) ^(b)	3,071	40,476
Mersana Therapeutics, Inc. (a)	7,374	69,537
Mind Medicine MindMed, Inc. (a) ^(b)	36,677	85,457
Molecular Templates, Inc. (a)	3,629	24,351
Monte Rosa Therapeutics, Inc. (a)	1,217	27,115
Mustang Bio, Inc. (a)	7,758	20,869
Myriad Genetics, Inc. (a)	8,021	258,998
NeoGenomics, Inc. (a)	11,750	566,820
NGM Biopharmaceuticals, Inc. (a)	3,246	68,231
Nkarta, Inc. (a)	1,464	40,714
Nurix Therapeutics, Inc. (a)	3,232	96,831
Nuvalent, Inc., Class A (a)	1,128	25,436
Nuvation Bio, Inc. (a)	7,031	69,888
Olema Pharmaceuticals, Inc. (a)	2,654	73,144
Omega Therapeutics, Inc. (a)	772	14,552
Omeros Corp. (a) ^(b)	6,184	85,277
Oncocyte Corp. (a)	6,271	22,325
Oncorus, Inc. (a)	2,278	21,277
	Number of Shares	Value
Oncternal Therapeutics, Inc. (a)	4,935	\$ 20,579
Organogenesis Holdings, Inc. (a)	3,889	55,379
Oyster Point Pharma, Inc. (a)	1,239	14,682
Pacific Biosciences of California, Inc. (a)	20,165	515,216
Phathom Pharmaceuticals, Inc. (a) ^(b)	2,071	66,479
Pliant Therapeutics, Inc. (a) ^(b)	2,558	43,179
Portage Biotech, Inc. (a) ^(b)	478	9,713
Poseida Therapeutics, Inc. (a)	3,075	22,417
Praxis Precision Medicines, Inc. (a)	3,413	63,106
Precigen, Inc. (a)	10,097	50,384
Precision BioSciences, Inc. (a)	5,101	58,866
Prelude Therapeutics, Inc. (a)	1,083	33,844
Prothena Corp. PLC (a)	3,621	257,924
Provention Bio, Inc. (a) ^(b)	5,766	36,902
PTC Therapeutics, Inc. (a)	7,154	266,200
Puma Biotechnology, Inc. (a)	3,523	24,696

Radius Health, Inc. (a)	4,748	58,923
Rain Therapeutics, Inc. (a)	827	12,372
Rallybio Corp. (a)	734	12,904
RAPT Therapeutics, Inc. (a)	2,246	69,738
Recursion Pharmaceuticals, Inc. Class A (a)	2,969	68,317
REGENXBIO, Inc. (a)	4,082	171,117
Relay Therapeutics, Inc. (a)	6,208	195,738
Replimune Group, Inc. (a)	3,044	90,224
Revolution Medicines, Inc. (a)	6,132	168,691
Rigel Pharmaceuticals, Inc. (a)	17,471	63,420
Rocket Pharmaceuticals, Inc. (a)	4,198	125,478
Rubius Therapeutics, Inc. (a)	4,715	84,304
Sana Biotechnology, Inc. (a) ^(b)	8,930	201,104
Sangamo Therapeutics, Inc. (a)	12,225	110,147
Scholar Rock Holding Corp. (a)	2,846	93,975
Seelos Therapeutics, Inc. (a)	10,463	25,216
Seer, Inc. (a) ^(b)	4,304	148,617
Selecta Biosciences, Inc. (a)	9,657	40,173
Sensei Biotherapeutics, Inc. (a)	2,178	22,913
Sesen Bio, Inc. (a) ^(b)	19,066	15,123
Shattuck Labs, Inc. (a) ^(b)	2,828	57,635
Sigilon Therapeutics, Inc. (a) ^(b)	1,550	8,757
Silverback Therapeutics, Inc. (a) ^(b)	2,151	21,467
Singular Genomics Systems, Inc. (a)	1,233	13,797
Solid Biosciences, Inc. (a)	6,648	15,889
Sorrento Therapeutics, Inc. (a) ^(b)	28,727	219,187
SpringWorks Therapeutics, Inc. (a)	3,013	191,145
Spruce Biosciences, Inc. (a)	876	5,265
SQZ Biotechnologies Co. (a)	2,427	34,997
Stoke Therapeutics, Inc. (a)	2,017	51,312
Surface Oncology, Inc. (a) ^(b)	3,706	28,054

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Sutro Biopharma, Inc. (a)	4,443	\$ 83,928
Syndax Pharmaceuticals, Inc. (a)	4,609	88,078
Talaris Therapeutics, Inc. (a)	993	13,465
Tarsus Pharmaceuticals, Inc. (a)	940	20,257
Taysa Gene Therapies, Inc. (a) ^(b)	2,337	43,515
TCR2 Therapeutics, Inc. (a)	3,248	27,640
Tenaya Therapeutics, Inc. (a)	1,460	30,149
Terns Pharmaceuticals, Inc. (a)	1,422	14,817
TG Therapeutics, Inc. (a)	13,274	441,759
Theravance Biopharma, Inc. (a) ^(b)	6,214	45,984
TransMedics Group, Inc. (a)	2,650	87,688
Traverse Therapeutics, Inc. (a)	6,028	146,179
Trillium Therapeutics, Inc. (a)	10,276	180,447
Turning Point Therapeutics, Inc. (a)	4,755	315,875
Twist Bioscience Corp. (a)	4,890	523,083
UroGen Pharma Ltd. (a) ^(b)	2,045	34,397
Vaxart, Inc. (a)	12,306	97,833
VBI Vaccines, Inc. (a)	19,761	61,457
Vera Therapeutics, Inc. (a)	738	12,804
Veracyte, Inc. (a)	6,986	324,500
Verastem, Inc. (a)	18,187	56,016
Vericel Corp. (a)	4,815	234,972
Veru, Inc. (a)	6,746	57,543
Verve Therapeutics, Inc. (a)	1,669	78,443
Viking Therapeutics, Inc. (a) ^(b)	7,140	44,839
Vincerox Pharma, Inc. (a)	1,360	21,991
Vir Biotechnology, Inc. (a)	6,227	270,999
Viracta Therapeutics, Inc. (a)	3,864	30,989
VistaGen Therapeutics, Inc. (a)	20,389	55,866
Vor BioPharma, Inc. (a)	1,990	31,203
WaVe Life Sciences Ltd. (a)	4,202	20,590
Werewolf Therapeutics, Inc. (a)	845	14,500
XBioTech, Inc.	1,483	19,205
Xencor, Inc. (a)	5,783	188,873
XOMA Corp. (a) ^(b)	680	16,830
Y-mAbs Therapeutics, Inc. (a)	3,597	102,658
Zentalis Pharmaceuticals, Inc. (a)	3,718	247,767
ZIOPHARM Oncology, Inc. (a) ^(b)	22,277	40,544
		26,892,880
Commercial Services — 4.7%		
2U, Inc. (a)	7,424	249,224
The Aaron's Co., Inc.	3,405	93,774
ABM Industries, Inc.	7,005	315,295
Acacia Research Corp. (a)	5,240	35,580
Adtalem Global Education, Inc. (a)	5,133	194,079
Alarm.com Holdings, Inc. (a)	4,906	383,600
Alta Equipment Group, Inc. (a)	2,039	27,995
American Public Education, Inc. (a)	1,954	50,042

	Number of Shares	Value
AMN Healthcare Services, Inc. (a)	4,899	\$ 562,160
API Group Corp. (a) ^{(b) (e)}	20,546	418,111
Arlo Technologies, Inc. (a)	8,833	56,620
ASGN, Inc. (a)	5,397	610,617
Avis Budget Group, Inc. (a)	5,054	588,842
Barrett Business Services, Inc.	794	60,550
BrightView Holdings, Inc. (a)	4,157	61,357
The Brink's Co.	5,048	319,538
CAI International, Inc.	1,670	93,370
Carriage Services, Inc.	1,688	75,268
Cass Information Systems, Inc.	1,507	63,068
CBIZ, Inc. (a)	5,231	169,171
Cimpress PLC (a)	1,746	151,605
CoreCivic, Inc. (a)	12,280	109,292
Corvel Corp. (a)	911	169,646
Coursera, Inc. (a)	5,966	188,824
CRA International, Inc.	726	72,121
Cross Country Healthcare, Inc. (a)	3,724	79,098

Custom Truck One Source, Inc. (a) (b)	4,862	45,362
Deluxe Corp.	4,351	156,157
Emerald Holding, Inc. (a)	2,576	11,180
Ennis, Inc.	2,714	51,159
European Wax Center, Inc. (a)	1,048	29,354
EVERTEC, Inc.	6,290	287,579
Evo Payments, Inc. Class A (a)	4,874	115,416
First Advantage Corp. (a)	3,119	59,417
Forrester Research, Inc. (a)	1,153	56,797
Franklin Covey Co. (a)	1,318	53,761
GP Strategies Corp. (a)	1,347	27,883
Graham Holdings Co. Class B	402	236,842
Green Dot Corp. Class A (a)	5,544	279,030
GreenSky, Inc. Class A (a)	7,568	84,610
The Hackett Group, Inc.	2,521	49,462
HealthEquity, Inc. (a)	8,479	549,100
Heidrick & Struggles International, Inc.	1,988	88,724
Herc Holdings, Inc. (a)	2,587	422,871
HireQuest, Inc. (b)	563	10,883
Huron Consulting Group, Inc. (a)	2,321	120,692
ICF International, Inc.	1,918	171,258
Insperty, Inc.	3,774	417,933
John Wiley & Sons, Inc. Class A	4,487	234,266
Kelly Services, Inc. Class A	3,600	67,968
Kforce, Inc.	2,126	126,795
Korn Ferry	5,716	413,610
Laureate Education, Inc. Class A (a)	10,275	174,572
LiveRamp Holdings, Inc. (a)	6,847	323,384
Marathon Digital Holdings, Inc. (a)	9,893	312,421
Medifast, Inc.	1,209	232,902

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
MoneyGram International, Inc. (a) ^(b)	9,445	\$ 75,749
Monro, Inc.	3,437	197,662
Multiplan Corp. (a) ^(b)	23,467	132,119
National Research Corp. Class A	1,448	61,062
Paya Holdings, Inc. Class A (a)	8,492	92,308
Perdoceo Education Corp. (a)	7,241	76,465
Priority Technology Holdings, Inc. (a)	994	6,640
PROG Holdings, Inc.	6,876	288,861
Progyny, Inc. (a)	6,545	366,520
Rent-A-Center, Inc.	6,842	384,589
Repay Holdings Corp. (a)	8,962	206,395
Resources Connection, Inc.	3,298	52,042
Riot Blockchain, Inc. (a) ^(b)	8,738	224,567
RR Donnelley & Sons Co. (a)	7,565	38,884
ShotSpotter, Inc. (a)	844	30,696
SP Plus Corp. (a)	2,365	72,535
StoneMor, Inc. (a)	3,567	8,810
Strategic Education, Inc.	2,526	178,083
Stride, Inc. (a)	4,164	149,654
Team, Inc. (a)	2,929	8,816
Textainer Group Holdings Ltd. (a)	4,962	173,223
Transcat, Inc. (a)	752	48,489
TriNet Group, Inc. (a)	4,208	397,993
Triton International Ltd.	6,930	360,637
TrueBlue, Inc. (a)	3,625	98,165
Vectrus, Inc. (a)	1,211	60,889
Viad Corp. (a)	2,089	94,861
Vivint Smart Home, Inc. (a)	9,430	89,114
Willdan Group, Inc. (a) ^(b)	1,127	40,110
WW International, Inc. (a)	5,395	98,459
		<u>14,524,632</u>
Cosmetics & Personal Care — 0.2%		
The Beauty Health Co. (a) ^(b)	9,042	234,821
Edgewell Personal Care Co.	5,631	204,405
elf Beauty, Inc. (a)	4,964	144,204
The Honest Co., Inc. (a) ^(b)	2,666	27,673
Inter Parfums, Inc.	1,851	138,399
Revlon, Inc. Class A (a)	815	8,240
		<u>757,742</u>
Food — 1.5%		
AquaBounty Technologies, Inc. (a)	5,599	22,788
B&G Foods, Inc. ^(b)	6,657	198,978
BellRing Brands, Inc. Class A (a)	4,136	127,182
Cal-Maine Foods, Inc.	3,691	133,466
Calavo Growers, Inc.	1,757	67,188
The Chefs' Warehouse, Inc. (a)	3,223	104,973
HF Foods Group, Inc. (a) ^(b)	3,835	23,202
Hostess Brands, Inc. (a)	13,663	237,326
	Number of Shares	Value
Ingles Markets, Inc. Class A	1,457	\$ 96,206
J&J Snack Foods Corp.	1,530	233,815
John B Sanfilippo & Son, Inc.	925	75,591
Krispy Kreme, Inc. (a) ^(b)	2,276	31,864
Laird Superfood, Inc. (a) ^(b)	691	13,184
Lancaster Colony Corp.	1,968	332,218
Landec Corp. (a) ^(b)	2,697	24,866
Mission Produce, Inc. (a) ^(b)	3,794	69,734
Nathan's Famous, Inc.	311	19,024
Natural Grocers by Vitamin Cottage, Inc.	1,081	12,129
Performance Food Group Co. (a)	15,703	729,561
Sanderson Farms, Inc.	2,111	397,290
Seneca Foods Corp. Class A (a)	681	32,838
The Simply Good Foods Co. (a)	8,826	304,409
SpartanNash Co.	3,711	81,271
Sprouts Farmers Market, Inc. (a)	11,926	276,325

Tattooed Chef, Inc. (a) ^(b)	4,896	90,233
Tootsie Roll Industries, Inc. ^(b)	1,617	49,205
TreeHouse Foods, Inc. (a)	5,402	215,432
United Natural Foods, Inc. (a)	5,796	280,642
Utz Brands, Inc.	5,871	100,570
Village Super Market, Inc. Class A	828	17,951
Weis Markets, Inc.	1,712	89,966
Whole Earth Brands, Inc. (a) ^(b)	3,922	45,299
		<u>4,534,726</u>
Health Care – Products — 4.0%		
Accelerate Diagnostics, Inc. (a)	3,529	20,574
Accuray, Inc. (a)	9,715	38,374
Acutus Medical, Inc. (a) ^(b)	1,933	17,088
Alphatec Holdings, Inc. (a)	7,435	90,633
AngioDynamics, Inc. (a)	3,820	99,091
Apria, Inc. (a)	1,584	58,846
Apyx Medical Corp. (a)	3,327	46,079
Asensus Surgical, Inc. (a)	24,773	45,830
Aspira Women's Health, Inc. (a) ^(b)	7,767	25,243
AtriCure, Inc. (a)	4,642	322,851
Atrion Corp.	146	101,835
Avanos Medical, Inc. (a)	4,955	154,596
Avita Medical, Inc. (a)	2,518	44,619
AxoGen, Inc. (a)	3,913	61,825
Axonics Inc. (a)	4,745	308,852
BioLife Solutions, Inc. (a)	2,507	106,096
Bionano Genomics, Inc. (a)	29,088	159,984
Bioventus, Inc. Class A (a)	1,668	23,619
Butterfly Network, Inc. (a) ^(b)	18,910	197,420
Cardiovascular Systems, Inc. (a)	4,049	132,929
CareDx, Inc. (a)	5,228	331,298
Castle Biosciences, Inc. (a)	2,205	146,632

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Celcuity, Inc. (a)	980	\$ 17,640
Cerus Corp. (a)	17,323	105,497
ClearPoint Neuro, Inc. (a) ^(b)	2,030	36,033
CONMED Corp.	3,011	393,929
CryoLife, Inc. (a)	3,920	87,377
Cutera, Inc. (a)	1,806	84,160
Cvrx, Inc. (a)	841	13,910
CytoSorbents Corp. (a) ^(b)	4,290	34,835
Dermtech, Inc. (a) ^(b)	2,556	82,073
Eargo, Inc. (a)	2,104	14,160
Glaukos Corp. (a)	4,656	224,280
Haemonetics Corp. (a)	5,233	369,397
Hanger, Inc. (a)	3,875	85,095
Inari Medical, Inc. (a)	3,521	285,553
InfuSystem Holdings, Inc. (a)	1,996	26,008
Inogen, Inc. (a)	2,051	88,378
Inspire Medical Systems, Inc. (a)	2,788	649,269
Integer Holdings Corp. (a)	3,412	304,828
Intersect ENT, Inc. (a)	3,421	93,051
Invacare Corp. (a)	3,577	17,027
iRadimed Corp. (a)	688	23,110
iRhythm Technologies, Inc. (a)	3,055	178,901
Lantheus Holdings, Inc. (a)	6,970	178,990
LeMaitre Vascular, Inc.	1,944	103,207
LivaNova PLC (a)	5,541	438,792
Meridian Bioscience, Inc. (a)	4,375	84,175
Merit Medical Systems, Inc. (a)	5,332	382,838
MiMedx Group, Inc. (a)	11,299	68,472
Misonix, Inc. (a)	1,261	31,903
NanoString Technologies, Inc. (a)	4,695	225,407
Natus Medical, Inc. (a)	3,493	87,604
Neogen Corp. (a)	11,176	485,374
NeuroPace, Inc. (a)	777	12,315
Nevro Corp. (a)	3,586	417,339
NuVasive, Inc. (a)	5,371	321,454
Omniceil, Inc. (a)	4,468	663,185
OraSure Technologies, Inc. (a)	7,368	83,332
Orthofix Medical, Inc. (a)	1,955	74,525
OrthoPediatrics Corp. (a)	1,432	93,810
PAVmed, Inc. (a)	7,317	62,487
Pulmonx Corp. (a)	2,731	98,261
Pulse Biosciences, Inc. (a)	1,438	31,061
Quanterix Corp. (a)	3,189	158,780
Quotient Ltd. (a) ^(b)	8,690	20,335
Rapid Micro Biosystems, Inc., Class A (a)	830	15,330
Retractable Technologies, Inc. (a)	1,912	21,089
RxSight, Inc. (a)	859	10,884
SeaSpine Holdings Corp. (a)	3,363	52,900
	Number of Shares	Value
Sera Prognostics, Inc., Class A (a)	459	\$ 5,099
Shockwave Medical, Inc. (a)	3,499	720,374
SI-BONE, Inc. (a)	3,319	71,093
Sientra, Inc. (a)	6,120	35,068
Silk Road Medical, Inc. (a)	3,507	192,990
Soliton, Inc. (a)	1,222	24,880
STAAR Surgical Co. (a)	4,930	633,653
Stereotaxis, Inc. (a)	5,312	28,579
Surmodics, Inc. (a)	1,387	77,117
Tactile Systems Technology, Inc. (a)	1,974	87,744
Talis Biomedical Corp. (a)	1,648	10,300
Treace Medical Concepts, Inc. (a)	1,219	32,791
Utah Medical Products, Inc.	357	33,144
Varex Imaging Corp. (a)	3,974	112,067
ViewRay, Inc. (a)	14,283	102,980
Zynex, Inc. (a)	2,093	23,839
		<u>12,164,392</u>

Health Care – Services — 2.2%

Accolade, Inc. (a) ^(b)	5,201	219,326
Addus HomeCare Corp. (a)	1,595	127,201
Agility, Inc. (a)	2,377	45,258
American Well Corp. Class A (a)	18,944	172,580
Aveanna Healthcare Holdings, Inc. (a)	3,939	31,591
Brookdale Senior Living, Inc. (a)	19,034	119,914
Community Health Systems, Inc. (a)	12,857	150,427
The Ensign Group, Inc.	5,449	408,076
Fulgent Genetics, Inc. (a) ^(b)	2,145	192,943
Innovage Holding Corp. (a)	1,786	11,805
Inotiv, Inc. (a)	1,318	38,538
Invitae Corp. (a) ^(b)	20,757	590,122
The Joint Corp. (a)	1,424	139,580
LHC Group, Inc. (a)	3,170	497,405
LifeStance Health Group, Inc. (a)	4,886	70,847
Magellan Health, Inc. (a)	2,464	232,971
MEDNAX, Inc. (a)	7,895	224,455
Medpace Holdings, Inc. (a)	3,004	568,597
ModivCare, Inc. (a)	1,290	234,290
National HealthCare Corp.	1,308	91,534
Neuronetics, Inc. (a)	2,787	18,283
Ontrak, Inc. (a)	954	9,578
OPKO Health, Inc. (a) ^(b)	41,375	151,019
Ortho Clinical Diagnostics Holdings PLC Class H (a)	11,475	212,058
The Pennant Group, Inc. (a)	2,625	73,736
Personalis, Inc. (a)	3,790	72,920
R1 RCM, Inc. (a)	12,321	271,185
RadNet, Inc. (a)	4,671	136,907
Select Medical Holdings Corp.	11,468	414,798
SOC Telemed, Inc. (a)	6,259	14,145

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Surgery Partners, Inc. (a)	3,282	\$ 138,960
Tenet Healthcare Corp. (a)	11,025	732,501
Tivity Health, Inc. (a)	4,539	104,669
Triple-S Management Corp. Class B (a)	2,326	82,271
U.S. Physical Therapy, Inc.	1,339	148,093
Vapotherm, Inc. (a)	2,320	51,666
Viemed Healthcare, Inc. (a)	3,805	21,118
		<u>6,821,367</u>
Household Products & Wares — 0.4%		
ACCO Brands Corp.	9,612	82,567
Central Garden & Pet Co. (a)	992	47,616
Central Garden & Pet Co. Class A (a)	4,242	182,406
Helen of Troy Ltd. (a)	2,502	562,149
Quanex Building Products Corp.	3,438	73,608
WD-40 Co.	1,419	328,470
		<u>1,276,816</u>
Pharmaceuticals — 3.2%		
Aclaris Therapeutics, Inc. (a)	5,377	96,786
AdaptHealth Corp. (a)	7,434	173,138
Aeglea BioTherapeutics, Inc. (a)	4,329	34,416
Aerie Pharmaceuticals, Inc. (a)	4,276	48,746
Agios Pharmaceuticals, Inc. (a) ^(b)	6,101	281,561
Akebia Therapeutics, Inc. (a)	17,828	51,345
Alector, Inc. (a)	6,034	137,696
Alkermes PLC (a)	16,602	512,006
Amneal Pharmaceuticals, Inc. (a)	10,572	56,454
Amphastar Pharmaceuticals, Inc. (a)	3,779	71,839
Ampio Pharmaceuticals, Inc. (a) ^(b)	19,481	32,338
Anika Therapeutics, Inc. (a)	1,528	65,032
Antares Pharma, Inc. (a)	17,175	62,517
Arvinas, Inc. (a)	4,522	371,618
Athenex, Inc. (a) ^(b)	9,214	27,734
Beyondspring, Inc. (a)	2,395	37,745
BioDelivery Sciences International, Inc. (a)	9,670	34,909
Bioxcel Therapeutics, Inc. (a) ^(b)	1,837	55,753
Catalyst Pharmaceuticals, Inc. (a)	10,255	54,351
Chimerix, Inc. (a)	7,695	47,632
Citius Pharmaceuticals, Inc. (a)	12,127	24,618
Clovis Oncology, Inc. (a)	11,990	53,475
Coherus Biosciences, Inc. (a)	6,569	105,564
Collegium Pharmaceutical, Inc. (a)	3,595	70,965
Corcept Therapeutics, Inc. (a)	10,014	197,075
CorMedix, Inc. (a)	4,229	19,665
Covetrus, Inc. (a)	10,684	193,808
Cytokinetics, Inc. (a)	8,210	293,425
Durect Corp. (a) ^(b)	23,223	29,725
	Number of Shares	Value
Eagle Pharmaceuticals, Inc. (a)	1,188	\$ 66,267
Enanta Pharmaceuticals, Inc. (a)	1,982	112,597
Endo International PLC (a)	23,258	75,356
Flexion Therapeutics, Inc. (a)	5,140	31,354
Foghorn Therapeutics, Inc. (a) ^(b)	2,088	29,086
Fortress Biotech, Inc. (a) ^(b)	7,639	24,598
Fulcrum Therapeutics, Inc. (a) ^(b)	2,806	79,157
G1 Therapeutics, Inc. (a) ^(b)	3,977	53,371
Gritstone bio, Inc. (a)	4,292	46,354
Harmony Biosciences Holdings, Inc. (a) ^(b)	2,297	88,044
Harpoon Therapeutics, Inc. (a)	2,089	16,503
Heron Therapeutics, Inc. (a) ^(b)	9,472	101,256
Heska Corp. (a)	1,014	262,160
Hookipa Pharma, Inc. (a) ^(b)	2,164	12,746
Ideaya Biosciences, Inc. (a)	3,453	88,017
Immuneering Corp. (a)	866	22,992
Intellia Therapeutics, Inc. (a)	7,142	958,099
Ironwood Pharmaceuticals, Inc. (a)	15,033	196,331

Jounce Therapeutics, Inc. (a)	3,513	26,102
Kala Pharmaceuticals, Inc. (a) ^(b)	5,390	14,122
KalVista Pharmaceuticals, Inc. (a)	2,116	36,924
Kura Oncology, Inc. (a)	6,547	122,625
Landos Biopharma, Inc. (a)	475	6,935
Lyell Immunopharma, Inc. (a)	2,485	36,778
Madrigal Pharmaceuticals, Inc. (a)	1,160	92,556
MannKind Corp. (a) ^(b)	25,511	110,973
Marinus Pharmaceuticals, Inc. (a) ^(b)	3,879	44,143
Mirum Pharmaceuticals, Inc. (a)	387	7,709
Morphic Holding, Inc. (a)	2,138	121,096
Nature's Sunshine Products, Inc.	1,315	19,265
Neoleukin Therapeutics, Inc. (a)	3,810	27,546
NexImmune, Inc. (a)	1,849	27,994
Ocugen, Inc. (a) ^(b)	19,031	136,643
Ocular Therapeutix, Inc. (a)	7,867	78,670
Option Care Health, Inc. (a)	15,526	376,661
Oramed Pharmaceuticals, Inc. (a)	3,190	70,116
ORIC Pharmaceuticals, Inc. (a)	3,333	69,693
Outlook Therapeutics, Inc. (a)	9,762	21,184
Owens & Minor, Inc.	7,530	235,614
Pacira BioSciences, Inc. (a)	4,516	252,896
Paratek Pharmaceuticals, Inc. (a) ^(b)	4,938	23,999
Passage Bio, Inc. (a)	3,868	38,525
Patterson Cos., Inc.	8,910	268,547
PetIQ, Inc. (a) ^(b)	2,816	70,315
Phibro Animal Health Corp. Class A	2,138	46,053
PMV Pharmaceuticals, Inc. (a)	2,678	79,804
Prestige Consumer Healthcare, Inc. (a)	5,189	291,155
Prometheus Biosciences, Inc. (a)	1,207	28,618

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Protagonist Therapeutics, Inc. (a)	4,726	\$ 83,745
Reata Pharmaceuticals, Inc. Class A (a) ^(b)	2,841	285,833
Relmada Therapeutics, Inc. (a)	1,608	42,146
Reneo Pharmaceuticals, Inc. (a)	706	5,260
Revance Therapeutics, Inc. (a)	7,215	201,010
Rhythm Pharmaceuticals, Inc. (a)	4,491	58,652
Senseonics Holdings, Inc. (a) ^(b)	44,737	151,658
Seres Therapeutics, Inc. (a)	7,320	50,947
SIGA Technologies, Inc. (a) ^(b)	5,288	39,078
Spectrum Pharmaceuticals, Inc. (a)	17,310	37,736
Spero Therapeutics, Inc. (a) ^(b)	2,538	46,725
Summit Therapeutics, Inc. (a) ^(b)	2,506	12,555
Supernus Pharmaceuticals, Inc. (a)	5,063	135,030
Syros Pharmaceuticals, Inc. (a) ^(b)	6,133	27,414
TherapeuticsMD, Inc. (a) ^(b)	40,365	29,927
Tonix Pharmaceuticals Holding Corp. (a)	36,420	21,892
Trevena, Inc. (a) ^(b)	15,770	19,397
USANA Health Sciences, Inc. (a)	1,309	120,690
Vanda Pharmaceuticals, Inc. (a)	5,641	96,687
Vaxcyte, Inc. (a) ^(b)	4,156	105,438
Verrica Pharmaceuticals, Inc. (a) ^(b)	1,448	18,100
Zogenix, Inc. (a)	5,715	86,811
		<u>9,966,216</u>
		<u>79,020,848</u>

Energy — 4.5%**Coal — 0.2%**

Arch Resources, Inc. (a)	1,558	144,505
CONSOL Energy, Inc. (a)	3,514	91,434
Peabody Energy Corp. (a)	8,298	122,728
SunCoke Energy, Inc.	8,383	52,645
Warrior Met Coal, Inc.	5,279	122,842
		<u>534,154</u>

Energy – Alternate Sources — 0.6%

Advent Technologies Holdings, Inc. (a) ^(b)	1,740	15,138
Aemetis, Inc. (a) ^(b)	2,871	52,482
Alto Ingredients, Inc. (a)	7,617	37,628
Array Technologies, Inc. (a)	13,240	245,205
Beam Global (a) ^(b)	944	25,837
Cleantech, Inc. (a) ^(b)	3,419	39,626
Eos Energy Enterprises, Inc. (a)	4,522	63,444
FuelCell Energy, Inc. (a) ^(b)	33,666	225,225
FutureFuel Corp.	2,499	17,818
Gevo, Inc. (a)	20,095	133,431
Green Plains, Inc. (a)	4,955	161,781
Renewable Energy Group, Inc. (a)	4,648	233,329

	Number of Shares	Value
REX American Resources Corp. (a)	532	\$ 42,491
Stem, Inc. (a)	5,000	119,450
Sunnova Energy International, Inc. (a) ^(b)	8,905	293,331
SunPower Corp. (a) ^(b)	8,297	188,176
TPI Composites, Inc. (a)	3,750	126,562
		<u>2,020,954</u>

Oil & Gas — 2.9%

Antero Resources Corp. (a)	29,713	558,902
Berry Corp.	7,072	50,989
Bonanza Creek Energy, Inc.	3,187	152,657
Brigham Minerals, Inc. Class A	4,522	86,642
California Resources Corp. (a)	8,580	351,780
Callon Petroleum Co. (a) ^(b)	4,142	203,289
Centennial Resource Development, Inc. Class A (a)	18,614	124,714
Chesapeake Energy Corp.	10,260	631,913
CNX Resources Corp. (a)	22,507	284,038
Comstock Resources, Inc. (a)	9,669	100,074
	15,545	71,041

Contango Oil & Gas Co. (a) ^(b)		
CVR Energy, Inc.	3,079	51,296
Delek US Holdings, Inc.	6,899	123,975
Denbury, Inc. (a)	5,231	367,478
Earthstone Energy, Inc. Class A (a)	2,576	23,699
Extraction Oil & Gas, Inc. (a)	1,609	90,828
Falcon Minerals Corp.	3,802	17,869
Helmerich & Payne, Inc.	10,899	298,742
HighPeak Energy, Inc.	556	5,004
Kosmos Energy Ltd. (a)	41,725	123,506
Laredo Petroleum, Inc. (a)	1,293	104,823
Magnolia Oil & Gas Corp. Class A	14,463	257,297
Matador Resources Co.	11,496	437,308
Murphy Oil Corp.	15,218	379,993
Nabors Industries Ltd. (a)	717	69,176
Northern Oil (a)nd Gas, Inc.	5,348	114,447
Oasis Petroleum, Inc.	2,098	208,583
Ovintiv, Inc.	27,218	894,928
Par Pacific Holdings, Inc. (a)	4,566	71,778
Patterson-UTI Energy, Inc.	19,315	173,835
PBF Energy, Inc. Class A (a)	9,931	128,805
PDC Energy, Inc.	10,328	489,444
Penn Virginia Corp. (a) ^(b)	1,642	43,792
Range Resources Corp. (a)	24,831	561,926
Riley Exploration Permian, Inc.	255	5,987
SM Energy Co.	12,459	328,668
Southwestern Energy Co. (a) ^(b)	70,430	390,182
Talos Energy, Inc. (a)	3,935	54,185
Tellurian, Inc. (a)	37,083	144,995
Vine Energy, Inc. Class A (a)	2,610	42,987

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
W&T Offshore, Inc. (a) ^(b)	9,748	\$ 36,263
Whiting Petroleum Corp. (a)	4,088	238,780
		<u>8,896,618</u>
Oil & Gas Services — 0.6%		
Archrock, Inc.	13,948	115,071
Bristow Group, Inc. (a)	2,490	79,257
ChampionX Corp. (a)	21,020	470,007
DMC Global, Inc. (a)	1,908	70,424
Dril-Quip, Inc. (a)	3,609	90,875
Frank's International NV (a) ^(b)	17,663	51,929
FTS International, Inc. Class A (a)	871	21,427
Helix Energy Solutions Group, Inc. (a) ^(b)	15,060	58,433
Liberty Oilfield Services, Inc. Class A (a)	9,506	115,308
Matrix Service Co. (a)	2,717	28,420
MRC Global, Inc. (a)	8,149	59,814
National Energy Services Reunited Corp. (a) ^(b)	3,951	49,466
Newpark Resources, Inc. (a)	9,603	31,690
NexTier Oilfield Solutions, Inc. (a)	17,706	81,447
NOW, Inc. (a)	11,298	86,430
Oceaneering International, Inc. (a)	10,225	136,197
Oil States International, Inc. (a)	6,438	41,139
ProPetro Holding Corp. (a)	8,652	74,840
RPC, Inc. (a)	7,213	35,055
Select Energy Services, Inc. Class A (a)	6,162	31,981
Solaris Oilfield Infrastructure, Inc. Class A	3,433	28,631
TETRA Technologies, Inc. (a)	13,044	40,697
Tidewater, Inc. (a)	4,371	52,714
US Silica Holdings, Inc. (a)	7,488	59,829
		<u>1,911,081</u>
Pipelines — 0.2%		
Equitrans Midstream Corp.	42,430	430,240
Golar LNG Ltd. (a)	10,805	140,141
		<u>570,381</u>
		<u>13,933,188</u>
Financial — 21.7%		
Banks — 8.0%		
1st Source Corp.	1,769	83,568
Alerus Financial Corp.	1,590	47,509
Allegiance Bancshares, Inc.	2,017	76,949
Altabancorp	1,853	81,828
Amalgamated Financial Corp.	1,355	21,436
American National Bankshares, Inc.	1,129	37,302
Ameris Bancorp	6,898	357,868
Arrow Financial Corp.	1,370	47,089
	Number of Shares	Value
Associated Banc-Corp.	15,740	\$ 337,151
Atlantic Capital Bancshares, Inc. (a)	2,024	53,616
Atlantic Union Bankshares Corp.	7,973	293,805
BancFirst Corp.	1,786	107,374
The Bancorp, Inc. (a)	5,484	139,568
BancorpSouth Bank	10,623	316,353
Bank First Corp.	677	47,979
Bank of Marin Bancorp	1,655	62,476
The Bank of NT Butterfield & Son Ltd.	5,165	183,409
BankUnited, Inc.	9,671	404,441
Banner Corp.	3,629	200,357
Bar Harbor Bankshares	1,491	41,823
Blue Foundry Bancorp (a)	2,906	40,074
Blue Ridge Bankshares, Inc.	1,747	30,730
Bridgewater Bancshares, Inc. (a)	2,165	37,909
Bryn Mawr Bank Corp.	2,037	93,600
Business First Bancshares, Inc.	2,047	47,879
Byline Bancorp, Inc.	2,564	62,972
Cadence BanCorp	12,773	280,495
Cambridge Bancorp	698	61,424
Camden National Corp.	1,526	73,095
Capital Bancorp, Inc. /MD	796	19,152

Capital City Bank Group, Inc.	1,385	34,265
Capstar Financial Holdings, Inc.	2,110	44,816
Carter Bankshares, Inc. (a)	2,766	39,333
Cathay General Bancorp	7,795	322,635
CBTX, Inc.	1,924	50,755
Central Pacific Financial Corp.	2,855	73,316
Century Bancorp, Inc. Class A	274	31,576
CIT Group, Inc.	10,300	535,085
Citizens & Northern Corp.	1,618	40,871
City Holding Co.	1,566	122,007
Civista Bancshares, Inc.	1,484	34,473
CNB Financial Corp.	1,642	39,966
Coastal Financial Corp. (a)	1,021	32,529
Columbia Banking System, Inc.	8,128	308,783
Community Bank System, Inc.	5,565	380,757
Community Trust Bancorp, Inc.	1,594	67,107
ConnectOne Bancorp, Inc.	3,855	115,689
CrossFirst Bankshares, Inc. (a)	4,763	61,919
Customers Bancorp, Inc. (a)	3,117	134,093
CVB Financial Corp.	13,398	272,917
Dime Community Bancshares, Inc.	3,611	117,935
Eagle Bancorp, Inc.	3,279	188,543
Eastern Bankshares, Inc.	17,817	361,685
Enterprise Bancorp, Inc.	976	35,087
Enterprise Financial Services Corp.	3,688	166,993
Equity Bancshares, Inc. Class A	1,405	46,899

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Farmers National Banc Corp.	2,811	\$ 44,161
FB Financial Corp.	3,473	148,922
Fidelity D&D Bancorp, Inc.	395	19,920
Financial Institutions, Inc.	1,666	51,063
First BanCorp	21,329	280,476
First Bancorp	2,938	126,363
First Bancorp, Inc.	1,110	32,345
The First Bancshares, Inc.	2,078	80,585
First Bank	1,562	22,009
First Busey Corp.	5,259	129,529
First Commonwealth Financial Corp.	9,863	134,433
First Community Bancshares, Inc.	1,734	55,002
First Financial Bancorp	9,870	231,057
First Financial Bankshares, Inc.	13,474	619,130
First Financial Corp.	1,150	48,358
First Foundation, Inc.	4,131	108,645
First Internet Bancorp	949	29,590
First Interstate BancSystem, Inc. Class A	4,277	172,192
First Merchants Corp.	5,583	233,593
First Mid Bancshares, Inc.	1,768	72,594
First Midwest Bancorp, Inc.	11,890	226,029
The First of Long Island Corp.	2,422	49,893
Five Star Bancorp	588	14,077
Flagstar Bancorp, Inc.	5,439	276,192
Fulton Financial Corp.	16,398	250,561
German American Bancorp Inc.	2,563	99,009
Glacier Bancorp, Inc.	9,950	550,732
Great Southern Bancorp, Inc.	1,102	60,401
Great Western Bancorp, Inc.	5,724	187,404
Guaranty Bancshares, Inc.	844	30,257
Hancock Whitney Corp.	8,975	422,902
Hanmi Financial Corp.	3,244	65,075
HarborOne Bancorp, Inc.	5,164	72,503
HBT Financial, Inc.	916	14,244
Heartland Financial USA, Inc.	4,204	202,128
Heritage Commerce Corp.	5,982	69,571
Heritage Financial Corp.	3,671	93,611
Hilltop Holdings, Inc.	6,611	215,981
Home BancShares, Inc.	15,851	372,974
HomeStreet, Inc.	2,088	85,921
Hope Bancorp, Inc.	12,357	178,435
Horizon Bancorp, Inc.	4,371	79,421
Howard Bancorp, Inc. (a)	1,322	26,810
Independent Bank Corp.	3,425	260,814
Independent Bank Corp. of Michigan	2,037	43,755
Independent Bank Group, Inc.	3,908	277,624
International Bancshares Corp.	5,592	232,851
Kearny Financial Corp.	7,598	94,443
	Number of Shares	Value
Lakeland Bancorp, Inc.	5,028	\$ 88,644
Lakeland Financial Corp.	2,541	181,021
Live Oak Bancshares, Inc.	3,268	207,943
Luther Burbank Corp.	1,696	22,743
Macatawa Bank Corp.	2,649	21,271
Mercantile Bank Corp.	1,651	52,882
Merchants Bancorp	992	39,154
Meta Financial Group, Inc.	3,245	170,298
Metrocity Bankshares, Inc.	1,944	40,766
Metropolitan Bank Holding Corp. (a)	787	66,344
Mid Penn Bancorp, Inc.	974	26,834
Midland States Bancorp, Inc.	2,311	57,151
MidWestOne Financial Group, Inc.	1,482	44,697
MVB Financial Corp.	1,034	44,286
National Bank Holdings Corp. Class A	3,036	122,897
NBT Bancorp, Inc.	4,389	158,531
Nicolet Bankshares, Inc. (a)	1,096	81,301
Northrim BanCorp, Inc.	614	26,101
OFG Bancorp	5,268	132,859

Old National Bancorp	17,091	289,692
Old Second Bancorp, Inc.	2,786	36,385
Origin Bancorp, Inc.	2,291	97,024
Orrstown Financial Services, Inc.	1,107	25,904
Park National Corp.	1,490	181,706
PCSB Financial Corp.	1,376	25,373
Peapack Gladstone Financial Corp.	1,861	62,083
Peoples Bancorp, Inc.	2,645	83,608
Peoples Financial Services Corp.	742	33,813
Pioneer Bancorp, Inc. (a)	1,236	15,623
Preferred Bank	1,430	95,352
Premier Financial Corp.	3,843	122,361
Primis Financial Corp.	2,551	36,887
Provident Bancorp, Inc.	1,609	25,776
QCR Holdings, Inc.	1,585	81,532
RBB Bancorp ^(b)	1,441	36,328
Red River Bancshares, Inc.	466	23,230
Reliant Bancorp, Inc.	1,541	48,680
Renasant Corp.	5,776	208,225
Republic Bancorp, Inc. Class A	968	49,029
Republic First Bancorp, Inc. (a)	4,383	13,500
S&T Bancorp, Inc.	4,013	118,263
Sandy Spring Bancorp, Inc.	4,832	221,402
Seacoast Banking Corp. of Florida	5,670	191,703
ServisFirst Bancshares, Inc.	5,193	404,015
Sierra Bancorp	1,509	36,639
Silvergate Capital Corp. Class A (a)	2,540	293,370
Simmons First National Corp. Class A	11,176	330,363
SmartFinancial, Inc.	1,428	36,914
South Plains Financial, Inc.	1,061	25,867

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Southern First Bancshares, Inc. (a)	763	\$ 40,821
Southside Bancshares, Inc.	3,210	122,911
SouthState Corp.	7,245	540,984
Spirit of Texas Bancshares, Inc.	1,285	31,097
Stock Yards Bancorp, Inc.	2,527	148,209
Summit Financial Group, Inc.	1,137	27,868
Texas Capital Bancshares, Inc. (a)	5,260	315,705
Tompkins Financial Corp.	1,468	118,776
Towne Bank	6,996	217,646
TriCo Bancshares	2,873	124,688
TriState Capital Holdings, Inc. (a)	2,944	62,266
Triumph Bancorp, Inc. (a)	2,444	244,718
TrustCo Bank Corp. NY	1,950	62,342
Trustmark Corp.	6,415	206,691
UMB Financial Corp.	4,555	440,514
United Bankshares, Inc.	12,964	471,630
United Community Banks, Inc.	8,997	295,282
Univest Financial Corp.	2,959	81,047
Valley National Bancorp	41,511	552,511
Veritex Holdings, Inc.	4,964	195,383
Walker & Dunlop, Inc.	3,040	345,040
Washington Trust Bancorp, Inc.	1,790	94,834
WesBanco, Inc.	6,557	223,463
West BanCorp, Inc.	1,703	51,141
Westamerica Bancorp.	2,707	152,296
		<u>24,547,083</u>

Diversified Financial Services — 2.4%

Amerant Bancorp, Inc. (a)	2,127	52,622
Artisan Partners Asset Management, Inc. Class A	6,095	298,167
Assetmark Financial Holdings, Inc. (a)	1,888	46,955
Associated Capital Group, Inc. Class A	136	5,088
Atlanticus Holdings Corp. (a)	575	30,510
B. Riley Financial, Inc.	2,102	124,102
BGC Partners, Inc. Class A	34,348	178,953
Blucora, Inc. (a)	5,004	78,012
Brightsphere Investment Group, Inc.	6,011	157,067
Cohen & Steers, Inc.	2,575	215,708
Columbia Financial, Inc. (a)	4,050	74,925
Cowen, Inc. Class A	2,953	101,317
Curo Group Holdings Corp.	2,246	38,923
Diamond Hill Investment Group, Inc.	324	56,914
Encore Capital Group, Inc. (a)	3,120	153,722
Enova International, Inc. (a)	3,763	130,012
EZCORP, Inc. Class A (a)	5,317	40,250
Federal Agricultural Mortgage Corp. Class C	948	102,877
Federated Hermes, Inc.	9,820	319,150

	Number of Shares	Value
Finance Of America Cos., Inc. Class A (a)	3,712	\$ 18,374
Flywire Corp. (a)	1,278	56,028
Focus Financial Partners, Inc. Class A (a)	6,177	323,490
GAMCO Investors, Inc. Class A	488	12,873
GCM Grosvenor, Inc. Class A	4,526	52,140
Greenhill & Co., Inc.	1,555	22,734
Hamilton Lane, Inc. Class A	3,528	299,245
Hannon Armstrong Sustainable Infrastructure Capital, Inc.	7,951	425,219
Home Point Capital, Inc. (b)	907	3,737
Houlihan Lokey, Inc.	5,321	490,064
I3 Verticals, Inc. Class A (a)	2,177	52,705
International Money Express, Inc. (a)	3,263	54,492
LendingClub Corp. (a)	10,146	286,523
LendingTree, Inc. (a)	1,203	168,216
Marlin Business Services Corp.	777	17,273
Moelis & Co. Class A	6,355	393,184
Mr Cooper Group, Inc. (a)	7,359	302,970
Navient Corp.	17,117	337,718
Nelnet, Inc. Class A	1,745	138,274
Ocwen Financial Corp. (a)	869	24,445
Oportun Financial Corp. (a)	2,219	55,542

Oppenheimer Holdings, Inc. Class A	965	43,705
PennyMac Financial Services, Inc.	3,411	208,514
Piper Sandler Cos.	1,815	251,305
PJT Partners, Inc. Class A	2,499	197,696
PRA Group, Inc. (a)	4,716	198,732
Pzena Investment Management, Inc. Class A	1,736	17,082
Regional Management Corp.	824	47,940
Sculptor Capital Management, Inc. (b)	2,295	64,008
StepStone Group, Inc. Class A	4,196	178,917
Stonex Group, Inc. (a)	1,719	113,282
Velocity Financial, Inc. (a)	954	12,555
Virtus Investment Partners, Inc.	760	235,843
WisdomTree Investments, Inc.	13,745	77,934
World Acceptance Corp. (a)	455	86,259
		<hr/>
		7,474,292
Insurance — 2.2%		
Ambac Financial Group, Inc. (a)	4,640	66,445
American Equity Investment Life Holding Co.	8,575	253,563
American National Group, Inc.	774	146,309
AMERISAFE, Inc.	1,988	111,646
Argo Group International Holdings Ltd.	3,269	170,707
BRP Group, Inc. Class A (a)	4,850	161,456

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Citizens, Inc. (a)	5,424	\$ 33,683
CNO Financial Group, Inc.	13,279	312,588
Crawford & Co. Class A	1,827	16,388
Donegal Group, Inc. Class A	1,439	20,851
eHealth, Inc. (a)	2,513	101,776
Employers Holdings, Inc.	2,991	118,115
Enstar Group Ltd. (a)	1,289	302,567
Essent Group Ltd.	11,485	505,455
Genworth Financial, Inc. Class A (a)	52,613	197,299
Goosehead Insurance, Inc. Class A	1,837	279,757
Greenlight Capital Re Ltd. Class A (a)	2,578	19,051
HCI Group, Inc.	576	63,804
Heritage Insurance Holdings, Inc.	2,914	19,844
Horace Mann Educators Corp.	4,297	170,978
Independence Holding Co.	426	21,125
Investors Title Co.	132	24,103
James River Group Holdings Ltd.	3,781	142,657
Kinsale Capital Group, Inc.	2,229	360,429
Maiden Holdings Ltd. (a)	6,801	21,491
MBIA, Inc. (a)	5,095	65,471
MetroMile, Inc. (a) ^(b)	4,094	14,534
National Western Life Group, Inc. Class A	260	54,753
NI Holdings, Inc. (a)	815	14,311
NMI Holdings, Inc. Class A (a)	8,700	196,707
Palomar Holdings, Inc. (a)	2,549	206,036
ProAssurance Corp.	5,520	131,266
Radian Group, Inc.	19,357	439,791
RLI Corp.	4,158	416,923
Safety Insurance Group, Inc.	1,503	119,113
Selective Insurance Group, Inc.	6,177	466,549
Selectquote, Inc. (a)	13,888	179,572
SiriusPoint Ltd. (a)	9,305	86,164
State Auto Financial Corp.	1,860	94,767
Stewart Information Services Corp.	2,790	176,495
Tiptree, Inc.	2,518	25,230
Trean Insurance Group, Inc. (a)	1,962	20,307
Trupanion, Inc. (a)	3,956	307,263
United Fire Group, Inc.	2,231	51,536
United Insurance Holdings Corp.	2,330	8,458
Universal Insurance Holdings, Inc.	2,739	35,717
		<u>6,753,050</u>
Investment Companies — 0.0%		
Altus Midstream Co. Class A	347	<u>23,953</u>
Real Estate — 0.9%		
Alexander & Baldwin, Inc.	7,474	175,191
Angel Oak Mortgage, Inc.	709	12,003
Cushman & Wakefield PLC (a)	14,412	268,207

	Number of Shares	Value
eXp World Holdings, Inc.	6,513	\$ 259,022
Fathom Holdings, Inc. (a) ^(b)	557	14,872
FRP Holdings, Inc. (a)	693	38,753
Kennedy-Wilson Holdings, Inc.	12,506	261,626
Legacy Housing Corp. (a)	772	13,873
Marcus & Millichap, Inc. (a)	2,487	101,022
McGrath RentCorp	2,498	179,731
Newmark Group, Inc. Class A	15,474	221,433
Radius Global Infrastructure, Inc. Class A (a)	6,030	98,470
Rafael Holdings, Inc. Class B Class B (a) ^(b)	1,040	31,959
RE/MAX Holdings, Inc. Class A	1,893	58,986
Realogy Holdings Corp. (a)	11,962	209,813
Redfin Corp. (a) ^(b)	10,541	528,104
The RMR Group, Inc. Class A	1,539	51,480
The St. Joe Co.	3,445	145,034
		<u>2,669,579</u>
Real Estate Investment Trusts (REITS) — 7.2%		
Acadia Realty Trust	8,980	183,282
Agree Realty Corp.	7,056	467,319

Alexander's, Inc.	219	57,076
American Assets Trust, Inc.	5,175	193,649
American Finance Trust, Inc.	12,363	99,399
Apartment Investment (a)nd Management Co. Class A	15,388	105,408
Apollo Commercial Real Estate Finance, Inc.	14,589	216,355
Apple Hospitality REIT, Inc.	22,194	349,112
Arbor Realty Trust, Inc.	14,118	261,607
Ares Commercial Real Estate Corp.	4,562	68,795
Armada Hoffer Properties, Inc.	6,171	82,506
ARMOUR Residential REIT, Inc. (b)	8,530	91,953
Ashford Hospitality Trust, Inc. (a) (b)	1,784	26,260
Blackstone Mortgage Trust, Inc. Class A	15,379	466,291
Braemar Hotels & Resorts, Inc. (a)	5,278	25,598
Brandywine Realty Trust	17,646	236,809
BrightSpire Capital, Inc.	8,710	81,787
Broadmark Realty Capital, Inc.	13,201	130,162
Broadstone Net Lease, Inc.	16,115	399,813
BRT Apartments Corp.	1,069	20,610
Capstead Mortgage Corp.	9,835	65,796
CareTrust REIT, Inc.	9,988	202,956
Catchmark Timber Trust, Inc. Class A	4,991	59,243
Centerspace	1,446	136,647
Chatham Lodging Trust (a)	5,051	61,875
Chimera Investment Corp.	24,551	364,582
City Office REIT, Inc.	4,476	79,941

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Clipper Realty, Inc.	1,346	\$ 10,903
Columbia Property Trust, Inc.	11,924	226,794
Community Healthcare Trust, Inc.	2,436	110,083
CorePoint Lodging Inc. (a)	3,997	61,954
Corporate Office Properties Trust	11,755	317,150
CTO Realty Growth, Inc.	627	33,708
DiamondRock Hospitality Co. (a)	21,564	203,780
Digitalbridge Group, Inc. (a) ^(b)	50,318	303,418
Diversified Healthcare Trust	24,387	82,672
Dynex Capital, Inc.	3,606	62,312
Easterly Government Properties, Inc.	8,714	180,031
EastGroup Properties, Inc.	4,143	690,348
Ellington Financial, Inc.	4,915	89,895
Empire State Realty Trust, Inc. Class A	14,748	147,922
Equity Commonwealth (a)	12,269	318,749
Essential Properties Realty Trust, Inc.	12,120	338,390
Farmland Partners, Inc.	2,882	34,555
Four Corners Property Trust, Inc.	7,877	211,576
Franklin Street Properties Corp.	10,430	48,395
The GEO Group, Inc.	12,089	90,305
Getty Realty Corp.	4,126	120,933
Gladstone Commercial Corp.	3,754	78,947
Gladstone Land Corp.	2,995	68,196
Global Medical REIT, Inc.	6,299	92,595
Global Net Lease, Inc.	10,531	168,707
Granite Point Mortgage Trust, Inc.	5,631	74,160
Great Ajax Corp.	2,192	29,570
Healthcare Realty Trust, Inc.	15,183	452,150
Hersha Hospitality Trust (a)	3,477	32,440
Independence Realty Trust, Inc.	10,988	223,606
Indus Realty Trust, Inc.	443	31,054
Industrial Logistics Properties Trust	6,702	170,298
Innovative Industrial Properties, Inc. ^(b)	2,458	568,216
Invesco Mortgage Capital, Inc.	30,749	96,859
iStar, Inc. ^(b)	7,198	180,526
Kite Realty Group Trust	8,665	176,419
KKR Real Estate Finance Trust, Inc.	3,300	69,630
Ladder Capital Corp.	11,710	129,396
Lexington Realty Trust	28,692	365,823
LTC Properties, Inc. ^(b)	4,083	129,390
The Macerich Co.	22,183	370,678
Mack-Cali Realty Corp. (a)	9,194	157,401
MFA Financial, Inc.	45,958	210,028
Monmouth Real Estate Investment Corp.	9,834	183,404
National Health Investors, Inc.	4,528	242,248
National Storage Affiliates Trust	8,475	447,395
NETSTREIT Corp.	4,131	\$ 97,698
New York Mortgage Trust, Inc.	39,292	167,384
NexPoint Residential Trust, Inc.	2,293	141,891
Office Properties, Inc. ome Trust	4,952	125,434
One Liberty Properties, Inc.	1,700	51,833
Orchid Island Capital, Inc. ^(b)	12,749	62,343
Outfront Media, Inc.	15,092	380,318
Paramount Group, Inc.	19,290	173,417
Pebblebrook Hotel Trust	13,463	301,706
PennyMac Mortgage Investment Trust	10,170	200,247
Phillips Edison & Co., Inc.	1,953	59,977
Physicians Realty Trust	22,343	393,684
Piedmont Office Realty Trust, Inc. Class A	12,870	224,324
Plymouth Industrial REIT, Inc.	2,981	67,818
Postal Realty Trust, Inc. Class A	1,340	24,978
PotlatchDeltic Corp.	6,861	353,890
Preferred Apartment Communities, Inc. Class A	5,265	64,391
PS Business Parks, Inc.	2,103	329,624
Ready Capital Corp. REIT	6,000	86,580
Redwood Trust, Inc.	11,687	150,645

Retail Opportunity Investments Corp.	12,303	214,318
Retail Properties of America, Inc. Class A	22,225	286,258
Retail Value, Inc.	1,860	48,974
RLJ Lodging Trust	17,118	254,374
RPT Realty	8,352	106,572
Ryman Hospitality Properties, Inc. (a)	5,573	466,460
Sabra Health Care REIT, Inc.	22,813	335,807
Safehold, Inc.	1,854	133,284
Saul Centers, Inc.	1,256	55,339
Seritage Growth Properties Class A (a) (b)	3,787	56,161
Service Properties Trust	17,001	190,581
SITE Centers Corp.	17,975	277,534
STAG Industrial, Inc.	16,971	666,112
Summit Hotel Properties, Inc. (a)	10,663	102,685
Sunstone Hotel Investors, Inc. (a)	22,587	269,689
Tanger Factory Outlet Centers, Inc.	10,543	171,851
Terreno Realty Corp.	7,220	456,521
TPG RE Finance Trust, Inc.	6,210	76,880
Two Harbors Investment Corp. (b)	32,564	206,456
UMH Properties, Inc.	4,374	100,165
Uniti Group, Inc.	20,182	249,651
Universal Health Realty Income Trust	1,320	72,956
Urban Edge Properties	11,987	219,482
Urstadt Biddle Properties, Inc. Class A	3,126	59,175

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Washington Real Estate Investment Trust	8,820	\$ 218,295
Whitestone REIT	4,651	45,487
Xenia Hotels & Resorts, Inc. (a)	11,799	209,314
		<u>21,976,403</u>
Savings & Loans — 1.0%		
Axos Financial, Inc. (a)	5,928	305,529
Banc of California, Inc.	4,661	86,182
Berkshire Hills Bancorp, Inc.	5,137	138,596
Brookline Bancorp, Inc.	7,993	121,973
Capitol Federal Financial, Inc.	13,566	155,873
Flushing Financial Corp.	3,010	68,026
FS Bancorp, Inc.	708	24,504
Hingham Institution for Savings	153	51,515
Home Bancorp Inc.	793	30,673
HomeTrust Bancshares, Inc.	1,553	43,453
Investors Bancorp, Inc.	23,833	360,117
Meridian Bancorp, Inc.	4,834	100,354
Northfield Bancorp, Inc.	4,572	78,456
Northwest Bancshares, Inc.	12,729	169,041
OceanFirst Financial Corp.	6,126	131,158
Pacific Premier Bancorp, Inc.	9,716	402,631
Provident Financial Services, Inc.	7,825	183,653
Southern Missouri Bancorp, Inc.	817	36,675
Washington Federal, Inc.	7,036	241,405
Waterstone Financial, Inc.	2,200	45,078
WSFS Financial Corp.	4,879	250,341
		<u>3,025,233</u>
		<u>66,469,593</u>
Government — 0.0%		
Multi-National — 0.0%		
Banco Latinoamericano de Comercio Exterior SA	3,304	57,952
Industrial — 12.3%		
Aerospace & Defense — 0.6%		
AAR Corp. (a)	3,479	112,824
Aerojet Rocketdyne Holdings, Inc.	7,759	337,904
Aerovironment, Inc. (a)	2,326	200,780
AerSale Corp. (a)	993	16,881
Astronics Corp. (a)	2,547	35,811
Barnes Group, Inc.	4,882	203,726
Ducommun, Inc. (a)	1,144	57,600
Kaman Corp.	2,828	100,875
Kratos Defense & Security Solutions, Inc. (a)	12,703	283,404
Moog, Inc. Class A	2,992	228,080
National Presto Industries, Inc.	522	42,846
Park Aerospace Corp.	2,144	29,330
	Number of Shares	Value
Triumph Group, Inc. (a)	6,546	\$ 121,952
		<u>1,772,013</u>
Building Materials — 1.5%		
AAON, Inc.	4,349	284,164
American Woodmark Corp. (a)	1,757	114,855
Apogee Enterprises, Inc.	2,619	98,894
Boise Cascade Co.	4,099	221,264
Caesarstone Ltd.	2,251	27,957
Cornerstone Building Brands, Inc. (a)	5,630	82,254
Forterra, Inc. (a)	3,003	70,751
Gibraltar Industries, Inc. (a)	3,401	236,880
Griffon Corp.	4,829	118,793
JELD-WEN Holding, Inc. (a)	8,691	217,536
Masonite International Corp. (a)	2,502	265,537
Patrick Industries, Inc.	2,354	196,088
PGT Innovations, Inc. (a)	6,011	114,810
Simpson Manufacturing Co., Inc.	4,523	483,825
SPX Corp. (a)	4,548	243,091
Summit Materials, Inc. Class A (a)	12,329	394,158
UFP Industries, Inc.	6,256	425,283
View, Inc. (a)	10,317	55,918
Zurn Water Solutions Corp.	12,610	810,697

		4,462,755
Electrical Components & Equipment — 0.6%		
American Superconductor Corp. (a)	2,800	40,824
Belden, Inc.	4,598	267,879
Blink Charging Co. (a) ^(b)	3,770	107,860
Encore Wire Corp.	2,080	197,246
Energizer Holdings, Inc.	7,051	275,342
EnerSys	4,436	330,216
Insteel Industries, Inc.	1,927	73,322
nLight, Inc. (a)	4,368	123,134
Novanta, Inc. (a)	3,660	565,470
Powell Industries, Inc. ^(b)	929	22,826
		<u>2,004,119</u>
Electronics — 1.7%		
Advanced Energy Industries, Inc.	3,985	349,684
Akoustis Technologies, Inc. (a)	4,554	44,174
Allied Motion Technologies, Inc.	1,190	37,223
Atkore, Inc. (a)	4,785	415,912
Badger Meter, Inc.	3,038	307,263
Benchmark Electronics, Inc.	3,700	98,827
Brady Corp. Class A	4,905	248,683
Comtech Telecommunications Corp.	2,706	69,301
FARO Technologies, Inc. (a)	1,910	125,697
Fluidigm Corp. (a)	7,984	52,615
GoPro, Inc. Class A (a)	13,072	122,354
Identiv, Inc. (a)	2,153	40,563

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
II-VI, Inc. (a) ^(b)	10,844	\$ 643,700
Itron, Inc. (a)	4,690	354,705
Kimball Electronics, Inc. (a)	2,463	63,471
Knowles Corp. (a)	9,249	173,326
Luna Innovations, Inc. (a) ^(b)	3,308	31,426
Mesa Laboratories, Inc.	515	155,715
MicroVision, Inc. (a) ^(b)	17,014	188,005
Napco Security Technologies, Inc. (a)	1,475	63,543
NVE Corp.	492	31,473
OSI Systems, Inc. (a)	1,744	165,331
Plexus Corp. (a)	2,909	260,094
Sanmina Corp. (a)	6,694	257,987
Stoneridge, Inc. (a)	2,669	54,421
TTM Technologies, Inc. (a)	11,126	139,854
Turtle Beach Corp. (a)	1,619	45,041
Vicor Corp. (a)	2,188	293,542
Vishay Intertechnology, Inc.	13,802	277,282
Vishay Precision Group, Inc. (a)	1,307	45,444
		<hr/> 5,156,656 <hr/>
Engineering & Construction — 1.3%		
908 Devices, Inc. (a) ^(b)	1,358	44,162
Arcosa, Inc.	5,024	252,054
Atlas Technical Consultants, Inc. (a)	1,501	15,265
Comfort Systems USA, Inc.	3,705	264,241
Concrete Pumping Holdings, Inc. (a)	2,754	23,519
Construction Partners, Inc. Class A Class A (a)	3,015	100,611
Dycom Industries, Inc. (a)	3,099	220,773
EMCOR Group, Inc.	5,542	639,436
Exponent, Inc.	5,395	610,444
Fluor Corp. (a) ^(b)	14,724	235,142
Granite Construction, Inc.	4,728	186,992
Great Lakes Dredge & Dock Corp. (a)	6,743	101,752
IES Holdings, Inc. (a)	882	40,299
Infrastructure (a)nd Energy Alternatives, Inc. (a)	2,884	32,964
Iteris, Inc. (a)	4,666	24,637
Latham Group, Inc. (a)	2,456	40,278
Mistras Group, Inc. (a)	2,138	21,722
MYR Group, Inc. (a)	1,709	170,046
NV5 Global, Inc. (a)	1,355	133,562
Primoris Services Corp.	5,494	134,548
Sterling Construction Co., Inc. (a)	2,841	64,405
Tutor Perini Corp. (a)	4,230	54,905
WillScot Mobile Mini Holdings Corp. (a)	21,701	688,356
		<hr/> 4,100,113 <hr/>
	Number of Shares	Value
Environmental Controls — 0.7%		
Casella Waste Systems, Inc. Class A (a)	5,118	\$ 388,661
CECO Environmental Corp. (a)	3,457	24,337
Centrus Energy Corp. Class A (a) ^(b)	966	37,346
Covanta Holding Corp.	12,442	250,333
Energy Recovery, Inc. (a)	4,373	83,218
Harsco Corp. (a)	8,052	136,481
Heritage-Crystal Clean, Inc. (a)	1,618	46,890
Montrose Environmental Group, Inc. (a)	2,383	147,126
Pure Cycle Corp. (a)	1,985	26,420
PureCycle Technologies, Inc. (a) ^(b)	3,511	46,626
Sharps Compliance Corp. (a)	1,607	13,290
Tetra Tech, Inc.	5,602	836,603
US Ecology, Inc. (a)	3,240	104,814
		<hr/> 2,142,145 <hr/>
Hand & Machine Tools — 0.2%		
Franklin Electric Co., Inc.	4,824	385,197
Kennametal, Inc.	8,675	296,945
Luxfer Holdings PLC	2,843	55,808
		<hr/> 737,950 <hr/>
Machinery – Construction & Mining — 0.3%		

Argan, Inc.	1,542	67,339
Astec Industries, Inc.	2,374	127,745
Babcock & Wilcox Enterprises, Inc. (a)	5,906	37,857
Bloom Energy Corp. Class A (a) ^(b)	14,426	270,055
Hyster-Yale Materials Handling, Inc.	1,022	51,366
The Manitowoc Co., Inc. (a)	3,548	75,998
Terex Corp.	7,095	298,700
		<u>929,060</u>
Machinery – Diversified — 1.7%		
AgEagle Aerial Systems, Inc. (a) ^(b)	7,442	22,400
Alamo Group, Inc.	1,031	143,855
Albany International Corp. Class A	3,190	245,215
Altra Industrial Motion Corp.	6,708	371,288
Applied Industrial Technologies, Inc.	4,030	363,224
Cactus, Inc. Class A	5,651	213,156
Chart Industries, Inc. (a)	3,789	724,116
CIRCOR International, Inc. (a)	1,954	64,502
Columbus McKinnon Corp.	2,865	138,523
CSW Industrials, Inc.	1,542	196,913
DXP Enterprises, Inc. (a)	1,809	53,492
Eastman Kodak Co. (a) ^(b)	4,790	32,620
The Gorman-Rupp Co. ^(b)	2,327	83,330
GrafTech International Ltd.	21,143	218,196
Hydrofarm Holdings Group, Inc. (a)	4,033	152,649

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Ichor Holdings Ltd. (a)	2,869	\$ 117,887
Kadant, Inc.	1,197	244,308
Lindsay Corp.	1,123	170,460
Mueller Water Products, Inc. Class A	16,342	248,725
NN, Inc. (a)	4,542	23,845
Ranpak Holdings Corp. (a)	3,855	103,391
SPX FLOW, Inc.	4,310	315,061
Tennant Co.	1,922	142,132
Thermon Group Holdings, Inc. (a)	3,334	57,712
Watts Water Technologies, Inc. Class A	2,863	481,242
Welbilt, Inc. (a)	13,558	315,088
		<hr/> 5,243,330
Metal Fabricate & Hardware — 0.7%		
AZZ, Inc.	2,593	137,948
Helios Technologies, Inc.	3,359	275,807
Lawson Products, Inc. (a)	519	25,955
Mayville Engineering Co., Inc. (a)	997	18,744
Mueller Industries, Inc.	5,829	239,572
Northwest Pipe Co. (a)	1,039	24,624
Olympic Steel, Inc.	1,038	25,286
Omega Flex, Inc.	313	44,662
Park-Ohio Holdings Corp.	934	23,836
Proto Labs, Inc. (a)	2,879	191,741
RBC Bearings, Inc. (a)	2,901	615,592
Ryerson Holding Corp.	1,763	39,262
Standex International Corp.	1,249	123,538
TimkenSteel Corp. (a)	4,858	63,543
Tredegar Corp.	2,834	34,518
Worthington Industries, Inc.	3,510	184,977
Xometry, Inc. Class A (a) ^(b)	849	48,962
		<hr/> 2,118,567
Miscellaneous - Manufacturing — 1.2%		
American Outdoor Brands, Inc. (a)	1,502	36,889
AMMO, Inc. (a)	9,065	55,750
Byrna Technologies, Inc. (a)	1,940	42,408
Chase Corp.	766	78,247
Enerpac Tool Group Corp.	6,330	131,221
EnPro Industries, Inc.	2,136	186,088
ESCO Technologies, Inc.	2,646	203,742
Fabrinet (a)	3,846	394,253
Federal Signal Corp.	6,240	240,989
Haynes International, Inc.	1,293	48,164
Hillenbrand, Inc.	7,560	322,434
John Bean Technologies Corp.	3,255	457,490
Lydall, Inc. (a)	1,807	112,197
Materion Corp.	2,098	144,007
Meta Materials, Inc. (a) ^(b)	22,520	130,166
	Number of Shares	Value
Myers Industries, Inc.	3,723	\$ 72,859
NL Industries, Inc.	880	5,069
Raven Industries, Inc. (a)	3,698	213,042
Sight Sciences, Inc. (a)	1,165	26,445
Smith & Wesson Brands, Inc.	4,913	101,994
Sturm, Ruger & Co., Inc.	1,767	130,369
Trinity Industries, Inc.	8,187	222,441
Trinseo SA	4,045	218,349
		<hr/> 3,574,613
Packaging & Containers — 0.3%		
Greif, Inc. Class A	2,662	171,965
Greif, Inc. Class B	593	38,426
Karat Packaging, Inc. (a)	506	10,641
Matthews International Corp. Class A	3,207	111,251
O-I Glass, Inc. (a)	16,440	234,599
Pactiv Evergreen, Inc. ^(b)	4,348	54,437
TriMas Corp. (a)	4,511	145,976
UFP Technologies, Inc. (a)	732	45,084
		<hr/> 812,379

Transportation — 1.3%

AFC Gamma, Inc.	807	17,415
Air Transport Services Group, Inc. (a)	6,105	157,570
ArcBest Corp.	2,629	214,973
Atlas Air Worldwide Holdings, Inc. (a)	2,994	244,550
Costamare, Inc.	5,429	84,095
Covenant Logistics Group, Inc. (a)	1,268	35,060
CryoPort, Inc. (a) ^(b)	4,204	279,608
Daseke, Inc. (a)	4,211	38,783
DHT Holdings, Inc. ^(b)	14,838	96,892
Dorian LPG Ltd.	3,323	41,239
Eagle Bulk Shipping, Inc. (a) ^(b)	929	46,840
Echo Global Logistics, Inc. (a)	2,733	130,392
Forward Air Corp.	2,817	233,867
Frontline Ltd.	12,322	115,457
Genco Shipping & Trading Ltd.	3,260	65,624
Heartland Express, Inc.	4,913	78,706
Hub Group, Inc. Class A (a)	3,455	237,531
Ideanomics, Inc. (a) ^(b)	42,775	84,267
International Seaways, Inc. ^(b)	4,784	87,165
Marten Transport Ltd.	6,217	97,545
Matson, Inc.	4,465	360,370
Nordic American Tankers Ltd.	15,214	38,948
PAM Transportation Services, Inc. (a)	351	15,788
Radiant Logistics, Inc. (a)	3,885	24,825
Safe Bulkers, Inc. (a)	6,412	33,150
Saia, Inc. (a)	2,754	655,535
Scorpio Tankers, Inc. ^(b)	4,976	92,255
SFL Corp. Ltd.	10,711	89,758

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Teekay Corp. (a)	7,342	\$ 26,872
Teekay Tankers Ltd. Class A (a)	2,539	36,892
Universal Logistics Holdings, Inc.	737	14,799
US Xpress Enterprises, Inc. Class A (a) ^(b)	2,964	25,579
Werner Enterprises, Inc.	6,540	289,526
Yellow Corp. (a)	5,399	30,504
		<hr/> 4,122,380
Trucking & Leasing — 0.2%		
GATX Corp.	3,674	329,044
The Greenbrier Cos., Inc.	3,283	141,136
Willis Lease Finance Corp. (a)	310	11,529
		<hr/> 481,709
		<hr/> 37,657,789
Technology — 11.5%		
Computers — 2.2%		
3D Systems Corp. (a)	12,587	347,024
Cantaloupe, Inc. (a)	5,897	63,570
Conduent, Inc. (a)	17,163	113,104
Corsair Gaming, Inc. (a) ^(b)	2,786	72,241
Desktop Metal, Inc. Class A (a)	15,530	111,350
Diebold Nixdorf, Inc. (a)	7,417	74,986
Exlservice Holdings, Inc. (a)	3,413	420,209
The ExOne Co. (a)	1,816	42,458
Grid Dynamics Holdings, Inc. (a)	4,348	127,049
iCAD, Inc. (a)	2,380	25,585
Insight Enterprises, Inc. (a) ^(b)	3,584	322,847
Integral Ad Science Holding Corp. (a)	1,787	36,866
KBR, Inc.	14,673	578,116
MAXIMUS, Inc.	6,380	530,816
Mitek Systems, Inc. (a)	4,406	81,511
NetScout Systems, Inc. (a)	7,252	195,441
Onespan, Inc. (a)	3,595	67,514
PAE, Inc. (a)	7,286	43,570
PAR Technology Corp. (a) ^(b)	2,517	154,821
Parsons Corp. (a)	2,729	92,131
Ping Identity Holding Corp. (a) ^(b)	5,110	125,553
PlayAGS, Inc. (a)	2,915	22,970
Qualys, Inc. (a)	3,540	393,967
Quantum Corp. (a)	6,223	32,235
Rapid7, Inc. (a)	5,768	651,899
Rekor Systems, Inc. (a)	3,353	38,526
Rimini Street, Inc. (a) ^(b)	4,671	45,075
SecureWorks Corp. Class A (a)	1,096	21,788
Startek, Inc. (a)	1,903	10,485
Super Micro Computer, Inc. (a)	4,458	163,029
Telos Corp. (a) ^(b)	4,118	117,034
Tenable Holdings, Inc. (a)	9,403	433,854
	Number of Shares	Value
TTEC Holdings, Inc.	1,922	\$ 179,765
Unisys Corp. (a)	6,793	170,776
Varonis Systems, Inc. (a)	10,986	668,498
Vocera Communications, Inc. (a)	3,569	163,317
Vuzix Corp. (a)	5,971	62,457
		<hr/> 6,802,437
Office & Business Equipment — 0.1%		
Pitney Bowes, Inc.	18,115	130,609
Semiconductors — 2.8%		
Alpha & Omega Semiconductor Ltd. (a)	2,147	67,351
Ambarella, Inc. (a)	3,625	564,558
Amkor Technology, Inc.	10,592	264,270
Atomera, Inc. (a)	2,165	49,990
Axcelis Technologies, Inc. (a)	3,451	162,301
AXT, Inc. (a)	4,213	35,094
CEVA, Inc. (a)	2,325	99,208
CMC Materials, Inc.	3,024	372,648
Cohu, Inc. (a)	4,961	158,454

CTS Corp.	3,299	101,972
Diodes, Inc. (a)	4,522	409,648
DSP Group, Inc. (a)	2,285	50,064
EMCORE Corp. (a)	3,887	29,075
FormFactor, Inc. (a)	8,065	301,066
Impinj, Inc. (a) ^(b)	1,921	109,747
Kulicke & Soffa Industries, Inc.	6,357	370,486
Lattice Semiconductor Corp. (a)	14,086	910,660
MACOM Technology Solutions Holdings, Inc. (a)	5,039	326,880
MaxLinear, Inc. (a)	7,351	362,037
Onto Innovation, Inc. (a)	5,048	364,718
Ouster, Inc. (a)	2,842	20,803
Photonics, Inc. (a)	6,275	85,528
Power Integrations, Inc.	6,270	620,667
Rambus, Inc. (a)	11,243	249,595
Semtech Corp. (a)	6,707	522,945
Silicon Laboratories, Inc. (a)	4,602	645,016
SiTime Corp. (a)	1,350	275,630
SkyWater Technology, Inc. (a) ^(b)	876	23,827
SMART Global Holdings, Inc. (a)	1,843	82,014
Synaptics, Inc. (a)	3,662	658,171
Ultra Clean Holdings, Inc. (a)	4,605	196,173
Veeco Instruments, Inc. (a)	5,201	115,514
		<u>8,606,110</u>
Software — 6.4%		
1Life Healthcare, Inc. (a)	12,065	244,316
8x8, Inc. (a)	11,487	268,681
ACI Worldwide, Inc. (a)	12,238	376,074

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Agilysys, Inc. (a)	2,065	\$ 108,123
Alignment Healthcare, Inc. (a)	2,786	44,520
Alkami Technology, Inc. (a)	775	19,127
Allscripts Healthcare Solutions, Inc. (a)	12,844	171,724
Altair Engineering, Inc. Class A (a) ^(b)	4,795	330,567
American Software, Inc. Class A	3,225	76,594
Apollo Medical Holdings, Inc. (a) ^(b)	3,912	356,188
Appfolio, Inc. Class A (a) ^(b)	1,942	233,817
Appian Corp. (a) ^(b)	4,078	377,256
Asana, Inc. Class A (a)	7,672	796,660
Avaya Holdings Corp. (a)	8,538	168,967
Avid Technology, Inc. (a)	3,794	109,722
Bandwidth, Inc. Class A (a)	2,388	215,589
Benefitfocus, Inc. (a)	2,510	27,861
BigCommerce Holdings, Inc. (a)	5,008	253,605
Blackbaud, Inc. (a)	5,022	353,298
Blackline, Inc. (a)	5,564	656,886
Bottomline Technologies de, Inc. (a)	4,590	180,295
Box, Inc. Class A (a)	14,773	349,677
Brightcove, Inc. (a)	4,281	49,403
BTRS Holdings, Inc. (a)	6,790	72,246
Cardlytics, Inc. (a) ^(b)	3,314	278,177
Castlight Health, Inc. Class B (a)	13,305	20,889
Cerence, Inc. (a)	3,925	377,232
Cloudera, Inc. (a)	23,984	383,024
CommVault Systems, Inc. (a)	4,764	358,777
Computer Programs & Systems, Inc.	1,435	50,885
Convey Holding Parent, Inc. (a)	1,379	11,584
Cornerstone OnDemand, Inc. (a)	6,539	374,423
CS Disco, Inc. (a)	1,364	65,390
CSG Systems International, Inc.	3,404	164,073
Daily Journal Corp. (a)	127	40,687
DarioHealth Corp. (a) ^(b)	1,504	20,530
Digi International, Inc. (a)	3,456	72,645
Digimarc Corp. (a) ^(b)	1,355	46,666
Digital Turbine, Inc. (a) ^(b)	9,422	647,762
DigitalOcean Holdings, Inc. (a)	5,138	398,863
Domo, Inc. Class B (a)	2,853	240,907
Donnelley Financial Solutions, Inc. (a)	3,050	105,591
E2open Parent Holdings, Inc. (a) ^(b)	16,832	190,202
Ebix, Inc. ^(b)	2,705	72,846
eGain Corp. (a)	2,209	22,532
Envestnet, Inc. (a)	5,639	452,473
EverCommerce, Inc. (a)	1,752	28,890
Evolut Health, Inc. Class A (a)	8,032	248,992
Forian, Inc. (a)	2,022	20,867
Genius Brands International, Inc. (a) ^(b)	29,994	40,792

	Number of Shares	Value
GreenBox POS (a) ^(b)	1,939	\$ 16,074
GTY Technology Holdings, Inc. (a)	3,426	25,764
Health Catalyst, Inc. (a)	5,189	259,502
IBEX Holdings Ltd. (a) ^(b)	642	10,914
Inovalon Holdings, Inc. Class A (a)	7,844	316,035
Inseego Corp. (a) ^(b)	8,534	56,836
Instructure Holdings, Inc. (a)	1,258	28,418
Intapp, Inc. (a)	1,058	27,254
Intelligent Systems Corp. (a) ^(b)	784	31,838
j2 Global, Inc. (a)	4,512	616,429
JFrog Ltd. (a)	5,467	183,144
Kaltura, Inc. (a)	1,822	18,748
LivePerson, Inc. (a)	6,720	396,144
ManTech International Corp. Class A	2,851	216,448
MeridianLink, Inc. (a)	1,323	29,582
MicroStrategy, Inc. Class A (a) ^(b)	815	471,396
Model N, Inc. (a)	3,667	122,845

Momentive Global, Inc. (a)	13,424	263,110
NantHealth, Inc. (a) ^(b)	3,036	4,888
NextGen Healthcare, Inc. (a)	5,772	81,385
ON24, Inc. (a)	2,830	56,430
Outbrain, Inc. (a)	840	12,432
Outset Medical, Inc. (a) ^(b)	4,738	234,247
PagerDuty, Inc. (a)	8,364	346,437
PDF Solutions, Inc. (a)	3,035	69,926
Phreesia, Inc. (a)	5,063	312,387
Porch Group, Inc. (a)	7,989	141,246
PowerSchool Holdings, Inc., Class A (a)	4,444	109,367
Privia Health Group, Inc. (a) ^(b)	2,114	49,806
Progress Software Corp.	4,559	224,257
PROS Holdings, Inc. (a) ^(b)	4,127	146,426
QAD, Inc. Class A	1,254	109,587
Rackspace Technology, Inc. (a) ^(b)	5,616	79,860
SailPoint Technologies Holding, Inc. (a)	9,482	406,588
Sapiens International Corp. NV	3,218	92,614
Schrodinger, Inc. /United States (a)	4,690	256,449
Simulations Plus, Inc.	1,576	62,252
Smith Micro Software, Inc. (a)	4,952	23,968
Sprout Social, Inc. Class A (a)	4,639	565,726
SPS Commerce, Inc. (a)	3,750	604,912
Sumo Logic, Inc. (a)	8,857	142,775
Tabula Rasa HealthCare, Inc. (a) ^(b)	2,293	60,100
Upland Software, Inc. (a)	2,974	99,451
Verint Systems, Inc. (a)	6,692	299,735
Veritone, Inc. (a)	3,006	71,813
Verra Mobility Corp. (a)	13,852	208,750
Viant Technology, Inc. (a)	1,207	14,750

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Workiva, Inc. (a)	4,446	\$ 626,708
Xperi Holding Corp.	10,878	204,942
Yext, Inc. (a)	11,400	137,142
Zuora, Inc. Class A Class A (a)	11,533	191,217
		<u>19,715,949</u>
		<u>35,255,105</u>
Utilities — 2.5%		
Electric — 1.3%		
ALLETE, Inc.	5,441	323,848
Ameresco, Inc. Class A (a)	3,210	187,560
Avista Corp.	7,205	281,860
Black Hills Corp.	6,533	410,011
Clearway Energy, Inc. Class A	3,588	101,182
Clearway Energy, Inc. Class C (b)	8,547	258,718
Evoqua Water Technologies Corp. (a)	12,001	450,758
FTC Solar, Inc. (a)	2,115	16,476
MGE Energy, Inc.	3,786	278,271
NorthWestern Corp.	5,383	308,446
Ormat Technologies, Inc.	4,700	313,067
Otter Tail Corp.	4,284	239,775
PNM Resources, Inc.	8,875	439,135
Portland General Electric Co.	9,378	440,672
Unitil Corp.	1,596	68,277
Via Renewables, Inc. (b)	1,116	11,372
		<u>4,129,428</u>
Gas — 0.8%		
Brookfield Infrastructure Corp. Class A (b)	5,565	333,232
Chesapeake Utilities Corp.	1,792	215,130
New Jersey Resources Corp.	10,020	348,796
Northwest Natural Holding Co.	3,193	146,846
ONE Gas, Inc.	5,464	346,254
South Jersey Industries, Inc. (b)	10,698	227,439
Southwest Gas Holdings, Inc.	6,145	410,977
Spire, Inc.	5,270	322,419
		<u>2,351,093</u>
Water — 0.4%		
American States Water Co.	3,839	328,311
Artesian Resources Corp. Class A	825	31,490
California Water Service Group	5,350	315,276
Global Water Resources, Inc.	1,254	23,475
Middlesex Water Co.	1,793	184,285
SJW Group	2,855	188,601
	Number of Shares	Value
The York Water Co.	1,322	\$ 57,745
		<u>1,129,183</u>
		<u>7,609,704</u>
TOTAL COMMON STOCK (Cost \$242,957,177)		<u>304,017,343</u>
TOTAL EQUITIES (Cost \$242,957,177)		<u>304,017,343</u>
WARRANTS — 0.0%		
Energy — 0.0%		
Oil & Gas — 0.0%		
Nabors Industries Ltd. (a) (b)	326	1,904
TOTAL WARRANTS (Cost \$0)		<u>1,904</u>
RIGHTS — 0.0%		
Consumer, Non-cyclical — 0.0%		
Biotechnology — 0.0%		
Aduro Biotech, Inc., CVR (a) (c) (d)	1,859	—
Tobira Therapeutics Inc., CVR (a) (c) (d)	1,376	10,471
		<u>10,471</u>
Pharmaceuticals — 0.0%		
	111	—

GTx, Inc., CVR (a) (b) (c) (d)

Omthera Pharmaceuticals Inc., CVR (a) (c) (d)

428

10,471

TOTAL RIGHTS (Cost \$310)

Principal
Amount

10,471

BONDS & NOTES — 0.0%

CORPORATE DEBT — 0.0%

Diversified Financial Services — 0.0%

GAMCO Investors, Inc.

\$ 1,000 995

TOTAL CORPORATE DEBT (Cost \$1,000)

995

TOTAL BONDS & NOTES (Cost \$1,000)

995

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
MUTUAL FUNDS — 2.5%		
Diversified Financial Services — 2.5%		
State Street Navigator Securities Lending Government Money Market Portfolio ^(f)	7,546,559	\$ 7,546,559
TOTAL MUTUAL FUNDS (Cost \$7,546,559)		7,546,559
TOTAL LONG-TERM INVESTMENTS (Cost \$250,505,046)		311,577,272
	Principal Amount	
SHORT-TERM INVESTMENTS — 1.1%		
Repurchase Agreement — 0.7%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(g)	\$ 2,237,750	2,237,750
U.S. Treasury Bill — 0.4%		
U.S. Treasury Bill		
0.038% 1/27/22 ^{(h)(i)}	1,155,000	1,154,839
TOTAL SHORT-TERM INVESTMENTS (Cost \$3,392,608)		3,392,589
TOTAL INVESTMENTS — 102.6% (Cost \$253,897,654) ⁽ⁱ⁾		314,969,861
Other Assets/(Liabilities) — (2.6)%		(8,056,278)
NET ASSETS — 100.0%		\$ 306,913,583

Abbreviation Legend

CVR Contingent Value Rights

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$23,100,115 or 7.53% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$16,146,408 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. (Note 2).
- (c) Investment was valued using significant unobservable inputs.
- (d) This security is fair valued in good faith in accordance with procedures approved by the Board of Trustees. At September 30, 2021, these securities amounted to a value of \$10,471 or 0.00% of net assets.
- (e) Security is exempt from registration under Regulation S or Rule 144A of the Securities Act of 1933. These securities are considered restricted and may be resold in transactions exempt from registration. At September 30, 2021, the aggregate market value of these securities amounted to \$418,111 or 0.14% of net assets.
- (f) Represents investment of security lending cash collateral. (Note 2).
- (g) Maturity value of \$2,237,750. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 5/15/27, and an aggregate market value, including accrued interest, of \$2,282,584.
- (h) The rate shown represents yield-to-maturity.
- (i) A portion of this security is pledged/held as collateral for open derivatives. (Note 2).
- (j) See Note 6 for aggregate cost for federal tax purposes.

Futures contracts

	Expiration Date	Number of Contracts	Notional Amount	Value/ Net Unrealized Appreciation/ (Depreciation)
Long				
Russell 2000 E Mini Index	12/17/21	33	\$ 3,659,645	\$ (28,325)

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

MassMutual Mid Cap Growth Fund — Portfolio of Investments

September 30, 2021

	Number of Shares	Value
EQUITIES — 98.1%		
COMMON STOCK — 96.7%		
Basic Materials — 0.8%		
Chemicals — 0.4%		
RPM International, Inc.	421,000	\$ 32,690,650
The Sherwin-Williams Co.	32,244	9,019,614
		<u>41,710,264</u>
Mining — 0.4%		
Kirkland Lake Gold Ltd. ^(a)	826,000	34,353,340
		<u>76,063,604</u>
Communications — 5.9%		
Internet — 4.9%		
Bright Health Group, Inc. ^{(a) (b)}	338,000	2,758,080
Chewy, Inc. Class A ^{(a) (b)}	194,264	13,231,321
Deliveroo Holdings PLC., Lockup Shares (Acquired 9/12/17-5/16/19, Cost \$6,218,820) ^{(b) (c) (d) (h)}	3,494,800	12,937,216
Etsy, Inc. ^(b)	275,000	57,189,000
Farfetch Ltd. Class A ^(b)	455,000	17,053,400
IAC/InterActiveCorp ^(b)	431,961	56,280,199
Match Group, Inc. ^(b)	275,000	43,172,250
Okta, Inc. ^(b)	115,699	27,460,001
Palo Alto Networks, Inc. ^(b)	150,503	72,090,937
Pinterest, Inc. Class A ^(b)	181,000	9,221,950
Roku, Inc. ^(b)	85,673	26,845,634
Spotify Technology SA ^(b)	239,000	53,856,260
Twitter, Inc. ^(b)	268,484	16,213,749
Upwork, Inc. ^(b)	232,000	10,446,960
Vimeo, Inc. ^(b)	967,753	28,422,905
Wayfair, Inc. Class A ^{(a) (b)}	9,000	2,299,590
		<u>449,479,452</u>
Media — 0.4%		
Liberty Media Corp-Liberty Formula One Class C ^(b)	746,000	38,351,860
Telecommunications — 0.6%		
Corning, Inc.	1,359,000	49,589,910
		<u>537,421,222</u>
Consumer, Cyclical — 16.1%		
Airlines — 0.8%		
Alaska Air Group, Inc. ^(b)	9,000	527,400
Azul SA ^{(a) (b)}	704,388	14,130,023
Southwest Airlines Co. ^(b)	1,089,000	56,007,270
		<u>70,664,693</u>
Apparel — 0.2%		
On Holding AG, Class A ^(b)	113,127	3,408,517
VF Corp.	218,000	\$ 14,603,820
		<u>18,012,337</u>
Auto Parts & Equipment — 0.7%		
Aptiv PLC ^(b)	329,000	49,011,130
BorgWarner, Inc.	235,040	10,156,079
		<u>59,167,209</u>
Distribution & Wholesale — 0.2%		
Leslie's, Inc. ^(b)	886,639	18,211,565
Entertainment — 2.5%		
Caesars Entertainment, Inc. ^(b)	1,009,571	113,354,632
DraftKings, Inc. Class A ^{(a) (b)}	442,000	21,286,720
Live Nation Entertainment, Inc. ^(b)	474,827	43,270,984
Vail Resorts, Inc. ^(b)	152,000	50,775,600
		<u>228,687,936</u>
Leisure Time — 0.4%		
Planet Fitness, Inc. Class A ^(b)	475,387	37,341,649

Lodging — 1.5%

Hilton Worldwide Holdings, Inc. ^(b)	707,000	93,401,770
MGM Resorts International	988,000	42,632,200
		<u>136,033,970</u>

Retail — 9.0%

Advance Auto Parts, Inc.	175,770	36,716,595
Bath & Body Works, Inc.	272,000	17,144,160
Bed Bath & Beyond, Inc. ^(b)	409,372	7,071,901
Burlington Stores, Inc. ^(b)	423,721	120,154,564
Carvana Co. ^(b)	47,817	14,418,738
Casey's General Stores, Inc.	362,000	68,218,900
Chipotle Mexican Grill, Inc. ^(b)	64,768	117,717,135
Darden Restaurants, Inc.	150,414	22,783,209
Dollar General Corp.	426,323	90,440,161
Dollar Tree, Inc. ^(b)	363,000	34,746,360
Domino's Pizza, Inc.	89,000	42,449,440
Five Below, Inc. ^(b)	88,000	15,559,280
Floor & Decor Holdings, Inc. Class A ^(b)	203,070	24,528,825
Lululemon Athletica, Inc. ^(b)	126,894	51,354,002
O'Reilly Automotive, Inc. ^(b)	154,912	94,660,527
Olaplex Holdings, Inc. ^(b)	354,962	8,696,569
Ross Stores, Inc.	504,267	54,889,463
Warby Parker, Inc. Class A ^(b)	45,649	2,421,680
		<u>823,971,509</u>

Toys, Games & Hobbies — 0.8%

Mattel, Inc. ^(b)	4,121,988	76,504,097
		<u>1,468,594,965</u>

Consumer, Non-cyclical — 30.4%**Beverages — 0.3%**

The Boston Beer Co., Inc. Class A ^(b)	56,149	28,621,953
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The accompanying notes are an integral part of the financial statements.

MassMutual Mid Cap Growth Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Biotechnology — 3.5%		
Alnylam Pharmaceuticals, Inc. ^(b)	228,000	\$ 43,048,680
Argenx SE ADR ^(b)	113,000	34,126,000
BioMarin Pharmaceutical, Inc. ^(b)	103,463	7,996,655
Exact Sciences Corp. ^(b)	445,345	42,508,180
Exelixis, Inc. ^(b)	405,000	8,561,700
Guardant Health, Inc. ^(b)	104,368	13,047,044
Horizon Therapeutics PLC ^(b)	151,687	16,615,794
Illumina, Inc. ^(b)	28,271	11,467,000
Incyte Corp. ^(b)	465,547	32,020,323
Ionis Pharmaceuticals, Inc. ^(b)	662,000	22,203,480
Kodiak Sciences, Inc. ^{(a) (b)}	57,000	5,470,860
Moderna, Inc. ^(b)	31,412	12,089,223
Seagen, Inc. ^(b)	311,000	52,807,800
Ultragenyx Pharmaceutical, Inc. ^(b)	181,000	16,324,390
		<u>318,287,129</u>
Commercial Services — 7.9%		
Bright Horizons Family Solutions, Inc. ^(b)	375,244	52,316,519
Cintas Corp.	126,443	48,131,792
CoStar Group, Inc. ^(b)	838,000	72,118,280
Dlocal Ltd. ^(b)	302,224	16,489,341
Equifax, Inc.	272,000	68,930,240
FleetCor Technologies, Inc. ^(b)	308,000	80,471,160
Global Payments, Inc.	125,640	19,798,351
GXO Logistics, Inc. ^(b)	171,500	13,452,460
Legalzoom.com Inc. ^(b)	48,002	1,267,253
MarketAxess Holdings, Inc.	80,000	33,655,200
Moody's Corp.	44,607	15,840,392
Multiplan Corp. ^{(a) (b)}	2,773,000	15,611,990
Quanta Services, Inc.	319,162	36,327,019
Square, Inc. Class A ^(b)	325,481	78,063,363
Terminix Global Holdings, Inc. ^(b)	1,106,000	46,087,020
Toast, Inc., Class A ^(b)	28,198	1,408,490
TransUnion	764,000	85,804,840
Verisk Analytics, Inc.	154,000	30,841,580
		<u>716,615,290</u>
Food — 0.3%		
TreeHouse Foods, Inc. ^(b)	613,000	24,446,440
Health Care – Products — 11.2%		
Alcon, Inc. ^(a)	766,547	61,684,037
Align Technology, Inc. ^(b)	51,838	34,494,560
Avantor, Inc. ^(b)	2,607,000	106,626,300
Bruker Corp.	1,626,000	126,990,600
The Cooper Cos., Inc.	245,484	101,460,992
Edwards Lifesciences Corp. ^(b)	109,226	12,365,475
Hologic, Inc. ^(b)	2,564,387	189,277,405
ICU Medical, Inc. ^(b)	165,000	38,507,700
	Number of Shares	Value
IDEXX Laboratories, Inc. ^(b)	47,113	\$ 29,299,575
Insulet Corp. ^(b)	102,691	29,187,863
Natera, Inc. ^(b)	152,903	17,039,510
Novocure Ltd. ^(b)	66,829	7,763,525
Quidel Corp. ^(b)	313,000	44,179,950
ResMed, Inc.	34,230	9,021,317
Teleflex, Inc.	424,577	159,874,469
West Pharmaceutical Services, Inc.	123,000	52,218,420
		<u>1,019,991,698</u>
Health Care – Services — 3.7%		
Acadia Healthcare Co., Inc. ^(b)	934,000	59,570,520

agilon health, Inc. ^(b)	238,000	6,237,980
Amedisys, Inc. ^(b)	62,139	9,264,925
Catalent, Inc. ^(b)	1,310,000	174,321,700
Humana, Inc.	46,174	17,968,612
Molina Healthcare, Inc. ^(b)	160,525	43,552,038
Ortho Clinical Diagnostics Holdings PLC Class H ^(b)	1,094,000	20,217,120
PPD, Inc. ^(b)	104,717	4,899,708
		<u>336,032,603</u>
Household Products & Wares — 0.9%		
Avery Dennison Corp.	301,000	62,370,210
Reynolds Consumer Products, Inc.	742,000	20,286,280
		<u>82,656,490</u>
Pharmaceuticals — 2.6%		
Alkermes PLC ^(b)	1,204,000	37,131,360
Dentsply Sirona, Inc.	401,000	23,278,050
DexCom, Inc. ^(b)	75,255	41,153,949
Elanco Animal Health, Inc. ^(b)	1,460,000	46,559,400
Neurocrine Biosciences, Inc. ^(b)	262,000	25,128,420
Perrigo Co. PLC	1,185,000	56,086,050
Sarepta Therapeutics, Inc. ^(b)	127,643	11,804,425
		<u>241,141,654</u>
		<u>2,767,793,257</u>
Energy — 0.2%		
Energy – Alternate Sources — 0.1%		
Shoals Technologies Group, Inc. Class A ^(b)	343,000	9,562,840
Oil & Gas — 0.1%		
Venture Global LNG, Inc., Series B (Acquired 3/08/18, Cost \$652,320) ^{(b) (c) (d) (e)}	216	991,459
Venture Global LNG, Inc., Series C (Acquired 10/16/17-3/08/18, Cost \$4,872,708) ^{(b) (c) (d) (e)}	1,328	6,095,640
		<u>7,087,099</u>
		<u>16,649,939</u>

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

MassMutual Mid Cap Growth Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Financial — 6.2%		
Banks — 1.1%		
SVB Financial Group ^(b)	121,461	\$ 78,570,692
Webster Financial Corp.	498,000	27,121,080
		<u>105,691,772</u>
Diversified Financial Services — 2.1%		
Cboe Global Markets, Inc.	452,000	55,984,720
LPL Financial Holdings, Inc.	190,316	29,833,936
Raymond James Financial, Inc.	205,000	18,917,400
SoFi Technologies, Inc. ^{(a) (b)}	1,430,000	22,708,400
Tradeweb Markets, Inc. Class A	783,000	63,250,740
		<u>190,695,196</u>
Insurance — 1.7%		
Aon PLC Class A	173,860	49,683,972
Assurant, Inc.	354,000	55,843,500
Axis Capital Holdings Ltd.	666,000	30,662,640
Kemper Corp.	232,000	15,495,280
		<u>151,685,392</u>
Private Equity — 1.3%		
KKR & Co., Inc.	1,984,802	120,834,746
		<u>568,907,106</u>
Industrial — 15.8%		
Building Materials — 0.5%		
Builders FirstSource, Inc. ^(b)	285,970	14,796,088
Martin Marietta Materials, Inc.	95,000	32,459,600
		<u>47,255,688</u>
Electrical Components & Equipment — 0.1%		
Littelfuse, Inc.	22,000	6,011,940
Electronics — 4.7%		
Agilent Technologies, Inc.	1,047,687	165,042,133
Amphenol Corp. Class A	755,414	55,318,967
Fortive Corp.	843,000	59,490,510
II-VI, Inc. ^{(a) (b)}	197,113	11,700,628
Keysight Technologies, Inc. ^(b)	575,000	94,466,750
National Instruments Corp.	1,115,000	43,741,450
		<u>429,760,438</u>
Engineering & Construction — 0.2%		
MasTec, Inc. ^{(a) (b)}	219,575	18,944,931
Environmental Controls — 0.8%		
Stericycle, Inc. ^(b)	153,677	10,445,426
Waste Connections, Inc.	460,103	57,940,771
		<u>68,386,197</u>
Machinery – Construction & Mining — 0.4%		
BWX Technologies, Inc.	751,000	40,448,860
Machinery – Diversified — 3.1%		
Cognex Corp.	213,000	17,086,860
	Number of Shares	Value
Colfax Corp. ^(b)	1,622,000	\$ 74,449,800
IDEX Corp.	315,000	65,189,250
Ingersoll Rand, Inc. ^(b)	2,465,000	124,260,650
		<u>280,986,560</u>
Miscellaneous - Manufacturing — 1.6%		
Textron, Inc.	2,106,000	147,019,860
Packaging & Containers — 3.0%		
Ardagh Metal Packaging SA ^(b)	865,381	8,619,195
Ball Corp.	2,045,780	184,058,826
Packaging Corp. of America	176,000	24,189,440
Sealed Air Corp.	970,000	53,146,300
		<u>270,013,761</u>
Transportation — 1.4%		
J.B. Hunt Transport Services, Inc.	566,000	94,646,520
Knight-Swift Transportation Holdings, Inc.	373,629	19,111,123
XPO Logistics, Inc. ^(b)	160,169	12,746,249
		<u>126,503,892</u>
		<u>1,435,332,127</u>

Technology — 20.3%**Computers — 1.8%**

Crowdstrike Holdings, Inc. Class A ^(b)	159,000	39,079,020
Fortinet, Inc. ^(b)	228,000	66,585,120
Genpact Ltd.	475,129	22,573,379
KBR, Inc.	319,645	12,594,013
Leidos Holdings, Inc.	197,000	18,937,610
Thoughtworks Holding, Inc. ^(b)	197,823	5,679,498
		<u>165,448,640</u>

Semiconductors — 7.3%

Advanced Micro Devices, Inc. ^(b)	365,351	37,594,618
Entegris, Inc.	543,000	68,363,700
KLA Corp.	325,383	108,843,867
Lam Research Corp.	39,343	22,392,068
Lattice Semiconductor Corp. ^(b)	196,000	12,671,400
Marvell Technology, Inc.	2,382,316	143,677,478
Microchip Technology, Inc.	1,309,900	201,056,551
Skyworks Solutions, Inc.	311,000	51,246,580
Wolfspeed, Inc. ^(b)	207,656	16,764,069
		<u>662,610,331</u>

Software — 11.2%

Atlassian Corp. PLC Class A ^(b)	171,153	66,992,707
Autodesk, Inc. ^(b)	61,499	17,537,670
BigCommerce Holdings, Inc. ^{(a) (b)}	221,803	11,232,104
Bill.com Holdings, Inc. ^(b)	106,000	28,296,700
Black Knight, Inc. ^(b)	672,000	48,384,000
Broadridge Financial Solutions, Inc.	142,000	23,662,880

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

MassMutual Mid Cap Growth Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
CCC Intelligent Solutions Holdings, Inc. ^{(a) (b)}	871,000	\$ 9,154,210
Ceridian HCM Holding, Inc. ^(b)	706,000	79,509,720
Citrix Systems, Inc.	308,000	33,069,960
Clarivate PLC ^(b)	3,121,000	68,349,900
Clear Secure Inc. Class A ^(b)	97,028	3,982,999
Coupa Software, Inc. ^(b)	128,628	28,192,685
DocuSign, Inc. ^(b)	329,000	84,694,470
Doximity, Inc. Class A ^(b)	140,000	11,298,000
HubSpot, Inc. ^(b)	46,669	31,552,444
Jack Henry & Associates, Inc.	88,000	14,437,280
MongoDB, Inc. ^(b)	72,660	34,259,917
MSCI, Inc.	68,053	41,399,362
nCino, Inc. ^(b)	178,000	12,643,340
Paycom Software, Inc. ^(b)	124,999	61,968,254
Playtika Holding Corp. ^(b)	530,000	14,643,900
Procore Technologies, Inc. ^(b)	16,079	1,436,498
Procore Technologies, Inc., Lockup Shares (Acquired 7/15/20-12/09/20, Cost \$2,972,913) ^{(b) (c) (d)}	54,836	4,654,096
PTC, Inc. ^(b)	317,000	37,973,430
Roper Technologies, Inc.	118,000	52,643,340
SentinelOne Inc. Class A ^{(a) (b)}	59,291	3,176,219
Signify Health, Inc. Class A ^{(a) (b)}	728,902	13,025,479
Splunk, Inc. ^(b)	154,000	22,285,340
Twilio, Inc. Class A ^(b)	49,239	15,709,703
Veeva Systems, Inc. Class A ^(b)	331,762	95,603,856
Workday, Inc. Class A ^(b)	81,751	20,428,757
Zynga, Inc. Class A ^(b)	3,621,000	27,266,130
		<u>1,019,465,350</u>
		<u>1,847,524,321</u>
Utilities — 1.0%		
Electric — 1.0%		
Ameren Corp.	312,000	25,272,000
Eversource Energy	176,000	14,389,760
Sempra Energy	399,000	50,473,500
		<u>90,135,260</u>
TOTAL COMMON STOCK (Cost \$5,976,023,357)		<u>8,808,421,801</u>
PREFERRED STOCK — 1.4%		
Consumer, Cyclical — 1.1%		
Auto Manufacturers — 1.1%		
Rivian Automotive, Inc., Series D (Acquired 12/23/19, Cost \$11,560,694) ^{(b) (c) (d) (e)}	1,076,014	76,429,274
	Number of Shares	Value
Rivian Automotive, Inc., Series E (Acquired 7/10/20, Cost \$6,096,028) ^{(b) (c) (d) (e)}	393,546	\$ 27,953,572
		<u>104,382,846</u>
Consumer, Non-cyclical — 0.1%		
Commercial Services — 0.0%		
Redwood Materials, Inc., Series C (Acquired 5/28/21, Cost \$3,678,889) ^{(b) (c) (d) (e)}	77,608	3,678,889
Wework Companies, Inc., Series D-1 (Acquired 12/09/14, Cost \$1,394,302) ^{(b) (c) (d) (e)}	83,736	623,247
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) ^{(b) (c) (d) (e)}	36,452	271,312
Health Care — Services — 0.1%		
Caris Life Sciences, Inc., Series D (Acquired 5/11/21, Cost \$5,006,003) ^{(b) (c) (d) (e)}	618,025	5,006,003
		<u>9,579,451</u>
Financial — 0.0%		
Investment Companies — 0.0%		
Maplebear, Inc., Series I (Acquired 2/26/21, Cost \$1,765,375) ^{(b) (c) (d) (e)}	14,123	1,765,375
Industrial — 0.1%		
Electrical Components & Equipment — 0.1%		
Sila Nanotechnologies, Inc., Series F (Acquired 1/07/21, Cost \$7,310,569) ^{(b) (c) (d) (e)}	177,128	7,310,569
Technology — 0.1%		
Software — 0.1%		
Databricks, Inc., Series G (Acquired 2/01/21, Cost \$2,400,675) ^{(b) (c) (d) (e)}	13,535	2,983,823

Databricks, Inc., Series H (Acquired 8/31/21, Cost \$3,616,301) ^(b) ^(c) (d) ^(e)	16,404	<div>3,616,301</div> <div>6,600,124</div>
TOTAL PREFERRED STOCK (Cost \$43,435,802)		<div>129,638,365</div>
TOTAL EQUITIES (Cost \$6,019,459,159)		<div>8,938,060,166</div>

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

MassMutual Mid Cap Growth Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
MUTUAL FUNDS — 0.7%		
Diversified Financial Services — 0.7%		
State Street Navigator Securities Lending Government Money Market Portfolio ^(f)	66,758,086	\$ 66,758,086
TOTAL MUTUAL FUNDS (Cost \$66,758,086)		66,758,086
TOTAL LONG-TERM INVESTMENTS (Cost \$6,086,217,245)		9,004,818,252
SHORT-TERM INVESTMENTS — 2.2%		
Mutual Fund — 1.2%		
T. Rowe Price Government Reserve Investment Fund	103,888,237	103,888,237
	Principal Amount	
Repurchase Agreement — 1.0%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(g)	\$ 92,485,921	92,485,921
TOTAL SHORT-TERM INVESTMENTS (Cost \$196,374,158)		196,374,158
TOTAL INVESTMENTS — 101.0% (Cost \$6,282,591,403) ⁽ⁱ⁾		9,201,192,410
Other Assets/(Liabilities) — (1.0)%		(91,133,100)
NET ASSETS — 100.0%		\$ 9,110,059,310

Abbreviation Legend

ADR American Depositary Receipt

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$143,934,613 or 1.58% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$80,514,903 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. (Note 2).
- (b) Non-income producing security.
- (c) This security is fair valued in good faith in accordance with procedures approved by the Board of Trustees. At September 30, 2021, these securities amounted to a value of \$154,316,776 or 1.69% of net assets.
- (d) Restricted security. Certain securities are restricted as to resale. At September 30, 2021, these securities amounted to a value of \$154,316,776 or 1.69% of net assets. The Fund generally bears the costs, if any, associated with the disposition of restricted securities.
- (e) Investment was valued using significant unobservable inputs.
- (f) Represents investment of security lending cash collateral. (Note 2).
- (g) Maturity value of \$92,485,921. Collateralized by U.S. Government Agency obligations with rates ranging from 0.500% - 2.375%, maturity dates ranging from 5/15/27 - 6/30/27, and an aggregate market value, including accrued interest, of \$94,335,801.
- (h) Security is exempt from registration under Regulation S or Rule 144A of the Securities Act of 1933. These securities are considered restricted and may be resold in transactions exempt from registration. At September 30, 2021, the aggregate market value of these securities amounted to \$12,937,216 or 0.14% of net assets.
- (i) See Note 6 for aggregate cost for federal tax purposes.

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

MassMutual Small Cap Growth Equity Fund — Portfolio of Investments

September 30, 2021

	Number of Shares	Value
EQUITIES — 96.1%		
COMMON STOCK — 96.1%		
Basic Materials — 2.0%		
Chemicals — 2.0%		
Cabot Corp.	31,697	\$ 1,588,654
Danimer Scientific, Inc. ^{(a) (b)}	31,666	517,422
Element Solutions, Inc.	146,386	3,173,649
Methanex Corp. ^(b)	59,618	2,744,813
Olin Corp.	92,132	4,445,369
Rogers Corp. ^(a)	13,684	2,551,792
		<u>15,021,699</u>
Communications — 5.0%		
Internet — 3.6%		
Couchbase, Inc. ^(a)	19,100	594,201
Criteo SA Sponsored ADR ^(a)	67,359	2,468,707
Figs, Inc. Class A ^{(a) (b)}	45,839	1,702,461
Mimecast Ltd. ^(a)	51,515	3,276,354
Overstock.com , Inc. ^(a)	18,850	1,468,792
Perficient, Inc. ^(a)	56,343	6,518,885
Q2 Holdings, Inc. ^(a)	18,069	1,448,050
RealReal, Inc. ^(a)	96,158	1,267,362
Revolve Group, Inc. ^(a)	36,668	2,264,982
Shutterstock, Inc.	55,725	6,314,757
The Honest Company, Inc., Lockup Shares (Acquired 8/03/15, Cost \$650,636) ^{(a) (c) (d)}	30,058	309,297
		<u>27,633,848</u>
Media — 0.2%		
The New York Times Co. Class A	33,338	1,642,563
Telecommunications — 1.2%		
Calix, Inc. ^(a)	99,900	4,938,057
Ciena Corp. ^(a)	32,745	1,681,456
Viavi Solutions, Inc. ^(a)	142,232	2,238,732
		<u>8,858,245</u>
		<u>38,134,656</u>
Consumer, Cyclical — 13.8%		
Apparel — 1.8%		
Carter's, Inc.	21,563	2,096,786
Crocs, Inc. ^(a)	22,656	3,250,683
Deckers Outdoor Corp. ^(a)	2,789	1,004,598
On Holding AG, Class A ^(a)	12,597	379,548
Oxford Industries, Inc.	27,280	2,459,838
Steven Madden Ltd.	55,465	2,227,474
Wolverine World Wide, Inc.	69,859	2,084,592
		<u>13,503,519</u>
Auto Manufacturers — 0.3%		
REV Group, Inc.	147,378	2,529,007
		<u>2,529,007</u>
	Number of Shares	Value
Auto Parts & Equipment — 1.4%		
Dana, Inc.	165,266	\$ 3,675,516
Fox Factory Holding Corp. ^(a)	26,622	3,847,944
Visteon Corp. ^(a)	23,429	2,211,463
XPEL, Inc. ^{(a) (b)}	9,820	744,945
		<u>10,479,868</u>
Distribution & Wholesale — 0.6%		
SiteOne Landscape Supply, Inc. ^(a)	23,230	4,633,688
Entertainment — 0.7%		
Cinemark Holdings, Inc. ^{(a) (b)}	101,468	1,949,200
Red Rock Resorts, Inc. Class A ^(a)	69,220	3,545,449
		<u>5,494,649</u>
Food Services — 0.3%		
Sovos Brands, Inc. ^{(a) (b)}	136,997	1,911,108

Home Builders — 1.2%

Cavco Industries, Inc. ^(a)	10,203	2,415,458
Skyline Champion Corp. ^(a)	113,220	6,799,993
		<u>9,215,451</u>

Leisure Time — 1.2%

Acushnet Holdings Corp.	40,540	1,893,218
Planet Fitness, Inc. Class A ^(a)	31,810	2,498,675
YETI Holdings, Inc. ^(a)	59,895	5,132,403
		<u>9,524,296</u>

Lodging — 0.8%

Boyd Gaming Corp. ^(a)	64,105	4,055,282
Choice Hotels International, Inc.	11,986	1,514,671
Travel + Leisure Co.	4,181	227,990
		<u>5,797,943</u>

Retail — 5.5%

American Eagle Outfitters, Inc. ^(b)	70,202	1,811,212
BJ's Restaurants, Inc. ^(a)	37,529	1,567,211
Boot Barn Holdings, Inc. ^(a)	33,628	2,988,520
Denny's Corp. ^(a)	107,689	1,759,638
Dutch Bros, Inc., Class A ^(a)	12,485	540,850
FirstCash, Inc.	35,521	3,108,087
Five Below, Inc. ^(a)	21,539	3,808,311
Floor & Decor Holdings, Inc. Class A ^(a)	23,310	2,815,615
Freshpet, Inc. ^(a)	35,525	5,069,062
La-Z-Boy, Inc.	33,437	1,077,675
Lithia Motors, Inc.	9,410	2,983,346
Nu Skin Enterprises, Inc. Class A	48,879	1,978,133
Ollie's Bargain Outlet Holdings, Inc. ^{(a) (b)}	49,653	2,993,083
Papa John's International, Inc.	19,443	2,469,067
Rush Enterprises, Inc. Class A	43,640	1,970,782

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

MassMutual Small Cap Growth Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Wingstop, Inc.	31,761	\$ 5,206,581
		42,147,173
		105,236,702
Consumer, Non-cyclical — 24.1%		
Biotechnology — 5.6%		
Accelaron Pharma, Inc. ^(a)	15,160	2,609,036
Akero Therapeutics, Inc. ^{(a) (b)}	28,458	636,036
Allakos, Inc. ^(a)	10,048	1,063,782
ALX Oncology Holdings, Inc. ^(a)	22,805	1,684,377
Amicus Therapeutics, Inc. ^(a)	191,222	1,826,170
Apellis Pharmaceuticals, Inc. ^(a)	18,518	610,353
Arena Pharmaceuticals, Inc. ^(a)	33,140	1,973,487
Ascendis Pharma A/S ADR ^(a)	10,096	1,609,201
BioAtla, Inc. ^(a)	31,434	925,417
Blueprint Medicines Corp. ^(a)	16,833	1,730,601
Celldex Therapeutics, Inc. ^(a)	13,540	731,025
Deciphera Pharmaceuticals, Inc. ^(a)	26,025	884,329
Fate Therapeutics, Inc. ^(a)	16,573	982,282
Halozyne Therapeutics, Inc. ^(a)	69,228	2,816,195
ImmunoGen, Inc. ^(a)	116,237	659,064
Karuna Therapeutics, Inc. ^(a)	6,435	787,194
Kodiak Sciences, Inc. ^(a)	21,036	2,019,035
Kymera Therapeutics, Inc. ^(a)	19,903	1,169,102
Mersana Therapeutics, Inc. ^(a)	107,506	1,013,782
Myriad Genetics, Inc. ^(a)	36,238	1,170,125
NeoGenomics, Inc. ^(a)	52,653	2,539,981
RAPT Therapeutics, Inc. ^(a)	25,819	801,680
Revolution Medicines, Inc. ^(a)	44,590	1,226,671
Rocket Pharmaceuticals, Inc. ^(a)	54,850	1,639,466
Sage Therapeutics, Inc. ^(a)	12,479	552,944
Scholar Rock Holding Corp. ^{(a) (b)}	16,514	545,292
Turning Point Therapeutics, Inc. ^(a)	23,553	1,564,626
Ultragenyx Pharmaceutical, Inc. ^(a)	6,446	581,365
Veracyte, Inc. ^(a)	102,918	4,780,541
Y-mAbs Therapeutics, Inc. ^(a)	53,268	1,520,269
		42,653,428
Commercial Services — 5.2%		
2U, Inc. ^{(a) (b)}	63,495	2,131,527
AMN Healthcare Services, Inc. ^(a)	12,077	1,385,836
Chegg, Inc. ^(a)	43,263	2,942,749
Cross Country Healthcare, Inc. ^(a)	132,659	2,817,677
Green Dot Corp. Class A ^(a)	41,713	2,099,415
HealthEquity, Inc. ^(a)	29,109	1,885,099
Herc Holdings, Inc. ^(a)	39,958	6,531,535
LiveRamp Holdings, Inc. ^(a)	47,191	2,228,831
Mister Car Wash, Inc. ^(a)	114,244	2,084,953
Multiplan Corp. ^{(a) (b)}	281,251	1,583,443
Paylocity Holding Corp. ^(a)	12,229	3,429,011
	Number of Shares	Value
Payoneer Global, Inc. ^(a)	228,354	\$ 1,952,427
Repay Holdings Corp. ^{(a) (b)}	97,489	2,245,172
Shift4 Payments, Inc. Class A ^(a)	31,452	2,438,159
Textainer Group Holdings Ltd. ^(a)	57,303	2,000,448
TriNet Group, Inc. ^(a)	20,084	1,899,545
		39,655,827
Food — 0.6%		
BellRing Brands, Inc. Class A ^(a)	35,146	1,080,740

Performance Food Group Co. ^(a)	43,388	2,015,806
Sanderson Farms, Inc.	6,588	1,239,862
		<u>4,336,408</u>
Health Care – Products — 8.8%		
Axonics Inc. ^(a)	51,119	3,327,336
Bio-Techne Corp.	3,747	1,815,684
CareDx, Inc. ^(a)	48,287	3,059,947
Glaukos Corp. ^(a)	22,481	1,082,910
Globus Medical, Inc. Class A ^(a)	97,608	7,478,725
Haemonetics Corp. ^(a)	33,902	2,393,142
Hill-Rom Holdings, Inc.	12,618	1,892,700
Inari Medical, Inc. ^(a)	23,351	1,893,766
Inspire Medical Systems, Inc. ^(a)	41,667	9,703,411
Integra LifeSciences Holdings Corp. ^(a)	42,085	2,881,981
Masimo Corp. ^(a)	11,159	3,020,853
NanoString Technologies, Inc. ^(a)	48,895	2,347,449
Omniceil, Inc. ^(a)	42,828	6,356,960
Penumbra, Inc. ^(a)	12,620	3,363,230
Quanterix Corp. ^(a)	18,124	902,394
Repligen Corp. ^(a)	26,697	7,715,166
Shockwave Medical, Inc. ^(a)	12,346	2,541,794
Tandem Diabetes Care, Inc. ^(a)	44,863	5,355,745
		<u>67,133,193</u>
Health Care – Services — 3.0%		
Acadia Healthcare Co., Inc. ^(a)	34,535	2,202,642
Accolade, Inc. ^{(a) (b)}	56,225	2,371,008
Amedisys, Inc. ^(a)	9,064	1,351,443
LHC Group, Inc. ^(a)	29,153	4,574,397
Medpace Holdings, Inc. ^(a)	47,840	9,055,155
Oak Street Health, Inc. ^{(a) (b)}	14,690	624,766
R1 RCM, Inc. ^(a)	11,800	259,718
Surgery Partners, Inc. ^(a)	49,074	2,077,793
		<u>22,516,922</u>
Pharmaceuticals — 0.9%		
Aclaris Therapeutics, Inc. ^(a)	52,455	944,190
Intellia Therapeutics, Inc. ^(a)	10,374	1,391,672
KalVista Pharmaceuticals, Inc. ^(a)	38,320	668,684
Madrigal Pharmaceuticals, Inc. ^(a)	7,805	622,761
Myovant Sciences Ltd. ^(a)	43,498	976,095

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

MassMutual Small Cap Growth Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Owens & Minor, Inc.	60,515	\$ 1,893,514
Reata Pharmaceuticals, Inc. Class A ^{(a) (b)}	7,049	<u>709,200</u>
		<u>7,206,116</u>
		<u>183,501,894</u>
Energy — 2.4%		
Energy – Alternate Sources — 1.0%		
Atlantica Sustainable Infrastructure PLC ^(b)	65,636	2,265,098
First Solar, Inc. ^(a)	27,111	2,588,016
Maxeon Solar Technologies Ltd. ^{(a) (b)}	124,806	2,200,330
Stem, Inc. ^(a)	26,841	<u>641,232</u>
		<u>7,694,676</u>
Oil & Gas — 1.4%		
Chesapeake Energy Corp.	64,700	3,984,873
Delek US Holdings, Inc.	48,328	868,454
Matador Resources Co.	43,300	1,647,132
Viper Energy Partners LP	96,687	2,112,611
Whiting Petroleum Corp. ^(a)	28,132	<u>1,643,190</u>
		<u>10,256,260</u>
		<u>17,950,936</u>
Financial — 12.5%		
Banks — 4.2%		
Ameris Bancorp	112,623	5,842,881
Atlantic Union Bankshares Corp.	75,318	2,775,468
BancorpSouth Bank	75,577	2,250,683
First Interstate BancSystem, Inc. Class A	48,727	1,961,749
Great Western Bancorp, Inc.	70,478	2,307,450
National Bank Holdings Corp. Class A	76,613	3,101,294
Pinnacle Financial Partners, Inc.	41,841	3,936,401
Seacoast Banking Corp. of Florida	83,608	2,826,786
Silvergate Capital Corp. Class A ^(a)	11,285	1,303,418
Simmons First National Corp. Class A	82,892	2,450,288
Western Alliance Bancorp	28,152	<u>3,063,501</u>
		<u>31,819,919</u>
Diversified Financial Services — 3.0%		
Air Lease Corp.	58,153	2,287,739
Artisan Partners Asset Management, Inc. Class A	25,674	1,255,972
Cohen & Steers, Inc.	25,006	2,094,753
Evercore, Inc. Class A	21,390	2,859,201
Hamilton Lane, Inc. Class A	51,891	4,401,395
Hannon Armstrong Sustainable Infrastructure Capital, Inc. ^(b)	74,017	3,958,429
LPL Financial Holdings, Inc.	18,424	2,888,146
PRA Group, Inc. ^(a)	61,554	2,593,886
	Number of Shares	Value
StepStone Group, Inc. Class A	18,769	\$ 800,310
		<u>23,139,831</u>
Insurance — 1.7%		
Assured Guaranty Ltd.	51,085	2,391,289
Kemper Corp.	23,032	1,538,307
Kinsale Capital Group, Inc.	11,859	1,917,600
MGIC Investment Corp.	177,852	2,660,666
Selective Insurance Group, Inc.	34,333	2,593,171
SiriusPoint Ltd. ^(a)	177,537	<u>1,643,993</u>
		<u>12,745,026</u>
Real Estate — 0.3%		
McGrath RentCorp	31,502	<u>2,266,569</u>
Real Estate Investment Trusts (REITS) — 3.1%		
Essential Properties Realty Trust, Inc.	169,579	4,734,646
Hudson Pacific Properties, Inc.	59,250	1,556,497
JBG SMITH Properties	18,173	538,103
Life Storage, Inc.	15,219	1,746,228
National Storage Affiliates Trust	48,260	2,547,645
Phillips Edison & Co., Inc.	57,500	1,765,825
PotlatchDeltic Corp.	44,353	2,287,728
PS Business Parks, Inc.	16,565	2,596,398
Ryman Hospitality Properties, Inc. ^(a)	24,957	2,088,901

Xenia Hotels & Resorts, Inc. ^(a)	213,857	3,793,823
		<u>23,655,794</u>
Savings & Loans — 0.2%		
Sterling Bancorp	70,745	<u>1,765,795</u>
		<u>95,392,934</u>
Industrial — 16.6%		
Aerospace & Defense — 0.6%		
Mercury Systems, Inc. ^(a)	51,099	2,423,114
Spirit AeroSystems Holdings, Inc. Class A	52,435	<u>2,317,103</u>
		<u>4,740,217</u>
Building Materials — 2.3%		
Builders FirstSource, Inc. ^(a)	59,730	3,090,430
Gibraltar Industries, Inc. ^(a)	31,468	2,191,746
Louisiana-Pacific Corp.	35,832	2,199,010
Patrick Industries, Inc.	28,729	2,393,126
SPX Corp. ^(a)	31,622	1,690,196
Trex Co., Inc. ^(a)	57,133	<u>5,823,567</u>
		<u>17,388,075</u>
Electrical Components & Equipment — 0.9%		
EnerSys	27,262	2,029,383
Novanta, Inc. ^(a)	33,430	<u>5,164,935</u>
		<u>7,194,318</u>
Electronics — 0.4%		
II-VI, Inc. ^{(a) (b)}	52,451	<u>3,113,491</u>

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

MassMutual Small Cap Growth Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Engineering & Construction — 0.5%		
Fluor Corp. ^{(a) (b)}	221,761	\$ 3,541,523
Environmental Controls — 1.0%		
Casella Waste Systems, Inc. Class A ^(a)	59,805	4,541,592
Clean Harbors, Inc. ^(a)	26,978	2,802,205
		<u>7,343,797</u>
Hand & Machine Tools — 0.3%		
Kennametal, Inc.	69,898	2,392,609
Machinery – Diversified — 5.6%		
Albany International Corp. Class A	26,553	2,041,129
Altra Industrial Motion Corp.	86,279	4,775,543
Applied Industrial Technologies, Inc.	45,910	4,137,868
Chart Industries, Inc. ^(a)	42,620	8,145,108
Colfax Corp. ^(a)	71,883	3,299,430
Curtiss-Wright Corp.	19,836	2,502,906
Hydrofarm Holdings Group, Inc. ^(a)	26,472	1,001,965
Kornit Digital Ltd. ^(a)	65,428	9,470,049
The Middleby Corp. ^(a)	18,585	3,168,928
Ranpak Holdings Corp. ^(a)	68,669	1,841,703
SPX FLOW, Inc.	32,230	2,356,013
		<u>42,740,642</u>
Metal Fabricate & Hardware — 1.7%		
Advanced Drainage Systems, Inc.	60,979	6,596,099
Helios Technologies, Inc.	31,401	2,578,336
Zurn Water Solutions Corp.	53,039	3,409,877
Xometry, Inc. Class A ^{(a) (b)}	10,294	593,655
		<u>13,177,967</u>
Miscellaneous - Manufacturing — 1.3%		
Enerpac Tool Group Corp.	86,586	1,794,928
Federal Signal Corp.	78,791	3,042,908
ITT, Inc.	37,101	3,184,750
John Bean Technologies Corp.	13,099	1,841,065
		<u>9,863,651</u>
Packaging & Containers — 0.3%		
Graphic Packaging Holding Co.	136,589	2,600,655
Transportation — 1.4%		
CryoPort, Inc. ^{(a) (b)}	44,454	2,956,635
Kirby Corp. ^(a)	32,871	1,576,493
Saia, Inc. ^(a)	24,724	5,885,054
		<u>10,418,182</u>
Trucking & Leasing — 0.3%		
GATX Corp.	25,874	2,317,275
		<u>126,832,402</u>
Technology — 19.4%		
Computers — 3.7%		
CyberArk Software Ltd. ^(a)	23,472	3,704,351
	Number of Shares	Value
Globant SA ^(a)	18,313	\$ 5,146,136
MarkForged, Inc. (Acquired 2/24/21, Cost \$1,785,000) ^{(a) (c) (d)}	178,500	1,170,960
PAR Technology Corp. ^{(a) (b)}	35,796	2,201,812
Rapid7, Inc. ^(a)	50,339	5,689,314
Telos Corp. ^{(a) (b)}	42,237	1,200,376
Varonis Systems, Inc. ^(a)	154,631	9,409,296
		<u>28,522,245</u>
Semiconductors — 5.8%		
Ambarella, Inc. ^(a)	32,114	5,001,434
Entegris, Inc.	11,958	1,505,512
FormFactor, Inc. ^(a)	59,717	2,229,236
Lattice Semiconductor Corp. ^(a)	122,001	7,887,365
MACOM Technology Solutions Holdings, Inc. ^(a)	58,081	3,767,714
MKS Instruments, Inc.	24,168	3,647,193
Nova Ltd. ^{(a) (b)}	25,602	2,618,828

Power Integrations, Inc.	46,938	4,646,393
SiTime Corp. ^(a)	5,150	1,051,475
Synaptics, Inc. ^(a)	26,312	4,729,056
Tower Semiconductor Ltd. ^(a)	234,483	7,011,042
		<u>44,095,248</u>
Software — 9.9%		
Avalara, Inc. ^(a)	25,908	4,527,941
Bandwidth, Inc. Class A ^{(a) (b)}	38,979	3,519,024
BigCommerce Holdings, Inc. ^(a)	27,326	1,383,789
Cardlytics, Inc. ^{(a) (b)}	42,527	3,569,716
Cerence, Inc. ^{(a) (b)}	30,491	2,930,490
Cloudera, Inc. ^(a)	191,884	3,064,387
Digital Turbine, Inc. ^{(a) (b)}	55,871	3,841,131
DigitalOcean Holdings, Inc. ^(a)	29,777	2,311,589
Health Catalyst, Inc. ^(a)	67,093	3,355,321
j2 Global, Inc. ^(a)	23,155	3,163,436
Jamf Holding Corp. ^{(a) (b)}	89,799	3,459,057
Kaltura, Inc. ^(a)	176,085	1,811,915
Latch, Inc., Lockup Shares (Acquired 6/04/21, Cost \$1,454,230) ^{(a) (c) (d)}	145,423	1,638,917
Lightspeed Commerce, Inc. ^{(a) (b)}	41,568	4,008,402
Manhattan Associates, Inc. ^(a)	55,927	8,558,509
Momentive Global, Inc. ^(a)	117,814	2,309,154
New Relic, Inc. ^(a)	27,793	1,994,704
Paymentus Holdings, Inc. ^(a)	15,652	385,665
Phreesia, Inc. ^(a)	45,417	2,802,229
Porch Group, Inc. (Acquired 12/23/20, Cost \$798,940) ^{(a) (c) (d)}	79,894	1,412,526
Porch Group, Inc. ^(a)	26,692	471,915
Signify Health, Inc. Class A ^(a)	14,412	257,542
Sprout Social, Inc. Class A ^(a)	68,458	8,348,453

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

MassMutual Small Cap Growth Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Verra Mobility Corp. ^(a)	182,380	\$ 2,748,467
Workiva, Inc. ^(a)	26,108	3,680,184
		<u>75,554,463</u>
		<u>148,171,956</u>
Utilities — 0.3%		
Electric — 0.3%		
Portland General Electric Co.	50,212	<u>2,359,462</u>
TOTAL COMMON STOCK (Cost \$587,144,083)		<u>732,602,641</u>
TOTAL EQUITIES (Cost \$587,144,083)		<u>732,602,641</u>
MUTUAL FUNDS — 4.1%		
Diversified Financial Services — 4.1%		
iShares Russell 2000 ETF ^(b)	29,184	6,384,000
iShares Russell 2000 Growth ETF ^(b)	25,915	7,608,385
State Street Navigator Securities Lending Government Money Market Portfolio ^(c)	17,312,033	<u>17,312,033</u>
TOTAL MUTUAL FUNDS (Cost \$31,535,056)		<u>31,304,418</u>
TOTAL LONG-TERM INVESTMENTS (Cost \$618,679,139)		<u>763,907,059</u>
	Principal Amount	
SHORT-TERM INVESTMENTS — 2.2%		
Repurchase Agreement — 2.2%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(f)	\$ 16,868,318	<u>16,868,318</u>
TOTAL SHORT-TERM INVESTMENTS (Cost \$16,868,318)		<u>16,868,318</u>
TOTAL INVESTMENTS — 102.4% (Cost \$635,547,457) ^(g)		780,775,377
Other Assets/(Liabilities) — (2.4)%		<u>(18,262,012)</u>
NET ASSETS — 100.0%		<u>\$ 762,513,365</u>

Abbreviation Legend

ADR American Depositary Receipt

ETF Exchange-Traded Fund

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

(a) Non-income producing security.

(b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$49,932,788 or 6.55% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$33,763,215 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. (Note 2).

(c) This security is fair valued in good faith in accordance with procedures approved by the Board of Trustees. At September 30, 2021, these securities amounted to a value of \$4,531,700 or 0.59% of net assets.

(d) Restricted security. Certain securities are restricted as to resale. At September 30, 2021, these securities amounted to a value of \$4,531,700 or 0.59% of net assets. The Fund generally bears the costs, if any, associated with the disposition of restricted securities.

(e) Represents investment of security lending cash collateral. (Note 2).

(f) Maturity value of \$16,868,318. Collateralized by U.S. Government Agency obligations with a rate of 0.500%, maturity date of 5/31/27, and an aggregate market value, including accrued interest, of \$17,205,787.

(g) See Note 6 for aggregate cost for federal tax purposes.

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

MM MSCI EAFE International Index Fund — Portfolio of Investments

September 30, 2021

EQUITIES — 98.0%**COMMON STOCK — 97.4%****Australia — 6.6%**

	Number of Shares	Value
Afterpay Ltd. ^(a)	2,522	\$ 218,181
The AGL Energy Ltd.	7,234	29,940
Ampol Ltd.	2,912	58,437
APA Group	13,088	82,171
Aristocrat Leisure Ltd.	6,652	222,672
ASX Ltd.	2,234	130,503
Aurizon Holdings Ltd.	21,848	59,505
AusNet Services Ltd.	22,416	40,996
Australia & New Zealand Banking Group Ltd.	33,162	669,043
BHP Group Ltd. ^(b)	34,375	923,908
BlueScope Steel Ltd.	5,995	86,973
Brambles Ltd.	17,378	135,165
Cochlear Ltd.	758	119,720
Coles Group Ltd.	15,551	189,783
Commonwealth Bank of Australia	20,703	1,542,777
Computershare Ltd.	6,056	79,254
Crown Resorts Ltd. ^{(a) (b)}	4,509	31,187
CSL Ltd.	5,310	1,119,758
Dexus	12,765	98,768
Domino's Pizza Enterprises Ltd.	743	85,664
Endeavour Group Ltd.	15,205	76,352
Evolution Mining Ltd.	20,954	53,100
Fortescue Metals Group Ltd.	20,299	214,064
Goodman Group	19,383	300,890
The GPT Group	21,615	78,744
Insurance Australia Group Ltd.	28,277	99,650
Lendlease Corp Ltd.	7,587	58,892
Macquarie Group Ltd.	4,009	525,991
Magellan Financial Group Ltd.	1,634	41,645
Medibank Pvt. Ltd.	33,970	87,831
Mirvac Group	48,346	103,718
National Australia Bank Ltd.	38,456	766,440
Newcrest Mining Ltd.	9,480	155,419
Northern Star Resources Ltd.	13,409	82,596
Orica Ltd.	4,653	45,861
Origin Energy Ltd.	21,305	71,802
Qantas Airways Ltd. ^(a)	11,575	47,311
QBE Insurance Group Ltd.	17,060	142,323
Ramsay Health Care Ltd.	2,237	112,527
REA Group Ltd.	575	65,380
Reece Ltd.	3,596	49,019
Rio Tinto Ltd.	4,321	307,050
Santos Ltd.	20,975	108,142
Scentre Group	63,066	135,697

	Number of Shares	Value
SEEK Ltd.	4,025	\$ 89,602
Sonic Healthcare Ltd.	5,198	152,612
South32 Ltd.	54,494	138,320
Stockland	29,016	92,785
Suncorp Group Ltd.	15,653	140,594
Sydney Airport ^(a)	15,730	93,440
Tabcorp Holdings Ltd.	25,053	88,674
Telstra Corp. Ltd.	48,267	136,041
Transurban Group	31,881	323,242
Transurban Group ^{(a) (c)}	3,636	36,865
Treasury Wine Estates Ltd.	8,820	78,409
Vicinity Centres	48,045	57,244
Washington H Soul Pattinson & Co. Ltd. ^(b)	2,605	73,516
Wesfarmers Ltd.	13,233	532,528
Westpac Banking Corp.	42,784	795,584
WiseTech Global Ltd.	1,698	65,420
Woodside Petroleum Ltd.	11,377	195,773

Woolworths Group Ltd.	14,798	420,188
		<u>13,165,686</u>
Austria — 0.2%		
Erste Group Bank AG	3,212	140,274
OMV AG	1,637	98,367
Raiffeisen Bank International AG	1,797	46,749
Verbund AG	804	81,216
voestalpine AG	1,417	52,081
		<u>418,687</u>
Belgium — 0.8%		
Ageas SA	1,960	97,000
Anheuser-Busch InBev SA	8,860	500,396
Elia Group SA/NV	319	38,101
Etablissements Franz Colruyt NV ^(b)	676	34,437
Groupe Bruxelles Lambert SA	1,286	141,382
KBC Group NV	2,899	260,259
Proximus SADP	1,822	36,022
Sofina SA	188	74,582
Solvay SA	848	105,520
UCB SA	1,469	163,448
Umicore SA	2,273	134,694
		<u>1,585,841</u>
Bermuda — 0.1%		
CK Infrastructure Holdings Ltd.	8,000	44,448
Hongkong Land Holdings Ltd.	12,300	58,866
Jardine Matheson Holdings Ltd.	2,600	136,736
		<u>240,050</u>
Cayman Islands — 0.6%		
Budweiser Brewing Co. APAC Ltd. ^(d)	21,025	52,921

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

MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Chow Tai Fook Jewellery Group Ltd.	20,200	\$ 38,457
CK Asset Holdings Ltd.	23,245	133,594
CK Hutchison Holdings Ltd.	31,745	210,511
ESR Cayman Ltd. ^{(a) (d)}	23,600	71,244
Futu Holdings Ltd. ADR ^(a)	616	56,068
Melco Resorts & Entertainment Ltd. ADR ^(a)	2,717	27,822
Sands China Ltd. ^(a)	27,600	56,562
Sea Ltd. ADR ^(a)	799	254,665
SITC International Holdings Co. Ltd.	16,000	57,043
WH Group Ltd. ^(d)	97,072	69,056
Wharf Real Estate Investment Co. Ltd.	20,000	103,326
Wynn Macau Ltd. ^(a)	19,600	16,371
Xinyi Glass Holdings Co. Ltd.	22,000	65,351
		<u>1,212,991</u>
Denmark — 2.6%		
Ambu A/S Class B	2,054	60,671
AP Moller - Maersk A/S Class A	36	92,114
AP Moller - Maersk A/S Class B	68	183,938
Carlsberg A/S Class B	1,152	187,402
Chr Hansen Holding A/S	1,298	105,999
Coloplast A/S Class B	1,380	216,300
Danske Bank A/S	7,926	133,610
Demant A/S ^(a)	1,191	59,980
DSV A/S	2,352	561,531
Genmab A/S ^(a)	761	332,469
GN Store Nord A/S	1,468	100,046
Novo Nordisk A/S Class B	19,647	1,889,748
Novozymes A/S Class B	2,464	168,692
Orsted A/S ^(d)	2,201	290,401
Pandora A/S	1,163	141,037
ROCKWOOL International A/S Class B	100	42,758
Tryg A/S	4,387	99,663
Vestas Wind Systems A/S	11,746	470,269
		<u>5,136,628</u>
Finland — 1.2%		
Elisa OYJ	1,735	107,721
Fortum OYJ	5,145	156,470
Kesko OYJ Class B	3,279	113,185
Kone OYJ Class B	3,954	277,261
Neste OYJ	4,909	277,059
Nokia OYJ ^(a)	62,843	345,725
Nordea Bank Abp	37,713	484,002
Orion OYJ Class B	1,311	51,891
Sampo OYJ Class A	5,793	287,450
Stora Enso OYJ Class R	6,640	110,252
UPM-Kymmene OYJ	6,262	221,251
	Number of Shares	Value
Wartsila OYJ Abp	5,587	\$ 66,904
		<u>2,499,171</u>
France — 10.1%		
Accor SA ^(a)	2,054	72,712
Aeroports de Paris ^(a)	374	47,472
Air Liquide SA	5,530	884,839
Alstom SA ^(b)	3,749	142,242
Amundi SA ^(d)	671	56,583
Arkema SA	749	99,080
Atos SE	1,194	63,576
AXA SA	22,528	626,729
BioMerieux	506	57,467
BNP Paribas SA ^(b)	13,077	837,653
Bolllore SA	9,232	53,384
Bouygues SA	2,626	108,370
Bureau Veritas SA	3,315	101,743
Capgemini SE	1,865	387,864

Carrefour SA	7,496	134,931
Cie de Saint-Gobain	5,903	397,579
Cie Generale des Etablissements Michelin SCA	1,965	301,570
CNP Assurances	2,157	34,217
Covivio	612	51,175
Credit Agricole SA	13,439	185,417
Danone SA	7,603	518,942
Dassault Aviation SA	280	31,415
Dassault Systemes SE	7,712	404,315
Edenred	2,884	155,334
Eiffage SA	1,012	102,092
Electricite de France SA	5,850	73,463
Engie SA	21,264	279,079
EssilorLuxottica SA	3,330	636,751
Eurazeo SE	498	46,803
Faurecia SE	249	11,818
Faurecia SE	1,196	55,739
Gecina SA	532	71,319
Getlink SE	4,856	76,027
Hermes International	370	511,368
Ipsen SA	464	44,297
Kering SA	875	622,323
Klepierre	2,496	55,574
L'Oreal SA	2,942	1,214,229
La Francaise des Jeux SAEM ^(d)	1,166	59,979
Legrand SA	3,106	333,129
LVMH Moet Hennessy Louis Vuitton SE	3,240	2,316,808
Orange SA	23,052	249,730
Orpea SA	623	72,152
Pernod Ricard SA	2,426	530,535

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

MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Publicis Groupe SA	2,630	\$ 177,114
Remy Cointreau SA	287	55,626
Renault SA ^(a)	2,161	77,085
Safran SA	3,977	498,637
Sanofi	13,219	1,272,522
Sartorius Stedim Biotech	321	179,177
Schneider Electric SE	6,282	1,044,446
SCOR SE	1,980	56,749
SEB SA	340	47,941
Societe Generale SA	9,356	293,751
Sodexo SA ^(a)	1,073	93,956
Suez SA	4,229	96,439
Teleperformance	679	267,157
Thales SA	1,220	117,818
TotalEnergies SE	29,082	1,393,583
Ubisoft Entertainment SA ^(a)	1,132	67,899
Unibail Rodamco Westfield ^(a)	9,567	36,549
Unibail Rodamco Westfield ^(a)	937	68,532
Valeo SE	2,551	71,188
Veolia Environnement SA	6,339	193,991
Vinci SA	6,182	640,356
Vivendi SE ^(b)	8,547	107,806
Wendel SE	330	45,759
Worldline SA ^{(a) (d)}	2,730	208,288
		<u>20,230,193</u>
Germany — 8.3%		
adidas AG	2,221	699,852
Allianz SE Registered	4,808	1,084,414
BASF SE	10,690	814,501
Bayer AG Registered	11,432	623,523
Bayerische Motoren Werke AG	3,851	369,634
Bechtle AG	960	65,862
Beiersdorf AG	1,157	125,088
Brenntag SE	1,782	166,229
Carl Zeiss Meditec AG	458	88,040
Commerzbank AG ^(a)	11,272	75,081
Continental AG ^(a)	1,258	137,916
Covestro AG ^(d)	2,233	153,366
Daimler AG Registered	9,976	886,820
Delivery Hero SE ^{(a) (d)}	1,924	246,378
Deutsche Bank AG Registered ^(a)	24,047	308,409
Deutsche Boerse AG	2,210	359,758
Deutsche Lufthansa AG Registered ^{(a) (b)}	3,637	25,024
Deutsche Post AG Registered	11,564	728,839
Deutsche Telekom AG Registered	38,876	783,824
Deutsche Wohnen SE	3,979	243,921
E.ON SE	26,173	320,213
Evonik Industries AG	2,526	80,007
	Number of Shares	Value
Fresenius Medical Care AG & Co. KGaA	2,383	\$ 167,934
Fresenius SE & Co. KGaA	4,869	234,098
GEA Group AG	1,883	86,295
Hannover Rueck SE	734	128,556
HeidelbergCement AG	1,765	132,373
HelloFresh SE ^(a)	1,976	182,939
Henkel AG & Co. KGaA	1,223	105,523
Infineon Technologies AG	15,158	623,132
KION Group AG	814	76,171
Knorr-Bremse AG	885	94,969
LANXESS AG	893	60,724
LEG Immobilien SE	815	115,308
Merck KGaA	1,504	327,058
MTU Aero Engines AG	617	139,511
Muenchener Rueckversicherungs-Gesellschaft AG in Muenchen Registered	1,632	447,323
Nemetschek SE	696	73,152

Puma SE	250	27,940
Puma SE	980	109,454
Rational AG	64	60,348
RWE AG	7,438	262,943
SAP SE	12,178	1,649,798
Scout24 AG (d)	975	67,677
Siemens AG Registered	8,923	1,466,735
Siemens Energy AG (a)	4,870	130,868
Siemens Healthineers AG (d)	3,274	213,040
Symrise AG	1,523	200,918
Teamviewer AG (a) (d)	2,010	59,268
Telefonica Deutschland Holding AG	12,247	34,861
Uniper SE	1,102	45,998
United Internet AG Registered	1,173	45,643
Volkswagen AG	399	123,882
Vonovia SE	6,361	382,380
Zalando SE (a) (d)	2,634	242,048
		<u>16,505,566</u>
Hong Kong — 2.3%		
AIA Group Ltd.	141,380	1,627,869
BOC Hong Kong Holdings Ltd.	42,500	127,323
CLP Holdings Ltd.	18,999	182,739
Galaxy Entertainment Group Ltd. (a)	26,000	131,184
Hang Lung Properties Ltd.	21,000	47,737
Hang Seng Bank Ltd.	8,900	151,893
Henderson Land Development Co. Ltd.	17,325	65,767
HK Electric Investments & HK Electric Investments Ltd. Class SS	31,706	31,476
HKT Trust & HKT Ltd.	41,840	57,221

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

MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Hong Kong & China Gas Co. Ltd.	131,290	\$ 198,868
Hong Kong Exchanges & Clearing Ltd.	14,081	854,692
Link REIT	24,006	205,160
MTR Corp. Ltd.	17,528	94,103
New World Development Co. Ltd.	18,722	75,969
Power Assets Holdings Ltd.	15,500	90,839
Sino Land Co. Ltd.	40,205	54,094
SJM Holdings Ltd. ^(a)	25,000	16,915
Sun Hung Kai Properties Ltd.	14,758	183,403
Swire Pacific Ltd. Class A	6,000	35,563
Swire Properties Ltd.	14,196	35,520
Techtronic Industries Co. Ltd.	15,903	311,754
		<u>4,580,089</u>
Ireland — 0.8%		
CRH PLC	9,109	424,898
DCC PLC	1,171	96,923
Flutter Entertainment PLC ^(a)	1,938	383,127
James Hardie Industries PLC	5,177	185,693
Kerry Group PLC Class A	1,851	247,819
Kingspan Group PLC	1,798	177,852
Smurfit Kappa Group PLC	2,843	149,036
		<u>1,665,348</u>
Israel — 0.6%		
Azrieli Group Ltd.	461	41,452
Bank Hapoalim B.M.	12,669	111,225
Bank Leumi Le-Israel BM	16,272	138,125
Check Point Software Technologies Ltd. ^(a)	1,308	147,856
CyberArk Software Ltd. ^(a)	475	74,965
Elbit Systems Ltd.	334	48,458
ICL Group Ltd.	7,427	54,022
Israel Discount Bank Ltd. Class A ^(a)	13,544	71,509
Mizrahi Tefahot Bank Ltd.	1,761	59,289
Nice Ltd. ^(a)	755	213,575
Teva Pharmaceutical Industries Ltd. Sponsored ADR ^(a)	13,420	130,711
Wix.com Ltd. ^(a)	682	133,652
		<u>1,224,839</u>
Italy — 1.8%		
Amplifon SpA	1,515	72,197
Assicurazioni Generali SpA	12,859	273,573
Atlantia SpA ^(a)	5,678	107,341
DiaSorin SpA	288	60,445
Enel SpA	94,769	727,592
Eni SpA	29,114	387,631
FinecoBank Banca Fineco SpA ^(a)	7,257	131,515
Infrastrutture Wireless Italiane SpA ^(d)	4,035	44,997
	Number of Shares	Value
Intesa Sanpaolo SpA	190,886	\$ 541,546
Mediobanca Banca di Credito Finanziario SpA ^(a)	7,537	91,046
Moncler SpA	2,374	145,196
Nexi SpA ^{(a) (d)}	4,991	93,116
Poste Italiane SpA ^(d)	6,446	88,716
Prysmian SpA	3,082	108,119
Recordati Industria Chimica e Farmaceutica SpA	1,234	71,779
Snam SpA	24,584	136,271
Telecom Italia SpA	101,524	39,786
Terna - Rete Elettrica Nazionale	15,940	113,060
UniCredit SpA	25,326	335,001
		<u>3,568,927</u>
Japan — 23.7%		
ABC-Mart, Inc.	400	22,646
Acom Co. Ltd. ^(b)	5,000	18,343
Advantest Corp.	2,300	206,061
Aeon Co. Ltd.	7,700	202,638
AGC, Inc.	2,300	117,719

Aisin Corp.	1,800	65,419
Ajinomoto Co. Inc.	5,400	159,785
ANA Holdings, Inc. (a)	1,900	49,329
Asahi Group Holdings Ltd.	5,300	256,742
Asahi Intecc Co. Ltd.	2,500	68,589
Asahi Kasei Corp.	14,500	154,769
Astellas Pharma, Inc.	21,700	357,804
Azbil Corp.	1,500	64,474
Bandai Namco Holdings, Inc.	2,300	172,718
Bridgestone Corp.	6,700	317,756
Brother Industries Ltd.	2,900	63,808
Canon, Inc. (b)	11,600	285,327
Capcom Co. Ltd.	1,900	52,773
Casio Computer Co. Ltd. (b)	2,000	33,163
Central Japan Railway Co.	1,700	271,713
The Chiba Bank Ltd.	6,200	39,920
Chubu Electric Power Co. Inc.	7,100	84,221
Chugai Pharmaceutical Co. Ltd.	7,700	282,070
Concordia Financial Group Ltd.	12,700	50,108
Cosmos Pharmaceutical Corp.	200	34,109
CyberAgent, Inc.	4,600	89,089
Dai Nippon Printing Co. Ltd.	2,400	58,122
Dai-ichi Life Holdings, Inc.	11,800	256,933
Daifuku Co. Ltd.	1,200	112,839
Daiichi Sankyo Co. Ltd.	20,500	546,895
Daikin Industries Ltd.	2,900	623,757
Daito Trust Construction Co. Ltd.	800	93,403
Daiwa House Industry Co. Ltd.	6,600	220,417
Daiwa House REIT Investment Corp.	23	67,394

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

MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Daiwa Securities Group, Inc.	16,400	\$ 95,797
Denso Corp.	5,000	327,778
Dentsu Group, Inc.	2,600	100,026
Disco Corp.	300	83,976
East Japan Railway Co.	3,600	252,523
Eisai Co. Ltd.	2,700	203,325
ENEOS Holdings, Inc.	35,600	145,371
FANUC Corp.	2,200	481,610
Fast Retailing Co. Ltd.	700	515,917
Fuji Electric Co. Ltd.	1,400	63,794
FUJIFILM Holdings Corp.	4,200	362,166
Fujitsu Ltd.	2,300	417,704
GLP J-REIT	51	83,832
GMO Payment Gateway, Inc.	500	63,348
Hakuhodo DY Holdings, Inc. ^(b)	2,900	50,031
Hamamatsu Photonics KK	1,700	105,458
Hankyu Hanshin Holdings, Inc.	2,800	88,343
Harmonic Drive Systems, Inc. ^(b)	500	24,114
Hikari Tsushin, Inc.	200	33,820
Hino Motors Ltd.	3,600	33,769
Hirose Electric Co. Ltd.	325	54,120
Hisamitsu Pharmaceutical Co., Inc.	600	22,759
Hitachi Construction Machinery Co. Ltd.	1,300	36,825
Hitachi Ltd.	11,300	670,020
Hitachi Metals Ltd. ^(a)	2,600	50,378
Honda Motor Co. Ltd.	19,100	589,050
Hoshizaki Corp.	600	54,631
Hoya Corp.	4,300	672,511
Hulic Co. Ltd.	3,200	35,675
Ibiden Co. Ltd.	1,300	71,866
Idemitsu Kosan Co. Ltd.	2,571	67,873
Iida Group Holdings Co. Ltd.	1,800	46,329
Inpex Corp.	11,400	89,219
Isuzu Motors Ltd.	6,800	89,338
Ito En Ltd.	700	46,484
ITOCHU Corp.	13,900	407,152
Itochu Techno-Solutions Corp.	1,200	39,176
Japan Airlines Co. Ltd. ^(a)	1,800	42,846
Japan Exchange Group, Inc.	5,800	143,944
Japan Metropolitan Fund Invest	87	83,638
Japan Post Bank Co. Ltd.	5,000	42,792
Japan Post Holdings Co. Ltd.	18,300	154,023
Japan Post Insurance Co. Ltd.	2,600	47,055
Japan Real Estate Investment Corp.	15	89,851
Japan Tobacco, Inc.	14,200	278,809
JFE Holdings, Inc.	5,400	80,575
JSR Corp.	2,500	90,623
Kajima Corp.	5,500	70,876

	Number of Shares	Value
Kakaku.com , Inc.	1,700	\$ 55,035
The Kansai Electric Power Co., Inc.	8,300	80,547
Kansai Paint Co. Ltd.	1,900	47,243
Kao Corp.	5,700	339,617
KDDI Corp.	18,900	624,598
Keio Corp.	1,200	64,244
Keisei Electric Railway Co. Ltd.	1,600	53,073
Keyence Corp.	2,300	1,378,126
Kikkoman Corp. ^(b)	1,700	138,151
Kintetsu Group Holdings Co. Ltd. ^(a)	2,100	70,881
Kirin Holdings Co. Ltd.	9,600	178,310
Kobayashi Pharmaceutical Co. Ltd.	600	47,517
Kobe Bussan Co. Ltd.	1,600	52,237
Koei Tecmo Holdings Co. Ltd.	580	27,589
Koito Manufacturing Co. Ltd.	1,300	78,168
Komatsu Ltd.	10,000	240,456
Konami Holdings Corp.	1,100	69,029
Kose Corp.	400	47,944

Kubota Corp.	12,100	258,132
Kurita Water Industries Ltd.	1,200	57,976
Kyocera Corp.	3,700	231,305
Kyowa Kirin Co. Ltd.	3,300	119,000
Lasertec Corp.	900	204,434
Lawson, Inc.	600	29,459
Lion Corp.	2,700	43,680
LIXIL Group Corp.	3,000	87,177
M3, Inc.	5,100	364,087
Makita Corp.	2,700	147,343
Marubeni Corp.	18,200	149,329
Mazda Motor Corp. ^(a)	6,100	53,120
McDonald's Holdings Co. Japan Ltd.	1,000	47,200
Medipal Holdings Corp.	2,100	39,613
MEIJI Holdings Co. Ltd.	1,500	96,945
Mercari, Inc. ^(a)	1,200	66,062
MinebeaMitsumi, Inc.	4,200	107,244
MISUMI Group, Inc.	3,300	140,231
Mitsubishi Chemical Holding Corp.	14,800	135,236
Mitsubishi Corp.	14,800	462,984
Mitsubishi Electric Corp.	21,000	292,077
Mitsubishi Estate Co. Ltd.	13,800	219,767
Mitsubishi Gas Chemical Co., Inc.	1,900	37,523
Mitsubishi HC Capital, Inc.	8,100	42,566
Mitsubishi Heavy Industries Ltd.	3,600	97,195
Mitsubishi UFJ Financial Group, Inc.	142,800	833,730
Mitsui & Co. Ltd.	17,800	386,139
Mitsui Chemicals, Inc.	2,300	77,222
Mitsui Fudosan Co. Ltd.	10,800	257,255
Miura Co. Ltd.	1,100	44,133
Mizuho Financial Group, Inc.	28,200	396,999

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

MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
MonotaRO Co. Ltd.	2,700	\$ 60,926
MS&AD Insurance Group Holdings, Inc.	5,100	170,168
Murata Manufacturing Co. Ltd.	6,700	596,399
Nabtesco Corp.	1,200	45,457
NEC Corp.	2,800	151,999
Nexon Co. Ltd.	5,500	88,736
NGK Insulators Ltd.	3,200	54,342
NH Foods Ltd.	1,000	37,827
Nidec Corp.	5,200	576,863
Nihon M&A Center, Inc.	3,600	106,083
Nintendo Co. Ltd.	1,300	632,397
Nippon Building Fund, Inc.	17	110,427
Nippon Express Co. Ltd.	900	62,008
Nippon Paint Holdings Co. Ltd.	8,000	87,026
Nippon Prologis REIT, Inc.	23	76,913
Nippon Sanso Holdings Corp.	1,800	45,298
Nippon Shinyaku Co. Ltd.	600	49,986
Nippon Steel Corp.	9,900	177,178
Nippon Telegraph & Telephone Corp.	15,100	417,440
Nippon Yusen KK	1,900	142,915
Nissan Chemical Corp.	1,500	87,553
Nissan Motor Co. Ltd. ^(a)	26,800	134,406
Nisshin Seifun Group, Inc.	2,400	40,012
Nissin Foods Holdings Co. Ltd.	700	56,267
Nitori Holdings Co. Ltd.	900	177,059
Nitto Denko Corp.	1,700	121,144
Nomura Holdings, Inc.	35,800	175,963
Nomura Real Estate Holdings, Inc.	1,300	33,878
Nomura Real Estate Master Fund, Inc.	49	70,610
Nomura Research Institute Ltd.	4,000	147,418
NSK Ltd.	4,600	31,219
NTT Data Corp.	7,100	137,558
Obayashi Corp.	7,400	61,444
Obic Co. Ltd.	800	153,078
Odakyu Electric Railway Co. Ltd.	3,200	74,129
Oji Holdings Corp.	9,900	49,955
Olympus Corp.	13,500	296,477
Omron Corp.	2,200	218,058
Ono Pharmaceutical Co. Ltd.	4,100	93,510
Oracle Corp.	400	35,195
Oriental Land Co. Ltd.	2,300	372,485
ORIX Corp.	14,400	269,107
Orix JREIT, Inc.	32	55,742
Osaka Gas Co. Ltd.	4,100	75,361
Otsuka Corp.	1,400	71,974
Otsuka Holdings Co. Ltd.	4,600	196,092
Pan Pacific International Holding Corp.	4,500	93,264

	Number of Shares	Value
Panasonic Corp.	25,700	\$ 318,992
PeptiDream, Inc. ^(a)	1,200	39,067
Persol Holdings Co. Ltd.	2,100	52,620
Pigeon Corp.	1,400	32,603
Pola Orbis Holdings, Inc.	1,200	27,679
Rakuten Group, Inc.	10,000	96,767
Recruit Holdings Co. Ltd.	15,800	963,410
Renesas Electronics Corp. ^(a)	14,600	180,146
Resona Holdings, Inc.	26,100	103,879
Ricoh Co. Ltd.	7,600	77,988
Rinnai Corp.	400	43,836
Rohm Co. Ltd.	1,000	94,206
Ryohin Keikaku Co. Ltd.	3,100	68,969
Santen Pharmaceutical Co. Ltd.	4,400	62,090
SBI Holdings, Inc. ^(b)	2,642	65,184
SCSK Corp.	1,800	38,064
Secom Co. Ltd.	2,500	181,410
Seiko Epson Corp.	3,400	68,596
Sekisui Chemical Co. Ltd.	4,500	77,477

Sekisui House Ltd.	7,100	149,200
Seven & i Holdings Co. Ltd.	8,800	399,340
SG Holdings Co. Ltd.	3,600	102,366
Sharp Corp.	2,600	32,916
Shimadzu Corp.	2,800	122,994
Shimano, Inc.	900	262,188
Shimizu Corp.	6,700	50,494
Shin-Etsu Chemical Co. Ltd.	4,100	691,525
Shionogi & Co. Ltd.	3,000	205,516
Shiseido Co. Ltd.	4,600	310,024
The Shizuoka Bank Ltd. ^(b)	5,500	45,249
SMC Corp.	700	437,939
Softbank Corp.	33,700	457,554
SoftBank Group Corp.	14,100	814,802
Sohgo Security Services Co. Ltd.	900	40,637
Sompo Holdings, Inc.	3,700	160,244
Sony Group Corp.	14,700	1,637,013
Square Enix Holdings Co. Ltd.	1,000	52,694
Stanley Electric Co. Ltd.	1,300	32,769
Subaru Corp.	7,000	129,994
SUMCO Corp.	3,300	66,257
Sumitomo Chemical Co. Ltd.	16,700	87,115
Sumitomo Corp.	13,400	187,349
Sumitomo Dainippon Pharma Co. Ltd.	2,300	41,094
Sumitomo Electric Industries Ltd.	8,600	114,725
Sumitomo Metal Mining Co. Ltd.	3,000	108,263
Sumitomo Mitsui Financial Group, Inc.	15,300	535,276
Sumitomo Mitsui Trust Holdings, Inc.	3,900	133,566

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

MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Sumitomo Realty & Development Co. Ltd.	3,500	\$ 127,716
Suntory Beverage & Food Ltd.	1,700	70,622
Suzuki Motor Corp.	4,300	191,665
Sysmex Corp.	2,000	247,062
T&D Holdings, Inc.	6,000	81,946
Taisei Corp.	2,200	70,836
Taisho Pharmaceutical Holdings Co. Ltd.	400	23,387
Takeda Pharmaceutical Co. Ltd.	18,341	607,964
TDK Corp.	4,500	162,572
Terumo Corp.	7,500	352,609
THK Co. Ltd.	1,400	30,867
TIS, Inc.	2,700	73,797
Tobu Railway Co. Ltd.	2,200	59,326
Toho Co. Ltd.	1,400	66,047
Toho Gas Co. Ltd.	900	39,317
Tohoku Electric Power Co., Inc.	5,400	39,787
Tokio Marine Holdings, Inc.	7,300	391,481
Tokyo Century Corp.	500	28,222
Tokyo Electric Power Co. Holdings, Inc. ^(a)	18,500	53,059
Tokyo Electron Ltd.	1,700	749,364
Tokyo Gas Co. Ltd.	4,100	76,354
Tokyu Corp.	5,600	83,392
TOPPAN, INC.	3,200	54,425
Toray Industries, Inc.	15,600	99,630
Toshiba Corp.	4,800	201,283
Tosoh Corp.	3,200	58,068
TOTO Ltd.	1,700	80,771
Toyo Suisan Kaisha Ltd.	1,100	48,856
Toyota Industries Corp.	1,700	139,666
Toyota Motor Corp.	124,000	2,218,138
Toyota Tsusho Corp.	2,400	100,580
Trend Micro, Inc.	1,600	89,258
Tsuruha Holdings, Inc.	500	61,770
Unicharm Corp.	4,700	208,454
United Urban Investment Corp.	38	51,408
USS Co. Ltd.	2,700	46,192
Welcia Holdings Co. Ltd.	1,200	43,144
West Japan Railway Co.	2,500	124,493
Yakult Honsha Co. Ltd.	1,400	70,981
Yamada Denki Co. Ltd.	8,200	34,514
Yamaha Corp.	1,600	100,589
Yamaha Motor Co. Ltd.	3,400	94,672
Yamato Holdings Co. Ltd.	3,300	83,661
Yaskawa Electric Corp.	2,900	139,504
Yokogawa Electric Corp.	2,800	48,958
Z Holdings Corp.	31,200	200,226

	Number of Shares	Value
ZOZO, Inc.	1,500	\$ 56,167
		47,424,153

Luxembourg — 0.3%

ArcelorMittal SA	8,300	250,442
Aroundtown SA	11,809	81,584
Eurofins Scientific SE	1,553	199,152
InPost SA ^(a)	2,436	40,182
Tenaris SA	5,770	60,847
		632,207

Netherlands — 6.0%

ABN AMRO Bank NV ^{(a) (d)}	5,306	76,347
Adyen NV ^{(a) (d)}	230	639,529
Aegon NV	20,722	106,386
Airbus SE ^(a)	6,875	902,654
Akzo Nobel NV	2,249	244,895
Argenx SE ^(a)	546	164,781
ASM International NV	548	213,961
ASML Holding NV	4,895	3,610,906
CNH Industrial NV	11,824	200,207
Davide Campari-Milano NV	6,374	89,727

EXOR NV	1,237	104,238
Ferrari NV	34	7,118
Ferrari NV	1,469	307,197
Heineken Holding NV	1,294	112,486
Heineken NV ^(b)	3,011	313,002
ING Groep NV ^(b)	45,413	659,132
JDE Peet's NV	912	27,089
Just Eat Takeaway.com ^{(a) (d)}	2,076	151,279
Koninklijke Ahold Delhaize NV	12,214	404,935
Koninklijke DSM NV	2,043	408,352
Koninklijke KPN NV	41,166	129,100
Koninklijke Philips NV	10,611	470,310
Koninklijke Vopak NV	839	32,983
NN Group NV	3,142	163,973
Prosus NV	10,860	855,314
QIAGEN NV ^(a)	2,657	138,149
Randstad NV ^(b)	1,335	89,219
Stellantis NV	12,500	238,687
Stellantis NV ^(b)	11,145	212,870
STMicroelectronics NV	7,923	345,423
Universal Music Group NV ^(a)	8,547	228,848
Wolters Kluwer NV	3,126	330,427
		<u>11,979,524</u>
New Zealand — 0.3%		
The a2 Milk Co. Ltd. ^{(a) (b)}	9,580	42,652
Auckland International Airport Ltd. ^(a)	13,821	74,302
Fisher & Paykel Healthcare Corp. Ltd.	6,688	147,057
Mercury NZ Ltd.	8,257	36,936

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

MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Meridian Energy Ltd.	13,498	\$ 45,770
Ryman Healthcare Ltd.	5,035	52,088
Spark New Zealand Ltd.	22,717	74,897
Xero Ltd. ^(a)	1,539	153,371
		<u>627,073</u>
Norway — 0.7%		
Adevinta ASA ^(a)	3,348	57,289
DNB Bank ASA	10,983	249,349
Equinor ASA	11,436	291,428
Gjensidige Forsikring ASA	2,172	48,100
Mowi ASA	5,047	127,375
Norsk Hydro ASA	16,444	122,710
Orkla ASA	9,029	82,745
Schibsted ASA Class A	860	40,870
Schibsted ASA Class B	1,234	52,206
Telenor ASA	7,927	133,145
Yara International ASA ^(b)	1,963	97,156
		<u>1,302,373</u>
Papua New Guinea — 0.0%		
Oil Search Ltd.	24,061	76,165
Portugal — 0.1%		
Banco Espirito Santo SA ^{(a) (c)}	39,664	—
EDP - Energias de Portugal SA	31,373	164,573
Galp Energia SGPS SA	6,303	71,381
Jeronimo Martins SGPS SA	3,060	60,933
		<u>296,887</u>
Singapore — 1.0%		
Ascendas REIT	40,032	88,109
CapitaLand Integrated Commercial Trust	54,634	81,213
Capitaland Investment Ltd. ^(a)	28,646	71,731
City Developments Ltd.	4,900	24,729
DBS Group Holdings, Ltd.	21,222	471,254
Genting Singapore Ltd.	77,400	40,768
Keppel Corp. Ltd.	17,800	67,643
Mapletree Commercial Trust	25,800	39,187
Mapletree Logistics Trust	35,500	52,954
Oversea-Chinese Banking Corp. Ltd.	39,087	327,213
Singapore Airlines Ltd. ^(a)	14,649	53,582
Singapore Exchange Ltd.	8,900	65,125
Singapore Technologies Engineering Ltd.	17,600	49,174
Singapore Telecommunications Ltd.	96,300	173,753
United Overseas Bank Ltd.	13,793	260,876
UOL Group Ltd.	5,769	29,000
Venture Corp. Ltd.	2,800	36,899
Wilmar International Ltd.	23,400	71,889
		<u>2,005,099</u>
	Number of Shares	Value
Spain — 2.4%		
ACS Actividades de Construcción y Servicios SA	3,047	\$ 81,695
Aena SME SA ^{(a) (d)}	857	147,825
Amadeus IT Group SA ^(a)	5,228	343,440
Banco Bilbao Vizcaya Argentaria SA ^(b)	77,473	511,052
Banco Santander SA	201,463	729,720
CaixaBank SA	51,883	160,882
Cellnex Telecom SA ^(d)	5,919	364,859
EDP Renovaveis SA	3,508	86,393
Enagas SA	3,123	69,408
Endesa SA	3,855	77,749
Ferrovial SA	5,652	163,921
Grifols SA	3,422	83,439
Iberdrola SA	68,961	688,752
Industria de Diseño Textil SA	12,708	462,349
Naturgy Energy Group SA	3,456	87,009
Red Electrica Corp. SA	5,267	105,279
Repsol SA	16,576	215,297
	2,992	75,629

Siemens Gamesa Renewable Energy SA ^(a)
Telefonica SA

59,687	278,199
	<u>4,732,897</u>

Sweden — 3.4%

Alfa Laval AB	3,633	135,374
Assa Abloy AB Class B	11,731	340,143
Atlas Copco AB Class A	7,914	480,066
Atlas Copco AB Class B	4,443	227,124
Boliden AB	3,316	106,676
Electrolux AB Series B ^(b)	2,492	57,546
Embracer Group AB ^(a)	5,466	52,546
Epiroc AB Class A	8,015	165,208
Epiroc AB Class B	4,369	77,195
EQT AB	3,376	139,057
Essity AB Class B	7,151	221,956
Evolution AB ^(d)	1,977	300,521
Fastighets AB Balder Class B ^(a)	1,291	77,435
Hennes & Mauritz AB Class B ^(a)	8,479	171,911
Hexagon AB Class B	22,847	352,031
Husqvarna AB Class B	5,064	60,413
ICA Gruppen AB	1,278	58,598
Industrivarden AB Class A	1,206	38,439
Industrivarden AB Class C	2,011	61,956
Investment AB Latour	1,869	57,829
Investor AB Class B	21,176	453,415
Kinnevik AB Class B ^(a)	2,963	104,472
L E Lundbergforetagen AB Class B	947	51,716
Lundin Energy AB ^(b)	2,396	88,943

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

MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Nibe Industrier AB Class B	16,625	\$ 208,824
Sandvik AB	13,076	298,422
Securitas AB Class B	3,748	59,441
Sinch AB ^{(a) (d)}	6,070	116,971
Skandinaviska Enskilda Banken AB Class A	18,929	266,712
Skanska AB Class B	3,813	95,568
SKF AB Class B	4,309	101,411
Svenska Cellulosa AB Class B	6,899	106,608
Svenska Handelsbanken AB Class A	16,894	189,512
Swedbank AB Class A	10,539	213,176
Swedish Match AB	18,199	159,607
Tele2 AB Class B ^(b)	5,545	81,912
Telefonaktiebolaget LM Ericsson Class B ^(b)	33,992	384,190
Telia Co AB	30,424	125,445
Volvo AB Class A	2,189	49,626
Volvo AB Class B	16,718	375,609
		<u>6,713,604</u>
Switzerland — 9.4%		
ABB Ltd. Registered	20,229	674,276
Adecco Group AG Registered	1,885	94,402
Alcon, Inc.	5,824	471,800
Baloise Holding AG Registered	562	85,691
Banque Cantonale Vaudoise Registered	368	27,986
Barry Callebaut AG Registered	43	97,284
Chocoladefabriken Lindt & Spruengli AG	12	134,429
Chocoladefabriken Lindt & Spruengli AG Registered	1	117,425
Cie Financiere Richemont SA Registered	6,085	627,445
Clariant AG	2,188	40,994
Coca-Cola HBC AG	2,245	72,158
Credit Suisse Group AG Registered	30,151	298,941
EMS-Chemie Holding AG Registered	85	80,005
Geberit AG Registered	433	318,152
Givaudan SA Registered	108	493,271
Holcim Ltd.	1,708	82,173
Holcim Ltd.	4,338	207,819
Julius Baer Group Ltd.	2,575	170,314
Kuehne & Nagel International AG Registered	635	215,771
Logitech International SA Registered ^(b)	2,012	178,191
Lonza Group AG Registered	868	650,298
Nestle SA Registered	33,647	4,048,370
Novartis AG Registered	25,894	2,124,349
Partners Group Holding AG	264	410,972
	Number of Shares	Value
Roche Holding AG	8,205	\$ 2,994,035
Roche Holding AG	371	152,323
Schindler Holding AG	489	130,851
Schindler Holding AG Registered	217	55,790
SGS SA Registered	71	206,451
Sika AG Registered ^(b)	1,652	522,519
Sonova Holding AG Registered	637	240,244
Straumann Holding AG Registered	120	214,741
The Swatch Group AG	363	95,156
The Swatch Group AG Registered	586	30,179
Swiss Life Holding AG Registered	370	187,622
Swiss Prime Site AG Registered	894	87,063
Swiss Re AG	3,505	298,563
Swisscom AG Registered	313	179,721
Temenos Group AG Registered	814	110,548
UBS Group AG Registered	42,683	682,073
Vifor Pharma AG	592	76,652
Zurich Insurance Group AG	1,757	716,414
		<u>18,703,461</u>
United Kingdom — 14.1%		
3i Group PLC	11,518	198,397
Abrdn PLC	26,646	91,481
Admiral Group PLC	2,365	98,700
Anglo American PLC	15,034	518,596

Antofagasta PLC	4,839	86,938
Ashtead Group PLC	5,227	396,503
Associated British Foods PLC	4,045	100,506
AstraZeneca PLC	18,075	2,175,952
Auto Trader Group PLC ^(d)	10,821	85,625
Aveva Group PLC	1,403	67,759
Aviva PLC	46,712	248,621
BAE Systems PLC	37,683	284,825
Barclays PLC	197,586	503,921
Barratt Developments PLC	11,648	102,787
Berkeley Group Holdings PLC	1,259	73,748
BHP Group PLC	24,583	612,689
BP PLC	235,807	1,068,217
British American Tobacco PLC	25,411	886,574
The British Land Co. PLC	9,913	65,471
BT Group PLC ^(a)	106,615	228,976
Bunzl PLC	3,898	128,769
Burberry Group PLC	4,618	112,441
Coca-Cola Europacific Partners PLC	2,367	130,871
Compass Group PLC ^(a)	20,680	423,119
Croda International PLC	1,626	185,682
Diageo PLC	27,223	1,311,687
Direct Line Insurance Group PLC	14,653	57,170
Entain PLC ^(a)	6,972	199,580

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

MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Evrax PLC	6,253	\$ 49,892
Experian PLC	10,753	446,689
Ferguson PLC	2,600	360,419
GlaxoSmithKline PLC	58,649	1,107,030
Glencore PLC	116,070	548,148
Halma PLC	4,395	167,651
Hargreaves Lansdown PLC	4,345	83,415
Hikma Pharmaceuticals PLC	2,100	69,086
HSBC Holdings PLC	238,145	1,245,862
Imperial Brands PLC	10,987	229,291
Informa PLC ^(a)	17,243	126,348
InterContinental Hotels Group PLC ^(a)	2,060	132,094
Intertek Group PLC	1,863	124,374
J Sainsbury PLC	20,413	78,167
JD Sports Fashion PLC	6,328	89,091
Johnson Matthey PLC	2,405	86,744
Kingfisher PLC	25,850	116,952
Land Securities Group PLC	8,036	74,796
Legal & General Group PLC	70,955	267,946
Lloyds Banking Group PLC	826,007	513,818
London Stock Exchange Group PLC	3,833	382,945
M&G PLC	29,236	80,013
Melrose Industries PLC	53,574	123,971
Mondi PLC	5,561	135,924
National Grid PLC	41,543	494,166
Natwest Group PLC	68,888	209,036
Next PLC	1,561	171,189
Ocado Group PLC ^(a)	5,965	132,670
Pearson PLC	9,399	89,867
Persimmon PLC	3,680	131,133
Phoenix Group Holdings PLC	7,282	62,970
Prudential PLC	30,471	591,523
Reckitt Benckiser Group PLC	8,318	651,045
RELX PLC	22,524	649,084
Rentokil Initial PLC	21,569	168,983
Rio Tinto PLC	13,099	864,877
Rolls-Royce Holdings PLC ^(a)	97,415	183,270
Royal Dutch Shell PLC Class A	47,634	1,052,326
Royal Dutch Shell PLC Class B	43,379	961,032
The Sage Group PLC	12,751	121,700
Schroders PLC	1,529	73,435
Segro PLC	13,878	222,692
Severn Trent PLC	2,949	103,123
Smith & Nephew PLC	10,190	174,999
Smiths Group PLC	4,419	84,708
Spirax-Sarco Engineering PLC	879	176,652
SSE PLC	12,139	254,901
St. James's Place PLC	6,201	125,626
	Number of Shares	Value
Standard Chartered PLC	31,202	\$ 182,863
Taylor Wimpey PLC	41,210	85,110
Tesco PLC	89,993	305,229
Unilever PLC	30,557	1,651,851
United Utilities Group PLC	8,298	107,895
Vodafone Group PLC	325,670	492,621
Whitbread PLC ^(a)	2,277	101,271
Wm Morrison Supermarkets PLC	28,945	114,728
WPP PLC	14,121	189,746
		28,068,592
United States — 0.0%		
Jackson Financial, Inc. ^{(a) (c)}	786	20,436
TOTAL COMMON STOCK (Cost \$156,435,617)		194,616,487
PREFERRED STOCK — 0.6%		
Germany — 0.6%		
Bayerische Motoren Werke AG 2.590%	688	52,532

Fuchs Petrolub SE 2.460%	EUR	875	40,937
Henkel AG & Co. KGaA 2.130%		2,030	188,469
Porsche Automobil Holding SE 2.350%		1,809	180,274
Sartorius AG 0.150%		304	193,602
Volkswagen AG 2.560%		2,128	476,703
			<u>1,132,517</u>
Italy — 0.0%			
Telecom Italia SpA 6.110%		73,532	<u>29,729</u>
TOTAL PREFERRED STOCK (Cost \$905,980)			<u>1,162,246</u>
TOTAL EQUITIES (Cost \$157,341,597)			<u>195,778,733</u>
MUTUAL FUNDS — 1.7%			
United States — 1.7%			
iShares Core MSCI EAFE ETF		1,750	129,938
State Street Navigator Securities Lending Government Money Market Portfolio ^(e)		3,225,837	<u>3,225,837</u>
TOTAL MUTUAL FUNDS (Cost \$3,357,940)			<u>3,355,775</u>

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

MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

	<u>Number of Shares</u>	<u>Value</u>
RIGHTS — 0.0%		
France — 0.0%		
Veolia Environment SA ^{(a) (b) (c)}	6,593	\$ 5,483
Germany — 0.0%		
Deutsche Lufthansa AG ^{(a) (b)}	3,637	8,637
TOTAL RIGHTS (Cost \$16,620)		14,120
TOTAL LONG-TERM INVESTMENTS (Cost \$160,716,157)		199,148,628
	<u>Principal Amount</u>	
SHORT-TERM INVESTMENTS — 0.8%		
Repurchase Agreement — 0.8%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(f)	\$ 1,554,437	1,554,437
TOTAL SHORT-TERM INVESTMENTS (Cost \$1,554,437)		1,554,437
TOTAL INVESTMENTS — 100.5% (Cost \$162,270,594) ^(g)		200,703,065
Other Assets/(Liabilities) — (0.5)%		(1,038,006)
NET ASSETS — 100.0%		\$ 199,665,059

Abbreviation Legend

ADR American Depositary Receipt

ETF Exchange-Traded Fund

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$5,461,216 or 2.74% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$2,528,041 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. (Note 2).
- (c) This security is fair valued in good faith in accordance with procedures approved by the Board of Trustees. At September 30, 2021, these securities amounted to a value of \$62,784 or 0.03% of net assets.
- (d) Security is exempt from registration under Regulation S or Rule 144A of the Securities Act of 1933. These securities are considered restricted and may be resold in transactions exempt from registration. At September 30, 2021, the aggregate market value of these securities amounted to \$3,900,034 or 1.95% of net assets.
- (e) Represents investment of security lending cash collateral. (Note 2).
- (f) Maturity value of \$1,554,437. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 5/15/27, and an aggregate market value, including accrued interest, of \$1,585,556.
- (g) See Note 6 for aggregate cost for federal tax purposes.

Sector weightings, as a percentage of net assets, is as follows:

Consumer, Non-cyclical	25.1%
Financial	19.6%
Industrial	14.3%
Consumer, Cyclical	13.6%
Technology	6.5%
Basic Materials	6.4%
Communications	5.5%
Energy	3.7%
Utilities	3.1%
Mutual Funds	1.7%
Diversified	0.2%
Total Long-Term Investments	99.7%
Short-Term Investments and Other Assets and Liabilities	0.3%
Net Assets	100.0%

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

*MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)***Forward contracts**

Counterparty	Settlement Date	Currency Purchased		Currency Sold		Unrealized Appreciation (Depreciation)
Bank of New York Mellon*	12/15/21	USD	76,013	CHF	70,000	\$ 764
Citibank N.A.*	12/15/21	HKD	167,890	USD	21,593	(22)
Citibank N.A.*	12/15/21	AUD	16,469	USD	12,168	(258)
Citibank N.A.*	12/15/21	CHF	123,388	USD	134,641	(2,001)
Citibank N.A.*	12/15/21	EUR	686,298	USD	812,787	(16,637)
Goldman Sachs International*	12/15/21	SEK	804,954	USD	93,590	(1,581)
Goldman Sachs International*	12/15/21	USD	37,391	ILS	119,805	205
JP Morgan Chase Bank N.A.*	12/15/21	DKK	164,266	USD	26,150	(528)
JP Morgan Chase Bank N.A.*	12/15/21	JPY	73,213,561	USD	667,015	(8,778)
JP Morgan Chase Bank N.A.*	12/15/21	GBP	80,218	USD	111,029	(2,932)
JP Morgan Chase Bank N.A.*	12/15/21	USD	1,974	SGD	2,658	17
Morgan Stanley & Co. LLC*	12/15/21	GBP	130,000	USD	176,302	(1,122)
Morgan Stanley & Co. LLC*	12/15/21	EUR	80,000	USD	93,060	(255)
Morgan Stanley & Co. LLC*	12/15/21	USD	11,620	NOK	101,065	66
Morgan Stanley & Co. LLC*	12/15/21	USD	105,771	EUR	90,000	1,365
Morgan Stanley & Co. LLC*	12/15/21	USD	164,227	JPY	18,370,000	(930)
						<u>\$ (32,627)</u>

Futures contracts

	Expiration Date	Number of Contracts	Notional Amount	Value/ Net Unrealized Appreciation/ (Depreciation)
Long				
Hang Seng Index	10/28/21	1	\$ 155,579	\$ 1,936
Topix Index	12/09/21	5	915,493	(3,278)
SPI 200 Index	12/16/21	3	399,293	(3,858)
Euro Stoxx 50 Index	12/17/21	38	1,829,524	(47,704)
FTSE 100 Index	12/17/21	7	663,663	3,495
				<u>\$ (49,409)</u>

* Contracts are subject to a Master Netting Agreement.

Currency Legend

AUD Australian Dollar
CHF Swiss Franc
DKK Danish Krone
EUR Euro
GBP British Pound
HKD Hong Kong Dollar
ILS Israeli Shekel
JPY Japanese Yen
NOK Norwegian Krone
SEK Swedish Krona
SGD Singapore Dollar
USD U.S. Dollar

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

September 30, 2021

	Number of Shares	Value
EQUITIES — 97.6%		
COMMON STOCK — 97.3%		
Australia — 0.7%		
AMP Ltd. ^(a)	93,238	\$ 66,468
Brambles Ltd.	202,800	1,577,364
Orica Ltd.	285,458	2,813,541
		<u>4,457,373</u>
Belgium — 1.1%		
Anheuser-Busch InBev SA	65,300	3,688,018
KBC Group NV	40,422	3,628,898
		<u>7,316,916</u>
Brazil — 0.2%		
Ambev SA ADR	418,254	1,154,381
Canada — 3.5%		
Canadian National Railway Co.	71,447	8,262,846
Cenovus Energy, Inc.	194,717	1,963,158
Intact Financial Corp.	15,278	2,020,180
Open Text Corp.	49,800	2,430,630
Restaurant Brands International, Inc.	27,200	1,664,368
Suncor Energy, Inc.	100,441	2,082,410
The Toronto-Dominion Bank	64,680	4,281,871
		<u>22,705,463</u>
Cayman Islands — 1.9%		
Alibaba Group Holding Ltd. ^(a)	117,640	2,188,105
Alibaba Group Holding Ltd. Sponsored ADR ^(a)	15,200	2,250,360
NetEase, Inc.	102,800	1,765,949
Tencent Holdings Ltd.	69,800	4,092,669
Trip.com Group Ltd. ADR ^(a)	16,899	519,644
Vipshop Holdings Ltd. ADR ^(a)	176,300	1,963,982
		<u>12,780,709</u>
Denmark — 1.9%		
Carlsberg A/S Class B	19,088	3,105,146
Novo Nordisk A/S Class B	100,785	9,694,012
		<u>12,799,158</u>
Finland — 0.2%		
UPM-Kymmene OYJ	33,900	1,197,764
France — 15.7%		
Accor SA ^(a)	136,492	4,831,851
Air Liquide SA	67,830	10,853,280
BNP Paribas SA ^(b)	128,431	8,226,701
Capgemini SE	56,078	11,662,550
Cie Generale des Etablissements Michelin SCA	17,014	2,611,151
Danone SA	48,705	3,324,357
Dassault Systemes SE	65,373	3,427,291
Engie SA	303,404	3,982,025
	Number of Shares	Value
EssilorLuxottica SA	28,920	\$ 5,529,982
L'Oreal SA	9,757	4,026,931
Legrand SA	41,124	4,410,689
LVMH Moet Hennessy Louis Vuitton SE	13,740	9,824,980
Pernod Ricard SA	34,946	7,642,237
Publicis Groupe SA	51,569	3,472,846
Schneider Electric SE	84,876	14,111,498
Valeo SE	116,830	3,260,248
Worldline SA ^{(a) (c)}	31,900	2,433,847
		<u>103,632,464</u>
Germany — 14.3%		
Allianz SE Registered	32,810	7,400,089
Bayer AG Registered	247,865	13,519,025
Bayerische Motoren Werke AG	81,385	7,811,651
Beiersdorf AG	59,178	6,397,982
Continental AG ^(a)	57,480	6,301,596
Daimler AG Registered	93,373	8,300,426
Deutsche Boerse AG	48,826	7,948,207

Fresenius Medical Care AG & Co. KGaA	69,700	4,911,874
Fresenius SE & Co. KGaA	44,800	2,153,953
Henkel AG & Co. KGaA	24,700	2,131,166
Merck KGaA	33,330	7,247,906
MTU Aero Engines AG	11,258	2,545,570
SAP SE	95,635	12,956,021
thyssenkrupp AG ^(a)	369,617	3,938,808
Vitesco Technologies Group AG ^(a)	11,236	663,776
		<u>94,228,052</u>
Hong Kong — 1.5%		
AIA Group Ltd.	874,200	10,065,662
India — 2.3%		
Axis Bank Ltd. ^(a)	284,405	2,931,317
HDFC Bank Ltd.	98,899	2,117,452
Housing Development Finance Corp. Ltd.	109,309	3,985,468
Tata Consultancy Services Ltd.	119,349	6,048,524
		<u>15,082,761</u>
Indonesia — 0.2%		
Bank Mandiri Persero Tbk PT	3,702,900	1,573,579
Ireland — 1.9%		
Linde PLC ^(a)	17,154	5,100,405
Ryanair Holdings PLC ^(a)	11,700	220,677
Ryanair Holdings PLC Sponsored ADR ^(a)	62,530	6,882,052
		<u>12,203,134</u>

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

MassMutual Overseas Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Israel — 0.7%		
Check Point Software Technologies Ltd. ^(a)	38,936	\$ 4,401,325
Italy — 2.3%		
Eni SpA	193,165	2,571,848
Intesa Sanpaolo SpA	4,492,433	12,745,097
		<u>15,316,945</u>
Japan — 11.9%		
Daikin Industries Ltd.	38,100	8,194,878
Denso Corp.	49,900	3,271,224
Hitachi Ltd.	158,400	9,392,139
Hoya Corp.	49,400	7,726,057
Japan Tobacco, Inc.	156,000	3,062,969
Koito Manufacturing Co. Ltd.	58,000	3,487,483
Komatsu Ltd.	67,500	1,623,076
Kose Corp.	24,900	2,984,538
Kubota Corp.	289,800	6,182,363
Kyocera Corp.	74,100	4,632,344
Olympus Corp.	247,300	5,431,019
Shin-Etsu Chemical Co. Ltd.	15,800	2,664,902
SMC Corp.	7,100	4,441,957
Sony Group Corp.	53,900	6,002,381
Terumo Corp.	132,400	6,224,718
Toyota Motor Corp.	184,500	3,300,374
		<u>78,622,422</u>
Mexico — 0.4%		
Grupo Televisa SAB Sponsored ADR	255,500	2,805,390
Netherlands — 6.3%		
Akzo Nobel NV	54,711	5,957,526
CNH Industrial NV	376,997	6,383,401
EXOR NV	57,500	4,845,339
ING Groep NV ^(b)	317,969	4,615,058
Koninklijke Philips NV	149,581	6,629,862
Prosus NV	54,023	4,254,754
QIAGEN NV ^(a)	71,947	3,740,849
Randstad NV ^(b)	59,770	3,994,456
Wolters Kluwer NV	7,163	757,150
		<u>41,178,395</u>
Portugal — 0.4%		
Galp Energia SGPS SA	228,435	2,587,014
Republic of Korea — 0.4%		
NAVER Corp.	7,500	2,443,832
Singapore — 0.7%		
DBS Group Holdings, Ltd.	207,800	4,614,387
South Africa — 0.3%		
Naspers Ltd.	10,764	1,773,777
		<u>1,773,777</u>
	Number of Shares	Value
Spain — 1.1%		
Amadeus IT Group SA ^(a)	114,840	\$ 7,544,128
Sweden — 1.6%		
Essity AB Class B	33,466	1,038,732
Hennes & Mauritz AB Class B ^(a)	195,194	3,957,551
SKF AB Class B	120,400	2,833,590
Volvo AB Class B	128,700	2,891,545
		<u>10,721,418</u>
Switzerland — 11.9%		
Cie Financiere Richemont SA Registered	58,244	6,005,738
Credit Suisse Group AG Registered	697,825	6,918,786
Holcim Ltd.	82,484	3,968,349
Julius Baer Group Ltd.	52,526	3,474,142
Nestle SA Registered	128,516	15,462,904
Novartis AG Registered	111,333	9,133,783
Roche Holding AG	42,164	15,385,800
Sika AG Registered ^(b)	13,215	4,179,838
The Swatch Group AG	5,210	1,365,732
UBS Group AG Registered	434,665	6,945,937
Zurich Insurance Group AG	13,156	5,364,337

		78,205,346
Taiwan — 1.0%		
Taiwan Semiconductor Manufacturing Co. Ltd. Sponsored ADR	55,929	6,244,473
United Kingdom — 12.5%		
Compass Group PLC ^(a)	396,973	8,122,191
Diageo PLC	150,643	7,258,440
Experian PLC	141,527	5,879,151
Glencore PLC	1,496,300	7,066,374
Informa PLC ^(a)	91,800	672,665
Liberty Global PLC Series A ^(a)	155,400	4,630,920
Lloyds Banking Group PLC	14,575,597	9,066,753
Natwest Group PLC	1,123,200	3,408,278
Prudential PLC	144,100	2,797,365
Reckitt Benckiser Group PLC	69,285	5,422,894
RELX PLC	240,546	6,931,922
Rio Tinto PLC	56,093	3,703,605
Rolls-Royce Holdings PLC ^(a)	2,339,275	4,400,959
Schroders PLC	59,068	2,836,908
Smiths Group PLC	179,800	3,446,580
Tesco PLC	1,166,988	3,958,067
WPP PLC	212,044	2,849,271
		<u>82,452,343</u>

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

MassMutual Overseas Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
United States — 0.4%		
Yum China Holdings, Inc.	47,565	\$ 2,764,002
TOTAL COMMON STOCK (Cost \$510,457,085)		640,872,613
PREFERRED STOCK — 0.3%		
Germany — 0.0%		
Henkel AG & Co. KGaA 2.130%	1,900	176,399
Republic of Korea — 0.3%		
Samsung Electronics Co. Ltd. 3.760%	29,400	1,720,857
TOTAL PREFERRED STOCK (Cost \$1,936,465)		1,897,256
TOTAL EQUITIES (Cost \$512,393,550)		642,769,869
	Principal Amount	
BONDS & NOTES — 0.1%		
CORPORATE DEBT — 0.1%		
United Kingdom — 0.1%		
Credit Suisse Group Guernsey VII Ltd.		
3.000% 11/12/21 CHF ^{(c) (d)}	\$ 400,000	455,174
3.000% 11/12/21 CHF ^{(b) (c) (d)}	335,000	384,624
		839,798
TOTAL CORPORATE DEBT (Cost \$806,878)		839,798
TOTAL BONDS & NOTES (Cost \$806,878)		839,798
	Number of Shares	
MUTUAL FUNDS — 3.4%		
United States — 3.4%		
State Street Navigator Securities Lending Government Money Market Portfolio ^(e)	22,156,838	22,156,838
TOTAL MUTUAL FUNDS (Cost \$22,156,838)		22,156,838
TOTAL LONG-TERM INVESTMENTS (Cost \$535,357,266)		665,766,505
	Principal Amount	Value
SHORT-TERM INVESTMENTS — 1.8%		
Repurchase Agreement — 1.8%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(f)	\$ 11,890,846	\$ 11,890,846
TOTAL SHORT-TERM INVESTMENTS (Cost \$11,890,846)		11,890,846
TOTAL INVESTMENTS — 102.9% (Cost \$547,248,112) ^(g)		677,657,351
Other Assets/(Liabilities) — (2.9)%		(19,122,286)
NET ASSETS — 100.0%		\$ 658,535,065

Abbreviation Legend

ADR American Depositary Receipt

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Non-income producing security.
- (b) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$21,103,777 or 3.20% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. *(Note 2)*.
- (c) Security is exempt from registration under Regulation S or Rule 144A of the Securities Act of 1933. These securities are considered restricted and may be resold in transactions exempt from registration. At September 30, 2021, the aggregate market value of these securities amounted to \$3,273,645 or 0.50% of net assets.
- (d) The principal amount of the security is in foreign currency. The market value is in U.S. dollars.
- (e) Represents investment of security lending cash collateral. *(Note 2)*.
- (f) Maturity value of \$11,890,846. Collateralized by U.S. Government Agency obligations with a rate of 0.500%, maturity date of 5/31/27, and an aggregate market value, including accrued interest, of \$12,128,796.
- (g) See Note 6 for aggregate cost for federal tax purposes.

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

*MassMutual Overseas Fund — Portfolio of Investments (Continued)***Notes to Portfolio of Investments (Continued)**

Sector weightings, as a percentage of net assets, is as follows:

Consumer, Non-cyclical	28.7%
Financial	18.6%
Industrial	15.1%
Consumer, Cyclical	14.2%
Technology	7.7%
Basic Materials	6.1%
Communications	5.3%
Mutual Funds	3.4%
Energy	1.4%
Utilities	0.6%
Total Long-Term Investments	101.1%
Short-Term Investments and Other Assets and Liabilities	(1.1)%
Net Assets	100.0%

Forward contracts

Counterparty	Settlement Date	Currency Purchased	Currency Sold	Unrealized Appreciation (Depreciation)
State Street Bank and Trust Co.*	12/15/21	USD 3,425,113	CHF 3,065,000	\$ 130,292

* Contracts are subject to a Master Netting Agreement.

Currency Legend

CHF Swiss Franc

USD U.S. Dollar

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

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments

September 30, 2021

	Number of Shares	Value
EQUITIES — 97.5%		
COMMON STOCK — 96.8%		
Australia — 2.1%		
Australia & New Zealand Banking Group Ltd.	107,861	\$ 2,176,094
BHP Group Ltd. ^(a)	135,539	3,642,925
Challenger Ltd.	203,921	914,382
Downer EDI Ltd.	676,151	3,097,654
IGO Ltd.	569,545	3,576,620
Incitec Pivot Ltd.	1,069,319	2,257,425
Macquarie Group Ltd.	18,388	2,412,554
Rio Tinto Ltd.	13,511	960,092
Scentre Group	1,524,699	3,280,632
South32 Ltd.	2,441,348	6,196,794
Treasury Wine Estates Ltd.	253,517	2,253,742
Worley Ltd.	602,443	4,238,182
		<u>35,007,096</u>
Austria — 0.9%		
BAWAG Group AG ^(b)	76,833	4,818,552
Erste Group Bank AG	232,506	10,153,968
		<u>14,972,520</u>
Belgium — 0.3%		
KBC Group NV	40,202	3,609,148
Umicore SA	38,843	2,301,765
		<u>5,910,913</u>
Bermuda — 0.4%		
China Resources Gas Group Ltd.	450,000	2,361,842
Credicorp Ltd.	11,665	1,294,115
Hongkong Land Holdings Ltd.	306,400	1,466,403
Kunlun Energy Co. Ltd.	1,942,000	2,018,599
		<u>7,140,959</u>
Brazil — 0.9%		
Ambev SA	452,800	1,272,155
B3 SA - Brasil Bolsa Balcao	636,400	1,488,819
Banco BTG Pactual SA	287,100	1,326,436
BRF SA ^(c)	127,600	634,749
EDP - Energias do Brasil SA	473,723	1,597,127
Lojas Renner SA	101,458	641,268
Magazine Luiza SA	771,800	2,032,339
Raia Drogasil SA	378,323	1,623,543
Rede D'Or Sao Luiz SA ^(b)	217,620	2,713,781
Suzano SA ^(c)	206,816	2,070,534
		<u>15,400,751</u>
British Virgin Islands — 0.1%		
Mail.ru Group Ltd. GDR ^{(b) (c)}	44,374	906,483
Canada — 3.2%		
Canadian Pacific Railway Ltd. ^(a)	48,700	3,168,909
	Number of Shares	Value
Element Fleet Management Corp. ^(a)	261,322	\$ 2,636,740
Franco-Nevada Corp.	16,930	2,199,456
Magna International, Inc.	101,142	7,609,924
Manulife Financial Corp.	126,756	2,439,848
National Bank of Canada	102,191	7,848,682
Shopify, Inc. Class A ^(c)	2,568	3,481,643
Sun Life Financial, Inc.	228,466	11,760,606
TC Energy Corp. ^(a)	53,749	2,586,878
TELUS International CDA, Inc. ^(c)	27,917	979,498
TMX Group Ltd.	50,724	5,470,070
Waste Connections, Inc.	33,041	4,160,853
		<u>54,343,107</u>
Cayman Islands — 5.2%		
AAC Technologies Holdings, Inc.	268,000	1,272,316
Alibaba Group Holding Ltd. ^(c)	165,180	3,072,350
Alibaba Group Holding Ltd. Sponsored ADR ^(c)	93,264	13,807,735

Baidu, Inc. Sponsored ADR ^(c)	51,163	7,866,311
Budweiser Brewing Co. APAC Ltd. ^(b)	689,900	1,736,522
China Mengniu Dairy Co. Ltd.	1,283,000	8,253,644
CK Hutchison Holdings Ltd.	339,500	2,251,333
ENN Energy Holdings Ltd.	88,200	1,444,349
Greentown Service Group Co. Ltd. ^(b)	508,000	546,056
JOYY, Inc. ADR ^(a)	69,603	3,816,332
Kanzhun Ltd. ^(c)	13,311	479,063
Longfor Group Holdings Ltd. ^(b)	260,500	1,197,148
Meituan Class B ^{(b) (c)}	127,300	3,975,159
New Oriental Education & Technology Group, Inc. ^(c)	166,200	328,563
Pagseguro Digital Ltd. Class A ^(c)	15,437	798,402
Pinduoduo, Inc. ADR ^(c)	15,800	1,432,586
Sea Ltd. ADR ^(c)	1,839	586,144
Sino Biopharmaceutical Ltd.	1,374,000	1,145,205
StoneCo Ltd. Class A ^(c)	58,412	2,028,065
Tencent Holdings Ltd.	325,600	19,091,302
Tongcheng-Elong Holdings Ltd. ^{(b) (c)}	1,090,000	2,605,061
Trip.com Group Ltd. ADR ^(c)	74,350	2,286,262
Weibo Corp. Sponsored ADR ^(c)	51,419	2,441,888
Wuxi Biologics Cayman, Inc. ^{(b) (c)}	81,000	1,309,225
XP, Inc. Class A ^(c)	71,058	2,854,400
Zhongsheng Group Holdings Ltd.	265,500	2,133,931
		<hr/> 88,759,352
Chile — 0.1%		
Banco Santander Chile Sponsored ADR	89,806	<hr/> 1,775,465

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

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
China — 3.0%		
Beijing Capital International Airport Co. Ltd. Class H ^(c)	2,302,000	\$ 1,356,582
BTG Hotels Group Co. Ltd. Class A ^(c)	427,425	1,432,106
China Construction Bank Corp. Class H	3,568,000	2,530,955
China Merchants Bank Co. Ltd. Class H	125,500	996,095
Fuyao Glass Industry Group Co. Ltd.	176,700	1,152,167
Gree Electric Appliances, Inc. of Zhuhai Class A	896,600	5,377,665
Hisense Home Appliances Group Co. Ltd.	804,900	1,494,975
Hongfa Technology Co. Ltd.	128,600	1,241,548
Huayu Automotive Systems Co. Ltd.	1,490,400	5,232,314
Hundsun Technologies, Inc. Class A	186,800	1,656,281
Jiangsu Hengrui Medicine Co. Ltd. Class A	96,060	746,078
Kweichow Moutai Co. Ltd. Class A	18,098	5,127,479
Midea Group Co. Ltd. Class A	99,300	1,069,873
NARI Technology Co. Ltd.	997,899	5,522,702
PICC Property & Casualty Co. Ltd. Class H	1,892,000	1,825,520
Ping An Bank Co. Ltd. Class A	313,900	871,395
Ping An Insurance Group Co. of China Ltd. Class A	188,700	1,404,554
Ping An Insurance Group Co. of China Ltd. Class H	657,500	4,461,487
Shandong Pharmaceutical Glass Co. Ltd.	238,200	1,094,510
Sinopharm Group Co. Ltd. Class H	350,800	911,144
Songcheng Performance Development Co. Ltd.	858,000	1,869,902
Tsingtao Brewery Co. Ltd. Class H	240,000	1,872,780
Yifeng Pharmacy Chain Co. Ltd. Class A	152,716	1,230,171
Zhejiang Runtu Co. Ltd.	711,453	1,032,768
		<u>51,511,051</u>
Cyprus — 0.1%		
Ozon Holdings PLC ^(c)	17,110	<u>863,199</u>
Czech Republic — 0.1%		
Komerční banka AS ^(c)	25,600	<u>1,036,737</u>
Denmark — 0.2%		
Chr Hansen Holding A/S	20,255	1,654,091
Genmab A/S ^(c)	3,653	<u>1,595,939</u>
		<u>3,250,030</u>
Finland — 0.8%		
Kojamo OYJ	58,737	1,213,472
Sampo OYJ Class A	187,377	9,297,693
	Number of Shares	Value
Stora Enso OYJ Class R	138,274	\$ 2,295,928
		<u>12,807,093</u>
France — 7.0%		
Air Liquide SA	38,782	6,205,395
Alstom SA	46,906	1,779,681
AXA SA	470,515	13,089,721
BNP Paribas SA ^(a)	136,733	8,758,489
Dassault Aviation SA	61,600	6,911,196
Engie SA	614,760	8,068,417
EssilorLuxottica SA	47,290	9,042,629
Eutelsat Communications SA ^(a)	80,238	1,102,964
Ipsen SA	14,257	1,361,073
Kering SA	4,909	3,491,408
L'Oreal SA	10,822	4,466,480
Legrand SA	21,064	2,259,186
LVMH Moët Hennessy Louis Vuitton SE	2,272	1,624,626
Orange SA	83,242	901,788
Safran SA	16,246	2,036,924
Sanofi	201,287	19,376,809
Teleperformance	5,511	2,168,338
Thales SA	126,765	12,242,013
TotalEnergies SE ^(a)	263,084	12,606,743
Valeo SE	56,306	<u>1,571,270</u>
		<u>119,065,150</u>
Germany — 5.6%		
Auto1 Group SE ^{(b) (c)}	21,067	770,214
BASF SE	75,330	5,739,600
Bayer AG Registered	155,491	8,480,773

Beiersdorf AG	27,828	3,008,602
Covestro AG ^(b)	74,601	5,123,708
Daimler AG Registered	48,502	4,311,603
Deutsche Boerse AG	26,517	4,316,607
Evotec SE ^(c)	103,661	4,946,484
Fresenius SE & Co. KGaA	128,479	6,177,180
GEA Group AG	57,365	2,628,948
HeidelbergCement AG	26,726	2,004,412
KION Group AG	34,818	3,258,147
Knorr-Bremse AG	37,900	4,067,031
MorphoSys AG ^(c)	20,978	1,000,805
Muenchener Rueckversicherungs-Gesellschaft AG in Muenchen Registered	30,464	8,350,032
SAP SE	27,602	3,739,343
Siemens AG Registered	95,100	15,632,244
Siemens Healthineers AG ^(b)	53,507	3,481,706
Stroeer SE & Co KGaA	17,444	1,441,352
Teamviewer AG ^{(b) (c)}	39,720	1,171,210
Telefonica Deutschland Holding AG	473,382	1,347,478

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

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Zalando SE ^{(b) (c)}	51,208	\$ 4,705,689
		<u>95,703,168</u>
Hong Kong — 1.6%		
AIA Group Ltd.	1,350,000	15,544,090
Beijing Enterprises Holdings Ltd.	234,500	936,800
China Overseas Land & Investment Ltd.	1,022,500	2,324,849
Fosun International Ltd.	1,405,000	1,707,022
Galaxy Entertainment Group Ltd. ^(c)	734,000	3,703,430
Guangdong Investment Ltd.	1,832,000	2,387,663
Hong Kong Exchanges & Clearing Ltd.	15,900	965,102
		<u>27,568,956</u>
Hungary — 0.4%		
OTP Bank Nyrt ^(c)	105,243	6,169,771
India — 3.8%		
Ambuja Cements Ltd.	420,788	2,267,930
Ashok Leyland Ltd.	492,665	878,703
Axis Bank Ltd. ^(c)	431,740	4,449,875
HDFC Asset Management Co. Ltd. ^(b)	28,023	1,094,221
HDFC Bank Ltd.	167,400	3,584,076
Hindalco Industries Ltd.	176,997	1,159,200
Housing Development Finance Corp. Ltd.	422,992	15,422,528
ICICI Bank Ltd.	283,336	2,667,273
ICICI Bank Ltd. Sponsored ADR	140,534	2,651,877
Indus Towers Ltd.	489,406	2,000,961
Infosys Ltd.	241,825	5,397,294
Kotak Mahindra Bank Ltd.	131,848	3,541,689
Maruti Suzuki India Ltd.	31,072	3,060,348
NTPC Ltd.	2,641,134	5,017,046
Petronet LNG Ltd.	829,785	2,653,250
Reliance Industries Ltd.	42,596	1,435,768
Shriram Transport Finance Co. Ltd.	229,410	3,988,964
Tata Consultancy Services Ltd.	15,413	781,120
Tech Mahindra Ltd.	128,292	2,378,034
Voltas Ltd.	20,036	329,673
		<u>64,759,830</u>
Indonesia — 0.7%		
Astra International Tbk PT	2,620,300	1,001,058
Bank Central Asia Tbk PT	2,401,200	5,873,345
Bank Rakyat Indonesia Persero Tbk PT	8,643,964	2,297,333
Sarana Menara Nusantara Tbk PT	37,179,800	3,432,666
		<u>12,604,402</u>
Ireland — 0.4%		
DCC PLC	24,767	2,049,943
	Number of Shares	Value
Linde PLC ^(c)	16,180	\$ 4,810,805
		<u>6,860,748</u>
Italy — 1.3%		
Banca Mediolanum SpA	335,148	3,625,993
DiaSorin SpA	13,635	2,861,691
Enel SpA	463,289	3,556,918
Intesa Sanpaolo SpA	589,643	1,672,826
Leonardo SpA ^(c)	251,996	2,058,160
Moncler SpA	44,639	2,730,156
Prysmian SpA	154,288	5,412,532
		<u>21,918,276</u>
Japan — 15.8%		
Asahi Group Holdings Ltd.	71,000	3,439,379
Asahi Kasei Corp.	214,600	2,290,578
Asics Corp.	90,700	2,057,775
Astellas Pharma, Inc.	628,100	10,356,521
Benesse Holdings, Inc.	52,200	1,180,538
Bridgestone Corp.	56,100	2,660,614
Central Japan Railway Co.	12,700	2,029,856
CyberAgent, Inc.	185,300	3,588,718
Dai-ichi Life Holdings, Inc.	132,700	2,889,413
Daiichi Sankyo Co. Ltd.	62,100	1,656,692

Denso Corp.	28,700	1,881,445
DIC Corp.	72,900	2,062,381
Disco Corp.	5,500	1,539,552
Electric Power Development Co. Ltd.	74,600	1,070,074
Fujitsu General Ltd. ^(a)	129,400	3,231,145
Fujitsu Ltd.	34,400	6,247,404
Hamamatsu Photonics KK	37,200	2,307,671
Hikari Tsushin, Inc.	7,400	1,251,322
Hitachi Ltd.	114,600	6,795,070
Hitachi Metals Ltd. ^(c)	157,100	3,043,973
Honda Motor Co. Ltd.	37,400	1,153,428
Hoshizaki Corp.	27,600	2,513,022
JGC Holdings Corp.	125,000	1,169,876
Kansai Paint Co. Ltd.	48,600	1,208,427
Kao Corp.	24,300	1,447,842
Kirin Holdings Co. Ltd.	230,100	4,273,879
Matsumotokiyoshi Holdings Co. Ltd. ^(a)	63,300	2,828,766
Mitsubishi Corp.	65,400	2,045,887
Mitsubishi Electric Corp.	544,900	7,578,694
Mitsubishi Estate Co. Ltd.	148,100	2,358,510
Mitsubishi HC Capital, Inc.	204,800	1,076,236
Mitsubishi UFJ Financial Group, Inc.	1,082,600	6,320,697
Mitsui Fudosan Co. Ltd.	282,100	6,719,595
Murata Manufacturing Co. Ltd.	87,000	7,744,289
Nippon Shokubai Co. Ltd.	31,200	1,611,439

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

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Nippon Steel Corp.	116,500	\$ 2,084,972
Nippon Telegraph & Telephone Corp.	798,300	22,069,051
NTT Data Corp.	370,800	7,184,024
Omron Corp.	19,500	1,932,791
ORIX Corp.	203,400	3,801,133
Otsuka Holdings Co. Ltd.	298,900	12,741,721
Outsourcing, Inc.	132,000	2,385,259
Pan Pacific International Holding Corp.	99,500	2,062,172
Panasonic Corp.	198,400	2,462,570
Persol Holdings Co. Ltd.	225,800	5,657,896
Pola Orbis Holdings, Inc.	22,400	516,674
Recruit Holdings Co. Ltd.	62,700	3,823,151
Renesas Electronics Corp. ^(c)	113,200	1,396,748
Seven & i Holdings Co. Ltd.	167,800	7,614,683
Shimadzu Corp.	48,100	2,112,855
Shiseido Co. Ltd.	12,500	842,458
SMC Corp.	1,900	1,188,693
SoftBank Group Corp.	27,700	1,600,710
Sompo Holdings, Inc.	76,700	3,321,817
Sony Group Corp.	78,500	8,741,872
Stanley Electric Co. Ltd.	218,100	5,497,623
Sumitomo Corp.	361,400	5,052,837
Sumitomo Mitsui Trust Holdings, Inc.	44,100	1,510,321
Sumitomo Rubber Industries Ltd.	65,700	835,482
Suzuki Motor Corp.	97,400	4,341,438
Taiheiyo Cement Corp.	62,000	1,289,632
Takeda Pharmaceutical Co. Ltd.	170,431	5,649,410
Takeda Pharmaceutical Co. Ltd. Sponsored ADR ^(a)	56,435	924,405
TechnoPro Holdings, Inc.	89,800	2,667,656
THK Co. Ltd.	41,000	903,955
Tokio Marine Holdings, Inc.	64,200	3,442,889
Tokyo Electron Ltd. ^(a)	16,100	7,096,920
Tosoh Corp.	21,300	386,513
Toyota Motor Corp.	827,000	14,793,547
Welcia Holdings Co. Ltd.	36,400	1,308,699
Z Holdings Corp.	1,180,200	7,573,941
		<u>268,447,226</u>
Luxembourg — 0.5%		
Globant SA ^(c)	4,558	1,280,844
InPost SA ^(c)	33,000	544,341
Millicom International Cellular SA ^(c)	43,432	1,571,798
Samsonite International SA ^{(b) (c)}	468,600	1,004,106
Tenaris SA	176,600	1,862,323
Tenaris SA ADR ^(a)	101,515	2,142,982
		<u>8,406,394</u>
	Number of Shares	Value
Malaysia — 0.1%		
CIMB Group Holdings Bhd	1,841,400	\$ 2,097,995
Mexico — 0.5%		
Gruma SAB de CV Class B	138,445	1,582,478
Grupo Aeroportuario del Pacifico SAB de CV ADR	16,949	1,971,508
Grupo Aeroportuario del Sureste SAB de CV ADR	9,094	1,700,578
Grupo Mexico SAB de CV Series B	247,384	983,711
Orbia Advance Corp. SAB de CV	506,078	1,299,182
Wal-Mart de Mexico SAB de CV	512,300	1,736,084
		<u>9,273,541</u>
Netherlands — 7.2%		
Adyen NV ^{(b) (c)}	415	1,153,933
AerCap Holdings NV ^(c)	46,800	2,705,508
Airbus SE ^(c)	43,315	5,687,048
Akzo Nobel NV	110,180	11,997,591
ASML Holding NV	35,056	25,859,840
CNH Industrial NV	161,651	2,737,113
Heineken NV ^(a)	12,191	1,267,287
ING Groep NV	1,038,644	15,075,061

Koninklijke DSM NV	12,176	2,433,725
Koninklijke Philips NV	256,671	11,376,400
NXP Semiconductor NV	55,666	10,903,299
Prosus NV	210,767	16,599,629
Prosus NV ^(c)	67,333	5,352,477
Shop Apotheke Europe NV ^{(b) (c)}	6,302	931,985
Signify NV ^(b)	47,877	2,378,644
Stellantis NV	174,467	3,338,109
X5 Retail Group NV GDR ^(b)	40,795	1,315,125
Yandex NV Class A ^(c)	19,900	1,585,831
		<u>122,698,605</u>
Norway — 0.7%		
DNB Bank ASA	226,976	5,153,078
Equinor ASA	174,233	4,440,046
Storebrand ASA	307,476	2,937,184
		<u>12,530,308</u>
Philippines — 0.3%		
Bank of the Philippine Islands	494,150	788,992
SM Investments Corp.	181,610	3,510,577
Universal Robina Corp.	387,460	1,030,668
		<u>5,330,237</u>
Poland — 0.2%		
Powszechny Zakład Ubezpieczeń SA	298,859	2,730,452
Portugal — 0.9%		
Banco Comercial Portugues SA ^(c)	5,488,796	993,594
Galp Energia SGPS SA	759,708	8,603,653

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

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Jeronimo Martins SGPS SA	250,260	\$ 4,983,371
		14,580,618
Republic of Korea — 3.8%		
Amorepacific Corp.	13,654	2,035,578
Hyundai Motor Co.	7,879	1,312,820
KakaoBank Corp. ^(c)	1,754	101,329
KT Corp.	45,462	1,240,529
KT Corp. Sponsored ADR	178,169	2,426,662
LG Household & Health Care Ltd.	7,252	8,151,619
NAVER Corp.	42,921	13,985,563
Samsung Electronics Co. Ltd.	569,799	35,463,609
		64,717,709
Russia — 0.8%		
LUKOIL PJSC Sponsored ADR	12,687	1,207,870
Moscow Exchange MICEX-RTS PJSC	313,100	747,576
Novatek PJSC Sponsored GDR Registered ^(b)	7,609	1,978,771
Sberbank of Russia PJSC Sponsored ADR	540,689	10,046,127
		13,980,344
Saudi Arabia — 0.4%		
Al Rajhi Bank	43,677	1,427,625
The Saudi British Bank	207,364	1,826,982
The Saudi National Bank	267,259	4,372,886
		7,627,493
Singapore — 0.9%		
DBS Group Holdings, Ltd.	74,700	1,658,781
Jardine Cycle & Carriage Ltd.	86,900	1,235,220
United Overseas Bank Ltd.	368,000	6,960,233
Wilmar International Ltd.	753,700	2,315,502
Yangzijiang Shipbuilding Holdings Ltd.	3,143,300	3,162,582
		15,332,318
South Africa — 0.7%		
Capitec Bank Holdings Ltd.	28,759	3,475,135
Clicks Group Ltd.	60,181	1,107,953
FirstRand Ltd.	842,698	3,574,011
Naspers Ltd.	15,312	2,523,233
Shoprite Holdings Ltd. ^(a)	116,085	1,374,638
		12,054,970
Spain — 0.8%		
Amadeus IT Group SA ^(c)	59,093	3,881,967
Banco Bilbao Vizcaya Argentaria SA	512,170	3,378,536
Iberdrola SA	421,710	4,211,854
Indra Sistemas SA ^(c)	123,471	1,309,272
		12,781,629
	Number of Shares	Value
Sweden — 1.4%		
Assa Abloy AB Class B	72,261	\$ 2,095,223
Elektro AB ^(a)	144,162	1,609,575
Essity AB Class B	60,796	1,887,012
Lundin Energy AB ^(a)	86,109	3,196,508
Svenska Handelsbanken AB Class A	234,561	2,631,234
Swedbank AB Class A	391,121	7,911,344
Telefonaktiebolaget LM Ericsson Class B ^(a)	363,456	4,107,912
		23,438,808
Switzerland — 5.9%		
ABB Ltd. Registered	119,196	3,973,058
Alcon, Inc.	62,451	5,059,132
Barry Callebaut AG Registered	1,570	3,552,015
Holcim Ltd.	33,389	1,606,363
Julius Baer Group Ltd.	130,981	8,663,264
Lonza Group AG Registered	10,534	7,891,977
Nestle SA Registered	189,299	22,776,248
Novartis AG Registered	158,268	12,984,340
PolyPeptide Group AG ^{(b) (c)}	7,471	951,859
Roche Holding AG	55,600	20,288,646
UBS Group AG Registered	250,587	4,004,375
Zurich Insurance Group AG	20,831	8,493,806

		<u>100,245,083</u>
Taiwan — 3.8%		
Hon Hai Precision Industry Co. Ltd.	787,000	2,941,157
Largan Precision Co. Ltd.	36,000	2,804,030
MediaTek, Inc.	118,000	3,803,530
President Chain Store Corp.	182,000	1,826,560
Taiwan Semiconductor Manufacturing Co. Ltd.	2,537,000	52,315,591
Vanguard International Semiconductor Corp.	325,000	1,748,536
		<u>65,439,404</u>
Thailand — 0.6%		
Airports of Thailand PCL	376,600	678,960
Bangkok Dusit Medical Services PCL	2,264,300	1,505,741
CP ALL PCL	2,954,700	5,523,416
Land & Houses PCL	7,420,600	1,731,728
		<u>9,439,845</u>
Turkey — 0.0%		
BIM Birlesik Magazalar AS	13,158	94,576
D-MARKET Elektronik Hizmetler ve Ticaret AS ^(c)	83,678	574,031
		<u>668,607</u>
United Arab Emirates — 0.1%		
First Abu Dhabi Bank PJSC	479,374	2,319,497

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

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
United Kingdom — 12.0%		
Amcor PLC	591,851	\$ 6,996,007
Antofagasta PLC	132,067	2,372,733
Ashtead Group PLC	50,131	3,802,769
ASOS PLC ^(c)	117,259	4,681,710
AstraZeneca PLC Sponsored ADR	362,800	21,789,768
Aviva PLC	909,804	4,842,372
BHP Group PLC	273,853	6,825,317
boohoo Group PLC ^(c)	959,960	2,805,821
Bridgepoint Group PLC ^{(b) (c)}	370,523	2,524,849
British American Tobacco PLC	71,359	2,489,672
Bunzl PLC	43,281	1,429,768
Burberry Group PLC	61,768	1,503,947
Close Brothers Group PLC	39,362	813,358
Compass Group PLC ^(c)	152,101	3,112,034
Deliveroo Holdings PLC Class A ^{(a) (b) (c)}	106,431	413,828
Deliveroo Holdings PLC., Lockup Shares (Acquired 5/16/19, Cost \$550,376) ^{(d) (e)}	263,400	975,067
Diageo PLC	78,059	3,761,121
Direct Line Insurance Group PLC	360,350	1,405,938
Dr. Martens Plc ^(c)	251,746	1,331,912
Fresnillo PLC	149,222	1,569,488
GlaxoSmithKline PLC Sponsored ADR ^(a)	227,941	8,709,626
Great Portland Estates PLC	425,987	4,277,790
Hargreaves Lansdown PLC	59,227	1,137,039
HSBC Holdings PLC	341,308	1,785,562
Imperial Brands PLC	145,425	3,034,925
Informa PLC ^(c)	309,415	2,267,241
Investec PLC	257,175	1,094,882
Johnson Matthey PLC	79,792	2,877,938
Kingfisher PLC	840,667	3,803,390
Lloyds Banking Group PLC	9,863,392	6,135,525
London Stock Exchange Group PLC	58,195	5,814,118
Meggitt PLC ^(c)	466,057	4,627,562
Melrose Industries PLC	1,238,425	2,865,725
Mondi PLC	49,203	1,202,642
National Grid PLC	222,363	2,645,074
Network International Holdings PLC ^{(b) (c)}	727,816	3,560,601
Next PLC	55,193	6,052,811
Persimmon PLC	66,103	2,355,515
Playtech PLC ^(c)	83,052	526,953
Prudential PLC	322,498	6,260,545
Rolls-Royce Holdings PLC ^(c)	2,220,520	4,177,541
Royal Dutch Shell PLC Class B Sponsored ADR	42,402	1,877,137
	Number of Shares	Value
Royal Dutch Shell PLC Class B	258,653	\$ 5,730,281
Smith & Nephew PLC	235,044	4,036,546
Smiths Group PLC	155,418	2,979,203
Standard Chartered PLC	157,178	921,158
THG PLC ^(c)	261,029	1,770,861
Unilever PLC	243,772	13,177,834
Unilever PLC	122,775	6,622,168
Vodafone Group PLC	2,228,074	3,370,274
Vodafone Group PLC Sponsored ADR ^(a)	155,287	2,399,184
Whitbread PLC ^(c)	57,426	2,554,051
WPP PLC	527,594	7,089,369
		203,188,550
United States — 1.2%		
Autoliv, Inc.	18,205	1,560,362
Broadcom, Inc.	8,819	4,276,598
Canva, Inc. (Acquired 8/16/21, Cost \$231,766) ^{(d) (e) (g)}	136	231,766
Coupang, Inc. ^(c)	41,677	1,160,705
Investindustrial Acquisition Corp., Class A (Acquired 7/19/21, Cost \$958,190) ^{(d) (e)}	95,819	856,334
MercadoLibre, Inc. ^(c)	1,216	2,042,150
Philip Morris International, Inc.	16,734	1,586,216

Visa, Inc. Class A	12,990	2,893,523
Yum China Holdings, Inc.	94,000	5,462,340
		<u>20,069,994</u>
TOTAL COMMON STOCK (Cost \$1,397,835,139)		<u>1,645,734,684</u>
PREFERRED STOCK — 0.7%		
Brazil — 0.2%		
Banco Bradesco SA 3.340%	376,720	1,440,955
Itau Unibanco Holding SA 0.550%	710,050	3,772,069
		<u>5,213,024</u>
Germany — 0.3%		
Sartorius AG 0.150%	1,467	934,256
Volkswagen AG 2.560%	19,226	4,306,906
		<u>5,241,162</u>
Italy — 0.1%		
Telecom Italia SpA 6.110%	2,132,106	862,005

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

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments (Continued)

	<u>Number of Shares</u>	<u>Value</u>
Republic of Korea — 0.1%		
Samsung Electronics Co. Ltd. 3.760%	17,981	\$ 1,052,474
TOTAL PREFERRED STOCK (Cost \$11,140,855)		12,368,665
TOTAL EQUITIES (Cost \$1,408,975,994)		1,658,103,349
MUTUAL FUNDS — 1.2%		
United States — 1.2%		
State Street Navigator Securities Lending Government Money Market Portfolio ^(f)	19,855,666	19,855,666
TOTAL MUTUAL FUNDS (Cost \$19,855,666)		19,855,666
RIGHTS — 0.0%		
Russia — 0.0%		
Moscow Exchange ^(c)	83,990	200,539
TOTAL RIGHTS (Cost \$150,842)		200,539
TOTAL LONG-TERM INVESTMENTS (Cost \$1,428,982,502)		1,678,159,554
SHORT-TERM INVESTMENTS — 2.0%		
Mutual Fund — 1.9%		
T. Rowe Price Government Reserve Investment Fund	32,213,101	32,213,101
	<u>Principal Amount</u>	
Repurchase Agreement — 0.1%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/21, 0.000%, due 10/01/21 ^(h)	\$ 1,003,582	1,003,582
TOTAL SHORT-TERM INVESTMENTS (Cost \$33,216,683)		33,216,683
TOTAL INVESTMENTS — 100.7% (Cost \$1,462,199,185) ⁽ⁱ⁾		1,711,376,237
Other Assets/(Liabilities) — (0.7)%		(11,277,837)
NET ASSETS — 100.0%		\$ 1,700,098,400

Abbreviation Legend

ADR American Depositary Receipt

GDR Global Depositary Receipt

Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2021, was \$48,343,123 or 2.84% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$30,711,103 of non-cash collateral (U.S. Treasury and/or Agency obligations) related to securities lending activity. This amount is not reflected on either the Portfolio of Investments or the Statement of Assets and Liabilities. (Note 2).
- (b) Security is exempt from registration under Regulation S or Rule 144A of the Securities Act of 1933. These securities are considered restricted and may be resold in transactions exempt from registration. At September 30, 2021, the aggregate market value of these securities amounted to \$52,368,436 or 3.08% of net assets.
- (c) Non-income producing security.
- (d) This security is fair valued in good faith in accordance with procedures approved by the Board of Trustees. At September 30, 2021, these securities amounted to a value of \$2,063,167 or 0.12% of net assets.
- (e) Restricted security. Certain securities are restricted as to resale. At September 30, 2021, these securities amounted to a value of \$2,063,167 or 0.12% of net assets. The Fund generally bears the costs, if any, associated with the disposition of restricted securities.
- (f) Represents investment of security lending cash collateral. (Note 2).
- (g) Investment was valued using significant unobservable inputs.
- (h) Maturity value of \$1,003,582. Collateralized by U.S. Government Agency obligations with a rate of 0.500%, maturity date of 5/31/27, and an aggregate market value, including accrued interest, of \$1,023,713.
- (i) See Note 6 for aggregate cost for federal tax purposes.

Sector weightings, as a percentage of net assets, is as follows:

Financial	22.8%
Consumer, Non-cyclical	21.0%
Communications	11.0%
Consumer, Cyclical	10.7%
Technology	10.7%

Industrial	10.6%
Basic Materials	5.6%
Energy	3.0%
Utilities	2.0%
Mutual Funds	1.2%
Diversified	0.1%
Total Long-Term Investments	98.7%
Short-Term Investments and Other Assets and Liabilities	1.3%
Net Assets	100.0%

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

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*MassMutual Select Funds – Financial Statements**Statements of Assets and Liabilities**September 30, 2021*

	MassMutual Total Return Bond Fund	MassMutual Strategic Bond Fund
<i>Assets:</i>		
Investments, at value (Note 2) ^(a)	\$ 1,002,633,571	\$ 449,589,762
Repurchase agreements, at value (Note 2) ^(b)	4,336,978	3,834,843
Other short-term investments, at value (Note 2) ^(c)	100,694,762	188,487,466
Total investments ^(d)	<u>1,107,665,311</u>	<u>641,912,071</u>
Cash	58,877	8,487,274
Foreign currency, at value ^(e)	—	2,284,411
Receivables from:		
Investments sold		
Regular delivery	38,640,257	1,828,950
Delayed delivery	182,161,351	8,366,861
Open forward contracts (Note 2)	—	1,343,853
Fund shares sold	365,504	444,634
Closed swap agreements, at value	—	1,614
Collateral pledged for open futures and options contracts (Note 2)	1,925,000	1,067,443
Collateral pledged for open swap agreements (Note 2)	629,012	3,128,980
Variation margin on open derivative instruments (Note 2)	8,459	959,911
Interest and dividends	3,021,345	3,202,000
Interest tax reclaim	13,624	1,023
Foreign taxes withheld	—	—
Prepaid expenses	39,391	32,817
Total assets	<u>1,334,528,131</u>	<u>673,061,842</u>
<i>Liabilities:</i>		
Payables for:		
Investments purchased		
Regular delivery	20,796,182	2,025,606
Delayed delivery	372,014,532	16,384,199
Written options outstanding, at value (Note 2) ^(f)	139,500	148,337
Open forward contracts (Note 2)	—	1,391,231
Foreign currency overdraft	40	—
Fund shares repurchased	1,615,782	5,250,236
Payable for premium on purchased options	109,445	48,208
Collateral held for securities on loan (Note 2) ^(g)	17,208,525	—
Open swap agreements, at value (Note 2)	—	359,735
Trustees' fees and expenses (Note 3)	149,350	49,629
Variation margin on open derivative instruments (Note 2)	—	82,100
Affiliates (Note 3):		
Administration fees	65,045	99,736
Investment advisory fees	226,889	206,403
Service fees	74,848	54,709
Distribution fees	14,619	8,450
Commitment and Contingent Liabilities (Note 9)	—	—
Accrued expense and other liabilities	95,879	126,743
Total liabilities	<u>412,510,636</u>	<u>26,235,322</u>
Net assets	<u>\$ 922,017,495</u>	<u>\$ 646,826,520</u>
<i>Net assets consist of:</i>		
Paid-in capital	\$ 899,209,830	\$ 610,049,125
Accumulated Gain (Loss)	22,807,665	36,777,395
Net assets	<u>\$ 922,017,495</u>	<u>\$ 646,826,520</u>
(a) Cost of investments:	\$ 992,165,403	\$ 441,712,162
(b) Cost of repurchase agreements:	\$ 4,336,978	\$ 3,834,843
(c) Cost of other short-term investments:	\$ 100,694,394	\$ 188,509,097
(d) Securities on loan with market value of:	\$ 19,400,252	\$ —
(e) Cost of foreign currency:	\$ —	\$ 2,335,011
(f) Premiums on written options:	\$ 86,123	\$ 182,136
(g) Non-cash collateral is not included.		

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

MassMutual Diversified Value Fund	MassMutual Fundamental Value Fund	MM S&P 500 Index Fund	MassMutual Equity Opportunities Fund	MassMutual Fundamental Growth Fund
\$ 377,261,595	\$ 583,404,798	\$ 3,482,367,360	\$ 749,188,418	\$ 54,867,170
2,039,001	4,284,657	14,001,426	13,685,763	860,696
103	—	7,363,974	157	—
379,300,699	587,689,455	3,503,732,760	762,874,338	55,727,866
—	61,674	16,735	—	1,876
11,654	288,845	—	—	—
2,239,134	330,069	—	245,799	—
—	—	—	—	—
—	—	—	—	—
87,664	89,616	1,290,477	219,814	170,908
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
512,069	664,729	2,155,544	1,368,546	7,907
—	—	—	—	—
9,080	70,976	—	113,327	—
42,497	37,725	37,376	34,204	37,601
382,202,797	589,233,089	3,507,232,892	764,856,028	55,946,158
1,703,523	—	—	94,595	22,613
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
1,426,291	973,562	6,537,278	561,254	4,049
—	—	—	—	—
1,130,138	14,325	—	1,677,159	445,614
—	—	—	—	—
134,011	177,936	432,096	113,361	15,156
—	—	262,604	—	—
32,499	47,332	450,737	62,052	17,929
157,907	296,588	281,635	445,685	32,061
26,381	29,656	527,500	42,460	10,937
814	897	181,052	2,090	1,275
—	—	—	—	—
61,181	77,959	190,798	76,074	65,271
4,672,745	1,618,255	8,863,700	3,074,730	614,905
\$ 377,530,052	\$ 587,614,834	\$ 3,498,369,192	\$ 761,781,298	\$ 55,331,253
\$ 265,667,762	\$ 396,899,323	\$ 1,349,676,306	\$ 529,061,605	\$ 32,250,180
111,862,290	190,715,511	2,148,692,886	232,719,693	23,081,073
\$ 377,530,052	\$ 587,614,834	\$ 3,498,369,192	\$ 761,781,298	\$ 55,331,253
\$ 304,245,781	\$ 450,304,931	\$ 1,700,921,954	\$ 594,807,575	\$ 46,946,038
\$ 2,039,001	\$ 4,284,657	\$ 14,001,426	\$ 13,685,763	\$ 860,696
\$ 103	\$ —	\$ 7,364,095	\$ 157	\$ —
\$ 1,102,333	\$ 3,027,411	\$ 269,715	\$ 1,641,759	\$ 2,946,692
\$ 11,753	\$ 288,800	\$ —	\$ —	\$ —
\$ —	\$ —	\$ —	\$ —	\$ —

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Assets and Liabilities**September 30, 2021*

	MassMutual Total Return Bond Fund	MassMutual Strategic Bond Fund
<i>Class I shares:</i>		
Net assets	\$ 677,869,166	\$ 400,718,094
Shares outstanding ^(a)	66,368,056	36,761,337
Net asset value, offering price and redemption price per share	\$ 10.21	\$ 10.90
<i>Class R5 shares:</i>		
Net assets	\$ 39,879,132	\$ 83,070,861
Shares outstanding ^(a)	3,911,689	7,618,477
Net asset value, offering price and redemption price per share	\$ 10.19	\$ 10.90
<i>Service Class shares:</i>		
Net assets	\$ 70,920,187	\$ 29,021,896
Shares outstanding ^(a)	6,928,816	2,661,036
Net asset value, offering price and redemption price per share	\$ 10.24	\$ 10.91
<i>Administrative Class shares:</i>		
Net assets	\$ 19,332,584	\$ 50,858,725
Shares outstanding ^(a)	1,899,288	4,686,342
Net asset value, offering price and redemption price per share	\$ 10.18	\$ 10.85
<i>Class A shares:</i>		
Net assets	\$ 11,661,686	\$ 30,067,650
Shares outstanding ^(a)	1,151,910	2,783,103
Net asset value, and redemption price per share	\$ 10.12	\$ 10.80
Offering price per share (100/[100-maximum sales charge] of net asset value)	\$ 10.57	\$ 11.28
<i>Class R4 shares:</i>		
Net assets	\$ 79,970,341	\$ 41,555,502
Shares outstanding ^(a)	7,802,945	3,855,085
Net asset value, offering price and redemption price per share	\$ 10.25	\$ 10.78
<i>Class R3 shares:</i>		
Net assets	\$ 22,384,399	\$ 11,533,792
Shares outstanding ^(a)	2,206,260	1,080,641
Net asset value, offering price and redemption price per share	\$ 10.15	\$ 10.67

(a) Authorized unlimited number of shares with no par value.

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

MassMutual Diversified Value Fund	MassMutual Fundamental Value Fund	MM S&P 500 Index Fund	MassMutual Equity Opportunities Fund	MassMutual Fundamental Growth Fund
\$ 230,230,146	\$ 353,238,493	\$ 1,495,160,608	\$ 432,816,727	\$ 13,385,805
17,085,452	33,714,959	69,666,351	21,460,545	2,176,840
\$ 13.48	\$ 10.48	\$ 21.46	\$ 20.17	\$ 6.15
\$ 70,251,097	\$ 112,193,086	\$ 471,640,979	\$ 165,142,677	\$ 10,813,027
5,202,032	10,629,161	21,882,412	8,149,686	1,746,441
\$ 13.50	\$ 10.56	\$ 21.55	\$ 20.26	\$ 6.19
\$ 15,170,105	\$ 29,948,473	\$ 371,149,083	\$ 46,986,802	\$ 6,640,779
1,123,472	2,854,616	17,185,374	2,379,597	1,136,636
\$ 13.50	\$ 10.49	\$ 21.60	\$ 19.75	\$ 5.84
\$ 21,354,327	\$ 47,796,526	\$ 368,149,168	\$ 51,725,839	\$ 8,031,762
1,569,533	4,514,351	17,487,270	2,668,833	1,472,179
\$ 13.61	\$ 10.59	\$ 21.05	\$ 19.38	\$ 5.46
\$ 26,834,612	\$ 33,431,324	\$ 25,654,850	\$ 53,123,218	\$ 13,199,297
1,995,123	3,212,568	1,250,718	2,921,513	2,794,810
\$ 13.45	\$ 10.41	\$ 20.51	\$ 18.18	\$ 4.72
\$ 14.23	\$ 11.02	\$ 21.70	\$ 19.24	\$ 4.99
\$ 12,607,556	\$ 9,329,149	\$ 494,936,620	\$ 8,726,886	\$ 1,698,716
952,273	915,696	23,920,650	490,222	369,943
\$ 13.24	\$ 10.19	\$ 20.69	\$ 17.80	\$ 4.59
\$ 1,082,209	\$ 1,677,783	\$ 271,677,884	\$ 3,259,149	\$ 1,561,867
81,090	165,448	13,641,508	198,705	422,560
\$ 13.35	\$ 10.14	\$ 19.92	\$ 16.40	\$ 3.70

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Assets and Liabilities**September 30, 2021*

	MassMutual Blue Chip Growth Fund	MassMutual Growth Opportunities Fund
<i>Assets:</i>		
Investments, at value <i>(Note 2)</i> ^(a)	\$ 4,243,056,782	\$ 506,959,538
Repurchase agreements, at value <i>(Note 2)</i> ^(b)	22,419,942	5,752,493
Other short-term investments, at value <i>(Note 2)</i> ^(c)	100	—
Total investments ^(d)	<u>4,265,476,824</u>	<u>512,712,031</u>
Cash	—	—
Foreign currency, at value ^(e)	—	—
Receivables from:		
Investments sold		
Regular delivery	30,874,338	2,130,042
Open forward contracts <i>(Note 2)</i>	—	—
Fund shares sold	2,548,769	679,799
Investment adviser <i>(Note 3)</i>	—	—
Interest and dividends	608,152	18,945
Foreign taxes withheld	1,678,293	10,968
Prepaid expenses	36,474	38,594
Total assets	<u>4,301,222,850</u>	<u>515,590,379</u>
<i>Liabilities:</i>		
Payables for:		
Investments purchased		
Regular delivery	—	265,713
Open forward contracts <i>(Note 2)</i>	—	—
Fund shares repurchased	9,837,571	25,329
Collateral held for securities on loan <i>(Note 2)</i> ^(f)	—	4,476
Trustees' fees and expenses <i>(Note 3)</i>	243,305	97,003
Variation margin on open derivative instruments <i>(Note 2)</i>	—	—
Affiliates <i>(Note 3)</i> :		
Administration fees	303,988	46,316
Investment advisory fees	2,261,233	312,004
Service fees	220,371	29,171
Distribution fees	37,765	1,690
Commitment and Contingent Liabilities <i>(Note 9)</i>	—	—
Accrued expense and other liabilities	224,557	60,284
Total liabilities	<u>13,128,790</u>	<u>841,986</u>
Net assets	<u>\$ 4,288,094,060</u>	<u>\$ 514,748,393</u>
<i>Net assets consist of:</i>		
Paid-in capital	\$ 1,598,073,469	\$ 200,101,870
Accumulated Gain (Loss)	2,690,020,591	314,646,523
Net assets	<u>\$ 4,288,094,060</u>	<u>\$ 514,748,393</u>
(a) Cost of investments:	\$ 2,267,068,400	\$ 295,859,765
(b) Cost of repurchase agreements:	\$ 22,419,942	\$ 5,752,493
(c) Cost of other short-term investments:	\$ 100	\$ —
(d) Securities on loan with market value of:	\$ 14,641,119	\$ 36,121,557
(e) Cost of foreign currency:	\$ —	\$ —
(f) Non-cash collateral is not included.		

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

MassMutual Mid Cap Value Fund	MassMutual Small Cap Value Equity Fund	MassMutual Small Company Value Fund	MM S&P Mid Cap Index Fund	MM Russell 2000 Small Cap Index Fund
\$ 116,888,434 941,039 — 117,829,473 1,798,632 4,733	\$ 60,914,834 1,690,118 — 62,604,952 — 72	\$ 283,884,092 3,430,866 — 287,314,958 — —	\$ 453,171,816 3,207,377 1,929,731 458,308,924 — —	\$ 311,577,272 2,237,750 1,154,839 314,969,861 2,244 14
303,224 38,988 23,932 36,327 167,705 1,835 43,552 120,248,401	125,012 — 116,992 — 51,387 — 37,115 62,935,530	670,432 6,326 269,096 63,679 200,747 — 37,199 288,562,437	— — 109,515 — 516,664 — 38,347 458,973,450	— — 171,660 — 240,730 — 38,347 315,422,856
270,542 567 276,659 89,959 19,068 — 10,725 70,400 1,865 169 — 63,530 803,484 \$ 119,444,917	95,231 — 403,843 — 19,838 — 13,334 38,926 5,523 481 — 55,117 632,293 \$ 62,303,237	709,520 — 1,724 3,217,967 63,632 — 23,746 197,507 9,556 211 — 72,574 4,296,437 \$ 284,266,000	243,924 — 949,050 826,140 42,046 89,276 83,479 39,016 148,202 76,625 — 84,087 2,581,845 \$ 456,391,605	24,580 — 576,752 7,546,559 30,517 34,837 61,287 26,133 84,217 36,579 — 87,812 8,509,273 \$ 306,913,583
\$ 88,567,733 30,877,184 \$ 119,444,917	\$ 34,554,233 27,749,004 \$ 62,303,237	\$ 198,511,143 85,754,857 \$ 284,266,000	\$ 302,981,935 153,409,670 \$ 456,391,605	\$ 201,349,319 105,564,264 \$ 306,913,583
\$ 111,143,435 \$ 941,039 \$ — \$ 1,269,882 \$ 4,729	\$ 44,157,217 \$ 1,690,118 \$ — \$ 1,299,853 \$ 73	\$ 233,100,802 \$ 3,430,866 \$ — \$ 6,380,004 \$ —	\$ 340,067,339 \$ 3,207,377 \$ 1,929,763 \$ 12,171,329 \$ —	\$ 250,505,046 \$ 2,237,750 \$ 1,154,858 \$ 23,100,115 \$ 13

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Assets and Liabilities**September 30, 2021*

	MassMutual Blue Chip Growth Fund	MassMutual Growth Opportunities Fund
<i>Class I shares:</i>		
Net assets	\$ 2,790,280,856	\$ 304,938,088
Shares outstanding ^(a)	82,899,762	26,961,381
Net asset value, offering price and redemption price per share	\$ 33.66	\$ 11.31
<i>Class R5 shares:</i>		
Net assets	\$ 616,307,232	\$ 82,696,233
Shares outstanding ^(a)	18,365,094	7,515,796
Net asset value, offering price and redemption price per share	\$ 33.56	\$ 11.00
<i>Service Class shares:</i>		
Net assets	\$ 207,565,345	\$ 30,818,708
Shares outstanding ^(a)	6,256,359	3,001,643
Net asset value, offering price and redemption price per share	\$ 33.18	\$ 10.27
<i>Administrative Class shares:</i>		
Net assets	\$ 347,255,904	\$ 51,977,835
Shares outstanding ^(a)	10,659,114	5,563,025
Net asset value, offering price and redemption price per share	\$ 32.58	\$ 9.34
<i>Class A shares:</i>		
Net assets	\$ 142,265,332	\$ 38,899,909
Shares outstanding ^(a)	4,616,028	5,115,300
Net asset value, and redemption price per share	\$ 30.82	\$ 7.60
Offering price per share (100/[100-maximum sales charge] of net asset value)	\$ 32.61	\$ 8.04
<i>Class R4 shares:</i>		
Net assets	\$ 128,729,545	\$ 2,721,139
Shares outstanding ^(a)	4,177,092	350,440
Net asset value, offering price and redemption price per share	\$ 30.82	\$ 7.76
<i>Class R3 shares:</i>		
Net assets	\$ 55,689,846	\$ 2,696,481
Shares outstanding ^(a)	1,966,489	457,295
Net asset value, offering price and redemption price per share	\$ 28.32	\$ 5.90

(a) Authorized unlimited number of shares with no par value.

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

MassMutual Mid Cap Value Fund	MassMutual Small Cap Value Equity Fund	MassMutual Small Company Value Fund	MM S&P Mid Cap Index Fund	MM Russell 2000 Small Cap Index Fund
\$ 114,786,034	\$ 37,020,537	\$ 179,847,015	\$ 125,905,256	\$ 98,932,761
7,596,317	2,837,042	14,172,507	7,289,244	6,082,267
\$ 15.11	\$ 13.05	\$ 12.69	\$ 17.27	\$ 16.27
\$ 1,001,486	\$ 11,027,992	\$ 65,854,135	\$ 34,036,997	\$ 19,312,545
65,556	843,661	5,152,079	1,977,928	1,188,474
\$ 15.28	\$ 13.07	\$ 12.78	\$ 17.21	\$ 16.25
\$ 568,718	\$ 3,143,319	\$ 8,737,185	\$ 21,698,565	\$ 13,433,074
37,522	239,475	688,336	1,268,784	834,345
\$ 15.16	\$ 13.13	\$ 12.69	\$ 17.10	\$ 16.10
\$ 1,123,705	\$ 2,549,807	\$ 14,862,242	\$ 50,348,001	\$ 45,887,562
72,676	196,334	1,200,423	2,945,254	2,845,860
\$ 15.46	\$ 12.99	\$ 12.38	\$ 17.09	\$ 16.12
\$ 1,544,458	\$ 6,375,124	\$ 13,825,906	\$ 29,885,173	\$ 19,824,656
102,065	500,824	1,168,510	1,751,878	1,238,684
\$ 15.13	\$ 12.73	\$ 11.83	\$ 17.06	\$ 16.00
\$ 16.01	\$ 13.47	\$ 12.52	\$ 18.05	\$ 16.93
\$ 276,329	\$ 1,491,614	\$ 780,385	\$ 78,753,077	\$ 53,580,710
18,477	117,910	67,001	4,643,721	3,362,761
\$ 14.96	\$ 12.65	\$ 11.65	\$ 16.96	\$ 15.93
\$ 144,187	\$ 694,844	\$ 359,132	\$ 115,764,536	\$ 55,942,275
9,664	55,639	33,457	6,866,594	3,534,771
\$ 14.92	\$ 12.49	\$ 10.73	\$ 16.86	\$ 15.83

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Assets and Liabilities**September 30, 2021*

	MassMutual Mid Cap Growth Fund	MassMutual Small Cap Growth Equity Fund
<i>Assets:</i>		
Investments, at value <i>(Note 2)</i> ^(a)	\$ 9,004,818,252	\$ 763,907,059
Repurchase agreements, at value <i>(Note 2)</i> ^(b)	92,485,921	16,868,318
Other short-term investments, at value <i>(Note 2)</i> ^(c)	103,888,237	—
Total investments ^(d)	<u>9,201,192,410</u>	<u>780,775,377</u>
Cash	—	6,364
Foreign currency, at value ^(e)	—	12
Receivables from:		
Investments sold		
Regular delivery	8,578,920	8,337,722
Open forward contracts <i>(Note 2)</i>	—	—
Fund shares sold	2,666,950	344,631
Investment adviser <i>(Note 3)</i>	—	—
Variation margin on open derivative instruments <i>(Note 2)</i>	—	—
Interest and dividends	1,440,565	247,955
Foreign taxes withheld	—	—
Prepaid expenses	43,210	41,204
Total assets	<u>9,213,922,055</u>	<u>789,753,265</u>
<i>Liabilities:</i>		
Payables for:		
Investments purchased		
Regular delivery	9,681,577	8,739,115
Open forward contracts <i>(Note 2)</i>	—	—
Fund shares repurchased	20,488,639	395,445
Collateral held for securities on loan <i>(Note 2)</i> ^(f)	66,758,086	17,312,033
Trustees' fees and expenses <i>(Note 3)</i>	503,401	103,732
Affiliates <i>(Note 3)</i> :		
Administration fees	444,239	50,335
Investment advisory fees	5,349,659	518,719
Service fees	243,161	35,138
Distribution fees	21,561	3,310
Commitment and Contingent Liabilities <i>(Note 9)</i>	—	—
Accrued expense and other liabilities	372,422	82,073
Total liabilities	<u>103,862,745</u>	<u>27,239,900</u>
Net assets	<u>\$ 9,110,059,310</u>	<u>\$ 762,513,365</u>
<i>Net assets consist of:</i>		
Paid-in capital	\$ 4,634,939,086	\$ 458,458,276
Accumulated Gain (Loss)	4,475,120,224	304,055,089
Net assets	<u>\$ 9,110,059,310</u>	<u>\$ 762,513,365</u>
(a) Cost of investments:	\$ 6,086,217,245	\$ 618,679,139
(b) Cost of repurchase agreements:	\$ 92,485,921	\$ 16,868,318
(c) Cost of other short-term investments:	\$ 103,888,237	\$ —
(d) Securities on loan with market value of:	\$ 143,934,613	\$ 49,932,788
(e) Cost of foreign currency:	\$ —	\$ 12
(f) Non-cash collateral is not included.		

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

MM MSCI EAFE International Index Fund		MassMutual Overseas Fund		MassMutual Select T. Rowe Price International Equity Fund	
\$	199,148,628	\$	665,766,505	\$	1,678,159,554
	1,554,437		11,890,846		1,003,582
	—		—		32,213,101
	200,703,065		677,657,351		1,711,376,237
	17,252		9,970		23,892
	491,299		197,125		3,058,043
	38,158		266,747		4,657,855
	2,417		130,292		—
	46,707		1,902,532		594,489
	—		55,308		163,091
	808,603		—		—
	567,163		597,050		4,333,309
	676,273		2,843,272		2,701,367
	37,748		38,723		8,525
	203,388,685		683,698,370		1,726,916,808
	—		778,297		4,780,562
	35,044		—		—
	151,313		724,516		264,583
	3,225,837		22,156,838		19,855,666
	33,691		100,986		40,018
	43,210		53,664		15,709
	17,439		443,552		—
	52,588		33,336		—
	21,549		4,506		—
	—		—		—
	142,955		867,610		1,861,870
	3,723,626		25,163,305		26,818,408
\$	199,665,059	\$	658,535,065	\$	1,700,098,400
\$	153,245,434	\$	493,242,827	\$	1,428,576,499
	46,419,625		165,292,238		271,521,901
\$	199,665,059	\$	658,535,065	\$	1,700,098,400
\$	160,716,157	\$	535,357,266	\$	1,428,982,502
\$	1,554,437	\$	11,890,846	\$	1,003,582
\$	—	\$	—	\$	32,213,101
\$	5,461,216	\$	21,103,777	\$	48,343,123
\$	494,155	\$	197,275	\$	2,403,496

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Assets and Liabilities**September 30, 2021*

	MassMutual Mid Cap Growth Fund	MassMutual Small Cap Growth Equity Fund
<i>Class I shares:</i>		
Net assets	\$ 6,514,823,406	\$ 487,030,889
Shares outstanding ^(a)	208,613,218	23,319,908
Net asset value, offering price and redemption price per share	\$ 31.23	\$ 20.88
<i>Class R5 shares:</i>		
Net assets	\$ 1,668,653,317	\$ 155,911,686
Shares outstanding ^(a)	54,172,900	7,617,134
Net asset value, offering price and redemption price per share	\$ 30.80	\$ 20.47
<i>Service Class shares:</i>		
Net assets	\$ 325,714,408	\$ 36,257,807
Shares outstanding ^(a)	10,922,761	1,919,420
Net asset value, offering price and redemption price per share	\$ 29.82	\$ 18.89
<i>Administrative Class shares:</i>		
Net assets	\$ 246,665,947	\$ 29,715,085
Shares outstanding ^(a)	8,761,335	1,726,227
Net asset value, offering price and redemption price per share	\$ 28.15	\$ 17.21
<i>Class A shares:</i>		
Net assets	\$ 167,113,926	\$ 31,655,855
Shares outstanding ^(a)	6,592,701	2,204,136
Net asset value, and redemption price per share	\$ 25.35	\$ 14.36
Offering price per share (100/[100-maximum sales charge] of net asset value)	\$ 26.83	\$ 15.20
<i>Class R4 shares:</i>		
Net assets	\$ 155,373,565	\$ 17,129,150
Shares outstanding ^(a)	6,062,572	1,178,479
Net asset value, offering price and redemption price per share	\$ 25.63	\$ 14.53
<i>Class R3 shares:</i>		
Net assets	\$ 31,714,741	\$ 4,812,893
Shares outstanding ^(a)	1,388,849	410,554
Net asset value, offering price and redemption price per share	\$ 22.84	\$ 11.72

(a) Authorized unlimited number of shares with no par value.

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

MM MSCI EAFE International Index Fund	MassMutual Overseas Fund	MassMutual Select T. Rowe Price International Equity Fund
\$ 74,969,246	\$ 383,222,871	\$ 1,700,098,400
5,180,011	37,676,131	145,236,069
\$ 14.47	\$ 10.17	\$ 11.71
\$ 16,476,325	\$ 158,046,384	\$ —
1,139,189	15,477,560	—
\$ 14.46	\$ 10.21	\$ —
\$ 4,190,849	\$ 45,453,546	\$ —
289,068	4,481,951	—
\$ 14.50	\$ 10.14	\$ —
\$ 25,078,122	\$ 19,735,119	\$ —
1,745,976	1,927,242	—
\$ 14.36	\$ 10.24	\$ —
\$ 16,156,598	\$ 24,230,810	\$ —
1,127,839	2,426,998	—
\$ 14.33	\$ 9.98	\$ —
\$ 15.16	\$ 10.56	\$ —
\$ 29,780,440	\$ 20,875,423	\$ —
2,090,549	2,140,316	—
\$ 14.25	\$ 9.75	\$ —
\$ 33,013,479	\$ 6,970,912	\$ —
2,328,173	707,644	—
\$ 14.18	\$ 9.85	\$ —

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Operations**For the Year Ended September 30, 2021*

	MassMutual Total Return Bond Fund	MassMutual Strategic Bond Fund
<i>Investment income (Note 2):</i>		
Dividends ^(a)	\$ 729	\$ —
Interest ^(b)	17,109,027	20,068,004
Securities lending net income	3,975	267
Non cash income	—	—
Total investment income	<u>17,113,731</u>	<u>20,068,271</u>
<i>Expenses (Note 3):</i>		
Investment advisory fees	2,736,139	2,763,689
Custody fees	129,386	188,618
Audit fees	62,247	73,212
Legal fees	49,695	18,240
Proxy fees	1,158	1,158
Accounting & Administration fees	78,242	175,409
Shareholder reporting fees	45,648	46,267
Trustees' fees	33,057	26,757
Registration and filing fees	101,754	103,190
Transfer agent fees	2,989	2,989
	<u>3,240,315</u>	<u>3,399,529</u>
Administration fees:		
Class R5	38,689	87,692
Service Class	145,367	64,880
Administrative Class	51,779	176,230
Class A	32,262	136,120
Class R4	191,410	92,056
Class R3	50,448	28,769
Distribution and Service fees:		
Class A	30,430	133,368
Class R4	239,263	115,069
Class R3	126,120	71,921
Shareholder service fees:		
Service Class	11,429	4,764
Administrative Class	7,891	27,778
Class A	4,253	23,921
Total expenses	<u>4,169,656</u>	<u>4,362,097</u>
Expenses waived (Note 3):		
Class I advisory fees waived	(167,173)	(29,090)
Class R5 advisory fees waived	(10,037)	(5,719)
Service Class advisory fees waived	(19,663)	(2,216)
Administrative Class advisory fees waived	(5,092)	(3,662)
Class A advisory fees waived	(3,189)	(2,706)
Class R4 advisory fees waived	(24,447)	(3,012)
Class R3 advisory fees waived	(6,407)	(916)
Net expenses:	<u>3,933,648</u>	<u>4,314,776</u>
Net investment income (loss)	<u>13,180,083</u>	<u>15,753,495</u>

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

MassMutual Diversified Value Fund	MassMutual Fundamental Value Fund	MM S&P 500 Index Fund	MassMutual Equity Opportunities Fund	MassMutual Fundamental Growth Fund
\$ 9,402,508	\$ 11,166,838	\$ 50,489,385	\$ 15,377,873	\$ 274,784
—	—	5,339	—	—
4,783	14,988	17,582	7,199	2,893
25,732	—	734,463	—	—
9,433,023	11,181,826	51,246,769	15,385,072	277,677
1,956,501	3,624,144	3,276,380	5,349,429	420,446
37,515	62,796	215,912	59,086	43,778
53,382	53,252	56,397	54,053	54,921
8,103	7,176	72,692	17,023	—
1,158	1,158	1,158	1,158	1,159
31,430	32,429	104,967	37,553	28,569
25,863	27,562	105,640	31,873	18,874
14,103	19,796	124,843	28,455	1,991
103,311	105,960	107,221	108,372	98,772
2,990	2,989	2,989	2,989	2,989
2,234,356	3,937,262	4,068,199	5,689,991	671,499
70,087	136,970	462,214	169,070	12,359
28,400	50,609	927,354	88,197	12,650
52,603	146,519	1,232,464	134,526	33,425
80,685	94,204	85,127	153,636	36,771
24,331	18,963	1,376,758	17,722	3,361
3,070	2,505	633,745	7,101	5,680
76,517	89,899	67,600	146,282	35,693
30,413	23,704	1,376,758	22,153	4,201
7,674	6,262	1,267,489	17,752	14,200
1,887	2,902	49,564	5,764	837
6,637	22,465	146,041	17,555	5,435
11,136	13,674	9,514	21,902	6,062
2,627,796	4,545,938	11,702,827	6,491,651	842,173
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
2,627,796	4,545,938	11,702,827	6,491,651	842,173
6,805,227	6,635,888	39,543,942	8,893,421	(564,496)

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Operations**For the Year Ended September 30, 2021*

	MassMutual Total Return Bond Fund	MassMutual Strategic Bond Fund
<i>Realized and unrealized gain (loss):</i>		
Net realized gain (loss) on:		
Investment transactions	\$ 3,864,787	\$ 12,380,977
Futures contracts	(728,905)	(3,950,682)
Written options	(28,698)	3,700,054
Swap agreements	(1,141)	7,297,326
Foreign currency transactions	(74,593)	69,614
Forward contracts	1,435,405	1,278,544
Net realized gain (loss)	4,466,855	20,775,833
Net change in unrealized appreciation (depreciation) on:		
Investment transactions	(16,600,048)	(23,249,989)*
Futures contracts	(149,635)	(1,571,640)
Written options	(53,377)	(24,626)
Swap agreements	(92,776)	(370,892)
Translation of assets and liabilities in foreign currencies	(2,607)	(36,235)
Forward contracts	—	598,416
Net change in unrealized appreciation (depreciation)	(16,898,443)	(24,654,966)
Net realized gain (loss) and change in unrealized appreciation (depreciation)	(12,431,588)	(3,879,133)
Net increase (decrease) in net assets resulting from operations	\$ 748,495	\$ 11,874,362
(a) Net of foreign withholding tax of:	\$ —	\$ —
(b) Net of foreign withholding tax of:	\$ —	\$ 10,665
* Net of net increase (decrease) in accrued foreign capital gains tax of:	\$ —	\$ (4,077)

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

MassMutual Diversified Value Fund	MassMutual Fundamental Value Fund	MM S&P 500 Index Fund	MassMutual Equity Opportunities Fund	MassMutual Fundamental Growth Fund
\$ 43,108,523	\$ 74,834,316	\$ 421,143,604	\$ 82,450,013	\$ 17,886,297
—	—	7,808,307	—	—
—	—	—	—	—
—	—	—	—	—
5,794	2,953	—	(9,814)	—
—	—	—	—	—
43,114,317	74,837,269	428,951,911	82,440,199	17,886,297
76,407,854	123,985,605	413,161,545	82,441,384	(376,347)
—	—	(807,746)	—	—
—	—	—	—	—
—	—	—	—	—
(2,208)	(6,649)	—	(5,659)	—
—	—	—	—	—
76,405,646	123,978,956	412,353,799	82,435,725	(376,347)
119,519,963	198,816,225	841,305,710	164,875,924	17,509,950
\$ 126,325,190	\$ 205,452,113	\$ 880,849,652	\$ 173,769,345	\$ 16,945,454
\$ 85,561	\$ 49,234	\$ 4,560	\$ 145,751	\$ 590
\$ —	\$ —	\$ —	\$ —	\$ —
\$ —	\$ —	\$ —	\$ —	\$ —

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Operations**For the Year Ended September 30, 2021*

	MassMutual Blue Chip Growth Fund	MassMutual Growth Opportunities Fund
<i>Investment income (Note 2):</i>		
Dividends ^(a)	\$ 21,684,215	\$ 1,019,767
Interest	14,686	—
Securities lending net income	53,183	42,445
Non cash income	—	—
Total investment income	<u>21,752,084</u>	<u>1,062,212</u>
<i>Expenses (Note 3):</i>		
Investment advisory fees	27,410,846	3,750,207
Custody fees	317,456	45,362
Audit fees	57,456	53,936
Legal fees	77,589	7,624
Proxy fees	1,158	1,158
Accounting & Administration fees	135,386	29,967
Shareholder reporting fees	112,491	27,779
Trustees' fees	168,499	19,015
Registration and filing fees	106,182	105,453
Transfer agent fees	2,989	2,989
	<u>28,390,052</u>	<u>4,043,490</u>
Administration fees:		
Class R5	650,075	99,991
Service Class	387,562	64,671
Administrative Class	983,917	142,448
Class A	510,184	108,995
Class R4	263,905	6,113
Class R3	118,457	3,915
Distribution and Service fees:		
Class A	491,301	104,147
Class R4	329,881	7,641
Class R3	296,142	9,789
Shareholder service fees:		
Service Class	25,075	4,319
Administrative Class	149,644	22,113
Class A	79,377	15,981
Total expenses	<u>32,675,572</u>	<u>4,633,613</u>
<i>Expenses waived (Note 3):</i>		
Class I fees reimbursed by adviser	—	—
Class R5 fees reimbursed by adviser	—	—
Service Class fees reimbursed by adviser	—	—
Administrative Class fees reimbursed by adviser	—	—
Class A fees reimbursed by adviser	—	—
Class R4 fees reimbursed by adviser	—	—
Class R3 fees reimbursed by adviser	—	—
Class I advisory fees waived	—	(58,750)
Class R5 advisory fees waived	—	(19,941)
Service Class advisory fees waived	—	(6,900)
Administrative Class advisory fees waived	—	(10,971)
Class A advisory fees waived	—	(8,332)
Class R4 advisory fees waived	—	(612)
Class R3 advisory fees waived	—	(394)
Net expenses:	<u>32,675,572</u>	<u>4,527,713</u>
Net investment income (loss)	<u>(10,923,488)</u>	<u>(3,465,501)</u>

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

MassMutual Mid Cap Value Fund	MassMutual Small Cap Value Equity Fund	MassMutual Small Company Value Fund	MM S&P Mid Cap Index Fund	MM Russell 2000 Small Cap Index Fund
\$ 2,388,713	\$ 911,750	\$ 3,595,044	\$ 7,125,825	\$ 3,327,867
—	1,929	—	1,399	849
1,975	3,500	10,323	24,410	199,429
—	—	—	—	42,649
<u>2,390,688</u>	<u>917,179</u>	<u>3,605,367</u>	<u>7,151,634</u>	<u>3,570,794</u>
844,752	642,117	2,152,369	457,742	323,932
54,359	30,080	71,970	79,012	136,052
53,731	53,647	53,065	48,309	50,475
2,639	1,172	2,042	6,973	4,535
1,158	1,158	1,158	1,158	1,158
30,516	29,059	30,737	32,311	41,939
23,780	19,335	18,346	69,751	52,791
4,389	3,099	9,082	16,216	11,696
99,636	99,802	100,967	102,245	101,387
2,989	2,989	2,989	2,990	2,990
<u>1,117,949</u>	<u>882,458</u>	<u>2,442,725</u>	<u>816,707</u>	<u>726,955</u>
868	14,729	60,905	29,730	19,165
820	6,169	14,587	55,320	31,114
2,806	7,843	43,568	170,430	174,952
9,327	17,368	39,272	99,926	68,711
1,377	4,275	2,755	214,945	147,380
699	1,708	561	292,511	144,585
8,845	16,254	36,631	79,214	54,383
1,722	5,343	3,444	214,945	147,380
1,749	4,270	1,403	585,022	289,170
28	392	642	2,773	1,305
352	1,376	5,857	17,773	19,165
1,287	2,135	4,684	10,973	7,424
<u>1,147,829</u>	<u>964,320</u>	<u>2,657,034</u>	<u>2,590,269</u>	<u>1,831,689</u>
(256,363)	—	(40,211)	—	—
(2,027)	—	(14,704)	—	—
(1,121)	—	(2,041)	—	—
(2,416)	—	(3,361)	—	—
(7,738)	—	(3,112)	—	—
(1,260)	—	(173)	—	—
(728)	—	(79)	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
<u>876,176</u>	<u>964,320</u>	<u>2,593,353</u>	<u>2,590,269</u>	<u>1,831,689</u>
<u>1,514,512</u>	<u>(47,141)</u>	<u>1,012,014</u>	<u>4,561,365</u>	<u>1,739,105</u>

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Operations**For the Year Ended September 30, 2021*

	MassMutual Blue Chip Growth Fund	MassMutual Growth Opportunities Fund
<i>Realized and unrealized gain (loss):</i>		
Net realized gain (loss) on:		
Investment transactions	\$ 798,397,919	\$ 118,471,910
Futures contracts	—	—
Foreign currency transactions	(91)	—
Forward contracts	—	—
Net realized gain (loss)	<u>798,397,828</u>	<u>118,471,910</u>
Net change in unrealized appreciation (depreciation) on:		
Investment transactions	89,559,267	15,322,375
Futures contracts	—	—
Translation of assets and liabilities in foreign currencies	(35)	—
Forward contracts	—	—
Net change in unrealized appreciation (depreciation)	<u>89,559,232</u>	<u>15,322,375</u>
Net realized gain (loss) and change in unrealized appreciation (depreciation)	<u>887,957,060</u>	<u>133,794,285</u>
Net increase (decrease) in net assets resulting from operations	<u>\$ 877,033,572</u>	<u>\$ 130,328,784</u>
(a) Net of foreign withholding tax of:	\$ 637,561	\$ —

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

MassMutual Mid Cap Value Fund	MassMutual Small Cap Value Equity Fund	MassMutual Small Company Value Fund	MM S&P Mid Cap Index Fund	MM Russell 2000 Small Cap Index Fund
\$ 29,733,301	\$ 15,363,417	\$ 44,620,846	\$ 43,147,320	\$ 50,324,560
—	—	—	1,888,840	971,615
(6,106)	805	(942)	—	—
(294,747)	—	25,503	—	—
29,432,448	15,364,222	44,645,407	45,036,160	51,296,175
5,142,983	23,244,045	69,530,256	101,872,326	61,484,648
—	—	—	(97,768)	(36,246)
66	(2)	—	—	1
80,027	—	6,326	—	—
5,223,076	23,244,043	69,536,582	101,774,558	61,448,403
34,655,524	38,608,265	114,181,989	146,810,718	112,744,578
\$ 36,170,036	\$ 38,561,124	\$ 115,194,003	\$ 151,372,083	\$ 114,483,683
\$ 12,325	\$ 1,758	\$ 5,703	\$ —	\$ 6,098

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Operations**For the Year Ended September 30, 2021*

	MassMutual Mid Cap Growth Fund	MassMutual Small Cap Growth Equity Fund
<i>Investment income (Note 2):</i>		
Dividends ^(a)	\$ 41,881,562	\$ 3,418,408
Interest	67,342	—
Securities lending net income	283,517	237,095
Non cash income	—	—
Total investment income	<u>42,232,421</u>	<u>3,655,503</u>
<i>Expenses (Note 3):</i>		
Investment advisory fees	65,355,447	5,948,196
Custody fees	557,142	84,089
Audit fees	58,234	55,690
Legal fees	142,870	7,690
Proxy fees	1,158	1,158
Accounting & Administration fees	251,804	36,938
Shareholder reporting fees	636,420	117,759
Trustees' fees	350,141	27,169
Registration and filing fees	141,320	103,644
Transfer agent fees	<u>2,989</u>	<u>2,989</u>
	67,497,525	6,385,322
Administration fees:		
Class R5	1,692,293	162,487
Service Class	654,263	70,874
Administrative Class	701,931	83,952
Class A	519,584	106,391
Class R4	371,352	35,921
Class R3	68,711	10,452
Distribution and Service fees:		
Class A	497,560	101,227
Class R4	464,190	44,901
Class R3	171,777	26,130
Shareholder service fees:		
Service Class	44,920	4,519
Administrative Class	103,199	11,922
Class A	<u>77,489</u>	<u>15,082</u>
Total expenses	72,864,794	7,059,180
<i>Expenses waived (Note 3):</i>		
Class I fees reimbursed by adviser	—	—
Class R5 fees reimbursed by adviser	—	—
Service Class fees reimbursed by adviser	—	—
Administrative Class fees reimbursed by adviser	—	—
Class A fees reimbursed by adviser	—	—
Class R4 fees reimbursed by adviser	—	—
Class R3 fees reimbursed by adviser	—	—
Net expenses:	<u>72,864,794</u>	<u>7,059,180</u>
Net investment income (loss)	<u>(30,632,373)</u>	<u>(3,403,677)</u>

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

MM MSCI EAFE International Index Fund		MassMutual Overseas Fund		MassMutual Select T. Rowe Price International Equity Fund	
\$	5,445,807	\$	13,798,933	\$	38,224,842
	—		18,199		15,566
	42,806		63,827		280,427
	331,739		159,869		532,808
	<u>5,820,352</u>		<u>14,040,828</u>		<u>39,053,643</u>
	212,132		5,600,920		—
	217,358		290,854		886,678
	54,541		74,686		108,335
	3,124		10,489		30,178
	1,158		1,157		1,158
	43,392		53,507		47,089
	21,467		31,243		38,768
	7,580		25,399		59,682
	101,179		104,627		29,516
	2,989		2,990		2,989
	<u>664,920</u>		<u>6,195,872</u>		<u>1,204,393</u>
	15,685		159,065		—
	9,540		86,512		—
	105,638		52,810		—
	54,186		78,878		—
	86,017		39,953		—
	85,437		14,150		—
	43,241		76,273		—
	86,017		49,942		—
	170,874		35,375		—
	471		5,239		—
	13,089		7,864		—
	6,351		12,649		—
	<u>1,341,466</u>		<u>6,814,582</u>		<u>1,204,393</u>
	—		(396,269)		(1,204,393)
	—		(151,089)		—
	—		(43,562)		—
	—		(19,204)		—
	—		(28,976)		—
	—		(18,968)		—
	—		(6,720)		—
	<u>1,341,466</u>		<u>6,149,794</u>		<u>—</u>
	<u>4,478,886</u>		<u>7,891,034</u>		<u>39,053,643</u>

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Operations**For the Year Ended September 30, 2021*

	MassMutual Mid Cap Growth Fund	MassMutual Small Cap Growth Equity Fund
<i>Realized and unrealized gain (loss):</i>		
Net realized gain (loss) on:		
Investment transactions	\$ 1,647,676,968	\$ 182,434,867
Futures contracts	—	—
Written options	—	—
Foreign currency transactions	(139)	(52)
Forward contracts	—	—
Net realized gain (loss)	<u>1,647,676,829</u>	<u>182,434,815</u>
Net change in unrealized appreciation (depreciation) on:		
Investment transactions	828,830,012	33,560,588
Futures contracts	—	—
Written options	—	—
Translation of assets and liabilities in foreign currencies	—	—
Forward contracts	—	—
Net change in unrealized appreciation (depreciation)	<u>828,830,012</u>	<u>33,560,588</u>
Net realized gain (loss) and change in unrealized appreciation (depreciation)	<u>2,476,506,841</u>	<u>215,995,403</u>
Net increase (decrease) in net assets resulting from operations	<u>\$ 2,445,874,468</u>	<u>\$ 212,591,726</u>
(a) Net of foreign withholding tax of:	\$ 190,174	\$ 1,735
* Net of net increase (decrease) in accrued foreign capital gains tax of:	\$ —	\$ —

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

MM MSCI EAFE International Index Fund	MassMutual Overseas Fund	MassMutual Select T. Rowe Price International Equity Fund
\$ 10,102,446	\$ 57,441,515	\$ 62,575,351
926,249	—	—
—	—	125,363
144,551	(28,367)	(997,680)
(20,432)	(59,192)	—
11,152,814	57,353,956	61,703,034
30,908,999	118,493,083*	231,075,331*
40,899	—	—
—	—	(31,387)
(88,494)	(75,017)	583,332
(29,384)	183,859	—
30,832,020	118,601,925	231,627,276
41,984,834	175,955,881	293,330,310
\$ 46,463,720	\$ 183,846,915	\$ 332,383,953
\$ 521,825	\$ 1,652,593	\$ 4,497,595
\$ —	\$ (377,407)	\$ (1,452,607)

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Changes in Net Assets*

	MassMutual Total Return Bond Fund	
	Year Ended September 30, 2021	Year Ended September 30, 2020
<i>Increase (Decrease) in Net Assets:</i>		
<i>Operations:</i>		
Net investment income (loss)	\$ 13,180,083	\$ 17,258,226
Net realized gain (loss)	4,466,855	42,687,538
Net change in unrealized appreciation (depreciation)	(16,898,443)	5,470,534
Net increase (decrease) in net assets resulting from operations	748,495	65,416,298
<i>Distributions to shareholders (Note 2):</i>		
Class I	(36,195,787)	(14,496,136)
Class R5	(2,183,127)	(1,165,597)
Service Class	(4,814,337)	(3,168,205)
Administrative Class	(1,077,493)	(542,340)
Class A	(595,039)	(209,443)
Class R4	(5,283,413)	(3,964,383)
Class R3	(1,444,165)	(674,501)
Total distributions	(51,593,361)	(24,220,605)
<i>Net fund share transactions (Note 5):</i>		
Class I	96,163,136	110,388,950
Class R5	3,833,656	(8,128,950)
Service Class	(17,605,651)	(27,486,984)
Administrative Class	(175,722)	(1,525,261)
Class A	968,248	2,495,648
Class R4	(16,602,248)	(64,423,288)
Class R3	(3,848,267)	(3,957,393)
Increase (decrease) in net assets from fund share transactions	62,733,152	7,362,722
Total increase (decrease) in net assets	11,888,286	48,558,415
<i>Net assets</i>		
Beginning of year	910,129,209	861,570,794
End of year	\$ 922,017,495	\$ 910,129,209

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

MassMutual Strategic Bond Fund		MassMutual Diversified Value Fund	
Year Ended September 30, 2021	Year Ended September 30, 2020	Year Ended September 30, 2021	Year Ended September 30, 2020
\$ 15,753,495	\$ 18,746,193	\$ 6,805,227	\$ 7,826,369
20,775,833	15,843,461	43,114,317	(7,080,679)
(24,654,966)	9,562,861	76,405,646	(24,284,487)
11,874,362	44,152,515	126,325,190	(23,538,797)
(23,040,523)	(16,309,511)	(4,826,890)	(15,492,478)
(4,697,559)	(2,772,395)	(1,427,247)	(5,283,654)
(1,923,985)	(1,377,962)	(310,576)	(713,075)
(3,735,392)	(2,903,139)	(339,296)	(1,352,099)
(3,173,070)	(1,857,498)	(504,355)	(2,365,876)
(2,384,840)	(2,464,809)	(199,786)	(491,606)
(702,974)	(634,788)	(24,615)	(133,835)
(39,658,343)	(28,320,102)	(7,632,765)	(25,832,623)
(7,328,067)	36,368,845	(41,004,875)	14,587,695
(3,524,026)	8,061,676	(13,881,575)	(716,037)
(7,247,620)	800,340	(3,425,423)	5,839,105
(16,752,042)	(7,485,686)	(637,603)	(1,213,744)
(27,857,171)	9,386,747	(10,390,898)	(5,078,648)
(6,478,544)	(17,912,908)	(871,873)	4,942,031
(3,711,171)	(3,082,511)	(900,942)	386,797
(72,898,641)	26,136,503	(71,113,189)	18,747,199
(100,682,622)	41,968,916	47,579,236	(30,624,221)
747,509,142	705,540,226	329,950,816	360,575,037
\$ 646,826,520	\$ 747,509,142	\$ 377,530,052	\$ 329,950,816

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Changes in Net Assets*

	MassMutual Fundamental Value Fund	
	Year Ended September 30, 2021	Year Ended September 30, 2020
<i>Increase (Decrease) in Net Assets:</i>		
<i>Operations:</i>		
Net investment income (loss)	\$ 6,635,888	\$ 10,171,404
Net realized gain (loss)	74,837,269	(14,550,287)
Net change in unrealized appreciation (depreciation)	123,978,956	(44,840,595)
Net increase (decrease) in net assets resulting from operations	<u>205,452,113</u>	<u>(49,219,478)</u>
<i>Distributions to shareholders (Note 2):</i>		
Class I	(5,157,291)	(68,929,847)
Class R5	(2,353,725)	(40,227,396)
Service Class	(360,826)	(5,484,269)
Administrative Class	(834,960)	(11,771,480)
Class A	(375,447)	(13,438,208)
Class R4	(115,118)	(1,849,486)
Class R3	(10,379)	(501,573)
Total distributions	<u>(9,207,746)</u>	<u>(142,202,259)</u>
<i>Net fund share transactions (Note 5):</i>		
Class I	(19,247,814)	6,514,392
Class R5	(69,565,446)	(10,279,554)
Service Class	279,092	(1,612,739)
Administrative Class	(28,849,743)	13,491,438
Class A	(12,884,956)	(11,590,568)
Class R4	(1,209,026)	1,021,203
Class R3	332,463	(718,135)
Increase (decrease) in net assets from fund share transactions	<u>(131,145,430)</u>	<u>(3,173,963)</u>
Total increase (decrease) in net assets	<u>65,098,937</u>	<u>(194,595,700)</u>
<i>Net assets</i>		
Beginning of year	522,515,897	717,111,597
End of year	<u>\$ 587,614,834</u>	<u>\$ 522,515,897</u>

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

MM S&P 500 Index Fund		MassMutual Equity Opportunities Fund	
Year Ended September 30, 2021	Year Ended September 30, 2020	Year Ended September 30, 2021	Year Ended September 30, 2020
\$ 39,543,942	\$ 50,590,309	\$ 8,893,421	\$ 9,706,038
428,951,911	396,766,226	82,440,199	39,974,551
412,353,799	15,513,066	82,435,725	(30,901,750)
880,849,652	462,869,601	173,769,345	18,778,839
(184,594,221)	(75,810,865)	(29,303,320)	(24,583,662)
(62,427,564)	(31,948,165)	(11,320,812)	(15,717,523)
(56,637,356)	(25,666,923)	(3,060,907)	(4,589,902)
(56,802,753)	(29,315,593)	(3,107,276)	(4,621,502)
(3,735,318)	(1,633,249)	(4,112,745)	(5,706,449)
(81,258,599)	(37,696,711)	(641,099)	(727,168)
(33,665,725)	(13,900,835)	(280,015)	(352,956)
(479,121,536)	(215,972,341)	(51,826,174)	(56,299,162)
119,039,680	6,634,993	(38,652,063)	139,953,914
292,712	(94,195,929)	(18,198,761)	(11,465,936)
(55,563,343)	(42,962,537)	(8,411,791)	(1,744,551)
(46,621,732)	(124,897,747)	(1,296,344)	(6,354,201)
(1,424,408)	(6,231,995)	(11,829,692)	(3,617,657)
(128,706,061)	(70,233,986)	(1,300,240)	2,191,280
29,862,549	(22,623,021)	(689,241)	422,466
(83,120,603)	(354,510,222)	(80,378,132)	119,385,315
318,607,513	(107,612,962)	41,565,039	81,864,992
3,179,761,679	3,287,374,641	720,216,259	638,351,267
\$ 3,498,369,192	\$ 3,179,761,679	\$ 761,781,298	\$ 720,216,259

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Changes in Net Assets*

	MassMutual Fundamental Growth Fund	
	Year Ended September 30, 2021	Year Ended September 30, 2020
<i>Increase (Decrease) in Net Assets:</i>		
<i>Operations:</i>		
Net investment income (loss)	\$ (564,496)	\$ (259,400)
Net realized gain (loss)	17,886,297	35,587,597
Net change in unrealized appreciation (depreciation)	(376,347)	(9,850,354)
Net increase (decrease) in net assets resulting from operations	<u>16,945,454</u>	<u>25,477,843</u>
<i>Distributions to shareholders (Note 2):</i>		
Class I	(6,380,932)	(11,328,772)
Class R5	(6,053,760)	(5,192,507)
Service Class	(3,030,485)	(1,680,311)
Administrative Class	(6,751,917)	(2,362,047)
Class A	(7,726,774)	(2,838,685)
Class R4	(841,305)	(222,136)
Class R3	(1,759,650)	(552,331)
Total distributions	<u>(32,544,823)</u>	<u>(24,176,789)</u>
<i>Net fund share transactions (Note 5):</i>		
Class I	3,998,568	(55,999,329)
Class R5	1,326,428	(18,902,368)
Service Class	1,716,809	(3,559,568)
Administrative Class	(2,357,880)	(1,281,251)
Class A	1,341,065	644,543
Class R4	473,520	378,011
Class R3	(274,762)	(9,495)
Increase (decrease) in net assets from fund share transactions	<u>6,223,748</u>	<u>(78,729,457)</u>
Total increase (decrease) in net assets	<u>(9,375,621)</u>	<u>(77,428,403)</u>
<i>Net assets</i>		
Beginning of year	64,706,874	142,135,277
End of year	<u>\$ 55,331,253</u>	<u>\$ 64,706,874</u>

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

MassMutual Blue Chip Growth Fund		MassMutual Growth Opportunities Fund	
Year Ended September 30, 2021	Year Ended September 30, 2020	Year Ended September 30, 2021	Year Ended September 30, 2020
\$ (10,923,488)	\$ (1,554,395)	\$ (3,465,501)	\$ (1,617,180)
798,397,828	174,866,870	118,471,910	97,446,596
89,559,232	903,520,540	15,322,375	76,888,644
877,033,572	1,076,833,015	130,328,784	172,718,060
(127,404,610)	(116,241,249)	(47,724,289)	(50,975,012)
(28,785,200)	(26,463,154)	(21,391,483)	(39,010,130)
(9,281,346)	(5,702,690)	(6,439,381)	(23,180,329)
(18,063,967)	(17,893,032)	(11,015,116)	(15,284,502)
(10,446,481)	(10,722,606)	(9,735,160)	(12,819,694)
(6,486,894)	(6,055,123)	(691,469)	(3,621,672)
(3,093,658)	(3,671,493)	(479,063)	(396,148)
(203,562,156)	(186,749,347)	(97,475,961)	(145,287,487)
(374,006,009)	211,010,413	33,930,008	58,103,654
(85,488,562)	30,492,892	(34,648,348)	(22,026,799)
(6,808,938)	34,842,807	(3,278,486)	(37,421,325)
(96,534,878)	(6,008,712)	(8,087,089)	5,062,756
(90,410,401)	(23,567,107)	(3,377,993)	4,455,751
(11,561,211)	(10,343,604)	(119,268)	(5,021,408)
(13,043,278)	(13,830,028)	1,659,825	104,590
(677,853,277)	222,596,661	(13,921,351)	3,257,219
(4,381,861)	1,112,680,329	18,931,472	30,687,792
4,292,475,921	3,179,795,592	495,816,921	465,129,129
\$ 4,288,094,060	\$ 4,292,475,921	\$ 514,748,393	\$ 495,816,921

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Changes in Net Assets*

	MassMutual Mid Cap Value Fund	
	Year Ended September 30, 2021	Year Ended September 30, 2020
<i>Increase (Decrease) in Net Assets:</i>		
<i>Operations:</i>		
Net investment income (loss)	\$ 1,514,512	\$ 1,635,678
Net realized gain (loss)	29,432,448	(2,522,456)
Net change in unrealized appreciation (depreciation)	5,223,076	(5,136,456)
Net increase (decrease) in net assets resulting from operations	36,170,036	(6,023,234)
<i>Distributions to shareholders (Note 2):</i>		
Class I	(1,535,817)	(1,720,169)
Class R5	(9,182)	(23,976)
Service Class	(2,890)	(3,523)
Administrative Class	(10,657)	(13,705)
Class A	(33,097)	(41,913)
Class R4	(9,681)	(14,160)
Class R3	(3,107)	(6,426)
Total distributions	(1,604,431)	(1,823,872)
<i>Net fund share transactions (Note 5):</i>		
Class I	(15,118,386)	10,970,630
Class R5	(78,209)	(233,144)
Service Class	284,050	8,330
Administrative Class	(37,094)	86,175
Class A	(2,624,903)	673,589
Class R4	(951,165)	(23,803)
Class R3	(356,301)	(64,818)
Increase (decrease) in net assets from fund share transactions	(18,882,008)	11,416,959
Total increase (decrease) in net assets	15,683,597	3,569,853
<i>Net assets</i>		
Beginning of year	103,761,320	100,191,467
End of year	\$ 119,444,917	\$ 103,761,320

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

MassMutual Small Cap Value Equity Fund		MassMutual Small Company Value Fund	
Year Ended September 30, 2021	Year Ended September 30, 2020	Year Ended September 30, 2021	Year Ended September 30, 2020
\$ (47,141)	\$ 87,031	\$ 1,012,014	\$ 987,510
15,364,222	(545,212)	44,645,407	(9,516,572)
23,244,043	(13,486,309)	69,536,582	(20,020,210)
38,561,124	(13,944,490)	115,194,003	(28,549,272)
(1,714,290)	(5,187,429)	(812,256)	(4,994,472)
(392,010)	(1,558,062)	(380,666)	(3,427,906)
(102,703)	(368,640)	(31,805)	(343,971)
(119,788)	(304,272)	(88,859)	(580,242)
(190,647)	(603,450)	(31,978)	(884,442)
(87,302)	(415,594)	(6,237)	(28,852)
(26,075)	(81,577)	—	(17,675)
(2,632,815)	(8,519,024)	(1,351,801)	(10,277,560)
(38,627,240)	18,951,494	29,888,794	10,302,017
(4,505,136)	(3,671,876)	(12,033,263)	(17,443,639)
(720,319)	(1,160,570)	1,296,461	(1,459,392)
(2,046,395)	549,107	(6,925,230)	3,160,641
(665,065)	(1,867,912)	(4,188,434)	(2,353,825)
(1,861,118)	(938,133)	(811,423)	480,905
(379,380)	88,436	90,947	(216,899)
(48,804,653)	11,950,546	7,317,852	(7,530,192)
(12,876,344)	(10,512,968)	121,160,054	(46,357,024)
75,179,581	85,692,549	163,105,946	209,462,970
\$ 62,303,237	\$ 75,179,581	\$ 284,266,000	\$ 163,105,946

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Changes in Net Assets*

	MM S&P Mid Cap Index Fund	
	Year Ended September 30, 2021	Year Ended September 30, 2020
<i>Increase (Decrease) in Net Assets:</i>		
<i>Operations:</i>		
Net investment income (loss)	\$ 4,561,365	\$ 4,009,277
Net realized gain (loss)	45,036,160	22,439,092
Net change in unrealized appreciation (depreciation)	101,774,558	(36,080,933)
Net increase (decrease) in net assets resulting from operations	151,372,083	(9,632,564)
<i>Distributions to shareholders (Note 2):</i>		
Class I	(6,691,909)	(3,459,749)
Class R5	(1,816,870)	(1,311,412)
Service Class	(1,580,444)	(809,111)
Administrative Class	(3,274,879)	(2,028,235)
Class A	(1,877,552)	(1,187,910)
Class R4	(5,732,162)	(3,602,840)
Class R3	(7,008,746)	(4,138,636)
Total distributions	(27,982,562)	(16,537,893)
<i>Net fund share transactions (Note 5):</i>		
Class I	12,805,722	8,475,321
Class R5	3,662,318	(7,629,918)
Service Class	(4,757,323)	(550,871)
Administrative Class	(6,066,042)	(8,469,243)
Class A	(9,122,748)	(3,908,120)
Class R4	(23,593,238)	(27,109,750)
Class R3	(13,862,251)	(23,749,232)
Increase (decrease) in net assets from fund share transactions	(40,933,562)	(62,941,813)
Total increase (decrease) in net assets	82,455,959	(89,112,270)
<i>Net assets</i>		
Beginning of year	373,935,646	463,047,916
End of year	\$ 456,391,605	\$ 373,935,646

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

MM Russell 2000 Small Cap Index Fund		MassMutual Mid Cap Growth Fund	
Year Ended September 30, 2021	Year Ended September 30, 2020	Year Ended September 30, 2021	Year Ended September 30, 2020
\$ 1,739,105	\$ 2,243,629	\$ (30,632,373)	\$ (2,812,915)
51,296,175	11,334,615	1,647,676,829	524,223,282
61,448,403	(12,542,471)	828,830,012	648,992,660
114,483,683	1,035,773	2,445,874,468	1,170,403,027
(4,196,431)	(5,018,091)	(375,441,053)	(322,407,169)
(838,131)	(972,716)	(93,364,700)	(83,304,762)
(547,886)	(624,710)	(21,000,941)	(20,001,203)
(2,550,257)	(3,215,208)	(16,747,973)	(16,621,612)
(941,766)	(1,467,484)	(14,060,398)	(13,974,500)
(2,730,417)	(3,581,019)	(12,555,638)	(13,362,278)
(2,474,950)	(3,210,572)	(2,425,094)	(2,187,663)
(14,279,838)	(18,089,800)	(535,595,797)	(471,859,187)
(6,670,417)	6,433,683	(1,050,859,042)	(245,077,176)
(361,913)	(467,867)	(133,644,713)	(180,492,380)
898,928	363,633	(79,897,288)	(64,780,429)
(15,783,800)	(2,867,442)	(67,420,563)	(48,419,613)
(6,918,536)	(1,985,638)	(67,523,371)	(42,279,216)
(15,119,767)	(6,991,898)	(56,872,643)	(57,002,375)
(8,381,054)	(6,972,564)	(5,336,176)	(3,660,990)
(52,336,559)	(12,488,093)	(1,461,553,796)	(641,712,179)
47,867,286	(29,542,120)	448,724,875	56,831,661
259,046,297	288,588,417	8,661,334,435	8,604,502,774
\$ 306,913,583	\$ 259,046,297	\$ 9,110,059,310	\$ 8,661,334,435

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Changes in Net Assets*

	MassMutual Select Small Cap Growth Equity Fund	
	Year Ended September 30, 2021	Year Ended September 30, 2020
<i>Increase (Decrease) in Net Assets:</i>		
<i>Operations:</i>		
Net investment income (loss)	\$ (3,403,677)	\$ (1,560,678)
Net realized gain (loss)	182,434,815	44,666,503
Net change in unrealized appreciation (depreciation)	33,560,588	57,341,826
Net increase (decrease) in net assets resulting from operations	212,591,726	100,447,651
<i>Distributions to shareholders (Note 2):</i>		
Class I	(29,012,613)	(32,558,345)
Class R5	(11,622,191)	(15,279,790)
Service Class	(2,891,135)	(4,338,467)
Administrative Class	(2,733,082)	(3,706,126)
Class A	(4,198,556)	(5,215,987)
Class R4	(1,628,809)	(1,960,542)
Class R3	(582,672)	(480,410)
Total distributions	(52,669,058)	(63,539,667)
<i>Net fund share transactions (Note 5):</i>		
Class I	48,500,540	48,838,806
Class R5	(14,434,041)	(2,199,711)
Service Class	(4,142,715)	(3,632,842)
Administrative Class	(6,527,416)	(964,948)
Class A	(11,314,222)	212,385
Class R4	(1,752,684)	2,093,781
Class R3	46,831	979,023
Increase (decrease) in net assets from fund share transactions	10,376,293	45,326,494
Total increase (decrease) in net assets	170,298,961	82,234,478
<i>Net assets</i>		
Beginning of year	592,214,404	509,979,926
End of year	\$ 762,513,365	\$ 592,214,404

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

MM MSCI EAFE International Index Fund		MassMutual Overseas Fund	
Year Ended September 30, 2021	Year Ended September 30, 2020	Year Ended September 30, 2021	Year Ended September 30, 2020
\$ 4,478,886	\$ 4,039,883	\$ 7,891,034	\$ 3,510,851
11,152,814	1,827,078	57,353,956	(2,901,212)
30,832,020	(4,337,972)	118,601,925	(201,855)
46,463,720	1,528,989	183,846,915	407,784
(2,197,280)	(2,128,393)	(9,459,279)	(14,676,789)
(535,653)	(812,776)	(3,249,074)	(5,799,133)
(109,695)	(95,838)	(923,098)	(1,434,801)
(1,045,250)	(1,358,826)	(421,047)	(801,623)
(434,004)	(719,248)	(637,174)	(1,012,176)
(987,127)	(1,238,985)	(395,010)	(579,655)
(886,577)	(1,140,187)	(131,963)	(123,568)
(6,195,586)	(7,494,253)	(15,216,645)	(24,427,745)
(1,757,932)	8,504,269	(89,876,994)	34,680,466
(1,692,765)	(6,778,443)	(11,110,200)	17,613,241
(203,237)	478,095	(2,927,620)	3,311,529
(14,371,018)	(6,818,236)	(4,219,010)	(1,943,738)
(6,375,803)	(4,071,851)	(14,609,910)	2,584,426
(11,233,374)	(6,346,733)	(1,874,361)	3,655,707
(5,659,961)	(7,991,296)	(734,871)	2,895,431
(41,294,090)	(23,024,195)	(125,352,966)	62,797,062
(1,025,956)	(28,989,459)	43,277,304	38,777,101
200,691,015	229,680,474	615,257,761	576,480,660
\$ 199,665,059	\$ 200,691,015	\$ 658,535,065	\$ 615,257,761

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

*MassMutual Select Funds – Financial Statements (Continued)**Statements of Changes in Net Assets*

	MassMutual Select T. Rowe Price International Equity Fund	
	Year Ended September 30, 2021	Year Ended September 30, 2020
<i>Increase (Decrease) in Net Assets:</i>		
<i>Operations:</i>		
Net investment income (loss)	\$ 39,053,643	\$ 20,027,061
Net realized gain (loss)	61,703,034	(29,142,586)
Net change in unrealized appreciation (depreciation)	231,627,276	49,194,236
Net increase (decrease) in net assets resulting from operations	332,383,953	40,078,711
<i>Distributions to shareholders (Note 2):</i>		
Class I	(23,974,243)	(28,120,959)
Total distributions	(23,974,243)	(28,120,959)
<i>Net fund share transactions (Note 5):</i>		
Class I	77,255,606	166,534,812
Increase (decrease) in net assets from fund share transactions	77,255,606	166,534,812
Total increase (decrease) in net assets	385,665,316	178,492,564
<i>Net assets</i>		
Beginning of year	1,314,433,084	1,135,940,520
End of year	\$ 1,700,098,400	\$ 1,314,433,084

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

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*MassMutual Total Return Bond Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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													
9/30/21	\$ 10.80	\$ 0.16	\$ (0.13)	\$ 0.03	\$ (0.24)	\$ (0.38)	\$ (0.62)	\$ 10.21	0.24%	\$ 677,869	0.36%	0.33%	1.55%
9/30/20	10.30	0.22	0.59	0.81	(0.31)	—	(0.31)	10.80	8.06%	616,932	0.36%	N/A	2.08%
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	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	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	2.18%
Class R5													
9/30/21	\$ 10.79	\$ 0.15	\$ (0.14)	\$ 0.01	\$ (0.23)	\$ (0.38)	\$ (0.61)	\$ 10.19	0.06%	\$ 39,879	0.46%	0.43%	1.45%
9/30/20	10.28	0.21	0.59	0.80	(0.29)	—	(0.29)	10.79	8.04%	38,177	0.46%	N/A	2.04%
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	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	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	2.04%
Service Class													
9/30/21	\$ 10.82	\$ 0.14	\$ (0.12)	\$ 0.02	\$ (0.22)	\$ (0.38)	\$ (0.60)	\$ 10.24	0.11%	\$ 70,920	0.55%	0.53%	1.33%
9/30/20	10.32	0.20	0.59	0.79	(0.29)	—	(0.29)	10.82	7.82%	93,185	0.56%	N/A	1.93%
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	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	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	1.95%

Year ended September 30				
2021	2020	2019	2018	2017
435%	316%	217%	243%	289%

Portfolio turnover rate

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

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.

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

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				
Administrative Class																	
9/30/21	\$ 10.77	\$ 0.13	\$ (0.13)	\$ 0.00 ^d	\$ (0.21)	\$ (0.38)	\$ (0.59)	\$ 10.18	(0.07%)	\$ 19,333	0.66%	0.63%	1.24%				
9/30/20	10.25	0.19	0.59	0.78	(0.26)	—	(0.26)	10.77	7.79%	20,596	0.66%	N/A	1.84%				
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	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	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	1.86%				
Class A																	
9/30/21	\$ 10.72	\$ 0.10	\$ (0.13)	\$ (0.03)	\$ (0.19)	\$ (0.38)	\$ (0.57)	\$ 10.12	(0.33%)	\$ 11,662	0.91%	0.88%	0.98%				
9/30/20	10.23	0.16	0.58	0.74	(0.25)	—	(0.25)	10.72	7.45%	11,334	0.91%	N/A	1.56%				
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	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	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	1.68%				
Class R4																	
9/30/21	\$ 10.83	\$ 0.11	\$ (0.13)	\$ (0.02)	\$ (0.18)	\$ (0.38)	\$ (0.56)	\$ 10.25	(0.20%)	\$ 79,970	0.80%	0.78%	1.07%				
9/30/20	10.32	0.18	0.59	0.77	(0.26)	—	(0.26)	10.83	7.64%	102,120	0.81%	N/A	1.72%				
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	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	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	1.71%				
Class R3																	
9/30/21	\$ 10.73	\$ 0.09	\$ (0.12)	\$ (0.03)	\$ (0.17)	\$ (0.38)	\$ (0.55)	\$ 10.15	(0.37%)	\$ 22,384	1.05%	1.03%	0.83%				
9/30/20	10.23	0.15	0.58	0.73	(0.23)	—	(0.23)	10.73	7.33%	27,785	1.06%	N/A	1.43%				
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	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	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	1.46%				

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

*MassMutual Strategic Bond Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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													
9/30/21	\$ 11.30	\$ 0.25	\$ (0.05)	\$ 0.20	\$ (0.33)	\$ (0.27)	\$ (0.60)	\$ 10.90	1.79%	\$ 400,718	0.46%	0.46% ^k	2.28%
9/30/20	11.05	0.30	0.41	0.71	(0.31)	(0.15)	(0.46)	11.30	6.70%	423,904	0.47%	0.47% ⁿ	2.76%
9/30/19	10.12	0.35	0.86	1.21	(0.28)	—	(0.28)	11.05	12.31%	377,879	0.49%	0.48%	3.37%
9/30/18	10.65	0.32	(0.60)	(0.28)	(0.25)	—	(0.25)	10.12	(2.69%)	287,070	0.47%	0.47% ⁿ	3.13%
9/30/17	10.67	0.27	(0.01) ^{aa}	0.26	(0.28)	—	(0.28)	10.65	2.64%	178,204	0.50%	0.48%	2.59%
Class R5													
9/30/21	\$ 11.31	\$ 0.24	\$ (0.06)	\$ 0.18	\$ (0.32)	\$ (0.27)	\$ (0.59)	\$ 10.90	1.61%	\$ 83,071	0.56%	0.56% ^k	2.19%
9/30/20	11.05	0.29	0.42	0.71	(0.30)	(0.15)	(0.45)	11.31	6.66%	89,644	0.57%	0.57% ⁿ	2.65%
9/30/19	10.12	0.34	0.86	1.20	(0.27)	—	(0.27)	11.05	12.20%	79,978	0.59%	0.58%	3.27%
9/30/18	10.65	0.31	(0.60)	(0.29)	(0.24)	—	(0.24)	10.12	(2.79%)	78,583	0.57%	0.57% ⁿ	3.02%
9/30/17	10.67	0.26	(0.01) ^{aa}	0.25	(0.27)	—	(0.27)	10.65	2.55%	71,341	0.60%	0.58%	2.53%
Service Class													
9/30/21	\$ 11.31	\$ 0.23	\$ (0.05)	\$ 0.18	\$ (0.31)	\$ (0.27)	\$ (0.58)	\$ 10.91	1.59%	\$ 29,022	0.66%	0.66% ^k	2.08%
9/30/20	11.05	0.28	0.42	0.70	(0.29)	(0.15)	(0.44)	11.31	6.53%	37,611	0.67%	0.67% ⁿ	2.57%
9/30/19	10.12	0.33	0.86	1.19	(0.26)	—	(0.26)	11.05	12.02%	36,123	0.69%	0.68%	3.17%
9/30/18	10.64	0.30	(0.59)	(0.29)	(0.23)	—	(0.23)	10.12	(2.78%)	52,794	0.67%	0.67% ⁿ	2.89%
9/30/17	10.67	0.25	(0.02) ^{aa}	0.23	(0.26)	—	(0.26)	10.64	2.30%	66,969	0.70%	0.68%	2.40%

Portfolio turnover rate

Year ended September 30				
2021	2020	2019	2018	2017
120%	193%	262%	294%	224%

^c Per share amount calculated on the average shares method.

^j Computed after giving effect to an agreement by MML Advisers 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.

^{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.

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

	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
Administrative Class													
9/30/21	\$ 11.25	\$ 0.22	\$ (0.05)	\$ 0.17	\$ (0.30)	\$ (0.27)	\$ (0.57)	\$ 10.85	1.49%	\$ 50,859	0.76%	0.76% ^k	1.98%
9/30/20	11.00	0.27	0.41	0.68	(0.28)	(0.15)	(0.43)	11.25	6.40%	70,366	0.77%	0.77% ⁿ	2.47%
9/30/19	10.08	0.32	0.85	1.17	(0.25)	—	(0.25)	11.00	11.91%	76,297	0.79%	0.78%	3.07%
9/30/18	10.61	0.29	(0.60)	(0.31)	(0.22)	—	(0.22)	10.08	(2.96%)	70,368	0.77%	0.77% ⁿ	2.81%
9/30/17	10.64	0.24	(0.01) ^{aa}	0.23	(0.26)	—	(0.26)	10.61	2.30%	66,460	0.80%	0.78%	2.33%
Class A													
9/30/21	\$ 11.21	\$ 0.19	\$ (0.05)	\$ 0.14	\$ (0.28)	\$ (0.27)	\$ (0.55)	\$ 10.80	1.21%	\$ 30,068	1.01%	1.01% ^k	1.72%
9/30/20	10.97	0.24	0.41	0.65	(0.26)	(0.15)	(0.41)	11.21	6.09%	60,452	1.02%	1.02% ⁿ	2.20%
9/30/19	10.04	0.29	0.86	1.15	(0.22)	—	(0.22)	10.97	11.72%	49,917	1.04%	1.03%	2.82%
9/30/18	10.57	0.26	(0.59)	(0.33)	(0.20)	—	(0.20)	10.04	(3.23%)	45,189	1.02%	1.02% ⁿ	2.54%
9/30/17	10.60	0.21	(0.01) ^{aa}	0.20	(0.23)	—	(0.23)	10.57	1.99%	53,329	1.05%	1.03%	2.07%
Class R4													
9/30/21	\$ 11.18	\$ 0.20	\$ (0.05)	\$ 0.15	\$ (0.28)	\$ (0.27)	\$ (0.55)	\$ 10.78	1.31%	\$ 41,556	0.91%	0.91% ^k	1.83%
9/30/20	10.93	0.25	0.41	0.66	(0.26)	(0.15)	(0.41)	11.18	6.29%	49,770	0.92%	0.92% ⁿ	2.33%
9/30/19	10.01	0.30	0.86	1.16	(0.24)	—	(0.24)	10.93	11.82%	66,656	0.94%	0.93%	2.91%
9/30/18	10.55	0.27	(0.60)	(0.33)	(0.21)	—	(0.21)	10.01	(3.17%)	67,672	0.92%	0.92% ⁿ	2.67%
9/30/17	10.58	0.22	(0.01) ^{aa}	0.21	(0.24)	—	(0.24)	10.55	2.15%	61,286	0.95%	0.93%	2.14%
Class R3													
9/30/21	\$ 11.07	\$ 0.17	\$ (0.05)	\$ 0.12	\$ (0.25)	\$ (0.27)	\$ (0.52)	\$ 10.67	1.03%	\$ 11,534	1.16%	1.16% ^k	1.59%
9/30/20	10.82	0.22	0.41	0.63	(0.23)	(0.15)	(0.38)	11.07	6.02%	15,761	1.17%	1.17% ⁿ	2.09%
9/30/19	9.92	0.27	0.84	1.11	(0.21)	—	(0.21)	10.82	11.48%	18,689	1.19%	1.18%	2.67%
9/30/18	10.45	0.24	(0.58)	(0.34)	(0.19)	—	(0.19)	9.92	(3.32%)	19,519	1.17%	1.17% ⁿ	2.42%
9/30/17	10.50	0.19	(0.01) ^{aa}	0.18	(0.23)	—	(0.23)	10.45	1.84%	16,295	1.20%	1.18%	1.90%

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

*MassMutual Diversified Value Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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												
9/30/21	\$ 9.87	\$ 0.23	\$ 3.62	\$ 3.85	\$ (0.24)	\$ —	\$ (0.24)	\$ 13.48	39.59%	\$ 230,230	0.57%	1.84%
9/30/20	11.48	0.25	(1.01)	(0.76)	(0.28)	(0.57)	(0.85)	9.87	(7.64%)	197,915	0.58%	2.42%
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%
Class R5												
9/30/21	\$ 9.89	\$ 0.22	\$ 3.62	\$ 3.84	\$ (0.23)	\$ —	\$ (0.23)	\$ 13.50	39.38%	\$ 70,251	0.67%	1.74%
9/30/20	11.50	0.24	(1.02)	(0.78)	(0.26)	(0.57)	(0.83)	9.89	(7.75%)	62,821	0.68%	2.33%
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%
Service Class												
9/30/21	\$ 9.89	\$ 0.20	\$ 3.63	\$ 3.83	\$ (0.22)	\$ —	\$ (0.22)	\$ 13.50	39.28%	\$ 15,170	0.77%	1.65%
9/30/20	11.51	0.23	(1.02)	(0.79)	(0.26)	(0.57)	(0.83)	9.89	(7.88%)	13,967	0.78%	2.25%
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%

Portfolio turnover rate

Year ended September 30				
2021	2020	2019	2018	2017
60%	52%	42%	75%	71%

^c Per share amount calculated on the average shares method.

^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.

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

		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 ^{1,m}
Administrative Class												
9/30/21	\$ 9.96	\$ 0.19	\$ 3.67	\$ 3.86	\$ (0.21)	\$ —	\$ (0.21)	\$ 13.61	39.24%	\$ 21,354	0.87%	1.54%
9/30/20	11.59	0.22	(1.03)	(0.81)	(0.25)	(0.57)	(0.82)	9.96	(7.99%)	16,359	0.88%	2.12%
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%
Class A												
9/30/21	\$ 9.85	\$ 0.16	\$ 3.63	\$ 3.79	\$ (0.19)	\$ —	\$ (0.19)	\$ 13.45	38.84%	\$ 26,835	1.12%	1.29%
9/30/20	11.46	0.19	(1.02)	(0.83)	(0.21)	(0.57)	(0.78)	9.85	(8.22%)	27,575	1.13%	1.87%
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%
Class R4												
9/30/21	\$ 9.70	\$ 0.17	\$ 3.57	\$ 3.74	\$ (0.20)	\$ —	\$ (0.20)	\$ 13.24	39.00%	\$ 12,608	1.02%	1.39%
9/30/20	11.31	0.20	(1.01)	(0.81)	(0.23)	(0.57)	(0.80)	9.70	(8.14%)	9,823	1.03%	2.00%
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%
Class R3												
9/30/21	\$ 9.77	\$ 0.14	\$ 3.61	\$ 3.75	\$ (0.17)	\$ —	\$ (0.17)	\$ 13.35	38.73%	\$ 1,082	1.27%	1.14%
9/30/20	11.39	0.18	(1.02)	(0.84)	(0.21)	(0.57)	(0.78)	9.77	(8.38%)	1,492	1.28%	1.76%
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%

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

*MassMutual Fundamental Value Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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												
9/30/21	\$ 7.52	\$ 0.12	\$ 2.99	\$ 3.11	\$ (0.15)	\$ —	\$ (0.15)	\$ 10.48	41.76%	\$ 353,238	0.65%	1.19%
9/30/20	10.33	0.15	(0.72)	(0.57)	(0.23)	(2.01)	(2.24)	7.52	(8.51%)	268,368	0.66%	1.85%
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%	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%	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%	1.82%
Class R5												
9/30/21	\$ 7.57	\$ 0.11	\$ 3.02	\$ 3.13	\$ (0.14)	\$ —	\$ (0.14)	\$ 10.56	41.74%	\$ 112,193	0.75%	1.11%
9/30/20	10.39	0.14	(0.73)	(0.59)	(0.22)	(2.01)	(2.23)	7.57	(8.68%)	132,370	0.76%	1.75%
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%	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%	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%	1.72%
Service Class												
9/30/21	\$ 7.53	\$ 0.10	\$ 2.99	\$ 3.09	\$ (0.13)	\$ —	\$ (0.13)	\$ 10.49	41.43%	\$ 29,948	0.85%	0.99%
9/30/20	10.34	0.13	(0.72)	(0.59)	(0.21)	(2.01)	(2.22)	7.53	(8.76%)	21,654	0.86%	1.64%
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%	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%	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%	1.59%

Year ended September 30				
2021	2020	2019	2018	2017
38%	54%	103%	46%	13%

Portfolio turnover rate

^c Per share amount calculated on the average shares method.

^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.

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

		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
Administrative Class												
9/30/21	\$ 7.60	\$ 0.09	\$ 3.02	\$ 3.11	\$ (0.12)	\$ —	\$ (0.12)	\$ 10.59	41.33%	\$ 47,797	0.95%	0.92%
9/30/20	10.41	0.13	(0.73)	(0.60)	(0.20)	(2.01)	(2.21)	7.60	(8.78%)	56,880	0.96%	1.53%
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%	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%	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%	1.51%
Class A												
9/30/21	\$ 7.46	\$ 0.06	\$ 2.98	\$ 3.04	\$ (0.09)	\$ —	\$ (0.09)	\$ 10.41	40.98%	\$ 33,431	1.20%	0.65%
9/30/20	10.26	0.11	(0.73)	(0.62)	(0.17)	(2.01)	(2.18)	7.46	(9.06%)	34,647	1.21%	1.33%
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%	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%	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%	1.26%
Class R4												
9/30/21	\$ 7.32	\$ 0.07	\$ 2.91	\$ 2.98	\$ (0.11)	\$ —	\$ (0.11)	\$ 10.19	41.10%	\$ 9,329	1.10%	0.74%
9/30/20	10.11	0.11	(0.70)	(0.59)	(0.19)	(2.01)	(2.20)	7.32	(8.98%)	7,609	1.11%	1.41%
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%	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%	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%	1.37%
Class R3												
9/30/21	\$ 7.27	\$ 0.05	\$ 2.90	\$ 2.95	\$ (0.08)	\$ —	\$ (0.08)	\$ 10.14	40.82%	\$ 1,678	1.35%	0.49%
9/30/20	10.05	0.09	(0.71)	(0.62)	(0.15)	(2.01)	(2.16)	7.27	(9.23%)	989	1.36%	1.15%
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%	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%	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%	1.14%

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

*MM S&P 500 Index Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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												
9/30/21	\$ 19.31	\$ 0.28	\$ 4.91	\$ 5.19	\$ (0.39)	\$ (2.65)	\$ (3.04)	\$ 21.46	29.93%	\$ 1,495,161	0.12%	1.36%
9/30/20	17.92	0.32	2.30	2.62	(0.40)	(0.83)	(1.23)	19.31	15.04%	1,210,251	0.12%	1.79%
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%	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%	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%	1.95%
Class R5												
9/30/21	\$ 19.38	\$ 0.26	\$ 4.93	\$ 5.19	\$ (0.37)	\$ (2.65)	\$ (3.02)	\$ 21.55	29.78%	\$ 471,641	0.22%	1.26%
9/30/20	17.98	0.30	2.31	2.61	(0.38)	(0.83)	(1.21)	19.38	14.93%	416,360	0.22%	1.70%
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%	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%	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%	1.88%
Service Class												
9/30/21	\$ 19.41	\$ 0.23	\$ 4.95	\$ 5.18	\$ (0.34)	\$ (2.65)	\$ (2.99)	\$ 21.60	29.63%	\$ 371,149	0.37%	1.11%
9/30/20	18.00	0.28	2.31	2.59	(0.35)	(0.83)	(1.18)	19.41	14.80%	381,745	0.37%	1.54%
9/30/19	20.55	0.28	(0.01) ^{aa}	0.27	(0.31)	(2.51)	(2.82)	18.00	3.84%	395,249	0.37%	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%	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%	1.72%

Year ended September 30				
2021	2020	2019	2018	2017
4%	6%	4%	3% ^q	5%

Portfolio turnover rate

^c Per share amount calculated on the average shares method.

^d Amount is less than \$0.005 per share.

^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. 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.

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

	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
Administrative Class												
9/30/21	\$ 18.99	\$ 0.20	\$ 4.83	\$ 5.03	\$ (0.32)	\$ (2.65)	\$ (2.97)	\$ 21.05	29.45%	\$ 368,149	0.47%	1.01%
9/30/20	17.63	0.25	2.27	2.52	(0.33)	(0.83)	(1.16)	18.99	14.68%	370,740	0.47%	1.45%
9/30/19	20.19	0.26	(0.01) ^{aa}	0.25	(0.30)	(2.51)	(2.81)	17.63	3.77%	476,225	0.47%	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%	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%	1.62%
Class A												
9/30/21	\$ 18.57	\$ 0.15	\$ 4.72	\$ 4.87	\$ (0.28)	\$ (2.65)	\$ (2.93)	\$ 20.51	29.14%	\$ 25,655	0.72%	0.76%
9/30/20	17.26	0.21	2.21	2.42	(0.28)	(0.83)	(1.11)	18.57	14.40%	23,908	0.72%	1.20%
9/30/19	19.82	0.21	(0.02) ^{aa}	0.19	(0.24)	(2.51)	(2.75)	17.26	3.46%	28,147	0.72%	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%	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%	1.37%
Class R4												
9/30/21	\$ 18.71	\$ 0.17	\$ 4.75	\$ 4.92	\$ (0.29)	\$ (2.65)	\$ (2.94)	\$ 20.69	29.26%	\$ 494,937	0.62%	0.87%
9/30/20	17.39	0.22	2.24	2.46	(0.31)	(0.83)	(1.14)	18.71	14.51%	561,315	0.62%	1.29%
9/30/19	19.95	0.23	(0.02) ^{aa}	0.21	(0.26)	(2.51)	(2.77)	17.39	3.61%	594,415	0.62%	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%	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%	1.47%
Class R3												
9/30/21	\$ 18.12	\$ 0.11	\$ 4.60	\$ 4.71	\$ (0.26)	\$ (2.65)	\$ (2.91)	\$ 19.92	28.96%	\$ 271,678	0.87%	0.60%
9/30/20	16.87	0.17	2.17	2.34	(0.26)	(0.83)	(1.09)	18.12	14.25%	215,443	0.87%	1.04%
9/30/19	19.45	0.18	(0.02) ^{aa}	0.16	(0.23)	(2.51)	(2.74)	16.87	3.34%	222,503	0.87%	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%	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%	1.21%

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

*MassMutual Equity Opportunities Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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												
9/30/21	\$ 17.22	\$ 0.24	\$ 3.99	\$ 4.23	\$ (0.24)	\$ (1.04)	\$ (1.28)	\$ 20.17	25.67%	\$ 432,817	0.73%	1.25%
9/30/20	18.33	0.27	0.26	0.53	(0.29)	(1.35)	(1.64)	17.22	2.73%	402,371	0.74%	1.64%
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%	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%	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%	2.00%
Class R5												
9/30/21	\$ 17.30	\$ 0.22	\$ 4.00	\$ 4.22	\$ (0.22)	\$ (1.04)	\$ (1.26)	\$ 20.26	25.48%	\$ 165,143	0.83%	1.15%
9/30/20	18.41	0.26	0.25	0.51	(0.27)	(1.35)	(1.62)	17.30	2.61%	156,171	0.84%	1.50%
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%	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%	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%	1.87%
Service Class												
9/30/21	\$ 16.88	\$ 0.20	\$ 3.91	\$ 4.11	\$ (0.20)	\$ (1.04)	\$ (1.24)	\$ 19.75	25.44%	\$ 46,987	0.93%	1.04%
9/30/20	18.00	0.23	0.25	0.48	(0.25)	(1.35)	(1.60)	16.88	2.52%	48,504	0.94%	1.41%
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%	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%	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%	1.74%

Year ended September 30				
2021	2020	2019	2018	2017
25%	41%	33%	35%	131%

Portfolio turnover rate

^c Per share amount calculated on the average shares method.

^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.

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

	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
Administrative Class												
9/30/21	\$ 16.59	\$ 0.18	\$ 3.83	\$ 4.01	\$ (0.18)	\$ (1.04)	\$ (1.22)	\$ 19.38	25.26%	\$ 51,726	1.03%	0.95%
9/30/20	17.71	0.21	0.25	0.46	(0.23)	(1.35)	(1.58)	16.59	2.42%	45,175	1.04%	1.30%
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%	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%	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%	1.66%
Class A												
9/30/21	\$ 15.64	\$ 0.12	\$ 3.61	\$ 3.73	\$ (0.15)	\$ (1.04)	\$ (1.19)	\$ 18.18	24.94%	\$ 53,123	1.28%	0.70%
9/30/20	16.78	0.16	0.24	0.40	(0.19)	(1.35)	(1.54)	15.64	2.19%	55,832	1.29%	1.05%
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%	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%	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%	1.42%
Class R4												
9/30/21	\$ 15.34	\$ 0.13	\$ 3.54	\$ 3.67	\$ (0.17)	\$ (1.04)	\$ (1.21)	\$ 17.80	25.07%	\$ 8,727	1.18%	0.79%
9/30/20	16.48	0.18	0.23	0.41	(0.20)	(1.35)	(1.55)	15.34	2.28%	8,716	1.19%	1.18%
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%	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%	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%	1.58%
Class R3												
9/30/21	\$ 14.22	\$ 0.09	\$ 3.27	\$ 3.36	\$ (0.14)	\$ (1.04)	\$ (1.18)	\$ 16.40	24.79%	\$ 3,259	1.43%	0.55%
9/30/20	15.42	0.13	0.22	0.35	(0.20)	(1.35)	(1.55)	14.22	2.00%	3,447	1.44%	0.92%
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%	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%	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%	1.28%

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

*MassMutual Fundamental Growth Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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													
9/30/21	\$ 8.33	\$ (0.04)	\$ 1.93	\$ 1.89	\$ —	\$ (4.07)	\$ (4.07)	\$ 6.15	28.46%	\$ 13,386	1.04%	N/A	(0.61%)
9/30/20	8.03	0.00 ^d	1.67	1.67	(0.02)	(1.35)	(1.37)	8.33	23.25%	12,278	0.89%	N/A	(0.01%)
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%
Class R5													
9/30/21	\$ 8.37	\$ (0.05)	\$ 1.94	\$ 1.89	\$ (0.00) ^d	\$ (4.07)	\$ (4.07)	\$ 6.19	28.29%	\$ 10,813	1.14%	N/A	(0.71%)
9/30/20	8.05	(0.01)	1.69	1.68	(0.01)	(1.35)	(1.36)	8.37	23.34%	12,351	0.99%	N/A	(0.17%)
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%
Service Class													
9/30/21	\$ 8.11	\$ (0.05)	\$ 1.85	\$ 1.80	\$ (0.00) ^d	\$ (4.07)	\$ (4.07)	\$ 5.84	28.05%	\$ 6,641	1.24%	N/A	(0.81%)
9/30/20	7.83	(0.02)	1.66	1.64	(0.01)	(1.35)	(1.36)	8.11	23.35%	6,285	1.09%	N/A	(0.30%)
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%

Year ended September 30				
2021	2020	2019	2018	2017
78%	164%	123%	47%	52%

Portfolio turnover rate

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%.

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.

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.

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

	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
Administrative Class													
9/30/21	\$ 7.80	\$ (0.05)	\$ 1.78	\$ 1.73	\$ (0.00) ^d	\$ (4.07)	\$ (4.07)	\$ 5.46	28.26%	\$ 8,032	1.34%	N/A	(0.91%)
9/30/20	7.59	(0.03)	1.59	1.56	—	(1.35)	(1.35)	7.80	23.08%	13,485	1.19%	N/A	(0.41%)
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%
Class A													
9/30/21	\$ 7.25	\$ (0.06)	\$ 1.60	\$ 1.54	\$ (0.00) ^d	\$ (4.07)	\$ (4.07)	\$ 4.72	27.60%	\$ 13,199	1.59%	N/A	(1.16%)
9/30/20	7.15	(0.04)	1.49	1.45	—	(1.35)	(1.35)	7.25	22.92%	15,843	1.44%	N/A	(0.67%)
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%
Class R4													
9/30/21	\$ 7.14	\$ (0.05)	\$ 1.57	\$ 1.52	\$ (0.00) ^d	\$ (4.07)	\$ (4.07)	\$ 4.59	27.79%	\$ 1,699	1.49%	N/A	(1.06%)
9/30/20	7.06	(0.04)	1.47	1.43	—	(1.35)	(1.35)	7.14	22.94%	1,662	1.34%	N/A	(0.59%)
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%
Class R3													
9/30/21	\$ 6.45	\$ (0.05)	\$ 1.37	\$ 1.32	\$ (0.00) ^d	\$ (4.07)	\$ (4.07)	\$ 3.70	27.69%	\$ 1,562	1.74%	N/A	(1.32%)
9/30/20	6.51	(0.05)	1.34	1.29	—	(1.35)	(1.35)	6.45	22.70%	2,803	1.59%	N/A	(0.82%)
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%	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%

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

*MassMutual Blue Chip Growth Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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												
9/30/21	\$ 28.98	\$ (0.05)	\$ 6.11	\$ 6.06	\$ —	\$ (1.38)	\$ (1.38)	\$ 33.66	21.60%	\$ 2,790,281	0.63%	(0.15%)
9/30/20	22.73	0.01	7.59	7.60	(0.09)	(1.26)	(1.35)	28.98	34.96%	2,729,246	0.64%	0.06%
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%	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%	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%	0.38%
Class R5												
9/30/21	\$ 28.93	\$ (0.08)	\$ 6.09	\$ 6.01	\$ —	\$ (1.38)	\$ (1.38)	\$ 33.56	21.46%	\$ 616,307	0.73%	(0.25%)
9/30/20	22.69	(0.01)	7.58	7.57	(0.07)	(1.26)	(1.33)	28.93	34.84%	604,630	0.74%	(0.04%)
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%	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%	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%	0.28%
Service Class												
9/30/21	\$ 28.64	\$ (0.11)	\$ 6.03	\$ 5.92	\$ —	\$ (1.38)	\$ (1.38)	\$ 33.18	21.36%	\$ 207,565	0.83%	(0.35%)
9/30/20	22.47	(0.04)	7.51	7.47	(0.04)	(1.26)	(1.30)	28.64	34.72%	184,567	0.84%	(0.17%)
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%	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%	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%	0.18%

Year ended September 30				
2021	2020	2019	2018	2017
20%	28%	25%	17%	27%

Portfolio turnover rate

^c Per share amount calculated on the average shares method.

^d Amount is less than \$0.005 per share.

^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.

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

		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)
Administrative Class													
9/30/21	\$ 28.18	\$ (0.14)	\$ 5.92	\$ 5.78	\$ —	\$ (1.38)	\$ (1.38)	\$ 32.58	21.21%	\$ 347,256	0.93%	(0.45%)	
9/30/20	22.13	(0.06)	7.40	7.34	(0.03)	(1.26)	(1.29)	28.18	34.60%	388,847	0.94%	(0.24%)	
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%	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%	(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%	0.08%	
Class A													
9/30/21	\$ 26.79	\$ (0.20)	\$ 5.61	\$ 5.41	\$ —	\$ (1.38)	\$ (1.38)	\$ 30.82	20.91%	\$ 142,265	1.18%	(0.69%)	
9/30/20	21.13	(0.11)	7.03	6.92	—	(1.26)	(1.26)	26.79	34.23%	202,794	1.18%	(0.48%)	
9/30/19	21.82	(0.04)	0.54	0.50	—	(1.19)	(1.19)	21.13	3.27%	181,457	1.19%	(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%	(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%	(0.16%)	
Class R4													
9/30/21	\$ 26.76	\$ (0.17)	\$ 5.61	\$ 5.44	\$ —	\$ (1.38)	\$ (1.38)	\$ 30.82	21.05%	\$ 128,730	1.08%	(0.60%)	
9/30/20	21.09	(0.09)	7.02	6.93	—	(1.26)	(1.26)	26.76	34.34%	121,843	1.09%	(0.38%)	
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%	(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%	(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%	(0.07%)	
Class R3													
9/30/21	\$ 24.76	\$ (0.23)	\$ 5.17	\$ 4.94	\$ —	\$ (1.38)	\$ (1.38)	\$ 28.32	20.72%	\$ 55,690	1.33%	(0.85%)	
9/30/20	19.64	(0.13)	6.51	6.38	—	(1.26)	(1.26)	24.76	34.06%	60,548	1.33%	(0.62%)	
9/30/19	20.41	(0.07)	0.49	0.42	—	(1.19)	(1.19)	19.64	3.10%	61,141	1.34%	(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%	(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%	(0.32%)	

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

*MassMutual Growth Opportunities Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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													
9/30/21	\$ 10.57	\$ (0.06)	\$ 2.82	\$ 2.76	\$ —	\$ (2.02)	\$ (2.02)	\$ 11.31	28.69%	\$ 304,938	0.76%	0.74%	(0.54%)
9/30/20	10.21	(0.02)	3.53	3.51	(0.06)	(3.09)	(3.15)	10.57	45.81%	248,333	0.77%	0.76%	(0.23%)
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%)
Class R5													
9/30/21	\$ 10.33	\$ (0.07)	\$ 2.76	\$ 2.69	\$ —	\$ (2.02)	\$ (2.02)	\$ 11.00	28.64%	\$ 82,696	0.86%	0.84%	(0.64%)
9/30/20	10.05	(0.03)	3.45	3.42	(0.05)	(3.09)	(3.14)	10.33	45.51%	112,882	0.87%	0.86%	(0.31%)
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%)
Service Class													
9/30/21	\$ 9.77	\$ (0.07)	\$ 2.59	\$ 2.52	\$ —	\$ (2.02)	\$ (2.02)	\$ 10.27	28.53%	\$ 30,819	0.96%	0.94%	(0.74%)
9/30/20	9.66	(0.03)	3.27	3.24	(0.04)	(3.09)	(3.13)	9.77	45.46%	31,955	0.97%	0.96%	(0.37%)
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%)

Year ended September 30				
2021	2020	2019	2018	2017
26%	47%	33%	28%	19%

Portfolio turnover rate

^c Per share amount calculated on the average shares method.

^d Amount is less than \$0.005 per share.

^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.

^{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.

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

	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
Administrative Class													
9/30/21	\$ 9.06	\$ (0.08)	\$ 2.38	\$ 2.30	\$ —	\$ (2.02)	\$ (2.02)	\$ 9.34	28.30%	\$ 51,978	1.06%	1.04%	(0.84%)
9/30/20	9.17	(0.04)	3.05	3.01	(0.03)	(3.09)	(3.12)	9.06	45.29%	57,076	1.07%	1.06%	(0.52%)
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%)
Class A													
9/30/21	\$ 7.72	\$ (0.08)	\$ 1.98	\$ 1.90	\$ —	\$ (2.02)	\$ (2.02)	\$ 7.60	27.99%	\$ 38,900	1.31%	1.29%	(1.09%)
9/30/20	8.24	(0.05)	2.63	2.58	(0.01)	(3.09)	(3.10)	7.72	44.93%	41,810	1.32%	1.31%	(0.77%)
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%)
Class R4													
9/30/21	\$ 7.84	\$ (0.08)	\$ 2.02	\$ 1.94	\$ —	\$ (2.02)	\$ (2.02)	\$ 7.76	28.08%	\$ 2,721	1.21%	1.19%	(0.99%)
9/30/20	8.32	(0.04)	2.66	2.62	(0.01)	(3.09)	(3.10)	7.84	45.05%	2,777	1.22%	1.21%	(0.60%)
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%)
Class R3													
9/30/21	\$ 6.40	\$ (0.07)	\$ 1.59	\$ 1.52	\$ —	\$ (2.02)	\$ (2.02)	\$ 5.90	27.84%	\$ 2,696	1.46%	1.44%	(1.24%)
9/30/20	7.33	(0.05)	2.21	2.16	(0.00) ^d	(3.09)	(3.09)	6.40	44.85%	984	1.47%	1.46%	(0.92%)
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%)

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

*MassMutual Mid Cap Value Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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													
9/30/21	\$ 11.24	\$ 0.18	\$ 3.87	\$ 4.05	\$ (0.18)	\$ —	\$ (0.18)	\$ 15.11	36.36%	\$ 114,786	0.93%	0.70%	1.28%
9/30/20	12.42	0.20	(1.15)	(0.95)	(0.23)	—	(0.23)	11.24	(7.88%)	97,457	1.00%	0.80%	1.75%
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%
Class R5													
9/30/21	\$ 11.36	\$ 0.17	\$ 3.91	\$ 4.08	\$ (0.16)	\$ —	\$ (0.16)	\$ 15.28	36.22%	\$ 1,001	1.03%	0.79%	1.18%
9/30/20	12.55	0.20	(1.17)	(0.97)	(0.22)	—	(0.22)	11.36	(7.96%)	843	1.10%	0.90%	1.67%
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%
Service Class													
9/30/21	\$ 11.28	\$ 0.16	\$ 3.88	\$ 4.04	\$ (0.16)	\$ —	\$ (0.16)	\$ 15.16	36.08%	\$ 569	1.13%	0.87%	1.07%
9/30/20	12.46	0.18	(1.16)	(0.98)	(0.20)	—	(0.20)	11.28	(8.05%)	203	1.20%	1.00%	1.55%
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%

Year ended September 30				
2021	2020	2019	2018	2017
134%	74%	54%	98%	88%

^c Per share amount calculated on the average shares method.

^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.

^{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.

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

	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
Administrative Class													
9/30/21	\$ 11.50	\$ 0.14	\$ 3.97	\$ 4.11	\$ (0.15)	\$ —	\$ (0.15)	\$ 15.46	35.93%	\$ 1,124	1.23%	1.00%	0.98%
9/30/20	12.71	0.17	(1.19)	(1.02)	(0.19)	—	(0.19)	11.50	(8.19%)	873	1.30%	1.10%	1.46%
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%
Class A													
9/30/21	\$ 11.27	\$ 0.10	\$ 3.88	\$ 3.98	\$ (0.12)	\$ —	\$ (0.12)	\$ 15.13	35.51%	\$ 1,544	1.48%	1.26%	0.73%
9/30/20	12.47	0.14	(1.17)	(1.03)	(0.17)	—	(0.17)	11.27	(8.41%)	3,071	1.55%	1.35%	1.23%
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%
Class R4													
9/30/21	\$ 11.14	\$ 0.11	\$ 3.84	\$ 3.95	\$ (0.13)	\$ —	\$ (0.13)	\$ 14.96	35.64%	\$ 276	1.38%	1.20%	0.81%
9/30/20	12.31	0.15	(1.14)	(0.99)	(0.18)	—	(0.18)	11.14	(8.27%)	934	1.45%	1.25%	1.29%
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%
Class R3													
9/30/21	\$ 11.10	\$ 0.07	\$ 3.84	\$ 3.91	\$ (0.09)	\$ —	\$ (0.09)	\$ 14.92	35.39%	\$ 144	1.63%	1.42%	0.52%
9/30/20	12.28	0.12	(1.15)	(1.03)	(0.15)	—	(0.15)	11.10	(8.53%)	381	1.70%	1.50%	1.05%
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%

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

*MassMutual Small Cap Value Equity Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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													
9/30/21	\$ 8.72	\$ 0.00 ^d	\$ 4.68	\$ 4.68	\$ —	\$ (0.35)	\$ (0.35)	\$ 13.05	54.27%	\$ 37,021	1.03%	N/A	0.04%
9/30/20	11.17	0.02	(1.39)	(1.37)	(0.03)	(1.05)	(1.08)	8.72	(14.27%)	51,492	1.05%	N/A	0.22%
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%
Class R5													
9/30/21	\$ 8.74	\$ (0.01)	\$ 4.69	\$ 4.68	\$ —	\$ (0.35)	\$ (0.35)	\$ 13.07	54.14%	\$ 11,028	1.13%	N/A	(0.07%)
9/30/20	11.19	0.01	(1.40)	(1.39)	(0.01)	(1.05)	(1.06)	8.74	(14.38%)	10,194	1.15%	N/A	0.11%
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%
Service Class													
9/30/21	\$ 8.79	\$ (0.02)	\$ 4.71	\$ 4.69	\$ —	\$ (0.35)	\$ (0.35)	\$ 13.13	53.95%	\$ 3,143	1.23%	N/A	(0.15%)
9/30/20	11.24	0.00 ^d	(1.40)	(1.40)	(0.00) ^d	(1.05)	(1.05)	8.79	(14.38%)	2,572	1.25%	N/A	0.02%
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%

Year ended September 30

	2021	2020	2019	2018	2017
Portfolio turnover rate	23%	77%	30%	24%	21%

^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%.

^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.

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

	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
Administrative Class													
9/30/21	\$ 8.70	\$ (0.03)	\$ 4.67	\$ 4.64	\$ —	\$ (0.35)	\$ (0.35)	\$ 12.99	53.93%	\$ 2,550	1.33%	N/A	(0.25%)
9/30/20	11.16	(0.01)	(1.40)	(1.41)	—	(1.05)	(1.05)	8.70	(14.58%)	3,126	1.35%	N/A	(0.08%)
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%
Class A													
9/30/21	\$ 8.56	\$ (0.06)	\$ 4.58	\$ 4.52	\$ —	\$ (0.35)	\$ (0.35)	\$ 12.73	53.40%	\$ 6,375	1.58%	N/A	(0.50%)
9/30/20	11.01	(0.03)	(1.37)	(1.40)	—	(1.05)	(1.05)	8.56	(14.70%)	4,715	1.60%	N/A	(0.34%)
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%)
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%
Class R4													
9/30/21	\$ 8.50	\$ (0.05)	\$ 4.55	\$ 4.50	\$ —	\$ (0.35)	\$ (0.35)	\$ 12.65	53.54%	\$ 1,492	1.48%	N/A	(0.41%)
9/30/20	10.93	(0.02)	(1.36)	(1.38)	—	(1.05)	(1.05)	8.50	(14.62%)	2,332	1.50%	N/A	(0.24%)
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%) ^e
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%
Class R3													
9/30/21	\$ 8.41	\$ (0.08)	\$ 4.51	\$ 4.43	\$ —	\$ (0.35)	\$ (0.35)	\$ 12.49	53.27%	\$ 695	1.73%	N/A	(0.66%)
9/30/20	10.86	(0.04)	(1.36)	(1.40)	—	(1.05)	(1.05)	8.41	(14.92%)	748	1.75%	N/A	(0.47%)
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%)

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

MassMutual Small Company Value Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

	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													
9/30/21	\$ 7.36	\$ 0.05	\$ 5.35	\$ 5.40	\$ (0.07)	\$ —	\$ (0.07)	\$ 12.69	73.67%	\$ 179,847	0.96%	0.94%	0.48%
9/30/20	9.22	0.05	(1.41)	(1.36)	(0.07)	(0.43)	(0.50)	7.36	(15.96%)	86,121	1.00%	N/A	0.67%
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%
Class R5													
9/30/21	\$ 7.42	\$ 0.05	\$ 5.37	\$ 5.42	\$ (0.06)	\$ —	\$ (0.06)	\$ 12.78	73.32%	\$ 65,854	1.06%	1.04%	0.40%
9/30/20	9.28	0.04	(1.41)	(1.37)	(0.06)	(0.43)	(0.49)	7.42	(15.95%)	48,006	1.10%	N/A	0.55%
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%
Service Class													
9/30/21	\$ 7.37	\$ 0.03	\$ 5.34	\$ 5.37	\$ (0.05)	\$ —	\$ (0.05)	\$ 12.69	73.14%	\$ 8,737	1.16%	1.14%	0.28%
9/30/20	9.23	0.04	(1.42)	(1.38)	(0.05)	(0.43)	(0.48)	7.37	(16.11%)	4,281	1.20%	N/A	0.44%
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%
									Year ended September 30				
									2021	2020	2019	2018	2017
Portfolio turnover rate									66%	57%	146%	65%	57%

^c Per share amount calculated on the average shares method.

^d Amount is less than \$0.005 per share.

^j Computed after giving effect to an agreement by MML Advisers 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.

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

	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
Administrative Class													
9/30/21	\$ 7.19	\$ 0.02	\$ 5.22	\$ 5.24	\$ (0.05)	\$ —	\$ (0.05)	\$ 12.38	73.10%	\$ 14,862	1.26%	1.24%	0.20%
9/30/20	9.01	0.03	(1.38)	(1.35)	(0.04)	(0.43)	(0.47)	7.19	(16.15%)	12,971	1.30%	N/A	0.36%
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%
Class A													
9/30/21	\$ 6.87	\$ (0.01)	\$ 4.99	\$ 4.98	\$ (0.02)	\$ —	\$ (0.02)	\$ 11.83	72.61%	\$ 13,826	1.51%	1.49%	(0.06%)
9/30/20	8.64	0.01	(1.33)	(1.32)	(0.02)	(0.43)	(0.45)	6.87	(16.45%)	10,694	1.55%	N/A	0.11%
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%
Class R4													
9/30/21	\$ 6.78	\$ 0.00 ^d	\$ 4.91	\$ 4.91	\$ (0.04)	\$ —	\$ (0.04)	\$ 11.65	72.68%	\$ 780	1.41%	1.40%	0.02%
9/30/20	8.52	0.02	(1.30)	(1.28)	(0.03)	(0.43)	(0.46)	6.78	(16.25%)	882	1.45%	N/A	0.28%
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%
Class R3													
9/30/21	\$ 6.23	\$ (0.02)	\$ 4.52	\$ 4.50	\$ —	\$ —	\$ —	\$ 10.73	72.23%	\$ 359	1.66%	1.64%	(0.23%)
9/30/20	7.86	(0.00) ^d	(1.20)	(1.20)	(0.00) ^d	(0.43)	(0.43)	6.23	(16.47%)	151	1.70%	N/A	(0.04%)
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%)

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

*MM S&P Mid Cap Index Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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													
9/30/21	\$ 12.92	\$ 0.23	\$ 5.18	\$ 5.41	\$ (0.19)	\$ (0.87)	\$ (1.06)	\$ 17.27	43.51%	\$ 125,905	0.18%	N/A	1.40%
9/30/20	13.76	0.18	(0.46)	(0.28)	(0.20)	(0.36)	(0.56)	12.92	(2.34%)	83,944	0.18%	N/A	1.38%
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%
Class R5													
9/30/21	\$ 12.88	\$ 0.21	\$ 5.17	\$ 5.38	\$ (0.18)	\$ (0.87)	\$ (1.05)	\$ 17.21	43.33%	\$ 34,037	0.28%	N/A	1.28%
9/30/20	13.71	0.16	(0.44)	(0.28)	(0.19)	(0.36)	(0.55)	12.88	(2.34%)	22,832	0.28%	N/A	1.28%
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%
Service Class													
9/30/21	\$ 12.81	\$ 0.18	\$ 5.14	\$ 5.32	\$ (0.16)	\$ (0.87)	\$ (1.03)	\$ 17.10	43.09%	\$ 21,699	0.43%	N/A	1.11%
9/30/20	13.64	0.14	(0.45)	(0.31)	(0.16)	(0.36)	(0.52)	12.81	(2.55%)	19,643	0.43%	N/A	1.13%
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%

Year ended September 30				
2021	2020	2019	2018	2017
16%	18%	15%	13%	33%

c Per share amount calculated on the average shares method.

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.

n Expenses incurred during the period fell under the expense cap.

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

		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
Administrative Class													
9/30/21	\$ 12.80	\$ 0.17	\$ 5.14	\$ 5.31	\$ (0.15)	\$ (0.87)	\$ (1.02)	\$ 17.09	42.96%	\$ 50,348	0.53%	N/A	1.04%
9/30/20	13.63	0.13	(0.45)	(0.32)	(0.15)	(0.36)	(0.51)	12.80	(2.63%)	42,109	0.53%	N/A	1.03%
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%
Class A													
9/30/21	\$ 12.77	\$ 0.12	\$ 5.14	\$ 5.26	\$ (0.10)	\$ (0.87)	\$ (0.97)	\$ 17.06	42.61%	\$ 29,885	0.78%	N/A	0.76%
9/30/20	13.60	0.10	(0.45)	(0.35)	(0.12)	(0.36)	(0.48)	12.77	(2.86%)	30,053	0.78%	N/A	0.78%
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%
Class R4													
9/30/21	\$ 12.70	\$ 0.14	\$ 5.11	\$ 5.25	\$ (0.12)	\$ (0.87)	\$ (0.99)	\$ 16.96	42.84%	\$ 78,753	0.68%	N/A	0.87%
9/30/20	13.53	0.11	(0.46)	(0.35)	(0.12)	(0.36)	(0.48)	12.70	(2.84%)	77,572	0.68%	N/A	0.88%
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%
Class R3													
9/30/21	\$ 12.63	\$ 0.10	\$ 5.09	\$ 5.19	\$ (0.09)	\$ (0.87)	\$ (0.96)	\$ 16.86	42.50%	\$ 115,765	0.93%	N/A	0.64%
9/30/20	13.46	0.08	(0.46)	(0.38)	(0.09)	(0.36)	(0.45)	12.63	(3.07%)	97,782	0.93%	N/A	0.63%
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%

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

*MM Russell 2000 Small Cap Index Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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													
9/30/21	\$ 11.60	\$ 0.14	\$ 5.25	\$ 5.39	\$ (0.16)	\$ (0.56)	\$ (0.72)	\$ 16.27	47.46%	\$ 98,933	0.22%	N/A	0.88%
9/30/20	12.32	0.14	(0.04)	0.10	(0.20)	(0.62)	(0.82)	11.60	0.29%	75,987	0.23%	0.22%	1.18%
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%
Class R5													
9/30/21	\$ 11.59	\$ 0.12	\$ 5.25	\$ 5.37	\$ (0.15)	\$ (0.56)	\$ (0.71)	\$ 16.25	47.29%	\$ 19,313	0.32%	N/A	0.78%
9/30/20	12.31	0.12	(0.03)	0.09	(0.19)	(0.62)	(0.81)	11.59	0.18%	14,076	0.33%	0.32%	1.08%
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%
Service Class													
9/30/21	\$ 11.49	\$ 0.10	\$ 5.20	\$ 5.30	\$ (0.13)	\$ (0.56)	\$ (0.69)	\$ 16.10	47.09%	\$ 13,433	0.47%	N/A	0.63%
9/30/20	12.21	0.11	(0.04)	0.07	(0.17)	(0.62)	(0.79)	11.49	0.01%	8,863	0.48%	0.47%	0.94%
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%

Year ended September 30				
2021	2020	2019	2018	2017
23%	17%	16%	20%	38%

Portfolio turnover rate

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

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.

n Expenses incurred during the period fell under the expense cap.

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

	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
Administrative Class													
9/30/21	\$ 11.50	\$ 0.08	\$ 5.22	\$ 5.30	\$ (0.12)	\$ (0.56)	\$ (0.68)	\$ 16.12	46.99%	\$ 45,888	0.57%	N/A	0.53%
9/30/20	12.23	0.10	(0.05)	0.05	(0.16)	(0.62)	(0.78)	11.50	(0.13%)	44,134	0.58%	0.57%	0.83%
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%
Class A													
9/30/21	\$ 11.42	\$ 0.04	\$ 5.18	\$ 5.22	\$ (0.08)	\$ (0.56)	\$ (0.64)	16.00	46.55%	\$ 19,825	0.82%	N/A	0.28%
9/30/20	12.15	0.07	(0.05)	0.02	(0.13)	(0.62)	(0.75)	11.42	(0.37%)	19,730	0.83%	0.82%	0.58%
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%
Class R4													
9/30/21	\$ 11.38	\$ 0.06	\$ 5.15	\$ 5.21	\$ (0.10)	\$ (0.56)	\$ (0.66)	\$ 15.93	46.67%	\$ 53,581	0.72%	N/A	0.38%
9/30/20	12.10	0.08	(0.05)	0.03	(0.13)	(0.62)	(0.75)	11.38	(0.25%)	50,001	0.73%	0.72%	0.68%
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%
Class R3													
9/30/21	\$ 11.31	\$ 0.02	\$ 5.13	\$ 5.15	\$ (0.07)	\$ (0.56)	\$ (0.63)	\$ 15.83	46.38%	\$ 55,942	0.97%	N/A	0.13%
9/30/20	12.03	0.05	(0.05)	0.00 ^d	(0.10)	(0.62)	(0.72)	11.31	(0.50%)	46,256	0.98%	0.97%	0.43%
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%

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

*MassMutual Mid Cap Growth Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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												
9/30/21	\$ 25.51	\$ (0.08)	\$ 7.39	\$ 7.31	\$ —	\$ (1.59)	\$ (1.59)	\$ 31.23	29.56%	\$ 6,514,823	0.70%	(0.26%)
9/30/20	23.34	0.01	3.43	3.44	(0.01)	(1.26)	(1.27)	25.51	15.23%	6,188,463	0.71%	0.03%
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%	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%	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%	(0.00%) ^e
Class R5												
9/30/21	\$ 25.20	\$ (0.11)	\$ 7.30	\$ 7.19	\$ —	\$ (1.59)	\$ (1.59)	\$ 30.80	29.44%	\$ 1,668,653	0.80%	(0.36%)
9/30/20	23.08	(0.02)	3.40	3.38	—	(1.26)	(1.26)	25.20	15.13%	1,471,580	0.81%	(0.07%)
9/30/19	23.87	0.01	1.12	1.13	—	(1.92)	(1.92)	23.08	6.54%	1,533,487	0.81%	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%	(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%	(0.11%)
Service Class												
9/30/21	\$ 24.47	\$ (0.13)	\$ 7.07	\$ 6.94	\$ —	\$ (1.59)	\$ (1.59)	\$ 29.82	29.29%	\$ 325,714	0.90%	(0.46%)
9/30/20	22.47	(0.04)	3.30	3.26	—	(1.26)	(1.26)	24.47	15.00%	335,782	0.91%	(0.17%)
9/30/19	23.31	(0.01)	1.09	1.08	—	(1.92)	(1.92)	22.47	6.48%	373,475	0.91%	(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%	(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%	(0.20%)

Year ended September 30				
2021	2020	2019	2018	2017
29%	37%	37%	34%	36%

Portfolio turnover rate

^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%.

^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.

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

	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
Administrative Class												
9/30/21	\$ 23.20	\$ (0.15)	\$ 6.69	\$ 6.54	\$ —	\$ (1.59)	\$ (1.59)	\$ 28.15	29.16%	\$ 246,666	1.00%	(0.56%)
9/30/20	21.38	(0.06)	3.14	3.08	—	(1.26)	(1.26)	23.20	14.92%	261,188	1.01%	(0.27%)
9/30/19	22.32	(0.03)	1.01	0.98	—	(1.92)	(1.92)	21.38	6.31%	290,024	1.01%	(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%	(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%	(0.30%)
Class A												
9/30/21	\$ 21.08	\$ (0.20)	\$ 6.06	\$ 5.86	\$ —	\$ (1.59)	\$ (1.59)	\$ 25.35	28.86%	\$ 167,114	1.25%	(0.81%)
9/30/20	19.58	(0.10)	2.86	2.76	—	(1.26)	(1.26)	21.08	14.64%	196,756	1.26%	(0.52%)
9/30/19	20.67	(0.07)	0.90	0.83	—	(1.92)	(1.92)	19.58	6.06%	226,723	1.26%	(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%	(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%	(0.55%)
Class R4												
9/30/21	\$ 21.28	\$ (0.17)	\$ 6.11	\$ 5.94	\$ —	\$ (1.59)	\$ (1.59)	\$ 25.63	28.97%	\$ 155,374	1.15%	(0.72%)
9/30/20	19.74	(0.08)	2.88	2.80	—	(1.26)	(1.26)	21.28	14.73%	176,500	1.16%	(0.42%)
9/30/19	20.80	(0.06)	0.92	0.86	—	(1.92)	(1.92)	19.74	6.18%	222,247	1.16%	(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%	(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%	(0.46%)
Class R3												
9/30/21	\$ 19.16	\$ (0.21)	\$ 5.48	\$ 5.27	\$ —	\$ (1.59)	\$ (1.59)	\$ 22.84	28.65%	\$ 31,715	1.40%	(0.96%)
9/30/20	17.93	(0.12)	2.61	2.49	—	(1.26)	(1.26)	19.16	14.48%	31,065	1.41%	(0.67%)
9/30/19	19.14	(0.09)	0.80	0.71	—	(1.92)	(1.92)	17.93	5.91%	32,770	1.41%	(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%	(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%	(0.70%)

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

*MassMutual Small Cap Growth Equity Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	Income (loss) from investment operations				Less distributions to shareholders			Net asset value, end of the period	Total return ^{l,m}	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 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												
9/30/21	\$ 16.42	\$ (0.07)	\$ 5.93	\$ 5.86	\$ —	\$ (1.40)	\$ (1.40)	\$ 20.88	36.62%	\$ 487,031	0.86%	(0.37%)
9/30/20	15.30	(0.03)	2.97	2.94	(0.14)	(1.68)	(1.82)	16.42	20.54%	342,888	0.87%	(0.19%)
9/30/19	19.08	(0.01)	(1.04)	(1.05)	—	(2.73)	(2.73)	15.30	(2.31%)	269,356	0.86%	(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%	(0.15%)
9/30/17	13.05	(0.01)	2.70	2.69	—	—	—	15.74	20.61%	306,490	0.86%	(0.05%)
Class R5												
9/30/21	\$ 16.13	\$ (0.09)	\$ 5.83	\$ 5.74	\$ —	\$ (1.40)	\$ (1.40)	\$ 20.47	36.53%	\$ 155,912	0.96%	(0.47%)
9/30/20	15.06	(0.04)	2.91	2.87	(0.12)	(1.68)	(1.80)	16.13	20.40%	134,136	0.97%	(0.29%)
9/30/19	18.85	(0.02)	(1.04)	(1.06)	—	(2.73)	(2.73)	15.06	(2.40%)	128,280	0.96%	(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%	(0.25%)
9/30/17	12.93	(0.02)	2.66	2.64	—	—	—	15.57	20.42%	119,338	0.96%	(0.15%)
Service Class												
9/30/21	\$ 14.99	\$ (0.10)	\$ 5.40	\$ 5.30	\$ —	\$ (1.40)	\$ (1.40)	\$ 18.89	36.36%	\$ 36,258	1.06%	(0.57%)
9/30/20	14.12	(0.05)	2.71	2.66	(0.11)	(1.68)	(1.79)	14.99	20.26%	31,977	1.07%	(0.39%)
9/30/19	17.89	(0.03)	(1.01)	(1.04)	—	(2.73)	(2.73)	14.12	(2.43%)	34,404	1.06%	(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%	(0.34%)
9/30/17	12.33	(0.03)	2.54	2.51	—	—	—	14.84	20.36%	34,017	1.06%	(0.25%)

Year ended September 30				
2021	2020	2019	2018	2017
81%	79%	71%	85%	86%

^c Per share amount calculated on the average shares method.

^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.

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

	Income (loss) from investment operations				Less distributions to shareholders			Net asset value, end of the period	Total return ^{L,M}	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 assets, end of the period (000's)	Ratio of expenses to average daily net assets	Net investment income (loss) to average daily net assets
Administrative Class												
9/30/21	\$ 13.77	\$ (0.11)	\$ 4.95	\$ 4.84	\$ —	\$ (1.40)	\$ (1.40)	\$ 17.21	36.23%	\$ 29,715	1.16%	(0.67%)
9/30/20	13.10	(0.06)	2.51	2.45	(0.10)	(1.68)	(1.78)	13.77	20.16%	29,067	1.17%	(0.49%)
9/30/19	16.87	(0.04)	(1.00)	(1.04)	—	(2.73)	(2.73)	13.10	(2.60%)	28,372	1.16%	(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%	(0.45%)
9/30/17	11.69	(0.04)	2.40	2.36	—	—	—	14.05	20.19%	30,295	1.16%	(0.35%)
Class A												
9/30/21	\$ 11.71	\$ (0.13)	\$ 4.18	\$ 4.05	\$ —	\$ (1.40)	\$ (1.40)	\$ 14.36	35.83%	\$ 31,656	1.41%	(0.91%)
9/30/20	11.38	(0.08)	2.16	2.08	(0.07)	(1.68)	(1.75)	11.71	19.94%	34,699	1.42%	(0.74%)
9/30/19	15.14	(0.07)	(0.96)	(1.03)	—	(2.73)	(2.73)	11.38	(2.87%)	33,997	1.41%	(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%	(0.70%)
9/30/17	10.61	(0.07)	2.18	2.11	—	—	—	12.72	19.89%	35,240	1.41%	(0.60%)
Class R4												
9/30/21	\$ 11.82	\$ (0.12)	\$ 4.23	\$ 4.11	\$ —	\$ (1.40)	\$ (1.40)	\$ 14.53	36.02%	\$ 17,129	1.31%	(0.82%)
9/30/20	11.48	(0.07)	2.18	2.11	(0.09)	(1.68)	(1.77)	11.82	20.01%	15,517	1.32%	(0.65%)
9/30/19	15.23	(0.06)	(0.96)	(1.02)	—	(2.73)	(2.73)	11.48	(2.76%)	12,843	1.31%	(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%	(0.60%)
9/30/17	10.65	(0.06)	2.19	2.13	—	—	—	12.78	20.00%	5,081	1.31%	(0.50%)
Class R3												
9/30/21	\$ 9.78	\$ (0.12)	\$ 3.46	\$ 3.34	\$ —	\$ (1.40)	\$ (1.40)	\$ 11.72	35.63%	\$ 4,813	1.56%	(1.07%)
9/30/20	9.79	(0.08)	1.82	1.74	(0.07)	(1.68)	(1.75)	9.78	19.66%	3,930	1.57%	(0.90%)
9/30/19	13.51	(0.07)	(0.92)	(0.99)	—	(2.73)	(2.73)	9.79	(2.94%)	2,728	1.56%	(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%	(0.85%)
9/30/17	9.57	(0.08)	1.97	1.89	—	—	—	11.46	19.75%	2,199	1.56%	(0.75%)

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

*MM MSCI EAFE International Index Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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													
9/30/21	\$ 11.96	\$ 0.35	\$ 2.59	\$ 2.94	\$ (0.29)	\$ (0.14)	\$ (0.43)	\$ 14.47	24.95%	\$ 74,969	0.31%	N/A	2.48%
9/30/20	12.34	0.27	(0.20)	0.07	(0.39)	(0.06)	(0.45)	11.96	0.35%	63,542	0.25%	0.25% ⁿ	2.27%
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%
Class R5													
9/30/21	\$ 11.95	\$ 0.32	\$ 2.60	\$ 2.92	\$ (0.27)	\$ (0.14)	\$ (0.41)	\$ 14.46	24.83%	\$ 16,476	0.41%	N/A	2.30%
9/30/20	12.33	0.25	(0.19)	0.06	(0.38)	(0.06)	(0.44)	11.95	0.29%	15,217	0.35%	0.35% ⁿ	2.09%
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%
Service Class													
9/30/21	\$ 11.98	\$ 0.31	\$ 2.60	\$ 2.91	\$ (0.25)	\$ (0.14)	\$ (0.39)	\$ 14.50	24.68%	\$ 4,191	0.56%	N/A	2.23%
9/30/20	12.28	0.24	(0.22)	0.02	(0.26)	(0.06)	(0.32)	11.98	0.02%	3,671	0.50%	0.50% ⁿ	2.01%
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%

Year ended September 30				
2021	2020	2019	2018	2017
5%	9%	7%	15%	35%

Portfolio turnover rate

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

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.

n Expenses incurred during the period fell under the expense cap.

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

	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
Administrative Class													
9/30/21	\$ 11.87	\$ 0.28	\$ 2.59	\$ 2.87	\$ (0.24)	\$ (0.14)	\$ (0.38)	\$ 14.36	24.54%	\$ 25,078	0.66%	N/A	2.00%
9/30/20	12.26	0.21	(0.19)	0.02	(0.35)	(0.06)	(0.41)	11.87	(0.04%)	32,706	0.60%	0.60% ⁿ	1.81%
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%
Class A													
9/30/21	\$ 11.83	\$ 0.26	\$ 2.57	\$ 2.83	\$ (0.19)	\$ (0.14)	\$ (0.33)	\$ 14.33	24.25%	\$ 16,157	0.91%	N/A	1.85%
9/30/20	12.22	0.19	(0.20)	(0.01)	(0.32)	(0.06)	(0.38)	11.83	(0.29%)	19,156	0.85%	0.85% ⁿ	1.62%
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%
Class R4													
9/30/21	\$ 11.78	\$ 0.26	\$ 2.57	\$ 2.83	\$ (0.22)	\$ (0.14)	\$ (0.36)	\$ 14.25	24.37%	\$ 29,780	0.81%	N/A	1.91%
9/30/20	12.16	0.20	(0.20)	0.00 ^d	(0.32)	(0.06)	(0.38)	11.78	(0.18%)	34,159	0.75%	0.75% ⁿ	1.70%
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%
Class R3													
9/30/21	\$ 11.73	\$ 0.23	\$ 2.55	\$ 2.78	\$ (0.19)	\$ (0.14)	\$ (0.33)	\$ 14.18	24.02%	\$ 33,013	1.06%	N/A	1.68%
9/30/20	12.11	0.17	(0.20)	(0.03)	(0.29)	(0.06)	(0.35)	11.73	(0.41%)	32,240	1.00%	1.00% ⁿ	1.43%
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%

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

*MassMutual Overseas Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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													
9/30/21	\$ 7.99	\$ 0.12	\$ 2.27	\$ 2.39	\$ (0.05)	\$ (0.16)	\$ (0.21)	\$ 10.17	30.17%	\$ 383,223	0.88%	0.79%	1.23%
9/30/20	8.35	0.05	(0.07)	(0.02)	(0.19)	(0.15)	(0.34)	7.99	(0.59%)	370,549	0.89%	0.83%	0.68%
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%
Class R5													
9/30/21	\$ 8.02	\$ 0.11	\$ 2.28	\$ 2.39	\$ (0.04)	\$ (0.16)	\$ (0.20)	\$ 10.21	30.07%	\$ 158,046	0.98%	0.89%	1.11%
9/30/20	8.38	0.05	(0.08)	(0.03)	(0.18)	(0.15)	(0.33)	8.02	(0.67%)	132,845	0.99%	0.94%	0.58%
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%
Service Class													
9/30/21	\$ 7.97	\$ 0.10	\$ 2.26	\$ 2.36	\$ (0.03)	\$ (0.16)	\$ (0.19)	\$ 10.14	29.91%	\$ 45,454	1.08%	0.99%	1.02%
9/30/20	8.33	0.04	(0.08)	(0.04)	(0.17)	(0.15)	(0.32)	7.97	(0.79%)	37,997	1.09%	1.03%	0.49%
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%

Year ended September 30				
2021	2020	2019	2018	2017
27%	34%	27%	46%	29%

Portfolio turnover rate

c Per share amount calculated on the average shares method.

d Amount is less than \$0.005 per share.

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.

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

		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
Administrative Class													
9/30/21	\$ 8.05	\$ 0.08	\$ 2.30	\$ 2.38	\$ (0.03)	\$ (0.16)	\$ (0.19)	\$ 10.24	29.72%	\$ 19,735	1.18%	1.09%	0.81%
9/30/20	8.40	0.03	(0.07)	(0.04)	(0.16)	(0.15)	(0.31)	8.05	(0.77%)	19,034	1.19%	1.14%	0.38%
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%
Class A													
9/30/21	\$ 7.85	\$ 0.06	\$ 2.24	\$ 2.30	\$ (0.01)	\$ (0.16)	\$ (0.17)	\$ 9.98	29.45%	\$ 24,231	1.43%	1.34%	0.59%
9/30/20	8.21	0.01	(0.08)	(0.07)	(0.14)	(0.15)	(0.29)	7.85	(1.17%)	30,721	1.44%	1.38%	0.17%
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%
Class R4													
9/30/21	\$ 7.68	\$ 0.07	\$ 2.18	\$ 2.25	\$ (0.02)	\$ (0.16)	\$ (0.18)	\$ 9.75	29.46%	\$ 20,875	1.33%	1.24%	0.70%
9/30/20	8.03	0.02	(0.06)	(0.04)	(0.16)	(0.15)	(0.31)	7.68	(0.90%)	18,019	1.34%	1.28%	0.28%
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%
Class R3													
9/30/21	\$ 7.76	\$ 0.05	\$ 2.21	\$ 2.26	\$ (0.01)	\$ (0.16)	\$ (0.17)	\$ 9.85	29.29%	\$ 6,971	1.58%	1.49%	0.51%
9/30/20	8.11	(0.00) ^d	(0.07)	(0.07)	(0.13)	(0.15)	(0.28)	7.76	(1.19%)	6,093	1.59%	1.53%	(0.03%)
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%

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

*MassMutual Select T. Rowe Price International Equity Fund – Financial Statements (Continued)**Financial Highlights (For a share outstanding throughout each period)*

	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										\$			
9/30/21	\$ 9.51	\$ 0.27	\$ 2.10	\$ 2.37	\$ (0.17)	\$ —	\$ (0.17)	\$ 11.71	25.11%	1,700,098	0.07%	0.00%	2.39%
9/30/20	9.43	0.15	0.16	0.31	(0.23)	—	(0.23)	9.51	3.11%	1,314,433	0.65%	0.55%	1.63%
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 ^g	10.00	0.19	(0.49)	(0.30)	—	—	—	9.70	(3.00%) ^b	809,616	0.89% ^a	0.67% ^a	3.03% ^a

Year ended September 30			Period ended
2021	2020	2019	September 30, 2018 ^b
28%	30%	26%	24% ^q

Portfolio turnover rate*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.*

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

Notes to Financial Statements

1. The Funds

MassMutual Select Funds (the “Trust”) is registered under the Investment Company Act of 1940, as amended (the “1940 Act”), as an open-end management investment company. The Trust is organized under the laws of the Commonwealth of Massachusetts as a Massachusetts business trust pursuant to an Agreement and Declaration of Trust dated May 28, 1993, as amended and restated as of November 21, 2011, as it may be further amended from time to time. The following are 19 series of the Trust (each individually referred to as a “Fund” or collectively as the “Funds”):

MassMutual Total Return Bond Fund (formerly known as MassMutual Select Total Return Bond Fund) (“Total Return Bond Fund”)
 MassMutual Strategic Bond Fund (formerly known as MassMutual Select Strategic Bond Fund) (“Strategic Bond Fund”)
 MassMutual Diversified Value Fund (formerly known as MassMutual Select Diversified Value Fund) (“Diversified Value Fund”)
 MassMutual Fundamental Value Fund (formerly known as MassMutual Select Fundamental Value Fund) (“Fundamental Value Fund”)
 MM S&P 500[®] Index Fund (“S&P 500 Index Fund”)
 MassMutual Equity Opportunities Fund (formerly known as MassMutual Select Equity Opportunities Fund) (“Equity Opportunities Fund”)
 MassMutual Fundamental Growth Fund (formerly known as MassMutual Select Fundamental Growth Fund) (“Fundamental Growth Fund”)
 MassMutual Blue Chip Growth Fund (formerly known as MassMutual Select Blue Chip Growth Fund) (“Blue Chip Growth Fund”)
 MassMutual Growth Opportunities Fund (formerly known as MassMutual Select Growth Opportunities Fund) (“Growth Opportunities Fund”)
 MassMutual Mid Cap Value Fund (formerly known as MassMutual Select Mid-Cap Value Fund) (“Mid Cap Value Fund”)
 MassMutual Small Cap Value Equity Fund (formerly known as MassMutual Select Small Cap Value Equity Fund) (“Small Cap Value Equity Fund”)
 MassMutual Small Company Value Fund (formerly known as MassMutual Select Small Company Value Fund) (“Small Company Value Fund”)
 MM S&P[®] Mid Cap Index Fund (“S&P Mid Cap Index Fund”)
 MM Russell 2000[®] Small Cap Index Fund (“Russell 2000 Small Cap Index Fund”)
 MassMutual Mid Cap Growth Fund (formerly known as MassMutual Select Mid Cap Growth Fund) (“Mid Cap Growth Fund”)
 MassMutual Small Cap Growth Equity Fund (formerly known as MassMutual Select Small Cap Growth Equity Fund) (“Small Cap Growth Equity Fund”)
 MM MSCI EAFE[®] International Index Fund (“MSCI EAFE International Index Fund”)
 MassMutual Overseas Fund (formerly known as MassMutual Select Overseas Fund) (“Overseas Fund”)
 MassMutual Select T. Rowe Price International Equity Fund (“MM Select T. Rowe Price International Equity Fund”)

Each share class of a Fund represents an interest in the same portfolio of assets. The principal difference among the classes is the level of service and administration fees, and shareholder and distribution service expenses borne by the classes. Because each class will have different fees and expenses, performance and share prices will vary between the classes. The classes of shares are offered to different types of investors, as outlined in the Funds’ Prospectus.

2. Significant Accounting Policies

The following is a summary of significant accounting policies followed consistently by each Fund in the preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America (“generally accepted accounting principles”). The preparation of the financial statements in accordance with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts and disclosures in the financial statements. Actual results could differ from those estimates.

Each Fund is an investment company and accordingly follows the investment company accounting and reporting guidance of the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification Topic 946, Financial Services – Investment Companies.

Notes to Financial Statements (Continued)

Investment Valuation

The net asset value of each Fund's shares is determined once daily as of the close of regular trading on the New York Stock Exchange ("NYSE"), on each day the NYSE is open for trading (a "business day"). 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 Board of Trustees ("Trustees"), and under the general oversight of the Trustees. On holidays and other days when the NYSE is closed, each Fund's net asset value 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 over-the-counter ("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 net asset values 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.

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 Committee¹ in accordance with procedures approved annually by the Trustees, and under the general oversight of the Trustees. The Funds' Valuation Committee employs various methods to determine fair valuations including a regular review of significant inputs and assumptions and review of any related market activity. The Funds' Valuation Committee reports to the Trustees at its regularly scheduled meetings. 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.

¹ *The voting members of the Valuation Committee consist of the President, Treasurer, Assistant Treasurers, Vice Presidents (except for the CCO, Secretary, and Assistant Secretaries) of the Trust, as well as such other members as the Trustees may from time to time designate. The non-voting members of the Valuation Committee consist of the CCO, Secretary, and Assistant Secretaries. The Valuation Committee reviews and determines the fair valuation of portfolio securities and the Funds' pricing procedures in general.*

Notes to Financial Statements (Continued)

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 net asset values. 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.

For investments in equity or debt issued by privately held companies or funds ("Private Company" or collectively, the "Private Companies") and any other investments fair valued using significant unobservable inputs, as described below, the fair valuation approaches used by third party service providers and/or the Funds' subadvisers utilize one or a combination of, but not limited to, the following inputs:

Market approach: (i) recent market transactions, including subsequent rounds of financing, in the underlying investment or comparable issuers; (ii) recapitalizations and other transactions across the capital structure; and (iii) market multiples of comparable issuers.

Income approach: (i) future cash flows discounted to present value and adjusted as appropriate for liquidity, credit, and/or market risks; (ii) quoted prices for similar investments or assets in active markets; and (iii) other risk factors, such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks, recovery rates, liquidation amounts, and/or default rates.

Cost approach: (i) audited or unaudited financial statements, investor communications, and financial or operational metrics issued by the Private Company; (ii) changes in the valuation of relevant indices or publicly traded companies comparable to the Private Company; (iii) relevant news and other public sources; and (iv) known secondary market transactions in the Private Company's interests and merger or acquisition activity in companies comparable to the Private Company.

Investments in series of preferred stock issued by Private Companies are typically valued utilizing Market approach in determining the enterprise value of the company. Such investments often contain rights and preferences that differ from other series of preferred and common stock of the same issuer. Valuation techniques such as the current value method ("CVM"), an option pricing model ("OPM"), a probability weighted expected return model ("PWERM"), or a hybrid of those techniques are used in allocating enterprise value of the company, as deemed appropriate under the circumstances. The CVM allocates value among the various parts of a company's capital structure assuming that the value of convertible preferred stock is represented by the most favorable claim the preferred stockholders have on the enterprise value as of the valuation date. The use of OPM and PWERM techniques involve a determination of the exit scenarios of the investment in order to appropriately allocate the enterprise value of the company among the various parts of its capital structure.

The Private Companies are not subject to the public company disclosure, timing, and reporting standards as other investments held by a Fund. Typically, the most recently available information for a Private Company is as of a date that is earlier than the date a Fund is calculating its net asset value. This factor may result in a difference between the value of the investment and the price a Fund could receive upon the sale of the investment.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. A three-tier hierarchy is utilized to maximize the use of observable market data inputs and minimize the use of unobservable inputs and to establish classification of fair value measurements for disclosure purposes. Inputs refer broadly to the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk, for example, the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model) and/or the risk inherent in the inputs to the valuation technique. Inputs may be observable or unobservable.

Notes to Financial Statements (Continued)

Observable inputs are inputs that reflect the assumptions market participants would use in pricing the asset or liability and are developed based on market data obtained from sources independent of the reporting entity. Unobservable inputs are inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability and are developed based on the best information available in the circumstances. The three-tier hierarchy of inputs is summarized in the three broad Levels listed below. The inputs or methodology used for valuing investments are not necessarily an indication of the risk associated with investing in those investments and the determination of the significance of a particular input to the fair value measurement in its entirety requires judgment and consideration of factors specific to each security.

Level 1 – quoted prices (unadjusted) in active markets for identical investments that the Funds can access at the measurement date

Level 2 – other significant observable inputs (including quoted prices for similar investments, interest rates, prepayment speeds, credit risk, etc.)

Level 3 – significant unobservable inputs, to the extent observable inputs are not available (including the Funds' own assumptions in determining the fair value of investments)

The availability of observable inputs can vary from security to security and is affected by a wide variety of factors, including, for example, the type of security, whether the security is new and not yet established in the marketplace, the liquidity of markets, and other characteristics particular to the security. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3.

Changes in valuation techniques may result in transfers in or out of an investment's assigned Level within the hierarchy. In addition, in periods of market dislocation, the observability of prices and inputs may be reduced for many instruments. This condition, as well as changes related to liquidity of investments, could cause a security to be reclassified between Levels.

In certain cases, the inputs used to measure fair value may fall into different Levels of the fair value hierarchy. In such cases, for disclosure purposes, the Level in the fair value hierarchy within which the fair value measurement falls is determined based on the lowest Level input that is significant to the overall fair value measurement.

The Fundamental Value Fund, Fundamental Growth Fund, and Growth Opportunities Fund characterized all long-term investments at Level 1, and all short-term investments at Level 2, as of September 30, 2021. For each Fund noted in the preceding sentence, the level classification by major category of investments is the same as the category presentation in the Portfolio of Investments.

The following is the aggregate value by input level, as of September 30, 2021, for the remaining Funds' investments:

	Level 1	Level 2	Level 3	Total
Total Return Bond Fund				
Asset Investments				
Bank Loans (Less Unfunded Loan Commitments)	\$ —	\$ 16,676,660	\$ —	\$ 16,676,660
Corporate Debt	—	208,496,157	—	208,496,157
Municipal Obligations	—	5,541,174	—	5,541,174
Non-U.S. Government Agency Obligations	—	102,183,832	—	102,183,832
Sovereign Debt Obligations	—	8,129,182	—	8,129,182
U.S. Government Agency Obligations and Instrumentalities	—	299,041,083	—	299,041,083
U.S. Treasury Obligations	—	344,941,655	—	344,941,655
Purchased Options	270,000	125,621	—	395,621
Mutual Funds	17,208,525	—	—	17,208,525
Short-Term Investments	—	105,031,740	—	105,031,740
Unfunded Loan Commitments***	—	19,682	—	19,682
Total Investments	\$ 17,478,525	\$ 1,090,186,786	\$ —	\$ 1,107,665,311

Notes to Financial Statements (Continued)

	Level 1	Level 2	Level 3	Total
Total Return Bond Fund (Continued)				
Asset Derivatives				
Futures Contracts	\$ 5,487	\$ —	\$ —	\$ 5,487
Swap Agreements	—	170,222	—	170,222
Total	<u>\$ 5,487</u>	<u>\$ 170,222</u>	<u>\$ —</u>	<u>\$ 175,709</u>
Liability Derivatives				
Futures Contracts	\$ (176,737)	\$ —	\$ —	\$ (176,737)
Swap Agreements	—	(262,998)	—	(262,998)
Written Options	(139,500)	—	—	(139,500)
Total	<u>\$ (316,237)</u>	<u>\$ (262,998)</u>	<u>\$ —</u>	<u>\$ (579,235)</u>
Strategic Bond Fund				
Asset Investments				
Bank Loans	\$ —	\$ 26,614,504	\$ —	\$ 26,614,504
Corporate Debt	—	203,953,252	—	203,953,252
Municipal Obligations	—	179,993	—	179,993
Non-U.S. Government Agency Obligations	—	60,566,520	—	60,566,520
Sovereign Debt Obligations	—	33,611,640	—	33,611,640
U.S. Government Agency Obligations and Instrumentalities	—	79,885,050	—	79,885,050
U.S. Treasury Obligations	—	44,575,160	—	44,575,160
Purchased Options	162,016	41,627	—	203,643
Short-Term Investments	—	192,322,309	—	192,322,309
Total Investments	<u>\$ 162,016</u>	<u>\$ 641,750,055</u>	<u>\$ —</u>	<u>\$ 641,912,071</u>
Asset Derivatives				
Forward Contracts	\$ —	\$ 1,343,853	\$ —	\$ 1,343,853
Futures Contracts	1,707,722	—	—	1,707,722
Swap Agreements	—	5,596,019	—	5,596,019
Total	<u>\$ 1,707,722</u>	<u>\$ 6,939,872</u>	<u>\$ —</u>	<u>\$ 8,647,594</u>
Liability Derivatives				
Forward Contracts	\$ —	\$ (1,391,231)	\$ —	\$ (1,391,231)
Futures Contracts	(3,792,883)	—	—	(3,792,883)
Swap Agreements	—	(547,569)	—	(547,569)
Written Options	(147,050)	(1,287)	—	(148,337)
Total	<u>\$ (3,939,933)</u>	<u>\$ (1,940,087)</u>	<u>\$ —</u>	<u>\$ (5,880,020)</u>
Diversified Value Fund				
Asset Investments				
Common Stock	\$ 365,881,848	\$ 4,916,066*	\$ —	\$ 370,797,914
Preferred Stock	1,768,103	1,358,649*	—	3,126,752
Mutual Funds	3,336,929	—	—	3,336,929
Short-Term Investments	103	2,039,001	—	2,039,104
Total Investments	<u>\$ 370,986,983</u>	<u>\$ 8,313,716</u>	<u>\$ —</u>	<u>\$ 379,300,699</u>
S&P 500 Index Fund				
Asset Investments				
Common Stock	\$ 3,482,367,360	\$ —	\$ —	\$ 3,482,367,360
Short-Term Investments	—	21,365,400	—	21,365,400
Total Investments	<u>\$ 3,482,367,360</u>	<u>\$ 21,365,400</u>	<u>\$ —</u>	<u>\$ 3,503,732,760</u>
Liability Derivatives				
Futures Contracts	<u>\$ (732,390)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (732,390)</u>

Notes to Financial Statements (Continued)

	Level 1	Level 2	Level 3	Total
Equity Opportunities Fund				
Asset Investments				
Common Stock	\$ 711,187,558	\$ 31,302,823*	\$ —	\$ 742,490,381
Preferred Stock	2,836,735	2,184,143*	—	5,020,878
Mutual Funds	1,677,159	—	—	1,677,159
Short-Term Investments	157	13,685,763	—	13,685,920
Total Investments	<u>\$ 715,701,609</u>	<u>\$ 47,172,729</u>	<u>\$ —</u>	<u>\$ 762,874,338</u>
Blue Chip Growth Fund				
Asset Investments				
Common Stock	\$ 4,189,192,342	\$ 27,255,976*	\$ 3,903,108**	\$ 4,220,351,426
Preferred Stock	—	—	15,748,944**	15,748,944
Corporate Debt	—	—	6,956,412**	6,956,412
Short-Term Investments	100	22,419,942	—	22,420,042
Total Investments	<u>\$ 4,189,192,442</u>	<u>\$ 49,675,918</u>	<u>\$ 26,608,464</u>	<u>\$ 4,265,476,824</u>
Mid Cap Value Fund				
Asset Investments				
Common Stock	\$ 114,004,844	\$ 2,656,259*	\$ —	\$ 116,661,103
Mutual Funds	227,331	—	—	227,331
Short-Term Investments	—	941,039	—	941,039
Total Investments	<u>\$ 114,232,175</u>	<u>\$ 3,597,298</u>	<u>\$ —</u>	<u>\$ 117,829,473</u>
Asset Derivatives				
Forward Contracts	<u>\$ —</u>	<u>\$ 38,988</u>	<u>\$ —</u>	<u>\$ 38,988</u>
Liability Derivatives				
Forward Contracts	<u>\$ —</u>	<u>\$ (567)</u>	<u>\$ —</u>	<u>\$ (567)</u>
Small Cap Value Equity Fund				
Asset Investments				
Common Stock	\$ 59,699,951	\$ 1,214,883*	\$ —†,**	\$ 60,914,834
Short-Term Investments	—	1,690,118	—	1,690,118
Total Investments	<u>\$ 59,699,951</u>	<u>\$ 2,905,001</u>	<u>\$ —</u>	<u>\$ 62,604,952</u>
Small Company Value Fund				
Asset Investments				
Common Stock	\$ 280,020,697	\$ 645,428*	\$ —†,**	\$ 280,666,125
Mutual Funds	3,217,967	—	—	3,217,967
Short-Term Investments	—	3,430,866	—	3,430,866
Total Investments	<u>\$ 283,238,664</u>	<u>\$ 4,076,294</u>	<u>\$ —</u>	<u>\$ 287,314,958</u>
Asset Derivatives				
Forward Contracts	<u>\$ —</u>	<u>\$ 6,326</u>	<u>\$ —</u>	<u>\$ 6,326</u>
S&P Mid Cap Index Fund				
Asset Investments				
Common Stock	\$ 452,345,676	\$ —	\$ —	\$ 452,345,676
Mutual Funds	826,140	—	—	826,140
Short-Term Investments	—	5,137,108	—	5,137,108
Total Investments	<u>\$ 453,171,816</u>	<u>\$ 5,137,108</u>	<u>\$ —</u>	<u>\$ 458,308,924</u>
Liability Derivatives				
Futures Contracts	<u>\$ (78,494)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (78,494)</u>

Notes to Financial Statements (Continued)

	Level 1	Level 2	Level 3	Total
Russell 2000 Small Cap Index Fund				
Asset Investments				
Common Stock	\$ 304,017,343	\$ —	\$ —+,**	\$ 304,017,343
Warrants	—	1,904	—	1,904
Rights	—	—	10,471**	10,471
Corporate Debt	—	995	—	995
Mutual Funds	7,546,559	—	—	7,546,559
Short-Term Investments	—	3,392,589	—	3,392,589
Total Investments	<u>\$ 311,563,902</u>	<u>\$ 3,395,488</u>	<u>\$ 10,471</u>	<u>\$ 314,969,861</u>
Liability Derivatives				
Futures Contracts	<u>\$ (28,325)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (28,325)</u>
Mid Cap Growth Fund				
Asset Investments				
Common Stock	\$ 8,783,743,390	\$ 17,591,312*	\$ 7,087,099	\$ 8,808,421,801
Preferred Stock	—	—	129,638,365	129,638,365
Mutual Funds	66,758,086	—	—	66,758,086
Short-Term Investments	103,888,237	92,485,921	—	196,374,158
Total Investments	<u>\$ 8,954,389,713</u>	<u>\$ 110,077,233</u>	<u>\$ 136,725,464</u>	<u>\$ 9,201,192,410</u>
Small Cap Growth Equity Fund				
Asset Investments				
Common Stock	\$ 728,070,941	\$ 4,531,700	\$ —	\$ 732,602,641
Mutual Funds	31,304,418	—	—	31,304,418
Short-Term Investments	—	16,868,318	—	16,868,318
Total Investments	<u>\$ 759,375,359</u>	<u>\$ 21,400,018</u>	<u>\$ —</u>	<u>\$ 780,775,377</u>
MSCI EAFE International Index Fund				
Asset Investments				
Common Stock*				
Australia	\$ —	\$ 13,165,686	\$ —	\$ 13,165,686
Austria	—	418,687	—	418,687
Belgium	—	1,585,841	—	1,585,841
Bermuda	—	240,050	—	240,050
Cayman Islands	338,555	874,436	—	1,212,991
Denmark	—	5,136,628	—	5,136,628
Finland	—	2,499,171	—	2,499,171
France	—	20,230,193	—	20,230,193
Germany	109,454	16,396,112	—	16,505,566
Hong Kong	—	4,580,089	—	4,580,089
Ireland	—	1,665,348	—	1,665,348
Israel	487,184	737,655	—	1,224,839
Italy	—	3,568,927	—	3,568,927
Japan	—	47,424,153	—	47,424,153
Luxembourg	—	632,207	—	632,207
Netherlands	748,915	11,230,609	—	11,979,524
New Zealand	—	627,073	—	627,073
Norway	—	1,302,373	—	1,302,373
Papua New Guinea	—	76,165	—	76,165
Portugal	—	296,887	—	296,887
Singapore	71,731	1,933,368	—	2,005,099
Spain	—	4,732,897	—	4,732,897
Sweden	—	6,713,604	—	6,713,604

*Notes to Financial Statements (Continued)***MSCI EAFE International Index Fund (Continued)****Asset Investments (Continued)**

Common Stock* (Continued)

	Level 1	Level 2	Level 3	Total
Switzerland	\$ —	\$ 18,703,461	\$ —	\$ 18,703,461
United Kingdom	130,871	27,937,721	—	28,068,592
United States	—	20,436	—	20,436
Preferred Stock*				
Germany	—	1,132,517	—	1,132,517
Italy	—	29,729	—	29,729
Mutual Funds	3,355,775	—	—	3,355,775
Rights	8,637	5,483	—	14,120
Short-Term Investments	—	1,554,437	—	1,554,437
Total Investments	<u>\$ 5,251,122</u>	<u>\$ 195,451,943</u>	<u>\$ —</u>	<u>\$ 200,703,065</u>

Asset Derivatives

Forward Contracts	\$ —	\$ 2,417	\$ —	\$ 2,417
Futures Contracts	5,431	—	—	5,431
Total	<u>\$ 5,431</u>	<u>\$ 2,417</u>	<u>\$ —</u>	<u>\$ 7,848</u>

Liability Derivatives

Forward Contracts	\$ —	\$ (35,044)	\$ —	\$ (35,044)
Futures Contracts	(54,840)	—	—	(54,840)
Total	<u>\$ (54,840)</u>	<u>\$ (35,044)</u>	<u>\$ —</u>	<u>\$ (89,884)</u>

Overseas Fund**Asset Investments**

Common Stock*

Australia	\$ —	\$ 4,457,373	\$ —	\$ 4,457,373
Belgium	—	7,316,916	—	7,316,916
Brazil	1,154,381	—	—	1,154,381
Canada	22,705,463	—	—	22,705,463
Cayman Islands	4,733,986	8,046,723	—	12,780,709
Denmark	—	12,799,158	—	12,799,158
Finland	—	1,197,764	—	1,197,764
France	—	103,632,464	—	103,632,464
Germany	663,776	93,564,276	—	94,228,052
Hong Kong	—	10,065,662	—	10,065,662
India	—	15,082,761	—	15,082,761
Indonesia	—	1,573,579	—	1,573,579
Ireland	6,882,052	5,321,082	—	12,203,134
Israel	4,401,325	—	—	4,401,325
Italy	—	15,316,945	—	15,316,945
Japan	—	78,622,422	—	78,622,422
Mexico	2,805,390	—	—	2,805,390
Netherlands	—	41,178,395	—	41,178,395
Portugal	—	2,587,014	—	2,587,014
Republic of Korea	—	2,443,832	—	2,443,832
Singapore	—	4,614,387	—	4,614,387
South Africa	—	1,773,777	—	1,773,777
Spain	—	7,544,128	—	7,544,128
Sweden	—	10,721,418	—	10,721,418
Switzerland	—	78,205,346	—	78,205,346

Notes to Financial Statements (Continued)

	Level 1	Level 2	Level 3	Total
Overseas Fund (Continued)				
Asset Investments (Continued)				
Common Stock* (Continued)				
Taiwan	\$ 6,244,473	\$ —	\$ —	\$ 6,244,473
United Kingdom	4,630,920	77,821,423	—	82,452,343
United States	2,764,002	—	—	2,764,002
Preferred Stock*				
Germany	—	176,399	—	176,399
Republic of Korea	—	1,720,857	—	1,720,857
Corporate Debt	—	839,798	—	839,798
Mutual Funds	22,156,838	—	—	22,156,838
Short-Term Investments	—	11,890,846	—	11,890,846
Total Investments	<u>\$ 79,142,606</u>	<u>\$ 598,514,745</u>	<u>\$ —</u>	<u>\$ 677,657,351</u>
Asset Derivatives				
Forward Contracts	<u>\$ —</u>	<u>\$ 130,292</u>	<u>\$ —</u>	<u>\$ 130,292</u>
MM Select T. Rowe Price International Equity Fund				
Asset Investments				
Common Stock*				
Australia	\$ —	\$ 35,007,096	\$ —	\$ 35,007,096
Austria	—	14,972,520	—	14,972,520
Belgium	—	5,910,913	—	5,910,913
Bermuda	1,294,115	5,846,844	—	7,140,959
Brazil	15,400,751	—	—	15,400,751
British Virgin Islands	—	906,483	—	906,483
Canada	54,343,107	—	—	54,343,107
Cayman Islands	38,397,188	50,362,164	—	88,759,352
Chile	1,775,465	—	—	1,775,465
China	—	51,511,051	—	51,511,051
Cyprus	863,199	—	—	863,199
Czech Republic	—	1,036,737	—	1,036,737
Denmark	—	3,250,030	—	3,250,030
Finland	—	12,807,093	—	12,807,093
France	—	119,065,150	—	119,065,150
Germany	—	95,703,168	—	95,703,168
Hong Kong	—	27,568,956	—	27,568,956
Hungary	—	6,169,771	—	6,169,771
India	2,651,877	62,107,953	—	64,759,830
Indonesia	—	12,604,402	—	12,604,402
Ireland	—	6,860,748	—	6,860,748
Italy	—	21,918,276	—	21,918,276
Japan	924,405	267,522,821	—	268,447,226
Luxembourg	3,423,826	4,982,568	—	8,406,394
Malaysia	—	2,097,995	—	2,097,995
Mexico	9,273,541	—	—	9,273,541
Netherlands	15,194,638	107,503,967	—	122,698,605
Norway	—	12,530,308	—	12,530,308
Philippines	—	5,330,237	—	5,330,237
Poland	—	2,730,452	—	2,730,452
Portugal	—	14,580,618	—	14,580,618
Republic of Korea	2,527,991	62,189,718	—	64,717,709
Russia	—	13,980,344	—	13,980,344

Notes to Financial Statements (Continued)

	Level 1	Level 2	Level 3	Total
MM Select T. Rowe Price International Equity Fund (Continued)				
Asset Investments (Continued)				
Common Stock* (Continued)				
Saudi Arabia	\$ —	\$ 7,627,493	\$ —	\$ 7,627,493
Singapore	—	15,332,318	—	15,332,318
South Africa	—	12,054,970	—	12,054,970
Spain	—	12,781,629	—	12,781,629
Sweden	—	23,438,808	—	23,438,808
Switzerland	—	100,245,083	—	100,245,083
Taiwan	—	65,439,404	—	65,439,404
Thailand	7,708,117	1,731,728	—	9,439,845
Turkey	574,031	94,576	—	668,607
United Arab Emirates	—	2,319,497	—	2,319,497
United Kingdom	34,775,715	168,412,835	—	203,188,550
United States	17,421,532	2,416,696	231,766**	20,069,994
Preferred Stock*				
Brazil	5,213,024	—	—	5,213,024
Germany	—	5,241,162	—	5,241,162
Italy	—	862,005	—	862,005
Republic of Korea	—	1,052,474	—	1,052,474
Mutual Funds	19,855,666	—	—	19,855,666
Rights	—	200,539	—	200,539
Short-Term Investments	32,213,101	1,003,582	—	33,216,683
Total Investments	<u>\$ 263,831,289</u>	<u>\$ 1,447,313,182</u>	<u>\$ 231,766</u>	<u>\$ 1,711,376,237</u>

* Includes foreign equity securities whose values were adjusted to reflect market trading of comparable securities or other correlated instruments after the close of trading in their respective foreign markets, as applicable.

** None of the unobservable inputs for Level 3 assets, individually or collectively, had a material impact on the Fund(s). Level 3 investments at September 30, 2021 in relation to net assets were not significant.

*** Unfunded loan commitments are valued at the unrealized appreciation (depreciation) on the commitment.

+ Represents a security at \$0 value as of September 30, 2021.

For certain Fund(s) the Statement of Assets and Liabilities shows receivables from investments sold on a delayed delivery basis, collateral pledged for open futures and options contracts, and collateral pledged for open swap agreements, as well as, any applicable liabilities for investments purchased on a delayed delivery basis and collateral held for securities on loan. These amounts approximate fair value and would be categorized at Level 2 for each applicable Fund as of September 30, 2021.

The Funds had no Level 3 transfers during the year ended September 30, 2021.

Notes to Financial Statements (Continued)

Following is a reconciliation of investments for which significant unobservable inputs (Level 3) were used in determining value:

Asset Valuation Inputs

Investments in Securities										Net Change in Unrealized Appreciation (Depreciation) from Investments Still held as of 9/30/21
	Balance as of 9/30/20	Accrued Discounts (Premiums)	Realized Gain (Loss)	Change in Unrealized Appreciation (Depreciation)	Purchases	(Sales)	Transfers into Level 3	Transfers (out) of Level 3	Balance as of 9/30/21	
Mid Cap Growth Fund										
Common Stock	\$ 6,666,127	\$ —	\$ 85,094	\$ 1,386,060	\$ 1,764,082	\$ (2,814,264)	\$ —	\$ —	\$ 7,087,099	\$ 1,145,787
Preferred Stock	32,347,572	—	74,490	82,995,542	23,777,810	(9,557,049)	—	—	129,638,365	83,585,615
	<u>\$ 39,013,699</u>	<u>\$ —</u>	<u>\$ 159,584</u>	<u>\$ 84,381,602</u>	<u>\$ 25,541,892</u>	<u>\$ (12,371,313)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 136,725,464</u>	<u>\$ 84,731,402</u>

The Mid Cap Growth Fund fair values certain of its Level 3 investments using acquisition cost, although the transaction may not have occurred during the current reporting period. These investments are generally privately held investments, but may include defaulted securities and new debt issuances. There may not be a secondary market for such investments, and/or there are a limited number of investors. The determination to fair value such investments at cost is based upon factors consistent with the principles of fair value measurement that are reasonably available to the Valuation Committee. Valuations are reviewed by members of the Valuation Committee utilizing available market information to determine if the carrying value of these investments should be adjusted. Such market data may include, but is not limited to, observations of the trading multiples of public companies considered comparable to the private companies being valued, financial or operational information released by the company, and/ or news or corporate events that affect the investment, also referred to as enterprise value (EV) to earnings before interest, taxes, depreciation, and amortization (EBITDA) ratios. Valuations may be adjusted to account for company-specific issues, the lack of liquidity inherent in a nonpublic investment, and the fact that comparable public companies are not identical to the investments being fair valued by the Mid Cap Growth Fund. All market variables are assessed on a regular frequency and calibrated as necessary.

Security Description	Fair Value	Valuation Technique ^(s)	Unobservable Input Description	Amount or Range/ Weighting of Unobservable Input	Impact to Valuation from an Increase in Input ^(a)
Mid Cap Growth Fund					
Common Stock - \$7,087,099					
Venture Global LNG, Inc., Series B		Market comparable	Transaction price EV/2023 EBITDA 10.8x Proj EV/2025 EBITDA 12.7x	\$ 5,200 / 20% \$ 3,736.27 / 40% \$ 5,138.96 / 40%	Increase
	\$ 991,459				
Venture Global LNG, Inc., Series C		Market comparable	Transaction price EV/2023 EBITDA 10.8x Proj EV/2025 EBITDA 12.7x	\$ 5,200 / 20% \$ 3,736.27 / 40% \$ 5,138.96 / 40%	Increase
	6,095,640				

Notes to Financial Statements (Continued)

Security Description	Fair Value	Valuation Technique ^(s)	Unobservable Input Description	Amount or Range/ Weighting of Unobservable Input	Impact to Valuation from an Increase in Input ^(a)
Mid Cap Growth Fund (Continued)					
Preferred Stock -					
\$129,638,365					
Caris Life Sciences, Inc., Series D	\$ 5,006,003	Market approach	Transaction price	\$ 8.10	Increase
Databricks, Inc., Series G	2,983,823	Market approach	Transaction price	\$ 220.4524	Increase
Databricks, Inc., Series H	3,616,301	Market approach	Transaction price	\$ 220.4524	Increase
Maplebear, Inc., Series I	1,765,375	Market approach	Transaction price	\$ 125.00	Increase
Redwood Materials, Inc., Series C	3,678,889	Market approach	Transaction price	\$ 47.40347	Increase
Rivian Automotive, Inc., Series D	76,429,274	Market approach	Transaction price	\$ 71.03	Increase
Rivian Automotive, Inc., Series E	27,953,572	Market approach	Transaction price	\$ 71.03	Increase
Sila Nanotechnologies, Inc., Series F	7,310,569	Market approach	Transaction price	\$ 41.2728	Increase
Wework Companies, Inc., Series D-1	623,247	Market approach	Parity price multiplied by conversion factor less 10% discount for lack of liquidity and deal uncertainty	\$ 7.443	Increase
Wework Companies, Inc., Series D-2	271,312	Market approach	Parity price multiplied by conversion factor less 10% discount for lack of liquidity and deal uncertainty	\$ 7.443	Increase
Total	\$ 136,725,464				

(a) Represents the directional change in the fair value of the Level 3 investments that could have resulted from an increase in the corresponding input as of the reporting date. A decrease in the unobservable input would have had the opposite effect. Significant changes in these inputs may have resulted in a significantly higher or lower fair value measurement at the reporting date.

Abbreviation Legend

EV/(year) EBITDA - financial ratio of comparable public companies' total market capitalization to earnings before interest, taxes, depreciation and amortization; measures the value of a comparable company in terms of its expected earnings for a given year

Derivative Instruments

Derivatives are financial instruments whose values are based on the values of one or more indicators, such as a security, asset, currency, interest rate, or index. Derivative transactions can create investment leverage and may be highly volatile. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. A Fund may not be able to close out a derivative transaction at a favorable time or price.

Notes to Financial Statements (Continued)

At September 30, 2021, and during the year then ended, the Fund(s) had the following derivatives and transactions in derivatives, grouped into the indicated risk categories:

	Credit Risk	Equity Risk	Foreign Exchange Risk	Interest Rate Risk	Total
Total Return Bond Fund					
Asset Derivatives					
Purchased Options*	\$ —	\$ —	\$ —	\$ 125,621	\$ 125,621
Purchased Options*~^^^	—	—	—	270,000	270,000
Futures Contracts^^	—	—	—	5,487	5,487
Swap Agreements^~^~^	—	—	—	170,222	170,222
Total Value	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 571,330</u>	<u>\$ 571,330</u>
Liability Derivatives					
Futures Contracts^^	\$ —	\$ —	\$ —	\$ (176,737)	\$ (176,737)
Swap Agreements^~^~^	—	—	—	(262,998)	(262,998)
Written Options^~^~^	—	—	—	(139,500)	(139,500)
Total Value	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (579,235)</u>	<u>\$ (579,235)</u>
Realized Gain (Loss)#					
Purchased Options	\$ —	\$ —	\$ —	\$ 62,257	\$ 62,257
Forward Contracts	—	—	1,435,405	—	1,435,405
Futures Contracts	—	—	—	(728,905)	(728,905)
Swap Agreements	—	—	—	(1,141)	(1,141)
Written Options	—	—	—	(28,698)	(28,698)
Total Realized Gain (Loss)	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,435,405</u>	<u>\$ (696,487)</u>	<u>\$ 738,918</u>
Change in Appreciation (Depreciation)##					
Purchased Options	\$ —	\$ —	\$ —	\$ 143,612	\$ 143,612
Futures Contracts	—	—	—	(149,635)	(149,635)
Swap Agreements	—	—	—	(92,776)	(92,776)
Written Options	—	—	—	(53,377)	(53,377)
Total Change in Appreciation (Depreciation)	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (152,176)</u>	<u>\$ (152,176)</u>
Strategic Bond Fund					
Asset Derivatives					
Purchased Options*	\$ —	\$ —	\$ 41,627	\$ —	\$ 41,627
Purchased Options*~^^^	—	—	—	162,016	162,016
Forward Contracts*	—	—	1,343,853	—	1,343,853
Futures Contracts^^	—	—	—	1,707,722	1,707,722
Swap Agreements^~^~^	1,857,476	—	—	3,738,543	5,596,019
Total Value	<u>\$ 1,857,476</u>	<u>\$ —</u>	<u>\$ 1,385,480</u>	<u>\$ 5,608,281</u>	<u>\$ 8,851,237</u>
Liability Derivatives					
Forward Contracts^	\$ —	\$ —	\$ (1,391,231)	\$ —	\$ (1,391,231)
Futures Contracts^^	—	—	—	(3,792,883)	(3,792,883)
Swap Agreements^	—	—	—	(359,735)	(359,735)
Swap Agreements^~^~^	—	—	—	(187,834)	(187,834)
Written Options^	—	—	(1,287)	—	(1,287)
Written Options^~^~^	—	—	—	(147,050)	(147,050)
Total Value	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (1,392,518)</u>	<u>\$ (4,487,502)</u>	<u>\$ (5,880,020)</u>

Notes to Financial Statements (Continued)

	Credit Risk	Equity Risk	Foreign Exchange Risk	Interest Rate Risk	Total
Strategic Bond Fund (Continued)					
Realized Gain (Loss)#					
Purchased Options	\$ —	\$ —	\$ (507,689)	\$ (3,066,364)	\$ (3,574,053)
Forward Contracts	—	—	1,278,544	—	1,278,544
Futures Contracts	—	—	—	(3,950,682)	(3,950,682)
Swap Agreements	4,902,169	—	—	2,395,157	7,297,326
Written Options	—	—	58,656	3,641,398	3,700,054
Total Realized Gain (Loss)	<u>\$ 4,902,169</u>	<u>\$ —</u>	<u>\$ 829,511</u>	<u>\$ (980,491)</u>	<u>\$ 4,751,189</u>
Change in Appreciation (Depreciation)##					
Purchased Options	\$ —	\$ —	\$ (39,360)	\$ 22,166	\$ (17,194)
Forward Contracts	—	—	598,416	—	598,416
Futures Contracts	—	—	—	(1,571,640)	(1,571,640)
Swap Agreements	(1,154,347)	—	—	783,455	(370,892)
Written Options	—	—	6,778	(31,404)	(24,626)
Total Change in Appreciation (Depreciation)	<u>\$ (1,154,347)</u>	<u>\$ —</u>	<u>\$ 565,834</u>	<u>\$ (797,423)</u>	<u>\$ (1,385,936)</u>
S&P 500 Index Fund					
Liability Derivatives					
Futures Contracts^^	<u>\$ —</u>	<u>\$ (732,390)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (732,390)</u>
Realized Gain (Loss)#					
Futures Contracts	<u>\$ —</u>	<u>\$ 7,808,307</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 7,808,307</u>
Change in Appreciation (Depreciation)##					
Futures Contracts	<u>\$ —</u>	<u>\$ (807,746)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (807,746)</u>
Mid Cap Value Fund					
Asset Derivatives					
Forward Contracts*^^^	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 38,988</u>	<u>\$ —</u>	<u>\$ 38,988</u>
Liability Derivatives					
Forward Contracts^^^	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (567)</u>	<u>\$ —</u>	<u>\$ (567)</u>
Realized Gain (Loss)#					
Forward Contracts	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (294,747)</u>	<u>\$ —</u>	<u>\$ (294,747)</u>
Change in Appreciation (Depreciation)##					
Forward Contracts	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 80,027</u>	<u>\$ —</u>	<u>\$ 80,027</u>
Small Company Value Fund					
Asset Derivatives					
Forward Contracts*	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 6,326</u>	<u>\$ —</u>	<u>\$ 6,326</u>
Realized Gain (Loss)#					
Forward Contracts	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 25,503</u>	<u>\$ —</u>	<u>\$ 25,503</u>
Change in Appreciation (Depreciation)##					
Forward Contracts	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 6,326</u>	<u>\$ —</u>	<u>\$ 6,326</u>
S&P Mid Cap Index Fund					
Liability Derivatives					
Futures Contracts^^	<u>\$ —</u>	<u>\$ (78,494)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (78,494)</u>
Realized Gain (Loss)#					
Futures Contracts	<u>\$ —</u>	<u>\$ 1,888,840</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,888,840</u>
Change in Appreciation (Depreciation)##					
Futures Contracts	<u>\$ —</u>	<u>\$ (97,768)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (97,768)</u>

Notes to Financial Statements (Continued)

	Credit Risk	Equity Risk	Foreign Exchange Risk	Interest Rate Risk	Total
Russell 2000 Small Cap Index Fund					
Liability Derivatives					
Futures Contracts^^	\$ —	\$ (28,325)	\$ —	\$ —	\$ (28,325)
Realized Gain (Loss)#					
Futures Contracts	\$ —	\$ 971,615	\$ —	\$ —	\$ 971,615
Change in Appreciation (Depreciation)##					
Futures Contracts	\$ —	\$ (36,246)	\$ —	\$ —	\$ (36,246)
MSCI EAFE International Index Fund					
Asset Derivatives					
Forward Contracts*	\$ —	\$ —	\$ 2,417	\$ —	\$ 2,417
Futures Contracts^^	—	5,431	—	—	5,431
Total Value	\$ —	\$ 5,431	\$ 2,417	\$ —	\$ 7,848
Liability Derivatives					
Forward Contracts^	\$ —	\$ —	\$ (35,044)	\$ —	\$ (35,044)
Futures Contracts^^	—	(54,840)	—	—	(54,840)
Total Value	\$ —	\$ (54,840)	\$ (35,044)	\$ —	\$ (89,884)
Realized Gain (Loss)#					
Forward Contracts	\$ —	\$ —	\$ (20,432)	\$ —	\$ (20,432)
Futures Contracts	—	926,249	—	—	926,249
Total Realized Gain (Loss)	\$ —	\$ 926,249	\$ (20,432)	\$ —	\$ 905,817
Change in Appreciation (Depreciation)##					
Forward Contracts	\$ —	\$ —	\$ (29,384)	\$ —	\$ (29,384)
Futures Contracts	—	40,899	—	—	40,899
Total Change in Appreciation (Depreciation)	\$ —	\$ 40,899	\$ (29,384)	\$ —	\$ 11,515
Overseas Fund					
Asset Derivatives					
Forward Contracts*	\$ —	\$ —	\$ 130,292	\$ —	\$ 130,292
Realized Gain (Loss)#					
Forward Contracts	\$ —	\$ —	\$ (59,192)	\$ —	\$ (59,192)
Change in Appreciation (Depreciation)##					
Forward Contracts	\$ —	\$ —	\$ 183,859	\$ —	\$ 183,859
MM Select T. Rowe Price International Equity Fund					
Realized Gain (Loss)#					
Written Options	\$ —	\$ 125,363	\$ —	\$ —	\$ 125,363
Change in Appreciation (Depreciation)##					
Written Options	\$ —	\$ (31,387)	\$ —	\$ —	\$ (31,387)

* Statements of Assets and Liabilities location: Investments, at value, or Receivables from: open forward contracts.

^ Statements of Assets and Liabilities location: Payables for: open forward contracts, open swap agreements, at value, or written options outstanding, at value, as applicable.

^^ Cumulative appreciation (depreciation) on futures contracts and centrally cleared swaps is reported in "Futures Contracts" and "Swap Agreements" in each applicable Fund's Portfolio of Investments. Only current day's variation margin, if any, is reported within the Statements of Assets and Liabilities.

^^^ Represents centrally cleared swaps, exchange-traded purchased and written options, or forward contracts, which are not subject to a master netting agreement or similar agreement.

Statements of Operations location: Amounts are included in net realized gain (loss) on: investment transactions, forward contracts, futures contracts, swap agreements, or written options, as applicable.

Notes to Financial Statements (Continued)

Statements of Operations location: Amounts are included in net change in unrealized appreciation (depreciation) on: investment transactions, forward contracts, futures contracts, swap agreements, or written options, as applicable.

For the year ended September 30, 2021, the number of contracts, notional amounts, or shares/units for each derivative type was as follows:

Fund Name	Number of Contracts, Notional Amounts, or Shares/Units†						
	Futures Contracts	Forward Contracts	Swap Agreements	Purchased Options	Purchased Swaptions	Written Options	Written Swaptions
Total Return Bond Fund	99	\$ 20,713,208	\$ 58,685,000	390	\$ 3,710,000	780	\$ —
Strategic Bond Fund	6,117	102,645,926	452,886,167	13,413,939	—	795,239	5,468,000
S&P 500 Index Fund	150	—	—	—	—	—	—
Mid Cap Value Fund	—	8,757,393	—	—	—	—	—
Small Company Value Fund	—	709,421	—	—	—	—	—
S&P Mid Cap Index Fund	25	—	—	—	—	—	—
Russell 2000 Small Cap Index Fund	34	—	—	—	—	—	—
MSCI EAFE International Index Fund	67	6,095,620	—	—	—	—	—
Overseas Fund	—	3,307,611	—	—	—	—	—
MM Select T. Rowe Price International Equity Fund	—	—	—	—	—	141	—

† Amount(s) disclosed represent average number of contracts for futures contracts, notional amounts for forward contracts, swap agreements, purchased swaptions and written swaptions, or shares/units outstanding for purchased options and written options, based on absolute values, which is indicative of volume of this derivative type, for the months that the Fund held such derivatives during the year ended September 30, 2021.

The Portfolio of Investments included in a Fund's financial statements shows the assets or liabilities of the Fund associated with individual derivatives transactions. The terms of many of those transactions contemplate that derivatives receivables and payables between the same two parties may be netted and that the parties will collateralize certain obligations. The following tables provide an illustration of the possible effect of netting provisions and of collateral (delivered or received) on a Fund's derivatives exposure as of September 30, 2021. Netting arrangements vary among different counterparties, and the actual disposition of derivatives receivables and payables, and of collateral, in a bankruptcy or insolvency can be complicated and difficult to predict.

The following table presents derivative assets by counterparty net of amounts available for offset under a master netting agreement ("MNA") or similar agreement and net of the related collateral received by the Fund(s) as of September 30, 2021.

Counterparty	Derivative Assets Subject to an MNA by Counterparty†	Financial Instruments Available for Offset	Collateral Received***	Net Amount*
Total Return Bond Fund				
Goldman Sachs & Co.	\$ 125,621	\$ —	\$ —	\$ 125,621
Strategic Bond Fund				
BNP Paribas SA	\$ 145,548	\$ —	\$ —	\$ 145,548
Citibank N.A.	246,694	(246,694)	—	—
Goldman Sachs & Co.	16,297	(1,287)	—	15,010
Goldman Sachs International	138,393	(138,393)	—	—
Morgan Stanley & Co. LLC	838,548	(389,893)	—	448,655

Notes to Financial Statements (Continued)

Counterparty	Derivative Assets Subject to an MNA by Counterparty†	Financial Instruments Available for Offset	Collateral Received***	Net Amount*
	\$ 1,385,480	\$ (776,267)	\$ —	\$ 609,213
Small Company Value				
UBS AG	\$ 6,326	\$ —	\$ —	\$ 6,326
MSCI EAFE International Index Fund				
Bank of New York Mellon	\$ 764	\$ —	\$ —	\$ 764
Goldman Sachs International	205	(205)	—	—
JP Morgan Chase Bank N.A.	17	(17)	—	—
Morgan Stanley & Co. LLC	1,431	(1,431)	—	—
	<u>\$ 2,417</u>	<u>\$ (1,653)</u>	<u>\$ —</u>	<u>\$ 764</u>
Overseas Fund				
State Street Bank and Trust Co.	\$ 130,292	\$ —	\$ —	\$ 130,292

The following table presents derivative liabilities by counterparty net of amounts available for offset under an MNA or similar agreement and net of the related collateral pledged by the Fund(s) as of September 30, 2021.

Counterparty	Derivative Liabilities Subject to an MNA by Counterparty†	Financial Instruments Available for Offset	Collateral Pledged***	Net Amount**
Strategic Bond Fund				
Citibank N.A.	\$ (953,279)	\$ 246,694	\$ 350,000	\$ (356,585)
Goldman Sachs & Co.	(1,287)	1,287	—	—
Goldman Sachs International	(407,794)	138,393	269,401	—
Morgan Stanley & Co. LLC	(389,893)	389,893	—	—
	<u>\$ (1,752,253)</u>	<u>\$ 776,267</u>	<u>\$ 619,401</u>	<u>\$ (356,585)</u>
MSCI EAFE International Index Fund				
Citibank N.A.	\$ (18,918)	\$ —	\$ —	\$ (18,918)
Goldman Sachs International	(1,581)	205	—	(1,376)
JP Morgan Chase Bank N.A.	(12,238)	17	—	(12,221)
Morgan Stanley & Co. LLC	(2,307)	1,431	—	(876)
	<u>\$ (35,044)</u>	<u>\$ 1,653</u>	<u>\$ —</u>	<u>\$ (33,391)</u>

* Represents the net amount receivable from the counterparty in the event of default.

** Represents the net amount payable to the counterparty in the event of default.

*** The amount presented here may be less than the total amount of collateral received/pledged as the net amount of derivative assets and liabilities for a counterparty cannot be less than \$0.

† The amount presented here may be less than the total amount shown in the Statements of Assets and Liabilities as some derivatives held by the counterparty are not covered within an MNA or similar agreement.

Such agreements typically permit a single net payment in the event of default, including the bankruptcy or insolvency of the counterparty. The Fund(s) and counterparties may not be permitted to sell, re-pledge, or use the collateral they receive. In the event that cash collateral is restricted for use, the balance will be reflected as restricted cash within the Statement of Assets and Liabilities.

Notes to Financial Statements (Continued)

Further details regarding the derivatives and other investments held by the Fund(s) during the year ended September 30, 2021, are discussed below.

Foreign Currency Exchange Transactions

A Fund may engage in foreign currency exchange transactions for hedging purposes in order to protect against uncertainty in the level of future foreign currency exchange rates, or for other, non-hedging purposes.

A Fund may enter into foreign currency exchange transactions, including foreign currency forward contracts. These contracts call for the Fund to deliver in the future an amount of one currency in return for an amount of another currency, at an exchange rate determined at the time the contract is entered into. Forward contracts are private contractual arrangements and a Fund is subject to the risk that its counterparty will not, or will not be able to, perform its obligations. This type of arrangement may require the Fund to post margin. A Fund may also buy and sell options on currencies. When the Fund buys an option, its loss should generally be limited to the amount of the premium paid and any transaction costs. If a Fund sells an option on a currency, it is subject generally to the same risks as if it had entered into a futures contract or forward contract with respect to that currency. For example, futures contracts are exchange-traded and typically have minimal exposure to counterparty risk and forward contracts are private contractual arrangements and a Fund is subject to the risk that its counterparty will not, or will not be able to, perform its obligations. A Fund may enter into foreign currency exchange transactions in order to hedge against changes in the values of the assets or liabilities denominated in one or more foreign currencies, or otherwise to increase or reduce a Fund's exposure to various foreign currencies. The use of foreign currency exchange transactions may create investment leverage.

Whenever a Fund enters into a foreign currency exchange transaction, it is subject to the risk that the value of the transaction will move in a direction unfavorable to it. When the Fund uses the transactions for hedging purposes, it is likely that the Fund will have an asset or liability that will offset any loss (or gain) on the transactions, at least in part. If a Fund enters into foreign currency exchange transactions other than for hedging purposes (for example, seeking to profit from an anticipated change in the values of currencies by creating directional exposures in the portfolio with respect to one or more currencies), it will generally be subject to the same risks, but is less likely to have assets or liabilities that will offset any losses on the transactions. There can be no assurance that a Fund will be able to terminate any foreign currency exchange transaction prior to its maturity in order to limit its loss on the transaction.

Forward foreign currency contracts are marked to market daily and the change in their value is recorded by the Funds as an unrealized gain or loss. Forward foreign currency contracts are valued at the settlement price established through dealers or other market sources on the day which they are traded. When a forward foreign currency contract is extinguished, through delivery or offset by entering into another forward foreign currency contract, the Funds record a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value of the contract at the time it was extinguished or offset. The notional or contractual amounts of these instruments do not necessarily represent the amounts potentially subject to risk. The measurement of the risk associated with these instruments is meaningful only when all related and offsetting transactions and counterparty risks are considered. For information regarding the accounting treatment of options, see "Options, Rights, and Warrants" below.

A Fund's current exposure to a counterparty is the unrealized appreciation on the contract.

Futures Contracts

A Fund may seek to manage a variety of different risks, such as interest rate risk, equity price risk, and currency risk, through the use of futures contracts and related options.

Futures Contracts. A Fund may use interest rate futures contracts to adjust the interest rate sensitivity (duration) of its portfolio or the credit exposure of the portfolio. Interest rate futures contracts obligate the long or short holder to take or make delivery of a specified quantity of a financial instrument, such as a specific fixed income security, during a specified future period at a specified price. A Fund may use index futures contracts to hedge against broad market risks to its portfolio or to gain broad market exposure when it holds uninvested cash or as an inexpensive substitute for cash investments directly in securities or other assets, including commodities and precious metals. Securities index futures contracts are contracts to buy or sell units of a

Notes to Financial Statements (Continued)

securities index at a specified future date at a price agreed upon when the contract is made and are settled in cash. Positions in futures contracts may be closed out only on an exchange or board of trade which provides a secondary market for such futures. Because futures contracts are exchange-traded, they typically have minimal exposure to counterparty risk.

Parties to a futures contract are not required to post the entire notional amount of the contract, but rather a small percentage of that amount (by way of margin), both at the time they enter into futures transactions, and then on a daily basis if their positions decline in value; as a result, futures contracts are highly leveraged. Such payments are known as variation margin and are recorded by the Funds as unrealized gains or losses. Because futures markets are highly leveraged, they can be extremely volatile, and there can be no assurance that the pricing of a futures contract will correlate precisely with the pricing of the asset or index underlying it or the asset or liability of the Fund that is the subject of the hedge. It may not always be possible for a Fund to enter into a closing transaction with respect to a futures contract it has entered into, at a favorable time or price. When a Fund enters into a futures transaction, it is subject to the risk that the value of the futures contract will move in a direction unfavorable to it. When a Fund uses futures contracts for hedging purposes, it is likely that the Fund will have an asset or liability that will offset any loss (or gain) on the transactions, at least in part.

Options on Futures Contracts. If a Fund buys an option on a futures contract, it will have the right to assume a futures contract at a particular price during the course of the option. Its potential loss should generally be limited to the amount of the premium paid and any transaction costs. If a Fund sells an option on a futures contract, it is subject generally to the same risks as if it had entered into a futures contract underlying the option itself.

When a futures contract is closed, the Fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed. Futures contracts are valued at the settlement price established each day by the board of trade or exchange on which they are traded. For information regarding the accounting treatment of options, see “Options, Rights, and Warrants” below.

Swap Agreements

Swap agreements are typically two-party contracts entered into primarily by institutional investors. In a standard “swap” transaction, two parties agree to exchange the returns (or differentials in rates of return) earned or realized on particular predetermined investments or instruments or rates, which may be adjusted for an interest factor. The gross returns to be exchanged or “swapped” between the parties are generally calculated with respect to a “notional amount,” (i.e., the return on or increase in value of a particular dollar amount invested at a particular interest rate or in a “basket” of securities representing a particular index).

Interest Rate Swaps. When a Fund enters into an interest rate swap, it typically agrees to make payments to its counterparty based on a specified long- or short-term interest rate and will receive payments from its counterparty based on another interest rate. Other forms of interest rate swap agreements include, among others, interest rate caps, under which, in return for a specified payment stream, one party agrees to make payments to the other to the extent that interest rates exceed a specified rate, or “cap”; interest rate floors, under which, in return for a specified payment stream, one party agrees to make payments to the other to the extent that interest rates fall below a specified rate, or “floor”; and interest rate collars, under which a party sells a cap and purchases a floor or vice versa in an attempt to protect itself against interest rate movements exceeding given minimum or maximum levels. A Fund may enter into an interest rate swap in order, for example, to hedge against the effect of interest rate changes on the value of specific securities in its portfolio, or to adjust the interest rate sensitivity (duration) or the credit exposure of its portfolio overall, or otherwise as a substitute for a direct investment in debt securities.

Credit Default Swaps. A Fund also may enter into credit default swap transactions, as a “buyer” or “seller” of credit protection. In a credit default swap, one party provides what is in effect insurance against a default or other adverse credit event affecting an issuer of debt securities (typically referred to as a “reference entity”). In general, the buyer of credit protection is obligated to pay the protection seller an upfront amount or a periodic stream of payments over the term of the swap. If a “credit event” occurs, the buyer has the right to deliver to the seller bonds or other obligations of the reference entity (with a value up to the full notional value of the swap), and to receive a payment equal to the par value of the bonds or other obligations. Credit events that would trigger a request that the seller make payment are specific to each credit default swap agreement, but generally include

Notes to Financial Statements (Continued)

bankruptcy, failure to pay, restructuring, acceleration, default, or repudiation/moratorium. When a Fund buys protection, it may or may not own securities of the reference entity. If it does own securities of the reference entity, the swap serves as a hedge against a decline in the value of the securities due to the occurrence of a credit event involving the issuer of the securities. If the Fund does not own securities of the reference entity, the credit default swap may be seen to create a short position in the reference entity. If a Fund is a buyer and no credit event occurs, the Fund will typically recover nothing under the swap, but will have had to pay the required upfront payment and stream of continuing payments under the swap. When a Fund sells protection under a credit default swap, the position may have the effect of creating leverage in the Fund's portfolio through the Fund's indirect long exposure to the issuer or securities on which the swap is written. When a Fund sells protection, it may do so either to earn additional income or to create a "synthetic" long position.

Whenever a Fund enters into a swap agreement, it takes on counterparty risk — the risk that its counterparty will be unable or unwilling to meet its obligations under the swap agreement. The Fund also takes the risk that the market will move against its position in the swap agreement. In the case of an interest rate swap, the value of the swap may increase or decrease depending on changes in interest rates. In the case of a credit default swap, the swap will become more or less valuable depending on the credit of the issuer of the underlying security, and, if a credit event occurs under a swap where the Fund is the seller of credit protection, the Fund could be required to purchase the security at par value, resulting in a significant loss to the Fund. When the Fund enters into any type of swap for hedging purposes, it is likely that the Fund will have an asset or liability that will offset any loss (or gain) on the swap, at least in part. Swap agreements may be non-transferable or otherwise highly illiquid, and a Fund may not be able to terminate or transfer a swap agreement at any particular time or at an acceptable price.

Swaptions. A Fund may also enter into options on swap agreements ("swaptions"). A swaption is a contract that gives a counterparty the right (but not the obligation) to enter into a new swap agreement or to shorten, extend, cancel, or otherwise modify an existing swap agreement, at some designated future time on specified terms. A Fund may write (sell) and purchase put and call swaptions. Depending on the terms of the particular option agreement, a Fund will generally incur a greater degree of risk when it writes a swaption than it will incur when it purchases a swaption. When a Fund purchases a swaption, it risks losing only the amount of the premium it has paid should it decide to let the option expire unexercised. However, when a Fund writes a swaption, upon exercise of the option the Fund will become obligated according to the terms of the underlying agreement. A Fund may enter into swaptions for the same purposes as swaps. For information regarding the accounting treatment of options, see "Options, Rights, and Warrants" below.

Centrally Cleared Swaps. Certain clearinghouses currently offer clearing for limited types of derivatives transactions, principally certain interest rate swaps, certain index swaps, and credit derivatives. In a cleared derivative transaction, a Fund typically enters into the transaction with a financial institution counterparty, and performance of the transaction is effectively guaranteed by a central clearinghouse, thereby reducing or eliminating the Fund's exposure to the credit risk of its original counterparty. The Fund will be required to post amounts ("initial margin") with the clearinghouse or at the instruction of the clearinghouse. The initial margin required by a clearinghouse may be greater than the initial margin the Fund would be required to post in an uncleared transaction. If cash is deposited as the initial margin, it is shown as collateral on a Fund's Statement of Assets and Liabilities. Swap agreements are marked-to-market daily and subsequent payments ("variation margin") are made or received by a Fund depending on whether unrealized gains or losses are incurred. These amounts are reflected as receivables or payables on a Fund's Statement of Assets and Liabilities ("Variation margin on open derivative instruments") and as a component of net change in unrealized appreciation (depreciation) on a Fund's Statement of Operations. Only a limited number of transaction types are currently eligible for clearing.

During the term of a swap transaction, changes in the value of the swap are recognized as unrealized gains or losses by marking to market to reflect the market value of the swap. When the swap is terminated, a Fund will record a realized gain or loss equal to the difference, if any, between the proceeds from (or cost of) the closing transaction and a Fund's basis in the agreement. Upfront swap premium payments paid or received by a Fund, if any, are recorded within the value of the open swap agreement on the Fund's Statement of Assets and Liabilities and represent payments paid or received upon entering into the swap agreement to compensate for differences between stated terms of the swap agreement and prevailing market conditions (credit spreads, currency exchange rates, and other relevant factors). These upfront payments are recorded as realized gain or loss on the Fund's Statement of Operations upon termination or maturity of the swap agreement.

Notes to Financial Statements (Continued)

During the term of a swap transaction, the periodic net payments can be made for a set period of time or may be triggered by a predetermined credit event. The net periodic payments may be based on a fixed or variable interest rate, the change in market value of a specified security, basket of securities or index, or the return generated by a security. These periodic payments received or made by the Funds are recorded in the accompanying Statements of Operations as realized gains and losses, respectively.

A Fund's current exposure to a counterparty is the fair value of the transaction.

Options, Rights, and Warrants

A Fund may purchase and sell put and call options on securities or an index of securities to enhance investment performance or to protect against changes in market prices. A Fund that invests in debt securities may also purchase and sell put and call options to adjust the interest rate sensitivity of its portfolio or the credit exposure of the portfolio.

Call Options. A call option gives the holder the right to purchase, and obligates the writer to sell, a security at the strike price at any time before the expiration date.

Put Options. A put option gives the holder the right to sell, and obligates the writer to buy, a security at the exercise price at any time before the expiration date.

Writing put and call options. A Fund may write call options on a security it owns, in a "directional" strategy hoping to realize a greater current return through the receipt of premiums. In return for the option premium, the Fund takes the risk that it will have to forego any increase in the value of the security over the strike price. When a Fund has written a call option on a security it does not own, its exposure on such an option is theoretically unlimited. A Fund may enter into closing purchase transactions in order to realize a profit or limit a loss on a previously written call option or, in the case of a call option on a security it owns, to free itself to sell the underlying security or to write another call on the security, or protect a security from being called in an unexpected market rise. Any profits from a closing purchase transaction in the case of a call option on a security a Fund owns may be offset by a decline in the value of the underlying security. Conversely, because increases in the market price of a call option will generally reflect increases in the market price of the underlying security, any loss resulting from a closing purchase transaction relating to a call option on a security a Fund owns is likely to be offset in whole or in part by unrealized appreciation of the underlying security owned by the Fund. A Fund may not be able to close out a call option that it has previously written. A Fund may write put options in order to enhance its current return by taking a long directional position as to a security or index of securities. By writing a put option, the Fund assumes the risk that it may be required to purchase the underlying security for an exercise price higher than its then current market value, resulting in a potential capital loss unless the security later appreciates in value. A Fund may terminate a put option that it has written before it expires by entering into a closing purchase transaction. Any loss from this transaction may be partially or entirely offset by the premium received on the terminated option. A Fund may not be able to close out a put option that it has previously written.

When a Fund writes a call or put option, an amount equal to the premium received is recorded as a liability. Premiums received from writing options which expire are treated as realized gains. Premiums received from writing options which are exercised or closed are added to the proceeds or offset against the amount paid on the underlying investment to determine the realized gain or loss.

Purchasing put and call options. A Fund may purchase put options to protect portfolio holdings against a decline in market value of a security or securities held by it. A Fund may also purchase a put option hoping to profit from an anticipated decline in the value of the underlying security. If the Fund holds the security underlying the option, the option premium and any transaction costs will reduce any profit the Fund might have realized had it sold the underlying security instead of buying the put option. A Fund may purchase call options to hedge against an increase in the price of securities that the Fund wants ultimately to buy. A Fund may also purchase a call option as a long directional investment hoping to profit from an anticipated increase in the value of the underlying security. In order for a call option to be profitable, the market price of the underlying security must rise sufficiently above the exercise price to cover the premium and transaction costs. These costs will reduce any profit the Fund might have realized had it bought the underlying security at the time it purchased the call option.

Notes to Financial Statements (Continued)

When a Fund purchases an option, it runs the risk that it will lose its entire investment in the option in a relatively short period of time, unless the Fund exercises the option or enters into a closing sale transaction before the option's expiration. If the price of the underlying security does not rise (in the case of a call) or fall (in the case of a put) to an extent sufficient to cover the option premium and transaction costs, the Fund will lose part or all of its investment in the option. This contrasts with an investment by a Fund in the underlying security, since the Fund will not realize a loss if the security's price does not change. Premiums paid for purchasing options that expire are treated as realized losses.

Exchange Traded Options. Exchange traded options purchased or sold by a Fund may be traded on a securities or options exchange or market. Such options typically have minimal exposure to counterparty risk. However, an exchange or market may at times find it necessary to impose restrictions on particular types of options transactions, such as opening transactions. If an underlying security ceases to meet qualifications imposed by the market or the Options Clearing Corporation, new series of options on that security will no longer be opened to replace expiring series, and opening transactions in existing series may be prohibited. Exchange traded options are valued at the last sale price, or if no sales are reported, the last bid price.

OTC Options. OTC options purchased or sold by a Fund are not traded on securities or options exchanges or backed by clearinghouses. Rather, they are entered into directly between a Fund and the counterparty to the option. In the case of an OTC option purchased by the Fund, the value of the option to the Fund will depend on the willingness and ability of the option writer to perform its obligations to the Fund. In addition, OTC options may not be transferable and there may be little or no secondary market for them, so they may be considered illiquid. It may not be possible to enter into closing transactions with respect to OTC options or otherwise to terminate such options, and as a result a Fund may be required to remain obligated on an unfavorable OTC option until its expiration. OTC options are valued using prices supplied by a primary pricing source, selected pursuant to procedures approved by the Trustees.

Rights and Warrants. A Fund may purchase or hold warrants or rights in order to gain exposure to the underlying security without owning the security, including, for example, cases where the Fund hopes to lock in the price today of a security it may wish to purchase in the future. Warrants generally give the holder the right, but not the obligation, to buy a security at a stated price. In order for a warrant to be profitable, the market price of the underlying security must rise sufficiently above the exercise price to cover any premium and transaction costs. Rights may similarly confer on the holder the right to purchase or acquire securities, including through participation in a so-called rights offering. Bonds may be issued with warrants or other rights attached to purchase or acquire equity or other debt securities, typically of the bond issuer. The market prices of bonds with warrants or rights attached to purchase equity securities or bonds may, to some degree, reflect changes in the values of the underlying securities.

When a Fund purchases or otherwise acquires warrants or other rights, it runs the risk that it will lose its entire investment in the warrants or rights, unless the Fund exercises the warrant or right, acquires the underlying securities, or enters into a closing transaction before expiration. If the price of the underlying security does not rise to an extent sufficient to cover any premium and transaction costs, the Fund will lose part or all of its investment. Any premiums or purchase price paid for warrants or other rights that expire are treated as realized losses. Warrants and similar rights differ from options in that they are typically written by the issuer of the security underlying the warrant or right. Although some warrants and rights may be non-transferable, others may be traded over-the-counter or on an exchange.

Hybrid Instruments

A hybrid instrument may be a debt security, preferred stock, warrant, convertible security, certificate of deposit, or other evidence of indebtedness on which a portion of or all interest payments, and/or the principal or stated amount payable at maturity, redemption, or retirement, is determined by reference to one or more underlying assets, indexes, economic factors, or other benchmarks. Because hybrid instruments may be designed to provide indirect exposures to virtually any type of derivative instrument, a Fund may invest in a hybrid instrument for any purpose it might engage in derivatives transactions. Hybrid instruments may take a number of forms, including, for example, debt instruments with interest or principal payments or redemption terms determined by reference to the value of an index, security, or other measure at a future time, preferred stock with dividend rates determined by reference to the value of a currency, or convertible securities where the conversion terms relate to a particular commodity. The risks of investing in a hybrid instrument may, depending on the nature of the instrument, reflect a combination of the risks of investing in securities, options, futures, currencies or other types of investments, and will depend

Notes to Financial Statements (Continued)

upon the terms of the instrument. Such risks generally depend upon factors unrelated to the operations or credit quality of the issuer of the hybrid instrument, and may not be foreseen by the purchaser, such as financial or market developments, economic and political events, the supply and demand of the underlying assets, and interest rate movements. Hybrid instruments may be highly volatile and their use by a Fund may not be successful. The terms of a hybrid instrument may create investment leverage. Hybrid instruments are typically privately issued, presenting credit risk of the issuer, and may be highly illiquid and difficult to value.

Inflation-Linked Securities

Inflation-linked securities are typically fixed income securities whose principal values are periodically adjusted according to a measure of inflation. If the index measuring inflation falls, the principal value of an inflation-linked security will be adjusted downward, and consequently the interest payable on the security (calculated with respect to a smaller principal amount) will be reduced. Repayment of the original principal of the security upon maturity (as adjusted for inflation) is guaranteed in the case of U.S. Treasury inflation-linked securities. For securities that do not provide a similar guarantee, the adjusted principal value of the security repaid at maturity may be less than the original principal.

Alternatively, the interest rates payable on certain inflation-linked securities may be adjusted according to a measure of inflation. As a result, the principal values of such securities do not adjust according to the rate of inflation, although the interest payable on such securities may decline during times of falling inflation.

The values of inflation-linked securities are expected to change in response to changes in real interest rates. Real interest rates are tied to the relationship between nominal interest rates and the rate of inflation. If nominal interest rates increase at a faster rate than inflation, real interest rates may rise, leading to a decrease in value of inflation-linked securities. Inflation-linked securities may cause a potential cash flow mismatch to investors, because an increase in the principal amount of an inflation-linked security will be treated as interest income currently subject to tax at ordinary income rates even though investors will not receive repayment of principal until maturity. If a Fund invests in such securities, it will be required to distribute such interest income in order to qualify for treatment as a regulated investment company and eliminate the Fund-level tax, without a corresponding receipt of cash, and therefore may be required to dispose of portfolio securities at a time when it may not be advantageous to do so in order to make such distributions.

Bank Loans

A Fund may invest in bank loans including, for example, corporate loans, loan participations, direct debt, bank debt, and bridge debt. A Fund may invest in a loan by lending money to a borrower directly as part of a syndicate of lenders. In a syndicated loan, the agent that originated and structured the loan typically administers and enforces the loan on behalf of the syndicate. Failure by the agent to fulfill its obligations may delay or adversely affect receipt of payment by a Fund. A Fund may also invest in loans through novations, assignments, and participation interests. In a novation, a Fund typically assumes all of the rights of a lending institution in a loan, including the right to receive payments of principal and interest and other amounts directly from the borrower and to enforce its rights as a lender directly against the borrower. When a Fund takes an assignment of a loan, the Fund acquires some or all of the interest of another lender (or assignee) in the loan. In such cases, the Fund may be required generally to rely upon the assignor to demand payment and enforce rights under the loan. If a Fund acquires a participation in the loan, the Fund purchases an indirect interest in a loan held by a third party and the Fund typically will have a contractual relationship only with the third party loan investor, not with the borrower. As a result, a Fund may have the right to receive payments of principal, interest, and any fees to which it is entitled only from the loan investor selling the participation and only upon receipt by such loan investor of such payments from the borrower. In such cases, a Fund assumes the credit risk of both the borrower and the loan investor selling the participation, 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.

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 the 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.

Notes to Financial Statements (Continued)

The Total Return Bond Fund entered into certain loan agreements which are unfunded. The Total Return Bond Fund is obligated to fund these commitments at the borrower's discretion. These commitments are disclosed in the Total Return Bond Fund's Portfolio of Investments. At September 30, 2021, the Total Return Bond Fund had sufficient cash and/or securities to cover these commitments.

Repurchase Agreements

Each Fund may enter into repurchase agreements with certain banks and broker-dealers whereby a Fund acquires a security for cash and obtains a simultaneous commitment from the seller to repurchase the security at an agreed upon price and date. A Fund, through its custodian, takes possession of the securities collateralizing the repurchase agreement in a segregated account. Repurchase agreements 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.

When-Issued, Delayed-Delivery, Forward Commitment, and To-Be-Announced Transactions

A Fund may enter into when-issued, delayed-delivery, forward commitment, or to-be-announced ("TBA") transactions (collectively, the "Forward Transactions") in order to lock in the purchase price of the underlying security, or in order to adjust the interest rate exposure of the Fund's existing portfolio. In Forward Transactions, a Fund commits to purchase or sell particular securities, with payment and delivery to take place at a future date. In the case of TBA purchase commitments, the unit price and the estimated principal amount are established when the Fund enters into a commitment, with the actual principal amount being within a specified range of the estimate. Although a Fund does not typically pay for the securities in these types of transactions until they are delivered, it immediately assumes the risks of ownership, including the risk of price fluctuation. As a result, each of these types of transactions may create investment leverage in a Fund's portfolio and increase the volatility of the Fund. If a Fund's counterparty fails to deliver a security purchased in a Forward Transaction, there may be a loss, and the Fund may have missed an opportunity to make an alternative investment.

These securities are valued on the basis of valuations furnished by a pricing service, selected pursuant to procedures approved by the Trustees, which determines valuations taking into account appropriate factors such as institutional-size trading in similar groups of securities, yield, quality, coupon rate, maturity, type of issue, trading characteristics, and other market data. Securities for which no market quotation is available are valued at fair value in accordance with procedures approved by the Trustees. The Funds record on a daily basis the unrealized appreciation (depreciation) based upon changes in the values of these securities. When a Forward Transaction is closed, the Funds record a realized gain or loss equal to the difference between the value of the transaction at the time it was opened and the value of the transaction at the time it was closed.

Dollar Roll Transactions

A Fund may enter into dollar roll transactions, in which the Fund sells mortgage-backed securities for delivery in the current month and simultaneously contracts to purchase substantially similar securities on a specified future date from the same party. A Fund may invest in dollar rolls in order to benefit from anticipated changes in pricing for the mortgage-backed securities during the term of the transaction, or for the purpose of creating investment leverage. In a dollar roll, the securities that are to be purchased will be of the same type as the securities sold, but will be supported by different pools of mortgages.

Dollar rolls involve the risk that the Fund's counterparty will be unable to deliver the mortgage-backed securities underlying the dollar roll at the fixed time. If the counterparty files for bankruptcy or becomes insolvent, a Fund's use of the transaction proceeds may be restricted pending a determination by the counterparty or its representative, whether to enforce the Fund's obligation to repurchase the securities. A Fund can incur a loss on a dollar roll transaction (either because its counterparty fails to perform or because the value of the mortgages subject to the transaction declines) and on the investments made by the Fund with the proceeds of the dollar roll transaction.

Notes to Financial Statements (Continued)

A Fund accounts for a dollar roll transaction as a purchase and sale whereby the difference in the sales price and purchase price of the security sold is recorded as a realized gain (loss). If certain criteria are met, these dollar roll transactions may be considered financing transactions, whereby the difference in the sales price and the future purchase price is recorded as an adjustment to interest income. Dollar roll transactions generally have the effect of creating leverage in a Fund's portfolio.

Securities Lending

Each Fund may lend its securities; however, lending cannot exceed 33% of the total assets of the Fund taken at current value. The Funds' securities lending activities are governed by a Securities Lending Agency Agreement ("Lending Agreement") between each Fund and the lending agent ("Agent"). The Lending Agreement authorizes the Agent to lend portfolio securities held by a Fund to approved borrowers (each, a "Borrower").

Each Fund expects that in connection with any securities on loan, the loan will be secured continuously by collateral consisting of cash (U.S. currency) and/or securities (U.S. Treasury and Agency obligations) adjusted daily to have value at least equal to the current market value of the securities loaned. The market value of the loaned securities is determined at the close of business of a Fund and any additional collateral is delivered to the Fund the next business day. The Funds bear the risk of loss with respect to the investment of cash collateral. As with other extensions of credit, the Funds may bear the risk of delay in recovery of the loaned securities or even loss of rights in the collateral should the Borrower of the securities fail financially. Pursuant to the Lending Agreement, the Agent has provided indemnification to the Funds in the event of default by a Borrower with respect to a loan. The Funds receive compensation for lending their securities in the form of a securities loan fee paid by the Borrower, as well as a share of the income earned on investment of the cash collateral received for the loaned securities. At September 30, 2021, the Funds' collateral was equal to or greater than 100% of the market value of securities on loan.

Subject to the terms of the Lending Agreement and the agreement between the Agent and the applicable Borrower ("Borrowing Agreement"), security loans can be terminated by the Agent, the Fund, or the Borrower and the related securities must be returned within the earlier of the customary settlement period for such securities or the period of time specified in the Borrowing Agreement.

The Funds employ the Agent to implement their securities lending program and the Agent receives a fee from the Funds for its services. In addition, the Funds may be required to pay a rebate to the Borrower. Accordingly, a Fund's compensation for lending its securities is reduced by any such fees or rebate paid to the Agent or Borrower, respectively. Income received by the Funds in securities lending transactions during the year ended September 30, 2021, is reflected as securities lending income on the Statement of Operations.

Accounting for Investment Transactions

Investment transactions are accounted for on the trade date. Realized gains and losses on sales of investments and unrealized appreciation and depreciation of investments are computed by the specific identification cost method. Proceeds received from litigation, if any, are included in realized gains on investment transactions for any investments that are no longer held in the portfolio and as a reduction in cost for investments that continue to be held in the portfolio. Interest income, adjusted for amortization of discounts and premiums on debt securities, is earned from the settlement date and is recorded on the accrual basis. Dividend income and realized capital gain distributions are recorded on the ex-dividend date. Non-cash dividends received in the form of stock are recorded as dividend income at market value. Withholding taxes on foreign interest, dividends, and capital gains have been provided for in accordance with the applicable country's tax rules and rates. Foreign dividend income is recorded on the ex-dividend date or as soon as practicable after the Fund determines the existence of a dividend declaration after exercising reasonable due diligence. Distributions received on securities that represent a return of capital or capital gains are recorded as a reduction of cost of investments and/or as a realized gain.

Foreign Currency Translation

The books and records of the Funds are maintained in U.S. dollars. The market values of foreign currencies, foreign securities, and other assets and liabilities denominated in foreign currencies are translated into U.S. dollars at the mean of the buying and selling rates of such currencies against the U.S. dollar at the end of each business day. Purchases and sales of foreign securities

Notes to Financial Statements (Continued)

and income and expense items are translated at the rates of exchange prevailing on the respective dates of such transactions. The Funds do not isolate that portion of the results of operations arising from changes in the exchange rates from that portion arising from changes in the market prices of securities. Net realized foreign currency gains and losses resulting from changes in exchange rates include foreign currency gains and losses between trade date and settlement date on investment securities transactions, foreign currency transactions, and the difference between the amounts of dividends or interest recorded on the books of the Funds and the amount actually received.

Allocation of Operating Activity

In maintaining the records for the Funds, the income and expense accounts are allocated daily to each class of shares. Investment income and loss, and unrealized and realized gains or losses are prorated among the classes of shares based on the relative net assets of each. Expenses are allocated to each class of shares depending on the nature of the expenditures. Administration and service fees, if any, which are directly attributable to a class of shares, are charged to that class's operations. Expenses of a Fund not directly attributable to the operations of any specific class of shares of the Fund are prorated among the classes to which the expense relates based on relative net assets or another alternative method.

Foreign Securities

Each of the MSCI EAFE International Index Fund, Overseas Fund, and MM Select T. Rowe Price International Equity Fund invests substantially all of its assets in foreign securities. The other Funds may also invest in foreign securities. Foreign securities, including American Depositary Receipts, are subject to additional risks compared to securities of U.S. issuers, including international trade, currency, political, regulatory, and diplomatic risks. In addition, fluctuations in currency exchange rates may adversely affect the values of foreign securities and the price of a Fund's shares. 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.

Federal Income Tax

It is each Fund's intent to continue to comply with the provisions of Subchapter M of the Internal Revenue Code of 1986, as amended (the "Code"), applicable to a regulated investment company. Under such provisions, the Funds would not be subject to federal income taxes on their ordinary income and net realized capital gains to the extent they are distributed or deemed to have been distributed to their shareholders. Therefore, the Funds have not made any provision for federal income tax.

Dividends and Distributions to Shareholders

Dividends from net investment income and distributions of any net realized capital gains of each Fund are declared and paid annually and at other times as may be required to satisfy tax or regulatory requirements.

Distributions to shareholders are recorded on the ex-dividend date. Income and capital gain distributions are determined in accordance with income tax regulations, which may differ from generally accepted accounting principles. As a result, net investment income and net realized capital gains on investment transactions for a reporting period may differ significantly from distributions during such period.

3. Advisory Fees and Other Transactions

Investment Advisory Fees and Investment Subadvisers

MML Investment Advisers, LLC ("MML Advisers"), a wholly-owned subsidiary of Massachusetts Mutual Life Insurance Company ("MassMutual"), serves as investment adviser to each Fund. Under the investment advisory agreements between MML Advisers and the Trust on behalf of each Fund, MML Advisers is responsible for providing investment management services for each Fund. In return for these services, MML Advisers receives advisory fees, based upon each Fund's average daily net assets, computed and accrued daily and payable monthly, at the annual rates shown in the following table.

Notes to Financial Statements (Continued)

MML Advisers has also entered into investment subadvisory agreements for each Fund with the unaffiliated investment subadviser(s) shown in the following table. MML Advisers pays a subadvisory fee to each of these subadvisers based upon the aggregate net assets under management which include (1) the average daily net assets of the specified Fund which it manages, and, if applicable, (2) the average daily net assets of other Funds or accounts of MML Advisers or its affiliates for which the subadviser provides subadvisory services.

The Funds' subadvisory fees, if applicable, are paid monthly by MML Advisers out of the advisory fees.

Fund	Investment Advisory Fee	Investment Subadviser(s)
Total Return Bond Fund	0.30% on the first \$2 billion; and 0.27% on any excess over \$2 billion	Metropolitan West Asset Management, LLC
Strategic Bond Fund*	0.45% on the first \$200 million; and 0.35% on any excess over \$200 million	Western Asset Management Company, LLC; Western Asset Management Company Limited; and Brandywine Global Investment Management, LLC
Diversified Value Fund	0.50% on the first \$400 million; and 0.475% on any excess over \$400 million	Brandywine Global Investment Management, LLC; and T. Rowe Price Associates, Inc.
Fundamental Value Fund	0.60% on the first \$1.25 billion; 0.575% on the next \$250 million; and 0.55% on any excess over \$1.5 billion	Barrow, Hanley, Mewhinney & Strauss, LLC; and Boston Partners Global Investors, Inc.
S&P 500 Index Fund	0.10% on the first \$2.5 billion; 0.08% on the next \$2.5 billion; and 0.05% on any excess over \$5 billion	Northern Trust Investments, Inc.
Equity Opportunities Fund	0.69% on the first \$1 billion; and 0.64% on any excess over \$1 billion	T. Rowe Price Associates, Inc.; and Wellington Management Company LLP
Fundamental Growth Fund	0.65% on the first \$300 million; and 0.60% on any excess over \$300 million	Wellington Management Company LLP; and Westfield Capital Management Company, L.P.
Blue Chip Growth Fund	0.65% on the first \$750 million; and 0.60% on any excess over \$750 million	Loomis, Sayles & Company, L.P.; and T. Rowe Price Associates, Inc.
Growth Opportunities Fund	0.71% on the first \$500 million; and 0.68% on any excess over \$500 million	Jackson Square Partners LLC; and Sands Capital Management, LLC
Mid Cap Value Fund**	0.70% on the first \$300 million; and 0.65% on any excess over \$300 million	American Century Investment Management, Inc.; PanAgora Asset Management, Inc.; and Thompson, Siegel & Walmsley LLC
Small Cap Value Equity Fund	0.75% on the first \$300 million; and 0.70% on any excess over \$300 million	Barrow, Hanley, Mewhinney & Strauss, LLC; and Wellington Management Company LLP
Small Company Value Fund	0.85% on the first \$750 million; and 0.80% on any excess over \$750 million	AllianceBernstein L.P.; and American Century Investment Management, Inc.
S&P Mid Cap Index Fund	0.10% on the first \$500 million; and 0.08% on any excess over \$500 million	Northern Trust Investments, Inc.
Russell 2000 Small Cap Index Fund	0.10% on the first \$500 million; and 0.08% on any excess over \$500 million	Northern Trust Investments, Inc.
Mid Cap Growth Fund	0.72% on the first \$2 billion; and 0.67% on any excess over \$2 billion	Frontier Capital Management Company, LLC; and T. Rowe Price Associates, Inc.
Small Cap Growth Equity Fund	0.80% on the first \$1 billion; and 0.78% on any excess over \$1 billion	Invesco Advisers, Inc.; and Wellington Management Company LLP
MSCI EAFE International Index Fund	0.10% on the first \$1 billion; and 0.09% on any excess over \$1 billion	Northern Trust Investments, Inc.
Overseas Fund	0.80% on the first \$750 million; 0.775% on the next \$500 million; and 0.75% on any excess over \$1.25 billion	Harris Associates L.P.; and Massachusetts Financial Services Company
MM Select T. Rowe Price International Equity Fund***	0.00%	T. Rowe Price Associates, Inc.

Notes to Financial Statements (Continued)

* Effective August 10, 2021, Brandywine Global Investment Management, LLC was added as a subadviser of the Fund.

** Effective March 31, 2021, PanAgora Asset Management, Inc. and Thompson, Siegel & Walmsley LLC were added as subadvisers of the Fund.

*** T. Rowe Price International Ltd and T. Rowe Price Hong Kong Limited each serves as a sub-subadviser of the Fund.

Administration Fees

Effective December 31, 2020, under an Administrative and Shareholder Services Agreement between the Trust and MML Advisers, on behalf of each Fund, MML Advisers is obligated to provide certain administrative and shareholder services. In return for these services, MML Advisers receives an administrative services fee, based upon the average daily net assets of the applicable class of shares of the Funds, at the following annual rates:

	Class I	Class R5	Service Class	Administrative Class	Class A	Class R4	Class R3
Total Return Bond Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
Strategic Bond Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
Diversified Value Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
Fundamental Value Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
S&P 500 Index Fund	None	0.10%	0.25%	0.35%	0.35%	0.25%	0.25%
Equity Opportunities Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
Fundamental Growth Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
Blue Chip Growth Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
Growth Opportunities Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
Mid Cap Value Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
Small Cap Value Equity Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
Small Company Value Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
S&P Mid Cap Index Fund	None	0.10%	0.25%	0.35%	0.35%	0.25%	0.25%
Russell 2000 Small Cap Index Fund	None	0.10%	0.25%	0.35%	0.35%	0.25%	0.25%
Mid Cap Growth Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
Small Cap Growth Equity Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
MSCI EAFE International Index Fund	None	0.10%	0.25%	0.35%	0.35%	0.25%	0.25%
Overseas Fund	None	0.10%	0.20%	0.30%	0.30%	0.20%	0.20%
MM Select T. Rowe Price International Equity Fund	None	N/A	N/A	N/A	N/A	N/A	N/A

Notes to Financial Statements (Continued)

Prior to December 31, 2020, under an Administrative and Shareholder Services Agreement between the Trust and MML Advisers, on behalf of each Fund, MML Advisers was obligated to provide certain administrative and shareholder services. In return for these services, MML Advisers received an administrative services fee, based upon the average daily net assets of the applicable class of shares of the Funds, at the following annual rates:

	Class I	Class R5	Service Class	Administrative Class	Class A	Class R4	Class R3
Total Return Bond Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
Strategic Bond Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
Diversified Value Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
Fundamental Value Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
S&P 500 Index Fund	None	0.10%	0.20%	0.20%	0.20%	0.25%	0.25%
Equity Opportunities Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
Fundamental Growth Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
Blue Chip Growth Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
Growth Opportunities Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
Mid Cap Value Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
Small Cap Value Equity Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
Small Company Value Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
S&P Mid Cap Index Fund	None	0.10%	0.20%	0.20%	0.20%	0.25%	0.25%
Russell 2000 Small Cap Index Fund	None	0.10%	0.20%	0.20%	0.20%	0.25%	0.25%
Mid Cap Growth Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
Small Cap Growth Equity Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
MSCI EAFE International Index Fund	None	0.10%	0.20%	0.20%	0.20%	0.25%	0.25%
Overseas Fund	None	0.10%	0.15%	0.15%	0.15%	0.20%	0.20%
MM Select T. Rowe Price International Equity Fund	None	N/A	N/A	N/A	N/A	N/A	N/A

Distribution and Service Fees

MML Distributors, LLC (the “Distributor”) acts as distributor to each Fund. Pursuant to a 12b-1 Plan adopted by the Trust, Class A shares and Class R4 shares of each Fund pay an annual fee of 0.25% of the average daily net assets of the class; and Class R3 shares of each Fund pay an annual fee of 0.50% of the average daily net assets of the class, to the Distributor. Such payments compensate the Distributor for services provided and expenses incurred by it for purposes of promoting the sale of the relevant class of shares, reducing redemptions of shares, or maintaining or improving services provided to each Fund’s shareholders. The Distributor is a wholly-owned subsidiary of MassMutual.

Prior to December 31, 2020, the Trust entered into a separate Supplemental Shareholder Services Agreement with MassMutual, on behalf of Service Class shares, Administrative Class shares, and Class A shares of each Fund. Fees payable under the Supplemental Shareholder Services Agreement were intended to compensate MassMutual for its provision of shareholder services to the Funds’ investors and were calculated and paid based on the average daily net assets attributable to the relevant share classes of the Funds separately, at the following annual rates: 0.05% for Service Class shares, and 0.15% for Administrative Class shares and Class A shares. MassMutual may have paid these fees to other intermediaries for providing shareholder services to the Funds’ investors.

Effective December 31, 2020, the Supplemental Shareholder Services Agreement was terminated and the fees were transferred into the Administrative and Shareholder Services Agreement.

*Notes to Financial Statements (Continued)**Expense Caps and Waivers*

MML Advisers has agreed to cap the fees and expenses of the Fund noted below (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), based upon the average daily net assets of the applicable class of shares of the Fund, as follows:

	Class I	Class R5	Service Class	Administrative Class	Class A	Class R4	Class R3
Overseas Fund*	0.79%	0.89%	0.99%	1.09%	1.34%	1.24%	1.49%

Acquired Fund Fees and Expenses are borne indirectly by a Fund through investments in other pooled investment vehicles.

* *Expense caps in effect through January 31, 2022.*

MML Advisers has agreed to cap the fees and expenses of the Fund noted below (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 expense, or other non-recurring or unusual expenses such as organizational expenses and shareholder meeting expenses, as applicable), based upon the average daily net assets of the applicable class of shares of the Fund, as follows:

	Class I
MM Select T. Rowe Price International Equity Fund*	0.00%

Acquired Fund Fees and Expenses are borne indirectly by a Fund through investments in other pooled investment vehicles.

* *Expense caps in effect through January 31, 2022.*

Effective August 1, 2021, MML Advisers has agreed to cap the fees and expenses of the Fund noted below (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 expense, or other non-recurring or unusual expenses such as organizational expenses and shareholder meeting expenses, as applicable), based upon the average daily net assets of the applicable class of shares of the Fund, as follows:

	Class I	Class R5	Service Class	Administrative Class	Class A	Class R4	Class R3
Small Company Value Fund*	0.86%	0.96%	1.06%	1.16%	1.41%	1.31%	1.56%

Acquired Fund Fees and Expenses are borne indirectly by a Fund through investments in other pooled investment vehicles.

* *Expense caps in effect through January 31, 2023.*

Effective March 31, 2021, MML Advisers has agreed to cap the fees and expenses of the Fund noted below (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 expense, or other non-recurring or unusual expenses such as organizational expenses and shareholder meeting expenses, as applicable), based upon the average daily net assets of the applicable class of shares of the Fund, as follows:

	Class I	Class R5	Service Class	Administrative Class	Class A	Class R4	Class R3
Mid Cap Value Fund*	0.61%	0.71%	0.81%	0.91%	1.16%	1.06%	1.31%

Acquired Fund Fees and Expenses are borne indirectly by a Fund through investments in other pooled investment vehicles.

Notes to Financial Statements (Continued)

* *Expense caps in effect through January 31, 2023.*

From February 1, 2021 to March 30, 2021, MML Advisers agreed to cap the fees and expenses of the Fund noted below (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 expense, or other non-recurring or unusual expenses such as organizational expenses and shareholder meeting expenses, as applicable), based upon the average daily net assets of the applicable class of shares of the Fund, as follows:

	Class I	Class R5	Service Class	Administrative Class	Class A	Class R4	Class R3
Mid Cap Value Fund	0.80%	0.90%	1.00%	1.10%	1.35%	1.25%	1.50%

Acquired Fund Fees and Expenses are borne indirectly by a Fund through investments in other pooled investment vehicles.

Prior to February 1, 2021, MML Advisers agreed to cap the fees and expenses of the Fund noted below (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), based upon the average daily net assets of the applicable class of shares of the Fund, as follows:

	Class I	Class R5	Service Class	Administrative Class	Class A	Class R4	Class R3
Mid Cap Value Fund	0.80%	0.90%	1.00%	1.10%	1.35%	1.25%	1.50%

Acquired Fund Fees and Expenses are borne indirectly by a Fund through investments in other pooled investment vehicles.

Effective November 20, 2020, MML Advisers has agreed to waive 0.03% of the advisory fees of the Total Return Bond Fund through January 31, 2022.

Effective February 1, 2021, MML Advisers has agreed to waive 0.02% of the advisory fees of the Growth Opportunities Fund through January 31, 2022. Prior to February 1, 2021, MML Advisers agreed to voluntarily waive 0.02% of the advisory fees of the Growth Opportunities Fund.

Effective August 10, 2021, MML Advisers has agreed to waive 0.05% of the advisory fee of the Strategic Bond Fund through January 31, 2023.

Expense caps and waiver amounts are reflected as a reduction of expenses on the Statements of Operations.

Rebated Brokerage Commissions

The Funds listed below have entered into agreements with certain brokers whereby the brokers will rebate to the Funds, in cash, a portion of brokerage commissions. Rebated brokerage commissions are amounts earned by the Funds and are included with realized gain or loss on investment transactions presented in the Statements of Operations. For the year ended September 30, 2021, brokerage commissions rebated under these agreements were as follows:

	Rebated Commissions
Diversified Value Fund	\$ 4,157
Fundamental Value Fund	604
Equity Opportunities Fund	174

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Notes to Financial Statements (Continued)

	Rebated Commissions
Fundamental Growth Fund	\$ 2,055
Blue Chip Growth Fund	18,928
Growth Opportunities Fund	5,859
Mid Cap Value Fund	542
Small Cap Value Equity Fund	1,437
Small Company Value Fund	125
Mid Cap Growth Fund	103,243
Small Cap Growth Equity Fund	12,698

Deferred Compensation

Trustees of the Funds who are not officers or employees of MassMutual may elect to defer receipt of their annual fees in accordance with terms of a Non-Qualified Deferred Compensation Plan. Amounts deferred shall accrue interest or earnings and shall be recorded on the Funds' books as other liabilities. Deferred compensation is included within Trustees' fees and expenses in the Statements of Assets and Liabilities.

Other

Certain officers and trustees of the Funds may also be employees of MassMutual. The compensation of a trustee who is not an employee of MassMutual is borne by the Funds.

The following table shows beneficial ownership of Funds' shares by affiliated parties at September 30, 2021:

	Total % Ownership by Related Party
Total Return Bond Fund	69.2%
Strategic Bond Fund	67.8%
Diversified Value Fund	57.2%
Fundamental Value Fund	89.8%
S&P 500 Index Fund	63.8%
Equity Opportunities Fund	70.4%
Fundamental Growth Fund	64.2%
Blue Chip Growth Fund	46.9%
Growth Opportunities Fund	57.2%
Mid-Cap Value Fund	78.8%
Small Cap Value Equity Fund	89.9%
Small Company Value Fund	61.9%
S&P Mid Cap Index Fund	44.3%
Russell 2000 Small Cap Index Fund	49.0%
Mid Cap Growth Fund	18.4%
Small Cap Growth Equity Fund	64.8%
MSCI EAFE International Index Fund	52.6%
Overseas Fund	78.6%
MM Select T. Rowe Price International Equity Fund	100.0%

*Notes to Financial Statements (Continued)**4. Purchases and Sales of Investments*

Cost of purchases and proceeds from sales of investment securities (excluding short-term investments) for the year ended September 30, 2021, were as follows:

	Purchases		Sales	
	Long-Term U.S. Government Securities	Other Long-Term Securities	Long-Term U.S. Government Securities	Other Long-Term Securities
Total Return Bond Fund	\$ 4,170,249,989	\$ 150,530,699	\$ 4,066,792,745	\$ 166,467,778
Strategic Bond Fund	674,182,943	155,146,482	821,135,444	292,245,200
Diversified Value Fund	—	228,106,058	—	297,910,787
Fundamental Value Fund	—	220,844,525	—	352,886,656
S&P 500 Index Fund	—	134,648,759	—	659,707,148
Equity Opportunities Fund	—	188,362,574	—	314,818,296
Fundamental Growth Fund	—	49,326,871	—	77,559,942
Blue Chip Growth Fund	—	888,963,672	—	1,814,298,081
Growth Opportunities Fund	—	135,206,435	—	247,916,177
Mid Cap Value Fund	—	155,904,176	—	174,610,741
Small Cap Value Equity Fund	—	18,725,733	—	69,099,397
Small Company Value Fund	—	169,452,261	—	162,727,931
S&P Mid Cap Index Fund	—	73,082,456	—	138,713,126
Russell 2000 Small Cap Index Fund	—	73,229,937	—	137,876,750
Mid Cap Growth Fund	—	2,644,990,365	—	4,660,153,632
Small Cap Growth Equity Fund	—	585,896,129	—	643,621,529
MSCI EAFE International Index Fund	—	10,596,578	—	51,019,670
Overseas Fund	—	178,139,448	—	309,647,594
MM Select T. Rowe Price International Equity Fund	—	505,311,876	—	432,878,966

The Funds may purchase from, or sell securities to, other affiliated Funds under procedures adopted by the Trustees. These procedures have been designed to ensure that cross trades conducted by the Funds comply with Rule 17a-7 under the 1940 Act. The cross trades disclosed in the table below are included within the respective purchases and sales amounts shown in the table above, as applicable.

	Purchases	Sales	Realized Gain/Loss
Equity Opportunities Fund	\$ 577,966	\$ 213,398	\$ 88,159
Blue Chip Growth Fund	1,872,294	192,767	(66,983)
Mid-Cap Value Fund	208,008	106,932	10,725
Small Company Value Fund	73,415	—	—
Mid Cap Growth Fund	1,844,583	983,943	279,356
Small Cap Growth Equity Fund	2,328,223	2,128,097	1,319,451
Overseas Fund	136,010	1,903,378	260,449

*Notes to Financial Statements (Continued)***5. Capital Share Transactions**

Changes in shares outstanding for each Fund were as follows:

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Total Return Bond Fund Class I				
Sold	19,146,497	\$ 197,586,295	26,740,428	\$ 278,564,867
Issued as reinvestment of dividends	3,517,569	36,195,787	1,448,165	14,496,136
Redeemed	(13,402,414)	(137,618,946)	(17,609,306)	(182,672,053)
Net increase (decrease)	9,261,652	\$ 96,163,136	10,579,287	\$ 110,388,950
Total Return Bond Fund Class R5				
Sold	966,646	\$ 9,943,955	1,400,696	\$ 14,841,749
Issued as reinvestment of dividends	212,366	2,183,127	116,560	1,165,597
Redeemed	(807,001)	(8,293,426)	(2,351,594)	(24,136,296)
Net increase (decrease)	372,011	\$ 3,833,656	(834,338)	\$ (8,128,950)
Total Return Bond Fund Service Class				
Sold	2,109,996	\$ 22,504,731	2,687,070	\$ 28,121,822
Issued as reinvestment of dividends	466,054	4,814,337	315,558	3,168,205
Redeemed	(4,257,688)	(44,924,719)	(5,668,967)	(58,777,011)
Net increase (decrease)	(1,681,638)	\$ (17,605,651)	(2,666,339)	\$ (27,486,984)
Total Return Bond Fund Administrative Class				
Sold	473,476	\$ 4,887,313	710,503	\$ 7,453,290
Issued as reinvestment of dividends	104,814	1,077,493	54,234	542,340
Redeemed	(591,870)	(6,140,528)	(918,398)	(9,520,891)
Net increase (decrease)	(13,580)	\$ (175,722)	(153,661)	\$ (1,525,261)
Total Return Bond Fund Class A				
Sold	485,232	\$ 4,955,544	611,827	\$ 6,472,950
Issued as reinvestment of dividends	58,109	595,039	21,007	209,443
Redeemed	(448,655)	(4,582,335)	(403,194)	(4,186,745)
Net increase (decrease)	94,686	\$ 968,248	229,640	\$ 2,495,648
Total Return Bond Fund Class R4				
Sold	1,619,080	\$ 16,849,147	1,840,435	\$ 19,264,501
Issued as reinvestment of dividends	509,982	5,283,413	393,683	3,964,383
Redeemed	(3,756,435)	(38,734,808)	(8,377,218)	(87,652,172)
Net increase (decrease)	(1,627,373)	\$ (16,602,248)	(6,143,100)	\$ (64,423,288)
Total Return Bond Fund Class R3				
Sold	457,819	\$ 4,729,647	504,550	\$ 5,289,113
Issued as reinvestment of dividends	140,483	1,444,165	67,450	674,501
Redeemed	(980,562)	(10,022,079)	(961,364)	(9,921,007)
Net increase (decrease)	(382,260)	\$ (3,848,267)	(389,364)	\$ (3,957,393)
Strategic Bond Fund Class I				
Sold	9,792,877	\$ 107,787,429	18,250,299	\$ 199,276,300
Issued as reinvestment of dividends	2,100,242	23,039,656	1,527,108	16,309,511
Redeemed	(12,641,185)	(138,155,152)	(16,471,194)	(179,216,966)
Net increase (decrease)	(748,066)	\$ (7,328,067)	3,306,213	\$ 36,368,845
Strategic Bond Fund Class R5				
Sold	1,720,310	\$ 18,754,867	3,253,588	\$ 36,313,939
Issued as reinvestment of dividends	427,829	4,697,559	259,102	2,772,395
Redeemed	(2,458,439)	(26,976,452)	(2,822,518)	(31,024,658)
Net increase (decrease)	(310,300)	\$ (3,524,026)	690,172	\$ 8,061,676

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Strategic Bond Fund Service Class				
Sold	703,441	\$ 7,620,821	1,056,415	\$ 11,786,637
Issued as reinvestment of dividends	175,067	1,923,985	128,661	1,377,962
Redeemed	(1,543,663)	(16,792,426)	(1,128,304)	(12,364,259)
Net increase (decrease)	(665,155)	\$ (7,247,620)	56,772	\$ 800,340
Strategic Bond Fund Administrative Class				
Sold	2,372,820	\$ 25,699,371	1,107,480	\$ 12,012,532
Issued as reinvestment of dividends	341,132	3,735,392	272,339	2,903,139
Redeemed	(4,280,361)	(46,186,805)	(2,061,667)	(22,401,357)
Net increase (decrease)	(1,566,409)	\$ (16,752,042)	(681,848)	\$ (7,485,686)
Strategic Bond Fund Class A				
Sold	1,496,947	\$ 16,640,515	3,335,460	\$ 36,392,503
Issued as reinvestment of dividends	290,574	3,173,070	174,413	1,857,498
Redeemed	(4,394,795)	(47,670,756)	(2,670,600)	(28,863,254)
Net increase (decrease)	(2,607,274)	\$ (27,857,171)	839,273	\$ 9,386,747
Strategic Bond Fund Class R4				
Sold	653,572	\$ 7,092,970	1,296,220	\$ 14,105,529
Issued as reinvestment of dividends	218,994	2,384,840	232,529	2,464,809
Redeemed	(1,470,051)	(15,956,354)	(3,174,379)	(34,483,246)
Net increase (decrease)	(597,485)	\$ (6,478,544)	(1,645,630)	\$ (17,912,908)
Strategic Bond Fund Class R3				
Sold	319,656	\$ 3,425,685	635,251	\$ 6,876,869
Issued as reinvestment of dividends	65,090	702,974	60,341	634,788
Redeemed	(727,933)	(7,839,830)	(998,607)	(10,594,168)
Net increase (decrease)	(343,187)	\$ (3,711,171)	(303,015)	\$ (3,082,511)
Diversified Value Fund Class I				
Sold	4,766,409	\$ 58,517,759	7,927,280	\$ 78,863,563
Issued as reinvestment of dividends	438,410	4,826,890	1,350,696	15,492,478
Redeemed	(8,179,237)	(104,349,524)	(7,563,444)	(79,768,346)
Net increase (decrease)	(2,974,418)	\$ (41,004,875)	1,714,532	\$ 14,587,695
Diversified Value Fund Class R5				
Sold	645,349	\$ 8,129,226	545,903	\$ 5,566,498
Issued as reinvestment of dividends	129,280	1,427,247	459,049	5,283,654
Redeemed	(1,925,876)	(23,438,048)	(1,120,315)	(11,566,189)
Net increase (decrease)	(1,151,247)	\$ (13,881,575)	(115,363)	\$ (716,037)
Diversified Value Fund Service Class				
Sold	164,512	\$ 2,075,082	662,914	\$ 6,983,178
Issued as reinvestment of dividends	28,106	310,576	61,899	713,075
Redeemed	(481,322)	(5,811,081)	(185,388)	(1,857,148)
Net increase (decrease)	(288,704)	\$ (3,425,423)	539,425	\$ 5,839,105
Diversified Value Fund Administrative Class				
Sold	347,161	\$ 4,457,155	408,808	\$ 4,213,066
Issued as reinvestment of dividends	30,457	339,296	116,460	1,352,099
Redeemed	(450,291)	(5,434,054)	(638,612)	(6,778,909)
Net increase (decrease)	(72,673)	\$ (637,603)	(113,344)	\$ (1,213,744)

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Diversified Value Fund Class A				
Sold	421,139	\$ 5,205,137	576,272	\$ 5,876,381
Issued as reinvestment of dividends	45,661	504,096	205,695	2,365,497
Redeemed	(1,271,123)	(16,100,131)	(1,226,460)	(13,320,526)
Net increase (decrease)	(804,323)	\$ (10,390,898)	(444,493)	\$ (5,078,648)
Diversified Value Fund Class R4				
Sold	271,872	\$ 3,106,319	609,100	\$ 6,580,761
Issued as reinvestment of dividends	18,255	198,248	42,879	485,396
Redeemed	(350,322)	(4,176,440)	(220,514)	(2,124,126)
Net increase (decrease)	(60,195)	\$ (871,873)	431,465	\$ 4,942,031
Diversified Value Fund Class R3				
Sold	30,422	\$ 403,152	72,005	\$ 796,458
Issued as reinvestment of dividends	2,246	24,615	11,709	133,835
Redeemed	(104,228)	(1,328,709)	(52,853)	(543,496)
Net increase (decrease)	(71,560)	\$ (900,942)	30,861	\$ 386,797
Fundamental Value Fund Class I				
Sold	6,014,795	\$ 58,173,128	10,392,675	\$ 78,613,563
Issued as reinvestment of dividends	600,383	5,157,291	7,895,744	68,929,847
Redeemed	(8,589,850)	(82,578,233)	(16,784,966)	(141,029,018)
Net increase (decrease)	(1,974,672)	\$ (19,247,814)	1,503,453	\$ 6,514,392
Fundamental Value Fund Class R5				
Sold	1,298,021	\$ 13,009,525	1,228,390	\$ 9,256,683
Issued as reinvestment of dividends	271,793	2,353,725	4,571,295	40,227,396
Redeemed	(8,416,442)	(84,928,696)	(7,270,124)	(59,763,633)
Net increase (decrease)	(6,846,628)	\$ (69,565,446)	(1,470,439)	\$ (10,279,554)
Fundamental Value Fund Service Class				
Sold	715,166	\$ 7,256,979	922,360	\$ 6,513,275
Issued as reinvestment of dividends	41,902	360,779	625,969	5,483,484
Redeemed	(778,059)	(7,338,666)	(1,585,769)	(13,609,498)
Net increase (decrease)	(20,991)	\$ 279,092	(37,440)	\$ (1,612,739)
Fundamental Value Fund Administrative Class				
Sold	594,754	\$ 5,712,661	2,254,254	\$ 16,283,135
Issued as reinvestment of dividends	95,972	834,960	1,331,615	11,771,480
Redeemed	(3,661,979)	(35,397,364)	(1,764,414)	(14,563,177)
Net increase (decrease)	(2,971,253)	\$ (28,849,743)	1,821,455	\$ 13,491,438
Fundamental Value Fund Class A				
Sold	393,724	\$ 3,933,994	660,980	\$ 4,661,173
Issued as reinvestment of dividends	43,766	375,073	1,543,560	13,428,969
Redeemed	(1,869,795)	(17,194,023)	(4,033,924)	(29,680,710)
Net increase (decrease)	(1,432,305)	\$ (12,884,956)	(1,829,384)	\$ (11,590,568)
Fundamental Value Fund Class R4				
Sold	50,328	\$ 473,808	141,194	\$ 1,023,469
Issued as reinvestment of dividends	13,737	115,118	216,821	1,849,486
Redeemed	(187,920)	(1,797,952)	(214,386)	(1,851,752)
Net increase (decrease)	(123,855)	\$ (1,209,026)	143,629	\$ 1,021,203

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Fundamental Value Fund Class R3				
Sold	78,733	\$ 805,088	25,383	\$ 183,885
Issued as reinvestment of dividends	1,242	10,379	59,078	501,573
Redeemed	(50,502)	(483,004)	(183,552)	(1,403,593)
Net increase (decrease)	29,473	\$ 332,463	(99,091)	\$ (718,135)
S&P 500 Index Fund Class I				
Sold	17,260,205	\$ 347,463,609	33,421,119	\$ 556,933,137
Issued as reinvestment of dividends	10,266,209	184,586,442	4,195,226	75,807,742
Redeemed	(20,521,046)	(413,010,371)	(35,434,447)	(626,105,886)
Net increase (decrease)	7,005,368	\$ 119,039,680	2,181,898	\$ 6,634,993
S&P 500 Index Fund Class R5				
Sold	1,891,528	\$ 38,627,265	2,204,399	\$ 38,510,146
Issued as reinvestment of dividends	3,454,763	62,427,564	1,761,200	31,948,165
Redeemed	(4,944,523)	(100,762,117)	(9,593,636)	(164,654,240)
Net increase (decrease)	401,768	\$ 292,712	(5,628,037)	\$ (94,195,929)
S&P 500 Index Fund Service Class				
Sold	2,704,969	\$ 55,210,299	2,069,060	\$ 36,686,768
Issued as reinvestment of dividends	3,123,958	56,637,356	1,411,046	25,666,923
Redeemed	(8,306,556)	(167,410,998)	(5,771,824)	(105,316,228)
Net increase (decrease)	(2,477,629)	\$ (55,563,343)	(2,291,718)	\$ (42,962,537)
S&P 500 Index Fund Administrative Class				
Sold	1,845,338	\$ 37,527,075	2,390,439	\$ 41,989,674
Issued as reinvestment of dividends	3,211,009	56,802,753	1,646,019	29,315,593
Redeemed	(7,090,273)	(140,951,560)	(11,527,435)	(196,203,014)
Net increase (decrease)	(2,033,926)	\$ (46,621,732)	(7,490,977)	\$ (124,897,747)
S&P 500 Index Fund Class A				
Sold	272,433	\$ 5,131,189	235,638	\$ 3,904,695
Issued as reinvestment of dividends	216,289	3,735,318	93,596	1,633,249
Redeemed	(525,326)	(10,290,915)	(672,357)	(11,769,939)
Net increase (decrease)	(36,604)	\$ (1,424,408)	(343,123)	\$ (6,231,995)
S&P 500 Index Fund Class R4				
Sold	2,912,407	\$ 56,820,281	5,133,080	\$ 87,682,429
Issued as reinvestment of dividends	4,668,157	81,225,926	2,145,497	37,696,386
Redeemed	(13,658,676)	(266,752,268)	(11,459,467)	(195,612,801)
Net increase (decrease)	(6,078,112)	\$ (128,706,061)	(4,180,890)	\$ (70,233,986)
S&P 500 Index Fund Class R3				
Sold	3,895,891	\$ 74,728,360	2,443,017	\$ 39,040,236
Issued as reinvestment of dividends	2,006,301	33,665,725	815,298	13,900,835
Redeemed	(4,151,692)	(78,531,536)	(4,555,528)	(75,564,092)
Net increase (decrease)	1,750,500	\$ 29,862,549	(1,297,213)	\$ (22,623,021)
Equity Opportunities Fund Class I				
Sold	2,342,051	\$ 44,627,814	12,421,310	\$ 206,164,899
Issued as reinvestment of dividends	1,667,804	29,303,320	1,402,377	24,583,662
Redeemed	(5,915,556)	(112,583,197)	(5,458,064)	(90,794,647)
Net increase (decrease)	(1,905,701)	\$ (38,652,063)	8,365,623	\$ 139,953,914

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Equity Opportunities Fund Class R5				
Sold	842,306	\$ 15,151,904	1,129,158	\$ 18,791,000
Issued as reinvestment of dividends	641,043	11,320,812	892,027	15,717,523
Redeemed	(2,362,507)	(44,671,477)	(2,771,893)	(45,974,459)
Net increase (decrease)	(879,158)	\$ (18,198,761)	(750,708)	\$ (11,465,936)
Equity Opportunities Fund Service Class				
Sold	376,730	\$ 6,983,511	406,648	\$ 6,836,961
Issued as reinvestment of dividends	177,650	3,060,907	266,700	4,589,902
Redeemed	(1,048,051)	(18,456,209)	(796,043)	(13,171,414)
Net increase (decrease)	(493,671)	\$ (8,411,791)	(122,695)	\$ (1,744,551)
Equity Opportunities Fund Administrative Class				
Sold	620,927	\$ 11,214,685	409,941	\$ 6,720,228
Issued as reinvestment of dividends	183,645	3,107,276	273,138	4,621,502
Redeemed	(858,899)	(15,618,305)	(1,083,340)	(17,695,931)
Net increase (decrease)	(54,327)	\$ (1,296,344)	(400,261)	\$ (6,354,201)
Equity Opportunities Fund Class A				
Sold	286,817	\$ 4,880,640	661,466	\$ 10,067,957
Issued as reinvestment of dividends	258,475	4,112,340	356,843	5,705,925
Redeemed	(1,193,610)	(20,822,672)	(1,256,328)	(19,391,539)
Net increase (decrease)	(648,318)	\$ (11,829,692)	(238,019)	\$ (3,617,657)
Equity Opportunities Fund Class R4				
Sold	58,146	\$ 972,979	256,078	\$ 3,736,679
Issued as reinvestment of dividends	41,202	641,099	46,405	727,168
Redeemed	(177,306)	(2,914,318)	(154,197)	(2,272,567)
Net increase (decrease)	(77,958)	\$ (1,300,240)	148,286	\$ 2,191,280
Equity Opportunities Fund Class R3				
Sold	88,794	\$ 1,445,005	91,828	\$ 1,301,061
Issued as reinvestment of dividends	19,486	280,015	24,242	352,956
Redeemed	(151,917)	(2,414,261)	(87,465)	(1,231,551)
Net increase (decrease)	(43,637)	\$ (689,241)	28,605	\$ 422,466
Fundamental Growth Fund Class I				
Sold	1,285,417	\$ 8,075,228	1,555,962	\$ 11,876,408
Issued as reinvestment of dividends	1,160,169	6,380,932	1,551,887	11,328,772
Redeemed	(1,742,122)	(10,457,592)	(10,104,729)	(79,204,509)
Net increase (decrease)	703,464	\$ 3,998,568	(6,996,880)	\$ (55,999,329)
Fundamental Growth Fund Class R5				
Sold	237,897	\$ 1,631,222	610,639	\$ 4,501,243
Issued as reinvestment of dividends	1,092,737	6,053,760	708,391	5,192,507
Redeemed	(1,059,599)	(6,358,554)	(3,695,958)	(28,596,118)
Net increase (decrease)	271,035	\$ 1,326,428	(2,376,928)	\$ (18,902,368)
Fundamental Growth Fund Service Class				
Sold	96,110	\$ 571,166	134,115	\$ 1,002,132
Issued as reinvestment of dividends	579,443	3,030,485	236,331	1,680,311
Redeemed	(314,225)	(1,884,842)	(846,723)	(6,242,011)
Net increase (decrease)	361,328	\$ 1,716,809	(476,277)	\$ (3,559,568)

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Fundamental Growth Fund Administrative Class				
Sold	228,849	\$ 1,235,015	208,578	\$ 1,487,047
Issued as reinvestment of dividends	1,380,760	6,751,917	345,329	2,362,047
Redeemed	(1,865,226)	(10,344,812)	(712,667)	(5,130,345)
Net increase (decrease)	(255,617)	\$ (2,357,880)	(158,760)	\$ (1,281,251)
Fundamental Growth Fund Class A				
Sold	189,500	\$ 906,932	570,854	\$ 3,964,976
Issued as reinvestment of dividends	1,822,352	7,726,774	445,633	2,838,685
Redeemed	(1,402,788)	(7,292,641)	(928,341)	(6,159,118)
Net increase (decrease)	609,064	\$ 1,341,065	88,146	\$ 644,543
Fundamental Growth Fund Class R4				
Sold	43,223	\$ 201,697	75,585	\$ 478,627
Issued as reinvestment of dividends	187,400	772,086	35,428	222,136
Redeemed	(93,402)	(500,263)	(50,776)	(322,752)
Net increase (decrease)	137,221	\$ 473,520	60,237	\$ 378,011
Fundamental Growth Fund Class R3				
Sold	204,225	\$ 737,635	138,133	\$ 805,381
Issued as reinvestment of dividends	530,015	1,759,650	97,413	552,331
Redeemed	(746,314)	(2,772,047)	(230,213)	(1,367,207)
Net increase (decrease)	(12,074)	\$ (274,762)	5,333	\$ (9,495)
Blue Chip Growth Fund Class I				
Sold	9,208,665	\$ 288,635,407	24,419,832	\$ 600,677,402
Issued as reinvestment of dividends	4,344,635	127,384,702	5,007,432	116,222,496
Redeemed	(24,822,276)	(790,026,118)	(20,957,706)	(505,889,485)
Net increase (decrease)	(11,268,976)	\$ (374,006,009)	8,469,558	\$ 211,010,413
Blue Chip Growth Fund Class R5				
Sold	2,679,809	\$ 82,658,186	7,001,349	\$ 183,239,368
Issued as reinvestment of dividends	983,773	28,785,200	1,141,637	26,463,154
Redeemed	(6,199,890)	(196,931,948)	(7,351,889)	(179,209,630)
Net increase (decrease)	(2,536,308)	\$ (85,488,562)	791,097	\$ 30,492,892
Blue Chip Growth Fund Service Class				
Sold	1,223,525	\$ 37,332,066	3,083,183	\$ 75,676,788
Issued as reinvestment of dividends	320,599	9,281,346	248,267	5,702,690
Redeemed	(1,731,897)	(53,422,350)	(1,960,951)	(46,536,671)
Net increase (decrease)	(187,773)	\$ (6,808,938)	1,370,499	\$ 34,842,807
Blue Chip Growth Fund Administrative Class				
Sold	1,382,931	\$ 43,389,745	2,440,560	\$ 59,514,382
Issued as reinvestment of dividends	634,937	18,063,967	791,377	17,893,032
Redeemed	(5,159,799)	(157,988,590)	(3,566,157)	(83,416,126)
Net increase (decrease)	(3,141,931)	\$ (96,534,878)	(334,220)	\$ (6,008,712)
Blue Chip Growth Fund Class A				
Sold	1,018,552	\$ 28,655,216	2,243,301	\$ 52,653,546
Issued as reinvestment of dividends	387,337	10,446,481	497,800	10,722,606
Redeemed	(4,359,478)	(129,512,098)	(3,760,228)	(86,943,259)
Net increase (decrease)	(2,953,589)	\$ (90,410,401)	(1,019,127)	\$ (23,567,107)

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Blue Chip Growth Fund Class R4				
Sold	1,076,100	\$ 30,583,742	1,213,245	\$ 27,972,007
Issued as reinvestment of dividends	240,790	6,486,894	281,633	6,055,123
Redeemed	(1,692,637)	(48,631,847)	(1,990,207)	(44,370,734)
Net increase (decrease)	(375,747)	\$ (11,561,211)	(495,329)	\$ (10,343,604)
Blue Chip Growth Fund Class R3				
Sold	357,619	\$ 9,388,348	523,850	\$ 10,911,043
Issued as reinvestment of dividends	124,694	3,093,658	184,219	3,671,493
Redeemed	(961,576)	(25,525,284)	(1,375,384)	(28,412,564)
Net increase (decrease)	(479,263)	\$ (13,043,278)	(667,315)	\$ (13,830,028)
Growth Opportunities Fund Class I				
Sold	5,964,565	\$ 64,460,451	7,663,376	\$ 69,462,161
Issued as reinvestment of dividends	4,781,993	47,724,289	6,611,545	50,975,012
Redeemed	(7,289,756)	(78,254,732)	(7,264,392)	(62,333,519)
Net increase (decrease)	3,456,802	\$ 33,930,008	7,010,529	\$ 58,103,654
Growth Opportunities Fund Class R5				
Sold	1,827,378	\$ 19,490,118	3,711,539	\$ 31,104,596
Issued as reinvestment of dividends	2,200,770	21,391,483	5,166,905	39,010,130
Redeemed	(7,435,247)	(75,529,949)	(10,649,912)	(92,141,525)
Net increase (decrease)	(3,407,099)	\$ (34,648,348)	(1,771,468)	\$ (22,026,799)
Growth Opportunities Fund Service Class				
Sold	347,551	\$ 3,384,510	743,737	\$ 6,082,594
Issued as reinvestment of dividends	709,183	6,439,381	3,246,545	23,180,329
Redeemed	(1,325,612)	(13,102,377)	(8,288,552)	(66,684,248)
Net increase (decrease)	(268,878)	\$ (3,278,486)	(4,298,270)	\$ (37,421,325)
Growth Opportunities Fund Administrative Class				
Sold	539,808	\$ 4,962,892	993,283	\$ 7,602,818
Issued as reinvestment of dividends	1,331,937	11,015,116	2,305,355	15,284,502
Redeemed	(2,609,272)	(24,065,097)	(2,306,044)	(17,824,564)
Net increase (decrease)	(737,527)	\$ (8,087,089)	992,594	\$ 5,062,756
Growth Opportunities Fund Class A				
Sold	683,345	\$ 4,932,367	861,868	\$ 5,599,220
Issued as reinvestment of dividends	1,444,315	9,734,684	2,264,835	12,818,964
Redeemed	(2,427,204)	(18,045,044)	(2,155,853)	(13,962,433)
Net increase (decrease)	(299,544)	\$ (3,377,993)	970,850	\$ 4,455,751
Growth Opportunities Fund Class R4				
Sold	34,506	\$ 256,709	248,215	\$ 1,643,971
Issued as reinvestment of dividends	100,504	691,469	630,953	3,621,672
Redeemed	(138,783)	(1,067,446)	(1,699,777)	(10,287,051)
Net increase (decrease)	(3,773)	\$ (119,268)	(820,609)	\$ (5,021,408)
Growth Opportunities Fund Class R3				
Sold	402,025	\$ 2,286,504	33,097	\$ 171,178
Issued as reinvestment of dividends	91,599	479,063	84,467	396,148
Redeemed	(190,176)	(1,105,742)	(89,953)	(462,736)
Net increase (decrease)	303,448	\$ 1,659,825	27,611	\$ 104,590

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Mid Cap Value Fund Class I				
Sold	1,378,441	\$ 19,471,679	3,729,787	\$ 40,718,223
Issued as reinvestment of dividends	120,645	1,535,817	133,346	1,720,169
Redeemed	(2,569,512)	(36,125,882)	(2,715,837)	(31,467,762)
Net increase (decrease)	<u>(1,070,426)</u>	<u>\$ (15,118,386)</u>	<u>1,147,296</u>	<u>\$ 10,970,630</u>
Mid Cap Value Fund Class R5				
Sold	26,384	\$ 378,441	49,016	\$ 581,867
Issued as reinvestment of dividends	713	9,182	1,837	23,976
Redeemed	(35,750)	(465,832)	(82,766)	(838,987)
Net increase (decrease)	<u>(8,653)</u>	<u>\$ (78,209)</u>	<u>(31,913)</u>	<u>\$ (233,144)</u>
Mid Cap Value Fund Service Class				
Sold	21,295	\$ 311,554	621	\$ 7,141
Issued as reinvestment of dividends	125	1,602	146	1,889
Redeemed	(1,891)	(29,106)	(66)	(700)
Net increase (decrease)	<u>19,529</u>	<u>\$ 284,050</u>	<u>701</u>	<u>\$ 8,330</u>
Mid Cap Value Fund Administrative Class				
Sold	12,029	\$ 184,500	17,103	\$ 208,245
Issued as reinvestment of dividends	723	9,443	914	12,087
Redeemed	(15,951)	(231,037)	(12,127)	(134,157)
Net increase (decrease)	<u>(3,199)</u>	<u>\$ (37,094)</u>	<u>5,890</u>	<u>\$ 86,175</u>
Mid Cap Value Fund Class A				
Sold	142,864	\$ 1,953,163	179,196	\$ 2,100,583
Issued as reinvestment of dividends	2,584	33,097	3,227	41,913
Redeemed	(315,794)	(4,611,163)	(133,660)	(1,468,907)
Net increase (decrease)	<u>(170,346)</u>	<u>\$ (2,624,903)</u>	<u>48,763</u>	<u>\$ 673,589</u>
Mid Cap Value Fund Class R4				
Sold	7,013	\$ 97,079	11,801	\$ 128,182
Issued as reinvestment of dividends	622	7,872	909	11,666
Redeemed	(72,997)	(1,056,116)	(14,163)	(163,651)
Net increase (decrease)	<u>(65,362)</u>	<u>\$ (951,165)</u>	<u>(1,453)</u>	<u>\$ (23,803)</u>
Mid Cap Value Fund Class R3				
Sold	5,118	\$ 70,621	11,345	\$ 122,111
Issued as reinvestment of dividends	246	3,107	502	6,426
Redeemed	(30,021)	(430,029)	(18,526)	(193,355)
Net increase (decrease)	<u>(24,657)</u>	<u>\$ (356,301)</u>	<u>(6,679)</u>	<u>\$ (64,818)</u>
Small Cap Value Equity Fund Class I				
Sold	907,032	\$ 11,357,203	6,100,337	\$ 58,694,533
Issued as reinvestment of dividends	152,789	1,714,290	472,443	5,187,429
Redeemed	(4,127,369)	(51,698,733)	(4,955,518)	(44,930,468)
Net increase (decrease)	<u>(3,067,548)</u>	<u>\$ (38,627,240)</u>	<u>1,617,262</u>	<u>\$ 18,951,494</u>
Small Cap Value Equity Fund Class R5				
Sold	809,584	\$ 10,404,197	522,939	\$ 4,348,445
Issued as reinvestment of dividends	34,845	392,010	141,385	1,558,062
Redeemed	(1,166,710)	(15,301,343)	(989,032)	(9,578,383)
Net increase (decrease)	<u>(322,281)</u>	<u>\$ (4,505,136)</u>	<u>(324,708)</u>	<u>\$ (3,671,876)</u>

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Small Cap Value Equity Fund Service Class				
Sold	29,025	\$ 363,192	65,149	\$ 604,616
Issued as reinvestment of dividends	9,089	102,703	33,271	368,640
Redeemed	(91,348)	(1,186,214)	(226,453)	(2,133,826)
Net increase (decrease)	(53,234)	\$ (720,319)	(128,033)	\$ (1,160,570)
Small Cap Value Equity Fund Administrative Class				
Sold	40,323	\$ 521,611	82,457	\$ 639,173
Issued as reinvestment of dividends	10,705	119,788	27,711	304,272
Redeemed	(213,856)	(2,687,794)	(41,458)	(394,338)
Net increase (decrease)	(162,828)	\$ (2,046,395)	68,710	\$ 549,107
Small Cap Value Equity Fund Class A				
Sold	152,503	\$ 1,865,323	64,916	\$ 553,978
Issued as reinvestment of dividends	17,347	190,647	55,772	603,450
Redeemed	(219,908)	(2,721,035)	(295,422)	(3,025,340)
Net increase (decrease)	(50,058)	\$ (665,065)	(174,734)	\$ (1,867,912)
Small Cap Value Equity Fund Class R4				
Sold	36,336	\$ 451,536	87,810	\$ 768,637
Issued as reinvestment of dividends	7,995	87,302	38,696	415,594
Redeemed	(200,794)	(2,399,956)	(245,637)	(2,122,364)
Net increase (decrease)	(156,463)	\$ (1,861,118)	(119,131)	\$ (938,133)
Small Cap Value Equity Fund Class R3				
Sold	21,846	\$ 274,446	19,140	\$ 160,962
Issued as reinvestment of dividends	2,414	26,075	7,660	81,577
Redeemed	(57,525)	(679,901)	(16,749)	(154,103)
Net increase (decrease)	(33,265)	\$ (379,380)	10,051	\$ 88,436
Small Company Value Fund Class I				
Sold	4,737,139	\$ 55,347,151	2,963,245	\$ 22,052,782
Issued as reinvestment of dividends	85,053	812,256	534,168	4,994,472
Redeemed	(2,348,073)	(26,270,613)	(2,146,728)	(16,745,237)
Net increase (decrease)	2,474,119	\$ 29,888,794	1,350,685	\$ 10,302,017
Small Company Value Fund Class R5				
Sold	2,238,221	\$ 24,968,017	1,429,633	\$ 9,999,491
Issued as reinvestment of dividends	39,529	380,666	363,511	3,427,906
Redeemed	(3,598,862)	(37,381,946)	(3,737,145)	(30,871,036)
Net increase (decrease)	(1,321,112)	\$ (12,033,263)	(1,944,001)	\$ (17,443,639)
Small Company Value Fund Service Class				
Sold	317,513	\$ 3,700,087	160,829	\$ 1,294,652
Issued as reinvestment of dividends	3,323	31,805	36,710	343,971
Redeemed	(213,621)	(2,435,431)	(358,367)	(3,098,015)
Net increase (decrease)	107,215	\$ 1,296,461	(160,828)	\$ (1,459,392)
Small Company Value Fund Administrative Class				
Sold	319,890	\$ 3,595,272	802,999	\$ 5,171,896
Issued as reinvestment of dividends	9,514	88,859	63,414	580,242
Redeemed	(933,127)	(10,609,361)	(322,795)	(2,591,497)
Net increase (decrease)	(603,723)	\$ (6,925,230)	543,618	\$ 3,160,641

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Small Company Value Fund Class A				
Sold	299,765	\$ 3,244,014	507,837	\$ 3,448,739
Issued as reinvestment of dividends	3,577	31,978	100,963	884,436
Redeemed	(691,731)	(7,464,426)	(988,003)	(6,687,000)
Net increase (decrease)	<u>(388,389)</u>	<u>\$ (4,188,434)</u>	<u>(379,203)</u>	<u>\$ (2,353,825)</u>
Small Company Value Fund Class R4				
Sold	73,265	\$ 751,995	85,162	\$ 594,070
Issued as reinvestment of dividends	673	5,920	2,960	25,544
Redeemed	(137,064)	(1,569,338)	(21,474)	(138,709)
Net increase (decrease)	<u>(63,126)</u>	<u>\$ (811,423)</u>	<u>66,648</u>	<u>\$ 480,905</u>
Small Company Value Fund Class R3				
Sold	16,202	\$ 161,460	5,796	\$ 35,382
Issued as reinvestment of dividends	—	—	2,223	17,675
Redeemed	(7,013)	(70,513)	(37,484)	(269,956)
Net increase (decrease)	<u>9,189</u>	<u>\$ 90,947</u>	<u>(29,465)</u>	<u>\$ (216,899)</u>
S&P Mid Cap Index Fund Class I				
Sold	2,126,843	\$ 35,570,161	2,665,722	\$ 33,865,976
Issued as reinvestment of dividends	461,829	6,691,909	247,478	3,459,749
Redeemed	(1,795,719)	(29,456,348)	(2,355,283)	(28,850,404)
Net increase (decrease)	<u>792,953</u>	<u>\$ 12,805,722</u>	<u>557,917</u>	<u>\$ 8,475,321</u>
S&P Mid Cap Index Fund Class R5				
Sold	839,995	\$ 14,215,521	674,660	\$ 8,099,876
Issued as reinvestment of dividends	125,735	1,816,870	94,075	1,311,412
Redeemed	(760,997)	(12,370,073)	(1,344,225)	(17,041,206)
Net increase (decrease)	<u>204,733</u>	<u>\$ 3,662,318</u>	<u>(575,490)</u>	<u>\$ (7,629,918)</u>
S&P Mid Cap Index Fund Service Class				
Sold	367,250	\$ 5,990,700	311,713	\$ 3,815,970
Issued as reinvestment of dividends	109,906	1,580,444	58,293	809,111
Redeemed	(742,178)	(12,328,467)	(405,314)	(5,175,952)
Net increase (decrease)	<u>(265,022)</u>	<u>\$ (4,757,323)</u>	<u>(35,308)</u>	<u>\$ (550,871)</u>
S&P Mid Cap Index Fund Administrative Class				
Sold	685,066	\$ 11,160,805	637,480	\$ 7,678,855
Issued as reinvestment of dividends	227,738	3,274,879	146,126	2,028,235
Redeemed	(1,257,406)	(20,501,726)	(1,459,621)	(18,176,333)
Net increase (decrease)	<u>(344,602)</u>	<u>\$ (6,066,042)</u>	<u>(676,015)</u>	<u>\$ (8,469,243)</u>
S&P Mid Cap Index Fund Class A				
Sold	554,824	\$ 9,039,654	662,924	\$ 8,185,717
Issued as reinvestment of dividends	130,567	1,877,552	85,646	1,187,910
Redeemed	(1,287,755)	(20,039,954)	(1,042,536)	(13,281,747)
Net increase (decrease)	<u>(602,364)</u>	<u>\$ (9,122,748)</u>	<u>(293,966)</u>	<u>\$ (3,908,120)</u>
S&P Mid Cap Index Fund Class R4				
Sold	863,466	\$ 14,261,029	1,491,172	\$ 17,581,946
Issued as reinvestment of dividends	401,412	5,732,162	261,265	3,602,840
Redeemed	(2,727,287)	(43,586,429)	(3,771,508)	(48,294,536)
Net increase (decrease)	<u>(1,462,409)</u>	<u>\$ (23,593,238)</u>	<u>(2,019,071)</u>	<u>\$ (27,109,750)</u>

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
S&P Mid Cap Index Fund Class R3				
Sold	1,180,316	\$ 19,237,954	1,303,189	\$ 14,656,532
Issued as reinvestment of dividends	492,533	7,008,746	300,992	4,138,636
Redeemed	(2,545,333)	(40,108,951)	(3,356,801)	(42,544,400)
Net increase (decrease)	(872,484)	\$ (13,862,251)	(1,752,620)	\$ (23,749,232)
Russell 2000 Small Cap Index Fund Class I				
Sold	1,573,646	\$ 24,868,488	2,311,259	\$ 25,844,570
Issued as reinvestment of dividends	299,104	4,196,431	399,529	5,018,091
Redeemed	(2,343,175)	(35,735,336)	(2,212,222)	(24,428,978)
Net increase (decrease)	(470,425)	\$ (6,670,417)	498,566	\$ 6,433,683
Russell 2000 Small Cap Index Fund Class R5				
Sold	648,502	\$ 10,477,592	471,010	\$ 5,439,736
Issued as reinvestment of dividends	59,738	838,131	77,446	972,716
Redeemed	(734,583)	(11,677,636)	(601,900)	(6,880,319)
Net increase (decrease)	(26,343)	\$ (361,913)	(53,444)	\$ (467,867)
Russell 2000 Small Cap Index Fund Service Class				
Sold	341,215	\$ 5,283,515	296,348	\$ 3,352,630
Issued as reinvestment of dividends	39,388	547,886	50,097	624,710
Redeemed	(317,656)	(4,932,473)	(313,216)	(3,613,707)
Net increase (decrease)	62,947	\$ 898,928	33,229	\$ 363,633
Russell 2000 Small Cap Index Fund Administrative Class				
Sold	579,844	\$ 8,948,622	988,531	\$ 10,534,632
Issued as reinvestment of dividends	182,814	2,550,257	257,217	3,215,208
Redeemed	(1,752,876)	(27,282,679)	(1,506,216)	(16,617,282)
Net increase (decrease)	(990,218)	\$ (15,783,800)	(260,468)	\$ (2,867,442)
Russell 2000 Small Cap Index Fund Class A				
Sold	536,036	\$ 8,165,532	619,381	\$ 6,966,379
Issued as reinvestment of dividends	67,900	941,766	118,060	1,467,484
Redeemed	(1,093,086)	(16,025,834)	(941,792)	(10,419,501)
Net increase (decrease)	(489,150)	\$ (6,918,536)	(204,351)	\$ (1,985,638)
Russell 2000 Small Cap Index Fund Class R4				
Sold	1,068,047	\$ 16,948,543	1,135,599	\$ 11,901,409
Issued as reinvestment of dividends	197,856	2,730,417	289,492	3,581,019
Redeemed	(2,298,236)	(34,798,727)	(2,003,882)	(22,474,326)
Net increase (decrease)	(1,032,333)	\$ (15,119,767)	(578,791)	\$ (6,991,898)
Russell 2000 Small Cap Index Fund Class R3				
Sold	703,629	\$ 10,872,549	788,203	\$ 7,900,655
Issued as reinvestment of dividends	180,259	2,474,950	260,598	3,210,572
Redeemed	(1,439,744)	(21,728,553)	(1,582,707)	(18,083,791)
Net increase (decrease)	(555,856)	\$ (8,381,054)	(533,906)	\$ (6,972,564)
Mid Cap Growth Fund Class I				
Sold	21,183,859	\$ 619,721,055	34,540,216	\$ 783,148,497
Issued as reinvestment of dividends	13,500,310	369,233,487	13,522,755	316,432,464
Redeemed	(68,670,135)	(2,039,813,584)	(59,395,439)	(1,344,658,137)
Net increase (decrease)	(33,985,966)	\$ (1,050,859,042)	(11,332,468)	\$ (245,077,176)

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Mid Cap Growth Fund Class R5				
Sold	8,395,381	\$ 240,160,574	8,605,542	\$ 193,613,482
Issued as reinvestment of dividends	3,401,006	91,793,143	3,539,260	81,863,075
Redeemed	(16,010,155)	(465,598,430)	(20,191,300)	(455,968,937)
Net increase (decrease)	(4,213,768)	\$ (133,644,713)	(8,046,498)	\$ (180,492,380)
Mid Cap Growth Fund Service Class				
Sold	1,066,469	\$ 29,688,014	2,176,739	\$ 46,753,495
Issued as reinvestment of dividends	803,095	21,000,941	889,733	20,001,203
Redeemed	(4,669,869)	(130,586,243)	(5,968,123)	(131,535,127)
Net increase (decrease)	(2,800,305)	\$ (79,897,288)	(2,901,651)	\$ (64,780,429)
Mid Cap Growth Fund Administrative Class				
Sold	869,031	\$ 23,069,316	846,728	\$ 17,188,547
Issued as reinvestment of dividends	677,781	16,747,973	779,260	16,621,612
Redeemed	(4,042,762)	(107,237,852)	(3,931,168)	(82,229,772)
Net increase (decrease)	(2,495,950)	\$ (67,420,563)	(2,305,180)	\$ (48,419,613)
Mid Cap Growth Fund Class A				
Sold	588,035	\$ 13,908,258	1,463,243	\$ 27,546,264
Issued as reinvestment of dividends	630,794	14,060,392	719,593	13,974,495
Redeemed	(3,959,939)	(95,492,021)	(4,426,059)	(83,799,975)
Net increase (decrease)	(2,741,110)	\$ (67,523,371)	(2,243,223)	\$ (42,279,216)
Mid Cap Growth Fund Class R4				
Sold	1,821,605	\$ 43,245,580	1,506,667	\$ 28,364,925
Issued as reinvestment of dividends	557,533	12,555,638	682,445	13,362,278
Redeemed	(4,612,065)	(112,673,861)	(5,153,659)	(98,729,578)
Net increase (decrease)	(2,232,927)	\$ (56,872,643)	(2,964,547)	\$ (57,002,375)
Mid Cap Growth Fund Class R3				
Sold	393,431	\$ 8,615,707	321,265	\$ 5,403,623
Issued as reinvestment of dividends	120,591	2,425,094	123,807	2,187,663
Redeemed	(746,836)	(16,376,977)	(650,993)	(11,252,276)
Net increase (decrease)	(232,814)	\$ (5,336,176)	(205,921)	\$ (3,660,990)
Small Cap Growth Equity Fund Class I				
Sold	7,016,670	\$ 144,369,320	6,872,775	\$ 98,397,814
Issued as reinvestment of dividends	1,541,584	29,012,613	2,199,888	32,558,345
Redeemed	(6,121,222)	(124,881,393)	(5,793,620)	(82,117,353)
Net increase (decrease)	2,437,032	\$ 48,500,540	3,279,043	\$ 48,838,806
Small Cap Growth Equity Fund Class R5				
Sold	1,671,272	\$ 32,751,480	1,038,242	\$ 14,834,041
Issued as reinvestment of dividends	629,588	11,622,191	1,050,157	15,279,790
Redeemed	(2,999,349)	(58,807,712)	(2,290,152)	(32,313,542)
Net increase (decrease)	(698,489)	\$ (14,434,041)	(201,753)	\$ (2,199,711)
Small Cap Growth Equity Fund Service Class				
Sold	293,630	\$ 5,450,566	272,369	\$ 3,712,366
Issued as reinvestment of dividends	169,568	2,891,135	320,655	4,338,467
Redeemed	(677,279)	(12,484,416)	(896,739)	(11,683,675)
Net increase (decrease)	(214,081)	\$ (4,142,715)	(303,715)	\$ (3,632,842)

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
Small Cap Growth Equity Fund Administrative Class				
Sold	203,401	\$ 3,468,903	439,059	\$ 5,175,707
Issued as reinvestment of dividends	175,761	2,733,082	297,920	3,706,126
Redeemed	(763,539)	(12,729,401)	(791,903)	(9,846,781)
Net increase (decrease)	(384,377)	\$ (6,527,416)	(54,924)	\$ (964,948)
Small Cap Growth Equity Fund Class A				
Sold	504,453	\$ 6,982,978	882,445	\$ 9,151,636
Issued as reinvestment of dividends	322,918	4,197,930	492,000	5,215,203
Redeemed	(1,587,189)	(22,495,130)	(1,396,998)	(14,154,454)
Net increase (decrease)	(759,818)	\$ (11,314,222)	(22,553)	\$ 212,385
Small Cap Growth Equity Fund Class R4				
Sold	241,546	\$ 3,516,902	587,299	\$ 6,160,730
Issued as reinvestment of dividends	123,958	1,628,809	183,400	1,960,542
Redeemed	(499,572)	(6,898,395)	(576,403)	(6,027,491)
Net increase (decrease)	(134,068)	\$ (1,752,684)	194,296	\$ 2,093,781
Small Cap Growth Equity Fund Class R3				
Sold	134,796	\$ 1,555,386	237,932	\$ 2,024,807
Issued as reinvestment of dividends	54,866	582,672	54,222	480,410
Redeemed	(180,997)	(2,091,227)	(169,009)	(1,526,194)
Net increase (decrease)	8,665	\$ 46,831	123,145	\$ 979,023
MSCI EAFE International Index Fund Class I				
Sold	1,167,745	\$ 16,349,594	2,258,244	\$ 26,056,327
Issued as reinvestment of dividends	167,731	2,197,280	165,376	2,128,393
Redeemed	(1,468,932)	(20,304,806)	(1,709,286)	(19,680,451)
Net increase (decrease)	(133,456)	\$ (1,757,932)	714,334	\$ 8,504,269
MSCI EAFE International Index Fund Class R5				
Sold	357,285	\$ 5,015,925	762,542	\$ 8,732,562
Issued as reinvestment of dividends	40,890	535,653	63,202	812,776
Redeemed	(532,440)	(7,244,343)	(1,368,557)	(16,323,781)
Net increase (decrease)	(134,265)	\$ (1,692,765)	(542,813)	\$ (6,778,443)
MSCI EAFE International Index Fund Service Class				
Sold	65,961	\$ 912,342	155,010	\$ 1,865,866
Issued as reinvestment of dividends	8,342	109,695	7,418	95,838
Redeemed	(91,634)	(1,225,274)	(128,119)	(1,483,609)
Net increase (decrease)	(17,331)	\$ (203,237)	34,309	\$ 478,095
MSCI EAFE International Index Fund Administrative Class				
Sold	336,591	\$ 4,688,150	498,299	\$ 5,624,966
Issued as reinvestment of dividends	80,157	1,045,250	106,075	1,358,826
Redeemed	(1,425,597)	(20,104,418)	(1,172,306)	(13,802,028)
Net increase (decrease)	(1,008,849)	\$ (14,371,018)	(567,932)	\$ (6,818,236)
MSCI EAFE International Index Fund Class A				
Sold	236,577	\$ 3,266,105	424,152	\$ 4,977,939
Issued as reinvestment of dividends	33,308	434,004	56,235	719,248
Redeemed	(761,697)	(10,075,912)	(821,055)	(9,769,038)
Net increase (decrease)	(491,812)	\$ (6,375,803)	(340,668)	\$ (4,071,851)

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
MSCI EAFE International Index Fund Class R4				
Sold	754,994	\$ 10,460,788	719,665	\$ 8,177,543
Issued as reinvestment of dividends	76,285	987,127	97,405	1,238,985
Redeemed	(1,641,065)	(22,681,289)	(1,340,057)	(15,763,261)
Net increase (decrease)	(809,786)	\$ (11,233,374)	(522,987)	\$ (6,346,733)
MSCI EAFE International Index Fund Class R3				
Sold	327,480	\$ 4,532,208	545,939	\$ 5,840,980
Issued as reinvestment of dividends	68,674	886,577	89,849	1,140,187
Redeemed	(817,256)	(11,078,746)	(1,259,855)	(14,972,463)
Net increase (decrease)	(421,102)	\$ (5,659,961)	(624,067)	\$ (7,991,296)
Overseas Fund Class I				
Sold	9,326,183	\$ 89,997,203	27,008,575	\$ 210,743,283
Issued as reinvestment of dividends	1,033,783	9,459,111	1,669,715	14,676,789
Redeemed	(19,054,553)	(189,333,308)	(24,059,555)	(190,739,606)
Net increase (decrease)	(8,694,587)	\$ (89,876,994)	4,618,735	\$ 34,680,466
Overseas Fund Class R5				
Sold	2,048,201	\$ 19,758,875	6,459,621	\$ 53,061,465
Issued as reinvestment of dividends	353,544	3,249,074	656,010	5,799,133
Redeemed	(3,483,345)	(34,118,149)	(5,135,391)	(41,247,357)
Net increase (decrease)	(1,081,600)	\$ (11,110,200)	1,980,240	\$ 17,613,241
Overseas Fund Service Class				
Sold	412,087	\$ 3,976,372	920,427	\$ 7,317,041
Issued as reinvestment of dividends	101,106	923,098	163,231	1,434,801
Redeemed	(798,474)	(7,827,090)	(698,674)	(5,440,313)
Net increase (decrease)	(285,281)	\$ (2,927,620)	384,984	\$ 3,311,529
Overseas Fund Administrative Class				
Sold	382,828	\$ 3,680,866	359,566	\$ 2,617,115
Issued as reinvestment of dividends	45,617	421,047	90,273	801,623
Redeemed	(866,637)	(8,320,923)	(650,714)	(5,362,476)
Net increase (decrease)	(438,192)	\$ (4,219,010)	(200,875)	\$ (1,943,738)
Overseas Fund Class A				
Sold	264,898	\$ 2,542,503	1,038,714	\$ 8,080,953
Issued as reinvestment of dividends	70,638	637,155	116,606	1,012,143
Redeemed	(1,819,906)	(17,789,568)	(843,012)	(6,508,670)
Net increase (decrease)	(1,484,370)	\$ (14,609,910)	312,308	\$ 2,584,426
Overseas Fund Class R4				
Sold	721,382	\$ 6,841,308	794,469	\$ 5,910,224
Issued as reinvestment of dividends	44,888	395,010	68,356	579,655
Redeemed	(973,710)	(9,110,679)	(367,130)	(2,834,172)
Net increase (decrease)	(207,440)	\$ (1,874,361)	495,695	\$ 3,655,707
Overseas Fund Class R3				
Sold	205,906	\$ 2,014,268	486,025	\$ 3,763,094
Issued as reinvestment of dividends	14,811	131,963	14,385	123,568
Redeemed	(297,944)	(2,881,102)	(132,373)	(991,231)
Net increase (decrease)	(77,227)	\$ (734,871)	368,037	\$ 2,895,431

Notes to Financial Statements (Continued)

	Year Ended September 30, 2021		Year Ended September 30, 2020	
	Shares	Amount	Shares	Amount
MM Select T. Rowe Price International Equity Fund Class I				
Sold	26,565,354	\$ 299,651,877	35,195,102	\$ 323,703,207
Issued as reinvestment of dividends	2,226,021	23,974,243	2,784,253	28,120,959
Redeemed	(21,745,375)	(246,370,514)	(20,190,886)	(185,289,354)
Net increase (decrease)	<u>7,046,000</u>	<u>\$ 77,255,606</u>	<u>17,788,469</u>	<u>\$ 166,534,812</u>

Purchases of Class A shares are subject to a front-end sales charge of up to 5.50% of the amount purchased. A portion of the front-end sales charge may be retained by the Distributor. The Distributor retained the following amounts during the year ended September 30, 2021:

	Front-End Sales Charges Retained by Distributor
Diversified Value Fund	\$ 47
Equity Opportunities Fund	47
Blue Chip Growth Fund	3,131
Small Company Value Fund	9
Mid Cap Growth Fund	41
Small Cap Growth Equity Fund	1,225

Redemptions of Class A shares made within eighteen months of purchase from initial investments of \$1 million or more are subject to a contingent deferred sales charge of 1% of the amount redeemed. The Distributor receives all contingent deferred sales charges. Any contingent deferred sales charges imposed during the year ended September 30, 2021, were waived for any redemptions subject to such a charge.

6. Federal Income Tax Information

At September 30, 2021, the aggregate cost of investments and the unrealized appreciation (depreciation) in the value of all investments owned by the Fund(s), as computed on a federal income tax basis, were as follows:

	Federal Income Tax Cost	Tax Basis Unrealized Appreciation	Tax Basis Unrealized (Depreciation)	Net Unrealized Appreciation (Depreciation)
Total Return Bond Fund	\$ 1,098,364,249	\$ 17,169,252	\$ (8,185,593)	\$ 8,983,659
Strategic Bond Fund	632,617,021	18,628,302	(8,668,656)	9,959,646
Diversified Value Fund	308,570,026	75,476,181	(4,745,508)	70,730,673
Fundamental Value Fund	459,001,782	135,170,716	(6,483,043)	128,687,673
S&P 500 Index Fund	1,757,413,366	1,795,472,532	(49,885,528)	1,745,587,004
Equity Opportunities Fund	610,233,401	155,780,871	(3,139,934)	152,640,937
Fundamental Growth Fund	48,302,430	9,049,679	(1,624,243)	7,425,436
Blue Chip Growth Fund	2,307,005,566	1,996,060,177	(37,588,919)	1,958,471,258
Growth Opportunities Fund	303,589,508	214,385,623	(5,263,100)	209,122,523
Mid Cap Value Fund	112,796,362	7,879,440	(2,807,908)	5,071,532
Small Cap Value Equity Fund	48,908,199	14,507,433	(810,680)	13,696,753
Small Company Value Fund	239,181,512	54,126,216	(5,986,444)	48,139,772
S&P Mid Cap Index Fund	349,013,982	123,437,967	(14,221,519)	109,216,448

Notes to Financial Statements (Continued)

	Federal Income Tax Cost	Tax Basis Unrealized Appreciation	Tax Basis Unrealized (Depreciation)	Net Unrealized Appreciation (Depreciation)
Russell 2000 Small Cap Index Fund	\$ 259,064,487	\$ 82,402,786	\$ (26,525,737)	\$ 55,877,049
Mid Cap Growth Fund	6,309,503,570	3,096,026,746	(204,337,906)	2,891,688,840
Small Cap Growth Equity Fund	638,789,844	169,910,744	(27,925,211)	141,985,533
MSCI EAFE International Index Fund	169,264,232	43,944,912	(12,588,113)	31,356,799
Overseas Fund	573,770,798	121,707,283	(17,690,107)	104,017,176
MM Select T. Rowe Price International Equity Fund	1,495,297,189	284,687,230	(68,608,182)	216,079,048

Net capital loss carryforwards may be applied against any net realized taxable gains in succeeding years. On December 22, 2010, the Regulated Investment Company Modernization Act of 2010 (the "Modernization Act") was signed by the President. The Modernization Act changed the capital loss carryforward rules as they relate to regulated investment companies. Capital losses generated in tax years beginning after the date of enactment may now be carried forward indefinitely, and retain the character of the original loss.

At September 30, 2021, for federal income tax purposes, there were no unused capital losses.

Generally accepted accounting principles in the United States of America require that only distributions in excess of tax basis earnings and profits be reported in the financial statements as a return of capital.

The tax character of distributions (including capital gain dividends, if any, designated pursuant to Section 852 of the Code) paid during the year ended September 30, 2021, was as follows:

	Ordinary Income	Long Term Capital Gain
Total Return Bond Fund	\$ 51,593,361	\$ —
Strategic Bond Fund	21,393,604	18,264,739
Diversified Value Fund	7,632,765	—
Fundamental Value Fund	9,207,746	—
S&P 500 Index Fund	59,183,283	419,938,253
Equity Opportunities Fund	13,151,452	38,674,722
Fundamental Growth Fund	14,953,658	17,591,165
Blue Chip Growth Fund	—	203,562,156
Growth Opportunities Fund	4,069,271	93,406,690
Mid Cap Value Fund	1,604,431	—
Small Cap Value Equity Fund	26,515	2,606,300
Small Company Value Fund	1,351,801	—
S&P Mid Cap Index Fund	6,422,505	21,560,057
Russell 2000 Small Cap Index Fund	4,007,936	10,271,901
Mid Cap Growth Fund	14,252,104	521,343,693
Small Cap Growth Equity Fund	6,970,464	45,698,594
MSCI EAFE International Index Fund	3,918,278	2,277,308
Overseas Fund	5,244,641	9,972,004
MM Select T. Rowe Price International Equity Fund	23,974,243	—

Notes to Financial Statements (Continued)

The tax character of distributions (including capital gain dividends, if any, designated pursuant to Section 852 of the Code) paid during the year ended September 30, 2020, was as follows:

	Ordinary Income	Long Term Capital Gain
Total Return Bond Fund	\$ 24,220,605	\$ —
Strategic Bond Fund	26,958,740	1,361,362
Diversified Value Fund	8,228,581	17,604,042
Fundamental Value Fund	18,074,839	124,127,420
S&P 500 Index Fund	64,623,731	151,348,610
Equity Opportunities Fund	9,963,794	46,335,368
Fundamental Growth Fund	1,340,480	22,836,309
Blue Chip Growth Fund	542,966	186,206,381
Growth Opportunities Fund	3,927,746	141,359,741
Mid-Cap Value Fund	1,823,872	—
Small Cap Value Equity Fund	220,339	8,298,685
Small Company Value Fund	1,037,198	9,240,362
S&P Mid Cap Index Fund	4,506,478	12,031,415
Russell 2000 Small Cap Index Fund	4,793,222	13,296,578
Mid Cap Growth Fund	2,976,557	468,882,630
Small Cap Growth Equity Fund	4,352,033	59,187,634
MSCI EAFE International Index Fund	6,435,642	1,058,611
Overseas Fund	14,570,121	9,857,624
MM Select T. Rowe Price International Equity Fund	28,120,959	—

The following Fund(s) have elected to pass through the foreign tax credit for the year ended September 30, 2021:

	Amount
MSCI EAFE International Index Fund	\$ 398,397
Overseas Fund	1,724,212
MM Select T. Rowe Price International Equity Fund	3,703,979

Capital accounts within the financial statements are periodically adjusted for permanent differences between book and tax accounting. These adjustments have no impact on net assets or the results of operations. Temporary book and tax accounting differences will reverse in subsequent periods. At September 30, 2021, temporary book and tax accounting differences were primarily attributable to the deferral of wash sale losses, deferred Trustee compensation, and other temporary basis adjustments.

Notes to Financial Statements (Continued)

At September 30, 2021, the components of distributable earnings on a tax basis were as follows:

	Undistributed Ordinary Income	Undistributed Long Term Capital Gain (Capital Loss Carryover)	Other Temporary Differences	Unrealized Appreciation (Depreciation)	Total
Total Return Bond Fund	\$ 13,970,001	\$ —	\$ (143,314)	\$ 8,980,978	\$ 22,807,665
Strategic Bond Fund	16,980,860	9,902,514	—	9,894,021	36,777,395
Diversified Value Fund	16,945,476	24,318,421	(131,313)	70,729,706	111,862,290
Fundamental Value Fund	8,293,957	53,907,569	(173,758)	128,687,743	190,715,511
S&P 500 Index Fund	29,793,935	373,719,405	(407,458)	1,745,587,004	2,148,692,886
Equity Opportunities Fund	11,064,961	69,126,262	(108,023)	152,636,493	232,719,693
Fundamental Growth Fund	9,172,286	6,498,040	(14,689)	7,425,436	23,081,073
Blue Chip Growth Fund	37,765,672	693,996,434	(212,773)	1,958,471,258	2,690,020,591
Growth Opportunities Fund	9,742,882	95,874,560	(93,442)	209,122,523	314,646,523
Mid Cap Value Fund	16,064,739	9,759,045	(18,231)	5,071,631	30,877,184
Small Cap Value Equity Fund	3,627,991	10,443,544	(19,283)	13,696,752	27,749,004
Small Company Value Fund	16,565,495	21,111,198	(61,608)	48,139,772	85,754,857
S&P Mid Cap Index Fund	10,681,991	33,550,046	(38,815)	109,216,448	153,409,670
Russell 2000 Small Cap Index Fund	6,570,972	43,144,475	(28,233)	55,877,050	105,564,264
Mid Cap Growth Fund	203,053,013	1,380,816,228	(437,857)	2,891,688,840	4,475,120,224
Small Cap Growth Equity Fund	39,573,638	122,594,480	(98,562)	141,985,533	304,055,089
MSCI EAFE International Index Fund	6,286,677	8,820,283	(32,249)	31,344,914	46,419,625
Overseas Fund	14,112,278	47,916,430	(96,344)	103,359,874	165,292,238
MM Select T. Rowe Price International Equity Fund	40,755,928	15,484,285	(28,128)	215,309,816	271,521,901

During the year ended September 30, 2021, the following amounts were reclassified due to permanent differences between book and tax accounting:

	Paid-in Capital	Accumulated Net Realized Gain (Loss) on Investments	Undistributed Net Investment Income (Loss)
Total Return Bond Fund	\$ 3,649	\$ (2,602,491)	\$ 2,598,842
Strategic Bond Fund	1,117	(6,708,008)	6,706,891
Diversified Value Fund	3,371	47,395	(50,766)
Fundamental Value Fund	4,456	199,546	(204,002)
S&P 500 Index Fund	10,332	996,959	(1,007,291)
Equity Opportunities Fund	2,746	9,814	(12,560)
Fundamental Growth Fund	376	(567,387)	567,011
Blue Chip Growth Fund	5,232	(13,042,231)	13,036,999
Growth Opportunities Fund	2,383	(3,483,652)	3,481,269
Mid Cap Value Fund	464	300,853	(301,317)
Small Cap Value Equity Fund	492	(50,947)	50,455
Small Company Value Fund	1,558	266,120	(267,678)
S&P Mid Cap Index Fund	818	1,075,442	(1,076,260)
Russell 2000 Small Cap Index Fund	594	(286,948)	286,354
Mid Cap Growth Fund	10,753	(36,454,508)	36,443,755
Small Cap Growth Equity Fund	2,505	(4,263,400)	4,260,895
MSCI EAFE International Index Fund	686	(791,603)	790,917

Notes to Financial Statements (Continued)

	Paid-in Capital	Accumulated Net Realized Gain (Loss) on Investments	Undistributed Net Investment Income (Loss)
Overseas Fund	\$ 2,449	\$ (1,060,131)	\$ 1,057,682
MM Select T. Rowe Price International Equity Fund	639	(479,615)	478,976

The Funds did not have any unrecognized tax benefits at September 30, 2021, nor were there any increases or decreases in unrecognized tax benefits for the year then ended. The Funds recognize interest and penalties, if any, related to unrecognized tax benefits as an income tax expense in the Statements of Operations. During the year ended September 30, 2021, the Funds did not incur any such interest or penalties. The Funds are subject to examination by U.S. federal and state tax authorities for returns filed for the prior three fiscal years. Foreign taxes are provided for based on the Funds' understanding of the tax rules and rates that exist in the foreign markets in which they invest.

7. Indemnifications

Under the Funds' organizational documents, current and former Trustees and Officers are provided with specified rights to indemnification against liabilities arising in connection with the performance of their duties to the Funds, and shareholders are indemnified against personal liability for obligations of the Funds. In the normal course of business, the Funds may also enter into contracts that provide general indemnifications. The Funds' maximum exposure under these arrangements is unknown as this would be dependent on future claims that may be made against the Funds. The risk of material loss from such claims is considered remote.

8. New Accounting Pronouncements

In October 2020, Accounting Standards Update 2017-08, Receivables — Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities ("ASU 2017-08") was amended by Accounting Standards Update 2020-08, Codification Improvements to Subtopic 310-20, Receivables — Nonrefundable Fees and Other Costs ("ASU 2020-08"). ASU 2020-08 requires entities to reevaluate whether callable debt securities fall within the scope of ASU 2017-08 at each reporting period. ASU 2020-08 also amends the relevant guidance to require premiums to be amortized to the "next call date" rather than the "earliest call date," and further clarifies the definition of "next call date." ASU 2020-08 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. As of September 30, 2021, Management has fully implemented the new rule and there was no material impact.

In January 2021, FASB issued Accounting Standards Update 2021-01 — Reference Rate Reform (Topic 848) — Scope ("ASU 2021-01") as an update to Accounting Standards Update 2020-04 — Reference Rate Reform (Topic 848) — Facilitation of the Effects of Reference Rate Reform on Financial Reporting ("ASU 2020-04") in order to make certain clarifications. ASU 2020-04 and ASU 2021-01 provide optional temporary financial reporting relief from the effect of certain types of contract modifications due to the planned discontinuation of the London Interbank Offered Rate ("LIBOR") and other interbank-offered based reference rates. The temporary relief provided by ASU 2020-04 and ASU 2021-01 is effective for certain reference rate-related contract modifications that occur during the period March 12, 2020 through December 31, 2022. Management does not believe the impact of adopting ASU 2020-04 and ASU 2021-01 will have a material impact on the financial statements.

9. Legal Proceedings

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

Notes to Financial Statements (Continued)

New York for consolidated pretrial proceedings. The action is now being prosecuted by the litigation trustee (“Trustee”) for the Tribune Litigation Trust. This case has been dismissed by the district court and dismissal was affirmed by the Second Circuit Court of Appeals. The Trustee recently filed with the Second Circuit a petition for rehearing *en banc*.

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, these actions were transferred to the Southern District of New York for consolidated pretrial proceedings. This case also has been dismissed. The district court’s dismissal of the case was affirmed by the Second Circuit Court of Appeals, and the Plaintiffs’ petition for certiorari was denied by the United States Supreme Court.

The Funds cannot predict the outcome of these proceedings. Accordingly, the Funds have not accrued any amounts related to 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’ net asset values depending on the net assets of each applicable Fund at the time of such judgment or settlement.

10. Coronavirus (COVID-19) Pandemic

The global pandemic outbreak of the novel coronavirus known as COVID-19 and efforts to contain its spread have produced, and will likely continue to produce, substantial market volatility, severe market dislocations and liquidity constraints in many markets, exchange trading suspensions and closures, higher default rates, and global business disruption, and they may result in future significant adverse effects, such as declines in global financial markets 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.

11. Subsequent Events

In preparation of these financial statements, management has evaluated the events and transactions subsequent to September 30, 2021, through the date when the financial statements were issued, and determined that there are no subsequent events or transactions that would require adjustments to or disclosures in the Funds’ financial statements other than those disclosed below.

The Board of Trustees of the MassMutual Select Funds has approved a Plan of Liquidation and Termination for each of the S&P Mid Cap Index Fund, Russell 2000 Small Cap Index Fund, and MSCI EAFE International Index Fund (each, a “Fund”) pursuant to which it is expected that each Fund will be dissolved. Effective on or about June 24, 2022 (the “Termination Date”), shareholders of the various classes of shares of each Fund will receive proceeds in proportion to the number of shares of such class held by each shareholder on the Termination Date.

Please note that prior to the Termination Date, each Fund may hold most or all of its assets in cash or cash equivalents and therefore may not be able to meet its investment objective.

Report of Independent Registered Public Accounting Firm

To the Board of Trustees of MassMutual Select Funds and Shareholders of MassMutual Total Return Bond Fund, MassMutual Strategic Bond Fund, MassMutual Diversified Value Fund, MassMutual Fundamental Value Fund, MM S&P 500[®] Index Fund, MassMutual Equity Opportunities Fund, MassMutual Fundamental Growth Fund, MassMutual Blue Chip Growth Fund, MassMutual Growth Opportunities Fund, MassMutual Mid Cap Value Fund, MassMutual Small Cap Value Equity Fund, MassMutual Small Company Value Fund, MM S&P[®] Mid Cap Index Fund, MM Russell 2000[®] Small Cap Index Fund, MassMutual Mid Cap Growth Fund, MassMutual Small Cap Growth Equity Fund, MM MSCI EAFE[®] International Index Fund, MassMutual Overseas Fund, and MassMutual Select T. Rowe Price International Equity Fund (collectively, the “Funds”):

Opinion on the Financial Statements and Financial Highlights

We have audited the accompanying statements of assets and liabilities of the Funds, including the portfolios of investments as of September 30, 2021, the related statements of operations for the year then ended, the statements of changes in net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended except for the MassMutual Select T. Rowe Price International Equity Fund; the related statement of operations for the year ended September 30, 2021 and the related statement of changes in net assets for each of the two years in the period then ended, and the financial highlights for each of the three years in the period then ended and the period February 9, 2018 (commencement of operations) to September 30, 2018, for the MassMutual Select T. Rowe Price International Equity Fund; and the related notes.

In our opinion, the financial statements and financial highlights present fairly, in all material respects, the financial position of the Funds, except MassMutual Select T. Rowe Price International Equity Fund, as of September 30, 2021, and the results of their operations for the year then ended, the changes in their net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the financial statements and financial highlights present fairly, in all material respects, the financial position of MassMutual Select T. Rowe Price International Equity Fund as of September 30, 2021, and the results of its operations for the year then ended, and the changes in net assets for each of the two years in the period then ended, and the financial highlights for each of the three years in the period then ended and the period February 9, 2018 (commencement of operations) to September 30, 2018, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements and financial highlights are the responsibility of the Funds’ management. Our responsibility is to express an opinion on the Funds’ financial statements and financial highlights based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Funds in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement, whether due to error or fraud. The Funds are not required to have, nor were we engaged to perform, an audit of their internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Funds’ internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements and financial highlights, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements and financial highlights. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating

Report of Independent Registered Public Accounting Firm (Continued)

the overall presentation of the financial statements and financial highlights. Our procedures included confirmation of securities owned as of September 30, 2021, by correspondence with the custodian, brokers and agent banks; when replies were not received from brokers or agent banks, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP

Boston, Massachusetts

November 23, 2021

We have served as the auditor of one or more MassMutual investment companies since 1995.

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Trustees and Principal Officers (Unaudited)

The following table lists the Trust's Trustees and Principal Officers; their address and year of birth; their position with the Trust; the length of time holding that position with the Trust; their principal occupation(s) during at least the past five years; the number of portfolios in the fund complex they oversee; and other directorships they hold in companies subject to registration or reporting requirements of the Securities Exchange Act of 1934 (generally called "public companies") or in registered investment companies. The Trust's Statement of Additional Information includes additional information about the Trust's Trustees and is available, without charge, upon request by calling 1-888-309-3539 or by writing MassMutual Select Funds, c/o Massachusetts Mutual Life Insurance Company, 1295 State Street, Springfield, Massachusetts 01111-0001, Attention: MassMutual U.S. Product.

Independent Trustees

Name, Address*, and Year of Birth	Position(s) Held with Trust	Term of Office** and Length of Time Served	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Trustee	Other Directorships Held by Trustee
Allan W. Blair Year of birth: 1948	Trustee	Since 2003	Retired.	111	Trustee (since 2012), MassMutual Premier Funds (open-end investment company); Trustee (since 2021), MassMutual Advantage Funds (open-end investment company); Trustee (since 2003), MML Series Investment Fund (open-end investment company); Trustee (since 2012), MML Series Investment Fund II (open-end investment company).
Nabil N. El-Hage Year of birth: 1958	Trustee	Since 2012	Founder and CEO (since 2018), AEE International LLC (a Puerto Rico LLC); Founder and sole member (2016-2018), PR Academy of Executive Education LLC (a Puerto Rico LLC).	111	Trustee (since 2003), Chairman (2006-2012), MassMutual Premier Funds (open-end investment company); Trustee (since 2021), MassMutual Advantage Funds (open-end investment company); Trustee (since 2012), MML Series Investment Fund (open-end investment company); Trustee (since 2005), Chairman (2006-2012), MML Series Investment Fund II (open-end investment company); Chairperson and Trustee (since 2021), MassMutual Access SM Private Equity Fund (closed-end investment company).
Maria D. Furman Year of birth: 1954	Trustee	Since 2012	Retired.	111	Trustee (since 2011), GMO Series Trust (open-end investment company); Trustee (since 2004), MassMutual Premier Funds (open-end investment company); Trustee (since 2021), MassMutual Advantage Funds (open-end investment company); Trustee (since 2012), MML Series Investment Fund (open-end investment company); Trustee (since 2005), MML Series Investment Fund II (open-end investment company).
R. Alan Hunter, Jr. Year of birth: 1946	Chairperson Trustee	Since 2016 Since 2003	Retired.	111	Chairperson (since 2016), Trustee (since 2012), MassMutual Premier Funds (open-end investment company); Chairperson and Trustee (since 2021), MassMutual Advantage Funds (open-end investment company); Chairperson (since 2016), Trustee (since 2003), MML Series Investment Fund (open-end investment company); Chairperson (since 2016), Trustee (since 2012), MML Series Investment Fund II (open-end investment company).

Trustees and Principal Officers (Unaudited) (Continued)

Name, Address*, and Year of Birth	Position(s) Held with Trust	Term of Office** and Length of Time Served	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Trustee	Other Directorships Held by Trustee
C. Ann Merrifield Year of birth: 1951	Trustee	Since 2012	Retired.	111	Lead Director (since 2020), Lyra Therapeutics (a clinical-stage specialty pharmaceutical company); Director (since 2014), Flexion Therapeutics (specialty pharmaceutical company); Chairperson (since 2017), Director (since 2014), InVivo Therapeutics (research and clinical-stage biomaterials and biotechnology company); Trustee (since 2004), MassMutual Premier Funds (open-end investment company); Trustee (since 2021), MassMutual Advantage Funds (open-end investment company); Trustee (since 2012), MML Series Investment Fund (open-end investment company); Trustee (since 2005), MML Series Investment Fund II (open-end investment company).
Susan B. Sweeney Year of birth: 1952	Trustee	Since 2009	Retired.	113 [^]	Trustee (since 2012), Barings Corporate Investors (closed-end investment company); Trustee (since 2012), Barings Participation Investors (closed-end investment company); Trustee (since 2012), MassMutual Premier Funds (open-end investment company); Trustee (since 2021), MassMutual Advantage Funds (open-end investment company); Trustee (since 2009), MML Series Investment Fund (open-end investment company); Trustee (since 2012), MML Series Investment Fund II (open-end investment company); Trustee (since 2021), MassMutual Access SM Private Equity Fund (closed-end investment company).

Interested Trustees

Name, Address*, and Year of Birth	Position(s) Held with Trust	Term of Office** and Length of Time Served	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Trustee	Other Directorships Held by Trustee
Michael R. Fanning ^{^^} Year of birth: 1963	Trustee	Since 2021	Head of MassMutual U.S. (since 2016), Executive Vice President (2016-2018), Member of MassMutual's Executive Leadership Team (since 2008), MassMutual.	111	Director (since 2016), MML Advisers; Trustee (since 2021), MassMutual Premier Funds (open-end investment company); Trustee (since 2021), MassMutual Advantage Funds (open-end investment company); Trustee (since 2021), MML Series Investment Fund (open-end investment company); Trustee (since 2021), MML Series Investment Fund II (open-end investment company).

Trustees and Principal Officers (Unaudited) (Continued)

Name, Address*, and Year of Birth	Position(s) Held with Trust	Term of Office** and Length of Time Served	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Trustee	Other Directorships Held by Trustee
Clifford M. Noreen^^ Year of birth: 1957	Trustee	Since 2021	Head of Global Investment Strategy (since 2019), Deputy Chief Investment Officer (2016-2018), MassMutual; President (2008-2016), Vice Chairman (2007-2008), Member of the Board of Managers (2006-2016), Managing Director (2000-2016), Barings LLC.	113^	Chairman (since 2009), Trustee (since 2005), President (2005-2009), CI Subsidiary Trust and PI Subsidiary Trust; Chairman and Trustee (since 2009), Barings Corporate Investors (closed-end investment company); Chairman and Trustee (since 2009), Barings Participation Investors (closed-end investment company); Trustee (since 2021), MassMutual Premier Funds (open-end investment company); Trustee (since 2021), MassMutual Advantage Funds (open-end investment company); Trustee (since 2021), MML Series Investment Fund (open-end investment company); Trustee (since 2021), MML Series Investment Fund II (open-end investment company).

Principal Officers

Name, Address*, and Year of Birth	Position(s) Held with Trust	Term of Office# and Length of Time Served	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Officer
Joseph Fallon Year of birth: 1975	Vice President	Since 2017	Investment Director (since 2014), MML Advisers; Client Portfolio Manager (since 2021), Head of Investment Consulting & Strategy (2017-2021), Investment Director (2006-2017), MassMutual; Vice President (since 2017), Assistant Vice President (2015-2017), MassMutual Premier Funds (open-end investment company); Vice President (since 2021), MassMutual Advantage Funds (open-end investment company); Vice President (since 2017), Assistant Vice President (2015-2017), MML Series Investment Fund (open-end investment company); Vice President (since 2017), Assistant Vice President (2015-2017), MML Series Investment Fund II (open-end investment company).	111
	Assistant Vice President	2015-2017		
Andrew M. Goldberg Year of birth: 1966	Vice President, Secretary, and Chief Legal Officer	Since 2008	Lead Counsel, Investment Adviser & Mutual Funds (since 2018), Assistant Vice President and Counsel (2004-2018), MassMutual; Secretary (since 2015), Assistant Secretary (2013-2015), MML Advisers; Vice President, Secretary (formerly known as "Clerk"), and Chief Legal Officer (since 2008), Assistant Clerk (2004-2008), MassMutual Premier Funds (open-end investment company); Vice President, Secretary, and Chief Legal Officer (since 2021), MassMutual Advantage Funds (open-end investment company); Vice President, Secretary, and Chief Legal Officer (since 2008), Assistant Secretary (2001-2008), MML Series Investment Fund (open-end investment company); Vice President, Secretary (formerly known as "Clerk"), and Chief Legal Officer (since 2008), Assistant Clerk (2005-2008), MML Series Investment Fund II (open-end investment company); Vice President, Secretary, and Chief Legal Officer (since 2021), MassMutual Access SM Private Equity Fund (closed-end investment company).	111
	Assistant Secretary	2001-2008		

Trustees and Principal Officers (Unaudited) (Continued)

Name, Address*, and Year of Birth	Position(s) Held with Trust	Term of Office# and Length of Time Served	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Officer
Renee Hitchcock Year of birth: 1970	Chief Financial Officer and Treasurer	Since 2016	Head of Mutual Fund Administration (since 2018), Assistant Vice President (2015-2018), MassMutual; Chief Financial Officer and Treasurer (since 2016), Assistant Treasurer (2007-2016), MassMutual Premier Funds (open-end investment company); Chief Financial Officer and Treasurer (since 2021), MassMutual Advantage Funds (open-end investment company); Chief Financial Officer and Treasurer (since 2016), Assistant Treasurer (2007-2016), MML Series Investment Fund (open-end investment company); Chief Financial Officer and Treasurer (since 2016), Assistant Treasurer (2007-2016), MML Series Investment Fund II (open-end investment company); Chief Financial Officer and Treasurer (since 2021), MassMutual Access SM Private Equity Fund (closed-end investment company).	111
	Assistant Treasurer	2007- 2016		
Aruna Hobbs Year of birth: 1960	Vice President	Since 2021	Vice President (since 2021), MML Advisers; Head of Institutional Investments (since 2014), MassMutual; Vice President (since 2021), MassMutual Premier Funds (open-end investment company); Vice President (since 2021), MassMutual Advantage Funds (open-end investment company); Vice President (since 2021), MML Series Investment Fund (open-end investment company); Vice President (since 2021), MML Series Investment Fund II (open-end investment company).	111
Paul LaPiana Year of birth: 1969	President	Since 2021	President (since 2021), MML Advisers; Head of MassMutual U.S. Product (since 2019), Head of Field Management (2016-2019), MassMutual; Executive Vice President, Head of Field Distribution (2012-2016), MetLife; President (since 2021), MassMutual Premier Funds (open-end investment company); President (since 2021), MassMutual Advantage Funds (open-end investment company); President (since 2021), MML Series Investment Fund (open-end investment company); President (since 2021), MML Series Investment Fund II (open-end investment company).	111
Jill Nareau Robert Year of birth: 1972	Vice President and Assistant Secretary	Since 2017	Lead Counsel, Investment Adviser & Mutual Funds (since 2018), Assistant Vice President and Counsel (2009-2018), MassMutual; Assistant Secretary (since 2015), MML Advisers; Vice President and Assistant Secretary (since 2017), Assistant Secretary (formerly known as "Assistant Clerk") (2008-2017), MassMutual Premier Funds (open-end investment company); Vice President and Assistant Secretary (since 2021), MassMutual Advantage Funds (open-end investment company); Vice President and Assistant Secretary (since 2017), Assistant Secretary (2008-2017), MML Series Investment Fund (open-end investment company); Vice President and Assistant Secretary (since 2017), Assistant Secretary (formerly known as "Assistant Clerk") (2008-2017), MML Series Investment Fund II (open-end investment company); Vice President and Assistant Secretary (since 2021), MassMutual Access SM Private Equity Fund (closed-end investment company).	111
	Assistant Secretary	2008- 2017		
Douglas Steele Year of birth: 1975	Vice President	Since 2016	Vice President and Head of Investment Management (since 2017), Head of Investment Due Diligence (2016-2017), MML Advisers; Head of Manager Research (since 2021), Head of Investment Management (2017-2021), Assistant Vice President (2013-2017), MassMutual; Vice President (since 2016), MassMutual Premier Funds (open-end investment company); Vice President (since 2021), MassMutual Advantage Funds (open-end investment company); Vice President (since 2016), MML Series Investment Fund (open-end investment company); Vice President (since 2016), MML Series Investment Fund II (open-end investment company).	111

Trustees and Principal Officers (Unaudited) (Continued)

Name, Address*, and Year of Birth	Position(s) Held with Trust	Term of Office# and Length of Time Served	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Officer
Philip S. Wellman Year of birth: 1964	Vice President and Chief Compliance Officer	Since 2007	Vice President and Chief Compliance Officer (since 2013), MML Advisers; Head of Mutual Funds & RIA Compliance (since 2018), Vice President, Associate General Counsel, and Chief Compliance Officer (Mutual Funds) (2014-2018), MassMutual; Vice President and Chief Compliance Officer (since 2007), MassMutual Premier Funds (open-end investment company); Vice President and Chief Compliance Officer (since 2021), MassMutual Advantage Funds (open-end investment company); Vice President and Chief Compliance Officer (since 2007), MML Series Investment Fund (open-end investment company); Vice President and Chief Compliance Officer (since 2007), MML Series Investment Fund II (open-end investment company); Vice President and Chief Compliance Officer (since 2021), MassMutual Access SM Private Equity Fund (closed-end investment company).	111

* The address of each Trustee and Principal Officer is the same as that for the Trust; 1295 State Street, Springfield, Massachusetts 01111-0001.

** Each Trustee of the Trust serves until the next meeting of shareholders called for the purpose of electing Trustees and until the election and qualification of his or her successor or until he or she dies, resigns, or is removed. Notwithstanding the foregoing, unless the Trustees determine that it is desirable and in the best interest of the Trust that an exception to the retirement policy of the Trust be made, a Trustee shall retire and cease to serve as a Trustee upon the conclusion of the calendar year in which such Trustee attains the age of seventy-five years, however, an interested Trustee of the Trust shall no longer serve as a Trustee if or when they are no longer an employee of MassMutual or an affiliate.

The Chairperson is elected to hold such office for a term of three years or until their successor is elected and qualified to carry out the duties and responsibilities of their office, or until he or she retires, dies, resigns, is removed, or becomes disqualified. The Chairperson shall hold office at the pleasure of the Trustees.

^ Barings Participation Investors and Barings Corporate Investors are deemed to be a part of the Fund Complex, because they are managed by Barings LLC, an affiliate of MML Advisers.

^^ Mr. Fanning is an "Interested Person," as that term is defined in the 1940 Act, as an employee of MassMutual.

^^^ Mr. Noreen is an "Interested Person," as that term is defined in the 1940 Act, as an employee of MassMutual.

The President, Treasurer, and Secretary and such other officers as the Trustees may in their discretion from time to time elect are elected to hold such office until their successor is elected and qualified to carry out the duties and responsibilities of their office, or until he or she dies, resigns, is removed, or becomes disqualified. Each officer shall hold office at the pleasure of the Trustees.

Federal Tax Information (Unaudited)

For corporate shareholders, a portion of the ordinary dividends paid during the Fund(s)' year ended September 30, 2021, qualified for the dividends received deduction, as follows:

	Dividends Received Deductions
Diversified Value Fund	87.17%
Fundamental Value Fund	86.52%
S&P 500 Index Fund	100.00%
Equity Opportunities Fund	84.11%
Fundamental Growth Fund	4.75%
Growth Opportunities Fund	19.96%
Mid Cap Value Fund	41.53%
Small Cap Value Equity Fund	18.63%
Small Company Value Fund	73.27%
S&P Mid Cap Index Fund	67.98%
Russell 2000 Small Cap Index Fund	48.46%
Mid Cap Growth Fund	17.09%
Small Cap Growth Equity Fund	6.01%
Overseas Fund	0.28%
MM Select T. Rowe Price International Equity Fund	1.85%

For the year ended September 30, 2021, the following Fund(s) earned the following foreign sources of income:

	Amount
MSCI EAFE International Index Fund	\$ 6,306,879
Overseas Fund	15,574,631
MM Select T. Rowe Price International Equity Fund	42,821,096

Under Section 854(b)(2) of the Code, the Fund(s) hereby designate the maximum amounts as qualified dividends for purposes of the maximum rate under Section 1(h) (11) of the Code for the year ended September 30, 2021.

The Fund(s) intend to pass through the maximum amount allowable as Section 163(j) Interest Dividends as defined in the Treasury Regulations §1.163(j)-1(b).

Other Information (Unaudited)

Proxy Voting

A description of the policies and procedures that each Fund's investment adviser and subadvisers use to vote proxies relating to the Fund's portfolio securities is available, without charge, upon request, by calling 1-888-309-3539, and on the SEC EDGAR database on its website at <http://www.sec.gov>.

Information regarding how the Funds voted proxies relating to portfolio securities during the most recent 12-month period ended June 30 is available, without charge, upon request, on the MassMutual website at <http://www.massmutual.com/funds> and on the SEC's EDGAR database on its website at <http://www.sec.gov>.

Quarterly Reporting

The Funds file their complete schedule of portfolio holdings with the SEC for the first and third quarters of each fiscal year as an exhibit to their reports on Form N-PORT. The Funds' Forms N-PORT are available on the SEC's EDGAR database on its website at <http://www.sec.gov>. In addition, the Funds make the complete schedule of portfolio holdings from their filings on Form N-PORT available to shareholders at <http://www.massmutual.com/funds>.

Trustees' Approval of Investment Advisory Contracts

At their meetings in May and June 2021, the Contract Committee (the "Committee") and the Trustees, including the Trustees who are not "interested persons" (as such term is defined in the 1940 Act) of the Trust, MML Advisers, or the subadvisers (the "Independent Trustees"), re-approved the existing advisory and subadvisory agreements (collectively, the "Contracts") for each of the Total Return Bond Fund, Strategic Bond Fund, Diversified Value Fund, Fundamental Value Fund, S&P 500 Index Fund, Equity Opportunities Fund, Fundamental Growth Fund, Blue Chip Growth Fund, Growth Opportunities Fund, Mid Cap Value Fund, Small Cap Value Equity Fund, Small Company Value Fund, S&P Mid Cap Index Fund, Russell 2000 Small Cap Index Fund, Mid Cap Growth Fund, Small Cap Growth Equity Fund, MSCI EAFE International Index Fund, Overseas Fund, and MM Select T. Rowe Price International Equity Fund. In preparation for the meetings, the Trustees requested, and MML Advisers and the subadvisers provided in advance, certain materials relevant to the consideration of the Contracts (the "Meeting Materials"). In all of their deliberations, the Trustees were advised by independent counsel.

The Committee received in advance of the meetings (i) a memorandum from MML Advisers discussing the nature and quality of the services it provides as investment adviser to the Funds; (ii) a profitability analysis prepared by MML Advisers; and (iii) a fee and performance study report (the "Third-Party Report") with respect to each Fund prepared by an independent third-party vendor (the "Third-Party"). The Third-Party Report provided detailed comparative advisory fee, total expense, and performance information for each Fund to assist the Committee in its evaluation of the Contracts. The Committee also considered information presented to it throughout the year regarding MML Advisers and each of the subadvisers.

The Committee considered the nature, scope, and quality of services MML Advisers provides to the Funds, including: (i) the financial condition, stability, and business strategy of MML Advisers; (ii) the capabilities of MML Advisers with respect to regulatory compliance and its ability to monitor compliance with the investment policies of the Funds; (iii) MML Advisers' ability to provide investment oversight and provide for administrative and shareholder services to the Funds; and (iv) the experience and qualifications of the personnel of MML Advisers that perform, or oversee the performance of, the services provided to the Funds, and the needs of the Funds for administrative and shareholder services. The Committee noted that it had received in the Meeting Materials or during the course of the past year: (i) detailed information regarding MML Advisers' ability to provide investment oversight and provide for administrative and shareholder services to the Funds; and (ii) a wide range of information about the subadvisers and their personnel with responsibility for providing services to the Funds and the fees payable to each subadviser by MML Advisers. MML Advisers reviewed with the Committee in detail the work MML Advisers does in its oversight roles, the expertise it brings to these roles, the size of its teams, and the financial commitment it has made to provide those services.

The Committee then reviewed and considered, for each Fund separately, the detailed information presented in the Third-Party Report regarding: (i) Fund expenses, including, among other things, both the Fund's net advisory fee and total net expense ratio against peer funds; and (ii) the Fund's relative performance (over various time periods against funds in its "category" and a benchmark index). In connection with the Committee's review, MML Advisers provided commentary and analysis regarding

Other Information (Unaudited) (Continued)

each Fund's expenses and performance and a recommendation as to the action to be taken by the Committee. Throughout the discussion, MML Advisers responded to Committee members' questions and provided additional information concerning each Fund.

The Committee reviewed the expense and performance information for each Fund. (References to any one- or three-year period below are to periods ended December 31, 2020. The three-year periods do not apply for any Fund that does not yet have a three- year performance history. In all cases, the comparative expense information is that of a Fund's "peer group" and the comparative performance information is that of a Fund's "performance category.")

The Committee considered that the total net expense ratios for the Total Return Bond Fund, Strategic Bond Fund, Diversified Value Fund, Fundamental Value Fund, S&P 500 Index Fund, Fundamental Growth Fund, Blue Chip Growth Fund, Growth Opportunities Fund, Mid Cap Value Fund, Small Company Value Fund, S&P Mid Cap Index Fund, Mid Cap Growth Fund, Small Cap Growth Equity Fund, MSCI EAFE International Index Fund, Overseas Fund, and MM Select T. Rowe Price International Equity Fund were within the top forty percent of their peer groups. The Small Cap Value Equity Fund had a total net expense ratio in the third comparative quintile. All of the foregoing Funds had net advisory fees at or below the medians of their peers except the Diversified Value Fund, Growth Opportunities Fund, and Small Company Value Fund, the levels of whose net advisory fees the Committee did not consider to be inconsistent with the advisory agreements' continuation, in light of the Funds' generally acceptable total net expense ratios and/or general favorable investment performance over time.

As to the Equity Opportunities Fund, the Committee considered MML Advisers' statement that, although the Fund's net advisory fee was at the 75th comparative percentile, MML Advisers recommended maintaining the fee in light of the Fund's generally favorable performance over the long term and in light of the fact that the Fund's total net expense ratio, at the 67th comparative percentile, was competitive at only four basis points above the peer group median. As to the Russell 2000 Small Cap Index Fund, the Committee considered MML Advisers' statement that, although the Fund's total net expense ratio and net advisory fee, each at the 67th comparative percentile, were 11 and six basis points above the peer group median, respectively, the peer group includes large index fund providers where scale has a significant influence on total expenses, and the Fund's expenses compare more favorably against similarly situated peer Funds; and that the Fund's performance ranked in the top half of its performance category for the one- and three-year periods.

The Committee determined on the basis of these factors that the levels of the Funds' net advisory fees, and the total net expenses of the Funds generally, were consistent with the continuation of their advisory agreements.

The Committee considered that the Total Return Bond Fund, Strategic Bond Fund, S&P 500 Index Fund, Equity Opportunities Fund, Fundamental Growth Fund, Blue Chip Growth Fund, Growth Opportunities Fund, Mid Cap Value Fund, Small Cap Value Equity Fund, Small Company Value Fund, S&P Mid Cap Index Fund, Russell 2000 Small Cap Index Fund, Small Cap Growth Equity Fund, and Overseas Fund had achieved three-year investment performance above the medians of their performance categories, or in the top sixty percent of their performance categories. The Committee considered that the Fundamental Value Fund experienced three-year investment performance outside the top sixty percent of its performance category, but experienced improved performance for the one-year period to the 57th comparative percentile.

The Committee considered that the Mid Cap Growth Fund and Diversified Value Fund had each experienced one- and three-year performance below the sixtieth comparative percentiles of their performance categories. The Committee considered MML Advisers' statement that a contributor to each Fund's underperformance was a relatively low exposure to high-growth stocks during the recent high growth-oriented equity markets, and MML Advisers' confidence in each Fund's investment strategy and subadviser(s) over the long term.

As to MSCI EAFE International Index Fund, the Committee noted that the Fund had experienced performance for the one- and three-year periods in the 84th and 75th comparative percentiles, respectively. The Committee considered MML Advisers' statements that the Fund's underperformance was due in part to a number of funds in the performance category being designed to track indices that have outperformed the index that the Fund is tracking, and that the subadviser has successfully replicated performance of the index and performance category with minimal tracking error.

Other Information (Unaudited) (Continued)

As to the MM Select T. Rowe Price International Equity Fund, the Committee noted that the Fund had not yet achieved a three-year performance record as of December 31, 2020. The Committee considered information regarding the one-year performance of the Fund and considered MML Advisers' statement that, although the period of time the Fund had been operational was too short to evaluate performance meaningfully, the Fund was performing appropriately in the view of MML Advisers. The Committee generally agreed with this perspective and analysis.

The Committee also reviewed and considered information included in the Meeting Materials, or discussed at the meeting and during the course of the year, concerning economies of scale and the profitability of MML Advisers' advisory relationship with the various Funds, including: (i) a description of MML Advisers' revenues from the Funds (including advisory fees and administrative and shareholder services fees, as applicable) and the expense allocation methodology employed by MML Advisers; and (ii) profitability information for each individual Fund. The discussions included consideration of the intangible benefits derived by MML Advisers and its affiliates resulting from their relationships with the Funds and any so-called "fallout benefits" to MML Advisers (which were not considered to be substantial in any event), such as any reputational value derived from serving as investment adviser to the Funds, and benefits accruing to subadvisers due to so-called "soft-dollar arrangements."

Prior to the votes being taken to approve the Contracts, the Committee met separately in executive session to discuss the appropriateness of such contracts. The Committee weighed the foregoing matters in light of the advice given to them by their independent legal counsel as to the law applicable to the review of investment advisory contracts. In arriving at a decision, the Committee did not identify any single matter as all-important or controlling. The foregoing summary does not detail all of the matters considered.

As to each of the Funds, the Committee concluded that: (i) overall, it was satisfied with the nature, extent, and quality of services provided, and expected to be provided in the future, under the Contracts, including the level of MML Advisers' oversight of each Fund and the subadvisory process; (ii) MML Advisers' levels of profitability from its relationship with the various Funds are not excessive and the advisory fees payable under the advisory agreements and each Fund's total net expenses are fair and reasonable; (iii) the investment processes, research capabilities, and philosophies of the subadvisers generally appear well suited to the Funds, given their investment objectives and policies; (iv) either the relative or absolute performance of a Fund (in each case, taking into account the applicable investment strategy and risk profile of the Fund), or the steps MML Advisers has proposed in respect of the underperformance of a Fund, are sufficient to warrant continuation of the Contracts for each of the Funds; and (v) the terms of the Contracts are fair and reasonable with respect to each Fund and are in the best interests of each Fund's shareholders.

Also at their meeting in June 2021, the Trustees, including the Independent Trustees, approved a new subadvisory agreement with Brandywine Global Investment Management, LLC ("Brandywine Global") for the Strategic Bond Fund (the "June Brandywine Subadvisory Agreement"). In preparation for the meeting, the Trustees requested, and MML Advisers provided in advance, certain materials relevant to the consideration of the June Brandywine Subadvisory Agreement. In all of their deliberations, the Trustees were advised by independent counsel.

In reviewing the June Brandywine Subadvisory Agreement, the Independent Trustees discussed with MML Advisers and considered a wide range of information about, among other things: (i) Brandywine Global and its personnel with responsibility for providing services to the Strategic Bond Fund; (ii) the terms of the June Brandywine Subadvisory Agreement; (iii) the scope and quality of the services that Brandywine Global is expected to provide under the June Brandywine Subadvisory Agreement; (iv) the historical investment performance track record of Brandywine Global; and (v) the fees payable to Brandywine Global by MML Advisers with respect to the Strategic Bond Fund, the effect of such fees on the profitability to MML Advisers, and any information provided by Brandywine Global regarding the fees paid to Brandywine Global by other funds with similar investment objectives as the Strategic Bond Fund. The Independent Trustees noted the fact that MML Advisers was proposing to add a five basis point contractual management fee waiver for the Strategic Bond Fund.

Prior to the votes being taken to approve the June Brandywine Subadvisory Agreement, the Independent Trustees met separately in executive session to discuss the appropriateness of such contract. The Independent Trustees weighed the foregoing matters in light of the advice given to them by their independent legal counsel as to the law applicable to the review of investment advisory contracts. In arriving at a decision, the Trustees, including the Independent Trustees, did not identify any single matter as all-important or controlling. The foregoing summary does not detail all of the matters considered.

Other Information (Unaudited) (Continued)

Based on the foregoing, and following their review, the Trustees concluded, with respect to the June Brandywine Subadvisory Agreement, that (i) overall, they were satisfied with the nature, extent, and quality of services expected to be provided under the June Brandywine Subadvisory Agreement; (ii) MML Advisers' projected level of profitability due to the June Brandywine Subadvisory Agreement is not excessive and the subadvisory fee under the June Brandywine Subadvisory Agreement is fair and reasonable; (iii) the investment process and strategy of Brandywine Global appear well suited to the Strategic Bond Fund given its investment objective and policies; and (iv) the terms of the June Brandywine Subadvisory Agreement are fair and reasonable with respect to the Strategic Bond Fund, and are in the best interests of the Strategic Bond Fund's shareholders. After carefully considering the information summarized above, the Trustees, including a majority of the Independent Trustees voting separately, unanimously voted to approve the June Brandywine Subadvisory Agreement.

The June Brandywine Subadvisory Agreement became effective on August 10, 2021.

Also at their meeting in June 2021, the Trustees, including the Independent Trustees, approved a new subadvisory agreement with Thompson, Siegel & Walmsley LLC ("TSW") for the Mid Cap Value Fund (the "June TSW Subadvisory Agreement") due to an expected change in control, whereby Pental Group Ltd. ("Pental") will acquire 100% equity interest in TSW through its acquisition of BrightSphere Investment Group Inc.'s ("BrightSphere") and TSW employees' equity interests in TSW. The acquisition by Pental of BrightSphere's and TSW employees' equity interests in TSW will trigger the automatic assignment of the current subadvisory agreement, necessitating the need for the June TSW Subadvisory Agreement, which is substantially identical to the current subadvisory agreement. The Trustees considered the nature of the transaction and that the transaction would not result in any change in the investment strategies or portfolio management team of the Mid Cap Value Fund, or in the fees or expenses of the Mid Cap Value Fund. In addition, the Trustees considered the statements of Pental and TSW that the change in control was not expected to have any material impact on TSW or the services it provides to the Mid Cap Value Fund, including the personnel providing services to the Mid Cap Value Fund.

Prior to the votes being taken to approve the June TSW Subadvisory Agreement discussed above, the Independent Trustees met separately in executive session to discuss the appropriateness of such contract. The Independent Trustees weighed the foregoing matters in light of the advice given to them by their independent legal counsel as to the law applicable to the review of investment advisory contracts. In arriving at a decision, the Trustees, including the Independent Trustees, did not identify any single matter as all-important or controlling. The foregoing summary does not detail all of the matters considered.

The June TSW Subadvisory Agreement became effective on July 22, 2021.

At their meeting in September 2021, the Trustees, including the Independent Trustees, reviewed and approved a proposal to make changes to the existing subadvisory agreement between MML Advisers and Loomis, Sayles & Company, L.P. ("Loomis Sayles") for the Blue Chip Growth Fund in order to lower the subadvisory fee paid on behalf of the Blue Chip Growth Fund. In arriving at their decision, the Trustees discussed the fees payable to Loomis Sayles by MML Advisers under the amended subadvisory agreement and the effect of such fees on the profitability to MML Advisers. The Trustees concluded that they were satisfied that MML Advisers' projected level of profitability due to the amended subadvisory agreement is not excessive and the subadvisory fee amount under the amended subadvisory agreement is fair and reasonable. In their deliberations, the Trustees were advised by independent counsel.

Prior to the vote being taken to approve the amendment to the subadvisory agreement discussed above, the Independent Trustees met separately in executive session to discuss the appropriateness of such contract. The Independent Trustees weighed the foregoing matters in light of the advice given to them by their independent legal counsel as to the law applicable to the review of investment advisory contracts. In arriving at a decision, the Trustees, including the Independent Trustees, did not identify any single matter as all-important or controlling. The foregoing summary does not detail all of the matters considered.

The amended subadvisory agreement became effective on October 1, 2021.

*Other Information (Unaudited) (Continued)**Fund Expenses September 30, 2021**Expense Examples:*

The following information is in regards to expenses for the six months ended September 30, 2021:

As a shareholder of the Funds, you may incur two types of costs: (1) transaction costs, including sales charges (loads) on purchase payments or redemptions; and (2) ongoing costs, including advisory fees, distribution and/or service (12b-1) fees, and other Fund expenses. These examples are intended to help you understand your ongoing costs (in dollars) of investing in the Funds and to compare these costs with the ongoing costs of investing in other mutual funds. These examples are based on an investment of \$1,000 invested for the six months ended September 30, 2021.

Actual Expenses:

The first four columns of the table below provide information about actual account values and actual expenses. You may use this information, together with the amount you invested, to estimate the expenses that you paid over the period. Simply divide your account value by \$1,000 (for example, an \$8,600 account value divided by \$1,000 = 8.6), then multiply the result by the number under the heading entitled "Operating Expenses Incurred" to estimate the expenses you paid on your account during this period.

Hypothetical Example for Comparison Purposes:

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

Please note that the expenses shown in the table are meant to highlight your ongoing costs only and do not reflect any transactional costs. Therefore, the last two columns of the table are useful in comparing ongoing costs only, and will not help you determine the relative total costs of owning different funds. In addition, if these transactional costs were included, your costs would have been higher.

	Beginning Value	Annualized Expense Ratio	Ending Value (Based on Actual Returns and Expenses)	Operating Expenses Incurred*	Ending Value (Based on Hypothetical Returns and Expenses)	Operating Expenses Incurred*
Total Return Bond Fund						
Class I	\$1,000	0.33%	\$1,020.00	\$1.67	\$1,023.40	\$1.67
Class R5	1,000	0.43%	1,019.00	2.18	1,022.90	2.18
Service Class	1,000	0.53%	1,018.90	2.68	1,022.40	2.69
Administrative Class	1,000	0.63%	1,019.00	3.19	1,021.90	3.19
Class A	1,000	0.88%	1,017.10	4.45	1,020.70	4.46
Class R4	1,000	0.78%	1,017.90	3.95	1,021.20	3.95
Class R3	1,000	1.03%	1,016.00	5.21	1,019.90	5.22

Other Information (Unaudited) (Continued)

	Beginning Value	Annualized Expense Ratio	Ending Value (Based on Actual Returns and Expenses)	Operating Expenses Incurred*	Ending Value (Based on Hypothetical Returns and Expenses)	Operating Expenses Incurred*
Strategic Bond Fund						
Class I	\$1,000	0.46%	\$1,030.20	\$2.34	\$1,022.80	\$2.33
Class R5	1,000	0.56%	1,029.30	2.85	1,022.30	2.84
Service Class	1,000	0.66%	1,029.20	3.36	1,021.80	3.35
Administrative Class	1,000	0.76%	1,028.40	3.86	1,021.30	3.85
Class A	1,000	1.01%	1,026.60	5.13	1,020.00	5.11
Class R4	1,000	0.91%	1,027.60	4.63	1,020.50	4.61
Class R3	1,000	1.16%	1,026.00	5.89	1,019.30	5.87
Diversified Value Fund						
Class I	1,000	0.57%	1,053.10	2.93	1,022.20	2.89
Class R5	1,000	0.67%	1,052.20	3.45	1,021.70	3.40
Service Class	1,000	0.77%	1,051.40	3.96	1,021.20	3.90
Administrative Class	1,000	0.87%	1,051.80	4.47	1,020.70	4.41
Class A	1,000	1.12%	1,050.00	5.76	1,019.50	5.67
Class R4	1,000	1.02%	1,050.80	5.24	1,020.00	5.17
Class R3	1,000	1.27%	1,049.50	6.52	1,018.70	6.43
Fundamental Value Fund						
Class I	1,000	0.65%	1,039.70	3.32	1,021.80	3.29
Class R5	1,000	0.75%	1,039.40	3.83	1,021.30	3.8
Service Class	1,000	0.85%	1,038.60	4.34	1,020.80	4.31
Administrative Class	1,000	0.95%	1,038.20	4.85	1,020.30	4.81
Class A	1,000	1.20%	1,036.90	6.13	1,019.10	6.07
Class R4	1,000	1.10%	1,037.70	5.62	1,019.60	5.57
Class R3	1,000	1.36%	1,035.80	6.94	1,018.20	6.88
S&P 500 Index Fund						
Class I	1,000	0.11%	1,091.00	0.58	1,024.50	0.56
Class R5	1,000	0.21%	1,090.60	1.10	1,024.00	1.07
Service Class	1,000	0.36%	1,089.80	1.89	1,023.30	1.83
Administrative Class	1,000	0.46%	1,089.00	2.41	1,022.80	2.33
Class A	1,000	0.71%	1,088.10	3.72	1,021.50	3.60
Class R4	1,000	0.61%	1,088.40	3.19	1,022.00	3.09
Class R3	1,000	0.86%	1,087.30	4.50	1,020.80	4.36
Equity Opportunities Fund						
Class I	1,000	0.74%	1,063.30	3.83	1,021.40	3.75
Class R5	1,000	0.84%	1,062.40	4.34	1,020.90	4.26
Service Class	1,000	0.94%	1,062.40	4.86	1,020.40	4.76
Administrative Class	1,000	1.04%	1,061.90	5.38	1,019.90	5.27
Class A	1,000	1.28%	1,060.10	6.61	1,018.70	6.48
Class R4	1,000	1.19%	1,060.80	6.15	1,019.10	6.02
Class R3	1,000	1.44%	1,059.40	7.43	1,017.80	7.28
Fundamental Growth Fund						
Class I	1,000	1.08%	1,088.50	5.65	1,019.70	5.47
Class R5	1,000	1.17%	1,087.90	6.12	1,019.20	5.92
Service Class	1,000	1.27%	1,087.50	6.65	1,018.70	6.43
Administrative Class	1,000	1.38%	1,087.60	7.22	1,018.10	6.98
Class A	1,000	1.63%	1,085.10	8.52	1,016.90	8.24
Class R4	1,000	1.53%	1,085.10	8.00	1,017.40	7.74
Class R3	1,000	1.78%	1,088.20	9.32	1,016.10	9.00

Other Information (Unaudited) (Continued)

	Beginning Value	Annualized Expense Ratio	Ending Value (Based on Actual Returns and Expenses)	Operating Expenses Incurred*	Ending Value (Based on Hypothetical Returns and Expenses)	Operating Expenses Incurred*
Blue Chip Growth Fund						
Class I	\$1,000	0.63%	\$1,104.00	\$3.32	\$1,021.90	\$3.19
Class R5	1,000	0.73%	1,103.60	3.85	1,021.40	3.70
Service Class	1,000	0.83%	1,103.10	4.38	1,020.90	4.20
Administrative Class	1,000	0.93%	1,102.50	4.90	1,020.40	4.71
Class A	1,000	1.18%	1,100.70	6.21	1,019.20	5.97
Class R4	1,000	1.08%	1,101.50	5.69	1,019.70	5.47
Class R3	1,000	1.33%	1,100.20	7.00	1,018.40	6.73
Growth Opportunities Fund						
Class I	1,000	0.74%	1,127.60	3.95	1,021.40	3.75
Class R5	1,000	0.84%	1,127.00	4.48	1,020.90	4.26
Service Class	1,000	0.94%	1,127.30	5.01	1,020.40	4.76
Administrative Class	1,000	1.04%	1,126.70	5.54	1,019.90	5.27
Class A	1,000	1.29%	1,124.30	6.87	1,018.60	6.53
Class R4	1,000	1.19%	1,124.60	6.34	1,019.10	6.02
Class R3	1,000	1.44%	1,126.00	7.67	1,017.80	7.28
Mid Cap Value Fund						
Class I	1,000	0.61%	1,041.40	3.12	1,022.00	3.09
Class R5	1,000	0.71%	1,040.90	3.63	1,021.50	3.60
Service Class	1,000	0.81%	1,040.50	4.14	1,021.00	4.10
Administrative Class	1,000	0.91%	1,039.70	4.65	1,020.50	4.61
Class A	1,000	1.16%	1,037.70	5.93	1,019.30	5.87
Class R4	1,000	1.06%	1,038.90	5.42	1,019.80	5.37
Class R3	1,000	1.31%	1,038.30	6.69	1,018.50	6.63
Small Cap Value Equity Fund						
Class I	1,000	1.07%	989.40	5.34	1,019.70	5.42
Class R5	1,000	1.17%	988.70	5.83	1,019.20	5.92
Service Class	1,000	1.28%	988.70	6.38	1,018.70	6.48
Administrative Class	1,000	1.39%	987.80	6.93	1,018.10	7.03
Class A	1,000	1.62%	986.10	8.07	1,016.90	8.19
Class R4	1,000	1.53%	986.70	7.62	1,017.40	7.74
Class R3	1,000	1.77%	985.80	8.81	1,016.20	8.95
Small Company Value Fund						
Class I	1,000	0.92%	1,028.40	4.68	1,020.50	4.66
Class R5	1,000	1.02%	1,027.30	5.18	1,020.00	5.17
Service Class	1,000	1.12%	1,027.50	5.69	1,019.50	5.67
Administrative Class	1,000	1.22%	1,026.50	6.20	1,019.00	6.17
Class A	1,000	1.47%	1,025.10	7.46	1,017.70	7.44
Class R4	1,000	1.37%	1,025.50	6.96	1,018.20	6.93
Class R3	1,000	1.62%	1,024.80	8.22	1,016.90	8.19
S&P Mid Cap Index Fund						
Class I	1,000	0.18%	1,017.10	0.91	1,024.20	0.91
Class R5	1,000	0.28%	1,017.10	1.42	1,023.70	1.42
Service Class	1,000	0.43%	1,016.00	2.17	1,022.90	2.18
Administrative Class	1,000	0.53%	1,015.40	2.68	1,022.40	2.69
Class A	1,000	0.77%	1,014.30	3.89	1,021.20	3.90
Class R4	1,000	0.68%	1,015.00	3.43	1,021.70	3.45
Class R3	1,000	0.93%	1,013.80	4.69	1,020.40	4.71

Other Information (Unaudited) (Continued)

	Beginning Value	Annualized Expense Ratio	Ending Value (Based on Actual Returns and Expenses)	Operating Expenses Incurred*	Ending Value (Based on Hypothetical Returns and Expenses)	Operating Expenses Incurred*
Russell 2000 Small Cap Index Fund						
Class I	\$1,000	0.23%	\$996.9	\$1.15	\$1,023.90	\$1.17
Class R5	1,000	0.33%	996.3	1.65	1,023.40	1.67
Service Class	1,000	0.48%	995.1	2.40	1,022.70	2.43
Administrative Class	1,000	0.58%	994.4	2.90	1,022.20	2.94
Class A	1,000	0.83%	993.2	4.15	1,020.90	4.20
Class R4	1,000	0.73%	993.8	3.65	1,021.40	3.70
Class R3	1,000	0.98%	993.1	4.90	1,020.20	4.96
Mid Cap Growth Fund						
Class I	1,000	0.70%	1,076.20	3.64	1,021.60	3.55
Class R5	1,000	0.80%	1,075.80	4.16	1,021.10	4.05
Service Class	1,000	0.90%	1,075.40	4.68	1,020.60	4.56
Administrative Class	1,000	1.00%	1,074.40	5.20	1,020.10	5.06
Class A	1,000	1.25%	1,073.30	6.50	1,018.80	6.33
Class R4	1,000	1.15%	1,073.80	5.98	1,019.30	5.82
Class R3	1,000	1.40%	1,072.30	7.27	1,018.00	7.08
Small Cap Growth Equity Fund						
Class I	1,000	0.87%	1,022.50	4.41	1,020.70	4.41
Class R5	1,000	0.97%	1,021.50	4.92	1,020.20	4.91
Service Class	1,000	1.07%	1,021.10	5.42	1,019.70	5.42
Administrative Class	1,000	1.17%	1,020.20	5.93	1,019.20	5.92
Class A	1,000	1.42%	1,019.20	7.19	1,017.90	7.18
Class R4	1,000	1.32%	1,020.40	6.69	1,018.50	6.68
Class R3	1,000	1.57%	1,018.20	7.94	1,017.20	7.94
MSCI EAFE International Index Fund						
Class I	1,000	0.31%	1,041.80	1.59	1,023.50	1.57
Class R5	1,000	0.41%	1,041.80	2.10	1,023.00	2.08
Service Class	1,000	0.56%	1,040.90	2.87	1,022.30	2.84
Administrative Class	1,000	0.66%	1,039.80	3.37	1,021.80	3.35
Class A	1,000	0.91%	1,039.20	4.65	1,020.50	4.61
Class R4	1,000	0.81%	1,040.10	4.14	1,021.00	4.10
Class R3	1,000	1.06%	1,038.10	5.42	1,019.80	5.37
Overseas Fund						
Class I	1,000	0.79%	1,037.80	4.04	1,021.10	4.00
Class R5	1,000	0.89%	1,037.60	4.55	1,020.60	4.51
Service Class	1,000	0.99%	1,036.80	5.05	1,020.10	5.01
Administrative Class	1,000	1.09%	1,036.40	5.56	1,019.60	5.52
Class A	1,000	1.34%	1,034.20	6.83	1,018.40	6.78
Class R4	1,000	1.24%	1,035.00	6.33	1,018.90	6.28
Class R3	1,000	1.49%	1,033.60	7.60	1,017.60	7.54
MM Select T. Rowe Price International Equity Fund						
Class I	1,000	0.00%	1,008.60	0.00	1,025.10	0.00

* Expenses are calculated using the annualized expense ratio for the six months ended September 30, 2021, multiplied by the average account value over the period, multiplied by 183 days in the period, divided by 365 days in the year, unless stated otherwise.

Underwriter:

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RS-50674-00