# ... MassMutual

# Annual Report MassMutual Select Funds

September 30, 2020

#### **Table of Contents**

President's Letter to Shareholders (Unaudited)	1
Economic and Market Overview (Unaudited)	<u>3</u>
Portfolio Manager Report (Unaudited)	<u>5</u>
Portfolio of Investments	
MassMutual Select Total Return Bond Fund	<u>74</u>
MassMutual Select Strategic Bond Fund	<u>87</u>
MassMutual Select Diversified Value Fund	<u>119</u>
MassMutual Select Fundamental Value Fund	<u>124</u>
MM S&P 500® Index Fund	<u>128</u>
MassMutual Select Equity Opportunities Fund	<u>136</u>
MassMutual Select Fundamental Growth Fund	<u>139</u>
MassMutual Select Blue Chip Growth Fund	<u>142</u>
MassMutual Select Growth Opportunities Fund	<u>146</u>
MassMutual Select Mid-Cap Value Fund	<u>148</u>
MassMutual Select Small Cap Value Equity Fund	<u>151</u>
MassMutual Select Small Company Value Fund	<u>155</u>
MM S&P® Mid Cap Index Fund	<u>159</u>
MM Russell 2000 Small Cap Index Fund	<u>166</u>
MassMutual Select Mid Cap Growth Fund	<u>191</u>
MassMutual Select Small Cap Growth Equity Fund	<u>196</u>
MM MSCI EAFE® International Index Fund	<u>201</u>
MassMutual Select Overseas Fund	<u>214</u>
MassMutual Select T. Rowe Price International Equity Fund	<u>218</u>
Statements of Assets and Liabilities	<u>226</u>
Statements of Operations	<u>238</u>
Statements of Changes in Net Assets	<u>250</u>
<u>Financial Highlights</u>	<u>264</u>
Notes to Financial Statements	<u>301</u>
Report of Independent Registered Public Accounting Firm	<u>351</u>
<u>Trustees and Principal Officers (Unaudited)</u>	<u>353</u>
Federal Tax Information (Unaudited)	<u>357</u>
Other Information (Unaudited)	<u>358</u>
Proxy Voting	<u>358</u>
Quarterly Reporting	<u>358</u>
Trustees' Approval of Investment Advisory Contracts	<u>358</u>
Fund Expenses	<u>363</u>

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.

Important Notice: Beginning on January 1, 2021, as permitted by regulations adopted by the Securities and Exchange Commission, paper copies of the Fund's annual and semi-annual reports will no longer be sent by mail, unless you specifically request paper copies of the reports from the Fund (or from your financial intermediary, such as a broker-dealer, bank, or retirement plan recordkeeper). Instead, the reports will be made available on the Fund's website (http://www.massmutual.com/funds), and you will be notified by mail each time a report is posted and provided with a website link to access the report. If you already elected to receive shareholder reports electronically, you will not be affected by this change and you need not take any action. If you would like to receive shareholder reports and other communications electronically from the Fund and are either a direct investor in the Fund or MassMutual serves as your retirement plan recordkeeper, please call (800) 767-1000 extension 43012 or send your request to enroll to RSProspectusFulfillment@massmutual.com. If you have invested in the Fund through another financial intermediary (such as a broker-dealer, bank, or retirement plan recordkeeper), you can request electronic delivery by contacting that financial intermediary. Beginning on January 1, 2019, you may elect to receive all future reports in paper free of charge. If you invest directly with the MassMutual Funds or MassMutual serves as your retirement plan recordkeeper, you can call (800) 767-1000 extension 43012 or send an email request to RSProspectusFulfillment@massmutual.com to inform the Funds or MassMutual that you wish to continue receiving paper copies of your shareholder reports. If you invest through a financial intermediary other than MassMutual, you can contact that financial intermediary to request that you continue to receive paper copies of

your shareholder reports. Your election to receive reports in paper will apply to all funds held in your account if you invest through your financial intermediary or all funds held within the fund complex if you invest directly with a Fund.

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MassMutual Select Funds - President's Letter to Shareholders (Unaudited)

#### To Our Shareholders



Eric Wietsma

"We encourage you to maintain perspective when it comes to retirement investing, despite short-term changes in the markets or day-to-day events that may seem unsettling. MassMutual's view is that changing market conditions have the potential to reward patient investors."

September 30, 2020

#### The return of market volatility challenges retirement investors

I am pleased to present you with the MassMutual Select Funds Annual Report, covering the year ended September 30, 2020 (the "fiscal year"). U.S. stocks and international stocks both experienced gains in the fiscal year despite the global economic recession brought on by the COVID-19 crisis. A swift response to the pandemic by the Federal Reserve Board and Congress delivered unprecedented monetary and fiscal stimulus to support the U.S. economy and financial markets. The global response was similar in speed and magnitude. U.S. bond investors enjoyed positive returns in a falling yield environment, fueled by lower economic growth expectations, interest rate decreases, and supportive central bank policy.

The return of volatility and the reality of market sell-offs can test an investor's mettle, but also serve to remind investors that market conditions are cyclical and subject to change anytime. In MassMutual's view, the market environment that ensued from the pandemic (with stocks largely selling off and then, for the most part, recovering) underscores the importance of maintaining a long-term perspective and avoiding reacting to current events. 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 run. Investing for retirement doesn't happen overnight. Most people save and invest for retirement throughout their working years. Although the financial markets will go up and down over time, taking a long-term approach to investing gives you more time to ride out the downturns as you work toward your retirement income goals.
- Keep contributing. While it's impossible to control how your investments perform, you can control how often and how much you save. Saving as much as possible and increasing your contributions regularly is one way smart retirement investors can help boost their retirement savings, regardless of the investment environment.\*
- Invest continually. Financial professionals often advise their clients to stay in the market, regardless of short-term results. Here's why: Individuals 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. This has the potential to put them at an advantage when the markets turn around.
- 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. Those 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 subcategories.\*

(Continued)

<sup>\*</sup> 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.

MassMutual Select Funds - President's Letter to Shareholders (Unaudited) (Continued)

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;

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

We live mutual, every day

MassMutual believes that humanity brings out the best in one another. That's why, for nearly 170 years, through ups and downs and good times and bad, we have continually believed that we are stronger when we rely on one another. That's also why we encourage you to maintain perspective when it comes to retirement investing, despite short-term changes in the markets or day-to-day events that may seem 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,

Eric Wietsma President

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

September 30, 2020

#### **Market Highlights**

- For the reporting period from October 1, 2019 through September 30, 2020, U.S. stocks were up over 15%, despite the global economic recession brought on by the COVID-19 crisis.
- The first quarter of 2020 was one of the most difficult quarters on record for the markets. COVID-19 fears turned to reality as "social distancing," shuttered businesses, and the associated lost economic activity became the new norm.
- A swift response to the pandemic by the Federal Reserve Board and Congress delivered unprecedented monetary and fiscal stimulus to support the U.S. economy and financial markets. The global response was similar in speed and magnitude.
- Foreign stocks in developed markets and emerging markets also experienced gains in the fiscal year, aided by increasing economic activity in the second half of the year and the weakening of the U.S. dollar.
- U.S. bond investors enjoyed positive returns in a falling yield environment, fueled by lower economic growth expectations, interest rate decreases, and supportive central bank policy.

#### **Market Environment**

Global stock investors experienced significant levels of volatility for the fiscal year beginning October 1, 2019. U.S. stocks rose steadily until mid-February 2020, when the severity of the COVID-19 crisis was becoming apparent with rising case counts, hospitalizations, and deaths. Investor sentiment quickly turned negative, with March 2020 marking the end of the 11-year bull market. The S&P 500<sup>®</sup> Index\* fell 34% from its February high to its March low, as the reality that the COVID-19 crisis had stalled the global economy and the imminence of a recession became evident.

Investors started the second quarter of 2020 facing increasing COVID-19 deaths, record unemployment levels, and expectations for an unprecedented decline in economic activity. Despite this, global markets ultimately recorded one of their best quarters ever. Investors responded positively to the massive amounts of monetary and fiscal stimulus. In addition, progress in combating COVID-19 and increasing economic activity, with the transition back to work for many, fueled the market turnaround. Central banks supported bond market liquidity and kept interest rates low through government and corporate bond purchases. Better-than-expected second quarter corporate earnings, a strong rebound in housing demand, and progress on COVID-19 therapeutics and vaccine research helped to tamp down investor concerns and drove many stocks, especially in the information technology sector, to new highs in the third quarter of 2020.

Global political tensions lessened significantly in the fiscal year, reducing market volatility up until the COVID-19 crisis emerged. In December 2019, a phase one trade agreement was reached between the U.S. and China. In the agreement, the U.S. agreed to roll back tariffs and China agreed to increase intellectual property protections, increase agricultural purchases, and open its markets to more U.S. firms. Similarly, the U.S., Mexico, and Canada reached a new trade agreement that opened up Mexico and Canada to more exports and strengthened intellectual property protection. In Europe, a Brexit agreement was reached in December 2019 that resulted in Britain's departure from the European Union on January 31, 2020, and allowed investors to set aside concerns regarding European Union stability for the time being.

The broad market S&P 500 delivered a strong 15.15% return for the fiscal year. The Dow Jones Industrial Average<sup>SM</sup> was also up a respectable 5.70%. The technology-heavy NASDAQ Composite Index was one of the biggest winners, up 40.96% for the fiscal year. Small- and mid-cap stocks underperformed their larger peers, as small caps barely broke even – while growth stocks outperformed their value counterparts by over 40% during the period.

Seven of 11 sectors delivered positive returns for the fiscal year, led by information technology, consumer discretionary, health care, and communication services, which all enjoyed double-digit growth and beat the S&P 500. The energy sector was the worst performer for the fiscal year, down over 45%. The financial, real estate, and utilities sectors also ended in negative territory.

\* 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)

Developed international markets, as measured by the MSCI EAFE<sup>®</sup> Index, significantly trailed their domestic peers, ending the fiscal year barely in positive territory, up 0.49%. Emerging-market stocks, as measured by the MSCI Emerging Markets Index, fared significantly better, ending up 10.54% for the period. Developed international and emerging-market stocks benefited from increasing economic activity in the second half of the fiscal year and the weakening U.S. dollar.

Bond yields fell sharply during the fiscal year, with the 10-year U.S. Treasury bond yield falling from a high of 1.94% in October 2019 to a low of 0.69% at the close of the period. Falling yields generally produce rising bond prices; consequently, bond index returns benefited. The Bloomberg Barclays U.S. Aggregate Bond Index ended the period up 6.98%. Investment-grade corporate bonds also advanced. The Bloomberg Barclays U.S. Corporate Bond Index, which tracks investment-grade corporate bonds, ended the period with a 7.90% gain. The Bloomberg Barclays U.S. Corporate High Yield Bond Index also ended in positive territory, advancing 3.25%, despite rising corporate bankruptcies.

#### Review and maintain your strategy

MassMutual is committed to helping people secure their long-term 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 Select Total Return Bond Fund – Portfolio Manager Report (Unaudited)

#### What is the investment approach of MassMutual Select 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).

#### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class I shares returned 8.06%, outperforming the 6.98% return of the Bloomberg Barclays 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, 2020, please see the Economic and Market Overview, beginning on page 3.

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

MetWest maintained a credit underweight, relative to the benchmark, at the beginning of the reporting period, based on what it viewed to be late cycle-like high corporate leverage and share buybacks. This strategy benefited performance during the March selloff. A defensive bias further rewarded the Fund's performance, as industries such as health care and pharmaceuticals outperformed more market-sensitive ones like cyclicals and non-U.S. sovereigns. During this phase, the Fund purchased credits at attractive levels, delivering another boost to returns. The positions were subsequently reduced to lock in gains.

In the securitized sector, the agency MBS allocation increased at favorable entry points, as the sector was weighed down by the Federal Reserve Board's (the Fed) tapering and low rates in 2019, contributing to returns with the Fed's limitless sponsorship established in March. (Bond issuers create securitized bonds by pooling various types of contractual debt – such as mortgages, auto loans, or credit card debt.)

In ABS and CMBS, the negative effects from the health crisis overshadowed solid performance in 2019 and the rebound from March, though issue selection that favored senior, higher quality was additive. Non-agency MBS also recovered from March to deliver a positive impact, buoyed by strong housing fundamentals. Elsewhere, Treasury futures used to manage duration detracted from the Fund's performance, as financing rates exceeded yields. (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.) On the other hand, Treasury inflation-protected securities (TIPS) proved beneficial, given investors' higher inflation expectations. Finally, duration positioning provided additional gains, with a neutral stance shifting to longer, then shorter, in early 2020, as yields plunged and held near record lows.

During the reporting period, the Fund's use of Treasury futures to manage duration and yield curve was a drag on performance, as financing rates exceeded yields. 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

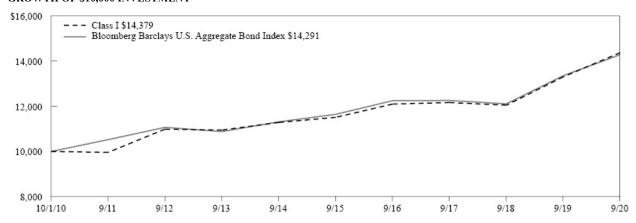
Going forward, MetWest believes that the outlook for growth is uncertain and largely dependent on the path of the pandemic. It believes that recent data suggests it will take considerable time before the economy returns to pre-COVID levels. While the view of MetWest is that behavioral changes and protracted job insecurity will restrain spending behavior, there are sectors that stand to benefit from the government response and shifting consumption/investment patterns. MetWest opines that the next phase of the recovery will likely be more difficult, particularly given the delay, and likely reduction, of additional fiscal support. Headline volatility persists, highlighted by a contentious U.S. presidential election. As such, after opening the risk budget earlier in the reporting period on volatility, the Fund has trimmed risk and is again positioned with ample liquidity to respond to rapidly changing valuations. At period end, the Fund's positioning favored senior securitized products and more defensive credits.

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

MassMutual Select	
Total Return Bond Fund	
Portfolio Characteristics	
(% of Net Assets) on 9/30/20	
U.S. Government Agency Obligations and Instrumentalities	33.3%
U.S. Treasury Obligations	27.9%
Corporate Debt	23.8%
Non-U.S. Government Agency Obligations	12.1%
Bank Loans	1.3%
Sovereign Debt Obligations	0.8%
Municipal Obligations	0.6%
Total Long-Term Investments	99.8%
Short-Term Investments and Other Assets and Liabilities	0.2%
Net Assets	100.0%

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

#### **GROWTH OF \$10,000 INVESTMENT**



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 09/30/202	·				
	Inception Date	1 37	<b>5 3</b> 7	10 37	Since Inception
	of Class	1 Year	5 Years	10 Years	04/01/2014
Class I	07/06/2010	8.06%	4.55%	3.70%	
Class R5	07/06/2010	8.04%	4.45%	3.58%	
Service Class	07/06/2010	7.82%	4.35%	3.47%	
Administrative Class	07/06/2010	7.79%	4.25%	3.37%	
Class R4	07/06/2010	7.64%	4.09%	3.24%	
Class A	04/01/2014	7.45%	4.00%		3.54%
Class A (sales load deducted)*	04/01/2014	2.88%	3.10%		2.85%
Class R3	07/06/2010	7.33%	3.83%	2.98%	
Bloomberg Barclays U.S. Aggregate Bond Index		6.98%	4.18%	3.64%	4.01%

<sup>\*</sup> 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 Select Strategic Bond Fund – Portfolio Manager Report (Unaudited)

#### What is the investment approach of MassMutual Select 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). Western Asset Limited manages the non-U.S. dollar denominated investments of the Fund.

#### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned 6.66%, underperforming the 6.98% return of the Bloomberg Barclays 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, 2020, 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, 2020, the Fund's yield curve positioning, which was biased towards a yield curve flattening environment, detracted from performance. (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.) Additionally, the Fund's exposures to structured products, which only partially recovered from the extreme levels witnessed in March 2020, ultimately detracted from returns. The Fund's emerging-market exposures, which included both local currency and U.S. dollar-denominated positions, were a meaningful detractor from performance over the period. Local currency exposures led the emerging markets' underperformance, given a generally stronger U.S. dollar (USD) relative to most currencies.

In aggregate, the Fund's top-down macro strategies had a largely positive impact on performance. For most of the period, the Fund had more interest rate exposure (duration) than the benchmark, which was a significant contributor to returns, as interest rates fell meaningfully from the beginning to the end of the reporting 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.)

In response to the COVID-19-induced economic shutdown, policymakers in the U.S., the eurozone, the U.K., and elsewhere rushed to introduce extraordinary amounts of fiscal and monetary stimulus packages to support both impacted individuals and broad swaths of their national economies. These actions helped propel corporate credit spreads tighter and sustain a rally in risk assets, which lasted until September, when risk assets experienced an additional bout of volatility. Against this backdrop, the Fund's exposures to both investment-grade and high-yield credit contributed positively to performance as spreads tightened considerably. (Credit spreads represent the difference in yields between nearly identical bonds with comparable maturities, but different quality ratings.) During the reporting period, the Fund's allocation to Treasury inflation-protected securities (TIPS) was also a positive, albeit a more modest contributor to performance, as breakeven inflation rates (i.e., the yield differential between nominal Treasuries and TIPS) rose over the period.

The Fund used derivative instruments mainly for hedging purposes, including adjusting duration and term structure exposures. Overall, the Fund's use of derivatives contributed positively to 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. Most derivatives are used for hedging, speculation, or both.

MassMutual Select Strategic Bond Fund - Portfolio Manager Report (Unaudited) (Continued)

#### Subadviser outlook

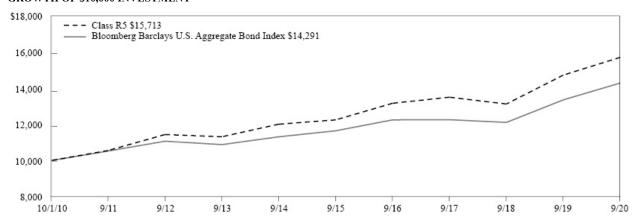
Western Asset's base case outlook is for an elongated, U-shaped global economic recovery. Fund management expects the battle against COVID-19 will take time; however, they are encouraged by signs of progress in the global race for a vaccine and the decline in global mortality rates. Forceful policy action to date has buoyed global economic activity and restored market functioning. Western Asset expects central banks could remain extraordinarily accommodative, especially in light of subdued global inflation pressures, and to remain so to support the recovery. That stated, Fund management is wary of the upcoming U.S. presidential election, post-Brexit trade negotiations, U.S.-China trade discussions and geopolitical tensions, as these all have the potential to disrupt economic and financial market activity. ("Brexit" – an abbreviation for "British exit" – refers to the United Kingdom's withdrawal from the European Union on January 31, 2020.) Given these uncertainties, Fund management has positioned the Fund to help withstand further market volatility, yet remain flexible enough to capture potentially favorable value opportunities as they appear.

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

MassMutual Select Strategic Bond Fund	
Portfolio Characteristics	
(% of Net Assets) on 9/30/20	
Corporate Debt	38.6%
U.S. Government Agency Obligations and Instrumentalities	21.6%
U.S. Treasury Obligations	16.4%
Non-U.S. Government Agency Obligations	9.6%
Sovereign Debt Obligations	8.3%
Bank Loans	4.8%
Municipal Obligations	0.1%
Purchased Options	0.0%
Total Long-Term Investments	99.4%
Short-Term Investments and Other Assets and Liabilities	0.6%
Net Assets	100.0%

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

#### **GROWTH OF \$10,000 INVESTMENT**



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 09/30/2020)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	04/01/2014	6.70%	5.19%		4.76%
Class R5	12/31/2004	6.66%	5.10%	4.62%	
Service Class	12/31/2004	6.53%	4.98%	4.52%	
Administrative Class	12/31/2004	6.40%	4.89%	4.40%	
Class R4	04/01/2014	6.29%	4.74%		4.30%
Class A	12/31/2004	6.18%	4.64%	4.15%	
Class A (sales load deducted)*	12/31/2004	1.67%	3.73%	3.69%	
Class R3	12/31/2004	6.02%	4.47%	3.93%	
Bloomberg Barclays U.S. Aggregate Bond Index		6.98%	4.18%	3.64%	4.01%

<sup>\*</sup> 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 Select Diversified Value Fund – Portfolio Manager Report (Unaudited)

#### What is the investment approach of MassMutual Select 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, 2020.

#### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned -7.75%, underperforming the -5.03% 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, 2020, 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, 2020, the Brandywine Global Fund component holdings within the financial sector were the greatest detractors from performance for the period. The Fund component held a particularly overweight position in banks, relative to the benchmark, due to attractive pricing. However, the pandemic led to concerns about reduced lending activity and potential borrower defaults in the low interest rate environment – resulting in banks being one of the weakest-performing groups for the period. The Brandywine Global component of the Fund was also hurt by an underweight stake in household products companies, such as Procter & Gamble, whose stock prices rose with substantially increased demand for sanitizing products. An overweight position in technology stocks contributed to full-period returns, with strong gains from two Fund component holdings – Broadcom, a semiconductor manufacturer; and technology giant Apple. Brandywine Global sold Apple in late 2019 because its price gains made the stock unattractive as a value investment.

Within the T. Rowe Price component of the Fund, stock selection in the industrial and business services sector was the biggest detractor from relative performance, led by Fund component holding Boeing. Shares of the company plummeted as investors reacted negatively to the prospect of a prolonged period of suppressed air travel due to the coronavirus pandemic. The financial sector also hampered relative results, due to weak stock choices. Fund component holding Wells Fargo underperformed against a challenging macroeconomic environment for financial institutions. Security selection in the health care sector also weighed on relative performance, led by CVS Health and Becton, Dickinson & Company, Fund component holdings that underperformed. On the positive side, the information technology sector was the largest relative contributor, due to stock selection as well as a beneficial overweight allocation. Shares of Fund component holding Qualcomm improved from the first-quarter sell-off and were up for the 12-month period, stemming from a favorable earnings report, which exceeded market expectations, and an announced long-term global patent license agreement with Chinese communications giant Huawei Technologies. The real estate sector also contributed to relative results for the period, driven by a favorable underweight allocation.

#### Subadviser outlook

Brandywine Global notes that uncertainty is high surrounding the pandemic's future course and the approaching U.S. elections. Despite this uncertainty, the broad U.S. stock market has recovered all its spring 2020 losses from the COVID-19 surprise, though value stocks as a group remain well below their previous highs. As a result, the price spread between value and growth stocks, on some valuation measures, is greater now than during the 1999-2000 technology bubble. Value stocks provided significant outperformance in the years that followed, as growth stocks retreated from their unsustainably high price levels. Brandywine Global believes that its component of the Fund is positioned to potentially benefit should a similar surge in value stocks recur.

MassMutual Select Diversified Value Fund - Portfolio Manager Report (Unaudited) (Continued)

T. Rowe Price notes that investors face an exceptionally uncertain environment in the final months of 2020. While the economic recovery is continuing, its pace appears to be slowing, and most observers agree that some additional stimulus will be needed to speed the recovery. However, the prospects of a broad-based fiscal package seemed to waver at the end of the third quarter, particularly as the controversy over the replacement of Justice Ruth Bader Ginsburg on the Supreme Court has heightened political tensions. T. Rowe Price believes that not all of the current "risks" apparent in the market are on the downside. Firms and individuals continue to benefit from record-low interest rates, and many consumers appear to have increased spending as they grow more confident. T. Rowe Price believes the biggest boost to confidence could come from a successful coronavirus vaccine, as well as effective and widely available treatments for COVID-19. The timing of a commercial rollout of a vaccine and what proportion of the population will choose to take it remain open questions for investors.

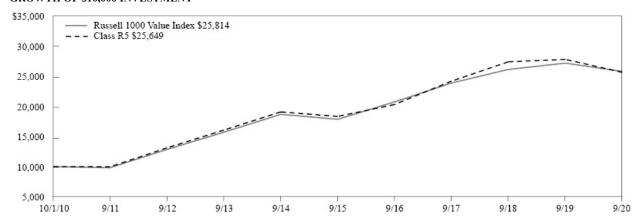
## MassMutual Select Diversified Value Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Select	
Diversified Value Fund	!
Largest Holdings	
(% of Net Assets) on 9/30/	/20
Comcast Corp. Class A	3.0%
P Morgan Chase & Co.	2.6%
Johnson & Johnson	2.5%
United Parcel Service, Inc. Class B	2.4%
Verizon Communications, Inc.	2.2%
Cisco Systems, Inc.	2.1%
ntel Corp.	2.0%
Philip Morris International, Inc.	1.9%
Bank of America Corp.	1.9%
Merck & Co., Inc.	1.9%
	22.5%

MassMutual Select	
Diversified Value Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Consumer, Non-cyclical	23.3%
Financial	21.8%
Industrial	13.7%
Technology	11.3%
Communications	11.0%
Utilities	5.0%
Basic Materials	3.9%
Consumer, Cyclical	3.7%
Energy	3.6%
Mutual Funds	3.1%
Total Long-Term Investments	100.4%
Short-Term Investments and Other Assets and Liabilities	(0.4)%
Net Assets	100.0%

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

#### **GROWTH OF \$10,000 INVESTMENT**



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 09/30/2020)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	04/01/2014	-7.64%	7.07%		5.49%
Class R5	10/15/2004	-7.75%	6.96%	9.88%	
Service Class	10/15/2004	-7.88%	6.86%	9.76%	
Administrative Class	10/15/2004	-7.99%	6.74%	9.65%	
Class R4	04/01/2014	-8.14%	6.59%		5.02%
Class A	10/15/2004	-8.22%	6.49%	9.36%	
Class A (sales load deducted)*	10/15/2004	-13.27%	5.29%	8.75%	
Class R3	10/15/2004	-8.38%	6.31%	9.13%	
Russell 1000 Value Index		-5.03%	7.66%	9.95%	5.88%

<sup>\*</sup> 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 Select Fundamental Value Fund – Portfolio Manager Report (Unaudited)

#### What is the investment approach of MassMutual Select 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 50% of the Fund's portfolio; and Barrow, Hanley, Mewhinney & Strauss, LLC (Barrow Hanley), which was responsible for approximately 50% of the Fund's portfolio, as of September 30, 2020.

#### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned -8.68%, underperforming the -5.03% return of the Russell 1000<sup>®</sup> 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, 2020, 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, 2020, within the Boston Partners component of the Fund, less-than-favorable stock selection in the financial and health care sectors detracted from performance – although this was offset by overweight positioning, relative to the benchmark, in the health care and materials sectors and an underweight stake in the real estate sector. Within the financial sector, Boston Partners' overweight allocation to banks, including Fund component holdings Wells Fargo, Bank of America Corp., and Citigroup Inc., hampered relative returns. Within the health care sector, limited exposure to large-cap biotechnology and diagnostics companies, which rallied on hopes of finding a vaccine and new testing kits for COVID-19, detracted from relative performance. An underweight position in Fund component holding Johnson & Johnson also hurt performance on a relative basis. The primary contributors to relative performance came from the information technology, materials, and industrial sectors. Within information technology, semiconductor companies Lam Research Corp., KLA Corp., and Applied Materials Inc. were three Fund component holdings that outperformed, relative to the benchmark, as stronger-than-expected semiconductor demand was expected to lead to higher capital spending. Within the materials sectors, Fund component holdings Barrick Gold Corp. and Yamana Gold Inc. added value in the defensive environment. Within industrial, machinery firms Deere & Company and Cummins Inc. were two Fund component holdings that aided relative returns, as both companies reported better-than-expected quarterly earnings and sales results.

Within the Fund's Barrow Hanley component, stock selection and a small overweight to the energy sector, along with an underweight to, and stock selection within, the consumer staples sector, detracted from relative performance. Fund component holdings within the financial sector also hindered performance. Across sectors, Fund component holdings that detracted the most from full-year results included commercial real estate company Simon Property Group, multinational energy company Phillips 66, bank holding company New York Community Bancorp, cruise line Royal Caribbean, and manufacturer and marketer of transportation fuels Valero Energy. Barrow Hanley eliminated Simon Property Group and Royal Caribbean from the Fund component during the period. On the upside, Barrow Hanley's allocation and stock selection within the information technology and consumer discretionary sectors, as well as its stake in the materials sector, added to relative performance. Fund component holdings that were the top relative contributors to results included home improvement company Lowe's, health care company UnitedHealth Group, Deere & Company, a manufacturer of agricultural, construction, and forestry machinery, semiconductor company Marvell Technology Group, and Stanley Black & Decker, Inc., a manufacturer of industrial tools and household hardware and provider of security products.

#### Subadviser outlook

Besides the loss of economic momentum, Boston Partners believes that the biggest risk factor facing the market remains the path the coronavirus takes, as the recent back-to-school and back-to-college news seems to be highly correlated with an increased level of infections that cannot be fully explained by the increase in testing being done. COVID hot spots are once again increasing both in the U.S. and internationally. Bottom line, until a vaccine or effective treatment is available to the masses, Boston Partners' view is that the market will be prone to heightened volatility, which in the near term will be exacerbated by the forthcoming U.S. presidential election.

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

In Barrow Hanley's opinion, the "low-inflation and low interest rates in perpetuity" crowd that drove markets to levels above the late '90s technology bubble felt the tremor of a well-needed reality (i.e., valuation) check. Barrow Hanley believes that conditions are changing to favor value over growth investing and the downturn in September, as brutal as it seemed, may be the precursor to a long "value" run that is typical after a growth run.

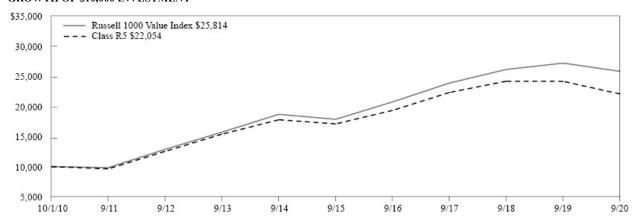
# MassMutual Select Fundamental Value Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Select	
Fundamental Value Fu	ınd
Largest Holdings	
(% of Net Assets) on 9/3	70/20
JP Morgan Chase & Co.	3.0%
Johnson & Johnson	2.6%
Deere & Co.	2.2%
Berkshire Hathaway, Inc. Class B	2.0%
Medtronic PLC	2.0%
Chubb Ltd.	1.9%
Lowe's Cos., Inc.	1.9%
UnitedHealth Group, Inc.	1.8%
Cigna Corp.	1.8%
DuPont de Nemours, Inc.	1.7%
	20.9%

MassMutual Select	
Fundamental Value Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Financial	24.2%
Consumer, Non-cyclical	21.9%
ndustrial	13.4%
Consumer, Cyclical	11.2%
Technology	8.9%
Communications	5.7%
Basic Materials	5.3%
Utilities	4.2%
Energy	4.1%
Total Long-Term Investments	98.9%
Short-Term Investments and Other Assets and Liabilities	1.1%
Net Assets	100.0%

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

#### **GROWTH OF \$10,000 INVESTMENT**



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 period	s ended 09/30/2020)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 11/15/2010	Since Inception 04/01/2014
Class I	11/15/2010	-8.51%	5.35%		8.01%	
Class R5	12/31/2001	-8.68%	5.23%	8.23%		
Service Class	12/31/2001	-8.76%	5.14%	8.14%		
Administrative Class	12/31/2001	-8.78%	5.05%	8.02%		
Class R4	04/01/2014	-8.98%	4.89%			3.75%
Class A	12/31/2001	-9.06%	4.77%	7.75%		
Class A (sales load deducted)*	12/31/2001	-14.06%	3.59%	7.14%		
Class R3	12/31/2002	-9.23%	4.61%	7.52%		
Russell 1000 Value Index		-5.03%	7.66%	9.95%	9.59%	5.88%

<sup>\*</sup> 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<sup>®</sup> 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<sup>®</sup> 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, 2020?

The Fund's Service Class shares returned 14.80%, underperforming the 15.15% 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, 2020, 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.

The top-performing sectors within the Index were information technology and consumer discretionary, returning 47.22% and 28.90%, respectively. These sectors rebounded after the March downturn and have benefited from the fiscal stimulus as well as the new "stay at home" environment that resulted from the pandemic.

Energy and financial were the worst-performing sectors for this period, with returns of -45.24% and -11.87%, respectively. Energy was hit hard in April, as front month oil futures briefly dropped below zero for the first time. Going into the winter months, concerns about lack of demand for oil caused another dip during the month of September. Financials struggled due to low interest rates and an economy that was shut down mid-period and recovered slowly.

For the year ended September 30, 2020, U.S. equities encountered significant volatility, but ended the third quarter of 2020 well above their 2019 third-quarter levels. Equities hit all-time highs in the early months of 2020, with increasing consumer confidence and three interest rate cuts by the U.S. Federal Reserve Board driving the rally. That quickly changed, as a worldwide pandemic shook global markets, and U.S. equities saw a drawdown of more than 30% in less than a month. Following the initial shock, markets rebounded in the second quarter, mostly erasing the losses from the early March slide. This rally was supported by record-level global fiscal stimulus and central banks that opted for extremely accommodative monetary policy. Despite an economy that looked to be adjusting slowly to living alongside the COVID-19 virus, markets continued to rally in the third quarter, setting new all-time highs, with technology leading the way. In the last month of the third quarter, weigh on investors' minds.

#### Subadviser outlook

NTI believes that, looking forward, a mix of elevated valuations, slow growth, lower profit margins, and broader focus on stakeholders versus just shareholders will subdue equity returns. In NTI's view, emerging markets, carrying attractive valuations but also much uncertainty, could slightly outpace developed markets. NTI believes that developed market equity returns could range from 3.8% (Japan) to 5.8% (Australia) – all below historical averages

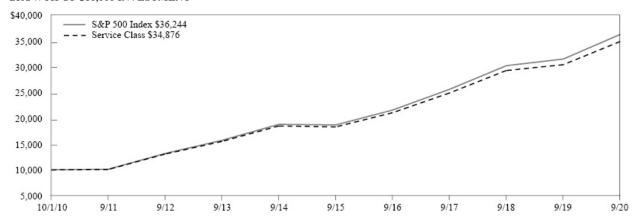
# MM S&P 500® Index Fund – Portfolio Manager Report (Unaudited) (Continued)

MM S&P 500 Index Fund Largest Holdings	
(% of Net Assets) on 9/30/20	
Apple, Inc.	6.7%
Microsoft Corp.	5.7%
Amazon.com, Inc.	4.8%
Facebook, Inc. Class A	2.3%
Alphabet, Inc. Class A	1.6%
Alphabet, Inc. Class C	1.5%
Berkshire Hathaway, Inc. Class B	1.5%
Johnson & Johnson	1.4%
The Procter & Gamble Co.	1.2%
Visa, Inc. Class A	1.2%
	27.9%

MM S&P 500 Index Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Technology	23.7%
Consumer, Non-cyclical	22.0%
Communications	16.7%
Financial	13.9%
Consumer, Cyclical	8.3%
Industrial	8.1%
Utilities	3.0%
Basic Materials	2.1%
Energy	2.0%
Mutual Funds	0.1%
Total Long-Term Investments	99.9%
Short-Term Investments and Other Assets and Liabilities	0.1%
Net Assets	100.0%

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

#### **GROWTH OF \$10,000 INVESTMENT**



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 period	*					
	Inception Date				Since Inception	
	of Class	1 Year	5 Years	10 Years	12/07/2011	04/01/2014
Class I	12/07/2011	15.04%	14.02%		14.01%	
Class R5	05/01/2001	14.93%	13.91%	13.51%		
Service Class	03/01/1998	14.80%	13.74%	13.31%		
Administrative Class	03/01/1998	14.68%	13.63%	13.23%		
Class R4	03/01/1998	14.51%	13.45%	13.04%		
Class A	04/01/2014	14.40%	13.35%			10.89%
Class A (sales load deducted)*	04/01/2014	8.11%	12.07%			9.92%
Class R3	12/31/2002	14.25%	13.18%	12.73%		
S&P 500 Index		15.15%	14.15%	13.74%	14.13%	11.67%

<sup>\*</sup> 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.

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

#### What is the investment approach of MassMutual Select 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 25% of the Fund's portfolio; and Wellington Management Company LLP (Wellington Management), which managed approximately 75% of the Fund's portfolio, as of September 30, 2020.

#### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned 2.61%, underperforming, by a wide margin, the 16.01% return of the Russell  $1000^{\text{®}}$  Index (the "benchmark"), which measures the performance of the large-cap segment of U.S. equity securities. It is a subset of the Russell  $3000^{\text{®}}$  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, 2020, 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 consumer discretionary and consumer staples sectors. Sector allocation, a residual of the Fund component's bottom-up stock selection process, also detracted from relative performance for the year ended September 30, 2020. An underweight to information technology, relative to the benchmark, and an overweight to consumer staples detracted most. This was partially offset by Wellington Management's lack of exposure to energy and utilities. Top relative detractors for the period included not holding Apple and an overweight stake in Chubb. Shares of Apple rose over the period on strong earnings as the continued reopening of its retail stores and the release of in-house chips to replace Intel processors in future Mac computers provided additional tailwinds. Shares of property and casualty insurance provider Chubb fell sharply in the first quarter of 2020, as the impact from COVID-19 took full effect on this Fund component holding. Underperformance was driven by poor investment results, COVID-19 exposure reductions in premiums, and lackluster performance in the company's consumer business. Fund component holdings that were among the top relative contributors for the period were UnitedHealth Group and Nike. After falling in the first quarter amid the broader market sell-off, shares of UnitedHealth Group rebounded on strong second-quarter earnings, with earnings-per-share coming in at \$7.12, up 100% year-over-year and beating the consensus of \$5.28. Nike reported earnings for its fiscal first quarter that doubled consensus expectations, driven by both better revenues and increasing profit margins. Marketing and endorsement expenses fell 34% year-over-year, mostly via a sharp reduction in live sporting events and related spend.

For the T. Rowe Price component of the Fund, stock selection within the industrial and business services sector was the top detractor for the period, driven by Boeing, the Fund component holding that underperformed the most. Shares of the company plummeted as investors reacted negatively to the prospect of a prolonged period of suppressed air travel due to the coronavirus pandemic. As fears of some of the worst-case scenarios with the coronavirus faded, Boeing rebounded off a low relative valuation during the second quarter, but still trailed for the one-year period. Stock choices like Wells Fargo in the financial sector also detracted from relative performance. Shares of this Fund component holding underperformed against a challenging macroeconomic environment for financial institutions. Within the health care sector, Fund component holdings CVS Health and Becton, Dickinson & Company further hampered relative results. On the positive side, strong security selection, coupled with a beneficial overweight allocation to the information technology sector contributed to relative returns. Shares of Fund component holding Qualcomm regained from the first-quarter sell-off and were up for the 12-month period, stemming from a favorable earnings report and an announced long-term global patent license agreement. An underweight allocation to the real estate sector also had a positive impact on the Fund component's relative results.

The T. Rowe Price component of the Fund held rights and 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 Select Equity Opportunities Fund – Portfolio Manager Report (Unaudited) (Continued)

#### Subadviser outlook

Looking toward the end of the calendar year and into 2021, Wellington Management's stance remains cautious. As Election Day approaches, the stakes seem to mount, as do the risks. The current positive market narrative seems obvious and intact, but the risks seem equally obvious to Wellington Management and, in their view, are likely to be more accurately discounted as time moves on. Wellington Management believes that markets could be dangerously at risk or, at a minimum, poised to find additional leadership. At the end of the period, the Wellington Management Fund component held its largest overweight positions in the consumer staples and industrial sectors, and its greatest underweight stakes in the information technology and communication services sectors.

T. Rowe Price expects volatility to continue until there is a medical solution to the pandemic. It believes that the market appears to have priced in continued good news with respect to the coronavirus and to have abandoned many of the worst-case fears that initially surfaced. At the same time, T. Rowe Price believes that the market has been myopic in nature, bidding up names that are seen as benefiting from accelerated secular trends and leaving behind names that may be facing temporary stress or are directly impacted by pandemic shutdowns. Looking forward, T. Rowe Price believes that this bifurcation in the market has created attractive long-term opportunities for fundamental investors. T. Rowe Price continues to review each name in its Fund component with a keen focus on the balance sheet and potential risks should the pandemic continue longer than expected.

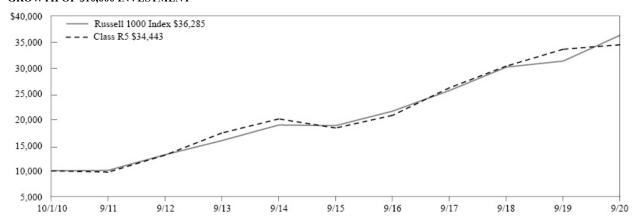
## MassMutual Select Equity Opportunities Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Se	elect
Equity Opportunities	es Fund
Largest Holdin	
(% of Net Assets) or	1 9/30/20
Johnson & Johnson	4.2%
NIKE, Inc. Class B	4.2%
McDonald's Corp.	4.1%
The Coca-Cola Co.	3.8%
UnitedHealth Group, Inc.	3.8%
Colgate-Palmolive Co.	3.5%
Chubb Ltd.	3.5%
Microsoft Corp.	3.5%
Medtronic PLC	3.4%
American Express Co.	3.3%
	37.3%

MassMutual Select	
Equity Opportunities Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Consumer, Non-cyclical	34.9%
Financial	18.4%
Industrial	14.1%
Consumer, Cyclical	11.9%
Technology	6.5%
Basic Materials	6.3%
Utilities	2.6%
Communications	2.1%
Energy	1.7%
Mutual Funds	1.0%
Total Long-Term Investments	99.5%
Short-Term Investments and Other Assets and Liabilities	0.5%
Net Assets	100.0%

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

#### **GROWTH OF \$10,000 INVESTMENT**



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.

	Inception Date				Since Inception	Since Inception
	of Class	1 Year	5 Years	10 Years	11/15/2010	04/01/2014
Class I	11/15/2010	2.73%	13.59%		12.52%	
Class R5	05/01/2000	2.61%	13.48%	13.16%		
Service Class	05/01/2000	2.52%	13.37%	13.05%		
Administrative Class	05/01/2000	2.42%	13.25%	12.92%		
Class R4	04/01/2014	2.28%	13.09%			9.41%
Class A	05/01/2000	2.19%	12.97%	12.63%		
Class A (sales load deducted)*	05/01/2000	-3.43%	11.69%	12.00%		
Class R3	12/31/2002	2.00%	12.79%	12.39%		
Russell 1000 Index		16.01%	14.09%	13.76%	13.32%	11.53%

<sup>\*</sup> 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 Fundamental Growth Fund - Portfolio Manager Report (Unaudited)

#### What is the investment approach of MassMutual Select 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, 2020. Effective March 2, 2020, Westfield was added as a co-subadviser of the Fund.

#### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned 23.34%, outperforming the 23.23% 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. The Fund underperformed the 37.53% 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.

For a discussion on the economic and market environment during the 12-month period ended September 30, 2020, please see the Economic and Market Overview, beginning on page 3.

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

Strong security selection within the information technology, health care, and communication services sectors was the primary performance driver for the Wellington Management component of the Fund. This was partially offset by weaker security selection within the consumer discretionary and industrial sectors. Sector allocation, a residual of Wellington Management's bottom-up stock selection process, also aided performance, driven by underweights to energy and materials and overweight to industrial and health care. Fund component holdings that were top contributors to relative performance during the period included Square and DocuSign. Shares of mobile payments provider Square rose during the period, after the company reported better-than-expected second-quarter results and strong growth. DocuSign, an esignature software company, rose over the period after releasing first-quarter results that topped earnings and revenue expectations. Remote-working-related tailwinds continued to benefit DocuSign as demand for digitization of agreement workflows has been pulled forward. Wellington Management eliminated both positions following their strong performances. Fund component holdings that were top detractors from relative returns during the period included Hexcel and Aramark. Shares of Hexcel, a manufacturer of advanced composite materials for aerospace, declined over the period. The company continued to feel the negative effects of the pandemic as commercial aerospace sales significantly declined due to reduced travel demand, prompting aerospace manufacturers to curb production. Aramark, a provider of uniform and food services to a broad base of customers, also declined on sharp slowdowns for many food services companies due to the fallout of the coronavirus pandemic.

Westfield became a subadviser of the Fund on March 2, 2020. For the period from March 2, 2020 to September 30, 2020, Fund component holdings in the materials and health care sectors helped to drive the Fund component's positive relative performance, although this was offset somewhat by lagging Fund component holdings within the consumer discretionary and industrial sectors. Within the materials sector, Westfield benefited from its underweight exposure, relative to the benchmark, to defensive investments. In the health care sector, Fund component holdings within health care equipment & supplies were particularly notable. Specifically, DexCom, Inc., a leader in continuous glucose monitoring, helped to drive Westfield's outperformance. On the other hand, in consumer discretionary, COVID-19 shifted consumer spending patterns toward home-related categories and away from travel and entertainment, while the adoption of e-commerce spending accelerated dramatically. The largest sources of relative weakness for Westfield were within the Fund component's experiences/travel and specialty retail holdings, along with an underweight to some higher-valuation retail internet names. Specifically, Fund component holdings hotel operator Hilton Worldwide Holdings Inc. and casino operator Eldorado Resorts Inc. (which merged with Caesars Entertainment, Inc. on July 20, 2020) were laggards. Given the near-term headwinds, Westfield eliminated both positions from its Fund component. Turning to the industrial sector, strength in transports and building products was offset by weakness in aerospace & defense. Dramatic airline capacity cuts, an uncertain timeline for the return of both business and personal travel, and the rising likelihood of a Democratic administration weighing on defense spending sentiment all contributed to the challenges faced by the group – and the Fund component holdings in this space were not immune.

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

#### Subadviser outlook

The Wellington Management Fund component remains balanced between short-term winners and losers, with a little more weight added to Fund component holdings that have underperformed over the past 12 months, while trimming the winners at extreme valuation highs. In Fund management's view, there is a large number of terrific alpha opportunities in the marketplace and Wellington Management will continue to leverage volatility in the coming months in an attempt to position their Fund component for success in the coming two- to three-year period. As of September 30, 2020, Wellington Management held its largest overweight allocations to the consumer discretionary, industrial, and financial sectors, and its greatest underweight stakes in the information technology, consumer staples, and materials sectors.

Looking forward, Westfield believes that the market could potentially rotate away from momentum and high price/earnings growth stocks to the strongest earnings recovery stocks, likely found in more cyclical growth sectors. Westfield has seen evidence of broadening participation across equity markets, in addition to indications of improving economic conditions, which makes Westfield more inclined to tilt portfolios on the margin towards smaller companies and those more leveraged to the economic recovery, in the event that they could fare better in such an environment. However, Westfield continues to maintain balanced exposure across the risk spectrum from cyclical laggards, high-quality operators with strong balance sheets, and secular growers as appropriate – on the belief that such a balanced approach leads to more consistent results over time and across market environments.

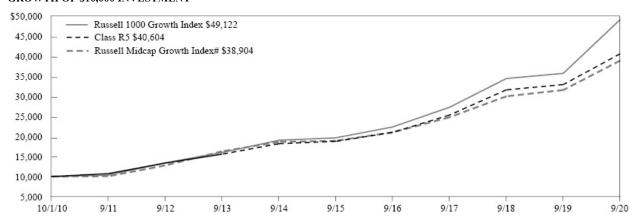
## MassMutual Select Fundamental Growth Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Select	
Fundamental Growth Fi	und
Largest Holdings	
(% of Net Assets) on 9/3	0/20
IDEXX Laboratories, Inc.	4.2%
Mettler-Toledo International, Inc.	3.4%
SS&C Technologies Holdings, Inc	3.0%
ICON PLC	2.6%
BWX Technologies, Inc.	2.6%
SBA Communications Corp.	2.4%
Burlington Stores, Inc.	2.4%
Seattle Genetics, Inc.	2.4%
J.B. Hunt Transport Services, Inc.	2.4%
TransUnion	2.3%
	27.7%

MassMutual Select	
Fundamental Growth Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Consumer, Non-cyclical	30.2%
Technology	25.8%
Industrial	15.7%
Consumer, Cyclical	12.9%
Financial	7.9%
Communications	6.8%
Basic Materials	1.4%
Mutual Funds	0.1%
Total Long-Term Investments	100.8%
Short-Term Investments and Other Assets and Liabilities	(0.8)%
Net Assets	100.0%

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

#### **GROWTH OF \$10,000 INVESTMENT**



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 09/30/2020)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	04/01/2014	23.25%	16.76%		14.10%
Class R5	05/01/2000	23.34%	16.67%	15.04%	
Service Class	05/01/2000	23.35%	16.55%	14.94%	
Administrative Class	05/01/2000	23.24%	16.45%	14.80%	
Class R4	04/01/2014	22.94%	16.28%		13.64%
Class A	05/01/2000	22.92%	16.15%	14.50%	
Class A (sales load deducted)*	05/01/2000	16.16%	14.85%	13.86%	
Class R3	12/31/2002	22.70%	16.01%	14.27%	
Russell Midcap Growth Index#		23.23%	15.53%	14.55%	12.60%
Russell 1000 Growth Index		37.53%	20.10%	17.25%	16.84%

st 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.

MassMutual Select Blue Chip Growth Fund - Portfolio Manager Report (Unaudited)

#### What is the investment approach of MassMutual Select 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, 2020.

#### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned 34.84%, underperforming the 37.53% return of the Russell 1000<sup>®</sup> 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. The Fund outperformed the 15.15% return of the S&P 500<sup>®</sup> 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, 2020, 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, the information technology sector was the largest detractor from relative performance, due to both less-than-favorable stock selection as well as an unfavorable underweight allocation to the sector, relative to the benchmark. The Fund component's underweight position in Apple hurt, as the stock outperformed the benchmark during the reporting period, driven by strength from its Mac and iPad products, which benefited from work- and learn-at-home dynamics, and better-than-feared iPhone results. Stock selection in the health care sector further detracted from relative results. Within the sector, Stryker was one Fund component holding that weighed on the Fund component's relative returns. Communication services was the biggest relative contributor for the T. Rowe Price component of the Fund, thanks to favorable stock selection. Fund component holding Tencent proved beneficial, as its shares traded higher as mobile gaming benefited from an increasing number of consumers entertaining themselves at home. The consumer staples sector also contributed due to the Fund component's significantly underweight allocation to that market segment. Certain pockets of the sector suffered due to the spread of stay-at-home orders early in the second quarter.

Within the Loomis Sayles component of the Fund, stock selection in the information technology, consumer discretionary, energy, financial, and consumer staples sectors, as well as the Fund component's allocations to the information technology, consumer staples, energy, financial, and communication services sectors, detracted from relative returns. Stock selection in the industrial and health care sectors, as well as allocations in the industrial and consumer discretionary sectors, contributed most positively to the Fund component's relative return. Fund component holding Coca-Cola, the world's leading owner and marketer of non-alcoholic beverage brands, detracted, due to the timing of the elimination of the Coca-Cola position in March 2020. French multinational packaged goods company Danone also underperformed, due to the erosion of brand equity and pricing power in its European fresh dairy market segment. Loomis Sayles eliminated its position in Danone during the period. Turning to the positive, Fund component holdings Amazon and Nvidia were the top contributors to Loomis Sayles' performance. Online retailer Amazon reported strong fundamentals, as shown by continued market share gains. Revenue growth during the year exceeded consensus expectations and accelerated following the company's 2019 rollout of one-day Prime shipping, and again following the outbreak of COVID-19. Nvidia is the world leader in visual computing, which enables computers to produce and utilize highly realistic 3D graphic imagery and models. The company reported better-than-expected results, driven by recovery in its gaming business and rising demand in its data center business.

#### Subadviser outlook

T. Rowe Price notes that investors face an exceptionally uncertain environment in the final months of 2020. While the economic recovery is continuing, the pace of the recovery appears to be slowing, and most observers agree that some additional stimulus will be needed to speed the recovery. However, T. Rowe Price believes that not all of the current "risks" apparent in the market are on the downside. Firms and individuals continue to benefit from record-low interest rates, and many consumers appear to have increased

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

spending as they grow more confident. T. Rowe Price believes the biggest boost to confidence could come from a successful coronavirus vaccine, as well as effective and widely available treatments for COVID-19. The timing of a commercial rollout of a vaccine and what proportion of the population will choose to take it remain open questions for investors.

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 an overweight stake in the industrial, communication services, consumer discretionary, financial, health care, energy, and consumer staples sectors – and an underweight allocation to the information technology sector. Loomis Sayles held no positions in the real estate or materials sectors.

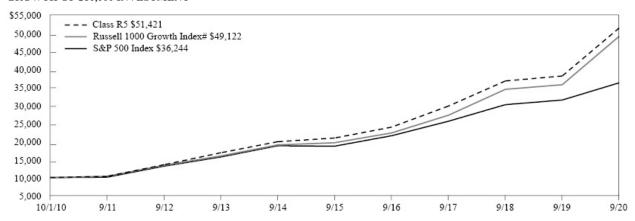
# MassMutual Select Blue Chip Growth Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Select	
Blue Chip Growth Fund	
Largest Holdings	
(% of Net Assets) on 9/30/20	
Amazon.com, Inc.	9.6%
Facebook, Inc. Class A	6.2%
Alibaba Group Holding Ltd. Sponsored ADR	5.5%
Microsoft Corp.	4.7%
Visa, Inc. Class A	4.3%
salesforce.com, Inc.	3.6%
Alphabet, Inc. Class C	3.5%
NVIDIA Corp.	3.4%
Apple, Inc.	2.6%
Autodesk, Inc.	2.0%
	45.4%

MassMutual Select	
Blue Chip Growth Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Communications	33.5%
Technology	29.2%
Consumer, Non-cyclical	19.5%
Financial	7.5%
Industrial	5.2%
Consumer, Cyclical	4.2%
Basic Materials	0.3%
Energy	0.3%
Mutual Funds	0.1%
Utilities	0.0%
Total Long-Term Investments	99.8%
Short-Term Investments and Other Assets and Liabilities	0.2%
Net Assets	100.0%

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

## **GROWTH OF \$10,000 INVESTMENT**



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 09/30/2020)	Inception Date				Cinas Insantian
	of Class	1 Year	5 Years	10 Years	Since Inception 04/01/2014
Class I	04/01/2014	34.96%	19.79%		16.84%
Class R5	06/01/2001	34.84%	19.66%	17.79%	
Service Class	06/01/2001	34.72%	19.54%	17.68%	
Administrative Class	06/01/2001	34.60%	19.43%	17.55%	
Class R4	04/01/2014	34.34%	19.25%		16.31%
Class A	06/01/2001	34.23%	19.12%	17.26%	
Class A (sales load deducted)*	06/01/2001	26.84%	17.78%	16.60%	
Class R3	12/31/2002	34.06%	18.96%	17.03%	
Russell 1000 Growth Index#		37.53%	20.10%	17.25%	16.84%
S&P 500 Index		15.15%	14.15%	13.74%	11.67%

<sup>\*</sup> 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.

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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 Select Growth Opportunities Fund – Portfolio Manager Report (Unaudited)

## What is the investment approach of MassMutual Select 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 55% of the Fund's portfolio; and Jackson Square Partners, LLC (Jackson Square), which was responsible for approximately 45% of the Fund's portfolio, as of September 30, 2020.

#### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned 45.51%, significantly outperforming the 37.53% 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, 2020, 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, 2020, the Sands Capital component of the Fund benefited from favorable security selection, as businesses in the communication services and information technology industries advanced in 2020's more socially distant world. On a relative basis, the Fund component holdings that were the largest contributors to performance included Sea, a leading ecommerce and gaming platform in Southeast Asia; Netflix, the world's largest video streaming service; ServiceNow, an enterprise workflow automation software provider; Match Group, a leader in online dating applications; and Square, an innovative financial services provider. Conversely, the Fund component holdings that were the largest relative detractors from performance included leading global software provider Microsoft; Texas Instruments, the largest analog semiconductor manufacturer; Uber Technologies, the world's leading mobility technology platform; Salesforce, a leading enterprise software provider; and Abiomed, which develops medical devices targeting heart conditions.

The holdings within the Jackson Square component of the Fund that were the top contributors to performance included Twilio, Inc.; PayPal Holdings, Inc. (a worldwide online payments system operator); and Domino's Pizza, Inc. Top-performing Twilio is a cloud communications platform that focuses on instant digital communication with customers and employees across any medium in any geography, which is an extremely complex problem that businesses increasingly need to solve. Twilio is the leading communications-as-a-service platform, at multiples the size of its next largest competitor. On the downside, the Fund component holdings that hampered performance the most included Constellation Brands, Inc.; Hasbro, Inc.; and Dollar Tree, Inc. Top detractor Constellation Brands, a producer and marketer of beer, wine, and spirits, suffered from investor concerns over the company's leverage profile on the balance sheet as well as the Mexican government's unexpected anti-business initiatives. Jackson Square sold its position in Constellation Brands during the period.

### Subadviser outlook

Sands Capital believes that COVID-19 has the potential to have a lasting impact on economies, business spaces, behaviors, and geopolitics. They believe that it is accelerating existing trends, ending others, and could widen the gap between market winners and losers. On the other hand, Sands Capital believes that COVID-19 is unlikely to change the fact that investors need appropriate absolute returns to achieve their goals – and that leadership, innovation, and competitive advantage will distinguish the winning businesses even more in the years ahead.

In anticipation of the new fiscal year, Jackson Square has been focusing on taking advantage of the volatility in the stock market to purchase some securities at bigger discounts to intrinsic business value than have been in place since the global financial crisis over a decade ago. Jackson Square has also pruned the Fund component's portfolio to eliminate companies that were struggling with fundamentals and/or carried a larger amount of leverage than Jackson Square believed to be prudent during this crisis. Jackson Square plans to continue to remain vigilant in watching for market volatility that may give them additional opportunities to enhance and refine the portfolio. Jackson Square remains consistent in its long-term investment philosophy: to own what it views as strong secular growth companies with solid business models and competitive positions that have the potential to grow market share and to deliver shareholder value in a variety of market environments.

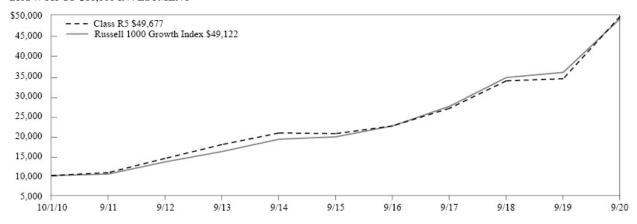
# MassMutual Select Growth Opportunities Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Select	
Growth Opportunities Fund	l
Largest Holdings	
(% of Net Assets) on 9/30/2	0
Amazon.com, Inc.	7.3%
Microsoft Corp.	5.9%
Visa, Inc. Class A	5.7%
Netflix, Inc.	5.5%
ServiceNow, Inc.	5.4%
Match Group, Inc.	4.3%
Sea Ltd.	4.2%
Twilio, Inc. Class A	3.6%
Adobe, Inc.	3.5%
Charter Communications, Inc. Class A	3.4%
	48.8%

30.7%
29.8%
20.7%
9.3%
4.7%
2.8%
0.6%
98.6%
1.4%
100.0%

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

## **GROWTH OF \$10,000 INVESTMENT**



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 period.	,					
	Inception Date	4 \$7	<b>= 3</b> 7	10.37	Since Inception	
	of Class	1 Year	5 Years	10 Years	12/07/2011	04/01/2014
Class I	12/07/2011	45.81%	19.57%		17.76%	
Class R5	05/01/2000	45.51%	19.43%	17.39%		
Service Class	05/01/2000	45.46%	19.32%	17.26%		
Administrative Class	05/01/2000	45.29%	19.19%	17.14%		
Class R4	04/01/2014	45.05%	19.01%			14.98%
Class A	05/01/2000	44.93%	18.90%	16.83%		
Class A (sales load deducted)*	05/01/2000	36.96%	17.56%	16.17%		
Class R3	12/31/2002	44.85%	18.74%	16.61%		
Russell 1000 Growth Index		37.53%	20.10%	17.25%	17.79%	16.84%

<sup>\*</sup> 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 Mid-Cap Value Fund – Portfolio Manager Report (Unaudited)

## What is the investment approach of MassMutual Select Mid-Cap Value Fund, and who is the Fund's subadviser?

The Fund seeks growth of capital over the long-term by investing primarily in equity securities of mid-capitalization companies that the Fund's subadviser believes 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 subadviser is American Century Investment Management, Inc. (American Century).

## How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned -7.96%, underperforming the -7.30% return of Russell Midcap<sup>®</sup> 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, 2020, 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, 2020, Fund holdings in the materials sector detracted from performance, as stock selection and the Fund's lack of exposure to the cyclical metals and mining industry (Newmont, in particular) hampered returns. The communication services sector proved detrimental, as stock selection within the sector and an underweight to the sector, relative to the benchmark, was a drag on the Fund's performance. The Fund's avoidance of the interactive media and services industry also hindered performance, as stay-at-home directives took hold and benefited companies that supported the new social distancing protocols.

Helping to drive the Fund's performance during the year was the Fund's underweight to the real estate sector. The Fund continued to hold a limited number of real estate stocks due to valuations that American Century believed to be extended. An overweight in the typically defensive consumer staples sector also benefited returns, as Fund holdings within the sector helped to drive the Fund's positive performance. Of particular note was food products company Conagra, which stood out as one of the primary beneficiaries of stay-at-home directives and surging grocery store sales. Additionally, the company continued to focus on reducing its leverage.

The Fund closed out the reporting period with an overweight allocation to the health care sector, the top-performing sector for the fiscal year. Fund holdings within the health care providers and services industry and the health care equipment and supplies industry made up the vast majority of the Fund's health care investments. Fund holding Hologic, a medical device company, outperformed due to significant sales for its new COVID-19 test. American Century trimmed its position in Hologic following the stock's outperformance.

The Fund 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.

#### Subadviser outlook

As 2021 approaches, American Century will continue to focus on earnings and quality, on the belief that the COVID-19 pandemic will continue to pressure earnings and dividends for many companies. It believes that other headwinds include escalating trade tensions with China, social unrest in the U.S., and the 2020 U.S. presidential election. While American Century believes the election is unlikely to be a crucial or lasting driver of the market, its view is that it could potentially cause investors to distort economic and company-specific fundamentals by not reflecting their underlying value or upside potential. Thus, American Century believes that the election season and other headwinds could provide opportunities to discover quality companies trading at attractive valuations. American Century plans to continue to conduct fundamental, bottom-up research in an effort to identify high-quality companies that have the potential to withstand these and other transitory headwinds.

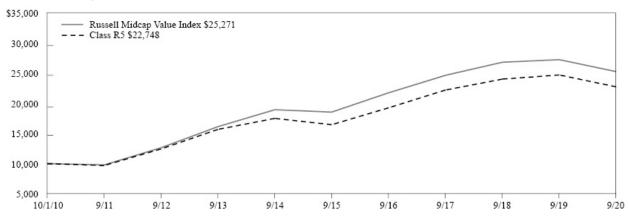
# MassMutual Select Mid-Cap Value Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Select	
Mid-Cap Value Fund	
Largest Holdings	
(% of Net Assets) on 9/30/20	
Zimmer Biomet Holdings, Inc.	3.0%
Northern Trust Corp.	2.9%
Chubb Ltd.	2.3%
Emerson Electric Co.	2.3%
iShares Russell Mid-Cap Value ETF	2.1%
Hubbell, Inc.	1.9%
Johnson Controls International PLC	1.8%
Universal Health Services, Inc. Class B	1.8%
Republic Services, Inc.	1.7%
Pinnacle West Capital Corp.	1.7%
	21.5%

MassMutual Select	
Mid-Cap Value Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Consumer, Non-cyclical	22.3%
Industrial	20.9%
Financial	18.9%
Consumer, Cyclical	11.6%
Utilities	8.3%
Technology	5.7%
Communications	3.6%
Energy	2.3%
Mutual Funds	2.3%
Basic Materials	1.3%
Total Long-Term Investments	97.2%
Short-Term Investments and Other Assets and Liabilities	2.8%
Net Assets	100.0%

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

## **GROWTH OF \$10,000 INVESTMENT**



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.

	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	-7.88%	6.79%		8.70%	
Class R5	08/29/2006	-7.96%	6.69%	8.57%		
Service Class	08/29/2006	-8.05%	6.58%	8.46%		
Administrative Class	08/29/2006	-8.19%	6.48%	8.32%		
Class R4	04/01/2014	-8.27%	6.33%			3.87%
Class A	08/29/2006	-8.41%	6.21%	8.06%		
Class A (sales load deducted)*	08/29/2006	-13.45%	5.01%	7.45%		
Class R3	08/29/2006	-8.53%	6.06%	7.85%		
Russell Midcap Value Index		-7.30%	6.38%	9.71%	9.87%	4.98%

<sup>\*</sup> 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 Small Cap Value Equity Fund – Portfolio Manager Report (Unaudited)

## What is the investment approach of MassMutual Select 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<sup>®</sup> 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, 2020.

### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned -14.38%, outperforming the -14.88% 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, 2020, please see the Economic and Market Overview, beginning on page 3.

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

Less-than-favorable security selection in the industrial, financial, and information technology sectors contributed to the Wellington Management Fund component's underperformance of its benchmark. Sector allocation, a residual of Wellington Management's bottom-up stock selection process, modestly contributed to performance. Overweight allocation to the industrial sector, relative to the benchmark, and an underweight stake in the financial sector contributed positively, while underweight allocation to the health care sector and a lack of exposure to communication services sector detracted from relative returns. Fund component holdings that were among the top relative detractors for the period included Kosmos Energy and RPT Realty. Share of Kosmos Energy, an American upstream oil company, fell sharply during the period after reporting weak fourth-quarter results and pressure by low oil prices caused by market concerns around the impact of COVID-19. Shares of RPT Realty, a real estate investment trust that owns and operates open-air shopping centers, fell over the period after having to draw down on a line of credit with uncertainties around the impact of COVID-19. Fund component holdings that were among the top relative contributors for the period were Saia and Cranswick. Shares of Saia, an American trucking company, rose over the period after reporting strong first- and second-quarter earnings. Cranswick is a leading food producer and supplier of premium, fresh and added-value food products in the U.K. It reported strong earnings and increased grocery demand related to the coronavirus pandemic.

For the Barrow Hanley component of the Fund, defensive and high-yielding stocks such as those found in the utilities and real estate sectors, which Barrow Hanley traditionally avoids because of their relatively low long-term return potential, outperformed. Similarly, the Fund component's investments in economically sensitive materials and consumer durable stocks, a typical area of focus, materially underperformed. This included Fund component holdings in the consumer discretionary, industrial, information technology, and materials sectors. With respect to specific Fund component holdings, Ciena Corporation, a designer and producer of critical networking software and infrastructure used by telecom service providers, experienced continuing earnings acceleration and superb fundamental visibility, enabling dramatic relative outperformance during the worst of the market downturn. On the other hand, Adient PLC, as the world's largest supplier of seating systems to the automotive industry, was a prominent victim of a collapse in demand.

#### Subadviser outlook

Based on a three- to five-year time horizon, Wellington Management continues 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's largest overweight positions were in the industrial, consumer staples, and information technology sectors. Examples of names Wellington Management added during the period include Onto Innovation, Element Solutions, and Lantheus Holdings. As of the end of the reporting period, the Fund component held its largest underweight positions in the health care, communication services, and consumer discretionary sectors.

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

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.

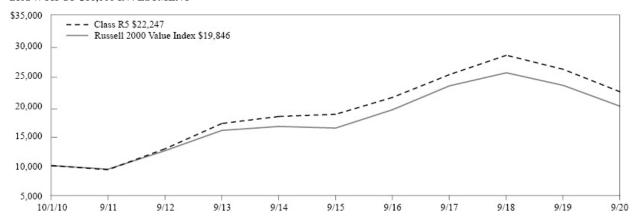
MassMutual Select Small Cap Value Equity Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Select	
Small Cap Value Equity Fun	nd .
Largest Holdings	
(% of Net Assets) on 9/30/20	0
WillScot Mobile Mini Holdings Corp.	1.7%
Adient PLC	1.7%
MGIC Investment Corp.	1.6%
Brooks Automation, Inc.	1.6%
The Greenbrier Cos., Inc.	1.6%
Primoris Services Corp.	1.5%
PRA Group, Inc.	1.5%
Colfax Corp.	1.5%
Texas Capital Bancshares, Inc.	1.5%
II-VI, Inc.	1.4%
	15.6%

MassMutual Select	
Small Cap Value Equity Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Industrial	32.1%
Financial	23.2%
Consumer, Non-cyclical	12.6%
Consumer, Cyclical	9.7%
Technology	9.3%
Basic Materials	5.4%
Utilities	2.4%
Communications	1.4%
Energy	1.0%
Mutual Funds	0.9%
Total Long-Term Investments	98.0%
Short-Term Investments and Other Assets and Liabilities	2.0%
Net Assets	100.0%

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

## **GROWTH OF \$10,000 INVESTMENT**



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 09/30/2020)					
	Inception Date				Since Inception
	of Class	1 Year	5 Years	10 Years	04/01/2014
Class I	04/01/2014	-14.27%	3.84%		2.55%
Class R5	03/31/2006	-14.38%	3.74%	8.32%	
Service Class	03/31/2006	-14.38%	3.64%	8.21%	
Administrative Class	03/31/2006	-14.58%	3.53%	8.05%	
Class R4	04/01/2014	-14.62%	3.38%		2.11%
Class A	03/31/2006	-14.70%	3.28%	7.81%	
Class A (sales load deducted)*	03/31/2006	-19.39%	2.12%	7.21%	
Class R3	04/01/2014	-14.92%	3.10%		1.84%
Russell 2000 Value Index		-14.88%	4.11%	7.09%	1.85%

<sup>\*</sup> 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 Small Company Value Fund – Portfolio Manager Report (Unaudited)

## What is the investment approach of MassMutual Select 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<sup>®</sup> 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, 2020.

## How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned -15.95%, underperforming the -14.88% 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 underperformed the 0.39% 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, 2020, 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, 2020, with respect to the AllianceBernstein component of the Fund, security selection detracted from performance, while sector selection contributed. Less-than-favorable security selection in the consumer discretionary and technology sectors more than offset positive security selection in real estate and health care. The Fund component's overweight position, relative to the benchmark, to the consumer discretionary sector contributed to relative performance, while an underweight stake in health care detracted.

The AllianceBernstein Fund component holding Regis, the largest hair salon chain in the world, detracted from performance, as sales declined significantly due to the novel coronavirus pandemic. Carpenter Technology, a specialty alloy manufacturer, underperformed due to weakness in this Fund component holding's aerospace market. Another Fund component holding – oil and gas services company Helix Energy Solutions – declined, as oil demand and weak pricing persisted amid lockdowns and fallout from the virus. Turning to the positive, three Fund component holdings were noteworthy performance drivers. Papa John's International advanced, as the pizza restaurant franchise experienced robust demand from consumers who had reduced dining options due to mandated restaurant closures. Masonite International, a manufacturer of residential and commercial doors, outperformed on consensus-beating results and a favorable pricing climate for its products. Finally, packaged-food company Hain Celestial benefited from pandemic-driven demand, as well as growth in its core brands and margin expansion from internal initiatives.

Within the American Century component of the Fund, an underweight allocation to the consumer discretionary sector detracted from performance, as consumer discretionary was among the market's strongest-performing sectors. Fund component holdings in the hotels, restaurants, and leisure industry segments also restrained performance, as many consumers' travel plans were cancelled due to the pandemic. American Century's Fund component holdings in the industrial sector also detracted. As an example, The Brink's Company, a cash management and transit company, suffered as brick-and-mortar businesses struggled and more payments became digitized. On the belief that the company will benefit as chain restaurants, retailers, and banks reopen, American Century bolstered its position on weakness in the stock price.

The American Century Fund component benefited from a lack of exposure to mortgages; real estate investment trusts (REITs) also supported returns. In the capital markets industry, Fund component holding Ares Management, an alternative asset manager, reported solid quarterly results, driven by continued growth in fee-related earnings and a sharp increase in assets under management from both market performance and inflows. Finally, an overweight in the consumer staples sector in general, and the household products industry in particular, contributed to relative performance. Within that sector, the Fund component's investment in Spectrum Brands Holdings, which offers a wide array of consumer household brands, benefited from the stay-at-home phenomenon resulting from the COVID-19 crisis.

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

## Subadviser outlook

AllianceBernstein anticipates that the current volatility seen in the market has the potential to persist for a period of time. Its approach throughout this volatile environment has been to take advantage of the market's anxiety, while being mindful of the increased risks. AllianceBernstein remains focused on finding companies for its Fund component's portfolio that combine attractive valuations with compelling company level catalysts, capable management teams, solid balance sheets, and strong business models.

American Century notes that, as 2020 comes to an end and it looks ahead to 2021, its Fund component's portfolio holds information technology stocks that have been driven down to attractive valuations due to cyclical reasons, trade war fears, or operational miscues. American Century plans to continue to seek higher-quality industrials names (i.e., machinery, distribution, commercial services), such as The Timken Company, a leading manufacturer of industrials bearings, transmissions, gearboxes, and related products. In addition, American Century observes that, while many companies in the consumer discretionary sector do not meet its quality criteria, the massive market dislocation fueled by the COVID-19 crisis has created an opportunity for American Century to increase its Fund component portfolio's exposure to the sector. Similarly, after a long stretch where it viewed utilities as extremely overvalued, recent underperformance has begun to bring this sector back toward fair value, in American Century's view – and it will continue to evaluate opportunities in this sector as valuations begin to look more attractive.

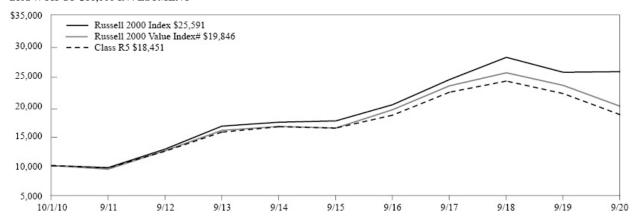
# MassMutual Select Small Company Value Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Selec	
Small Company Value	Fund
Largest Holdings	
(% of Net Assets) on 9/2	30/20
Graphic Packaging Holding Co.	1.5%
BankUnited, Inc.	1.5%
Independent Bank Group, Inc.	1.4%
Regal Beloit Corp.	1.3%
KB Home	1.2%
Kennametal, Inc.	1.1%
Physicians Realty Trust	1.1%
Belden, Inc.	1.1%
STAG Industrial, Inc.	1.0%
Dana, Inc.	1.0%
	12.2%

MassMutual Select	
Small Company Value Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Financial	33.7%
Consumer, Cyclical	21.5%
Industrial	17.6%
Consumer, Non-cyclical	9.9%
Technology	6.1%
Basic Materials	3.0%
Utilities	2.2%
Energy	2.2%
Communications	2.0%
Mutual Funds	0.5%
Total Long-Term Investments	98.7%
Short-Term Investments and Other Assets and Liabilities	1.3%
Net Assets	100.0%

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

## **GROWTH OF \$10,000 INVESTMENT**



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 09/30/2020)						
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 11/15/2010	Since Inception 04/01/2014
Class I	11/15/2010	-15.96%	2.68%		5.93%	
Class R5	12/31/2001	-15.95%	2.60%	6.32%		
Service Class	12/31/2001	-16.11%	2.49%	6.23%		
Administrative Class	12/31/2001	-16.15%	2.38%	6.10%		
Class R4	04/01/2014	-16.25%	2.24%			0.57%
Class A	12/31/2001	-16.45%	2.12%	5.83%		
Class A (sales load deducted)*	12/31/2001	-21.04%	0.97%	5.23%		
Class R3	12/31/2002	-16.47%	1.97%	5.62%		
Russell 2000 Value Index#		-14.88%	4.11%	7.09%	6.51%	1.85%
Russell 2000 Index		0.39%	8.00%	9.85%	9.28%	5.39%

<sup>\*</sup> 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<sup>®</sup> 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, 2020?

The Fund's Class I shares returned -2.34%, underperforming the -2.16% 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, 2020, 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.

The top-performing sectors within the Index were health care and consumer discretionary, returning 21.59% and 15.28%, respectively. These sectors rebounded after the March downturn and have benefited from the fiscal stimulus as well as the prospects of a vaccine for the virus.

Energy and utilities were the worst-performing sectors for this period, with returns of -84.23% and -25.94%, respectively. Energy was hit hard in April, as front month oil futures briefly dropped below zero for the first time. Going into the winter months, concerns about lack of demand for oil caused another dip during the month of September. Utilities were impacted negatively during the pandemic and have since struggled to rebound.

For the year ended September 30, 2020, U.S. equities encountered significant volatility, but ended the third quarter of 2020 well above their 2019 third-quarter levels. Equities hit all-time highs in the early months of 2020, with increasing consumer confidence and three interest rate cuts by the U.S. Federal Reserve driving the rally. That quickly changed, as a worldwide pandemic shook global markets, and U.S. equities saw a drawdown of more than 30% in less than a month. Following the initial shock, markets rebounded in the second quarter, mostly erasing the losses from the early March slide. This rally was supported by record-level global fiscal stimulus and central banks that opted for extremely accommodative monetary policy. Despite an economy that looked to be adjusting slowly to living alongside the COVID-19 virus, markets continued to rally in the third quarter, setting new all-time highs, with technology leading the way. In the last month of the third quarter, U.S. markets saw a pullback, as investors did not get the additional fiscal stimulus they desired and potential outcomes of the November election began to weigh on investors' minds.

#### Subadviser outlook

NTI believes that, looking forward, a mix of elevated valuations, slow growth, lower profit margins, and broader focus on stakeholders versus just shareholders will subdue equity returns. In NTI's view, emerging markets, carrying attractive valuations but also much uncertainty, could slightly outpace developed markets. NTI believes that developed market equity returns could range from 3.8% (Japan) to 5.8% (Australia) – all below historical averages.

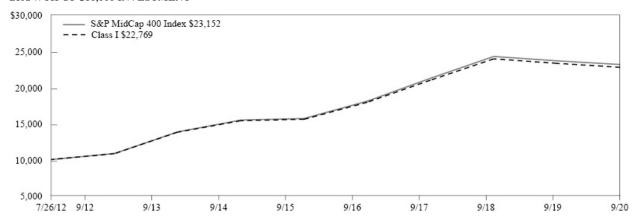
# MM S&P® Mid Cap Index Fund – Portfolio Manager Report (Unaudited) (Continued)

MM S&P Mid Cap Index Fund	
Largest Holdings	
(% of Net Assets) on 9/30/20	
Pool Corp.	0.8%
FactSet Research Systems, Inc.	0.8%
Fair Isaac Corp.	0.7%
Trimble, Inc.	0.7%
Generac Holdings, Inc.	0.7%
SolarEdge Technologies, Inc.	0.7%
Masimo Corp.	0.7%
Monolithic Power Systems, Inc.	0.7%
Cognex Corp.	0.7%
Charles River Laboratories International, Inc.	0.7%
	7.2%

MM S&P Mid Cap	
Index Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Financial	22.2%
Industrial	20.1%
Consumer, Non-cyclical	18.3%
Consumer, Cyclical	17.2%
Technology	7.8%
Basic Materials	3.7%
Energy	3.6%
Communications	3.5%
Utilities	3.5%
Mutual Funds	0.3%
Total Long-Term Investments	100.2%
Short-Term Investments and Other Assets and Liabilities	(0.2)%
Net Assets	100.0%

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

## **GROWTH OF \$10,000 INVESTMENT**



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 09/30/2020)					
	Inception Date of Class	1 Year	5 Years	Since Inception 07/26/2012	Since Inception 04/01/2014
Class I	07/26/2012	-2.34%	7.90%	10.58%	
Class R5	07/26/2012	-2.34%	7.80%	10.47%	
Service Class	07/26/2012	-2.55%	7.62%	10.31%	
Administrative Class	07/26/2012	-2.63%	7.52%	10.19%	
Class R4	04/01/2014	-2.84%	7.35%		5.70%
Class A	07/26/2012	-2.86%	7.27%	9.92%	
Class A (sales load deducted)*	07/26/2012	-8.21%	6.06%	9.16%	
Class R3	04/01/2014	-3.07%	7.08%		5.45%
S&P MidCap 400 Index		-2.16%	8.11%	10.80%	6.43%

<sup>\*</sup> 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<sup>®</sup> Small Cap Index Fund – Portfolio Manager Report (Unaudited)

## What is the investment approach of MM Russell 2000<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Index (the "Index") vest in the relevant LSE Group company which owns the Index. "Russell 2000<sup>®</sup>" and "Russell<sup>®</sup>" 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, 2020?

The Fund's Class I shares returned 0.29%, underperforming the 0.39% 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, 2020, 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.

The top-performing sectors within the Index were health care and consumer discretionary, returning 36.85% and 14.15%, respectively. These sectors rebounded after the March downturn and have benefited from the fiscal stimulus as well as the prospects of a vaccine for the virus.

The worst-performing sectors during the reporting period were energy and financial, with returns of -53.1% and -23.96%, respectively. Energy was hit hard in April, as front month oil futures briefly dropped below zero for the first time. Going into the winter months, concerns about lack of demand for oil caused another dip during the month of September. Financials struggled due to low interest rates and an economy that shut down mid-period and only slowly began to recover.

For the year ended September 30, 2020, U.S. equities encountered significant volatility, but ended the third quarter of 2020 well above their 2019 third-quarter levels. Equities hit all-time highs in the early months of 2020, with increasing consumer confidence and three interest rate cuts by the U.S. Federal Reserve Board driving the rally. That quickly changed, as a worldwide pandemic shook global markets, and U.S. equities saw a drawdown of more than 30% in less than a month. Following the initial shock, markets rebounded in the second quarter, mostly erasing the losses from the early March slide. This rally was supported by record-level global fiscal stimulus and central banks that opted for extremely accommodative monetary policy. Despite an economy that looked to be adjusting slowly to living alongside the COVID-19 virus, markets continued to rally in the third quarter, setting new all-time highs, with technology leading the way. In the last month of the third quarter, U.S. markets saw a pullback, as investors did not get the additional fiscal stimulus they desired and potential outcomes of the November election began to weigh on investors' minds.

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

## Subadviser outlook

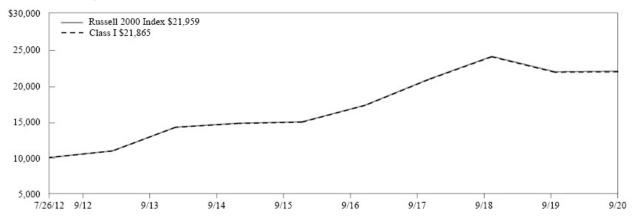
NTI believes that, looking forward, a mix of elevated valuations, slow growth, lower profit margins, and broader focus on stakeholders versus just shareholders will subdue equity returns. In NTI's view, emerging markets, carrying attractive valuations but also much uncertainty, could slightly outpace developed markets. NTI believes that developed market equity returns could range from 3.8% (Japan) to 5.8% (Australia) – all below historical averages.

MM Russell 2000	
Small Cap Index Fun	d
Largest Holdings	
(% of Net Assets) on 9/3	0/20
Penn National Gaming, Inc.	0.6%
Sunrun, Inc.	0.5%
Caesars Entertainment, Inc.	0.4%
MyoKardia, Inc.	0.4%
Novavax, Inc.	0.4%
Rhythm Technologies, Inc.	0.3%
LHC Group, Inc.	0.3%
Mirati Therapeutics, Inc.	0.3%
Churchill Downs, Inc.	0.3%
Momenta Pharmaceuticals, Inc.	0.3%
	3.8%

Small Cap Index Fund Sector Table (% of Net Assets) on 9/30/20  sumer, Non-cyclical nicial sumer, Cyclical strial nology munications nal Funds ties e Materials gy	26.4% 20.9% 14.6% 13.8%
(% of Net Assets) on 9/30/20 sumer, Non-cyclical ncial sumer, Cyclical strial nology munications tal Funds ties te Materials	20.9% 14.6%
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strial nology munications ial Funds ties to Materials	
nology munications ual Funds ties to Materials	13.8%
munications ual Funds ties  c Materials	
aal Funds ties c Materials	10.4%
ties c Materials	4.3%
c Materials	3.7%
	3.2%
gy	3.1%
	2.8%
ernment	0.0%
rsified	0.0%
Long-Term Investments	103.2%
t-Term Investments and Other Assets and Liabilities	(3.2)%
Assets	100.0%

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

## GROWTH OF \$10,000 INVESTMENT



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 09/30/2020)					
	Inception Date of Class	1 Year	5 Years	Since Inception 07/26/2012	Since Inception 04/01/2014
Class I	07/26/2012	0.29%	7.97%	10.03%	
Class R5	07/26/2012	0.18%	7.85%	9.92%	
Service Class	07/26/2012	0.01%	7.67%	9.74%	
Administrative Class	07/26/2012	-0.13%	7.55%	9.64%	
Class R4	04/01/2014	-0.25%	7.41%		4.83%
Class A	07/26/2012	-0.37%	7.31%	9.35%	
Class A (sales load deducted)*	07/26/2012	-5.85%	6.10%	8.59%	
Class R3	04/01/2014	-0.50%	7.13%		4.57%
Russell 2000 Index		0.39%	8.00%	10.09%	5.39%

<sup>\*</sup> 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 Select Mid Cap Growth Fund – Portfolio Manager Report (Unaudited)

## What is the investment approach of MassMutual Select Mid Cap Growth, 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 75% of the Fund's portfolio; and Frontier Capital Management Company, LLC (Frontier), which was responsible for approximately 25% of the Fund's portfolio, as of September 30, 2020.

Except as noted below, the MassMutual Select Mid Cap Growth Fund has not been available for purchase by new investors since August 15, 2018. Customers who were invested in the Fund on August 15, 2018 will continue to be able to invest. Investment products and programs offered by MassMutual or its affiliates, including, but not limited to, certain separate investment accounts, mutual funds, collective trust funds, qualified and non-qualified retirement plans, and IRA customers, as well as other institutional investors and programs sponsored by financial intermediaries for which investment decisions are made on a centralized basis at the discretion of the firm, may be able to purchase the Fund at the discretion of MML Advisers. Sales of Fund shares may be further restricted or reopened in the future.

#### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned 15.13%, substantially underperforming the 23.23% 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, 2020, 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, consumer discretionary was the biggest detractor from relative performance during the reporting period due to security selection, led by Fund component holding Norwegian Cruise Line Holdings. Shares of the company tumbled over the period as the global coronavirus pandemic halted the cruise industry, and the Fund component exited its position. An unfavorable underweight allocation, relative to the benchmark, to the information technology sector further hampered the Fund component's relative performance for the period. Stock selection within, coupled with a favorable underweight allocation to, the communication services sector contributed to the Fund component's relative performance during the period. Shares of IAC/InterActiveCorp were strong heading into the spinoff of Match, the operator of the most widely used internet dating platforms in the world, which unlocked value for shareholders and allowed the company to focus on its investment in ANGI Homeservices Inc. and other privately held assets. The real estate sector also contributed during the reporting period due to a significant underweight position in the lagging sector.

For the Frontier component of the Fund, pandemic-related headwinds in the health care and consumer discretionary sectors drove the underperformance for the year ended September 30, 2020. Sector allocation had a modestly negative impact on returns, primarily due to an overweight in financials that detracted from relative performance in the near-zero interest rate environment. Also hampering Frontier's performance were certain Fund component holdings. In health care, medical device makers Teleflex Inc. and Edwards Lifesciences Corp. both experienced a significant revenue drop due to a sharp decline in the number of elective surgeries. Contact lens manufacturers Cooper Companies and Alcon Inc. underperformed on lower demand, as many people shifted to work from home. In the consumer discretionary sector, luxury retailer Capri Holdings Limited and concert organizer Live Nation Entertainment Inc. fell 61% and 33%, respectively, because of widespread store closures and restrictions on large gatherings. On the other hand, the industrial sector was a bright spot; within the sector, payment processor Square Inc. posted a 140% gain. In technology, computer chip designer Advanced Micro Devices was a standout with a return of 183% on continued share gains.

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

#### Subadviser outlook

T. Rowe Price views its outlook to be dependent on the course of the coronavirus, which continues to spread in many countries, including the U.S., that have failed to contain the virus. T. Rowe Price opines that the expectations baked into the valuations of many high-flying growth stocks leave little room for error and require them to deliver very high operating margins and/or sales growth for a decade or more. Such a feat is rare, and T. Rowe Price believes there could be a reckoning in the market when select companies do not meet such lofty expectations. In this extraordinary economic environment, T. Rowe Price continues to leverage its fundamental research platform and time-tested investment process to identify high-quality companies with durable growth prospects, strong management teams, and solid balance sheets.

Frontier notes that the current environment is marked with significant uncertainty along several vectors: the president of the U.S. being afflicted with COVID-19; the economic recovery, which appears to be plateauing; the rancor surrounding the U.S. elections approaching a crescendo; and the fate of the much-needed relief bill remaining in limbo at this writing. Frontier believes that despite these challenges, the market has remained resilient. American businesses and consumers have been adapting to the pandemic, marching on with extraordinary ingenuity; the COVID-19 vaccine appears to be on track and Federal Reserve Board policy remains supportive of equity valuations. Frontier notes that, while volatility may spike in the near term, it is optimistic as it looks for market-leading companies with defendable business models that offer multiple ways to help drive the Fund component's performance.

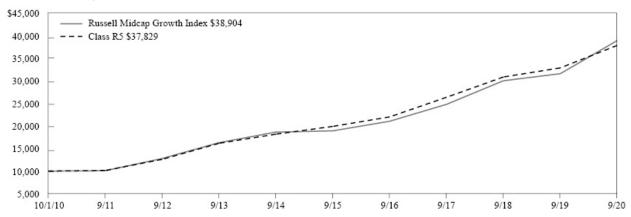
# MassMutual Select Mid Cap Growth Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Se	
Mid Cap Growth	
Largest Holdin	
(% of Net Assets) on	9/30/20
Ball Corp.	2.2%
Hologic, Inc.	2.2%
Teleflex, Inc.	1.9%
Microchip Technology, Inc.	1.8%
Dollar General Corp.	1.5%
Marvell Technology Group Ltd.	1.5%
Catalent, Inc.	1.5%
Agilent Technologies, Inc.	1.5%
Veeva Systems, Inc. Class A	1.3%
The Cooper Cos., Inc.	1.3%
	16.7%

32.1%
21.1%
16.6%
14.9%
5.0%
4.5%
1.6%
1.0%
0.7%
0.5%
0.4%
98.4%
1.6%
100.0%

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

## **GROWTH OF \$10,000 INVESTMENT**



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.

	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 11/15/2010	Since Inception 04/01/2014
Class I	11/15/2010	15.23%	13.84%		13.88%	
Class R5	06/01/2000	15.13%	13.72%	14.23%		
Service Class	06/01/2000	15.00%	13.62%	14.13%		
Administrative Class	06/01/2000	14.92%	13.49%	13.99%		
Class R4	04/01/2014	14.73%	13.33%			11.73%
Class A	06/01/2000	14.64%	13.21%	13.71%		
Class A (sales load deducted)*	06/01/2000	8.34%	11.94%	13.07%		
Class R3	12/31/2002	14.48%	13.05%	13.48%		
Russell Midcap Growth Index		23.23%	15.53%	14.55%	14.07%	12.60%

<sup>\*</sup> 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 Small Cap Growth Equity Fund – Portfolio Manager Report (Unaudited)

## What is the investment approach of MassMutual Select 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 59% of the Fund's portfolio; and Invesco Advisers, Inc. (Invesco), which oversaw approximately 41% of the Fund's portfolio, as of September 30, 2020.

### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned 20.40%, outperforming the 15.71% return of the Russell 2000 Growth Index (the "benchmark"), which measures the performance of the small- to mid-cap growth segment of the U.S. equity universe. It includes Russell 2000 Index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted. The Fund also outperformed the 0.39% 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, 2020, 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, strong security selection in the information technology, health care, and consumer discretionary sectors was a primary driver of the Fund component's outperformance of the benchmark. This was partially offset by weaker security selection within the financial and materials sectors. Sector allocation, a residual of the Fund component's bottom-up stock selection process, also aided performance, primarily driven by underweight positioning in industrial, relative to the benchmark.

Wellington Management Fund component holdings that were top contributors to relative performance during the period included DraftKings in the consumer discretionary sector and Livongo Health in health care. Shares of DraftKings, a sports betting operator, rose over the period after the company went public. Shares of Livongo Health, a digital health management company, also rose. The company announced a merger agreement with Teladoc Health, which will position the firm as a leader in comprehensive virtual care during a time of unprecedented demand and will further expand access to underserved populations. Wellington Management exited its position in Livongo Health during the period due to the outperformance. Fund component holdings that were top detractors from relative returns during the period included Sterling Bancorp in the financial sector, and Curtiss-Wright in industrial. Shares of Sterling Bancorp, a small-cap bank providing a full range of products and services to commercial, consumer, and municipal clients, declined amid the global pandemic and sharp Federal Reserve Board rate cuts, which were detrimental to spread lenders. Curtiss-Wright is a precision components and systems designer and manufacturer for several industries, including defense, aerospace, and automotive. Like many of its peers, the company has suffered due to commercial aerospace and defense budget concerns.

With respect to the Invesco component of the Fund, strong stock selection within the information technology, health care, and industrial sectors drove Invesco's performance, although this was partially offset by weaker stock selection within the consumer discretionary sector. Fund component holdings that were the top performers included Coupa Software, Inc., Repligen Corporation, and Teladoc Health. Coupa Software, which enables businesses to manage their spending in a more centralized, efficient manner, is rapidly growing its market share, while continuing penetration with existing customers. Repligen Corporation, a bioprocessing company focused on providing technology and solutions that facilitate manufacturing of complex therapeutics, experienced impressive revenue growth, led by a robust underlying bioprocess market and adoption of its differentiated products in newer markets. Teladoc Health is the nation's leading provider of telehealth services, most notably due to COVID-19 dynamics. Fund component holdings that were top detractors from performance included Boot Barn Holdings, Bright Horizons Family Solutions, and Pinnacle Financial Partners. Boot Barn Holdings, the largest western and work-related lifestyle retail chain in the U.S., underperformed due to its significant presence in energy-intensive states, and demand impacts due to coronavirus. Bright Horizons Family Solutions, a leading provider of childcare, back-up dependent care, and educational advisory services, underperformed due

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

to site closures caused by the COVID-19 outbreak. Pinnacle Financial Partners, the holding company for Pinnacle National Bank, which operates as community bank in Tennessee, suffered in tandem with other regional banks, largely due to a low and flat yield curve.

#### Subadviser outlook

Wellington Management notes that it continues to find attractively valued investment opportunities created by the inefficiencies frequently found among small-cap companies. At the end of the period, the Fund component had its largest overweight allocations to the industrial, financial, and information technology sectors. Its most underweight stakes were in the health care, consumer discretionary, and utilities sectors.

Looking forward, Invesco expects that the U.S. economy has the potential to contract by about 3.5% in 2020, the first decline after 10 consecutive years of growth. However, Invesco believes that economic activity may have bottomed in the spring of 2020, with the potential to turn positive in the second half of the year. Invesco's view is that unprecedented fiscal and monetary stimulus, along with uneven progress in the struggle against COVID-19, supports the case for economic recovery. Meanwhile, interest rates and inflation remain very low by historical standards and Invesco expects corporate earnings growth to resume after a very difficult first half of 2020.

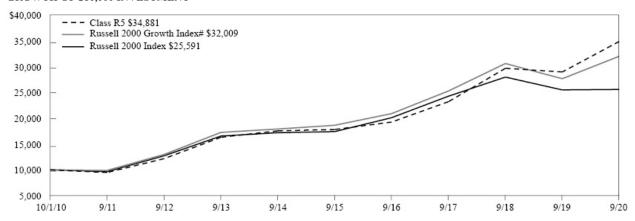
MassMutual Select Small Cap Growth Equity Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Select	
Small Cap Growth Equity	Fund
Largest Holdings	
(% of Net Assets) on 9/3	0/20
Advanced Drainage Systems, Inc.	1.4%
Tandem Diabetes Care, Inc.	1.3%
Bandwidth, Inc. Class A	1.2%
Five9, Inc.	1.1%
Repligen Corp.	1.1%
Insulet Corp.	1.0%
Monolithic Power Systems, Inc.	1.0%
MKS Instruments, Inc.	1.0%
Amedisys, Inc.	0.9%
Chart Industries, Inc.	0.9%
	10.9%

MassMutual Select	
Small Cap Growth Equity Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Consumer, Non-cyclical	28.2%
Technology	18.7%
Industrial	17.3%
Consumer, Cyclical	17.0%
Financial	10.9%
Communications	3.5%
Mutual Funds	1.6%
Energy	1.4%
Basic Materials	0.9%
Diversified	0.2%
Utilities	0.2%
Total Long-Term Investments	99.9%
Short-Term Investments and Other Assets and Liabilities	0.1%
Net Assets	100.0%

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

## **GROWTH OF \$10,000 INVESTMENT**



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.

	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 11/15/2010	Since Inception 04/01/2014
Class I	11/15/2010	20.54%	14.48%		13.12%	
Class R5	05/03/1999	20.40%	14.38%	13.31%		
Service Class	05/03/1999	20.26%	14.27%	13.18%		
Administrative Class	05/03/1999	20.16%	14.14%	13.04%		
Class R4	04/01/2014	20.01%	13.98%			10.27%
Class A	05/03/1999	19.94%	13.86%	12.76%		
Class A (sales load deducted)*	05/03/1999	13.34%	12.58%	12.13%		
Class R3	12/31/2002	19.66%	13.70%	12.53%		
Russell 2000 Growth Index#		15.71%	11.42%	12.34%	11.78%	8.56%
Russell 2000 Index		0.39%	8.00%	9.85%	9.28%	5.39%

<sup>\*</sup> 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, 2020?

The Fund's Class I shares returned 0.35%, underperforming the 0.49% return of the Index, 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, 2020, 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 performance versus the Index is 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.

The Fund's top-performing sectors during the reporting period were information technology and health care, returning 24.02% and 21.13%, respectively. Energy and financial were the worst-performing sectors for the period, with returns of -42.23% and -16.40%, respectively.

The top-performing countries within the Index were Denmark and Ireland, returning 15.40% and 14.65%, respectively. Austria and Spain were the worst-performing countries, with returns of -4.74% and -3.85%, respectively.

Global equity markets were slightly positive for the reporting period. They underperformed U.S. markets, but encountered significant volatility during the reporting period. Equities rallied into early February off of increased consumer confidence, three rate cuts by the U.S. Federal Reserve Board, and de-escalating trade tensions between the U.S. and China. That quickly changed, as a worldwide pandemic shook global markets, and equities saw a drawdown of more than 30% in less than a month. Following the initial shock, markets rebounded in the second quarter of 2020, erasing more than half of the losses from the early March slide. This rally was supported by record-level global fiscal stimulus and central banks that opted for extremely accommodative monetary policy. The third quarter saw a continued rally in the markets, albeit slower than the second quarter. Economies continued to open up, and countries began to adjust to living with the virus and the uncertainty that comes with it. Brexit negotiations remained unresolved with an important November deadline approaching, increasing the likelihood of a no-deal outcome. ("Brexit" – an abbreviation for "British exit" – refers to the United Kingdom's withdrawal from the European Union on January 31, 2020.)

#### Subadviser outlook

NTI believes that, looking forward, a mix of elevated valuations, slow growth, lower profit margins, and broader focus on stakeholders versus just shareholders will subdue equity returns. In NTI's view, emerging markets, carrying attractive valuations but also much uncertainty, could slightly outpace developed markets. NTI believes that developed market equity returns could range from 3.8% (Japan) to 5.8% (Australia) – all below historical averages.

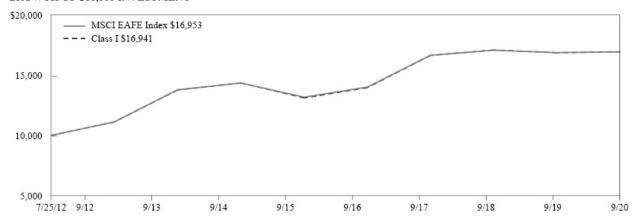
# MM MSCI EAFE® International Index Fund – Portfolio Manager Report (Unaudited) (Continued)

MM MSCI EAFE	
International Index Fund	
Largest Holdings	
(% of Net Assets) on 9/30/20	
Nestle SA Registered	2.5%
Roche Holding AG	1.7%
Novartis AG Registered	1.4%
SAP SE	1.2%
ASML Holding NV	1.1%
AstraZeneca PLC	1.0%
Toyota Motor Corp.	1.0%
LVMH Moet Hennessy Louis Vuitton SE	0.9%
Novo Nordisk A/S Class B	0.8%
AIA Group Ltd.	0.8%
	12.4%

MM MSCI EAFE	
International Index Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Consumer, Non-cyclical	28.1%
Financial	17.6%
Industrial	13.5%
Consumer, Cyclical	12.7%
Basic Materials	6.6%
Communications	6.1%
Technology	5.5%
Utilities	3.8%
Energy	3.1%
Mutual Funds	1.0%
Diversified	0.2%
Total Long-Term Investments	98.2%
Short-Term Investments and Other Assets and Liabilities	1.8%
Net Assets	100.0%

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

## **GROWTH OF \$10,000 INVESTMENT**



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 09/30/2020)					
	Inception Date of Class	1 Year	5 Years	Since Inception 07/25/2012	Since Inception 04/01/2014
Class I	07/25/2012	0.35%	5.15%	6.65%	
Class R5	07/25/2012	0.29%	5.04%	6.55%	
Service Class	07/25/2012	0.02%	4.87%	6.38%	
Administrative Class	07/25/2012	-0.04%	4.76%	6.27%	
Class R4	04/01/2014	-0.18%	4.62%		1.72%
Class A	07/25/2012	-0.29%	4.51%	6.01%	
Class A (sales load deducted)*	07/25/2012	-5.78%	3.33%	5.28%	
Class R3	04/01/2014	-0.41%	4.35%		1.47%
MSCI EAFE Index		0.49%	5.26%	6.66%	2.26%

<sup>\*</sup> 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 Select Overseas Fund – Portfolio Manager Report (Unaudited)

## What is the investment approach of MassMutual Select 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 63% of the Fund's portfolio; and Harris Associates L.P. (Harris), which oversaw approximately 37% of the Fund's portfolio, as of September 30, 2020.

#### How did the Fund perform during the 12 months ended September 30, 2020?

The Fund's Class R5 shares returned -0.67%, underperforming the 0.49% 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, 2020, please see the Economic and Market Review, beginning on page 3.

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

For the year ended September 30, 2020, with respect to the MFS component of the Fund, stock selection and an underweight position in both the consumer discretionary and utilities sectors detracted from benchmark-relative returns. Within the consumer discretionary sector, the Fund component's overweight position, relative to the benchmark, in food catering company Compass Group (United Kingdom) held back relative results. Certain Fund component holdings in the consumer staples sector hindered relative returns. Specifically, MFS's overweight position in shares of food processing company Danone (France) and Brazilian beverage manufacturer AmBev SA, which is not a benchmark constituent, weakened relative returns. Elsewhere, overweight positions in diversified industrial manufacturer Rolls-Royce (United Kingdom), tourism and travel IT solutions provider Amadeus IT (Spain), banking firm KBC Groep (Belgium), hydrocarbon supplier Eni (Italy), and oil and gas company Galp Energia (Portugal) dampened relative results.

On the positive side, an overweight position and stock selection in the health care sector supported relative results for the MFS component of the Fund. Within the sector, overweight positions in precision instruments and machines manufacturer Olympus (Japan) and imaging products and medical-related equipment manufacturer HOYA (Japan) bolstered relative returns. Stock selection within, and to a lesser extent, an overweight position in, both the industrial and materials sectors also aided relative results. Within the industrial sector, the Fund component's overweight positions in electrical distribution equipment manufacturer Schneider Electric (France) and air conditioning system manufacturer Daikin Industries (Japan) buoyed relative results. Within the materials sector, an overweight position in industrial gas supplier Air Liquide (France) helped relative performance.

For the year ended September 30, 2020, with respect to the Harris component of the Fund, Fund component holdings in the U.K. detracted most from relative performance – driven by share price declines from aerospace and defense company Rolls-Royce Holdings, financial firm Lloyds Banking Group, and financial company NatWest Group, among others. The next-largest negative relative results came from holdings in Switzerland and France. On a sector basis, financials supplied the largest negative relative result, as all 14 underlying holdings lost absolute value. Materials and health care were the next-largest detractors for the period.

South Korea provided the best relative performance for the Harris Fund component, as both Fund component holdings in this geography – internet media company NAVER and technology hardware and equipment company Samsung Electronics – generated double-digit returns, and the benchmark lacks exposure to this geography. Spain and Ireland produced the next-best results, owing to share price advances for two of three combined Fund component holdings in these geographies. From a sector perspective, the energy sector furnished the best relative result, owing exclusively to a positive outcome from a lower-than-benchmark weighting, even though a single Fund component holding within the sector, Cenovus Energy, provided a negative absolute return. A lack of exposure to real estate and a greater-than-benchmark weighting in consumer discretionary delivered the next-best relative results.

MassMutual Select Overseas Fund - Portfolio Manager Report (Unaudited) (Continued)

## Subadviser outlook

MFS observes that the dramatic recovery in the stock markets this year has been propelled by unprecedented stimulus policies and the partial reopening of economies. In its view, however, a number of uncertainties may impact the sustainability of economic recovery going forward – including the potential for a second wave of coronavirus infections, the availability and timing of vaccines, the issuance of additional economic stimulus, and the outcome of the U.S. elections. At times of heightened volatility, MFS believes it is valuation discipline that matters most, with the price being paid the key determinant of future returns. Consequently, MFS remains focused on identifying companies with above-average, long-term growth and return prospects and strong free cash flow generation trading at attractive valuations.

Harris notes that, despite the COVID-19 pandemic, recent signs of stabilization led to a boost in global equity prices, though growth stocks benefited most while investors continued to largely underappreciate value stocks. Harris believes that this disconnect has provided Harris with select opportunities to enhance its portfolio. While the near-term macro outlook may be mixed, Harris believes that positive vaccine developments or further signs of economic recovery from the initial shock of COVID-19 could improve market sentiment. In the meantime, Harris is seeking opportunities that, from a valuation perspective, have the potential to benefit its Fund component.

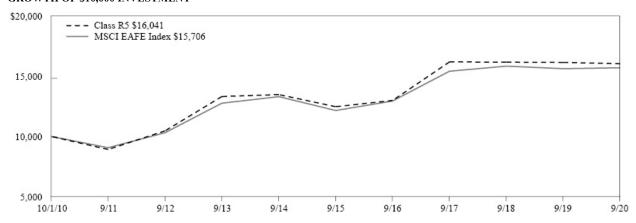
# MassMutual Select Overseas Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual	Select
Overseas F	und
Largest Hole	
(% of Net Assets)	on 9/30/20
Nestle SA Registered	2.7%
Schneider Electric SE	2.3%
Roche Holding AG	2.2%
Air Liquide SA	2.0%
SAP SE	1.9%
Intesa Sanpaolo SpA	1.9%
Bayer AG Registered	1.8%
AIA Group Ltd.	1.7%
Hoya Corp.	1.6%
Amadeus IT Group SA	1.5%
	19.6%

MassMutual Select	
Overseas Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Consumer, Non-cyclical	30.2%
Financial	17.5%
Industrial	15.4%
Consumer, Cyclical	13.8%
Basic Materials	6.9%
Technology	6.8%
Communications	4.7%
Energy	1.3%
Utilities	0.6%
Mutual Funds	0.3%
Total Long-Term Investments	97.5%
Short-Term Investments and Other Assets and Liabilities	2.5%
Net Assets	100.0%

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

### **GROWTH OF \$10,000 INVESTMENT**



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 period	ls ended 09/30/2020)					
	Inception Date of Class	1 Year	5 Years	10 Years	Since Inception 11/15/2010	Since Inception 04/01/2014
Class I	11/15/2010	-0.59%	5.27%		4.59%	
Class R5	05/01/2001	-0.67%	5.16%	4.84%		
Service Class	05/01/2001	-0.79%	5.05%	4.75%		
Administrative Class	05/01/2001	-0.77%	4.94%	4.67%		
Class R4	04/01/2014	-0.90%	4.79%			1.86%
Class A	05/01/2001	-1.17%	4.67%	4.39%		
Class A (sales load deducted)*	05/01/2001	-6.60%	3.49%	3.80%		
Class R3	12/31/2002	-1.19%	4.54%	4.18%		
MSCI EAFE Index		0.49%	5.26%	4.62%	4.19%	2.26%

<sup>\*</sup> 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 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) and T. Rowe Price Hong Kong Limited (T. Rowe Price Hong Kong) serves as a sub-subadviser for the Fund. T. Rowe Price Hong Kong was added as a sub-subadviser to the Fund on May 22, 2020.

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, 2020?

The Fund's Class I shares returned 3.11%, outperforming the 3.00% 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, 2020, 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. It also invests with an awareness of the global economic backdrop and its own outlook for certain industries, sectors, and individual countries. For this reporting period, stock selection among international developed value equities was the top contributor to the Fund's relative returns. Stock selection in the international developed core allocation also added value, while Fund holdings in the international developed growth allocation negatively impacted the Fund's relative results. An overweight allocation, relative to the benchmark, to emerging-market equities also contributed to relative performance.

In the international core equity strategy, stock selection within, and an overweight allocation to, the information technology sector contributed the most to relative performance. Conversely, Fund holdings within the health care sector detracted from relative returns, although an overweight position offset this somewhat. Regionally, the Pacific ex-Japan was the leading contributor to relative performance, due to security selection. On the downside, security selection within Japan was the sole detractor.

Within the international equity growth strategy, security selection in the communication services sector was the largest contributor to relative returns, whereas security selection in the financial sector was the leading detractor. The Pacific ex-Japan was the only region that contributed to relative performance, driven by strong security selection. In the international equity value strategy, strong stock selection within the information technology sector was the largest contributor to relative results. The industrial and business services sector was the largest detractor due to weak stock selection. Latin America detracted due to an overweight allocation to the region, coupled with unfavorable stock selection.

An unfavorable overweight and stock selection in the financial sector detracted within the emerging markets equity strategy. The Fund's underweight to the consumer discretionary sector hurt relative performance, as did stock selection within the sector. Fund holdings in the communication services sector added value. From a country perspective, the Fund's overweight to the United Arab Emirates had a negative effect, while stock selection in South Korea proved beneficial.

As of September 30, 2020, the Fund held equity options generating minimal exposure. Rights were also held during the period, which detracted slightly from performance. The estimated return impact from employing currency forwards 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.

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

### Subadviser outlook

T. Rowe Price notes that aggressive monetary and fiscal stimulus measures in the U.S. and several other countries have helped fuel a rally that saw major indexes bounce back from March lows to new highs during the third quarter of 2020. Fund management believes that the course of the coronavirus pandemic and the outcome of upcoming U.S. presidential and congressional elections will have a significant impact on the path to a sustainable recovery. While T. Rowe Price can envision a scenario in which public health, geopolitical, and idiosyncratic risks abate – creating a favorable environment for growth and risk assets – Fund management is also cognizant of the potential for downside surprises among these myriad risks. On balance, T. Rowe Price expects that economic recovery will continue over the next 12 months, despite periodic volatility, and therefore has sought opportunities to lean into risk in measured ways.

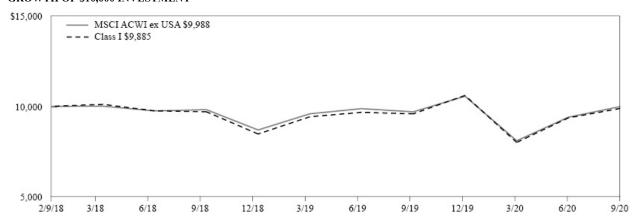
MassMutual Select T. Rowe Price International Equity Fund – Portfolio Manager Report (Unaudited) (Continued)

MassMutual Select	
T. Rowe Price International Equity F	und
Largest Holdings	
(% of Net Assets) on 9/30/20	
Taiwan Semiconductor Manufacturing Co. Ltd.	3.2%
Samsung Electronics Co. Ltd.	2.6%
Alibaba Group Holding Ltd. Sponsored ADR	2.3%
Tencent Holdings Ltd.	1.9%
Roche Holding AG	1.5%
Nestle SA Registered	1.5%
AIA Group Ltd.	1.4%
Nippon Telegraph & Telephone Corp.	1.2%
Koninklijke Philips NV	1.2%
NAVER Corp.	1.1%
	17.9%

MassMutual Select	
T. Rowe Price International Equity Fund	
Sector Table	
(% of Net Assets) on 9/30/20	
Consumer, Non-cyclical	24.2%
Financial	19.4%
Communications	13.5%
Technology	11.6%
Industrial	9.8%
Consumer, Cyclical	9.2%
Basic Materials	5.6%
Energy	2.7%
Utilities	1.8%
Mutual Funds	0.8%
Diversified	0.3%
Total Long-Term Investments	98.9%
Short-Term Investments and Other Assets and Liabilities	1.1%
Net Assets	100.0%

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

## **GROWTH OF \$10,000 INVESTMENT**



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 09/30/2020)			
	Inception Date of Class	1 Year	Since Inception 02/09/2018
Class I	02/09/2018	3.11%	-0.44%
MSCI ACWI ex USA		3.00%	-0.05%

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 Total Return Bond Fund – Portfolio of Investments

**September 30, 2020** 

BONDS & NOTES — 99.8% BANK LOANS — 1.3% Aerospace & Defense — 0.0% TransDigm, Inc., 2020 Term Loan E, 1 mo. LIBOR + 2.250% 2.397% VRN 5/30/25 \$ 295,750 \$ 279,0′ Airlines — 0.0% American Airlines, Inc., 2017 1st Lien Term Loan, 1 mo. LIBOR + 1.750% 1.896% VRN 1/29/27 125,000 90,7′ Auto Parts & Equipment — 0.0% Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 3.500% 3.647% VRN 4/30/26 240,7′ Diversified Financial Services — 0.3% Avolon TLB Borrower 1 (US) LLC, Term Loan B3, 1 mo. LIBOR + 1.750% 2.500% VRN 1/15/25 70,325 68,2′ Delos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750% 1.970% VRN 10/06/23 2,410,000 2,350,9′ 2.150% VRN 10/16/25 97,739 94,3² Penn National Gaming, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.250% 3.000% VRN 10/15/25 171,938 166,8² Environmental Controls — 0.1% Clean Harbors, Inc., 2017 Term Loan B, 1 mo. LIBOR + 1.750% Clean Harbors, Inc., 2017 Term Loan B, 1 mo. LIBOR + 1.750% Clean Harbors, Inc., 2017 Term Loan B, 1 mo. LIBOR + 1.750% Clean Harbors, Inc., 2017 Term Loan B, 1 mo. LIBOR + 1.750% Clean Harbors, Inc., 2017 Term Loan B, 1 mo. LIBOR + 1.750% Clean Harbors, Inc., 2017 Term Loan B, 1 mo. LIBOR + 1.750%
Name
2.397% VRN 5/30/25   \$ 295,750   \$ 279,07     Airlines — 0.0%   American Airlines, Inc., 2017 1st Lien Term Loan, 1 mo. LIBOR + 1.750%   125,000   90,70     Auto Parts & Equipment — 0.0%   247,500   240,77     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 3.500%   3.647% VRN 4/30/26   247,500   240,77     Diversified Financial Services — 0.3%   240,77     Avolon TLB Borrower 1 (US) LLC, Term Loan B3, 1 mo. LIBOR + 1.750%   2,500% VRN 1/15/25   70,325   68,20     Delos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750%   2,410,000   2,350,95     1.970% VRN 10/06/23   2,410,000   2,350,95     Entertainment — 0.0%   2,150% VRN 12/27/24   97,739   94,34     Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250%   3,000% VRN 10/15/25   171,938   166,86     Environmental Controls — 0.1%   171,938   166,86     Environmental Controls — 0.1%   2,150   2,150     Environmental Controls — 0.1%   2,150   2,150     Environmental Controls — 0.1%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 2.250%   2,150     Clarios Global LP, US
Airlines — 0.0% American Airlines, Inc., 2017 1st Lien Term Loan, 1 mo. LIBOR + 1.750%  1.896% VRN 1/29/27  Auto Parts & Equipment — 0.0%  Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 3.500%  3.647% VRN 4/30/26  Diversified Financial Services — 0.3%  Avolon TLB Borrower 1 (US) LLC, Term Loan B3, 1 mo. LIBOR + 1.750%  2.500% VRN 1/15/25  Polos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750%  1.970% VRN 10/06/23  Entertainment — 0.0%  Churchill Downs, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.000%  2.150% VRN 12/27/24  Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250%  3.000% VRN 10/15/25  171,938  166,88  Environmental Controls — 0.1%
1.896% VRN 1/29/27 Auto Parts & Equipment — 0.0% Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 3.500% 3.647% VRN 4/30/26 Diversified Financial Services — 0.3% Avolon TLB Borrower 1 (US) LLC, Term Loan B3, 1 mo. LIBOR + 1.750% 2.500% VRN 1/15/25 Delos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750% 1.970% VRN 10/06/23 2,410,000 2,350,99 2,419,20 Entertainment — 0.0% Churchill Downs, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.000% 2.150% VRN 12/27/24 Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250% 3.000% VRN 10/15/25 171,938 166,88 Environmental Controls — 0.1%
Auto Parts & Equipment — 0.0% Clarios Global LP, USD Term Loan B, 1 mo. LIBOR + 3.500% 3.647% VRN 4/30/26  Diversified Financial Services — 0.3% Avolon TLB Borrower 1 (US) LLC, Term Loan B3, 1 mo. LIBOR + 1.750% 2.500% VRN 1/15/25  Pelos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750% 1.970% VRN 10/06/23  Entertainment — 0.0% Churchill Downs, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.000% 2.150% VRN 12/27/24  Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250% 3.000% VRN 10/15/25  Environmental Controls — 0.1%
3.647% VRN 4/30/26  Diversified Financial Services — 0.3%  Avolon TLB Borrower 1 (US) LLC, Term Loan B3, 1 mo. LIBOR + 1.750%  2.500% VRN 1/15/25  Delos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750%  1.970% VRN 10/06/23  Entertainment — 0.0%  Churchill Downs, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.000%  2.150% VRN 12/27/24  Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250%  3.000% VRN 10/15/25  Environmental Controls — 0.1%
Diversified Financial Services — 0.3%         Avolon TLB Borrower 1 (US) LLC, Term Loan B3, 1 mo. LIBOR + 1.750%       70,325       68,20         2.500% VRN 1/15/25       70,325       68,20         Delos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750%       2,410,000       2,350,95         1.970% VRN 10/06/23       2,410,000       2,350,95         Entertainment — 0.0%       2,419,21         Churchill Downs, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.000%       97,739       94,34         Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250%       3.000% VRN 10/15/25       171,938       166,84         Environmental Controls — 0.1%       261,18
2.500% VRN 1/15/25 70,325 68,260 Delos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750%  1.970% VRN 10/06/23 2,410,000 2,350,95  Entertainment — 0.0% Churchill Downs, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.000% 2.150% VRN 12/27/24 97,739 94,34 Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250% 3.000% VRN 10/15/25 171,938 166,84 Environmental Controls — 0.1%
Delos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750%  1.970% VRN 10/06/23  2,410,000  2,350,95  2,419,25  Entertainment — 0.0%  Churchill Downs, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.000%  2.150% VRN 12/27/24  Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250%  3.000% VRN 10/15/25  171,938  166,84  261,18  Environmental Controls — 0.1%
1.970% VRN 10/06/23  Entertainment — 0.0%  Churchill Downs, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.000% 2.150% VRN 12/27/24  Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250% 3.000% VRN 10/15/25  Environmental Controls — 0.1%
Entertainment — 0.0% Churchill Downs, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.000% 2.150% VRN 12/27/24 Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250% 3.000% VRN 10/15/25 171,938 166,84 261,18 Environmental Controls — 0.1%
Churchill Downs, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.000% 2.150% VRN 12/27/24  Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250% 3.000% VRN 10/15/25  Environmental Controls — 0.1%  97,739 94,34 166,84 261,18
Penn National Gaming, Inc., 2018 1st Lien Term Loan B, 1 mo. LIBOR + 2.250%  3.000% VRN 10/15/25  Environmental Controls — 0.1%  171,938  166,84  261,18
3.000% VRN 10/15/25 171,938 166,84 261,18  Environmental Controls — 0.1%
Environmental Controls — 0.1%
Clean Harbors, file., 2017 Term Loan B, 1 mo. Libox + 1.75070
1.897% VRN 6/28/24 97,727 97,38
GFL Environmental, Inc., 2018 USD Term Loan B, 1 mo. LIBOR + 3.000%, 3 mo. LIBOR + 3.000% 4.000% VRN 5/30/25 329,731 327,91
425,30
Foods — 0.0% Hostess Brands LLC, 2019 Term Loan, 1 mo. LIBOR + 2.250%, 3 mo. LIBOR + 2.250%
3.000% VRN 8/03/25 316,73
Principal Amount Value
Health Care – Services — 0.1%
Gentiva Health Services, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.250% 3.438% VRN 7/02/25 \$ 88,431 \$ 86,49
IQVIA, Inc., 2017 USD Term Loan B2, 1 mo. LIBOR + 1.750%
1.897% VRN 1/17/25 161,259 158,87 MPH Acquisition Holdings LLC, 2016 Term Loan B, 3 mo. LIBOR + 2.750%
3.750% VRN 6/07/23 128,134 125,93
Media — 0.1%
Charter Communications Operating LLC, 2019 Term Loan B2, 1 mo. LIBOR + 1.750%
1.900% VRN 2/01/27 99,248 96,85
1.900% VRN 2/01/27 99,248 96,85 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 423,550 408,65
1.900% VRN 2/01/27 99,248 96,85 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 423,550 408,65 Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. LIBOR + 2.000%
1.900% VRN 2/01/27 99,248 96,85 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 423,550 408,65
1.900% VRN 2/01/27 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. LIBOR + 2.000% 2.152% VRN 4/30/28  Packaging & Containers — 0.1%  99,248 423,550 408,63  300,000 289,17 794,66
1.900% VRN 2/01/27 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. LIBOR + 2.000% 2.152% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan Y, 1 mo. LIBOR + 2.000%
1.900% VRN 2/01/27 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. LIBOR + 2.000% 2.152% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan Y, 1 mo. LIBOR + 2.000% 2.156% VRN 7/01/26 Pharmaceuticals — 0.2%  99,248 408,63 4
1.900% VRN 2/01/27 99,248 96,85 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 423,550 408,65 Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. LIBOR + 2.000% 2.152% VRN 4/30/28 300,000 289,17 Packaging & Containers — 0.1% Berry Global, Inc., Term Loan Y, 1 mo. LIBOR + 2.000% 2.156% VRN 7/01/26 544,366 527,45
1.900% VRN 2/01/27 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. LIBOR + 2.000% 2.152% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan Y, 1 mo. LIBOR + 2.000% 2.156% VRN 7/01/26  Pharmaceuticals — 0.2% Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24 Elanco Animal Health, Inc., Term Loan B, 1 mo. LIBOR + 1.750%
1.900% VRN 2/01/27 99,248 96,85 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 423,550 408,65 Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. LIBOR + 2.000% 2.152% VRN 4/30/28 300,000 289,17 794,66  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan Y, 1 mo. LIBOR + 2.000% 2.156% VRN 7/01/26 544,366 527,42  Pharmaceuticals — 0.2% Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24 289,597 283,12
1.900% VRN 2/01/27 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. LIBOR + 2.000% 2.152% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan Y, 1 mo. LIBOR + 2.000% 2.156% VRN 7/01/26 Pharmaceuticals — 0.2% Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24 Elanco Animal Health, Inc., Term Loan B, 1 mo. LIBOR + 1.750% 1.905% VRN 8/01/27 Grifols Worldwide Operations USA, Inc., USD 2019 Term Loan B, 1 Week LIBOR + 2.000% 2.100% VRN 11/15/27  124,063  121,364
1.900% VRN 2/01/27 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. LIBOR + 2.000% 2.152% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan Y, 1 mo. LIBOR + 2.000% 2.156% VRN 7/01/26  Pharmaceuticals — 0.2% Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24 Elanco Animal Health, Inc., Term Loan B, 1 mo. LIBOR + 1.750% 1.905% VRN 8/01/27 Grifols Worldwide Operations USA, Inc., USD 2019 Term Loan B, 1 Week LIBOR + 2.000%
1.900% VRN 2/01/27 99,248 96,83 CSC Holdings LLC, 2018 Incremental Term Loan, 1 mo. LIBOR + 2.250% 2.402% VRN 1/15/26 423,550 408,63 Telenet Financing USD LLC, 2020 USD Term Loan AR, 1 mo. LIBOR + 2.000% 2.152% VRN 4/30/28 300,000 289,17 Packaging & Containers — 0.1% Berry Global, Inc., Term Loan Y, 1 mo. LIBOR + 2.000% 2.156% VRN 7/01/26 544,366 527,42 Pharmaceuticals — 0.2% Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24 289,597 283,12 Elanco Animal Health, Inc., Term Loan B, 1 mo. LIBOR + 1.750% 1.905% VRN 8/01/27 1,049,854 1,019,23 Grifols Worldwide Operations USA, Inc., USD 2019 Term Loan B, 1 Week LIBOR + 2.000% 2.100% VRN 11/15/27 124,063 121,34 1,423,76

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

	Principal Amount		Value
Retail — 0.0%			
1011778 B.C. Unlimited Liability Co., Term Loan B4, 1 mo. LIBOR + 1.750% 1.897% VRN 11/19/26	\$ 374,485	\$	358,412
Semiconductors — 0.0%	,	<del></del>	
Broadcom, Inc., 2019 1st Lien Term Loan A3, 3 mo. LIBOR + 1.125% 1.284% VRN 11/04/22	310,887		310,110
Software — 0.0%	310,007		310,110
SS&C Technologies Holdings Europe S.A.R.L., 2018 Term Loan B4, 1 mo. LIBOR + 1.750%	20.752		20.720
1.897% VRN 4/16/25 SS&C Technologies, Inc., 2018 Term Loan B3, 1 mo. LIBOR + 1.750%	30,753		29,728
1.897% VRN 4/16/25	43,172		41,733
T.L.,,,, 0.40/			71,461
Telecommunications — 0.4% CenturyLink, Inc.			
2020 Term Loan A, 1 mo. LIBOR + 2.000%			
2.147% VRN 1/31/25 2020 Term Loan B, 1 mo. LIBOR + 2.250%	240,625		232,203
2.397% VRN 3/15/27	347,375		333,171
CommScope, Inc., 2019 Term Loan B, 1 mo. LIBOR + 3.250%			
3.397% VRN 4/06/26 Frontier Communications Corp., 2017 Term Loan B1, PRIME + 2.750%	297,000		288,886
6.000% 6/15/24	847,187		831,539
Level 3 Financing, Inc., 2019 Term Loan B, 1 mo. LIBOR + 1.750%	225 000		214.520
1.897% VRN 3/01/27 SBA Senior Finance II LLC, 2018 Term Loan B, 1 mo. LIBOR + 1.750%	325,000		314,538
1.896% VRN 4/11/25	488,750		475,476
T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000%	(72.212		(72.290
3.147% VRN 4/01/27 Zayo Group Holdings, Inc., USD Term Loan, 1 mo. LIBOR + 3.000%	673,313		672,289
3.147% VRN 3/09/27	572,125		554,452
			3,702,554
	Principal		
	 Amount		Value
Transportation — 0.0% PODS LLC, 2018 1st Lien Term Loan, 1 mo. LIBOR + 2.750%			
3.750% VRN 12/06/24	\$ 125,439	\$	122,670
TOTAL BANK LOANS (Cost \$11,841,803)			11,835,916
			11,000,010
CORPORATE DEBT — 23.8% Agriculture — 0.5%			
BAT Capital Corp.			
2.726% 3/25/31	645,000		642,713
4.390% 8/15/37 4.540% 8/15/47	340,000 1,845,000		367,640 1,975,763
Reynolds American, Inc.	1,043,000		1,975,705
5.850% 8/15/45	1,160,000		1,409,568
Airlines — 0.4%			4,395,684
Continental Airlines, Inc.			
8.048% 5/01/22	177		177
5.983% 10/19/23 US Airways, Inc.	2,883,909		2,828,326
7.125% 4/22/25	831,172		708,230
			3,536,733
Auto Manufacturers — 1.3% Ford Motor Credit Co. LLC			
Auto Manufacturers — 1.3% Ford Motor Credit Co. LLC 3 mo. USD LIBOR + .810% 1.114% FRN 4/05/21	3,255,000		3,207,411
Ford Motor Credit Co. LLC 3 mo. USD LIBOR + .810% 1.114% FRN 4/05/21 3 mo. USD LIBOR + .880% 1.146% FRN 10/12/21	455,000		437,129
Ford Motor Credit Co. LLC 3 mo. USD LIBOR + .810% 1.114% FRN 4/05/21 3 mo. USD LIBOR + .880% 1.146% FRN 10/12/21 2.343% 11/02/20	455,000 1,270,000		437,129 1,268,413
Ford Motor Credit Co. LLC 3 mo. USD LIBOR + .810% 1.114% FRN 4/05/21 3 mo. USD LIBOR + .880% 1.146% FRN 10/12/21 2.343% 11/02/20 3.339% 3/28/22	455,000 1,270,000 955,000		437,129 1,268,413 951,276
Ford Motor Credit Co. LLC 3 mo. USD LIBOR + .810% 1.114% FRN 4/05/21 3 mo. USD LIBOR + .880% 1.146% FRN 10/12/21 2.343% 11/02/20	455,000 1,270,000		437,129 1,268,413
Ford Motor Credit Co. LLC  3 mo. USD LIBOR + .810% 1.114% FRN 4/05/21  3 mo. USD LIBOR + .880% 1.146% FRN 10/12/21  2.343% 11/02/20  3.339% 3/28/22  3.813% 10/12/21  4.250% 9/20/22  5.750% 2/01/21	455,000 1,270,000 955,000 520,000		437,129 1,268,413 951,276 521,300
Ford Motor Credit Co. LLC  3 mo. USD LIBOR + .810% 1.114% FRN 4/05/21  3 mo. USD LIBOR + .880% 1.146% FRN 10/12/21  2.343% 11/02/20  3.339% 3/28/22  3.813% 10/12/21  4.250% 9/20/22  5.750% 2/01/21  General Motors Co.	455,000 1,270,000 955,000 520,000 435,000 265,000		437,129 1,268,413 951,276 521,300 438,767 266,656
Ford Motor Credit Co. LLC  3 mo. USD LIBOR + .810% 1.114% FRN 4/05/21  3 mo. USD LIBOR + .880% 1.146% FRN 10/12/21  2.343% 11/02/20  3.339% 3/28/22  3.813% 10/12/21  4.250% 9/20/22  5.750% 2/01/21	455,000 1,270,000 955,000 520,000 435,000		437,129 1,268,413 951,276 521,300 438,767
Ford Motor Credit Co. LLC  3 mo. USD LIBOR + .810% 1.114% FRN 4/05/21  3 mo. USD LIBOR + .880% 1.146% FRN 10/12/21  2.343% 11/02/20  3.339% 3/28/22  3.813% 10/12/21  4.250% 9/20/22  5.750% 2/01/21  General Motors Co.  4.875% 10/02/23  General Motors Financial Co., Inc.  3.150% 6/30/22	455,000 1,270,000 955,000 520,000 435,000 265,000 150,000		437,129 1,268,413 951,276 521,300 438,767 266,656 163,220 826,936
Ford Motor Credit Co. LLC  3 mo. USD LIBOR + .810% 1.114% FRN 4/05/21  3 mo. USD LIBOR + .880% 1.146% FRN 10/12/21  2.343% 11/02/20  3.339% 3/28/22  3.813% 10/12/21  4.250% 9/20/22  5.750% 2/01/21  General Motors Co.  4.875% 10/02/23  General Motors Financial Co., Inc.	455,000 1,270,000 955,000 520,000 435,000 265,000		437,129 1,268,413 951,276 521,300 438,767 266,656

3.450% 4/10/22	1,720,000	1,768,373
3.550% 7/08/22	410,000	423,620
4.200% 11/06/21	245,000	252,875
4.375% 9/25/21	995,000	1,026,512
		11,887,482
Banks — 3.3%		
Bank of America Corp.		
SOFR + 1.150% 1.319% VRN 6/19/26	65,000	65,490

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

	Principal Amount	Value
3 mo. USD LIBOR + 1.190% 2.884% VRN 10/22/30 3 mo. USD LIBOR + 3.150% 4.083% VRN 3/20/51	\$ 595,000 1,780,000	\$ 642,655 2,204,247
Citigroup, Inc.		
SOFR + 2.107% 2.572% VRN 6/03/31 3.200% 10/21/26	1,150,000 855,000	1,205,280 943,150
Discover Bank	1 120 000	1 227 275
4.200% 8/08/23 Fifth Third Bancorp	1,120,000	1,226,265
2.550% 5/05/27	1,100,000	1,184,478
Global Bank Corp. 3 mo. USD LIBOR + 3.300%	1,100,000	1,101,170
5.250% VRN 4/16/29 <sup>(a)</sup>	200,000	209,500
The Goldman Sachs Group, Inc.	200,000	207,500
3 mo. USD LIBOR + 1.201% 3.272% VRN 9/29/25	2,055,000	2,224,307
3 mo. USD LIBOR + 1.510% 3.691% VRN 6/05/28	405,000	453,976
HSBC Holdings PLC		
SOFR + 1.732% 2.013% VRN 9/22/28	1,370,000	1,358,021
SOFR + 1.947% 2.357% VRN 8/18/31	920,000	905,781
JP Morgan Chase & Co. SOFR + 2.440% 3.109% VRN 4/22/51	1,660,000	1,781,382
3.200% 6/15/26	820,000	910,196
3 mo. USD LIBOR + 1.000% 4.023% VRN 12/05/24	2,130,000	2,337,308
SOFR + 3.790% 4.493% VRN 3/24/31	650,000	793,223
Lloyds Banking Group PLC	,	,
3 mo. USD LIBOR + .810% 2.907% VRN 11/07/23	445,000	462,155
3.900% 3/12/24	830,000	901,813
4.050% 8/16/23	845,000	914,443
Santander UK PLC		
5.000% 11/07/23 <sup>(a)</sup>	1,390,000	1,515,864
Wells Fargo & Co.	1 060 000	1 105 076
SOFR + 2.100% 2.393% VRN 6/02/28 3 mo. USD LIBOR + 1.170% 2.879% VRN 10/30/30	1,060,000 75,000	1,105,876 80,542
SOFR + 2.530% 3.068% VRN 4/30/41	1,300,000	1,359,931
3 mo. USD LIBOR + 1.310% 3.584% VRN 5/22/28	1,345,000	1,505,648
	-,,	-,,
	Dwingingl	
	Principal	37.1
2 LICD LIDOR   4 2400/ 5 0120/ VPNI 4/04/51	Amount	Value
3 mo. USD LIBOR + 4.240% 5.013% VRN 4/04/51		\$ 3,453,098
	Amount	
3 mo. USD LIBOR + 4.240% 5.013% VRN 4/04/51 <b>Beverages</b> — <b>0.4%</b> Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc.	Amount	\$ 3,453,098
Beverages — 0.4%	Amount	\$ 3,453,098
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd.	Amount \$ 2,523,000	\$ 3,453,098 29,744,629
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46	Amount \$ 2,523,000	\$ 3,453,098 29,744,629
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a)	Amount \$ 2,523,000 2,215,000	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd.	Amount \$ 2,523,000  2,215,000  460,000	\$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a)	Amount \$ 2,523,000  2,215,000  460,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688
Beverages — 0.4%  Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46  Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1%  Amgen, Inc.	Amount \$ 2,523,000  2,215,000  460,000 275,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45	Amount \$ 2,523,000  2,215,000  460,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3%	Amount \$ 2,523,000  2,215,000  460,000 275,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426
Beverages — 0.4%  Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46  Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1%  Amgen, Inc. 4.400% 5/01/45  Chemicals — 0.3%  International Flavors & Fragrances, Inc.	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48	Amount \$ 2,523,000  2,215,000  460,000 275,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426
Beverages — 0.4%  Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46  Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1%  Amgen, Inc. 4.400% 5/01/45  Chemicals — 0.3%  International Flavors & Fragrances, Inc. 5.000% 9/26/48  Nutrition & Biosciences, Inc.	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4%	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000  1,160,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/55 Gartner, Inc.	Amount \$ 2,523,000  2,215,000  460,000 275,000  1,265,000  1,160,000  875,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531 926,456
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/55	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000  1,160,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/55 Gartner, Inc. 3.750% 10/01/30 (a) IHS Markit Ltd.	Amount \$ 2,523,000  2,215,000  460,000  275,000  1,265,000  1,160,000  875,000  660,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531 926,456 667,623
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/55 Gartner, Inc. 3.750% 10/01/30 (a) IHS Markit Ltd. 4.000% 3/01/26 (a)	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000  1,160,000  875,000  660,000  124,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531 926,456 667,623 138,260
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/55 Gartner, Inc. 3.750% 10/01/30 (a) IHS Markit Ltd. 4.000% 3/01/26 (a) 4.750% 2/15/25 (a)	Amount \$ 2,523,000  2,215,000  460,000 275,000  1,265,000  1,160,000  875,000  660,000  124,000 505,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531 926,456 667,623 138,260 572,145
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/55 Gartner, Inc. 3.750% 10/01/30 (a) IHS Markit Ltd. 4.000% 3/01/26 (a) 4.750% 2/15/25 (a) 4.750% 8/01/28	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000  1,160,000  875,000 660,000  124,000 505,000 750,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531 926,456 667,623 138,260 572,145 892,193
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/55 Gartner, Inc. 3.750% 10/01/30 (a) IHS Markit Ltd. 4.000% 3/01/26 (a) 4.750% 2/15/25 (a)	Amount \$ 2,523,000  2,215,000  460,000 275,000  1,265,000  1,160,000  875,000  660,000  124,000 505,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531 926,456 667,623 138,260 572,145 892,193 359,530
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/55 Gartner, Inc. 3.750% 10/01/30 (a) IHS Markit Ltd. 4.000% 3/01/26 (a) 4.750% 2/15/25 (a) 4.750% 8/01/28 5.000% 11/01/22 (a)	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000  1,160,000  875,000 660,000  124,000 505,000 750,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531 926,456 667,623 138,260 572,145 892,193
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/55 Gartner, Inc. 3.750% 10/01/30 (a) IHS Markit Ltd. 4.000% 3/01/26 (a) 4.750% 2/15/25 (a) 4.750% 8/01/28	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000  1,160,000  875,000 660,000  124,000 505,000 750,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531 926,456 667,623 138,260 572,145 892,193 359,530
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/55 Gartner, Inc. 3.750% 10/01/30 (a) IHS Markit Ltd. 4.000% 3/01/26 (a) 4.750% 2/15/25 (a) 4.750% 8/01/28 5.000% 11/01/22 (a)  Computers — 0.0%	Amount \$ 2,523,000  2,215,000  460,000 275,000  680,000  1,265,000  1,160,000  875,000 660,000  124,000 505,000 750,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531 926,456 667,623 138,260 572,145 892,193 359,530
Beverages — 0.4% Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc. 4.900% 2/01/46 Bacardi Ltd. 4.700% 5/15/28 (a) 5.300% 5/15/48 (a)  Biotechnology — 0.1% Amgen, Inc. 4.400% 5/01/45 Chemicals — 0.3% International Flavors & Fragrances, Inc. 5.000% 9/26/48 Nutrition & Biosciences, Inc. 3.468% 12/01/50 (a)  Commercial Services — 0.4% Duke University 2.832% 10/01/30 (a) IHS Markit Ltd. 4.000% 3/01/26 (a) 4.750% 2/15/25 (a) 4.750% 8/01/28 5.000% 11/01/22 (a)  Computers — 0.0% Dell International LLC/EMC Corp.	Amount \$ 2,523,000  2,215,000  460,000 275,000  1,265,000  1,160,000  875,000 660,000  124,000 505,000 750,000 335,000	\$ 3,453,098 29,744,629 2,731,160 534,578 344,688 3,610,426 842,447 1,565,306 1,171,225 2,736,531 926,456 667,623 138,260 572,145 892,193 359,530 3,556,207

Diversified Financial Services — 1.1%		
AerCap Ireland Capital DAC / AerCap Global Aviation Trust		
4.500% 5/15/21	250,000	254,763
AerCap Ireland Capital DAC/AerCap Global Aviation Trust		
3.875% 1/23/28	265,000	244,258
4.125% 7/03/23	220,000	224,389
Air Lease Corp.		
3.250% 3/01/25	950,000	966,411
Avolon Holdings Funding Ltd.		
2.875% 2/15/25 <sup>(a)</sup>	860,000	788,277

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

Manual
5.128% 100123 (a)         10,000         10,108 to           6E Capital Funding LC         10,000         10,38 to           4.400% \$1/330 (b)         875,00         39,80 to           6E Capital International Funding Co. Unlimited Co.         32,800 to         3,417,89 to           4.48 (in 17/53)         640 to         36,818 to           1.850% \$1/522 (b)         640 to         65,884 to           1.850% \$1/523 (b)         700 to         69,366 to           4.500% \$1/523 (b)         700 to         78,810 to           5.500% \$1/524 (b)         26,500 to         78,810 to           5.000% \$1/525 (b)         20,000 to         20,525 to           5.84 FB Texas, Inc.         3,300 to         20,000 to         20,535 to           4.850 (c) 10/125 (b)         480,000 to         20,000 to         20,535 to           4.850 (c) 10/125 (c)         480,000 to         20,000 to
5.250% \$15524 bb         110,000         110,385           GC Capital Funding LLC         875,00         939,670           GE Capital International Funding Co. Unlimited Co.         3,238,00         3,417,899           Intercontinental Exchange, Inc.         3,238,00         635,884           Park Acrospace Holdings Lt.         700,000         693,664           \$2,50% \$15523 bb         700,000         693,664           \$2,50% \$15524 bb         260,000         267,022           \$2,50% \$15524 bb         260,000         2,203,555           ***EPT Exast, Inc.         3,200,000         2,203,555           ***ABEP Texast, Inc.         4,000,000         2,000,000         2,003,555           ***ABEP Texast, Inc.         4,000,000         2,000,000         2,003,555           ***ABEP Texast, Inc.         4,000,000         2,000,000         2,003,555           ****ABEP Texast, Inc.         4,000,000         3,000,000         2,000,000         3,000,000         2,000,000
GE Capital Funding LLC         875,00         39,070           4,400% \$15320.60         3,238,000         3,417,899           Intercontinental Exchange, Inc.         64,000         655,884           1,850% \$1552.20         64,000         693,644           2,500% \$1552.20         70,000         693,644           4,500% 31552.20         75,000         788,170           5,500% \$1522.60         70,000         693,644           5,500% \$1522.60         70,000         693,644           4,500% 31552.20         70,000         693,648           6,500% \$1522.60         70,000         693,648           6,500% \$1522.60         70,000         70,000           8,500% \$1522.60         70,000         70,000           8,500% \$1522.60         70,000         70,000           3,500% \$1522.60         20,000         2,203,53           Ameril Hinolo         3,000         564,812           Centric — 1.2%         3,000         1,300,00         564,812           Ameril Hinolo         3,300         874,130         1,300,00         1,300,00         1,300,00         1,300,00         1,300,00         1,300,00         1,300,00         1,300,00         1,300,00         1,300,00         1,300,00
GE Capital International Funding Co. Unlimited Co. 44/8% 11/15/35         3,238,00         3,417,898           Intercontinental Exchange, Inc.         64,000         635,884           Park Acrospace Holdings Ltd.         70,000         78,816           4,500% 31/522 (a)         78,000         78,100           5,250% 81/522 (a)         78,000         267,001           5,000% 21/524 (a)         20,000         2,70,701           Electric — 1,2%         2,000,000         2,203,535           AREP Texas, Inc.         3,800% 100/125 (a)         2,000,000         564,812           3,800% 100/125 (b)         2,000,000         564,812           Consolidated Edison Co. of New York, Inc.         480,000         64,812           Consolidated Edison Co. of New York, Inc.         1,000,000         1,300,003           Duke Energy Crobinant LC         73,800         1,300,003           Sarry Conditions LC         1,250,000         1,300,802           FirstEnergy Transmission LC         1,250,000         1,308,625           FirstEnergy Transmission LC         9,800,000         1,022,283           MidAmerican Energy Co.         4,000,416,125 (a)         2,000,000           Atomy Coll 15/44 (a)         1,000,000         2,416,347           Mong Duong Finance Holding
4.48% 11/5/35         3,238,00%         3,417,898           Intercontinent Exchange, Inc.         1,850% 91/523         640,00%         635,884           Park Acrossnec Holdings Ltd.         700,00%         693,664         5250% 81/522 (9)         700,00%         693,664         5250% 81/522 (9)         788,100         788,100         267,021<
1.850% 91/5.732
4.50% 3.15.22 (a)   700,000   633,664   5.250% 8.15.22 (a)   785,000   788,176   5.500% 2.15.24 (a)   265,000   267,023   26
5.250% 8/15/22 (a)       785,000       788,106         5.50% 2/15/24 (a)       265,000       267,021         Electric — 1.2%
5.00% 2/15/24 (a)         26,000 (a)         26,001 (a)         26,002 (a)         26,002 (a)         26,002 (a)         26,002 (a)         26,002 (a)         26,003 (a)
Deletric - 1.2%   AEP Texas, Inc.
Electric - 1.2%         Comment of the part of
3.850% 1001/25 (a)         2,000,000         2,203,535           Ameren Illinois Co.         480,000         564,812           Consolidated Edison Co. of New York, Inc.         480,000         1,300,812           4,650% 120/147         1,000,000         373,000         874,130           Duke Energy Carolinas LLC         738,000         378,000         874,130           Entergy Louisiana LLC         1,250,000         1,368,625           FirstEnergy Transmission LLC         600,000         775,273           Metropolitan Edison Co.         4,000% 4/15/25 (a)         88,000         1,092,283           MidAmerican Energy Co.         4,000% 4/15/25 (a)         2,805,000         2,416,347           Mong Duong Finance Holdings BV         250,000         2,416,347           5,125% 5/07/29 (a)         250,000         254,797           Mong Duong Finance Holdings BV         250,000         254,797           Power Team Services LLC         821,000         865,129           9,033% 12/04/25 (a)         821,000         865,129           Caesars Entertainment, Inc.         266,000         278,035           Churchill Downs, Inc.         250,000 4/01/27 (a)         266,000         278,035           Live Nation Entertainment, Inc.         250,000
3.70% 12/01/47       480,000       564,812         Consolidated Edison Co. of New York, Inc.       1,000,000       1,300,193         Uke Energy Carolinas LLC       738,000       874,130         3.70% 12/01/47       738,000       874,130         Entergy Louisians LLC       1,250,000       1,668,625         5.45,9% 7/15/44 (a)       600,000       775,273         Metropolitan Edison Co.       4,000% 41/5/25 (a)       985,000       1,092,283         MidAmerican Energy Co.       3,195,000       2,416,347         Mong Duong Finance Holdings BV       250,000       254,797         5.125% 5/07/29 (a)       250,000       254,797         Power Team Services LLC       821,000       865,129         9.033% (12/04/25 (a)       821,000       865,129         Entertainment — 0.2%       266,000       278,035         Caesars Entertainment, Inc.       266,000       278,035         Churchill Downs, Inc.       257,000       240,696         6.250% 7/01/25 (a)       994,000       1,037,537         Live Nation Entertainment, Inc.       257,000       240,696         1,759% 10/15/27 (a)       257,000       240,696         6.250% 7/01/25 (a)       257,000       257,000       257,506
Consolidated Edison Co. of New York, Inc.         1,000,000         1,300,108           4.650% 12/01/47         738,000         874,130           Duke Energy Carolinas LLC         738,00%         12,500,000         1,368,625           Entergy Louisiana LLC         1,250,000         1,368,625           FirstEnergy Transmission LLC         600,000         775,273           5,450% 71/5/44 (%)         600,000         775,273           Metropolitan Edison Co.         4,000%         1,905,000         2,918,283           MidAmerican Energy Co.         4,400%         1,950,000         2,416,347           Mong Duong Finance Holdings BV         250,000         254,797           5,125% 5/07/29 (%)         250,000         254,797           10,849,995         10,849,995           Engineering & Construction — 0.1%         821,000         865,129           PowerTeam Services LLC         821,000         865,129           9,033% 12/04/25 (%)         821,000         865,129           Entertainment — 0.2%         266,000         278,035           Cassars Entertainment, Inc.         994,000         1,037,353           Live Nation Entertainment, Inc.         257,000         240,666           Live Nation Entertainment, Inc.         Princi
Duke Energy Carolinas LLC         738,00%         874,130           3.700% 12/01/7         738,00%         874,130           Entergy Louisiana LLC         1,250,000         1,368,625           FirstEnergy Transmission LLC         600,000         775,273           Metropolitan Edison Co.         985,000         1,092,283           4.000% 4/15/25 (a)         985,000         2,416,347           MidAmerican Energy Co.         250,000         2,416,347           Mong Duong Finance Holdings BV         250,000         254,797           5.125% 5/07/29 (a)         250,000         254,797           PowerTeam Services LLC         821,000         865,129           Pertrainment — 0.2%         881,000         865,129           Casars Entertainment, Inc.         266,000         278,035           Churchill Downs, Inc.         250,000         1,037,537           Live Nation Entertainment, Inc.         257,000         240,696           4,750% 10/15/27 (a)         257,000         240,696           Live Nation Entertainment, Inc.         257,000         240,696           Live Nation Entertainment, Inc.         257,000         240,696           Live Nation Entertainment, Inc.         257,000         257,000           Live Nation Ent
Enterty Louisiana LLC         1,250,00         1,368,025           3.780% 4/01/25         1,250,000         1,368,025           FirstEnergy Transmission LLC         600,000         775,273           Metropolitan Edison Co.         985,000         1,092,283           4.000% 4/15/25 (a)         985,000         2,416,347           MidAmerican Energy Co.         250,000         254,079           4.000 10/15/4         250,000         254,797           Mong Duong Finance Holdings BV         250,000         254,797           5.125% 5/07/29 (a)         250,000         254,797           PowerTeam Services LLC         821,000         865,129           9.033% 12/04/25 (a)         821,000         865,129           Entertainment — 0.2%         266,000         278,035           Ceasars Entertainment, Inc.         266,000         278,035           Churchill Downs, Inc.         994,000         1,037,537           Live Nation Entertainment, Inc.         257,000         240,696           4,750% 10/15/27 (a)         257,000         240,696           4,750% 10/15/27 (a)         257,000         1,555,626           Environmental Controls — 0.1%         Yalue
3.78% 4/01/25       1,250,000       1,368,625         FirstEnergy Transmission LLC       600,000       775,273         S.450% 7/15/44 (a)       600,000       775,273         Metropolitan Edison Co.       985,000       1,092,283         MidAmerican Energy Co.       1,905,000       2,416,347         4.400% 10/15/44       1,905,000       254,797         6.12% 5/07/29 (a)       250,000       254,797         7.10,849,995       10,849,995         Engineering & Construction — 0.1%         PowerTeam Services LLC       821,000       865,129         9.033% 12/04/25 (a)       821,000       865,129         Entertainment — 0.2%       266,000       278,035         Chestratinment, Inc.       266,000       278,035         6.250% 7/01/25 (a)       994,000       1,037,537         Churchill Downs, Inc.       994,000       1,037,537         Live Nation Entertainment, Inc.       257,000       240,696         4.750% 10/15/27 (a)       257,000       21,556,266         Low North Angelia       257,000       240,696         1,556,268       257,000       257,000         257,000       257,000       257,000         257,000       257,000
5.450% 7/15/44 (a)         600,000         775,273           Metropolitan Edison Co.         700,00% 4/15/25 (a)         985,000         1,092,283           4.00% 4/15/25 (a)         985,000         1,092,283           MidAmerican Energy Co.         4.400% 10/15/44         1,905,000         2,416,347           Mong Duong Finance Holdings BV         250,000         254,797         10,849,995           Engineering & Construction — 0.1%         821,000         865,129           PowerTeam Services LLC         821,000         865,129           Entertainment — 0.2%         821,000         865,129           Casears Entertainment, Inc.         26,250% 7/0/25 (a)         266,000         278,035           Churchill Downs, Inc.         994,000         1,037,537           Live Nation Entertainment, Inc.         257,000         240,696           4.750% 10/15/27 (a)         257,000         240,696           4.750% 10/15/27 (a)         257,000         240,696           Environmental Controls — 0.1%         Value
1,00% 4/15/25 (a)   985,000   1,092,283     MidAmerican Energy Co.   4,400% 10/15/44   1,905,000   2,416,347     Mong Duong Finance Holdings BV   250,000   254,797     Formitian Energy Co.   260,000   278,035     Formitian Energy Co.   260,000
MidAmerican Energy Co.       4.400% 10/15/44       1,905,000       2,416,347         Mong Duong Finance Holdings BV       250,000       254,797         5.125% 5/07/29 (a)       250,000       254,797         10,849,995         Engineering & Construction — 0.1%         Power Team Services LLC       821,000       865,129         9.033% 12/04/25 (a)       821,000       865,129         Entertainment — 0.2%       266,000       278,035         Churchill Downs, Inc.       266,000       278,035         Churchill Downs, Inc.       994,000       1,037,537         Live Nation Entertainment, Inc.       257,000       240,696         4.750% 10/15/27 (a)       257,000       240,696         1,556,268       27,006       27,006         Principal Amount       Value
Mong Duong Finance Holdings BV           5.125% 5/07/29 (a)         250,000         254,797           Engineering & Construction — 0.1%           PowerTeam Services LLC           9.033% 12/04/25 (a)         821,000         865,129           Entertainment — 0.2%           Caesars Entertainment, Inc.         266,000         278,035           Churchill Downs, Inc.         994,000         1,037,537           Live Nation Entertainment, Inc.         257,000         240,696           4.750% 10/15/27 (a)         257,000         240,696           1,556,268           Principal Amount         Value
10,849,995
PowerTeam Services LLC   9.033% 12/04/25 (a)   821,000   865,129     Entertainment — 0.2%
9.033% 12/04/25 (a) 821,000 865,129  Entertainment — 0.2% Caesars Entertainment, Inc. 6.250% 7/01/25 (a) 266,000 278,035  Churchill Downs, Inc. 5.500% 4/01/27 (a) 994,000 1,037,537  Live Nation Entertainment, Inc. 4.750% 10/15/27 (a) 257,000 240,696 1,556,268  Environmental Controls — 0.1%
Entertainment — 0.2% Caesars Entertainment, Inc. 6.250% 7/01/25 (a) Churchill Downs, Inc. 5.500% 4/01/27 (a) Live Nation Entertainment, Inc. 4.750% 10/15/27 (a)  Principal Amount Value  Environmental Controls — 0.1%
Caesars Entertainment, Inc.       266,000       278,035         Churchill Downs, Inc.       994,000       1,037,537         5.500% 4/01/27 (a)       994,000       1,037,537         Live Nation Entertainment, Inc.       257,000       240,696         4.750% 10/15/27 (a)       257,000       1,556,268         Principal Amount       Value
Churchill Downs, Inc.  5.500% 4/01/27 (a)  Live Nation Entertainment, Inc.  4.750% 10/15/27 (a)  257,000 240,696 1,556,268  Principal Amount Value  Environmental Controls — 0.1%
5.500% 4/01/27 (a) Live Nation Entertainment, Inc.  4.750% 10/15/27 (a)  257,000 240,696 1,556,268  Principal Amount Value  Environmental Controls — 0.1%
Live Nation Entertainment, Inc.  4.750% 10/15/27 (a)  257,000  1,556,268  Principal Amount Value  Environmental Controls — 0.1%
4.750% 10/15/27 (a) 240,696 257,000 240,696 1,556,268  Principal Amount Value  Environmental Controls — 0.1%
Principal Amount Value Environmental Controls — 0.1%
Principal Amount Value  Environmental Controls — 0.1%
Environmental Controls — 0.1% Value Value
Environmental Controls — 0.1%
3.750% 8/01/25 <sup>(a)</sup> \$ 500,000 \$ 502,763 Waste Pro USA, Inc.
5.500% 2/15/26 <sup>(a)</sup> 303,000 306,633
809,396
Foods — 0.8%  JBS USA LUX SA/JBS USA Food Co./JBS USA Finance, Inc.
5.500% 1/15/30 <sup>(a)</sup> 81,635
Kraft Heinz Foods Co. 4.375% 6/01/46 1,195,000 1,227,776
4.875% 10/01/49 <sup>(a)</sup> 1,435,000 1,514,381
5.000% 6/04/42 2,450,000 2,683,051
5.200% 7/15/45 750,000 819,925 The Kroger Co.
4.450% 2/01/47 885,000 1,086,112
Pilgrim's Pride Corp.       75,000       77,437

5.875% 9/30/27 <sup>(a)</sup>		
C 0.20/		7,490,317
Gas — 0.2%		
KeySpan Gas East Corp.		
5.819% 4/01/41 <sup>(a)</sup>	1,337,000	1,868,812
Health Care – Services — 1.0%		
Aetna, Inc.	500.000	5.45.000
3.500% 11/15/24	500,000	547,908
Centene Corp.		
3.000% 10/15/30 <sup>(b)</sup>	2,936,000	2,995,307
4.250% 12/15/27	435,000	455,197
5.250% 4/01/25 <sup>(a)</sup>	255,000	265,009
Encompass Health Corp.		
4.750% 2/01/30	415,000	421,034
HCA, Inc.		
5.000% 3/15/24	975,000	1,092,311
5.125% 6/15/39	650,000	788,815
5.250% 4/15/25	644,000	743,594
5.250% 6/15/49	1,000,000	1,224,141
Molina Healthcare, Inc.		
5.375% STEP 11/15/22	460,000	480,700
UnitedHealth Group, Inc.		
3.875% 8/15/59	230,000	281,388
		9,295,404
Household Products & Wares — 0.1%		
Central Garden & Pet Co.		
5.125% 2/01/28	22,000	23,100
Spectrum Brands, Inc.		
5.750% 7/15/25	500,000	515,500
		538,600

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

	Principal Amount	Value
Insurance — 1.3%  Formore Evolution of Conitol II 2 mg, USD LIDOR   2.7449/		
Farmers Exchange Capital II 3 mo. USD LIBOR + 3.744% 6.151% VRN 11/01/53 <sup>(a)</sup> Farmers Exchange Capital III 3 mo. USD LIBOR + 3.454%	\$ 1,750,000	\$ 2,145,007
5.454% VRN 10/15/54 <sup>(a)</sup> Teachers Insurance & Annuity Association of America 3 mo. USD LIBOR + 2.661%	3,290,000	3,977,856
4.375% VRN 9/15/54 <sup>(a)</sup> Willis North America, Inc.	4,000,000	4,240,249
2.950% 9/15/29	1,280,000	1,379,301 11,742,413
Media — 1.1% CCO Holdings LLC/CCO Holdings Capital Corp.		
4.250% 2/01/31 <sup>(a)</sup>	800,000	829,170
4.500% 8/15/30 <sup>(a)</sup>	589,000	618,477
5.375% 6/01/29 <sup>(a)</sup>	329,000	356,554
Charter Communications Operating LLC/Charter Communications Operating Capital	329,000	330,334
3.750% 2/15/28	500,000	552,802
4.908% 7/23/25	1,105,000	1,277,626
5.375% 4/01/38	5,000	6,120
CSC Holdings LLC		
5.375% 2/01/28 <sup>(a)</sup>	125,000	132,031
Time Warner Cable, Inc.	,	,
5.875% 11/15/40	1,270,000	1,582,518
Virgin Media Secured Finance PLC		
4.500% 8/15/30 <sup>(a)</sup>	900,000	924,696
5.500% 5/15/29 <sup>(a)</sup>	541,000	580,736
The Walt Disney Co.		
2.650% 1/13/31	875,000	944,712
3.600% 1/13/51	1,725,000	1,943,915
		9,749,357
Mining — 0.0%		
Corp. Nacional del Cobre de Chile	400.000	105.064
3.150% 1/14/30 <sup>(a)</sup>	400,000	425,364
Miscellaneous - Manufacturing — 0.3%		
General Electric Co. 4.250% 5/01/40	850,000	862,376
5.875% 1/14/38	716,000	837,259
6.750% 3/15/32	890,000	1,119,652
		2,819,287
Oil & Gas — 1.6%		
Antero Resources Corp.		
5.000% 3/01/25	813,000	508,125
	Principal Amount	Value
5.125% 12/01/22	\$ 392,000	\$ 319,480
5.625% 6/01/23	125,000	90,625
BP Capital Markets America, Inc.		ŕ
3.000% 2/24/50	205,000	197,332
3.633% 4/06/30	1,265,000	1,451,157
Canadian Natural Resources Ltd.	277.000	402.760
3.850% 6/01/27 EQT Corp.	375,000	403,768
3.900% 10/01/27	760,000	699,675
Equinor ASA	,	,
3.700% 4/06/50	1,065,000	1,221,718
Exxon Mobil Corp.		
2.610% 10/15/30	255,000	275,632
3.482% 3/19/30	780,000	899,415
4.327% 3/19/50 KazMunayGas National Co	1,910,000	2,390,861
KazMunayGas National Co. 5.750% 4/19/47 <sup>(a)</sup>	200.000	226.011
5./50% 4/19/4/ (4) Occidental Petroleum Corp.	200,000	236,944
4.500% 7/15/44	400,000	286,250
Pertamina Persero PT	700,000	200,230
3.100% 8/27/30 <sup>(a)</sup>	875,000	901,378
Petrobras Global Finance BV	675,000	701,576
·		

5/25/252	2 3 3 4 3	
5.093% 1/15/30	292,000	306,848
Petroleos del Peru SA		
4.750% 6/19/32 <sup>(a)</sup>	400,000	433,200
Petroleos Mexicanos		
5.950% 1/28/31 <sup>(a)</sup>	860,000	726,270
6.625% 6/15/35	2,100,000	1,743,934
7.690% 1/23/50 <sup>(a)</sup>	710,000	594,270
Range Resources Corp.		
4.875% 5/15/25	147,000	132,682
Saudi Arabian Oil Co.		
4.250% 4/16/39 <sup>(a)</sup>	200,000	229,897
Transocean Guardian Ltd.		
5.875% 1/15/24 <sup>(a)</sup>	265,200	171,054
Transocean Pontus Ltd.		
6.125% 8/01/25 <sup>(a)</sup>	313,560	280,385
Transocean Poseidon Ltd.		
6.875% 2/01/27 <sup>(a)</sup>	233,000	186,745
		14,687,645
Oil & Gas Services — 0.0%		
Transocean Proteus Ltd.		
6.250% 12/01/24 <sup>(a)</sup>	111,150	99,201
USA Compression Partners LP / USA Compression Finance Corp.		
6.875% 4/01/26	70,000	69,387
6.875% 9/01/27	217,000	215,182
		383,770

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

		Principal Amount	 Value
Packaging & Containers — 0.3% Amoor Finance USA, Inc.			
4.500% 5/15/28	\$	965,000	\$ 1,131,142
Ardagh Packaging Finance PLC/Ardagh Holdings USA, Inc. 4.125% 8/15/26 <sup>(a)</sup>		170,000	172,337
Ball Corp. 4.000% 11/15/23		200,000	212,300
Matthews International Corp.			
5.250% 12/01/25 <sup>(a)</sup> Mauser Packaging Solutions Holding Co.		275,000	259,875
5.500% 4/15/24 <sup>(a)</sup> OI European Group BV		70,000	70,248
4.000% 3/15/23 <sup>(a)</sup> Sealed Air Corp.		75,000	76,125
4.000% 12/01/27 <sup>(a)</sup>		70,000	73,136
Trivium Packaging Finance BV 5.500% 8/15/26 <sup>(a)</sup>		995,000	1,030,298
		3,2,000	3,025,461
Pharmaceuticals — 2.0% AbbVie, Inc.			
4.250% 11/21/49 <sup>(a)</sup>		725,000	860,703
4.450% 5/14/46		1,848,000	2,200,764
4.550% 3/15/35 <sup>(a)</sup>		576,000	708,154
Bausch Health Cos., Inc. 7.000% 3/15/24 <sup>(a)</sup>		152,000	157,320
Bayer US Finance II LLC		132,000	137,320
4.250% 12/15/25 <sup>(a)</sup>		515,000	589,073
4.375% 12/15/28 <sup>(a)</sup>		2,735,000	3,211,415
4.625% 6/25/38 <sup>(a)</sup>		1,310,000	1,563,114
4.875% 6/25/48 <sup>(a)</sup>		870,000	1,079,552
Bayer US Finance LLC		<b>=</b> co ooo	0.00
3.375% 10/08/24 <sup>(a)</sup> Cigna Corp.		760,000	826,788
3.400% 3/15/50		700,000	732,811
4.125% 11/15/25		2,000,000	2,294,331
CVS Health Corp. 3.250% 8/15/29		5,000	5,500
5.050% 3/25/48		2,820,000	3,599,472
5.125% 7/20/45		610,000	770,728
Pipelines — 1.5%			 18,599,725
Cheniere Energy Partners LP			
5.250% 10/01/25		70,000	71,610
Energy Transfer Operating LP 4.950% 6/15/28		1,291,000	1,367,969
5.500% 6/01/27		264,000	290,687
		Principal	
Energy Transfer Partners LP		Amount	 Value
5.950% 10/01/43 Kinder Morgan Energy Partners LP	\$	750,000	\$ 744,609
3.500% 9/01/23 Kinder Morgan, Inc.		1,006,000	1,072,822
5.550% 6/01/45		1,000,000	1,187,094
Plains All American Pipeline LP/PAA Finance Corp. 4.650% 10/15/25		500,000	536,636
Rockies Express Pipeline LLC 4.950% 7/15/29 <sup>(a)</sup>		1,000,000	971,250
6.875% 4/15/40 <sup>(a)</sup>		745,000	767,946
Sabine Pass Liquefaction LLC		2,000	, , ,
4.500% 5/15/30 <sup>(a)</sup>		1,500,000	1,689,677
Southern Gas Corridor 6.875% 3/24/26 <sup>(a)</sup>		600,000	681,360
Sunoco Logistics Partners Operations LP			
5.350% 5/15/45		370,000	344,328
/	0500		00/40

5.400% 10/01/47	1,275,000	1,203,813
Targa Resources Partners LP/Targa Resources Partners Finance Corp. 6.875% 1/15/29	162,000	173,291
TC PipeLines LP	102,000	173,271
3.900% 5/25/27	1,500,000	1,607,739
Williams Cos., Inc.	, ,	, ,
4.000% 9/15/25	1,000,000	1,108,621
		13,819,452
Real Estate Investment Trusts (REITS) — 1.1%		
Boston Properties LP		
3.850% 2/01/23	1,000,000	1,064,889
CyrusOne LP / CyrusOne Finance Corp.		
2.150% 11/01/30	920,000	898,932
GLP Capital LP/GLP Financing II, Inc.		
4.000% 1/15/30	60,000	62,100
5.250% 6/01/25	500,000	542,910
5.300% 1/15/29	620,000	690,475
5.375% 4/15/26	1,755,000	1,945,066
Healthpeak Properties, Inc.		
4.250% 11/15/23	59,000	64,412
MGM Growth Properties Operating Partnership LP/MGP Finance Co-Issuer, Inc.		
5.625% 5/01/24	450,000	477,126
SL Green Operating Partnership LP		
3.250% 10/15/22	1,000,000	1,020,405
Ventas Realty LP		
3.750% 5/01/24	1,050,000	1,125,645

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

	Principal Amount		Value
3.850% 4/01/27	\$ 1,000,000	\$	1,089,545
Welltower, Inc. 3.750% 3/15/23	1,300,000		1,375,262
3./30/0 3/13/23	1,300,000		10,356,767
Retail — 0.2%			<u> </u>
Alimentation Couche-Tard, Inc.	425.000		420.222
2.700% 7/26/22 <sup>(a)</sup> 3.800% 1/25/50 <sup>(a)</sup>	425,000		438,333
8.800% 1/25/30 V Rite Aid Corp.	105,000		115,405
8.000% 11/15/26 <sup>(a)</sup>	226,000		225,718
Starbucks Corp.			
2.250% 3/12/30	890,000		924,303 1,703,759
Savings & Loans — 0.1%			1,703,739
Nationwide Building Society			
3 mo. USD LIBOR + 1.181% 3.622% VRN 4/26/23 <sup>(a)</sup>	620,000		644,189
3 mo. USD LIBOR + 1.392% 4.363% VRN 8/01/24 <sup>(a)</sup>	300,000		325,263
Semiconductors — 0.3%			969,452
Broadcom Corp./Broadcom Cayman Finance Ltd.			
3.625% 1/15/24	1,005,000		1,080,919
Intel Corp. 4.100% 5/19/46	625,000		780,080
4.750% 3/25/50	490,000		674,789
			2,535,788
Software — 0.1% Change Healthcare Holdings LLC/Change Healthcare Finance, Inc.			
5.750% 3/01/25 <sup>(a)</sup>	325,000		329,648
SS&C Technologies, Inc.	222,000		323,0.0
5.500% 9/30/27 <sup>(a)</sup>	320,000		340,070
Tologommunications 2.40/			669,718
Telecommunications — 2.4% AT&T, Inc.			
3.300% 2/01/52	860,000		815,124
3.500% 9/15/53 <sup>(a)</sup>	1,216,000		1,175,658
4.500% 5/15/35 4.500% 3/09/48	110,000 330,000		129,871 378,713
4.750% 5/15/46	100,000		117,477
4.800% 6/15/44	3,380,000		4,028,350
4.850% 3/01/39 5.250% 3/01/37	366,000 850,000		441,598 1,062,773
Intelsat Jackson Holdings SA	050,000		1,002,773
8.500% 10/15/24 <sup>(a) (c)</sup>	378,000		243,810
9.750% 7/15/25 <sup>(a) (c)</sup>	1,379,000		903,245
	Principal		
	Amount		Value
Koninklijke KPN NV	 	_	
8.375% 10/01/30 Level 3 Financing, Inc.	\$ 440,000	\$	640,498
4.625% 9/15/27 <sup>(a)</sup>	241,000		247,627
5.375% 5/01/25	166,000		171,148
Sprint Corp. 7.875% 9/15/23	74.000		95 007
Sprint Spectrum Co. LLC/Sprint Spectrum Co. II LLC/Sprint Spectrum Co. III LLC	74,000		85,007
3.360% STEP 3/20/23 <sup>(a)</sup>	485,000		490,432
4.738% 9/20/29 <sup>(a)</sup>	2,685,000		2,903,156
5.152% 9/20/29 <sup>(a)</sup>	700,000		824,250
T-Mobile USA, Inc.	_		_
2.550% 2/15/31 <sup>(a)</sup>	955,000		988,053
3.875% 4/15/30 <sup>(a)</sup> 4.375% 4/15/40 <sup>(a)</sup>	840,000		953,081
4.375% 4/15/40 <sup>(4)</sup> 4.500% 2/01/26	840,000 400,000		984,623 412,160
4.750% 2/01/28	175,000		187,204
6.000% 3/01/23	94,000		94,244
6.000% 4/15/24	279,000		284,842

Vodafone Group PLC 4.250% 9/17/50 4.875% 6/19/49 5.250% 5/30/48	315,000 1,260,000 1,000,000	365,340 1,564,397 1,292,822 21,785,503
Transportation — 0.0%		
Empresa de Transporte de Pasajeros Metro SA		
3.650% 5/07/30 <sup>(a)</sup>	200,000	221,500
TOTAL CORPORATE DEBT (Cost \$202,719,481)		217,027,779
MUNICIPAL OBLIGATIONS — 0.6%		
Commonwealth of Massachusetts, General Obligation		
3.000% 3/01/49	1,360,000	1,452,426
Health & Educational Facilities Authority of the State of Missouri, Revenue Bond 3.652% 8/15/57	375,000	462,502
New York State Dormitory Authority, Revenue Bond		
5.051% 9/15/27	600,000	729,264
Regents of the University of California Medical Center Pooled, Revenue Bond 3.256% 5/15/60	2,205,000	2,405,038
5.25070 5.15700	2,203,000	2,103,030

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

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

	 Principal Amount	Value
State of California, General Obligation 7.950% 3/01/36	\$ 221	\$ 205 5,049,435
TOTAL MUNICIPAL OBLIGATIONS (Cost \$4,545,399)		5,049,435
NON-U.S. GOVERNMENT AGENCY OBLIGATIONS — 12.1%  Commercial Mortgage-Backed Securities — 1.3%  BAMLL Commercial Mortgage Securities Trust, Series 2018-PARK, Class A,		
4.227% VRN 8/10/38 <sup>(a)</sup> (d) BX Trust, Series 2019-OC11, Class A	1,280,000	1,505,314
3.202% 12/09/41 <sup>(a)</sup> CALI Mortgage Trust, Series 2019-101C, Class A	420,000	445,173
3.957% 3/10/39 <sup>(a)</sup>	945,000	1,107,880
CPT Mortgage Trust, Series 2019-CPT, Class A 2.865% 11/13/39 (a) DC Off Trust Science 2010 MTG Class A	805,000	877,800
DC Office Trust, Series 2019-MTC, Class A 2.965% 9/15/45 <sup>(a)</sup>	860,000	940,872
Hudson Yards Mortgage Trust Series 2019-55HY, Class A, 3.041% VRN 12/10/41 <sup>(a)</sup> (d) Series 2019-30HY, Class A, 3.228% 7/10/39 <sup>(a)</sup>	860,000 880,000	950,887 987,027
J.P. Morgan Chase Commercial Mortgage Securities Trust, Series 2019-OSB, Class A 3.397% 6/05/39 (a)	900,000	1,019,223
MKT Mortgage Trust, Series 2020-525M, Class A 2.694% 2/12/40 <sup>(a)</sup>	1,030,000	1,090,703
Natixis Commercial Mortgage Securities Trust, Series 2020-2PAC, Class A 2.966% 12/15/38 <sup>(a)</sup>	840,000	867,339
One Bryant Park Trust, Series 2019-OBP, Class A 2.516% 9/15/54 <sup>(a)</sup>	1,085,000	1,156,426
RBS Commercial Funding, Inc. Trust, Series 2013-GSP, Class A, 3.961% VRN 1/15/32 <sup>(a) (d)</sup>	640,000	668,186
	Principal Amount	Value
SFAVE Commercial Mortgage Securities Trust, Series 2015-5AVE, Class A2B, 4.144% VRN 1/05/43 <sup>(a)</sup> (d)	\$ 120,000	\$ 111,791 11,728,621
Home Equity Asset-Backed Securities — 0.7% Argent Securities, Inc., Series 2005-W2, Class M1, 1 mo. USD LIBOR + .490% 0.638% FRN 10/25/35 Home Equity Asset Trust, Series 2006-3, Class 1A1, 1 mo. USD LIBOR + .200%	4,500,000	4,355,128
0.348% FRN 7/25/36 Option One Mortgage Loan Trust, Series 2006-1, Class 1A1, 1 mo. USD LIBOR + .220%	318,877	318,003
0.368% FRN 1/25/36 Residential Asset Securities Corp., Series 2005-KS11, Class M1, 1 mo. USD LIBOR + .400%	1,935,116	1,817,102
0.548% FRN 12/25/35	9,211	9,203 6,499,436
Other Asset-Backed Securities — 2.9% Aimco CLO Ltd., Series 2020-11A, Class A1, 3 mo. USD LIBOR + 1.380% 0.000% FRN 10/15/31 <sup>(a)</sup> <sup>(b)</sup>	2,075,000	2,075,000
Ajax Mortgage Loan Trust, 2.860% STEP 7/25/59 <sup>(a)</sup>	3,731,326	3,731,648
Barings CLO Ltd., Series 2013-IA, Class AR, 3 mo. USD LIBOR + .800% 1.072% FRN 1/20/28 <sup>(a)</sup>	3,419,218	3,389,099
Countrywide Asset-Backed Certificates Series 2006-22, Class 2A3, 1 mo. USD LIBOR + .160% 0.308% FRN 1/25/34	61,853	59,101
Series 2004-5, Class M1, 1 mo. USD LIBOR + .855% 1.003% FRN 8/25/34 First Franklin Mortgage Loan Trust, Series 2005-FF9, Class A4, 1 mo. USD LIBOR + .360%	365,522	356,413
0.508% FRN 10/25/35 GoldenTree Loan Opportunities Ltd., Series 2014-9A, Class AR2, 3 mo. USD LIBOR + 1.110%	667,906	654,881
1.380% FRN 10/29/29 <sup>(a)</sup>	2,100,000	2,087,188

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

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

	Principal Amount	Value
GSAMP Trust, Series 2006-HE1, Class M1, 1 mo. USD LIBOR + .390% 0.538% FRN 1/25/36	\$ 4,073,340	\$ 3,992,049
LCM Ltd., 3 mo. USD LIBOR + 1.240% 1.515% FRN 7/15/27 <sup>(a)</sup>	1,400,000	1,395,878
Lehman XS Trust, Series 2005-4, Class 1A3, 1 mo. USD LIBOR + .800% 0.948% FRN 10/25/35 Magnetite Ltd.	246,807	242,638
Series 2012-7A, Class A1R2, 3 mo. USD LIBOR + .800% 1.075% FRN 1/15/28 <sup>(a)</sup>	1,489,000	1,476,372
Series 2019-21A, Class A, 3 mo. USD LIBOR + 1.280% 1.552% FRN 4/20/30 (a)	450,000	448,715
Morgan Stanley Capital, Inc. Trust Series 2006-HE1, Class A4, 1 mo. USD LIBOR + .290% 0.438% FRN 1/25/36 Series 2006-NC2, Class A2D, 1 mo. USD LIBOR + .290% 0.438% FRN 2/25/36	3,482,125 3,461,601	3,393,402 3,342,533 26,644,917
Student Loans Asset-Backed Securities — 3.8%		
Access Group, Inc., Series 2015-1, Class A, 1 mo. USD LIBOR + .700% 0.848% FRN 7/25/56 <sup>(a)</sup>	2,103,784	2,060,161
Education Loan Asset-Backed Trust, Series 2013-1, Class A2, 1 mo. USD LIBOR + .800%	2,103,764	2,000,101
0.948% FRN 4/26/32 <sup>(a)</sup> SLC Student Loan Trust	4,100,000	4,073,263
Series 2006-2, Class A6, 3 mo. USD LIBOR + .160% 0.410% FRN 9/15/39 Series 2006-1, Class A6, 3 mo. USD LIBOR + .160% 0.410% FRN 3/15/55	7,720,000	7,252,992 6,877,609
Series 2006-1, Class A6, 5 mo. USD LIBOR + .100% 0.410% FRN 3/13/33 SLM Student Loan Trust	7,380,000	0,877,009
Series 2014-1, Class A3, 1 mo. USD LIBOR + .600% 0.748% FRN 2/26/29	1,602,754	1,493,590
Series 2012-7, Class A3, 1 mo. USD LIBOR + .650% 0.798% FRN 5/26/26 Series 2008-5, Class B, 3 mo. USD LIBOR + 1.850% 2.095% FRN 7/25/73	2,911,849 3,735,000	2,841,029 3,423,746
	Principal Amount	Value
Series 2008-9, Class B, 3 mo. USD LIBOR + 2.250% 2.495% FRN 10/25/83	\$ 3,630,000	\$ 3,571,894
Wachovia Student Loan Trust, Series 2006-1, Class A6, 3 mo. USD LIBOR + .170% 0.415% FRN 4/25/40 <sup>(a)</sup>	2,753,456	2,631,165
0.41370 FKN 4/25/40	2,733,430	34,225,449
Whole Loan Collateral Collateralized Mortgage Obligations — 3.4%		
American Home Mortgage Investment Trust, Series 2006-1, Class 12A1, 1 mo. USD LIBOR + .400% 0.548% FRN 3/25/46	2,384,811	2,138,389
Bear Stearns ALT-A Trust, Series 2005-4, Class 25A1,	, ,	, ,
3.422% VRN 5/25/35 <sup>(d)</sup> Citizmoun Montage Loop Trust Inc. Series 2006 AR2 Class 1A2	1,884,329	1,801,153
Citigroup Mortgage Loan Trust, Inc., Series 2006-AR2, Class 1A2, 3.879% VRN 3/25/36 <sup>(d)</sup>	6,700	6,233
Credit Suisse Mortgage Trust, Series 2018-RPL9, Class A,	0,700	0,255
3.850% VRN 9/25/57 <sup>(a) (d)</sup>	2,903,110	3,224,775
First Horizon Alternative Mortgage Securities Trust, Series 2005-AA9, Class 2A1, 3.261% VRN 11/25/35 (d)	2,218,206	1,996,872
HarborView Mortgage Loan Trust	2,218,200	1,990,072
Series 2006-10, Class 1A1A, 1 mo. USD LIBOR + .200% 0.356% FRN 11/19/36	3,541,015	2,981,293
Series 2007-6, Class 1A1A, 1 mo. LIBOR + .200% 0.356% FRN 8/19/37 HomeBanc Mortgage Trust, Series 2005-5, Class A1, 1 mo. USD LIBOR + .260%	3,525,450	3,021,774
0.408% FRN 1/25/36 JP Morgan Mortgage Trust, Series 2005-A5, Class 1A2,	5,190,832	4,920,419
2.870% VRN 8/25/35 <sup>(d)</sup> MASTR Adjustable Rate Mortgages Trust, Series 2004-3, Class 4A1,	326,090	325,070
2.714% VRN 4/25/34 <sup>(d)</sup>	648,672	633,264
Morgan Stanley Resecuritization Trust, Series 2014-R8, Class 3A, 12 mo. MTA + .750%	1 424 00 :	1 201 100
1.921% FRN 6/26/47 <sup>(a)</sup> RALI Trust, Series 2006-QA7, Class 2A1, 1 mo. USD LIBOR + .185%	1,424,094	1,391,100
0.333% FRN 8/25/36	801,021	737,409

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	Principal Amount	Value
Structured Asset Mortgage Investments Trust, Series 2006-AR1, Class 3A1, 1 mo. USD LIBOR + .230% 0.378% FRN 2/25/36	\$ 2,995,621	\$ 2,688,810
Washington Mutual Mortgage Pass-Through Certificates Trust	1.006.517	1.040.225
Series 2005-AR2, Class 2A1A, 1 mo. USD LIBOR + .310% 0.458% FRN 1/25/45 Series 2005-7, Class 4CB, 7.000% 8/25/35	1,086,517 2,985,566	1,048,235 2,272,523
Wells Fargo Mortgage-Backed Securities Trust, Series 2007-AR3, Class A4,	, ,	, . ,
4.030% VRN 4/25/37 <sup>(d)</sup>	1,548,403	1,446,225
		 30,633,544
TOTAL NON-U.S. GOVERNMENT AGENCY OBLIGATIONS (Cost \$108,428,337)		 109,731,967
SOVEREIGN DEBT OBLIGATIONS — 0.8% Abu Dhabi Government International Bond		
2.500% 9/30/29 <sup>(a)</sup>	647,000	691,278
Colombia Government International Bond	,	
3.000% 1/30/30	400,000	409,000
4.500% 1/28/26 5.200% 5/15/49	200,000 200,000	221,500 240,720
Dominican Republic International Bond	200,000	210,720
4.500% 1/30/30 <sup>(a)</sup>	250,000	245,625
6.000% 7/19/28 <sup>(a)</sup>	150,000	161,251
Indonesia Government International Bond	200,000	215.047
2.850% 2/14/30 Mexico Government International Bond	300,000	315,047
3.250% 4/16/30	858,000	878,858
3.750% 1/11/28	200,000	215,302
Panama Government International Bond 3.160% 1/23/30	400,000	435,004
Peruvian Government International Bond 2.844% 6/20/30	276,000	300,150
4.125% 8/25/27	254,000	296,230
Qatar Government International Bond		
4.500% 4/23/28 <sup>(a)</sup>	600,000	717,000
	Principal Amount	Value
Republic of South Africa Government International Bond		 
4.875% 4/14/26	\$ 200,000	\$ 201,993
Russian Foreign Bond 4.375% 3/21/29 <sup>(a)</sup>	200,000	229,471
4.750% 5/27/26 <sup>(a)</sup>	200,000	229,471
Saudi Government International Bond	200,000	227,202
3.250% 10/22/30 <sup>(a)</sup>	200,000	217,196
3.625% 3/04/28 <sup>(a)</sup>	200,000	221,552
3.750% 1/21/55 <sup>(a)</sup>	200,000	216,440
4.500% 10/26/46 <sup>(a)</sup>	200,000	240,024
Uruguay Government International Bond	204.020	456.022
4.375% 10/27/27	394,830	456,033 7,138,876
TOTAL COVEREION DEBT OBLICATIONS (Co. 4 60 621 414)		 <u> </u>
TOTAL SOVEREIGN DEBT OBLIGATIONS (Cost \$6,821,414)		 7,138,876
U.S. GOVERNMENT AGENCY OBLIGATIONS AND INSTRUMENTALITIES — 33.3% Collateralized Mortgage Obligations — 2.3%		
Federal Home Loan Mortgage Corp. Multifamily Structured Pass-Through Certificates Series S8FX, Class A2, 3.291% 3/25/27	3,955,000	4,436,765
Series K155, Class A3, 3.750% 4/25/33 Federal National Mortgage Association	2,115,000	2,597,534
Series 2020-M10, Class X8, 0.776% VRN 12/25/27 <sup>(d)</sup>	1,910,000	76,830
Series 2020-M10, Class X2, 1.826% VRN 12/25/30 (d)	4,943,114	682,872
Series 2020-M10, Class X1, 1.923% VRN 12/25/30 (d)	2,368,685	340,399
Series 2018-43, Class CT, 3.000% 6/25/48	1,923,152	2,034,685
Series 2018-54, Class KA, 3.500% 1/25/47	2,199,310	2,290,004
Series 2018 38 Class DA 3 500% 6/25/47		
Series 2018-38, Class PA, 3.500% 6/25/47 Federal National Mortgage Association REMICS Series 2018-55, Class PA 3.500% 1/25/47	2,596,809	2,696,186 2,376,188
Federal National Mortgage Association REMICS Series 2018-55, Class PA 3.500% 1/25/47 Government National Mortgage Association	2,596,809 2,282,077	2,376,188
Federal National Mortgage Association REMICS Series 2018-55, Class PA 3.500% 1/25/47	2,596,809	

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

	Principal	<b>X</b> 7.1
Series 2019-15, Class GT, 3.500% 2/20/49	Amount \$ 2,121,712	<b>Value</b> \$ 2,258,033
D. Th. 10 11 2400/		21,116,230
Pass-Through Securities — 31.0% Federal Home Loan Mortgage Corp.		
Pool #G18619 2.500% 11/01/31	830,780	870,670
Pool #G16770 2.500% 2/01/32	851,494	900,628
Pool #G16660 2.500% 7/01/32 Pool #G18596 3.000% 4/01/31	1,368,655	1,433,089
Pool #G18596 3.000% 4/01/31 Pool #G18691 3.000% 6/01/33	553,952 240,661	584,581 253,365
Pool #G08710 3.000% 6/01/46	147,254	154,787
Pool #G08715 3.000% 8/01/46	3,058,253	3,212,796
Pool #G08721 3.000% 9/01/46	413,599	434,500
Pool #G08726 3.000% 10/01/46 Pool #G08732 3.000% 11/01/46	5,560,301 3,880,808	5,841,281 4,076,919
Pool #G08741 3.000% 1/01/47	2,474,375	2,595,547
Pool #G18713 3.500% 11/01/33	2,013,252	2,135,274
Pool #G16756 3.500% 1/01/34	713,821	769,354
Pool #G60038 3.500% 1/01/44 Pool #G07848 3.500% 4/01/44	1,085,230	1,180,590
Pool #G07924 3.500% 4/01/44 Pool #G07924 3.500% 1/01/45	6,794,018 2,385,062	7,569,888 2,625,292
Pool #G60138 3.500% 8/01/45	4,216,523	4,674,328
Pool #G08711 3.500% 6/01/46	2,572,972	2,750,015
Pool #G08716 3.500% 8/01/46	3,728,115	3,978,816
Pool #G67703 3.500% 4/01/47 Pool #G67706 3.500% 12/01/47	3,135,838 2,638,820	3,432,088 2,883,993
Pool #G07700 3.500% 12/01/47 Pool #G08792 3.500% 12/01/47	3,503,316	3,711,530
Pool #G67707 3.500% 1/01/48	2,729,744	3,015,034
Pool #G67708 3.500% 3/01/48	6,158,587	6,659,573
Pool #G67709 3.500% 3/01/48	7,339,436	8,014,462
Pool #G67711 4.000% 3/01/48 Pool #G67713 4.000% 6/01/48	902,917 2,714,331	993,866 2,958,053
Pool #G67714 4.000% 7/01/48	3,515,072	3,868,039
Pool #G67717 4.000% 11/01/48	3,141,903	3,457,399
Pool #G08843 4.500% 10/01/48	1,766,572	1,909,986
Pool #G08826 5.000% 6/01/48	558,764	613,208
Pool #G08844 5.000% 10/01/48 Federal National Mortgage Association	204,883	224,654
Pool #MA4093 2.000% 8/01/40	1,311,077	1,358,247
Pool #MA4152 2.000% 10/01/40	4,430,000	4,589,383
Pool #MA4176 2.000% 10/01/40 <sup>(b)</sup>	3,150,000	3,263,331
Pool #BL6060 2.455% 4/01/40	1,265,000	1,364,726
Pool #MA3029 3.000% 6/01/32	594,778	626,934
Pool #MA1607 3.000% 10/01/33 Pool #MA3811 3.000% 10/01/49	3,243,894 2,572,369	3,435,520 2,647,959
Pool #BL2360 3.450% 5/01/34	1,760,000	2,144,657
Pool #AN0877 3.500% 2/01/31	922,908	1,094,204
Pool #AB4262 3.500% 1/01/32	2,253,503	2,429,729
	Principal	
	Amount	Value
Pool #MA1148 3.500% 8/01/42	\$ 5,471,133	\$ 5,938,304
Pool #CA0996 3.500% 1/01/48 Pool #MA3276 3.500% 2/01/48	170,701 557,145	184,476 589,397
Pool #MA3305 3.500% 2/01/48	1,878,345	1,987,079
Pool #MA3332 3.500% 4/01/48	75,497	79,868
Pool #CA3633 3.500% 6/01/49	1,445,851	1,578,346
Pool #AM7122 3.610% 11/01/34	1,775,863	2,156,886
Pool #BL0661 3.990% 11/01/33 Pool #MA2995 4.000% 5/01/47	4,197,265 1,552,076	5,161,422 1,672,121
Pool #AS9830 4.000% 6/01/47	1,140,903	1,225,937
Pool #MA3027 4.000% 6/01/47	1,390,165	1,487,261
Pool #AS9972 4.000% 7/01/47	1,049,086	1,124,982
Pool #AL9106 4.500% 2/01/46	567,602	623,277
Pool #CA1710 4.500% 5/01/48 Pool #CA1711 4.500% 5/01/48	2,725,999 49,852	2,951,646 53,979
Pool #CA208 4.500% 5/01/48 Pool #CA2208 4.500% 8/01/48	2,036,741	2,205,334
Government National Mortgage Association II	2,000,711	2,200,001
Pool #MA4126 3.000% 12/20/46	3,715,437	3,905,176
Pool #MA4836 3.000% 11/20/47	2,962,529	3,106,412
Pool #MA6209 3.000% 10/20/49	3,005,668	3,084,019

Pool #MA4127 3.500% 12/20/46	2,381,402	2,551,898
Pool #MA4382 3.500% 4/20/47	478,958	512,351
Pool #MA4719 3.500% 9/20/47	4,550,396	4,854,850
Pool #MA4837 3.500% 11/20/47	610,845	650,761
Pool #MA4962 3.500% 1/20/48	3,794,969	4,042,950
Pool #MA5019 3.500% 2/20/48	2,109,176	2,247,000
Pool #MA4838 4.000% 11/20/47	1,304,866	1,405,311
Pool #MA4901 4.000% 12/20/47	1,061,727	1,141,465
Pool #MA5078 4.000% 3/20/48	992,121	1,066,632
Pool #MA5466 4.000% 9/20/48	664,544	710,507
Pool #MA5528 4.000% 10/20/48	2,713,029	2,895,799
Pool #MA4264 4.500% 2/20/47	522,491	571,779
Pool #MA4512 4.500% 6/20/47	3,651,068	3,989,779
Pool #MA3666 5.000% 5/20/46	60,239	68,680
Pool #MA3806 5.000% 7/20/46	395,444	449,248
Pool #MA4072 5.000% 11/20/46	75,771	86,436
Pool #MA4454 5.000% 5/20/47	1,757,656	1,949,011
Government National Mortgage Association II TBA Pool #8 2.000% 3/01/50 (b)	15,300,000	15,896,461
Government National Mortgage Association TBA Pool #264 2.500% 2/01/50 (b)	12,675,000	13,307,760
Uniform Mortgage Backed Securities TBA		
Pool #97 1.500% 8/01/35 <sup>(b)</sup>	4,500,000	4,604,062
Pool #505 2.000% 5/01/35 <sup>(b)</sup>	12,875,000	13,383,964
Pool #1082 2.000% 4/01/50 <sup>(b)</sup>	40,625,000	42,008,789
Pool #56 2.500% 12/01/49 <sup>(b)</sup>	6,650,000	6,965,356

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

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

	Principal Amount		Value
Pool #869 2.500% 12/01/49 <sup>(b)</sup>	\$ 6,725,000	\$	7,055,471
			282,270,537
TOTAL U.S. GOVERNMENT AGENCY OBLIGATIONS AND INSTRUMENTALITIES (Cost \$292,932,411)			303,386,767
U.S. TREASURY OBLIGATIONS — 27.9%			
U.S. Treasury Bonds & Notes — 27.9%			
U.S. Treasury Bond 1.250% 5/15/50	9,114,000		8,662,925
1.375% 8/15/50	28,730,000		28,194,605
U.S. Treasury Inflation Index	, ,		, ,
0.125% 4/15/25	2,146,270		2,284,297
0.125% 7/15/30 0.250% 2/15/50	3,984,007 3,059,026		4,431,793 3,615,705
U.S. Treasury Note	3,037,020		3,013,703
0.125% 7/31/22	20,945,000		20,943,437
0.125% 8/31/22 0.125% 9/30/22	39,560,000 65,015,000		39,558,536 65,014,974
0.250% 8/31/25	21,795,000		21,778,085
0.250% 9/30/25	34,470,000		34,434,603
0.375% 9/30/27	16,970,000		16,864,085
0.625% 8/15/30	8,316,000		8,274,734
			254,057,779
TOTAL U.S. TREASURY OBLIGATIONS (Cost \$253,876,768)			254,057,779
TOTAL BONDS & NOTES (Cost \$881,165,613)			908,228,519
TOTAL LONG-TERM INVESTMENTS (Cost \$881,165,613)			908,228,519
	Principal		\$7.1
SHORT-TERM INVESTMENTS — 10.9%	 Amount	-	Value
Commercial Paper — 0.2%			
Ford Motor Credit Co.			
3.245% 10/08/20 <sup>(a)</sup>	\$ 2,200,000	\$	2,199,362
U.S. Treasury Bill — 10.7% U.S. Treasury Bill			
0.000% 10/22/20	19,435,000		19,434,064
0.000% 10/29/20	3,390,000		3,389,756
0.000% 11/03/20 0.000% 11/05/20	8,615,000 7,385,000		8,614,269 7,384,372
0.000% 11/105/20	4,785,000		4,784,438
0.000% 11/19/20	3,730,000		3,729,543
0.000% 11/24/20	2,585,000		2,584,661
0.000% 12/03/20 0.000% 12/10/20	9,535,000 10,685,000		9,533,415 10,683,026
0.000% 2/04/21	5,210,000		5,208,131
0.000% 2/11/21	5,280,000		5,277,952
United States Cash Management Bill	2 400 000		2 200 220
0.000% 1/19/21 0.000% 1/26/21	2,400,000 5,010,000		2,399,230 5,007,965
0.000% 2/09/21	3,120,000		3,118,694
0.000% 2/23/21	6,170,000		6,167,515
			97,317,031
TOTAL SHORT-TERM INVESTMENTS (Cost \$99,510,715)			99,516,393
TOTAL INVESTMENTS — 110.7% (Cost \$980,676,328) (e)			1,007,744,912
Other Assets/(Liabilities) — (10.7)%			(97,615,703)
NET ASSETS — 100.0%		\$	910,129,209
Abbreviation Legand			, ,

**Abbreviation Legend** Collateralized Loan Obligation

CLO Designated Activity Company DAC

FRN REMICS STEP TBA VRN Floating Rate Note
Real Estate Mortgage Investment Conduits
Step Up Bond
To Be Announced
Variable Rate Note

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

MassMutual Select Total Return Bond Fund - Portfolio of Investments (Continued)

### Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) 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, 2020, the aggregate market value of these securities amounted to \$111,395,824 or 12.24% of net assets.
- (b) A portion of this security is purchased on a when-issued, delayed-delivery or forward commitment basis. (Note 2).
- (c) 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, 2020, these securities amounted to a value of \$1,147,055 or 0.13% of net assets.
- (d) 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, 2020.
- (e) See Note 6 for aggregate cost for federal tax purposes.

#### **Futures contracts**

	Expiration Date	Number of Contracts	Notional Amount	U Ap	Value/ Net Inrealized Opreciation/ Opreciation)
Long					_
U.S. Treasury Ultra Bond	12/21/20	31	\$ 6,919,467	\$	(43,281)
U.S. Treasury Note 5 Year	12/31/20	341	42,950,549		26,107
				\$	(17,174)
Short					
U.S. Treasury Ultra 10 Year	12/21/20	24	\$ (3,833,684)	\$	(4,441)

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments

**September 30, 2020** 

BOND S WOTES — 1978   PRINK LOANS — 1879   PRINK			Principal Amount		Value
Terrish Rich Player, Inc., Term Loan R, Irno. LIBOR + 1250%, 3 m. LIBOR + 1250%   12	BONDS & NOTES — 99.4% BANK LOANS — 4.8%				
A 3 PR A 5 PR					
Persistant   Per		\$	446.476	\$	434.836
1.500   VRN 20722   780,000   782,000   780,000   782,000   780,	Aerospace & Defense — 0.1%	Ψ	110,170	Ψ	13 1,030
Part			780 000		752 700
AST   A PURP A			780,000	_	732,700
Auto Park & Equipment — 0.1%   1.00					-0.5.4-4
Clarios (Global LP, USD Term Loan B, I no. LIBOR + 3.500%   1800			708,225		706,454
Religing Naterials—0.0%   367.25   359.26   2.649 VRN 1001/26   369.24   368.28   2.649 VRN 1002/26   369.24   368.28   2.649 VRN 1002/26   369.24   369.24   369.24   2.65885 VRN 15/25   369.20   311.00   310.00   2.65885 VRN 1002/26   369.20   311.00   2.65885 VRN 1002/26   369.20   369.20   2.65885 VRN 1002/26   369.20	1 1				
API Grup DE, Inc. Term Loan B, 1 mo. LIBOR + 2.500% 2000 2000 2000 2000 2000 2000 2000			445,500		433,387
2.44% NRN 1001/26					
Allied Universal Holdeo LLC, 2019 Fern Lean B, 1 mo. LIBOR + 2.50%   1918 ft Vex Landscapes LLC, 2018 Ist Lich Term Lean B, 1 mo. LIBOR + 2.50%   23,40%	2.647% VRN 10/01/26		367,225		359,267
A.397% VRN 71/10/26   694,248   685,820   871,000   231,600   23					
2688% VRN NIS/252         234,00         231,00           Grad Word Security Corp., 2019 Ist Lien Term Loan B, 1 mo. LIBOR + 3.250%, 3 mo. LIBOR + 3.250%, 1         171,76         170,435           Prime Security Services Borrowe LLC, 2019 Term Loan B1, 1 mo. LIBOR + 3.250%, 3 mo. LIBOR + 3.250%         687,35         687,34         687,34           LEO Holdings, Inc., 2017 I st Lien Term Loan, 6 mo. LIBOR + 3.750%         344,581         322,669           TASSW VRN NI/1026         258,336         251,514           Lagow VrN NI/1026         258,336         251,514           Lagow VrN NI/1026         258,336         25,507           Computers — 0.1%         56,000         56,000           Dell International LLC, 2019 Term Loan B, 1 mo. LIBOR + 2.000%         180,000         180,000           Western Digital Corp., 2018 Term Loan B, 1 mo. LIBOR + 1.750%         180,000         180,000           15,898 VRN 12726         246,81         25,85           12,899 VRN 12726         246,81         25,85           12,899 VRN 127276         246,81         25,85           12,898 VRN 127276         32,90         36,30           12,899 VRN 127276         33,90         36,30           12,990 VRN 100623         32,90         36,30           12,990 VRN 100623         33,90         36,30 <td></td> <td></td> <td>694,248</td> <td></td> <td>685,820</td>			694,248		685,820
Gard Nord Security Corp., 2019 Ist Lien Term Loan B., I mo. LIBOR + 3.750%, 3 mo. LIBOR = 3.250%, 12 mo. LIBOR + 3.250%, 3 mo. LIBOR = 3.250%, 2 mo. LIBOR = 1.250%, 2 mo. LIBO			224 600		221.061
17,100   1			234,600		231,961
Mo. LIBOR * 3.250%   4.250% VRN 9/3276	4.900% VRN 10/30/26		171,766		170,435
4.50% VRN 9/32/6					
A 1,50% VRN 2/01/23   32,06%   12,00%			687,345		680,348
Rans Union LLC, 2019 Term Loan B5, 1 mo. LIBOR + 1.750%   251,342,747			244.501		222.660
1897% VRN 11/1626			344,581		322,669
Principal			258,336		
Marie   Mari					2,342,747
Poll International LLC, 2019 Term Loan B, 1 mo. LIBOR + 2.000%   \$ 562,041   \$ 559,079   \$ 562,041   \$ 559,079   \$ 562,041   \$ 559,079   \$ 562,041   \$ 559,079   \$ 562,041   \$ 559,079   \$ 562,041   \$ 559,079   \$ 562,041   \$ 559,079   \$ 562,041   \$ 559,079   \$ 562,041   \$ 559,079   \$ 562,041   \$ 559,079   \$ 562,041   \$ 562,042   \$ 562,043			Principal		
Dell International LLC, 2019 Term Loan B, 1 mo. LIBOR + 2.000%   \$ 559,079   \$ 559,079   \$ 2.750% VRN 9/19/25   \$ 559,079   \$ 559,079   \$ 2.750% VRN 9/19/25   \$ 559,079   \$ 2.750% VRN 9/19/25   \$ 180,020   \$ 178,284   \$ 737,363   \$ 2.898% VRN 4/29/23   \$ 180,020   \$ 2.46,881   \$ 2.45,185   \$ 2.897% VRN 2/27/26   \$ 2.897% VRN 2/27/24   \$ 2.897% VRN 2/2	Computers 0.10/	_	Amount		Value
2,750% VRN 9/19/25   5,50,000	•				
18898 VRN 4/29/23   1880,020   178,284   737,363   737		\$	562,041	\$	559,079
1973/36    1973/36			180 020		178 284
Citadel Securities LP, 2020 Term Loan B, 1 mo. LIBOR + 2.750%   246,881   245,185	1.05070 VIA 4/25/25		100,020		
245,87% VRN 2/27/26   246,881   245,185     Deerfield Dakkota Holding, LLC, 2020 USD Term Loan B, 1 mo. LIBOR + 3.750%   4.750% VRN 4/09/27   638,400   633,746     Delos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750%   900,000   877,950     Edelman Financial Center LLC, 2018 1st Lien Term Loan, 1 mo. LIBOR + 3.000%   320,910     Edelman Financial Center LLC, 2018 1st Lien Term Loan, 1 mo. LIBOR + 2.000%   329,776   332,926   320,910     Focus Financial Partners LLC, 2020 Term Loan, 1 mo. LIBOR + 2.000%   395,776   384,101     Jane Street Group LLC, 2020 Term Loan, 1 mo. LIBOR + 3.000%   354,532   351,210     VFH Parent LLC, 2019 Term Loan B, 1 mo. LIBOR + 3.000%   3.151% VRN 3/01/26   374,863					_
Deerfield Dakota Holding, LLC, 2020 USD Term Loan B, 1 mo. LIBOR + 3.750%			246.881		245.185
Delos Finance S.A.R.L., 2018 Term Loan B, 3 mo. LIBOR + 1.750%   1.970% VRN 10/06/23   900,000   877,950   877,950   800,000   800,000   877,950   800,000   800,000   877,950   800,000   800,000   877,950   800,000   800,000   877,950   800,000   800,000   877,950   800,000   800,000   877,950   800,000	Deerfield Dakota Holding, LLC, 2020 USD Term Loan B, 1 mo. LIBOR + 3.750%		ŕ		ŕ
1.970% VRN 10/06/23   900,000   877,950     Edelman Financial Center LLC, 2018 1st Lien Term Loan, 1 mo. LIBOR + 3.000%   332,926   320,910     3.145% VRN 7/21/25   332,926   332,910     Focus Financial Partners LLC, 2020 Term Loan, 1 mo. LIBOR + 2.000%   395,776   384,101     Jane Street Group LLC, 2020 Term Loan, 1 mo. LIBOR + 3.000%   354,532   351,210     VFH Parent LLC, 2019 Term Loan B, 1 mo. LIBOR + 3.000%   3.151% VRN 3/01/26   176,239   174,863   2.987,965     Electrical Components & Equipment — 0.0%   176,239   174,863   2.987,965     Electrical Components & Equipment — 0.0%   277,479   270,145     Engineering & Construction — 0.0%   277,479   270,145     Engineering & Construction — 0.0%   28,250   95,712     Engineering & Construction — 0.0%   28,250   95,712     Engineering & Construction — 0.1%   28,250   29,712     Engineering & Construction — 0.1%   28,250   29,712     Engineering & Construction — 0.1%   28,250   28,2			638,400		633,746
3.145% VRN 7/21/25   332,926   320,910     Focus Financial Partners LLC, 2020 Term Loan, 1 mo. LIBOR + 2.000%   2.147% VRN 7/03/24   395,776   384,101     Jane Street Group LLC, 2020 Term Loan, 1 mo. LIBOR + 3.000%   354,532   351,210     VFH Parent LLC, 2019 Term Loan B, 1 mo. LIBOR + 3.000%   3.151% VRN 3/01/26   176,239   174,863   2.987,965     Electrical Components & Equipment — 0.0%   277,479   270,145     Brookfield WEC Holdings, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000%   3.750% VRN 8/01/25   277,479   270,145     Engineering & Construction — 0.0%   277,479   270,145     Engineering & Construction — 0.0%   28,250   98,250   95,712     Entertainment — 0.1%   28,250   28,250   28,250   28,250   28,250     S.500% VRN 12/06/25   98,250   95,712     Entertainment — 0.1%   40,000   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   38,717     PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%   32,712     PCI Gaming Authority Term Loan,			900,000		877,950
Focus Financial Partners LLC, 2020 Term Loan, 1 mo. LIBOR + 2.000%         2.147% VRN 7/03/24       395,776       384,101         Jane Street Group LLC, 2020 Term Loan, 1 mo. LIBOR + 3.000%       354,532       351,210         3.147% VRN 1/31/25       354,532       351,210         VFH Parent LLC, 2019 Term Loan B, 1 mo. LIBOR + 3.000%       176,239       174,863         3.151% VRN 3/01/26       176,239       174,863         Electrical Components & Equipment — 0.0%         Brookfield WEC Holdings, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000%       277,479       270,145         Engineering & Construction — 0.0%       277,479       270,145         Atlantic Aviation FBO, Inc., 2018 Term Loan B, 1 mo. LIBOR + 3.750%       3897% VRN 12/06/25       98,250       95,712         Entertainment — 0.1%       98,250       95,712       270,145<			222.026		220.010
Jane Street Group LLC, 2020 Term Loan, 1 mo. LIBOR + 3.000%       354,532       351,210         VFH Parent LLC, 2019 Term Loan B, 1 mo. LIBOR + 3.000%       176,239       174,863         3.151% VRN 3/01/26       176,239       174,863         Electrical Components & Equipment — 0.0%         Brookfield WEC Holdings, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000%       277,479       270,145         3.750% VRN 8/01/25       277,479       270,145         Engineering & Construction — 0.0%         Atlantic Aviation FBO, Inc., 2018 Term Loan B, 1 mo. LIBOR + 3.750%       98,250       95,712         Entertainment — 0.1%         Delta 2 (LUX) S.A.R.L., 2018 USD Term Loan, 1 mo. LIBOR + 2.500%       40,000       38,717         PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%       40,000       38,717			332,926		320,910
3.147% VRN 1/31/25 VFH Parent LLC, 2019 Term Loan B, 1 mo. LIBOR + 3.000% 3.151% VRN 3/01/26  176,239 174,863 2,987,965  Electrical Components & Equipment — 0.0% Brookfield WEC Holdings, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.750% VRN 8/01/25 277,479 270,145  Engineering & Construction — 0.0% Atlantic Aviation FBO, Inc., 2018 Term Loan B, 1 mo. LIBOR + 3.750% 3.897% VRN 12/06/25 298,250 298,250 295,712 Entertainment — 0.1% Delta 2 (LUX) S.A.R.L., 2018 USD Term Loan, 1 mo. LIBOR + 2.500% 3.500% VRN 2/01/24 40,000 38,717 PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%	2.147% VRN 7/03/24		395,776		384,101
VFH Parent LLC, 2019 Term Loan B, 1 mo. LIBOR + 3.000%         3.151% VRN 3/01/26       176,239       174,863         Electrical Components & Equipment — 0.0%         Brookfield WEC Holdings, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000%       277,479       270,145         3.750% VRN 8/01/25       277,479       270,145         Engineering & Construction — 0.0%       40,000       38,712         Atlantic Aviation FBO, Inc., 2018 Term Loan, 1 mo. LIBOR + 2.500%       98,250       95,712         Entertainment — 0.1%       40,000       38,717         PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%       40,000       38,717			354 532		351 210
Electrical Components & Equipment — 0.0%   Sprokfield WEC Holdings, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000%   3.750% VRN 8/01/25   277,479   270,145			334,332		331,210
Electrical Components & Equipment — 0.0%         Brookfield WEC Holdings, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000%       277,479       270,145         3.750% VRN 8/01/25       277,479       270,145         Engineering & Construction — 0.0%       40,000       38,712         Atlantic Aviation FBO, Inc., 2018 Term Loan B, 1 mo. LIBOR + 2.500%       98,250       95,712         Entertainment — 0.1%       500% VRN 2/01/24       40,000       38,717         PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%       40,000       38,717	3.151% VRN 3/01/26		176,239		
Brookfield WEC Holdings, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.750% VRN 8/01/25 277,479 270,145 Engineering & Construction — 0.0% Atlantic Aviation FBO, Inc., 2018 Term Loan B, 1 mo. LIBOR + 3.750% 3.897% VRN 12/06/25 98,250 98,250 95,712 Entertainment — 0.1% Delta 2 (LUX) S.A.R.L., 2018 USD Term Loan, 1 mo. LIBOR + 2.500% 3.500% VRN 2/01/24 40,000 38,717 PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%	Electrical Components & Equipment — 0.0%				2,987,965
Engineering & Construction — 0.0% Atlantic Aviation FBO, Inc., 2018 Term Loan B, 1 mo. LIBOR + 3.750% 3.897% VRN 12/06/25 98,250 95,712 Entertainment — 0.1% Delta 2 (LUX) S.A.R.L., 2018 USD Term Loan, 1 mo. LIBOR + 2.500% 3.500% VRN 2/01/24 40,000 38,717 PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%					
Atlantic Aviation FBO, Inc., 2018 Term Loan B, 1 mo. LIBOR + 3.750%  3.897% VRN 12/06/25  Entertainment — 0.1%  Delta 2 (LUX) S.A.R.L., 2018 USD Term Loan, 1 mo. LIBOR + 2.500%  3.500% VRN 2/01/24  PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%			277,479		270,145
3.897% VRN 12/06/25  Entertainment — 0.1%  Delta 2 (LUX) S.A.R.L., 2018 USD Term Loan, 1 mo. LIBOR + 2.500% 3.500% VRN 2/01/24  PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%					
Delta 2 (LUX) S.A.R.L., 2018 USD Term Loan, 1 mo. LIBOR + 2.500% 3.500% VRN 2/01/24 40,000 38,717 PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%			98,250		95,712
3.500% VRN 2/01/24 40,000 38,717 PCI Gaming Authority, Term Loan, 1 mo. LIBOR + 2.500%					
	3.500% VRN 2/01/24		40,000		38,717
201,040 2/2,490			281 046		272 406
			201,070		2,2,770

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

		Principal Amount		Value
Scientific Games International, Inc., 2018 Term Loan B5, 1 mo. LIBOR + 2.750%, 6 mo. LIBOR + 2.750% 2.896% - 3.612% VRN 8/14/24	\$	668,383	\$	627,351
Stars Group Holdings B.V. (The), 2018 USD Incremental Term Loan, 3 mo. LIBOR + 3.500% 3.720% VRN 7/10/25		15,250		15,198 953,762
Environmental Controls — 0.0% GFL Environmental, Inc., 2018 USD Term Loan B, 1 mo. LIBOR + 3.000%, 3 mo. LIBOR + 3.000% 4.000% VRN 5/30/25 Food Services — 0.1%		71,556		71,162
Aramark Services, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 1.750% 1.897% VRN 1/15/27 Foods — 0.1%		557,200		531,664
Froneri International Ltd., 2020 USD Term Loan, 1 mo. LIBOR + 2.250% 2.397% VRN 1/31/27 US Foods, Inc.		309,225		296,525
2016 Term Loan B, 1 mo. LIBOR + 1.750% 1.897% VRN 6/27/23		208,909		200,553
2019 Term Loan B, 1 mo. LIBOR + 2.000% 2.750% VRN 9/13/26		607,937		579,443 1,076,521
Health Care – Products — 0.1% Athenahealth, Inc., 2019 Term Loan B, 3 mo. LIBOR + 4.500% 4.750% VRN 2/11/26 Health Care – Services — 0.5% EyeCare Partners LLC		1,096,375		1,077,189
2020 Delayed Draw Term Loan, 0.000% 2/18/27 <sup>(a)</sup>		45,405		42,596
2020 Term Loan, 1 mo. LIBOR + 3.750% 3.897% VRN 2/18/27 Global Medical Response, Inc.		193,622		181,642
2020 Term Loan B, 0.000% 9/24/25 <sup>(b)</sup> 2018 Term Loan B1, 3 mo. LIBOR + 3.250% 4.250% VRN 4/28/22		170,000 218,829		166,015 218,043
4.250/0 VIII 4/26/22		Principal Amount		Value
HCA, Inc., Term Loan B12, 1 mo. LIBOR + 1.750% 1.897% VRN 3/13/25	<u> </u>	163,160	\$	162,256
Jaguar Holding Co. II, 2018 Term Loan, 1 mo. LIBOR + 2.500% 3.500% VRN 8/18/22	Ψ	471,065	Ψ	468,921
MPH Acquisition Holdings LLC, 2016 Term Loan B, 3 mo. LIBOR + 2.750% 3.750% VRN 6/07/23		766,755		753,613
Phoenix Guarantor, Inc., 2020 Term Loan B, 1 mo. LIBOR + 3.250% 3.401% VRN 3/05/26		800,993		778,765
RegionalCare Hospital Partners Holdings, Inc., 2018 Term Loan B, 1 mo. LIBOR + 3.750% 3.897% VRN 11/17/25		861,664		835,814
Household Products — 0.1% Reynolds Consumer Products LLC, Term Loan, 1 mo. LIBOR + 1.750% 1.897% VRN 2/04/27 Insurance — 0.2%		413,776		3,607,665
AmWINS Group, Inc., 2017 Term Loan B, 1 mo. LIBOR + 2.750% 3.750% VRN 1/25/24 Asurion LLC		19,948		19,744
2017 Term Loan B4, 1 mo. LIBOR + 3.000% 3.147% VRN 8/04/22		628,782		620,790
2018 Term Loan B6, 1 mo. LIBOR + 3.000% 3.147% VRN 11/03/23		168,659		165,990
2018 Term Loan B7, 1 mo. LIBOR + 3.000% 3.147% VRN 11/03/24		344,290		338,051 1,144,575
Internet — 0.1% Go Daddy Operating Co. LLC, 2017 Repriced Term Loan, 1 mo. LIBOR + 1.750% 1.897% VRN 2/15/24		59,794		58,542
McAfee LLC, 2018 USD Term Loan B, 1 mo. LIBOR + 3.750% 3.896% VRN 9/30/24		849,276		842,083 900,625
Investment Companies — 0.1%				

FinCo I LLC, 2018 Term Loan B,  $0.000\% \ 12/27/22^{(b)}$ 

32,996 32,769

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
First Eagle Holdings, Inc., 2020 Term Loan B, 3 mo. LIBOR + 2.500% 2.720% VRN 2/01/27	206,562	\$ 201,324
UFC Holdings LLC, 2019 Term Loan, 6 mo. LIBOR + 3.250% 4.250% VRN 4/29/26	561,941	551,405
Leisure Time — 0.0% Alterra Mountain Co., Term Loan B1, 1 mo. LIBOR + 2.750% 2.897% VRN 7/31/24	373,283	785,498 359,128
Lodging — 0.4%  Caesars Resort Collection LLC, 2017 1st Lien Term Loan B, 1 mo. LIBOR + 2.750%  2.897% VRN 12/23/24	814,254	760,855
CityCenter Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.250% 3.000% VRN 4/18/24	323,340	309,679
Four Seasons Hotels Ltd., New 1st Lien Term Loan, 1 mo. LIBOR + 2.000% 2.147% VRN 11/30/23	348,712	338,687
Golden Nugget, Inc., 2017 Incremental Term Loan B, 1 mo. LIBOR + 2.500%, 2 mo. LIBOR + 2.500% 3.250% VRN 10/04/23 Hilton Worldwide Finance LLC, 2019 Term Loan B2, 1 mo. LIBOR + 1.750%	423,074	376,087
1.898% VRN 6/22/26 Wynn Resorts Ltd., 2019 Term Loan A, 1 mo. LIBOR + 1.750%	716,204	690,156
1.900% VRN 9/20/24	883,500	830,490 3,305,954
Media — 0.3% Charter Communications Operating LLC 2019 Term Loan B1, 1 mo. LIBOR + 1.750%		
1.900% VRN 4/30/25 2019 Term Loan B2, 1 mo. LIBOR + 1.750%	837,965	822,153
1.900% VRN 2/01/27 CSC Holdings LLC, 2019 Term Loan B5, 1 mo. LIBOR + 2.500%	138,947	135,597
2.652% VRN 4/15/27	139,300	134,802
	Principal	
D' 10 . C H.C.T I 1 HDOD 12000/	Amount	Value
Diamond Sports Group LLC, Term Loan, 1 mo. LIBOR + 3.250% 3.400% VRN 8/24/26 \$		\$ 22,535
3.400% VRN 8/24/26 \$ Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24		
3.400% VRN 8/24/26 \$ Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26	29,203	\$ 22,535
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26	29,203 120,328	\$ 22,535 112,958
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26 Ziggo Financing Partnership, USD Term Loan I, 1 mo. LIBOR + 2.500% 2.652% VRN 4/30/28	29,203 120,328 277,112	\$ 22,535 112,958 262,348
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26 Ziggo Financing Partnership, USD Term Loan I, 1 mo. LIBOR + 2.500% 2.652% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan W, 1 mo. LIBOR + 2.000% 2.156% VRN 10/01/22 Pharmaceuticals — 0.4% Bausch Health Cos., Inc.	29,203 120,328 277,112 430,309	\$ 22,535 112,958 262,348 418,170 132,815
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26 Ziggo Financing Partnership, USD Term Loan I, 1 mo. LIBOR + 2.500% 2.652% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan W, 1 mo. LIBOR + 2.000% 2.156% VRN 10/01/22 Pharmaceuticals — 0.4% Bausch Health Cos., Inc. Term Loan B, 1 mo. LIBOR + 2.750% 2.901% VRN 11/27/25	29,203 120,328 277,112 430,309 138,250	\$ 22,535 112,958 262,348 418,170 132,815 2,041,378
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26 Ziggo Financing Partnership, USD Term Loan I, 1 mo. LIBOR + 2.500% 2.652% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan W, 1 mo. LIBOR + 2.000% 2.156% VRN 10/01/22 Pharmaceuticals — 0.4% Bausch Health Cos., Inc. Term Loan B, 1 mo. LIBOR + 2.750% 2.901% VRN 11/27/25 2018 Term Loan B, 1 mo. LIBOR + 3.000% 3.151% VRN 6/02/25	29,203 120,328 277,112 430,309 138,250	\$ 22,535 112,958 262,348 418,170 132,815 2,041,378 428,231
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26 Ziggo Financing Partnership, USD Term Loan I, 1 mo. LIBOR + 2.500% 2.652% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan W, 1 mo. LIBOR + 2.000% 2.156% VRN 10/01/22 Pharmaceuticals — 0.4% Bausch Health Cos., Inc. Term Loan B, 1 mo. LIBOR + 2.750% 2.901% VRN 11/27/25 2018 Term Loan B, 1 mo. LIBOR + 3.000% 3.151% VRN 6/02/25 Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24	29,203 120,328 277,112 430,309 138,250 432,351	\$ 22,535 112,958 262,348 418,170 132,815 2,041,378 428,231
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26 Ziggo Financing Partnership, USD Term Loan I, 1 mo. LIBOR + 2.500% 2.652% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan W, 1 mo. LIBOR + 2.000% 2.156% VRN 10/01/22 Pharmaceuticals — 0.4% Bausch Health Cos., Inc. Term Loan B, 1 mo. LIBOR + 2.750% 2.901% VRN 11/27/25 2018 Term Loan B, 1 mo. LIBOR + 3.000% 3.151% VRN 6/02/25 Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24 Elanco Animal Health, Inc., Term Loan B, 1 mo. LIBOR + 1.750% 1.899% VRN 8/01/27	29,203 120,328 277,112 430,309 138,250 432,351 230,000 299,031	\$ 22,535 112,958 262,348 418,170 132,815 2,041,378 428,231 224,250 292,740
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26 Ziggo Financing Partnership, USD Term Loan I, 1 mo. LIBOR + 2.500% 2.652% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan W, 1 mo. LIBOR + 2.000% 2.156% VRN 10/01/22 Pharmaceuticals — 0.4% Bausch Health Cos., Inc. Term Loan B, 1 mo. LIBOR + 2.750% 2.901% VRN 11/27/25 2018 Term Loan B, 1 mo. LIBOR + 3.000% 3.151% VRN 6/02/25 Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24 Elanco Animal Health, Inc., Term Loan B, 1 mo. LIBOR + 1.750% 1.899% VRN 8/01/27 Grifols Worldwide Operations USA, Inc., USD 2019 Term Loan B, 1 Week LIBOR + 2.000% 2.104% VRN 11/15/27	29,203 120,328 277,112 430,309 138,250 432,351 230,000 299,031 975,797	\$ 22,535 112,958 262,348 418,170 132,815 2,041,378 428,231 224,250 292,740 953,998
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26 Ziggo Financing Partnership, USD Term Loan I, 1 mo. LIBOR + 2.500% 2.652% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan W, 1 mo. LIBOR + 2.000% 2.156% VRN 10/01/22 Pharmaceuticals — 0.4% Bausch Health Cos., Inc. Term Loan B, 1 mo. LIBOR + 2.750% 2.901% VRN 11/27/25 2018 Term Loan B, 1 mo. LIBOR + 3.000% 3.151% VRN 6/02/25 Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24 Elanco Animal Health, Inc., Term Loan B, 1 mo. LIBOR + 1.750% 1.899% VRN 8/01/27 Grifols Worldwide Operations USA, Inc., USD 2019 Term Loan B, 1 Week LIBOR + 2.000%	29,203 120,328 277,112 430,309 138,250 432,351 230,000 299,031 975,797 654,327	\$ 22,535 112,958 262,348 418,170 132,815 2,041,378 428,231 224,250 292,740 953,998 635,241
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 iHeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26 Ziggo Financing Partnership, USD Term Loan I, 1 mo. LIBOR + 2.500% 2.652% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan W, 1 mo. LIBOR + 2.000% 2.156% VRN 10/01/22 Pharmaceuticals — 0.4% Bausch Health Cos., Inc. Term Loan B, 1 mo. LIBOR + 2.750% 2.901% VRN 11/27/25 2018 Term Loan B, 1 mo. LIBOR + 3.000% 3.151% VRN 6/02/25 Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24 Elanco Animal Health, Inc., Term Loan B, 1 mo. LIBOR + 1.750% 1.899% VRN 8/01/27 Grifols Worldwide Operations USA, Inc., USD 2019 Term Loan B, 1 Week LIBOR + 2.000% 2.104% VRN 11/15/27 HC Group Holdings II, Inc., Term Loan B, 1 mo. LIBOR + 4.500%	29,203 120,328 277,112 430,309 138,250 432,351 230,000 299,031 975,797 654,327 734,450	\$ 22,535 112,958 262,348 418,170 132,815 2,041,378 428,231 224,250 292,740 953,998 635,241 718,387 343,613
3.400% VRN 8/24/26 Entercom Media Corp., 2019 Term Loan, 1 mo. LIBOR + 2.500% 2.645% VRN 11/18/24 illeartCommunications, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 5/01/26 Univision Communications, Inc., 2020 Replacement Term Loan, 1 mo. LIBOR + 3.750% 4.750% VRN 3/13/26 Ziggo Financing Partnership, USD Term Loan I, 1 mo. LIBOR + 2.500% 2.652% VRN 4/30/28  Packaging & Containers — 0.1% Berry Global, Inc., Term Loan W, 1 mo. LIBOR + 2.000% 2.156% VRN 10/01/22 Pharmaceuticals — 0.4% Bausch Health Cos., Inc. Term Loan B, 1 mo. LIBOR + 2.750% 2.901% VRN 11/27/25 2018 Term Loan B, 1 mo. LIBOR + 3.000% 3.151% VRN 6/02/25 Change Healthcare Holdings LLC, 2017 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500% 3.500% VRN 3/01/24 Elanco Animal Health, Inc., Term Loan B, 1 mo. LIBOR + 1.750% 1.899% VRN 8/01/27 Grifols Worldwide Operations USA, Inc., USD 2019 Term Loan B, 1 Week LIBOR + 2.000% 2.104% VRN 11/15/27 HC Group Holdings II, Inc., Term Loan B, 1 mo. LIBOR + 4.500% 4.647% VRN 8/06/26  Real Estate Investment Trusts (REITS) — 0.1%	29,203 120,328 277,112 430,309 138,250 432,351 230,000 299,031 975,797 654,327 734,450	\$ 22,535 112,958 262,348 418,170 132,815 2,041,378 428,231 224,250 292,740 953,998 635,241 718,387 343,613

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

		Principal Amount	Value
VICI Properties 1 LLC, Replacement Term Loan B, 1 mo. LIBOR + 1.750%	e.	120,000	¢ 414.002
1.906% VRN 12/20/24	\$	430,000	\$ 414,903 462,655
Retail — 0.2%			102,033
1011778 B.C. Unlimited Liability Co., Term Loan B4, 1 mo. LIBOR + 1.750%		027.222	007.007
1.897% VRN 11/19/26 Academy, Ltd., 2015 Term Loan B, 1 mo. LIBOR + 4.000%		937,233	897,007
5.000% VRN 7/01/22		241,208	235,298
Asplundh Tree Expert LLC, Term Loan B,			
0.000% 9/07/27 <sup>(b)</sup>		120,000	119,776
BJ's Wholesale Club, Inc., 2017 1st Lien Term Loan, 0.000% 2/03/24 <sup>(b)</sup>		120,000	117,763
Michaels Stores, Inc.		120,000	117,705
2020 Term Loan B,			
0.000% 9/17/27 <sup>(b)</sup> 2018 Term Loan B, 1 mo. LIBOR + 2.500%		150,000	146,250
3.500% VRN 1/30/23		149,787	148,889
Party City Holdings, Inc., 2018 Term Loan B, 1 mo. LIBOR + 2.500%, 3 mo. LIBOR + 2.500%		,	,
3.250% VRN 8/19/22		132,753	107,862
Software — 0.2%			1,772,845
DCert Buyer, Inc., 2019 Term Loan B, 1 mo. LIBOR + 4.000%			
4.147% VRN 10/16/26 MA FinanceCo. LLC, USD Term Loan B3, 1 mo. LIBOR + 2.500%		756,200	745,568
2.647% VRN 6/21/24		11,469	10,867
Milano Acquisition Corp., Term Loan,			
0.000% 8/13/27 <sup>(b)</sup>		540,000	533,250
Seattle Spinco, Inc., USD Term Loan B3, 1 mo. LIBOR + 2.500% 2.647% VRN 6/21/24		77,452	73,385
2017/00/14/00/21/21		77,102	1,363,070
Telecommunications — 0.4%			
Altice France S.A., USD Term Loan B12, 1 mo. LIBOR + 3.688% 3.840% VRN 1/31/26		221,814	213,219
		221,01.	
Level 3 Financing, Inc., 2019 Term Loan B, 1 mo. LIBOR + 1.750%			
Level 3 Financing, Inc., 2019 Term Loan B, 1 mo. LIBOR + 1.750% 1.897% VRN 3/01/27		368,362	356,504
		368,362 Principal	356,504
1.897% VRN 3/01/27		ŕ	356,504 <b>Value</b>
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750%	<u> </u>	Principal Amount	Value
1.897% VRN 3/01/27	<u> </u>	Principal	,
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27	\$	Principal Amount	Value
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500%	\$	Principal Amount 971,236 548,625	<b>Value</b> \$ 948,577 547,791
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27	\$	Principal Amount 971,236	<b>Value</b> \$ 948,577
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1%	\$	Principal Amount 971,236 548,625	Value \$ 948,577 547,791 837,318
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000%	\$	Principal Amount  971,236  548,625  863,954	Value  \$ 948,577  547,791  837,318  2,903,409
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1%	\$	Principal Amount 971,236 548,625	Value       \$ 948,577       547,791       837,318       2,903,409       635,535
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000%	\$	Principal Amount  971,236  548,625  863,954	Value  \$ 948,577  547,791  837,318  2,903,409
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1%  Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)	\$	Principal Amount  971,236  548,625  863,954	Value       \$ 948,577       547,791       837,318       2,903,409       635,535
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3%	\$	Principal Amount  971,236  548,625  863,954	Value       \$ 948,577       547,791       837,318       2,903,409       635,535
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co.	\$	Principal Amount  971,236  548,625  863,954  646,750	Value       \$ 948,577       547,791       837,318       2,903,409       635,535       36,117,758
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3%	\$	Principal Amount  971,236  548,625  863,954  646,750	Value       \$ 948,577       547,791       837,318       2,903,409       635,535       36,117,758       87,776
Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26 T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27 Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genessee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co. 2.700% 2/01/27 2.800% 3/01/27 3.100% 5/01/26	\$	Principal Amount  971,236  548,625  863,954  646,750  90,000 150,000 80,000	Value       \$ 948,577       547,791       837,318       2,903,409       635,535       36,117,758       87,776       146,360       79,803
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1%  Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co. 2.700% 2/01/27 2.800% 3/01/27 3.100% 5/01/26 3.200% 3/01/29	\$	Principal Amount  971,236  548,625  863,954  646,750  90,000 150,000 80,000 450,000	Value       \$ 948,577       547,791       837,318       2,903,409       635,535       36,117,758       87,776       146,360       79,803       443,179
Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26 T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27 Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genessee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co. 2.700% 2/01/27 2.800% 3/01/27 3.100% 5/01/26	\$	Principal Amount  971,236  548,625  863,954  646,750  90,000 150,000 80,000	Value       \$ 948,577       547,791       837,318       2,903,409       635,535       36,117,758       87,776       146,360       79,803
Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26 T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27 Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co. 2.700% 2/01/27 2.800% 3/01/27 3.100% 5/01/26 3.200% 3/01/29 3.250% 2/01/35 3.550% 3/01/38 3.750% 2/01/50	\$	Principal Amount  971,236  548,625  863,954  646,750  90,000 150,000 80,000 450,000 730,000 80,000 240,000	\$ 948,577 547,791 837,318 2,903,409 635,535 36,117,758  87,776 146,360 79,803 443,179 686,177 72,875 219,639
Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26 T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27 Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co. 2.700% 2/01/27 2.800% 3/01/27 3.100% 5/01/26 3.200% 3/01/29 3.250% 2/01/35 3.550% 3/01/38 3.750% 2/01/50 4.875% 5/01/25	\$	971,236 548,625 863,954 646,750  90,000 150,000 80,000 450,000 730,000 80,000 240,000 990,000	\$ 948,577  547,791  837,318  2,903,409  635,535  36,117,758  87,776  146,360  79,803  443,179  686,177  72,875  219,639  1,077,244
Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26 T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27 Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co. 2.700% 2/01/27 2.800% 3/01/27 3.100% 5/01/26 3.200% 3/01/29 3.250% 2/01/35 3.550% 3/01/38 3.750% 2/01/50	\$	Principal Amount  971,236  548,625  863,954  646,750  90,000 150,000 80,000 450,000 730,000 80,000 240,000	Value       \$ 948,577       547,791       837,318       2,903,409       635,535       36,117,758       87,776       146,360       79,803       443,179       686,177       72,875       219,639
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co. 2.700% 2/01/27 2.800% 3/01/27 3.100% 5/01/26 3.200% 3/01/29 3.250% 2/01/35 3.550% 3/01/38 3.750% 2/01/50 4.875% 5/01/25 5.150% 5/01/25 5.150% 5/01/40 5.805% 5/01/50	\$	971,236 548,625 863,954 646,750  90,000 150,000 80,000 450,000 730,000 80,000 240,000 990,000 500,000 400,000 930,000	\$ 948,577  547,791  837,318  2,903,409  635,535  36,117,758  87,776 146,360 79,803 443,179 686,177 72,875 219,639 1,077,244 562,004 471,569 1,125,096
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26 T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27 Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co. 2.700% 2/01/27 2.800% 3/01/27 3.100% 5/01/26 3.200% 3/01/29 3.250% 2/01/35 3.550% 3/01/38 3.750% 2/01/50 4.875% 5/01/25 5.150% 5/01/40 5.805% 5/01/40 5.805% 5/01/50 5.930% 5/01/60	\$	971,236 548,625 863,954 646,750  90,000 150,000 80,000 450,000 730,000 80,000 240,000 990,000 500,000 400,000	\$ 948,577  547,791  837,318  2,903,409  635,535  36,117,758  87,776  146,360  79,803  443,179  686,177  72,875  219,639  1,077,244  562,004  471,569
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co. 2.700% 2/01/27 2.800% 3/01/27 3.100% 5/01/26 3.200% 3/01/29 3.250% 2/01/35 3.550% 3/01/38 3.750% 2/01/50 4.875% 5/01/25 5.150% 5/01/25 5.150% 5/01/40 5.805% 5/01/50	\$	971,236 548,625 863,954 646,750  90,000 150,000 80,000 450,000 730,000 80,000 240,000 990,000 500,000 400,000 930,000	\$ 948,577  547,791  837,318  2,903,409  635,535  36,117,758  87,776 146,360 79,803 443,179 686,177 72,875 219,639 1,077,244 562,004 471,569 1,125,096
1.897% VRN 3/01/27  Nexstar Broadcasting, Inc., 2019 Term Loan B4, 1 mo. LIBOR + 2.750% 2.899% VRN 9/18/26  T-Mobile USA, Inc., 2020 Term Loan, 1 mo. LIBOR + 3.000% 3.147% VRN 4/01/27  Virgin Media Bristol LLC, USD Term Loan N, 1 mo. LIBOR + 2.500% 2.652% VRN 1/31/28  Transportation — 0.1% Genesee & Wyoming, Inc., Term Loan, 3 mo. LIBOR + 2.000% 2.220% VRN 12/30/26  TOTAL BANK LOANS (Cost \$37,010,656)  CORPORATE DEBT — 38.6% Aerospace & Defense — 1.3% The Boeing Co. 2.700% 2/01/27 2.800% 3/01/27 3.100% 5/01/26 3.200% 3/01/29 3.250% 2/01/35 3.550% 3/01/38 3.750% 2/01/50 4.875% 5/01/25 5.150% 5/01/20 5.805% 5/01/40 5.805% 5/01/40 5.805% 5/01/60 General Dynamics Corp.	\$	971,236 548,625 863,954 646,750  90,000 150,000 80,000 450,000 240,000 990,000 500,000 400,000 930,000 300,000	\$ 948,577  547,791  837,318  2,903,409  635,535  36,117,758  87,776 146,360 79,803 443,179 686,177 72,875 219,639 1,077,244 562,004 471,569 1,125,096 371,292

4.250% 4/01/40 4.250% 4/01/50	20,000 110,000	25,162 143,666
L3Harris Technologies, Inc. 5.054% 4/27/45	280,000	380,139
Lockheed Martin Corp. 3.550% 1/15/26	350,000	397,714
4.500% 5/15/36 Northrop Grumman Corp.	60,000	76,277
2.930% 1/15/25 3.250% 1/15/28	340,000 730,000	369,938 820,210
5.250% 5/01/50	230,000	329,934

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

		Principal Amount		Value
Raytheon Co. 3.125% 10/15/20	\$	120,000	\$	120,123
Raytheon Technologies Corp. 2.250% 7/01/30				
2.250% //01/30 3.150% 12/15/24 <sup>(c)</sup>		280,000		296,138
3.150% 12/15/24 <sup>C7</sup> 3.950% 8/16/25		140,000 350,000		151,238 397,752
4.125% 11/16/28		260,000		307,873
4.500% 6/01/42		80,000		101,002
TransDigm, Inc.				
6.250% 3/15/26 <sup>(c)</sup>		180,000		187,973
8.000% 12/15/25 <sup>(c)</sup>		70,000	_	76,125 9,735,361
Agriculture — 1.0%			_	
Altria Group, Inc. 2.350% 5/06/25		80,000		84,529
2.850% 8/09/22		160,000		166,625
3.490% 2/14/22		160,000		166,397
3.800% 2/14/24		180,000		196,745
3.875% 9/16/46 4.400% 2/14/26		150,000 620,000		154,188 716,201
4.750% 5/05/21		290,000		297,291
4.800% 2/14/29		530,000		628,895
5.800% 2/14/39		1,120,000		1,433,277
5.950% 2/14/49 6.200% 2/14/59		100,000 140,000		133,954 191,426
BAT Capital Corp.		110,000		171,120
3.557% 8/15/27		500,000		540,005
4.540% 8/15/47		1,110,000		1,188,670
Cargill, Inc. 1.375% 7/23/23 <sup>(c)</sup>		300,000		306,867
Philip Morris International, Inc.		300,000		300,007
1.125% 5/01/23		190,000		192,917
2.100% 5/01/30		190,000		195,437
2.500% 8/22/22 2.500% 11/02/22		80,000 350,000		83,115 364,376
2.900% 11/15/21		240,000		246,640
4.500% 3/20/42		80,000		98,250
Reynolds American, Inc. 5.850% 8/15/45		190,000		230,878
		170,000		7,616,683
Airlines — 0.6% Delta Air Lines, Inc.				
3.400% 4/19/21		450,000		448,199
3.625% 3/15/22		250,000		245,632
3.800% 4/19/23 2.900% 10/28/24		90,000		87,142
7.000% 5/01/25 <sup>(c)</sup>		140,000 1,670,000		124,845 1,833,701
7.375% 1/15/26		420,000		440,304
		Principal		
Daka Ain Lines Inc. / Classification ID Ltd.		Amount		Value
Delta Air Lines, Inc. / SkyMiles IP Ltd. 4.500% 10/20/25 (c)	Ф	220,000	Ф	220 502
4.500% 10/20/25 <sup>(c)</sup> 4.750% 10/20/28 <sup>(c)</sup>	\$	320,000	\$	328,593
4./50% 10/20/28 (*) Mileage Plus Holdings LLC / Mileage Plus Intellectual Property Assets Ltd.		300,000		311,484
6.500% 6/20/27 <sup>(c)</sup>		330,000		343,612
Spirit Loyalty Cayman Ltd. / Spirit IP Cayman Ltd.		330,000		545,012
8.000% 9/20/25 <sup>(c)</sup>		400,000		423,808
Apparel — 0.3%			_	4,587,320
Hanesbrands, Inc.				
4.625% 5/15/24 <sup>(c)</sup>		30,000		31,193
5.375% 5/15/25 <sup>(c)</sup>		200,000		211,000
4.875% 5/15/26 <sup>(c)</sup>		110,000		117,425
Levi Strauss & Co.				
5.000% 5/01/25		190,000		194,394
NIKE, Inc.				

0/20/2021	Fill Document	
2.400% 3/27/25	170,000	182,632
2.750% 3/27/27	270,000	300,297
2.850% 3/27/30	280,000	314,474
3.250% 3/27/40	180,000	205,940
3.375% 3/27/50	610,000	712,558
	,	2,269,913
Auto Manufacturers — 0.6%		
BMW US Capital LLC		
1.850% 9/15/21 <sup>(c)</sup>	60,000	60,731
Ford Motor Co.	******	**,**-
4.750% 1/15/43	90,000	81,488
8.500% 4/21/23	140,000	152,600
9.000% 4/22/25	80,000	91,721
Ford Motor Credit Co. LLC		
3.339% 3/28/22	370,000	368,557
4.125% 8/17/27	200,000	194,500
5.125% 6/16/25	200,000	206,250
5.875% 8/02/21	400,000	407,500
General Motors Co.		
5.150% 4/01/38	40,000	42,479
5.400% 10/02/23	130,000	143,307
5.950% 4/01/49	110,000	128,891
6.125% 10/01/25	220,000	255,565
6.250% 10/02/43	300,000	355,519
General Motors Financial Co., Inc.	110,000	110.176
2.450% 11/06/20	110,000	110,176
3.450% 4/10/22	30,000	30,844
4.250% 5/15/23	10,000	10,623
4.375% 9/25/21	80,000	82,534

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

	 Principal Amount	Value
Nissan Motor Co. Ltd.	 	 
3.043% 9/15/23 <sup>(c)</sup>	\$ 400,000	\$ 405,486
3.522% 9/17/25 <sup>(c)</sup>	810,000	817,241
4.345% 9/17/27 <sup>(c)</sup>	900,000	 901,571
Banks — 11.8% ABN AMRO Bank NV		 4,847,583
4.750% 7/28/25 <sup>(c)</sup>	260,000	292,786
Banco Santander SA 3 mo. USD LIBOR + 1.120% 1.386% FRN 4/12/23	200,000	200,893
2.746% 5/28/25	1,000,000	1,048,953
3.848% 4/12/23	400,000	427,045
Bank of America Corp.	260,000	202.012
SOFR + 2.150% 2.592% VRN 4/29/31 3 mo. USD LIBOR + .790% 3.004% VRN 12/20/23	360,000 270,000	383,012 283,445
3.300% 1/11/23	90,000	95,534
3 mo. USD LIBOR + 1.040% 3.419% VRN 12/20/28	570,000	634,282
3.500% 4/19/26	290,000	324,929
3 mo. USD LIBOR + .780% 3.550% VRN 3/05/24	470,000	500,531
3 mo. USD LIBOR + 1.370% 3.593% VRN 7/21/28 3 mo. USD LIBOR + 1.070% 3.970% VRN 3/05/29	1,920,000 600,000	2,156,273 688,420
3 mo. USD LIBOR + 1.010% 3.974% VRN 3/03/29 3 mo. USD LIBOR + 1.210% 3.974% VRN 2/07/30	630,000	730,040
4.000% 4/01/24	270,000	299,223
4.000% 1/22/25	270,000	300,780
3 mo. USD LIBOR + 3.150% 4.083% VRN 3/20/51	1,150,000	1,424,092
4.125% 1/22/24	290,000	321,202
4.200% 8/26/24 4.250% 10/22/26	380,000 50,000	423,183 57,896
3 mo. USD LIBOR + 1.520% 4.330% VRN 3/15/50	250,000	317,839
4.450% 3/03/26	50,000	57,667
5.000% 1/21/44	1,010,000	1,394,663
3 mo. USD LIBOR + 3.705% 6.250% VRN <sup>(d)</sup>	170,000	181,645
Bank of Montreal	500.000	616 227
1.850% 5/01/25 5 year USD Swap + 1.432% 3.803% VRN 12/15/32	590,000	616,237
The Bank of New York Mellon Corp.	90,000	100,313
1.600% 4/24/25	170,000	176,703
	 Principal Amount	 Value
The Bank of Nova Scotia 1.300% 6/11/25	\$ 320,000	\$ 326,160
Barclays Bank PLC 1.700% 5/12/22 Barclays PLC	240,000	244,142
3 mo. USD LIBOR + 1.902% 4.972% VRN 5/16/29	230,000	269,138
3 mo. USD LIBOR + 3.054% 5.088% VRN 6/20/30 BNP Paribas SA	1,210,000	1,355,397
SOFR + 2.074% 2.219% VRN 6/09/26 <sup>(c)</sup>	400,000	412,476
3.375% 1/09/25 <sup>(c)</sup>	240,000	260,321
5 year USD Swap + 1.483% 4.375% VRN 3/01/33 <sup>(c)</sup>	220,000	245,095
4.400% 8/14/28 <sup>(c)</sup>	1,120,000	1,313,530
4.625% 3/13/27 <sup>(c)</sup>	260,000	295,712
3 mo. USD LIBOR + 2.235% 4.705% VRN 1/10/25 (c)	880,000	974,256
3 mo. USD LIBOR + 2.567% 5.198% VRN 1/10/30 <sup>(c)</sup> Canadian Imperial Bank of Commerce	440,000	542,614
0.950% 6/23/23 Citigroup, Inc.	300,000	302,697
SOFR + 1.667% 1.678% VRN 5/15/24	340,000	348,302
SOFR + 2.107% 2.572% VRN 6/03/31 SOFR + 2.750% 2.106% VRN 4/08/26	340,000	356,344 259,761
SOFR + 2.750% 3.106% VRN 4/08/26 3 mo. USD LIBOR + 1.151% 3.520% VRN 10/27/28	240,000 1,400,000	1,560,268
3 mo. USD LIBOR + 1.338% 3.980% VRN 3/20/30	710,000	817,320
3 mo. USD LIBOR + 1.192% 4.075% VRN 4/23/29	750,000	867,467
4.125% 7/25/28	360,000	414,653
4.300% 11/20/26	670,000	767,825
4.400% 6/10/25	340,000	383,625

SOFR + 3.914% 4.412% VRN 3/31/31	410,000	491,478
4.450% 9/29/27	480,000	556,605
4.650% 7/30/45	441,000	576,573
4.650% 7/23/48	70,000	92,315
4.750% 5/18/46	40,000	50,199
5.300% 5/06/44	16,000	21,335
5.500% 9/13/25	170,000	201,510
3 mo. USD LIBOR + 4.068% 5.950% VRN <sup>(d)</sup>	100,000	102,600
3 mo. USD LIBOR + 3.905% 5.950% VRN <sup>(d)</sup>	470,000	492,325

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		Principal Amount		Value
3 mo. USD LIBOR + 3.423% 6.300% VRN <sup>(d)</sup>	\$	60,000	\$	62,850
6.625% 6/15/32 8.125% 7/15/39		20,000 310,000		27,943 539,582
Cooperatieve Rabobank UA		310,000		339,362
1 year CMT + 1.000% 1.339% VRN 6/24/26 <sup>(c)</sup>		250,000		253,098
4.375% 8/04/25		1,380,000		1,564,076
4.625% 12/01/23 5.250% 8/04/45		250,000 295,000		277,764 401,959
Credit Agricole SA		_,,,,,,		,
SOFR + 1.676% 1.907% VRN 6/16/26 (c)		270,000		275,816
5 year USD Swap + 1.644% 4.000% VRN 1/10/33 <sup>(c)</sup>		790,000		866,774
Credit Suisse AG 2.950% 4/09/25		340,000		371,198
Credit Suisse Group AG		5-10,000		371,170
SOFR + 2.044% 2.193% VRN 6/05/26 <sup>(c)</sup>		850,000		875,533
SOFR + 3.730% 4.194% VRN 4/01/31 <sup>(c)</sup>		250,000		288,623
Credit Suisse Group Funding (Guernsey) Ltd. 4.550% 4/17/26		500,000		583,025
4.330% 4/1//20 Danske Bank A/S		500,000		383,023
1.226% 6/22/24 <sup>(c)</sup>		200,000		201,822
3 mo. USD LIBOR + 1.249% 3.001% VRN 9/20/22 (c)		420,000		427,972
5.000% 1/12/22 <sup>(c)</sup>		740,000		777,406
5.375% 1/12/24 <sup>(c)</sup>		610,000		686,130
Goldman Sachs Capital II 3 mo. USD LIBOR + .768%				
4.000% VRN <sup>(d)</sup> The Goldman Sachs Group, Inc.		18,000		16,668
3.200% 2/23/23		300,000		318,090
3.500% 4/01/25		370,000		408,358
3.500% 11/16/26 3.625% 2/20/24		200,000 1,270,000		221,243 1,378,025
3 mo. USD LIBOR + 1.510% 3.691% VRN 6/05/28		1,740,000		1,950,416
3.850% 7/08/24		90,000		98,978
4.000% 3/03/24 3 mo. USD LIBOR + 1.301% 4.223% VRN 5/01/29		100,000 490,000		109,983 571,444
4.250% 10/21/25		260,000		295,802
4.750% 10/21/45		480,000		631,434
5.150% 5/22/45 5.250% 7/27/21		1,000,000 100,000		1,317,922 104,005
6.250% 2/01/41		770,000		1,150,303
6.750% 10/01/37		80,000		116,234
		Principal		
		Amount		Value
HSBC Holdings PLC	•	-10.000	•	*15.100
SOFR + 1.929% 2.099% VRN 6/04/26 SOFR + 2.387% 2.848% VRN 6/04/31	\$	510,000 420,000	\$	516,100 434,868
3 mo. USD LIBOR + 1.610% 3.973% VRN 5/22/30		1,220,000		1,362,092
4.250% 8/18/25		330,000		358,635
4.300% 3/08/26 3 mo. USD LIBOR + 1.535% 4.583% VRN 6/19/29		500,000 730,000		563,652 842,224
5 year USD ICE Swap + 3.453% 6.250% VRN (d)		270,000		271,688
6.500% 9/15/37		300,000		407,101
5 year USD ICE Swap + 3.606% 6.500% VRN <sup>(d)</sup>		280,000		297,324
Intesa Sanpaolo SpA				***
3.125% 7/14/22 <sup>(c)</sup>		300,000		308,546
3.375% 1/12/23 <sup>(c)</sup> 5.017% 6/26/24 <sup>(c)</sup>		550,000		571,131
5.01/% 6/26/24 <sup>(c)</sup> 5.710% 1/15/26 <sup>(c)</sup>		900,000 200,000		945,840 218,054
JP Morgan Chase & Co.		200,000		210,034
SOFR + 1.455% 1.514% VRN 6/01/24		900,000		918,549
SOFR + 1.850% 2.083% VRN 4/22/26 SOFR + 2.040% 2.522% VRN 4/22/21		540,000		564,721
SOFR + 2.040% 2.522% VRN 4/22/31 SOFR + 2.440% 3.109% VRN 4/22/51		300,000 80,000		319,222 85,850
3 mo. USD LIBOR + .945% 3.509% VRN 1/23/29		780,000		877,353
3.625% 5/13/24 3.875% 0/10/24		80,000		88,306
3.875% 9/10/24		300,000		332,756

3 mo, USD LIBOR + 1.000% 4.023% VRN 12/05/24	940,000	1,031,488
3 mo. USD LIBOR + 1.260% 4.203% VRN 7/23/29	310.000	366,921
4.250% 10/01/27	70.000	81,541
3 mo. USD LIBOR + 1.330% 4.452% VRN 12/05/29	1.190.000	1,430,730
4.950% 6/01/45	290,000	393,002
Lloyds Banking Group PLC	,	,
3.900% 3/12/24	580,000	630,182
4.375% 3/22/28	200,000	232,031
4.550% 8/16/28	370,000	436,156
Mitsubishi UFJ Financial Group, Inc.		
2.998% 2/22/22	160,000	165,347
Morgan Stanley		
SOFR + 1.990% 2.188% VRN 4/28/26	870,000	911,138

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

		Principal Amount	Value
SOFR + 1.143% 2.699% VRN 1/22/31	\$	580,000	\$ 617,813
SOFR + 3.120% 3.622% VRN 4/01/31		990,000	1,137,490
3 mo. USD LIBOR + 1.140% 3.772% VRN 1/24/29		820,000	935,957
3 mo. USD LIBOR + 1.628% 4.431% VRN 1/23/30		10,000 90,000	11,948
SOFR + 4.840% 5.597% VRN 3/24/51 National Securities Clearing Corp.		90,000	135,319
1.200% 4/23/23 <sup>(c)</sup>		250,000	254 415
1.500% 4/23/25 (c)		250,000	254,415
Natwest Group PLC		250,000	257,768
3 mo. USD LIBOR + 1.762% 4.269% VRN 3/22/25		430,000	467,093
3 mo. USD LIBOR + 1.550% 4.519% VRN 6/25/24		200,000	215,565
5.125% 5/28/24		400,000	438,659
6.000% 12/19/23		240,000	269,908
Nordea Bank AB			
4.875% 5/13/21 <sup>(c)</sup>		390,000	400,096
Royal Bank of Canada			
1.150% 6/10/25		310,000	314,330
1.600% 4/17/23		500,000	513,120
2.150% 10/26/20		240,000	240,322
3.200% 4/30/21 Santander Holdings USA, Inc.		270,000	274,589
4.500% 7/17/25		50,000	55,462
Sumitomo Mitsui Financial Group, Inc.		30,000	33,402
2.058% 7/14/21		230,000	233,089
Svenska Handelsbanken AB		,	,
3.350% 5/24/21		250,000	255,035
Swedbank AB			
1.300% 6/02/23 <sup>(c)</sup>		390,000	397,453
The Toronto-Dominion Bank			
0.750% 6/12/23		610,000	613,965
1.150% 6/12/25		300,000	304,871
3.250% 6/11/21 UBS AG		330,000	336,813
1.750% 4/21/22 <sup>(c)</sup>		550,000	550 004
UBS Group AG		550,000	559,984
		200.000	207.420
3 mo. USD LIBOR + .954% 2.859% VRN 8/15/23 <sup>(c)</sup>		200,000	207,420
3.491% 5/23/23 <sup>(c)</sup>		500,000	521,467
4.125% 9/24/25 <sup>(c)</sup>		210,000	239,207
4.253% 3/23/28 <sup>(c)</sup>		800,000	928,160
5 year USD Swap + 4.344% 7.000% VRN <sup>(c) (d)</sup>		1,050,000	1,120,875
		Principal	
		Amount	 Value
UniCredit SpA	_		
6.572% 1/14/22 <sup>(c)</sup>	\$	640,000	\$ 679,180
US Bancorp 1.450% 5/12/25		690,000	704 110
US Bank NA/Cincinnati OH		680,000	704,118
3.150% 4/26/21		270,000	273,792
Wachovia Capital Trust III 3 mo. USD LIBOR + .930%		270,000	273,772
5.570% VRN <sup>(d)</sup>		630,000	629,660
Wells Fargo & Co.		030,000	027,000
SOFR + 1.600% 1.654% VRN 6/02/24		720,000	733,427
SOFR + 2.000% 2.188% VRN 4/30/26		570,000	594,527
SOFR + 2.100% 2.393% VRN 6/02/28		360,000	375,581
3 mo. USD LIBOR + 1.170% 2.879% VRN 10/30/30		150,000	161,085
3.000% 10/23/26		350,000	382,582
3.450% 2/13/23		120,000	127,177
3.750% 1/24/24 4.150% 1/24/29		270,000	293,361 740,932
4.130% 1/24/29 4.300% 7/22/27		630,000 530,000	607,256
4.400% 6/14/46		180,000	215,018
3 mo. USD LIBOR + 3.770% 4.478% VRN 4/04/31		210,000	254,868
4.480% 1/16/24		991,000	1,098,617
4.600% 4/01/21		40,000	40,849
4.650% 11/04/44		400,000	488,123
4.750% 12/07/46		590,000	734,731
4.900% 11/17/45		880,000	1,119,159

3 mo. USD LIBOR + 4.240% 5.013% VRN 4/04/51 2,710,000 5.375% 11/02/43 110,000	3,709,035 145,613
3 mo. USD LIBOR + 3.990% 5.875% VRN <sup>(d)</sup> 50,000	53,831
Westpac Banking Corp.	
2.600% 11/23/20 280,000	280,947
	88,174,315
Beverages — 1.0%	
Anheuser-Busch Cos. LLC/Anheuser-Busch InBev Worldwide, Inc.	
3.650% 2/01/26 790,000	885,593
4.900% 2/01/46 600,000	739,818
Anheuser-Busch InBev Worldwide, Inc.	
3.500% 6/01/30 160,000	182,037
4.000% 4/13/28 90,000	104,285
4.150% 1/23/25	124,468

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		Principal Amount		Value
4.350% 6/01/40	\$	200,000	\$	233,763
4.500% 6/01/50		360,000		431,480
4.750% 1/23/29		930,000		1,134,989
5.550% 1/23/49 The Coca-Cola Co.		470,000		631,861
1.450% 6/01/27		250,000		257,347
2.500% 6/01/40		10,000		10,485
2.500% 3/15/51		130,000		129,871
2.600% 6/01/50		140,000		140,574
2.950% 3/25/25		120,000		131,884
3.375% 3/25/27 Diageo Investment Corp.		320,000		367,063
2.875% 5/11/22		150,000		155,916
Molson Coors Beverage Co.		,		,-
3.000% 7/15/26		80,000		85,290
3.500% 5/01/22		30,000		31,191
4.200% 7/15/46 PepsiCo, Inc.		80,000		84,387
0.750% 5/01/23		360,000		363,660
1.625% 5/01/30		290,000		297,930
2.250% 3/19/25		30,000		32,134
2.625% 3/19/27		40,000		43,947
2.875% 10/15/49		100,000		107,502
3.625% 3/19/50		50,000		60,614
3.875% 3/19/60 4.000% 3/05/42		80,000 50,000		101,009 62,805
Pernod Ricard SA		30,000		02,803
4.450% 1/15/22 <sup>(c)</sup>		250,000		262,386
1.15070 1715/2E		230,000		7,194,289
Biotechnology — 0.1%				
Amgen, Inc. 3.625% 5/22/24		30,000		33,019
4.663% 6/15/51		34,000		44,263
Gilead Sciences, Inc.		5 1,000		11,203
3.700% 4/01/24		210,000		230,633
4.500% 2/01/45		10,000		12,513
4.750% 3/01/46		200,000		260,545
Building Materials — 0.2%			-	580,973
Carrier Global Corp.		100.000		102 000
1.923% 2/15/23 <sup>(c)</sup>		100,000		102,890
2.242% 2/15/25 <sup>(c)</sup>		260,000		271,225
2.493% 2/15/27 <sup>(c)</sup>		50,000		52,281
2.700% 2/15/31 <sup>(c)</sup>		130,000		135,438
2.722% 2/15/30 <sup>(c)</sup>		450,000		470,716
3.377% 4/05/40 <sup>(c)</sup>		150,000		157,159
3.577% 4/05/50 <sup>(c)</sup>		160,000		169,973
				1,359,682
		D		
		Principal Amount		Value
Chemicals — 0.2%		/ xinoulit		v andt
Equate Petrochemical BV				
4.250% 11/03/26 <sup>(c)</sup>	\$	430,000	\$	450,963
OCP SA	*	,	*	,,
4.500% 10/22/25 <sup>(c)</sup>		330,000		348,060
Syngenta Finance NV				
3.933% 4/23/21 <sup>(c)</sup>		400,000		405,162
				1,204,185
Commercial Services — 0.4% Cintas Corp. No 2				
2.900% 4/01/22		160,000		165,509
3.700% 4/01/27		260,000		299,733
DP World PLC		.,		,
5.625% 9/25/48 <sup>(c)</sup>		560,000		638,400
PayPal Holdings, Inc.				
1.350% 6/01/23		260,000		265,574

1.650% 6/01/25	270,000	279,644
Prime Security Services Borrower LLC/Prime Finance, Inc.		
5.750% 4/15/26 <sup>(c)</sup>	210,000	224,570
United Rentals North America, Inc.	1,7111	,
3.875% 11/15/27	60,000	61,800
3.875% 2/15/31	460,000	466,900
4.875% 1/15/28	150,000	157,500
5.875% 9/15/26	90,000	94,837
		2,654,467
Computers — 0.4%		
Apple, Inc.		
1.125% 5/11/25	730,000	747,047
1.550% 8/04/21	10,000	10,096
2.450% 8/04/26	800,000	871,784
Dell International LLC/EMC Corp.		
4.420% 6/15/21 <sup>(c)</sup>	242,000	247,719
International Business Machines Corp.		
3.000% 5/15/24	910,000	985,702
		2,862,348
Cosmetics & Personal Care — 0.1%		
The Procter & Gamble Co.		
2.450% 3/25/25	140,000	151,621
2.800% 3/25/27	50,000	56,118
3.000% 3/25/30	160,000	185,591
3.550% 3/25/40	200,000	243,564
3.600% 3/25/50	270,000	342,357
	_	979,251
Diversified Financial Services — 0.5%		
AerCap Ireland Capital DAC / AerCap Global Aviation Trust	200,000	276 262
3.150% 2/15/24	380,000	376,262

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

	Principal Amount	Value	
4.500% 5/15/21	\$ 160,000	\$ 163,0	048
5.000% 10/01/21	150,000	154,	609
Air Lease Corp. 3.375% 7/01/25	200,000	204,	372
GE Capital International Funding Co. Unlimited Co.	200,000	201,	3,2
4.418% 11/15/35 ILFC E-Capital Trust II	380,000	401,	112
3.230% VRN 12/21/65 <sup>(c)</sup> (e) International Lease Finance Corp.	10,000	5,4	425
5.875% 8/15/22 KKR Group Finance Co. II LLC	70,000	74,9	910
5.500% 2/01/43 <sup>(c)</sup> Mastercard, Inc.	20,000	25,	435
3.850% 3/26/50 Park Aerospace Holdings Ltd.	50,000	63,5	836
4.500% 3/15/23 <sup>(c)</sup>	10,000	9,9	910
5.250% 8/15/22 <sup>(c)</sup>	230,000	230,9	931
5.500% 2/15/24 <sup>(c)</sup>	50,000	50,3	381
USAA Capital Corp.	4.50.000		
1.500% 5/01/23 <sup>(c)</sup> Vanguard Group, Inc.	150,000	153,	825
3.050% 8/22/50 Visa, Inc.	450,000	422,	582
3.150% 12/14/25	720,000	805,	568
4.300% 12/14/45	260,000	345,	
Electric — 0.8%		3,487,	546
Consolidated Edison Co. of New York, Inc.			
3.350% 4/01/30	120,000	138,	
3.950% 4/01/50 Duke Energy Corp.	80,000	97,:	541
3.750% 4/15/24	100,000	109,	825
Duke Energy Ohio, Inc.			
3.650% 2/01/29 Exelon Corp.	440,000	510,	
5.625% 6/15/35 First Property Corp.	290,000	385,2	201
FirstEnergy Corp. 1.600% 1/15/26	120,000	119,	255
3.900% 7/15/27	710,000	780,	616
4.250% 3/15/23	310,000	328,9	
4.850% 7/15/47 7.375% 11/15/31	240,000 1,460,000	289, 2,047,	
Pacific Gas and Electric Co.			
1.750% 6/16/22	450,000	450,:	
2.100% 8/01/27 2.500% 2/01/31	140,000 180,000	135,4 171,2	
3.300% 8/01/40	50,000		916
	Duda di cil		
	Principal Amount	Value	
3.500% 8/01/50	\$ 80,000	\$ 72,	130
Electronics — 0.0%		5,681,	870
Honeywell International, Inc.	210.000	216	
1.350% 6/01/25 Environmental Controls — 0.1%	210,000	216,	517
GFL Environmental, Inc.			
4.250% 6/01/25 <sup>(c)</sup>	160,000	161,	600
Republic Services, Inc.	220.000	244	015
2.500% 8/15/24 Waste Management, Inc.	230,000	244,	813
3.500% 5/15/24	90,000	98,4	469
4.150% 7/15/49	200,000	254,	460
4.600% 3/01/21	30,000		215
Foods — 0.5%		789,	<u> </u>
Danone SA 2.077% 11/02/21 <sup>(c)</sup>	250,000	253,	000
2.07170 11/0Z/Z1 · ·	230,000	255,	oou

0/20/2021	1 Till Bocallicht	
2.589% 11/02/23 <sup>(c)</sup>	310,000	326,935
2.947% 11/02/26 <sup>(c)</sup>	550,000	609,929
The Hershey Co.		
0.900% 6/01/25	90,000	90,467
Kraft Heinz Foods Co.		
3.000% 6/01/26	170,000	174,679
3.950% 7/15/25	88,000	95,484
4.250% 3/01/31 <sup>(c)</sup>	70,000	76,801
4.375% 6/01/46	130,000	133,566
4.625% 10/01/39 <sup>(c)</sup>	10,000	10,616
4.875% 10/01/49 <sup>(c)</sup>	180,000	189,957
5.000% 6/04/42	110,000	120,463
5.200% 7/15/45	230,000	251,443
5.500% 6/01/50 <sup>(c)</sup>	190,000	217,751
6.750% STEP 3/15/32	10,000	13,220
6.875% 1/26/39	30,000	40,184
7.125% 8/01/39 <sup>(c)</sup>	10,000	13,479
Lamb Weston Holdings, Inc.		
4.875% 5/15/28 <sup>(c)</sup>	70,000	75,600
Mars, Inc.		
2.700% 4/01/25 <sup>(c)</sup>	240,000	258,834
3.200% 4/01/30 <sup>(c)</sup>	140,000	160,166
Mondelez International, Inc.		
1.500% 5/04/25	660,000	678,243
2.125% 4/13/23	100,000	103,780
WM Wrigley Jr. Co.		
3.375% 10/21/20 <sup>(c)</sup>	10,000	10,015
		3,905,492

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

Persent Pers			Principal Amount		Value
Same   Properties   Propertie	Forest Products & Paper — 0.0%		_		
Medican		ø	00 000	¢.	00 221
About 1		Þ	90,000	<u> </u>	90,221
4.790% 112046         360,00         510,00%           Mcdirons, Inc.         20,000         151,048           4.50% 15123         194,000         118,565           4.50% 15124         21,000         21,556           4.50% 15123         40,000         12,152,508           Actas, Inc.         30,000         42,152           Amben, Inc.         30,000         34,461           2,50% 15123         40,000         44,91           3,50% 120124         30,000         113,831           3,55% 120127         140,000         113,831           3,55% 120127         140,000         113,831           3,55% 120127         100,000         13,183           3,55% 120127         90,000         5,186           4,50% 130142         90,000         5,186           4,50% 130122 el         90,000         5,186           4,50% 130122 el         90,000         5,186           4,50% 130122 el         90,000         5,186           4,50% 13012 el         90,000         5,186           4,50% 10014 el         90,000         5,186           4,50% 10015 el         90,000         5,186           4,50% 50012 el         90,000         5,186					
4.000   1.170-146   3.00,000			239,000		
Medicinals, Inc.         194,000         218,35           4,20% \$11545         28,00         38,54           4,20% \$11545         28,00         38,54           Asserting Inc.         2,200% \$10523         40,000         42,12           Authern, Inc.         2,200% \$1523         30,000         124,94           2,950% \$120122         30,000         52,145           3,150% \$15224         20,000         13,155           3,300% \$15214         20,000         121,45           4,500% \$100124         20,000         21,45           4,500% \$100124         20,000         21,45           4,500% \$10140         20,000         78,47           4,500% \$10140         20,000         78,474           4,500% \$101524         30,000         78,474           4,500% \$101524         30,000         78,474           4,500% \$101524         40,000         44,900           4,500% \$101524         20,000         22,722           4,500% \$101524         20,000         22,722           4,500% \$101524         20,000         22,722           5,000% \$101524         20,000         20,000           4,500% \$101529         20,000         20,000					
3.000% 31525   194,000   218,585   162,000			360,000		510,408
Meath Care—Services—0.6%   23,236   2			104 000		219 565
Patenth Care - Services — 0.69%   Acton. Inc.   Acton. I					
National Process   National Pr	1.02070 3/13/13		20,000		
2.800% 6/15/23         4,000         42,152           2.905% 12/01/22         330,000         346,919           3.125% 5/15/22         50,000         131,815           3.150% 12/01/24         10,000         131,815           3.150% 12/01/27         10,000         10,152           3.150% 11/01/42         20,000         71,405           CommonSpirt Health         70,000         78,474           4.50% 11/01/42         70,000         78,474           4.50% 11/01/42         50,000         31,868           HCA, Inc.         260,000         264,909           4.50% 501/23         260,000         44,908           4.50% 501/23         280,000         264,909           4.50% 501/23         280,000         24,722           4.50% 501/23         280,000         24,722           5.25% 61/526         60,000         44,000           5.25% 61/526         100,000         44,000           5.25% 90/128         20,000         33,308           5.25% 90/128         20,000         34,319           5.25% 90/128         20,000         31,310           5.25% 90/128         20,000         31,310           5.25% 90/128         20,000	Health Care – Services — 0.6%				<u>, , , , , , , , , , , , , , , , , , , </u>
Anthern. Inc.   1.2	· · · · · · · · · · · · · · · · · · ·				
2.90% 1201/22         330,00%         349,919           3.125% 515/22         50,000         52,145           3.60% 1201/24         120,000         131,818           3.60% 1201/27         140,000         19,523           3.70% 815/21         70,000         74,406           CommonSprift Health         20,000         78,474           4.75% 1015/24 10         70,000         78,474           4.75% 1015/24 10         50,000         31,868           HCA, Inc.         260,000         264,900           4.50% 215/27         40,000         40,900           4.50% 315/34         250,000         50,000           4.75% 5017/3         250,000         50,000           5.373% 2016/2         40,000         50,000           5.373% 2016/2         40,000         50,000           5.50% 615/47         130,000         10,000           5.50% 615/47         130,000         10,000           5.50% 615/47         130,000         20,000           5.50% 615/47         190,000         27,026           5.60% 615/47         100,000         10,000           5.50% 615/47         100,000         10,000           5.60% 615/47         100,000			40,000		42,152
3.15% 5.15.22			330,000		3/6 010
3.55% 1.20127					
140,000   159,523   37,000   174,000   174,000   174,000   174,000   174,000   174,000   174,000   174,000   174,000   175					
CommonSpirit Health         20,000         21,726           Fresenus Medical Cure Us Finance II, Inc.         20,000         78,748           4,750% In 10/1524 fc)         70,000         53,186           HCA, Inc.         50,000         53,186           HCA, Inc.         20,000         264,909           4,50% In 10/1527         40,000         40,909           4,50% S, 10/123         20,000         52,722           5,00% 6,1526         40,000         70,001           5,375% 2,00123         40,000         70,001           5,375% 2,00123         40,000         70,001           5,375% 2,00123         40,000         140,000         150,000           5,375% 2,00123         40,000         140,000			140,000		
Tessenian Medical Care US Finnace II, Inc.   Fresenian Medical Care US Finnace III, Inc.   Fresh Medical Care US Finn			70,000		71,406
Fresmiss Medial Care Us Finance II, Inc.         7,000         78,474           4,750% 10/1524 (°)         50,000         33,186           HCA, Inc.         S60,000         260,000         264,000           4,500% 21/527         40,000         244,928           4,750% 50/123         250,000         272,725           5,000% 31/524         60,000         70,001           5,250% 61/526         60,000         35,000           5,375% 90/125         40,000         44,000           5,375% 90/126         40,000         40,300           5,525% 60/1526         30,000         160,330           5,525% 90/128         30,000         160,335           5,625% 90/128         30,000         37,850           5,625% 90/128         30,000         337,850           5,625% 90/128         30,000         37,850           3,150% 120/129         40,000         42,003           4,50% 120/124         90,000         27,002           4,50% 120/122         90,000         77,000           4,50% 120/124         90,000         77,000           4,50% 120/124         90,000         13,091           4,50% 120/124         90,000         13,091           4			20,000		21.745
**********************************			20,000		21,743
5.875% 1/31/22 (°)     5.0006     53,186       1/C.A. Inc.     3.5006 9/01/30     264,000     264,909       4.5006 2/15/27     40,000     44,928       4.7506 5/01/23     250,000     272,722       5.0006 3/15/24     60,000     70,000       5.275% 6/15/26     60,000     70,000       5.375% 9/01/25     140,000     133,000       5.375% 9/01/26     30,000     30,000       5.500% 6/15/47     30,000     16,035       5.625% 9/01/29     30,000     337,850       18mman, Inc.     190,000     21,000       3.150% 12/01/22     40,000     37,000       4.500% 4/01/25     50,000     57,429       4.500% 4/01/25     50,000     37,132       4.500% 5/15/30     100,000     110,000       1.500% 11/15/26     110,000     110,001       2.375% 10/15/22     50,000     70,000       2.375% 10/15/22     50,000     70,000       2.375% 10/15/22     50,000     70,000       2.375% 10/15/21     50,000     10,000       2.375% 10/15/22     50,000     10,000       2.375% 10/15/21     50,000     10,000       3.150% 5/15/30     100,000     10,150       3.150% 5/15/31     100,000     10,150    <			70,000		78 474
HCA   1.0					
3.50% 901/30       260,000       264,909         4.50% 21527       40,000       44,928         4.50% 21527       250,000       272,722         5.00% 41526       50,000       70,001         5.378% 20125       140,000       143,208         5.378% 20126       40,000       144,200         5.378% 20129       30,000       34,319         5.50% 61547       30,000       34,319         5.50% 61547       30,000       34,319         5.62% 90128       30,000       34,319         5.62% 90129       40,000       42,003         18,000       40,000       42,003         3,150% 120122       40,000       42,003         4,50% 40125       50,000       57,429         4,50% 40124       70,000       13,091         4,50% 40125       70,000       13,091         4,50% 40144       60,00       79,436         4,50% 40156       110,000       10,479         2,375% 10/1522       100,000       52,028         2,875% 12/1521       50,000       52,028         3,150% 41/1526       10,000       16,529         3,150% 41/1521       10,000       13,570         3,750% 11/1522			30,000		33,160
3.150% 1501.23   520,000   52,722   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,000   50,375% 2011.26   40,000   44,200   50,000   50,475   30,000   34,319   58,75% 2011.29   290,000   337,850   10,000   21,000			260,000		264,909
5.00% 31524         50,00%         50,00%           5.250% 61526         60,000         70,001           5.375% 201125         140,000         153,300           5.375% 201126         40,000         40,003           5.500% 61547         30,000         33,180           5.625% 90128         30,000         33,785           5.875% 20129         290,000         33,785           Humana, Inc.         31,50% 120122         40,000         42,003           3,150% 120122         90,000         57,429           4,500% 40125         50,000         57,429           4,625% 120142         70,000         87,132           4,800% 31547         10,000         13,001           4,950% 100144         60,000         79,436           UnitedHealth Group, Inc.         110,000         110,931           1,250% 11526         110,000         104,779           2,375% 10/1522         \$50,000         32,928           2,875% 12/1521         160,000         105,229           3,125% 51/560         30,000         32,197           3,500% 45/1523         100,000         108,155           3,700% 81/1549         120,000         43,575           3,875% 12/1548	4.500% 2/15/27		40,000		44,928
5.250% 615.26         60.000         70.001           5.375% 20125         140.000         43.30           5.375% 901/26         40.000         44.200           5.500% 615/47         30.000         34.31           5.625% 901/28         30.000         337.85           5.625% 901/29         40.000         337.85           Humana, Inc.         40.000         217.026           3.150% 12/01/22         40.000         217.026           4.625% 12/01/24         50.000         57.429           4.625% 12/01/24         70.000         87.432           4.800% 31/547         10.000         79.436           UnitedHealth Group, Inc.         110.000         10.479           1.230% 17/526         110.000         10.479           2.000% 51/526         110.000         10.479           2.2375% 10/15/25         50.000         \$5.2028           2.875% 12/15/21         160.000         10.5029           3.125% 51/560         30.000         32.197           3.125% 51/560         30.000         32.197           3.500% 41/523         10.000         108.155           3.700% 81/549         10.000         10.5029           3.875% 11/292         10.					
5.375% 2010/25       140,000       44,200         5.375% 9010/26       40,000       16,035         5.625% 9010/28       30,000       34,319         5.875% 2010/29       290,000       337,850         Humana, Inc.       90,000       217,026         3.150% 12/01/22       40,000       217,026         4.500% 401/25       50,000       57,429         4.500% 401/25       50,000       57,429         4.500% 401/24       70,000       87,132         4.950% 10/01/44       60,000       79,436         Unitedificalth Group, Inc.       110,000       110,293         2.200% 5/15/30       110,000       104,779         2.375% 10/15/25       160,000       55,228         2.875% 12/15/21       8,000       52,028         3.125% 5/15/60       30,000       32,197         3.500% 6/15/23       100,000       104,159         3.750% 7/15/25       100,000       104,350         3.875% 12/15/26       190,000       216,861         3.875% 12/15/28       100,000       104,350         3.875% 12/15/48       50,000       30,000         4.500% 615/23       100,000       216,861         5,000% 615/27       1					
5.37% 9/01/26       44,000       44,200         5.50% 9/01/28       30,000       34,319         5.875% 201/29       290,000       337,850         Humana, Inc.       """         3.150% 12/01/22       40,000       42,003         4.500% 4/01/25       50,000       57,429         4.625% 12/01/42       50,000       57,429         4.625% 12/01/42       10,000       10,001         4.90% 3/15/47       10,000       79,436         1.250% 1/15/26       110,000       112,931         2.00% 5/15/30       110,000       104,779         2.375% 10/15/22       \$ 50,000       \$ 5,202         2.875% 12/15/21       160,000       104,779         3.125% 5/15/30       30,000       32,197         3.500% 6/15/23       100,000       165,029         3.125% 5/15/30       30,000       32,197         3.500% 6/15/23       100,000       104,759         3.500% 6/15/23       100,000       104,502         3.750% 10/15/25       190,000       216,861         3.875% 12/15/21       100,000       13,570         3.875% 12/15/25       100,000       216,861         3.875% 12/15/25       100,000       216,861 <td></td> <td></td> <td></td> <td></td> <td></td>					
5.00% 6/15/47       130,000       160,935         5.625% 9/01/28       30,000       34,319         5.825% 9/01/29       290,000       337,805         Humana, Inc.       T       40,000       42,003         3.150% 12/01/22       40,000       217,026         4.500% 401/25       50,000       57,429         4.629% 12/01/42       70,000       87,132         4.800% 3/15/47       60,000       79,436         4.950% 10/01/44       60,000       79,436         UnicedHealth Group, Inc.       110,000       110,000         1.250% 1/15/26       110,000       104,779         2.375% 10/15/22       \$ 50,000       \$ 5,2028         2.875% 12/15/21       160,000       32,197         3.500% 6/15/23       100,000       108,155         3.750% 11/5/26       100,000       108,155         3.750% 11/5/29       100,000       121,806         3.125% 5/15/60       30,000       32,197         3.500% 6/15/23       100,000       108,155         3.750% 11/5/25       100,000       121,806         3.875% 12/15/28       100,000       216,861         3.875% 12/15/28       100,000       34,245         4.500					
5.625% 9/01/28       30,000       34,319         5.875% 2/01/29       290,000       337,858         Human, Inc.       40,000       42,003         3.150% 12/01/22       40,000       57,429         4.625% 12/01/42       50,000       57,429         4.625% 12/01/42       70,000       87,132         4.800% 3/15/47       10,000       13,091         4.950% 10/01/44       60,000       79,436         UnitedHeath Group, Inc.       110,000       112,931         2.000% 5/15/30       100,000       104,779         2.375% 10/15/22       \$ 50,000       \$ 52,028         2.875% 12/15/21       160,000       32,197         3.125% 5/15/60       30,000       32,197         3.500% 6/15/23       100,000       104,357         3.750% 7/15/25       100,000       108,155         3.750% 11/5/29       110,000       108,155         3.875% 12/15/29       110,000       108,155         3.875% 12/15/28       100,000       108,155         3.875% 12/15/28       100,000       108,155         3.875% 12/15/28       110,000       108,155         4.500% 13/15/36       100,000       4,250%         5,000% 6/15/27					
Humana Inc.	5.625% 9/01/28				
3.150% 12/01/22			290,000		337,850
3.90% 3/15/27       190,000       217,026         4.50% 4/01/25       50,000       57,429         4.62% 12/01/42       70,000       87,132         4.80% 3/15/47       10,000       13,091         4.95% 10/01/44       60,000       79,436         UnitedHealth Group, Inc.       110,000       112,931         2.000% 5/15/30       100,000       104,779         2.37% 10/15/26       \$ 50,000       \$ 52,028         2.875% 12/15/21       \$ 60,000       32,197         3.12% 5/15/60       30,000       32,197         3.50% 6/15/23       100,000       108,155         3.70% 8/15/25       100,000       108,155         3.75% 12/15/28       100,000       216,861         3.87% 8/15/59       100,000       216,861         3.87% 8/15/28       110,000       25,900         4.45% 12/15/48       270,000       344,245         4.45% 12/15/48       270,000       66,220         5.80% 3/15/36       70,000       10,1378         4.50% 11/19/12       10,000       216,861         4.75% 11/12/15/48       270,000       66,220         5.80% 3/15/36       70,000       10,1378         4.75% 11/12/12			40.000		42.002
\$1,00% 4/01/25   \$5,000   \$7,429   \$4,625% 1/201/42   \$70,000   \$7,132   \$1,000   \$1,1001   \$1,000   \$1,1001   \$1,000   \$1,0001   \$1,00000   \$1,0000   \$1,0000   \$1,0000   \$1,0000   \$1,0000   \$1,0000   \$1,					
4.825% 12/01/42       70,000       87,132         4.800% 3/15/47       10,000       79,436         4.950% 10/01/44       60,000       79,436         UnitedHealth Group, Inc.       "I1,250% 1/15/26       110,000       112,931         2.000% 5/15/30       100,000       104,779         2.375% 10/15/22       \$ 5,000       \$ 52,028         2.875% 12/15/21       160,000       165,029         3.125% 5/15/60       30,000       32,197         3.500% 6/15/23       100,000       104,557         3.700% 8/15/49       120,000       143,570         3.875% 12/15/28       110,000       216,861         3.875% 12/15/28       110,000       256,920         4.250% 6/15/48       50,000       62,20         4.450% (4/15/48)       50,000       62,20         4.500% 4/30/24       50,000       62,20         4.750% 4/30/24       120,000       128,400         4.750% 4/15/27       190,000       216,932         5.000% 6/15/27       190,000       216,932         6.00% 4/30/24       120,000       128,400         4.750% 11/29/27       190,000       216,932         5.000% 6/15/27       190,000       216,932      <					
4.950% 10/01/44       60,000       79,436         UnitedHealth Group, Inc.       1.250% 1/15/26       110,000       112,931         2.000% 5/15/30       100,000       104,779         Principal Amount       Value         2.375% 10/15/22       \$ 50,000       \$ 52,028         2.875% 12/15/21       160,000       165,029         3.125% 5/15/60       30,000       32,197         3.500% 6/15/23       100,000       108,155         3.700% 8/15/49       120,000       143,570         3.875% 12/15/28       110,000       216,861         3.875% 12/15/28       110,000       256,920         4.450% 12/15/48       270,000       344,245         4.450% 12/15/48       50,000       66,220         5.800% 3/15/36       70,000       101,378         Home Builders — 0.1%         Lenar Corp.       4,500% 4/30/24       120,000       128,400         4,750% 11/29/27       10,000       216,932         5,000% 6/15/27       10,000       128,400         MDC Holdings, Inc.       6,000% 1/15/45       100,000       121,000         MDC Holdings, Inc.       6,000% 1/15/45       100,000					
UnitedHealth Group, Inc.					
1.250% 1/15/26			60,000		79,436
2.000% 5/15/30         100,000         104,779           Principal Amount         Value           2.375% 10/15/22         \$ 50,000         \$ 52,028           2.875% 12/15/21         160,000         165,029           3.125% 5/15/60         30,000         30,100           3.500% 6/15/23         100,000         108,155           3.700% 8/15/49         120,000         216,861           3.875% 12/15/25         190,000         216,861           3.875% 8/15/59         210,000         256,920           4.250% 6/15/48         270,000         344,245           4.50% 12/15/48         50,000         66,220           5.800% 3/15/36         70,000         101,378           5.800% 3/15/36         100,000         113,780           4.50% 12/15/48         270,000         344,245           4.50% 12/15/48         70,000         101,378           5.800% 3/15/36         120,000         128,400           4.50% 4/30/24         120,000         216,932           4.50% 11/29/27         190,000         216,932           5.000% 6/15/27         10,000         11,300           MDC Holdings, Inc.         6,000% 1/15/43         100,000         121,000			110,000		112 021
2.375% 10/15/22         \$ 50,000         \$ 52,028           2.875% 12/15/21         160,000         165,029           3.125% 5/15/60         30,000         32,197           3.50% 6/15/23         100,000         108,155           3.700% 8/15/49         120,000         143,570           3.875% 7/15/25         190,000         216,861           3.875% 8/15/59         110,000         256,920           4.250% 6/15/48         270,000         344,245           4.50% 6/15/48         50,000         66,220           5.800% 3/15/36         70,000         101,378           5.800% 3/15/36         70,000         101,378           4.50% 6/15/48         270,000         344,245           4.50% 12/15/48         50,000         66,220           Home Builders — 0.1%         120,000         128,400           4.750% 11/29/27         190,000         216,932           5.000% 6/15/27         10,000         11,300           MDC Holdings, Inc.         6,000% 1/15/43         100,000         121,000					
Amount         Value           2.375% 10/15/22         \$ 50,000         \$ 52,028           2.875% 12/15/21         160,00         165,029           3.125% 5/15/60         30,000         32,197           3.500% 6/15/23         100,000         108,155           3.700% 8/15/49         120,000         216,861           3.875% 12/15/28         110,000         33,752           3.875% 12/15/28         110,000         256,920           4.250% 6/15/48         270,000         344,245           4.450% 12/15/48         50,000         66,220           5.800% 3/15/36         70,000         101,378           Home Builders — 0.1%           Lennar Corp.         4.500% 4/30/24         120,000         216,932           4.500% 4/30/24         120,000         216,932           5.000% 6/15/27         190,000         216,932           5.000% 6/15/27         100,000         11,300           MDC Holdings, Inc.         6.000% 1/15/43         100,000         121,000	2.00070 3/13/30		100,000		101,775
2.375% 10/15/22       \$ 50,000       \$ 52,028         2.875% 12/15/21       160,000       165,029         3.125% 5/15/60       30,000       32,197         3.500% 6/15/23       100,000       108,155         3.700% 8/15/49       120,000       143,570         3.750% 7/15/25       190,000       216,861         3.875% 12/15/28       110,000       256,920         4.250% 6/15/48       270,000       344,245         4.450% 12/15/48       50,000       66,220         5.800% 3/15/36       70,000       101,378         Home Builders — 0.1%         Lennar Corp.       4.500% 4/30/24       120,000       128,400         4.750% 11/29/27       190,000       216,932         5.000% 6/15/27       10,000       11,300         MDC Holdings, Inc.       6.000% 1/15/43       100,000       121,000			Principal		
2.875% 12/15/21       160,000       165,029         3.125% 5/15/60       30,000       32,197         3.500% 6/15/23       100,000       108,155         3.700% 8/15/49       120,000       216,861         3.875% 7/15/25       190,000       216,861         3.875% 8/15/59       210,000       256,920         4.250% 6/15/48       270,000       344,245         4.450% 12/15/48       50,000       66,220         5.800% 3/15/36       70,000       101,378         Home Builders — 0.1%         Lennar Corp.       4.500% 4/30/24       120,000       128,400         4.750% 11/29/27       190,000       216,932         5.000% 6/15/27       10,000       11,300         MDC Holdings, Inc.       6.000% 1/15/43       100,000       121,000		_			
3.125% 5/15/60       30,000       32,197         3.500% 6/15/23       100,000       108,155         3.700% 8/15/49       120,000       143,570         3.750% 7/15/25       190,000       216,861         3.875% 8/15/59       110,000       256,920         4.250% 6/15/48       270,000       344,245         4.450% 12/15/48       50,000       66,220         5.800% 3/15/36       70,000       101,378         Home Builders — 0.1%         Lennar Corp.       4.50% 4/30/24       120,000       128,400         4.750% 11/29/27       190,000       216,932         5.000% 6/15/27       190,000       11,300         MDC Holdings, Inc.       6.000% 1/15/43       100,000       121,000		\$		\$	
3.500% 6/15/23       100,000       108,155         3.700% 8/15/49       120,000       143,570         3.750% 7/15/25       190,000       216,861         3.875% 12/15/28       110,000       130,722         3.875% 8/15/59       210,000       256,920         4.250% 6/15/48       270,000       344,245         4.450% 12/15/48       50,000       66,220         5.800% 3/15/36       70,000       101,378         Home Builders — 0.1%         Lennar Corp.       120,000       128,400         4.750% 11/29/27       190,000       216,932         5.000% 6/15/27       10,000       11,300         MDC Holdings, Inc.       6.000% 1/15/43       100,000       121,000					
3.700% 8/15/49       120,000       143,570         3.750% 7/15/25       190,000       216,861         3.875% 12/15/28       110,000       130,722         3.875% 8/15/59       210,000       256,920         4.250% 6/15/48       270,000       344,245         4.450% 12/15/48       50,000       66,220         5.800% 3/15/36       70,000       101,378         Home Builders — 0.1%         Lennar Corp.       4.500% 4/30/24       120,000       128,400         4.750% 11/29/27       190,000       216,932         5.000% 6/15/27       10,000       11,300         MDC Holdings, Inc.       6.000% 1/15/43       100,000       121,000					
3.875% 12/15/28       110,000       130,722         3.875% 8/15/59       210,000       256,920         4.250% 6/15/48       270,000       344,245         4.450% 12/15/48       50,000       66,220         5.800% 3/15/36       70,000       101,378         Home Builders — 0.1%         Lennar Corp.       120,000       128,400         4.500% 4/30/24       120,000       216,932         5.000% 6/15/27       190,000       216,932         5.000% 6/15/27       10,000       11,300         MDC Holdings, Inc.       6.000% 1/15/43       100,000       121,000					
3.875% 8/15/59       210,000       256,920         4.250% 6/15/48       270,000       344,245         4.450% 12/15/48       50,000       66,220         5.800% 3/15/36       70,000       101,378         Home Builders — 0.1%         Lennar Corp.       120,000       128,400         4.500% 4/30/24       120,000       216,932         5.000% 6/15/27       190,000       216,932         5.000% 6/15/27       10,000       11,300         MDC Holdings, Inc.       6.000% 1/15/43       100,000       121,000	3.750% 7/15/25				
4.250% 6/15/48       270,000       344,245         4.450% 12/15/48       50,000       66,220         5.800% 3/15/36       70,000       101,378         Home Builders — 0.1%         Lennar Corp.         4.500% 4/30/24       120,000       128,400         4.750% 11/29/27       190,000       216,932         5.000% 6/15/27       10,000       11,300         MDC Holdings, Inc.       6.000% 1/15/43       100,000       121,000					
4.450% 12/15/48     50,000     66,220       5.800% 3/15/36     70,000     101,378       Home Builders — 0.1%       Lennar Corp.       4.500% 4/30/24     120,000     128,400       4.750% 11/29/27     190,000     216,932       5.000% 6/15/27     10,000     11,300       MDC Holdings, Inc.     6.000% 1/15/43     100,000     121,000					
5.800% 3/15/36     70,000     101,378       Home Builders — 0.1%       Lennar Corp.     3120,000     128,400       4.500% 4/30/24     120,000     128,400       4.750% 11/29/27     190,000     216,932       5.000% 6/15/27     10,000     11,300       MDC Holdings, Inc.       6.000% 1/15/43     100,000     121,000					
Home Builders — 0.1%   4,727,713					
Home Builders — 0.1%         Lennar Corp.       120,000       128,400         4.500% 4/30/24       120,000       128,400         4.750% 11/29/27       190,000       216,932         5.000% 6/15/27       10,000       11,300         MDC Holdings, Inc.       100,000       121,000			,		
4.500% 4/30/24       120,000       128,400         4.750% 11/29/27       190,000       216,932         5.000% 6/15/27       10,000       11,300         MDC Holdings, Inc.       100,000       121,000         6.000% 1/15/43       100,000       121,000					, , , , , , , , , , , , , , , , , , ,
4.750% 11/29/27       190,000       216,932         5.000% 6/15/27       10,000       11,300         MDC Holdings, Inc.       100,000       121,000         6.000% 1/15/43       100,000       121,000					
5.000% 6/15/27 10,000 11,300 MDC Holdings, Inc. 6.000% 1/15/43 100,000 121,000					
MDC Holdings, Inc. 6.000% 1/15/43 100,000 121,000					
6.000% 1/15/43 100,000 121,000			10,000		11,300
			100,000		121,000
	NVR, Inc.				

11,000   114,976   698,257     11,000   698,257     11,000   698,257     11,000   113,000   118,117     11,000   113,000   118,117     11,000   113,000   118,117     11,000   113,000   118,117     11,000   11,000   11,000   118,117     11,000   11,000   11,000   118,117     11,000   11,000   113,000   118,117     11,000   11,000   118,117     11,000   11,000   11,000   118,117     11,000   11,000   11,000   118,117     11,000   11,000   118,117     11,000   11,000   11,000     11,000   11,000   11,000     11,000   11,000   11,000     11,000   11,000   11,000     11,000   11,000   11,000     11,000   11,000   11,000     11,000   11,000	3.950% 9/15/22	100,000	105,649
Newell Brands, Inc.   113,000   118,117   118,107   113,000   118,117   118,107   113,000   118,117   118,107   113,000   118,117   118,107   113,000   118,117   118,107   113,000   118,117   118,107   113,000   118,117   118,107   11	Toll Brothers Finance Corp. 4.375% 4/15/23	110,000	
13,000   118,117   Insurance — 0.4%	Housewares — 0.0%		098,237
Insurance — 0.4%         Ambac Assurance Corp.       3.100% (c) (d)       4,362       5,975         Ambac LSNI LLC 3 mo. USD LIBOR + 5.000%       16,038       16,038         American International Group, Inc.       180,000       192,226         2.500% 6/30/25       180,000       257,891         Berkshire Hathaway Finance Corp.       34,000       257,891         4.250% 1/15/49       550,000       715,681         Brighthouse Financial, Inc.       30,000       28,872         Chubb INA Holdings, Inc.       2.300% 11/03/20       70,000       70,099         3.350% 5/03/26       120,000       135,984         Guardian Life Global Funding       135,984	Newell Brands, Inc.		
Ambac Assurance Corp.  5.100% (c) (d)  Ambac LSNI LLC 3 mo. USD LIBOR + 5.000%  6.000% FRN 2/12/23 (c)  American International Group, Inc.  2.500% 6/30/25 6.250% 3/15/87  Berkshire Hathaway Finance Corp.  4.250% 1/15/49  Brighthouse Financial, Inc.  4.700% 6/22/47  Chubb INA Holdings, Inc.  2.300% 11/03/20  3.350% 5/03/26  Guardian Life Global Funding	4.350% STEP 4/01/23	113,000	118,117
5.100% (c) (d)       4,362       5,975         Ambac LSNI LLC 3 mo. USD LIBOR + 5.000%       16,038       16,038         6.000% FRN 2/12/23 (c)       16,038       16,038         American International Group, Inc.       180,000       192,226         6.250% 6/30/25       234,000       257,891         Berkshire Hathaway Finance Corp.       550,000       715,681         Brighthouse Financial, Inc.       30,000       28,872         Chubb INA Holdings, Inc.       2300% 11/03/20       70,000       70,099         3.350% 5/03/26       120,000       135,984         Guardian Life Global Funding       5000       1500       150,000 <t< td=""><td>Insurance — 0.4%</td><td></td><td></td></t<>	Insurance — 0.4%		
Ambac LSNI LLC 3 mo. USD LIBOR + 5.000% 6.000% FRN 2/12/23 (c) 16,038 American International Group, Inc. 2.500% 6/30/25 6.250% 3/15/87 Berkshire Hathaway Finance Corp. 4.250% 1/15/49 Brighthouse Financial, Inc. 4.700% 6/22/47 Chubb INA Holdings, Inc. 2.300% 11/03/20 3.350% 5/03/26 Guardian Life Global Funding	Ambac Assurance Corp.		
6.000% FRN 2/12/23 (c)16,03816,038American International Group, Inc.180,000192,2262.500% 6/30/25180,000257,8916.250% 3/15/87234,000257,891Berkshire Hathaway Finance Corp.\$50,000715,6814.250% 1/15/49550,000715,681Brighthouse Financial, Inc.\$30,00028,872Chubb INA Holdings, Inc.\$70,00070,0993.350% 5/03/26120,000135,984Guardian Life Global Funding	5.100% <sup>(c) (d)</sup>	4,362	5,975
American International Group, Inc.  2.500% 6/30/25 6.250% 3/15/87 Berkshire Hathaway Finance Corp. 4.250% 1/15/49 Brighthouse Financial, Inc. 4.700% 6/22/47 Chubb INA Holdings, Inc. 2.300% 11/03/20 3.350% 5/03/26 Guardian Life Global Funding	Ambac LSNI LLC 3 mo. USD LIBOR + 5.000%		
American International Group, Inc.  2.500% 6/30/25 6.250% 3/15/87 Berkshire Hathaway Finance Corp. 4.250% 1/15/49 Brighthouse Financial, Inc. 4.700% 6/22/47 Chubb INA Holdings, Inc. 2.300% 11/03/20 3.350% 5/03/26 Guardian Life Global Funding	6.000% FRN 2/12/23 <sup>(c)</sup>	16.038	16.038
2.500% 6/30/25       180,000       192,226         6.250% 3/15/87       234,000       257,891         Berkshire Hathaway Finance Corp.       T         4.250% 1/15/49       550,000       715,681         Brighthouse Financial, Inc.       T         4.700% 6/22/47       30,000       28,872         Chubb INA Holdings, Inc.       T       70,000       70,099         3.350% 5/03/26       120,000       135,984         Guardian Life Global Funding       T       T       T	American International Group, Inc.	,	,
Berkshire Hathaway Finance Corp.       350,000       715,681         4.250% 1/15/49       550,000       715,681         Brighthouse Financial, Inc.       30,000       28,872         Chubb INA Holdings, Inc.       70,000       70,099         3.350% 5/03/26       120,000       135,984         Guardian Life Global Funding       100,000       100,000		180,000	192,226
4.250% 1/15/49       550,000       715,681         Brighthouse Financial, Inc.       30,000       28,872         4.700% 6/22/47       30,000       28,872         Chubb INA Holdings, Inc.       70,000       70,099         3.350% 5/03/26       120,000       135,984         Guardian Life Global Funding       10,000       10,000	6.250% 3/15/87	234,000	257,891
Brighthouse Financial, Inc. 4.700% 6/22/47 Chubb INA Holdings, Inc. 2.300% 11/03/20 3.350% 5/03/26 70,000 70,009 3.350% 5/03/26 120,000 135,984	Berkshire Hathaway Finance Corp.		
4.700% 6/22/47       30,000       28,872         Chubb INA Holdings, Inc.       70,000       70,099         3.350% 5/03/26       120,000       135,984         Guardian Life Global Funding       10,000       10,000	11-4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	550,000	715,681
Chubb INA Holdings, Inc.       70,000       70,099         2.300% 11/03/20       70,000       70,099         3.350% 5/03/26       120,000       135,984         Guardian Life Global Funding			
2.300% 11/03/20       70,000       70,099         3.350% 5/03/26       120,000       135,984         Guardian Life Global Funding		30,000	28,872
3.350% 5/03/26 120,000 135,984 Guardian Life Global Funding		<b>-</b> 0.000	=
Guardian Life Global Funding		· · · · · · · · · · · · · · · · · · ·	· ·
		120,000	135,984
	1.100% 6/23/25 <sup>(c)</sup>	120,000	120,997
MetLife Capital Trust IV			
$7.875\% \ 12/15/67^{\text{(c)}}$ 200,000 276,022	7.875% 12/15/67 <sup>(c)</sup>	200,000	276,022

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

		Principal Amount		Value
MetLife, Inc.	Φ.	100,000	Φ.	226 271
6.400% 12/15/66 New York Life Global Funding	\$	190,000	\$	236,371
0.950% 6/24/25 (c)		220,000		222,179
Principal Life Global Funding II				
1.250% 6/23/25 <sup>(c)</sup>		110,000		112,045
Teachers Insurance & Annuity Association of America 4.900% 9/15/44 <sup>(c)</sup>		200,000		252.262
4.900% 9/15/44 (*) 6.850% 12/16/39 <sup>(c)</sup>		200,000 22,000		252,363 32,821
Voya Financial, Inc.		22,000		32,621
5.700% 7/15/43		160,000		214,690
Internet — 0.5%				2,890,254
Alphabet, Inc.		00.000		70.752
0.450% 8/15/25 0.800% 8/15/27		80,000 150,000		79,752 149,356
1.100% 8/15/30		170,000		169,248
2.050% 8/15/50		260,000		243,357
Amazon.com, Inc.		270.000		274 449
0.800% 6/03/25 1.200% 6/03/27		370,000 460,000		374,448 466,100
1.500% 6/03/30		430,000		438,837
2.500% 6/03/50		360,000		367,207
3.150% 8/22/27		470,000		535,901
3.875% 8/22/37		160,000		199,204
4.050% 8/22/47 4.250% 8/22/57		210,000 70,000		272,834 95,567
4.950% 12/05/44		180,000		256,133
Prosus NV		420.000		400 155
4.850% 7/06/27 <sup>(c)</sup>		430,000		489,177 4,137,121
Iron & Steel — 0.2% ArcelorMittal SA				4,137,121
3.600% 7/16/24		370,000		387,601
4.550% 3/11/26		220,000		238,384
6.125% 6/01/25		480,000		553,248
7.250% STEP 10/15/39 Vale Overseas Ltd.		60,000		75,729
6.875% 11/21/36		174,000		226,494
Leisure Time — 0.0%				1,481,456
VOC Escrow Ltd.				
5.000% 2/15/28 <sup>(c)</sup>		210,000		185,928
Lodging — 0.3%				
Hilton Domestic Operating Co., Inc. 5.375% 5/01/25 <sup>(c)</sup>		210.000		222 722
5.75% 5/01/28 <sup>(c)</sup>		310,000 100,000		323,733
3./30% 3/01/28 \		100,000		105,375
		Principal Amount		Value
Las Vegas Sands Corp.	•		Ф.	
2.900% 6/25/25 3.200% 8/08/24	\$	50,000 630,000	\$	49,937 636,848
Sands China Ltd.		030,000		030,848
3.800% 1/08/26 <sup>(c)</sup>		280,000		292,317
4.600% 8/08/23		200,000		213,222
5.125% 8/08/25		750,000		818,227
Wynn Macau Ltd. 5.125% 12/15/29 <sup>(c)</sup>		200,000		101.005
5.125% 12/15/29 (7)		200,000		191,895 2,631,554
Machinery – Diversified — 0.2%				
Deere & Co. 3.100% 4/15/30		60,000		68,533
3.750% 4/15/50		260,000		325,840
Otis Worldwide Corp.				
2.056% 4/05/25 2.293% 4/05/27		140,000 150,000		147,313 159,549
2.293% 4/03/27 2.565% 2/15/30		450,000		483,629
https://massmutual.prospectus-express.com/print.asp?doctype=app&clientid=massmutpre&fundid=57629S539		.20,000		123/4

	=	1,184,864
Media — 1.4%	_	
CCO Holdings LLC/CCO Holdings Capital Corp.		
4.500% 8/15/30 <sup>(c)</sup>	30,000	31,501
4.500% 5/01/32 <sup>(c)</sup>	680,000	709,750
Charter Communications Operating LLC/Charter Communications Operating Capital		
4.200% 3/15/28	720,000	817,143
4.800% 3/01/50	100,000	113,713
4.908% 7/23/25	630,000	728,420
5.050% 3/30/29	510,000	611,278
5.375% 4/01/38	480,000	587,528
5.750% 4/01/48	470,000	586,366
6.484% 10/23/45	160,000	214,600
6.834% 10/23/55	60,000	83,098
Comcast Corp.		
3.100% 4/01/25	20,000	22,036
3.150% 3/01/26	280,000	312,687
3.250% 11/01/39	30,000	33,409
3.300% 4/01/27	120,000	135,690
3.375% 8/15/25	170,000	189,503
3.400% 4/01/30	180,000	207,695
3.400% 7/15/46	30,000	33,381
3.450% 2/01/50	250,000	282,415
3.750% 4/01/40	40,000	46,779
3.950% 10/15/25	230,000	263,992
3.999% 11/01/49	55,000	66,738
4.000% 3/01/48	50,000	60,748
4.150% 10/15/28	1,460,000	1,759,328

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

	Principal Amount	Value
4.200% 8/15/34	\$ 160,000	\$ 199,306
4.250% 10/15/30	430,000	528,057
4.250% 1/15/33	20,000	24,850
4.700% 10/15/48	80,000	106,688
6.500% 11/15/35	200,000	303,357
DISH DBS Corp.	200.000	200.045
5.875% 11/15/24 7.750% 7/01/26	390,000	399,945
Fox Corp.	50,000	54,968
5.476% 1/25/39	90,000	120,390
5.576% 1/25/49	230,000	317,712
Time Warner Cable, Inc.		
4.125% 2/15/21	140,000	140,547
6.550% 5/01/37	10,000	13,295
6.750% 6/15/39 7.300% 7/01/38	120,000 210,000	162,278 297,216
Time Warner Entertainment Co. LP	210,000	297,210
8.375% 7/15/33	20,000	30,632
ViacomCBS, Inc.	,	,
3.875% 4/01/24	30,000	32,690
The Walt Disney Co.		
6.200% 12/15/34	20,000	29,557
6.650% 11/15/37	120,000	181,233
Mining — 0.9%		10,840,519
Anglo American Capital PLC		
3.625% 9/11/24 <sup>(c)</sup>	560,000	602,138
3.750% 4/10/22 <sup>(c)</sup>	200,000	
4.750% 4/10/27 <sup>(c)</sup>	· ·	207,131
8.750% 4/10/27 Parrick Gold Corp.	470,000	540,022
5.250% 4/01/42	80,000	109,679
Barrick North America Finance LLC	00,000	100,070
5.700% 5/30/41	180,000	254,211
5.750% 5/01/43	210,000	305,788
BHP Billiton Finance USA Ltd.		
2.875% 2/24/22	20,000	20,665
5.000% 9/30/43 Freeport-McMoRan, Inc.	300,000	421,729
3.875% 3/15/23	10,000	10,302
4.550% 11/14/24	10,000	10,748
4.625% 8/01/30	120,000	126,174
5.400% 11/14/34	20,000	22,125
5.450% 3/15/43	406,000	450,165
Glencore Funding LLC		
3.875% 10/27/27 <sup>(c)</sup>	140,000	152,653
4.000% 3/27/27 <sup>(c)</sup>	1,440,000	1,572,459
4.125% 5/30/23 <sup>(c)</sup>	130,000	139,372
4.125% 3/12/24 <sup>(c)</sup>	460,000	498,451
	D., 2 2 3	
	Principal Amount	Value
Southern Copper Corp.	Amvunt	y aiut
5,250% 11/08/42	\$ 870,000	\$ 1,097,250
Teck Resources Ltd.		, , , , , , , , ,
6.000% 8/15/40	20,000	22,647
		6,563,709
Miscellaneous - Manufacturing — 0.7%		
3M Co. 2.375% 8/26/29	250,000	270,389
3.050% 4/15/30	60,000	68,592
3.700% 4/15/50	420,000	508,438
Eaton Corp.	.20,000	200,130
2.750% 11/02/22	570,000	597,375
4.150% 11/02/42	110,000	135,789
General Electric Co.		
3.450% 5/01/27	60,000	63,527
3.625% 5/01/30 4.250% 5/01/40	130,000 140,000	134,630 142,038
T.2JU/U J/UI/TU	140,000	142,038

0/20/2021	Print Document	
4.350% 5/01/50	180,000	183,530
5.875% 1/14/38	286,000	334,436
6.150% 8/07/37	330,000	395,629
6.750% 3/15/32	210,000	264,188
6.875% 1/10/39	1,406,000	1,806,139
		4,904,700
Oil & Gas — 3.7%	_	, , , , , , , , , , , , , , , , , , ,
Apache Corp.		
4.250% 1/15/44	570,000	484,500
4.375% 10/15/28	1,010,000	924,150
4.750% 4/15/43	150,000	133,406
5.100% 9/01/40	120,000	107,475
6.000% 1/15/37	17,000	16,234
BP Capital Markets America, Inc.		
2.937% 4/06/23	30,000	31,731
3.000% 2/24/50	740,000	712,319
3.119% 5/04/26	290,000	320,161
3.410% 2/11/26	270,000	301,351
3.588% 4/14/27	330,000	369,825
3.633% 4/06/30	200,000	229,432
3.790% 2/06/24	70,000	76,764
BP Capital Markets PLC		
3.506% 3/17/25	550,000	612,323
3.535% 11/04/24	110,000	121,404
3.561% 11/01/21	20,000	20,694
Chevron Corp.		
1.554% 5/11/25	350,000	362,688
1.995% 5/11/27	110,000	116,349
3.078% 5/11/50	40,000	42,761
Cimarex Energy Co.		
3.900% 5/15/27	730,000	735,713

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	Principal Amount	Value
4.375% 3/15/29	\$ 360,000	\$ 372,479
CNOOC Finance USA LLC	1 0 40 000	1 1 41 421
3.500% 5/05/25 Concho Resources, Inc.	1,040,000	1,141,431
3.750% 10/01/27	140,000	151,226
4.300% 8/15/28	1,060,000	1,172,417
ConocoPhillips Co.	125 000	172 572
6.950% 4/15/29 Continental Resources, Inc.	125,000	173,573
3.800% 6/01/24	120,000	110,700
4.375% 1/15/28	90,000	77,963
4.500% 4/15/23	270,000	257,310
Devon Energy Corp. 4.750% 5/15/42	10,000	9,293
5.000% 6/15/45	960,000	911,211
5.600% 7/15/41	460,000	465,370
5.850% 12/15/25	220,000	246,553
Diamondback Energy, Inc. 3.250% 12/01/26	10,000	10,033
3.500% 12/01/29	170,000	164,802
5.375% 5/31/25	180,000	186,902
Ecopetrol SA	1 200 000	1 415 000
5.875% 5/28/45 EOG Resources, Inc.	1,300,000	1,417,000
3.900% 4/01/35	340,000	380,950
4.150% 1/15/26	140,000	160,331
4.375% 4/15/30	100,000	117,828
4.950% 4/15/50	60,000	73,724
EQT Corp. 3.000% 10/01/22	560,000	546,700
3.900% 10/01/27	10,000	9,206
7.875% STEP 2/01/25	20,000	22,169
Exxon Mobil Corp.		
1.571% 4/15/23 2.992% 3/19/25	50,000 810,000	51,429 887,644
3.043% 3/01/26	210,000	231,757
3.482% 3/19/30	310,000	357,460
4.114% 3/01/46	520,000	617,893
4.327% 3/19/50	40,000	50,070
KazMunayGas National Co. 5.375% 4/24/30 <sup>(c)</sup>	200,000	222.464
Noble Energy, Inc.	200,000	233,464
3.850% 1/15/28	590,000	669,997
4.950% 8/15/47	70,000	91,784
5.250% 11/15/43	120,000	159,094
Occidental Petroleum Corp. 2.700% 8/15/22	330,000	308,342
2.900% 8/15/24	530,000	449,668
3.000% 2/15/27	110,000	86,267
	n	
	Principal Amount	Value
3.125% 2/15/22	\$ 180,000	\$ 170,129
3.200% 8/15/26	300,000	237,937
3.400% 4/15/26	170,000	135,575
3.500% 8/15/29	60,000	45,972
4.100% 2/15/47 4.200% 3/15/48	580,000 120,000	391,558 82,500
4.400% 4/15/46	50,000	35,511
4.625% 6/15/45	80,000	57,800
5.550% 3/15/26	280,000	253,655
6.450% 9/15/36 6.600% 3/15/46	240,000 630,000	204,600 542,587
6.950% 7/01/24	220,000	212,916
7.875% 9/15/31	160,000	155,200
Parsley Energy LLC / Parsley Finance Corp.		
5.375% 1/15/25 <sup>(c)</sup>	30,000	29,925
Petrobras Global Finance BV	1 001 000	2.064.072
5.299% 1/27/25 5.999% 1/27/28	1,891,000 900,000	2,064,972 999,900
3.777/0 112/120	900,000	777,700

6.250% 3/17/24	332,000	368,198
7.375% 1/17/27	260,000	307,931
Petroleos Mexicanos		
6.375% 1/23/45	220,000	168,630
6.625% 6/15/35	763,000	633,630
6.875% 8/04/26	160,000	153,984
Range Resources Corp.	,	,
4.875% 5/15/25	60,000	54,156
5.000% 3/15/23	202,000	191,900
5.875% 7/01/22	4,000	3,880
Shell International Finance BV		•
2.750% 4/06/30	270,000	295,242
2.875% 5/10/26	380,000	420,711
3.250% 4/06/50	390,000	414,918
4.000% 5/10/46	310,000	361,730
4.375% 5/11/45	190,000	233,012
4.550% 8/12/43	100,000	125,137
Sinopec Group Overseas Development 2014 Ltd.	,	,
4.375% 4/10/24 <sup>(c)</sup>	330,000	364,229
WPX Energy, Inc.	330,000	301,229
5.250% 10/15/27	50,000	50,750
5.875% 6/15/28	40,000	41,800
8.250% 8/01/23	30,000	33,900
6.23070 6/01/23	30,000	27,937,795
Oil & Gas Services — 0.1%		21,931,193
Halliburton Co.		
3.800% 11/15/25	15,000	16,299
4.850% 11/15/35	30,000	31,850
5.000% 11/15/45	500,000	515,725
3.000/0 11/13/13	500,000	313,723

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	 Principal Amount	Value
Schlumberger Holdings Corp.		
3.900% 5/17/28 <sup>(c)</sup>	\$ 51,000	\$ 54,914 618,788
Packaging & Containers — 0.0%		010,700
WestRock RKT LLC		
4.000% 3/01/23	30,000	32,056
Pharmaceuticals — 3.1% AbbVie, Inc.		
2.300% 11/21/22 <sup>(c)</sup>	1,310,000	1,355,493
2.600% 11/21/24 <sup>(c)</sup>	1,120,000	1,186,644
2.900% 11/06/22	80,000	83,890
2.950% 11/21/26 <sup>(c)</sup>	260,000	283,199
3.200% 11/21/29 <sup>(c)</sup>	850,000	936,459
3.450% 3/15/22 <sup>(c)</sup>	30,000	31,117
3.600% 5/14/25	130,000	144,092
3.750% 11/14/23	70,000	76,385
3.800% 3/15/25 <sup>(c)</sup>	180,000	199,592
4.250% 11/21/49 <sup>(c)</sup>	50,000	59,359
4.550% 3/15/35 <sup>(c)</sup> Bausch Health Cos., Inc.	90,000	110,649
5.500% 11/01/25 <sup>(c)</sup>	10,000	10,262
6.250% 2/15/29 <sup>(c)</sup>	270,000	277,711
7.250% 5/30/29 <sup>(c)</sup>	170,000	183,175
Becton Dickinson and Co.	170,000	103,173
3.363% 6/06/24	750,000	811,671
3.734% 12/15/24	65,000	71,740
4.685% 12/15/44 Bristol-Myers Squibb Co.	40,000	49,458
2.250% 8/15/21	240,000	244,220
2.600% 5/16/22	350,000	363,107
2.900% 7/26/24	950,000	1,028,347
3.200% 6/15/26	520,000	586,527
3.400% 7/26/29 3.550% 8/15/22	250,000 40,000	291,177 42,425
3.625% 5/15/24	40,000	44,079
3.875% 8/15/25	80,000	91,213
5.000% 8/15/45	640,000	900,010
5.250% 8/15/43 Cigna Corp.	70,000	98,784
3.400% 9/17/21	210,000	216,117
3.750% 7/15/23	499,000	540,752
4.125% 11/15/25	160,000	183,546
4.375% 10/15/28 CVS Health Corp.	1,230,000	1,463,156
2.750% 12/01/22	120,000	125,142
3.350% 3/09/21	101,000	102,319
3.625% 4/01/27	90,000	100,746
3.700% 3/09/23	320,000	342,908
	Principal	
	 Amount	Value
3.750% 4/01/30	\$ 250,000	\$ 285,283
3.875% 7/20/25 4.100% 3/25/25	124,000 75,000	139,704 84,722
4.125% 4/01/40	120,000	136,678
4.250% 4/01/50	30,000	35,262
4.300% 3/25/28	2,640,000	3,090,045
5.050% 3/25/48 5.125% 7/20/45	710,000 350,000	906,250 442,221
CVS Pass-Through Trust	330,000	772,221
5.298% 1/11/27 <sup>(c)</sup>	6,580	7,059
5.880% 1/10/28	77,163	86,804
6.036% 12/10/28	68,745	78,158
6.943% 1/10/30 GlaveSmithVline Cenital PLC	60,852	72,585
GlaxoSmithKline Capital PLC 2.850% 5/08/22	20,000	20,808
Johnson & Johnson	,-00	_==,000

6/26/2021	Print Document		
0.550% 9/01/25		200,000	200,060
0.950% 9/01/27		420,000	421,925
3.625% 3/03/37		690,000	842,694
Merck & Co., Inc.			
0.750% 2/24/26		340,000	340,934
1.450% 6/24/30		200,000	202,797
Pfizer, Inc.			
0.800% 5/28/25		450,000	453,195
1.700% 5/28/30		280,000	288,563
2.625% 4/01/30		290,000	324,242
Teva Pharmaceutical Finance Co. BV			
2.950% 12/18/22		110,000	106,934
3.650% 11/10/21		80,000	79,800
Teva Pharmaceutical Finance IV BV			
3.650% 11/10/21		170,000	169,575
Teva Pharmaceutical Finance Netherlands III BV			
2.200% 7/21/21		590,000	584,395
2.800% 7/21/23		420,000	401,625
3.150% 10/01/26		370,000	326,418
6.000% 4/15/24		350,000	357,000
7.125% 1/31/25		390,000	409,500
		_	23,530,707
Pipelines — 1.9%			
Blue Racer Midstream LLC/Blue Racer Finance Corp.			
6.125% 11/15/22 <sup>(c)</sup>		120,000	117,066
Cameron LNG LLC			
2.902% 7/15/31 <sup>(c)</sup>		110,000	121,006
3.302% 1/15/35 <sup>(c)</sup>		600,000	676,953
Cheniere Energy, Inc.		000,000	0.0,700
4.625% 10/15/28 <sup>(c)</sup>		180,000	184,725
7.023/0 10/13/20 \/		100,000	104,/23

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

	Principal Amount			Value
DCP Midstream Operating LP 6.450% 11/03/36 <sup>(c)</sup>	Ф 70.0		Ф	67,000
6.450% 11/03/36 (*) El Paso Natural Gas Co. LLC 8.375% 6/15/32	\$ 70,0		\$	67,080 397,864
Energy Transfer LP/Regency Energy Finance Corp.	200,0	00		377,001
4.500% 11/01/23 5.875% 3/01/22	30,0 100,0			31,919 104,459
Energy Transfer Operating LP	260.0			261.045
2.900% 5/15/25 3.750% 5/15/30	360,0 870,0			361,945 842,602
4.950% 6/15/28	50,0			52,981
5.250% 4/15/29	180,0			193,249
6.250% 4/15/49	80,0			82,682
5 year CMT + 5.134% 6.750% VRN <sup>(d)</sup> Enterprise Products Operating LLC	120,0	.00		92,400
3.700% 1/31/51	10,0	000		9,861
4.150% 10/16/28 5.700% 2/15/42	2,600,0 40,0			3,041,285 50,752
Kinder Morgan Energy Partners LP				
3.500% 3/01/21	110,0			110,786
3.500% 9/01/23 5.500% 3/01/44	120,0 30,0			127,971 35,405
Kinder Morgan, Inc.	,-			
4.300% 6/01/25	230,0			259,059
4.300% 3/01/28 5.200% 3/01/48	140,0 20,0			159,315 23,436
5.550% 6/01/45	100,0			118,709
MPLX LP	400			
4.500% 4/15/38 4.700% 4/15/48	420,0 620,0			429,974 629,239
4.800% 2/15/29	320,0			366,348
4.875% 12/01/24	150,0	000		167,578
5.500% 2/15/49 Southern Natural Gas Co. LLC	250,0	00		280,781
8.000% 3/01/32	248,0	000		352,052
Sunoco Logistics Partners Operations LP	20.0			
5.300% 4/01/44 Targa Resources Partners LP/Targa Resources Partners Finance Corp.	20,0	.00		18,634
4.875% 2/01/31 <sup>(c)</sup>	160,0	000		154,948
5.500% 3/01/30 <sup>(c)</sup>	150,0	000		150,158
Tennessee Gas Pipeline Co. LLC				
2.900% 3/01/30 <sup>(c)</sup>	780,0	00		808,717
Transcontinental Gas Pipe Line Co. LLC 7.850% 2/01/26	60,0	000		77,682
	Principal			
	Amount	_		Value
Western Midstream Operating LP 3 mo. USD LIBOR + 1.850% 2.116% FRN 1/13/23	\$ 90,0	000	\$	83,700
4.100% STEP 2/01/25	240,0		Ψ	228,600
5.050% STEP 2/01/30	900,0			875,938
5.500% 8/15/48 6.250% STEP 2/01/50	20,0 230,0			16,500 213,038
The Williams Cos., Inc.	230,0	00		213,030
3.750% 6/15/27	710,0			779,121
7.500% 1/15/31 7.750% 6/15/31	330,0 580,0			434,696 762,925
7.75070 0/15/51	300,0	00		14,094,139
Real Estate Investment Trusts (REITS) — 0.1% GLP Capital LP/GLP Financing II, Inc.				
5.250% 6/01/25	10,0			10,858
5.375% 4/15/26 WEA Finance LLC/Westfield UK & Europe Finance PLC	40,0	00		44,332
3.750% 9/17/24 <sup>(c)</sup>	220,0	000		231,029
4.750% 9/17/44 <sup>(c)</sup>	250,0			252,621
Detail 0.00/				538,840
Retail — 0.9% Costco Wholesale Corp.				
1.375% 6/20/27	430,0	00		440,453
https://massmutual.prospectus-express.com/print.asp?doctype=ann&clientid=massmutpre&fundid=57629S539				131/49

1.600% 4/20/30	310,000	315,187
Dollar General Corp.		
3.250% 4/15/23	30,000	31,834
The Home Depot, Inc.		
2.500% 4/15/27	180,000	195,647
2.700% 4/15/30	200,000	222,575
3.300% 4/15/40	230,000	261,284
3.350% 4/15/50	640,000	740,869
3.900% 12/06/28	30,000	35,542
3.900% 6/15/47	40,000	49,386
Lowe's Cos., Inc.		
4.500% 4/15/30	130,000	161,273
5.000% 4/15/40	100,000	131,082
5.125% 4/15/50	420,000	579,647
McDonald's Corp.		
1.450% 9/01/25	50,000	51,583
3.300% 7/01/25	210,000	233,507
3.500% 3/01/27	240,000	271,734
3.500% 7/01/27	60,000	68,324
3.600% 7/01/30	190,000	221,558
3.625% 9/01/49	40,000	44,914
3.700% 1/30/26	410,000	466,997
3.800% 4/01/28	110,000	128,368
4.200% 4/01/50	340,000	413,813

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		Principal Amount		Value
Target Corp.				·
2.250% 4/15/25 The TJX Cos., Inc.	\$	290,000	\$	310,741
3.500% 4/15/25		210,000		233,892
3.750% 4/15/27		60,000		68,786
Walmart, Inc.		120,000		120 645
3.400% 6/26/23 3.550% 6/26/25		120,000 90,000		129,645 101,924
3.700% 6/26/28		560,000		662,180
				6,572,745
Semiconductors — 0.9% Broadcom, Inc.				
2.250% 11/15/23		470,000		488,634
3.150% 11/15/25		560,000		606,552
4.700% 4/15/25		710,000		806,782
Intel Corp. 3.700% 7/29/25		70,000		79,525
4.600% 3/25/40		130,000		173,187
4.750% 3/25/50		910,000		1,253,179
4.950% 3/25/60 Micron Technology, Inc.		330,000		481,490
2.497% 4/24/23		290,000		301,152
NVIDIA Corp.				, -
2.850% 4/01/30		150,000		168,526
3.500% 4/01/40 3.500% 4/01/50		410,000 890,000		480,495 1,041,548
3.700% 4/01/60		280,000		333,814
NXP BV / NXP Funding LLC / NXP USA, Inc.		,		,
2.700% 5/01/25 <sup>(c)</sup>		200,000		211,873
Texas Instruments, Inc.		100,000		195 (((
1.750% 5/04/30 TSMC Global Ltd.		180,000		185,666
0.750% 9/28/25 <sup>(c)</sup>		250,000		247,776
1.000% 9/28/27 <sup>(c)</sup>		210,000		206,714
1.000/07/20/27		210,000		7,066,913
Software — 0.6%				· · · · · · · · · · · · · · · · · · ·
Microsoft Corp. 1.550% 8/08/21		360,000		262 997
2.400% 2/06/22		540,000		363,887 554,977
2.400% 8/08/26		1,620,000		1,769,608
2.525% 6/01/50		463,000		484,214
2.675% 6/01/60 2.700% 2/12/25		17,000 100,000		17,933 108,901
2.700% 2/12/23 2.875% 2/06/24		380,000		408,948
3.300% 2/06/27		290,000		331,352
3.950% 8/08/56		83,000		109,324
4.100% 2/06/37		107,000		138,716
		Principal		
		Amount		Value
salesforce.com, Inc. 3.250% 4/11/23	\$	270,000	\$	289,236
3.700% 4/11/28	Ф	90,000	Þ	106,260
51,707,0 111,20		,,,,,,,	-	4,683,356
Telecommunications — 1.6%				
AT&T, Inc. 1.650% 2/01/28		910.000		011 521
2.250% 2/01/28 2.250% 2/01/32		810,000 80,000		811,531 80,016
2.300% 6/01/27		540,000		565,538
3.100% 2/01/43		660,000		643,727
3.550% 9/15/55 <sup>(c)</sup>		353,000		342,118
4.250% 3/01/27 4.350% 6/15/45		260,000 101,000		301,870 113,162
4.550% 6/15/45 Sprint Capital Corp.		101,000		115,102
8.750% 3/15/32		130,000		190,295
Sprint Spectrum Co. LLC/Sprint Spectrum Co. II LLC/Sprint Spectrum Co. III LLC				
3.360% STEP 3/20/23 <sup>(c)</sup>		50,000		50,560
4.738% 9/20/29 <sup>(c)</sup> T-Mobile USA, Inc.		220,000		237,875
1-MOUNT OSA, IIIC.				

0/20/2021	1 lift Boodmone	
2.050% 2/15/28 <sup>(c) (f)</sup>	70,000	71,668
2.550% 2/15/31 <sup>(c)</sup> (f)	200,000	206,922
3.500% 4/15/25 <sup>(c)</sup>	1,280,000	1,404,544
3.750% 4/15/27 <sup>(c)</sup>	50,000	56,107
3.875% 4/15/30 <sup>(c)</sup>	700,000	794,234
6.000% 3/01/23	10,000	10,026
6.000% 4/15/24	10,000	10,210
Telefonica Emisiones SA		
5.213% 3/08/47	150,000	178,238
Verizon Communications, Inc.		
2.625% 8/15/26	300,000	327,928
3.000% 3/22/27	90,000	100,202
3.150% 3/22/30	230,000	259,907
3.376% 2/15/25	300,000	334,369
3.500% 11/01/24	160,000	176,648
3.850% 11/01/42	40,000	47,694
3.875% 2/08/29	130,000	153,791
4.000% 3/22/50	120,000	147,735
4.125% 3/16/27	130,000	153,699
4.125% 8/15/46	180,000	222,081
4.329% 9/21/28	820,000	994,249
4.400% 11/01/34	270,000	336,602
4.500% 8/10/33	670,000	849,785
4.522% 9/15/48	240,000	314,429
4.862% 8/21/46	250,000	341,374
5.250% 3/16/37	170,000	235,426
5.500% 3/16/47	30,000	45,187

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

	]	Principal Amount		Value
Vodafone Group PLC	•	500,000	Ф	606.546
4.375% 5/30/28	\$	580,000	\$	686,546 11,796,293
Transportation — 0.3%				11,770,273
Union Pacific Corp.				
2.150% 2/05/27		50,000 190,000		53,153
3.750% 7/15/25 3.750% 2/05/70		250,000		216,295 282,247
3.839% 3/20/60		600,000		696,017
3.950% 9/10/28		620,000		731,284
T 1 0 1 0 00/				1,978,996
Trucking & Leasing — 0.0% DAE Funding LLC				
5.750% 11/15/23 <sup>(c)</sup>		60,000		60,600
5.75070 11/15/25		00,000		00,000
TOTAL CORPORATE DEBT (Cost \$263,646,046)				288,745,359
MUNICIPAL OBLIGATIONS — 0.1%				
Health & Educational Facilities Authority of the State of Missouri, Revenue Bond				
3.229% 5/15/50 Northwart Ohio Ragional Sayon District Rayonya Band		280,000		316,512
Northeast Ohio Regional Sewer District, Revenue Bond 5.000% 11/15/43		50,000		56,225
State of California		20,000		50,225
General Obligation, 5.000% 4/01/42		70,000		74,502
General Obligation, 5.000% 11/01/43		50,000		56,490
				503,729
TOTAL MUNICIPAL OBLIGATIONS (Cost \$453,256)				503,729
NON-U.S. GOVERNMENT AGENCY OBLIGATIONS — 9.6% Auto Floor Plan Asset-Backed Securities — 0.2%				
Ford Credit Floorplan Master, Series 2018-4, Class A		1 100 000		1 227 225
4.060% 11/15/30 Automobile Asset-Backed Securities — 0.0%		1,100,000		1,237,235
Hertz Vehicle Financing II LP, Series 2019-3A, Class A				
2.670% 12/26/25 <sup>(c)</sup>		290,032		290,646
Commercial Mortgage-Backed Securities — 3.1%				
Banc of America Merrill Lynch Trust, Series 2016-GG10, Class AJA,				
6.016% VRN 8/10/45 <sup>(c) (e)</sup>		708,576		307,239
	]	Principal Amount		Value
BANK, Series 2017-BNK4, Class XA,		Amount		value
1.568% VRN 5/15/50 <sup>(e)</sup>	\$	3,648,443	\$	242,736
BBCCRE Trust, Series 2015-GTP, Class E,		, ,		,
4.715% VRN 8/10/33 <sup>(c) (e)</sup>		1,020,000		872,592
BX Trust				
Series 2018-IND, Class G, 1 mo. USD LIBOR + 2.050% 2.202% FRN 11/15/35 (c)		357,000		351,445
Series 2018-IND, Class H, 1 mo. USD LIBOR + 3.000% 3.152% FRN 11/15/35 (c)		1,533,000		1,476,354
CD Mortgage Trust, Series 2017-CD3, Class A4 3.631% 2/10/50		400,000		453,446
CHT Mortgage Trust, Series 2017-CSMO, Class A, 1 mo. USD LIBOR + .930%				
1.082% FRN 11/15/36 <sup>(c)</sup> Citigroup Commercial Mortgage Trust, Series 2015-GC27, Class AS		460,000		444,480
3.571% 2/10/48 Credit Suisse Commercial Mortgage Trust, Series 2019-RIO Class A		390,000		418,834
12/15/22		2,500,000		2,340,625
Credit Suisse Mortgage Trust		420.000		430 510
Series 2017-LSTK, Class A, 2.761% 4/05/33 (c)		430,000		430,519
Series 2014-USA, Class A2, 3.953% 9/15/37 (c)		190,000		190,902
Series 2014-USA, Class E, 4.373% 9/15/37 <sup>(c)</sup> Series 2014-USA, Class F, 4.373% 9/15/37 <sup>(c)</sup>		140,000		91,528
Series 2006-C5, Class AJ, 5.373% 12/15/39		2,440,000 92,328		1,474,058 36,931
Series 2017-CHOP, Class G, 1 mo. USD LIBOR + 5.350% 5.502% FRN 7/15/32 (c)		1,700,000		1,142,500
FREMF Mortgage Trust		2,700,000		1,112,500
Series 2012-K20, Class X2A, 0.200% 5/25/45 <sup>(c)</sup>		3,069,842		7,451

Series 2019-KF58, Class B, 1 mo. USD LIBOR + 2.150% 2.307% FRN 1/25/26 (c)	1,136,682	1,078,349
GS Mortgage Securities Trust		
Series 2018-SRP5, Class A, 1 mo. USD LIBOR + 1.300% 1.452% FRN 9/15/31 (c)	1,350,000	1,147,760
Series 2015-GC30, Class AS, 3.777% VRN 5/10/50 <sup>(e)</sup>	280,000	304,948
Series 2006-GG8, Class AJ, 5.622% 11/10/39	85,275	46,901

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
JPMBB Commercial Mortgage Securities Trust		
Series 2014-C19, Class XA, 0.900% VRN 4/15/47 <sup>(e)</sup> Series 2014-C21, Class AS, 3.997% 8/15/47	\$ 1,302,671 250,000	\$ 20,544 271,105
Series 2015-C31, Class B, 4.773% VRN 8/15/48 <sup>(e)</sup>	160,000	171,799
Series 2013-C17, Class B, 5.055% VRN 1/15/47 <sup>(e)</sup> JPMCC Commercial Mortgage Securities Trust, Series 2019-BOLT, Class A, 1 mo. USD LIBOR + 1.150%	30,000	31,528
1.302% FRN 7/15/34 <sup>(c)</sup> JPMDB Commercial Mortgage Securities Trust, Series 2017-C7, Class XA,	871,158	828,517
1.037% VRN 10/15/50 <sup>(e)</sup> ML-CFC Commercial Mortgage Trust, Series 2007-9, Class AJ,	7,851,987	366,294
6.072% VRN 9/12/49 <sup>(e)</sup> Morgan Stanley Bank of America Merrill Lynch Trust, Series 2015-C22, Class A4	38,144	14,495
3.306% 4/15/48 Morgan Stanley Capital I Trust	420,000	456,030
Series 2019-BPR, Class A, 1 mo. USD LIBOR + 1.400% 1.552% FRN 5/15/36 (c)	1,360,000	1,279,341
Series 2019-L2, Class B, 4.494% VRN 3/15/52 (e)	850,000	939,238
Series 2006-IQ12, Class AJ, 5.399% 12/15/43	13,683	9,168
Series 2007-IQ13, Class AJ, 5.438% 3/15/44	2,568	2,542
Natixis Commercial Mortgage Securities Trust		
Series 2019-FAME, Class A, 3.047% 8/15/36 (c)	1,270,000	1,307,494
Series 2019-10K, Class E, 4.272% VRN 5/15/39 (c) (e) Shops at Crystals Trust, Series 2016-CSTL, Class A	1,710,000	1,674,564
3.126% 7/05/36 <sup>(c)</sup>	320,000	295,425
Tharaldson Hotel Portfolio Trust, Series 2018-THL, Class A, 1 mo. USD LIBOR + .750% 0.909% FRN 11/11/34 <sup>(c)</sup>	267,326	256,488
UBS Commercial Mortgage Trust Series 2017-C1, Class A4, 3.460% 6/15/50	170,000	189,449
	n total	
	Principal	** *
Series 2017 C2 Class A4 2 4070/ 9/15/50	Amount	Value (41.672
Series 2017-C2, Class A4, 3.487% 8/15/50 Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A,	**	\$ 641,672
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)	Amount	
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 <sup>(c) (e)</sup> Wells Fargo Commercial Mortgage Trust	*** S70,000 142,755	\$ 641,672 144,729
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e) Wells Fargo Commercial Mortgage Trust Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48	Amount \$ 570,000 142,755 5,889,632 190,000	\$ 641,672 144,729 645,790 203,956
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48 Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust	Amount \$ 570,000 142,755 5,889,632 190,000 140,000	\$ 641,672 144,729 645,790 203,956 139,086
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e) Wells Fargo Commercial Mortgage Trust Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48 Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e) WFRBS Commercial Mortgage Trust Series 2014-C24, Class AS, 3.931% 11/15/47	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000	\$ 641,672 144,729 645,790 203,956 139,086 199,992
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust  Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e)  Series 2015-NXSI, Class AS, 3.406% 5/15/48  Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust  Series 2014-C24, Class AS, 3.931% 11/15/47  Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e)	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust  Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e)  Series 2015-NXSI, Class AS, 3.406% 5/15/48  Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust  Series 2014-C24, Class AS, 3.931% 11/15/47  Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e)  Series 2014-C24, Class C, 4.290% VRN 11/15/47 (e)	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000	\$ 641,672 144,729 645,790 203,956 139,086 199,992
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust  Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e)  Series 2015-NXSI, Class AS, 3.406% 5/15/48  Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust  Series 2014-C24, Class AS, 3.931% 11/15/47  Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e)	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254 139,578
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust  Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48  Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust Series 2014-C24, Class AS, 3.931% 11/15/47  Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e)  Series 2014-C24, Class C, 4.290% VRN 11/15/47 (e)  Home Equity Asset-Backed Securities — 0.6%  Asset Backed Securities Corp. Home Equity Loan Trust Series 2007-HE1, Class A4, 1 mo. USD LIBOR + .140% 0.288% FRN 12/25/36 Series 2003-HE6, Class A3B, 1 mo. USD LIBOR + .960% 1.108% FRN 11/25/33	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254 139,578
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust  Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48  Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust Series 2014-C24, Class AS, 3.931% 11/15/47  Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e) Series 2014-C24, Class C, 4.290% VRN 11/15/47 (e)  Home Equity Asset-Backed Securities — 0.6%  Asset Backed Securities Corp. Home Equity Loan Trust Series 2007-HE1, Class A4, 1 mo. USD LIBOR + .140% 0.288% FRN 12/25/36 Series 2003-HE6, Class A3B, 1 mo. USD LIBOR + .960% 1.108% FRN 11/25/33  GSAA Home Equity Trust, Series 2006-5, Class 2A3, 1 mo. USD LIBOR + .270% 0.418% FRN 3/25/36	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000 190,000	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254 139,578 23,275,676
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust  Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48  Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust Series 2014-C24, Class AS, 3.931% 11/15/47  Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e)  Series 2014-C24, Class C, 4.290% VRN 11/15/47 (e)  Home Equity Asset-Backed Securities — 0.6%  Asset Backed Securities Corp. Home Equity Loan Trust Series 2007-HE1, Class A4, 1 mo. USD LIBOR + .140% 0.288% FRN 12/25/36 Series 2003-HE6, Class A3B, 1 mo. USD LIBOR + .960% 1.108% FRN 11/25/33 GSAA Home Equity Trust, Series 2006-5, Class 2A3, 1 mo. USD LIBOR + .270%	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000 190,000 1,458,728 1,249,236	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254 139,578 23,275,676 1,328,516 1,101,805 249,380 1,367,709
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust  Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48  Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust Series 2014-C24, Class AS, 3.931% 11/15/47  Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e) Series 2014-C24, Class C, 4.290% VRN 11/15/47 (e)  Home Equity Asset-Backed Securities — 0.6%  Asset Backed Securities Corp. Home Equity Loan Trust Series 2007-HE1, Class A4, 1 mo. USD LIBOR + .140% 0.288% FRN 12/25/36 Series 2003-HE6, Class A3B, 1 mo. USD LIBOR + .960% 1.108% FRN 11/25/33  GSAA Home Equity Trust, Series 2006-5, Class 2A3, 1 mo. USD LIBOR + .270% 0.418% FRN 3/25/36  RBSSP Resecuritization Trust, Series 2010-4, Class 6A2,	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000 190,000  1,458,728 1,249,236 398,776	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254 139,578 23,275,676 1,328,516 1,101,805 249,380
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48 Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust Series 2014-C24, Class AS, 3.931% 11/15/47 Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e) Series 2014-C24, Class C, 4.290% VRN 11/15/47 (e)  Home Equity Asset-Backed Securities — 0.6% Asset Backed Securities Corp. Home Equity Loan Trust Series 2007-HE1, Class A4, 1 mo. USD LIBOR + .140% 0.288% FRN 12/25/36 Series 2003-HE6, Class A3B, 1 mo. USD LIBOR + .960% 1.108% FRN 11/25/33 GSAA Home Equity Trust, Series 2006-5, Class 2A3, 1 mo. USD LIBOR + .270% 0.418% FRN 3/25/36 RBSSP Resecuritization Trust, Series 2010-4, Class 6A2, 5.825% STEP 2/26/36 (e)  Manufactured Housing Asset-Backed Securities — 0.1% Conseco Finance Corp., Series 1996-4, Class M1, 7.750% VRN 6/15/27 (e)	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000 190,000  1,458,728 1,249,236 398,776	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254 139,578 23,275,676 1,328,516 1,101,805 249,380 1,367,709
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e) Wells Fargo Commercial Mortgage Trust Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48 Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e) WFRBS Commercial Mortgage Trust Series 2014-C24, Class AS, 3.931% 11/15/47 Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e) Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e) Series 2014-C24, Class C, 4.290% VRN 11/15/47 (e)  Home Equity Asset-Backed Securities — 0.6% Asset Backed Securities Corp. Home Equity Loan Trust Series 2007-HE1, Class A4, 1 mo. USD LIBOR + .140% 0.288% FRN 12/25/36 Series 2003-HE6, Class A3B, 1 mo. USD LIBOR + .960% 1.108% FRN 11/25/33 GSAA Home Equity Trust, Series 2006-5, Class 2A3, 1 mo. USD LIBOR + .270% 0.418% FRN 3/25/36 RBSSP Resecuritization Trust, Series 2010-4, Class 6A2, 5.825% STEP 2/26/36 (e)  Manufactured Housing Asset-Backed Securities — 0.1% Conseco Finance Corp., Series 1996-4, Class M1, 7.750% VRN 6/15/27 (e) Other Asset-Backed Securities — 2.4%	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000 190,000  1,458,728 1,249,236 398,776 1,354,071	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254 139,578 23,275,676 1,328,516 1,101,805 249,380 1,367,709 4,047,410
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48 Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust Series 2014-C24, Class AS, 3.931% 11/15/47 Series 2014-C24, Class AS, 3.931% 11/15/47 Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e) Series 2014-C24, Class C, 4.290% VRN 11/15/47 (e)  Home Equity Asset-Backed Securities — 0.6% Asset Backed Securities Corp. Home Equity Loan Trust Series 2007-HE1, Class A4, 1 mo. USD LIBOR + .140% 0.288% FRN 12/25/36 Series 2003-HE6, Class A3B, 1 mo. USD LIBOR + .960% 1.108% FRN 11/25/33 GSAA Home Equity Trust, Series 2006-5, Class 2A3, 1 mo. USD LIBOR + .270% 0.418% FRN 3/25/36 RBSSP Resecuritization Trust, Series 2010-4, Class 6A2, 5.825% STEP 2/26/36 (e)  Manufactured Housing Asset-Backed Securities — 0.1% Conseco Finance Corp., Series 1996-4, Class M1, 7.750% VRN 6/15/27 (e) Other Asset-Backed Securities — 2.4% Applebee's Funding LLC/IHOP Funding LLC, Series 2019-1A, Class A21	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000 190,000  1,458,728 1,249,236 398,776 1,354,071	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254 139,578 23,275,676 1,328,516 1,101,805 249,380 1,367,709 4,047,410 978,913
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e) (e) Wells Fargo Commercial Mortgage Trust Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48 Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e) WFRBS Commercial Mortgage Trust Series 2014-C24, Class AS, 3.931% 11/15/47 Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e) Series 2014-C24, Class C, 4.290% VRN 11/15/47 (e)  Home Equity Asset-Backed Securities — 0.6% Asset Backed Securities Corp. Home Equity Loan Trust Series 2007-HE1, Class A4, 1 mo. USD LIBOR + .140% 0.288% FRN 12/25/36 Series 2003-HE6, Class A3B, 1 mo. USD LIBOR + .960% 1.108% FRN 11/25/33 GSAA Home Equity Trust, Series 2006-5, Class 2A3, 1 mo. USD LIBOR + .270% 0.418% FRN 3/25/36 RBSSP Resecuritization Trust, Series 2010-4, Class 6A2, 5.825% STEP 2/26/36 (c)  Manufactured Housing Asset-Backed Securities — 0.1% Conseco Finance Corp., Series 1996-4, Class M1, 7.750% VRN 6/15/27 (e) Other Asset-Backed Securities — 2.4% Applebee's Funding LLC/IHOP Funding LLC, Series 2019-1A, Class A2I 4.194% 6/07/49 (e)	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000 190,000  1,458,728 1,249,236 398,776 1,354,071	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254 139,578 23,275,676 1,328,516 1,101,805 249,380 1,367,709 4,047,410
Waterfall Commercial Mortgage Trust, Series 2015-SBC5, Class A, 4.104% VRN 9/14/22 (c) (e)  Wells Fargo Commercial Mortgage Trust Series 2019-C52, Class XA, 1.765% VRN 8/15/52 (e) Series 2015-NXSI, Class AS, 3.406% 5/15/48 Series 2013-LC12, Class B, 4.411% VRN 7/15/46 (e)  WFRBS Commercial Mortgage Trust Series 2014-C24, Class AS, 3.931% 11/15/47 Series 2014-C24, Class AS, 3.931% 11/15/47 Series 2014-C24, Class B, 4.204% VRN 11/15/47 (e) Series 2014-C24, Class C, 4.290% VRN 11/15/47 (e)  Home Equity Asset-Backed Securities — 0.6% Asset Backed Securities Corp. Home Equity Loan Trust Series 2007-HE1, Class A4, 1 mo. USD LIBOR + .140% 0.288% FRN 12/25/36 Series 2003-HE6, Class A3B, 1 mo. USD LIBOR + .960% 1.108% FRN 11/25/33 GSAA Home Equity Trust, Series 2006-5, Class 2A3, 1 mo. USD LIBOR + .270% 0.418% FRN 3/25/36 RBSSP Resecuritization Trust, Series 2010-4, Class 6A2, 5.825% STEP 2/26/36 (e)  Manufactured Housing Asset-Backed Securities — 0.1% Conseco Finance Corp., Series 1996-4, Class M1, 7.750% VRN 6/15/27 (e) Other Asset-Backed Securities — 2.4% Applebee's Funding LLC/IHOP Funding LLC, Series 2019-1A, Class A21	Amount \$ 570,000  142,755  5,889,632 190,000 140,000 190,000 190,000 190,000  1,458,728 1,249,236 398,776 1,354,071	\$ 641,672 144,729 645,790 203,956 139,086 199,992 187,254 139,578 23,275,676 1,328,516 1,101,805 249,380 1,367,709 4,047,410 978,913

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

	 Principal Amount	 Value
Dividend Solar Loans LLC, Series 2019-1, Class A		
3.670% 8/22/39 <sup>(c)</sup>	\$ 1,152,242	\$ 1,182,429
Fanniemae Grantor Trust, Series 2017-T1, Class A 2.898% 6/25/27	99,690	109,656
HSI Asset Securitization Corp., Series 2005-II, Class 2A4, 1 mo. USD LIBOR + .390% 0.538% FRN 11/25/35	1,900,711	1,819,148
Legacy Mortgage Asset Trust	1,900,711	1,019,140
Series 2019-GS5, Class A1, 3.200% STEP 5/25/59 (c)	1,561,891	1,545,240
Series 2019-GS1, Class A1, 4.000% STEP 1/25/59 (c)	1,160,685	1,164,633
Magnolia Finance XI DAC, Series 2019-10TF, Class A1, 3 mo. USD LIBOR + 2.900% 3.168% FRN 8/09/24 (c)		
PFCA Home Equity Investment Trust, Series 2003-IFC6, Class A,	985,000	975,754
4.501% VRN 4/22/35 <sup>(c)</sup> (e)	714,166	706,664
Popular ABS Mortgage Pass-Through Trust, Series 2005-2, Class M2,	/14,100	700,004
5.717% STEP 4/25/35	1,550,844	1,143,803
RAMP Trust, Series 2006-NC3, Class M1, 1 mo. USD LIBOR + .340%		
0.488% FRN 3/25/36	2,080,000	1,931,387
SBA Small Business Investment Cos.	260.570	279 204
Series 2019-25G, Class 1, 2.690% 7/01/44 Series 2019-20D, Class 1, 2.980% 4/01/39	260,570 276,540	278,304 288,216
Series 2019-10A, Class 1, 3.113% 3/10/29	482,905	524,589
Series 2018-10B, Class 1, 3.548% 9/10/28	351,094	378,021
Structured Asset Investment Loan Trust, Series 2004-8, Class A9, 1 mo. USD LIBOR + 1.000%	,,,,	
1.148% FRN 9/25/34 Structured Asset Securities Corp. Mortgage Loan Trust, Series 2007-WF1, Class A1, 1 mo. USD LIBOR + .210%	1,211,477	1,144,894
0.358% FRN 2/25/37	3,333,919	3,083,125
		18,130,662
	Principal	Value
Student Loans Asset-Backed Securities — 0.9%	 Principal Amount	Value
Student Loans Asset-Backed Securities — 0.9% Navient Student Loan Trust		Value
	\$ Amount	\$ Value 1,438,970
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 <sup>(c)</sup>	\$ Amount	\$ 
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 <sup>(c)</sup> Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 <sup>(c)</sup>	\$ 1,455,313 1,030,000	\$ 1,438,970 1,030,000
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 <sup>(c)</sup>	\$ Amount 1,455,313	\$ 1,438,970
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 <sup>(c)</sup> Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 <sup>(c)</sup> Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 <sup>(c)</sup>	\$ 1,455,313 1,030,000	\$ 1,438,970 1,030,000
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 <sup>(c)</sup> Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 <sup>(c)</sup> Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 <sup>(c)</sup> SLM Student Loan Trust	\$ 1,455,313 1,030,000 650,000	\$ 1,438,970 1,030,000 655,683
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c) Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c) Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c) SLM Student Loan Trust Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38 Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c) SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX	\$ 1,455,313 1,030,000 650,000 1,191,849	\$ 1,438,970 1,030,000 655,683 1,127,969
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 <sup>(c)</sup> Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 <sup>(c)</sup> Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 <sup>(c)</sup> SLM Student Loan Trust Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38 Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 <sup>(c)</sup>	\$ 1,455,313 1,030,000 650,000 1,191,849	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 <sup>(c)</sup> Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 <sup>(c)</sup> Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 <sup>(c)</sup> SLM Student Loan Trust Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38 Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 <sup>(c)</sup> SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX 3.690% 6/15/48 <sup>(c)</sup>	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891
Navient Student Loan Trust  Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c)  Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c)  Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c)  SLM Student Loan Trust  Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38  Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c)  SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX  3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3%  BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150%	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103
Navient Student Loan Trust  Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c)  Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c)  Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c)  SLM Student Loan Trust  Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38  Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c)  SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX  3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3%  BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150%  0.472% FRN 5/28/36 (c)	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103
Navient Student Loan Trust  Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c)  Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c)  Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c)  SLM Student Loan Trust  Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38  Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c)  SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX  3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3%  BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150%  0.472% FRN 5/28/36 (c)  Bear Stearns Asset -Backed Securities I Trust, Series 2005-AC8, Class A3, 1 mo. USD LIBOR + 7.650%  7.502% FRN 11/25/35	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530 1,720,000	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103 6,514,616
Navient Student Loan Trust  Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c)  Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c)  Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c)  SLM Student Loan Trust  Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38  Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c)  SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX  3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3%  BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150%  0.472% FRN 5/28/36 (c)  Bear Stearns Asset -Backed Securities I Trust, Series 2005-AC8, Class A3, 1 mo. USD LIBOR + 7.650%  7.502% FRN 11/25/35  Citigroup Mortgage Loan Trust, Series 2007-6, Class 2A4, 1 mo. USD LIBOR + .350%  0.498% FRN 5/25/37	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530 1,720,000	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103 6,514,616
Navient Student Loan Trust  Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c)  Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c)  Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c)  SLM Student Loan Trust  Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38  Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c)  SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX  3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3%  BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150%  0.472% FRN 5/28/36 (c)  Bear Stearns Asset -Backed Securities I Trust, Series 2005-AC8, Class A3, 1 mo. USD LIBOR + 7.650%  7.502% FRN 11/25/35  Citigroup Mortgage Loan Trust, Series 2007-6, Class 2A4, 1 mo. USD LIBOR + .350%  0.498% FRN 5/25/37  Credit Suisse Mortgage Trust	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530 1,720,000 360,435 789,936 1,996,451	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103 6,514,616 357,273 280,353 773,453
Navient Student Loan Trust  Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c)  Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c)  Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c)  SLM Student Loan Trust  Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38  Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c)  SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX  3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3%  BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150%  0.472% FRN 5/28/36 (c)  Bear Stearns Asset -Backed Securities I Trust, Series 2005-AC8, Class A3, 1 mo. USD LIBOR + 7.650%  7.502% FRN 11/25/35  Citigroup Mortgage Loan Trust, Series 2007-6, Class 2A4, 1 mo. USD LIBOR + .350%  0.498% FRN 5/25/37  Credit Suisse Mortgage Trust  Series 2015-4R, Class 3A3, 1 mo. USD LIBOR + .310% 0.795% FRN 10/27/36 (c)	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530 1,720,000 360,435 789,936 1,996,451 868,065	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103 6,514,616 357,273 280,353 773,453 405,579
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c) Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c) Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c) SLM Student Loan Trust Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38 Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c) SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX 3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3% BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150% 0.472% FRN 5/28/36 (c) Bear Stearns Asset -Backed Securities I Trust, Series 2005-AC8, Class A3, 1 mo. USD LIBOR + 7.650% 7.502% FRN 11/25/35 Citigroup Mortgage Loan Trust, Series 2007-6, Class 2A4, 1 mo. USD LIBOR + .350% 0.498% FRN 5/25/37 Credit Suisse Mortgage Trust Series 2015-4R, Class 3A3, 1 mo. USD LIBOR + .310% 0.795% FRN 10/27/36 (c) Series 2015-2R, Class 7A2, 3.065% VRN 8/27/36 (c) (e)	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530 1,720,000 360,435 789,936 1,996,451 868,065 2,261,713	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103 6,514,616 357,273 280,353 773,453 405,579 1,735,612
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c) Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c) Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c) SLM Student Loan Trust Series 2005-A, Class A4, 3 mo. USD LIBOR + 3.10% 0.560% FRN 12/15/38 Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c) SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX 3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3% BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150% 0.472% FRN 5/28/36 (c) Bear Stearns Asset -Backed Securities I Trust, Series 2005-AC8, Class A3, 1 mo. USD LIBOR + 7.650% 7.502% FRN 11/25/35 Citigroup Mortgage Loan Trust, Series 2007-6, Class 2A4, 1 mo. USD LIBOR + .350% 0.498% FRN 5/25/37 Credit Suisse Mortgage Trust Series 2015-4R, Class 3A3, 1 mo. USD LIBOR + .310% 0.795% FRN 10/27/36 (c) Series 2015-2R, Class 7A2, 3.065% VRN 8/27/36 (c) (e) Series 2018-J1, Class A2, 3.500% VRN 8/27/38 (c) (e)	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530 1,720,000 360,435 789,936 1,996,451 868,065	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103 6,514,616 357,273 280,353 773,453 405,579
Navient Student Loan Trust  Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c)  Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c)  Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c)  SLM Student Loan Trust  Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38  Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c)  SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX  3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3%  BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150%  0.472% FRN 5/28/36 (c)  Bear Stearns Asset -Backed Securities 1 Trust, Series 2005-AC8, Class A3, 1 mo. USD LIBOR + 7.650%  7.502% FRN 11/25/35  Citigroup Mortgage Loan Trust, Series 2007-6, Class 2A4, 1 mo. USD LIBOR + .350%  0.498% FRN 5/25/37  Credit Suisse Mortgage Trust  Series 2015-4R, Class 3A3, 1 mo. USD LIBOR + .310% 0.795% FRN 10/27/36 (c)  Series 2015-2R, Class 7A2, 3.065% VRN 8/27/36 (c) (e)  Flagstar Mortgage Trust, Series 2018-2, Class A4,	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530 1,720,000 360,435 789,936 1,996,451 868,065 2,261,713 3,072,462	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103 6,514,616 357,273 280,353 773,453 405,579 1,735,612 3,139,087
Navient Student Loan Trust Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c) Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c) Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c) SLM Student Loan Trust Series 2005-A, Class A4, 3 mo. USD LIBOR + 310% 0.560% FRN 12/15/38 Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c) SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX 3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3% BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150% 0.472% FRN 5/28/36 (c) Bear Stearns Asset -Backed Securities I Trust, Series 2005-AC8, Class A3, 1 mo. USD LIBOR + 7.650% 7.502% FRN 11/25/35 Citigroup Mortgage Loan Trust, Series 2007-6, Class 2A4, 1 mo. USD LIBOR + .350% 0.498% FRN 5/25/37 Credit Suisse Mortgage Trust Series 2015-4R, Class 3A3, 1 mo. USD LIBOR + .310% 0.795% FRN 10/27/36 (c) Series 2015-2R, Class 7A2, 3.065% VRN 8/27/36 (c) (e) Series 2018-J1, Class A2, 3.500% VRN 2/25/48 (c) (e) Flagstar Mortgage Trust, Series 2018-2, Class A4, 3.500% VRN 4/25/48 (c) (e)	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530 1,720,000 360,435 789,936 1,996,451 868,065 2,261,713	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103 6,514,616 357,273 280,353 773,453 405,579 1,735,612
Navient Student Loan Trust  Series 2017-2A, Class A, 1 mo. USD LIBOR + 1.050% 1.198% FRN 12/27/66 (c)  Series 2017-1A, Class A3, 1 mo. USD LIBOR + 1.150% 1.298% FRN 7/26/66 (c)  Series 2016-6A, Class A3, 1 mo. USD LIBOR + 1.300% 1.448% FRN 3/25/66 (c)  SLM Student Loan Trust  Series 2005-A, Class A4, 3 mo. USD LIBOR + .310% 0.560% FRN 12/15/38  Series 2003-7A, Class A5A, 3 mo. USD LIBOR + 1.200% 1.450% FRN 12/15/33 (c)  SoFi Professional Loan Program LLC, Series 2019-A, Class A2FX  3.690% 6/15/48 (c)  Whole Loan Collateral Collateralized Mortgage Obligations — 2.3%  BCAP LLC Trust, Series 2011-RR5, Class 11A4, 1 mo. USD LIBOR + .150%  0.472% FRN 5/28/36 (c)  Bear Stearns Asset -Backed Securities I Trust, Series 2005-AC8, Class A3, 1 mo. USD LIBOR + 7.650%  7.502% FRN 11/25/35  Citigroup Mortgage Loan Trust, Series 2007-6, Class 2A4, 1 mo. USD LIBOR + .350%  0.498% FRN 5/25/37  Credit Suisse Mortgage Trust  Series 2015-4R, Class 3A3, 1 mo. USD LIBOR + .310% 0.795% FRN 10/27/36 (c)  Series 2015-2R, Class 7A2, 3.065% VRN 8/27/36 (c) (e)  Flagstar Mortgage Trust, Series 2018-2, Class A4,	\$ 1,455,313 1,030,000 650,000 1,191,849 444,530 1,720,000 360,435 789,936 1,996,451 868,065 2,261,713 3,072,462	\$ 1,438,970 1,030,000 655,683 1,127,969 427,891 1,834,103 6,514,616 357,273 280,353 773,453 405,579 1,735,612 3,139,087

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

	Principal Amount	Value
GSMSC Resecuritization Trust, Series 2014-2R, Class 3B, 1 mo. USD LIBOR + .610%		
0.785% FRN 11/26/37 <sup>(c)</sup> GSR Mortgage Loan Trust, Series 2005-AR5, Class 2A3,	\$ 1,220,000	\$ 948,734
3.083% VRN 10/25/35 <sup>(e)</sup>	63,480	47,451
HarborView Mortgage Loan Trust, Series 2006-2, Class 1A,		.,,,,,
3.347% VRN 2/25/36 <sup>(e)</sup>	32,719	15,770
JP Morgan Mortgage Trust	1 215 472	1 252 454
Series 2018-3, Class A1, 3.500% VRN 9/25/48 <sup>(c)</sup> (e) Series 2018-4, Class A1, 3.500% VRN 10/25/48 <sup>(c)</sup> (e)	1,215,473	1,252,454 546,806
Series 2018-5, Class A1, 3.500% VRN 10/25/48 (c) (e)	531,866 621,312	638,665
Morgan Stanley Resecuritization Trust, Series 2015-R3, Class 7A2, 12 mo. MTA + .770%	021,312	038,003
1.941% FRN 4/26/47 <sup>(c)</sup>	300,000	277,668
New Residential Mortgage Loan Trust, Series 2017-4A, Class A1,		
4.000% VRN 5/25/57 <sup>(c) (e)</sup>	478,995	515,205
Prime Mortgage Trust Series 2006-DR1, Class 1A1, 5.500% 5/25/35 (c)	11 211	10,538
Series 2006-DR1, Class 2A2, 6.000% 5/25/35 (c)	11,211 673,160	572,763
RBSSP Resecuritization Trust, Series 2013-4, Class 1A2, 1 mo. USD LIBOR + 1.500%	073,100	372,703
1.675% FRN 12/26/37 <sup>(c)</sup>	2,137,634	1,798,518
Structured Adjustable Rate Mortgage Loan Trust, Series 2006-7, Class 1A1,		
3.725% VRN 8/25/36 <sup>(e)</sup>	226,343	182,358
Structured Asset Mortgage Investments, Inc., Series 2005-AR7, Class 4A1, 12 mo. MTA + 2.150% 3.169% FRN 3/25/46	238,994	231,268
Washington Mutual Mortgage Pass-Through Certificates, Series 2006-AR3, Class A1B, 12 mo. MTA + 1.000%	230,771	231,200
2.019% FRN 2/25/46	768,199	649,891
		16,975,515
	Principal	
	Amount	Value
Whole Loan Collateral Planned Amortization Classes — 0.0%		
Alternative Loan Trust, Series 2006-18CB, Class A6, 1 mo. USD LIBOR + 28.600% 28.008% FRN 7/25/36	\$ 55,450	\$ 93,743
20.0007011617/25/50	Ψ 55,150	
		<del></del>
TOTAL NON-U.S. GOVERNMENT AGENCY OBLIGATIONS (Cost \$72,747,757)		71,544,416
		71,544,416
TOTAL NON-U.S. GOVERNMENT AGENCY OBLIGATIONS (Cost \$72,747,757)  SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond		71,544,416
SOVEREIGN DEBT OBLIGATIONS — 8.3%	870,000	<b>71,544,416</b> 900,015
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c)	870,000 1,530,000	
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER	1,530,000	900,015 1,637,100
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g)	· · · · · · · · · · · · · · · · · · ·	900,015
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro	1,530,000 6,865,560	900,015 1,637,100 107,430
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h)	1,530,000	900,015 1,637,100
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30	1,530,000 6,865,560 9,270,000 1,244,579	900,015 1,637,100 107,430 98,753 522,723
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319	900,015 1,637,100 107,430 98,753 522,723 724,672
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319	900,015 1,637,100 107,430 98,753 522,723 724,672
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29 Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g)	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29 Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g)	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c)  Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g)  Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h)  Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29  Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g) 10.000% 1/01/27 BRL (g)	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c)  Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g)  Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h)  Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29  Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g) Brazilian Government International Bond	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000 15,801,000 1,935,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132 3,128,769 392,813
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c)  Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g)  Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h)  Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29  Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g) 10.000% 1/01/27 BRL (g)	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000 15,801,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132 3,128,769
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29 Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g) 10.000% 1/01/27 BRL (g) Brazilian Government International Bond 4.625% 1/13/28 5.000% 1/27/45 5.625% 1/07/41	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000 15,801,000 1,935,000 420,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132 3,128,769 392,813 455,284
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29 Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g) 10.000% 1/01/27 BRL (g) Brazilian Government International Bond 4.625% 1/13/28 5.000% 1/27/45 5.625% 1/07/41 Colombia Government International Bond	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000 15,801,000 1,935,000 420,000 510,000 2,350,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132 3,128,769 392,813 455,284 513,825 2,545,073
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond  2.500% 10/11/22 (c) 3.125% 9/30/49 (c)  Argentina Treasury Bond BONCER  1.000% 8/05/21 ARS (g)  Argentine Bonos del Tesoro  18.200% 10/03/21 ARS (g) (h)  Argentine Republic Government International Bond  0.125% STEP 7/09/30  0.125% STEP 7/09/35  0.125% STEP 7/09/41  1.000% 7/09/29  Brazil Notas do Tesouro Nacional Serie F  10.000% 1/01/21 BRL (g)  10.000% 1/01/23 BRL (g)  10.000% 1/01/27 BRL (g)  Brazilian Government International Bond  4.625% 1/13/28  5.000% 1/27/45  5.625% 1/07/41  Colombia Government International Bond  5.625% 2/26/44	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000 15,801,000 1,935,000 420,000 510,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132 3,128,769 392,813 455,284 513,825
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29 Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g) Brazilian Government International Bond 4.625% 1/13/28 5.000% 1/27/45 5.625% 1/07/41 Colombia Government International Bond	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000 15,801,000 1,935,000 420,000 510,000 2,350,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132 3,128,769 392,813 455,284 513,825 2,545,073
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29 Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g) 10.000% 1/01/27 BRL (g) Brazilian Government International Bond 4.625% 1/13/28 5.000% 1/27/45 5.625% 1/07/41 Colombia Government International Bond 5.577% 2/21/23 (c) Indonesia Government International Bond	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000 15,801,000 1,935,000 420,000 510,000 2,350,000 520,000 370,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132 3,128,769 392,813 455,284 513,825 2,545,073 646,625 379,720
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/35 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29 Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g) 10.000% 1/01/27 BRL (g) Brazilian Government International Bond 4.625% 1/13/28 5.000% 1/27/45 5.625% 1/07/41 Colombia Government International Bond 5.625% 2/26/44 Egypt Government International Bond 5.577% 2/21/23 (c) Indonesia Government International Bond 3.500% 1/11/28	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000 15,801,000 1,935,000 420,000 510,000 2,350,000 520,000 370,000 400,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132 3,128,769 392,813 455,284 513,825 2,545,073 646,625 379,720 437,131
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/30 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29 Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g) 10.000% 1/01/27 BRL (g) Brazilian Government International Bond 4.625% 1/13/28 5.000% 1/27/45 5.625% 1/07/41 Colombia Government International Bond 5.625% 2/26/44 Egypt Government International Bond 5.577% 2/21/23 (c) Indonesia Government International Bond 3.500% 1/11/28 3.750% 4/25/22 (c)	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000 15,801,000 1,935,000 420,000 510,000 2,350,000 370,000 400,000 1,030,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132 3,128,769 392,813 455,284 513,825 2,545,073 646,625 379,720 437,131 1,071,282
SOVEREIGN DEBT OBLIGATIONS — 8.3% Abu Dhabi Government International Bond 2.500% 10/11/22 (c) 3.125% 9/30/49 (c) Argentina Treasury Bond BONCER 1.000% 8/05/21 ARS (g) Argentine Bonos del Tesoro 18.200% 10/03/21 ARS (g) (h) Argentine Republic Government International Bond 0.125% STEP 7/09/35 0.125% STEP 7/09/35 0.125% STEP 7/09/41 1.000% 7/09/29 Brazil Notas do Tesouro Nacional Serie F 10.000% 1/01/21 BRL (g) 10.000% 1/01/23 BRL (g) 10.000% 1/01/27 BRL (g) Brazilian Government International Bond 4.625% 1/13/28 5.000% 1/27/45 5.625% 1/07/41 Colombia Government International Bond 5.57% 2/26/44 Egypt Government International Bond 5.57% 2/21/23 (c) Indonesia Government International Bond 3.500% 1/11/28	1,530,000 6,865,560 9,270,000 1,244,579 1,927,319 110,000 153,987 8,458,000 15,801,000 1,935,000 420,000 510,000 2,350,000 520,000 370,000 400,000	900,015 1,637,100 107,430 98,753 522,723 724,672 43,670 70,218 1,535,132 3,128,769 392,813 455,284 513,825 2,545,073 646,625 379,720 437,131

 $5.125\%\ 1/15/45\ ^{(c)}$  Italy Buoni Poliennali Del Tesoro  $2.300\%\ 10/15/21\ EUR\ ^{(c)\ (g)}$ 

200,000

251,235

7,950,000

9,571,430

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

	Principal Amount	Value
Kenya Government International Bond	_	
	\$ 200,000	\$ 203,236
Kuwait Government International Bond		
3.500% 3/20/27 <sup>(c)</sup> Mexican Bonos	530,000	596,250
7.750% 11/13/42 MXN <sup>(g)</sup>	34,785,600	1,703,246
8.000% 11/07/47 MXN <sup>(g)</sup>	195,560,000	9,773,091
8.500% 5/31/29 MXN <sup>(g)</sup>	75,560,000	4,040,494
Mexico Government International Bond	75,500,000	4,040,494
4.750% 3/08/44	1,220,000	1,330,410
Nigeria Government International Bond		
6.500% 11/28/27 <sup>(c)</sup>	200,000	190,292
7.143% 2/23/30 <sup>(c)</sup>	210,000	199,017
Panama Government International Bond	210.000	212.225
2.252% 9/29/32 4.500% 4/01/56	310,000 350,000	312,325 438,375
Peruvian Government International Bond	330,000	730,373
6.550% 3/14/37	750,000	1,133,445
Provincia de Buenos Aires		
6.500% 2/15/23 <sup>(c)</sup> (i)	170,000	66,300
7.875% 6/15/27 <sup>(c)</sup> <sup>(i)</sup>	160,000	62,400
9.125% 3/16/24 <sup>(c) (i)</sup>	160,000	63,200
Qatar Government International Bond		
4.000% 3/14/29 <sup>(c)</sup>	580,000	677,858
4.817% 3/14/49 <sup>(c)</sup>	1,280,000	1,723,456
Republic of Poland Government International Bond 4.000% 1/22/24	910,000	1,013,358
Russian Federal Bond— OFZ	910,000	1,013,336
6.900% 5/23/29 RUB <sup>(g)</sup>	228,650,000	3,097,022
7.000% 1/25/23 RUB <sup>(g)</sup>	30,640,000	413,436
7.000% 8/16/23 RUB <sup>(g)</sup>	63,590,000	863,754
7.050% 1/19/28 RUB <sup>(g)</sup>	239,886,000	3,285,393
7.250% 5/10/34 RUB <sup>(g)</sup>	60,500,000	840,880
7.700% 3/16/39 RUB <sup>(g)</sup>	86,260,000	1,264,399
7.750% 9/16/26 RUB <sup>(g)</sup>	8,260,000	117,355
8.150% 2/03/27 RUB <sup>(g)</sup>	55,120,000	800,571
State of Israel	33,120,000	800,371
2.750% 7/03/30	310,000	342,101
3.875% 7/03/50	200,000	 240,000
		 62,051,375
TOTAL COVEREION DEPT OF LCATIONS (C. 14 CC 5CA 500)		(2.051.255
TOTAL SOVEREIGN DEBT OBLIGATIONS (Cost \$66,564,599)		 62,051,375
	Principal	
W. COMPRIMENTS A CENTON OR LOCATIONS AND INCORPORTATIONS AND ALL	Amount	 Value
U.S. GOVERNMENT AGENCY OBLIGATIONS AND INSTRUMENTALITIES — 21.6% Collateralized Mortgage Obligations — 1.8%		
Federal Home Loan Mortgage Corp.		
	\$ 11,298	\$ 87
Series 5010, Class IK, 2.500% 9/25/50	299,454	37,020
Series 5010, Class JI, 2.500% 9/25/50	598,189	76,306
Series 5013, Class IN, 2.500% 9/25/50 Series 4793, Class CB, 3.000% 5/15/48	299,427 599,182	34,872 633,581
Series 4793, Class CD, 3.000% 5/15/48	420,139	444,287
Series 4813, Class CJ, 3.000% 8/15/48	400,860	416,650
Series 353, Class S1, 1 mo. USD LIBOR + 6.000% 5.848% FRN 12/15/46	383,632	83,415
Series 334, Class S7, 1 mo. USD LIBOR + 6.100% 5.948% FRN 8/15/44	176,365	35,905
Series R007, Class ZA, 6.000% 5/15/36 Series 3621, Class SB, 1 mo. USD LIBOR + 6.230% 6.078% FRN 1/15/40	96,758 34,112	114,962 7,990
Series 4203, Class PS, 1 mo. USD LIBOR + 6.250% 6.098% FRN 9/15/42	173,483	24,937
Series 3973, Class SA, 1 mo. USD LIBOR + 6.490% 6.338% FRN 12/15/41	235,177	54,000
Federal Home Loan Mortgage Corp. Multifamily Structured Pass-Through Certificates		
Series K099, Class X1, 1.006% VRN 9/25/29 (e)	2,056,875	142,295
Series K094, Class X1, 1.016% VRN 6/25/29 (e)	999,033	67,411
Series K735, Class X1, 1.102% VRN 5/25/26 (e)	1,042,825	50,001
https://massmutual.prospectus-express.com/print.asp?doctype=ann&clientid=massmutpre&fundid=57629S539		141/49

 Series KC05, Class X1, 1.204% VRN 6/25/27 (e)
 1,577,650
 87,254

 Series K736, Class X1, 1.437% VRN 7/25/26 (e)
 4,198,678
 264,585

 Series K108, Class X1 1.810% 3/25/30 (e)
 3,600,000
 496,433

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

Federal National Mortgage Association Series 2006-118, Class IP1, 0.243% FRN 12/25/36 (e) \$ 85,471 \$	Value
(-)	4,943
Series 2006-118, Class IP2, 0.243% FRN 12/25/36 <sup>(e)</sup> 65,376	4,337
Series 2020-47, Class GZ, 2.000% 7/25/50 301,503	303,597
Series 2020-56, Class DI, 2.500% 8/25/50 497,511	70,581
Series 2005-88, Class IP, 2.601% FRN 10/25/35 <sup>(e)</sup> 33,369	1,767
Series 2006-88, Class IP, 2.872% 3/25/36 50,907	2,190
Series 409, Class C2, 3.000% 4/25/27 96,014	5,643
Series 2006-59, Class IP, 3.458% FRN 7/25/36 <sup>(e)</sup> 103,663	9,024
Series 409, Class C13, 3.500% 11/25/41 117,216	13,665
Series 409, Class C18, 4.000% 4/25/42 128,487	17,977
Series 409, Class C22, 4.500% 11/25/39 69,859	10,691
Series 2011-59, Class NZ, 5.500% 7/25/41 436,289	505,017
Series 2013-9, Class CB, 5.500% 4/25/42 363,319	417,822
Series 2013-124, Class SB, 1 mo. USD LIBOR + 5.950% 5.802% FRN 12/25/43 423,629	86,606
Series 2016-61, Class BS, 1 mo. USD LIBOR + 6.100% 5.952% FRN 9/25/46 131,859	25,474
Series 2016-60, Class QS, 1 mo. USD LIBOR + 6.100% 5.952% FRN 9/25/46 281,278	58,910
Series 2017-76, Class SB, 1 mo. USD LIBOR + 6.100% 5.952% FRN 10/25/57  810,169	150,195
Series 2012-46, Class BA, 6.000% 5/25/42 93,438 Series 2012-133, Class CS, 1 mo. USD LIBOR + 6.150% 6.002% FRN 12/25/42 128,779	110,634 24,520
Series 2012-134, Class SK, 1 mo. USD LIBOR + 6.150% 6.002% FRN 12/25/42 238,200	50,141
Series 2013-54, Class BS, 1 mo. USD LIBOR + 6.150% 6.002% FRN 6/25/43 325,253	70,363
Series 2017-85, Class SC, 1 mo. USD LIBOR + 6.200% 6.052% FRN 11/25/47 230,255	42,271
	1.2,2 / 2
Principal Amount	Volue
Amount	<b>Value</b> 22 027
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         Amount         \$	22,027
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42       \$ 110,247       \$         Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40       176,981       176,981	22,027 18,478
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247         \$           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981         176,981           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209	22,027
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247         \$           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981         176,981           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209	22,027 18,478 47,129
Amount         Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42       \$ 110,247       \$         Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40       176,981         Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41       222,209         Series 2012-28, Class B, 6.500% 6/25/39       15,429	22,027 18,478 47,129 16,853
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247         \$           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981         176,981           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209         15,429           Series 2012-28, Class B, 6.500% 6/25/39         15,429         106,717           Series 2013-9, Class BC, 6.500% 7/25/42         106,717         106,717	22,027 18,478 47,129 16,853 129,350
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247         \$           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981         \$           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209         \$           Series 2012-28, Class B, 6.500% 6/25/39         15,429         \$           Series 2013-9, Class BC, 6.500% 7/25/42         106,717         \$           Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42         57,662	22,027 18,478 47,129 16,853 129,350 11,455
Amount         Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42       \$ 110,247       \$         Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40       176,981         Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41       222,209         Series 2012-28, Class B, 6.500% 6/25/39       15,429         Series 2013-9, Class BC, 6.500% 7/25/42       106,717         Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42       57,662         Series 2012-51, Class B, 7.000% 5/25/42       77,953         Federal National Mortgage Association ACES       100,717	22,027 18,478 47,129 16,853 129,350 11,455
Amount         Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42       \$ 110,247       \$         Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40       176,981         Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41       222,209         Series 2012-28, Class B, 6.500% 6/25/39       15,429         Series 2013-9, Class BC, 6.500% 7/25/42       106,717         Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42       57,662         Series 2012-51, Class B, 7.000% 5/25/42       77,953         Federal National Mortgage Association ACES       100,000	22,027 18,478 47,129 16,853 129,350 11,455 95,302
Amount         Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42       \$ 110,247       \$         Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40       176,981       \$         Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41       222,209       \$         Series 2012-28, Class B, 6.500% 6/25/39       15,429       \$         Series 2013-9, Class BC, 6.500% 7/25/42       106,717       \$         Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42       57,662       \$         Series 2012-51, Class B, 7.000% 5/25/42       77,953       \$         Federal National Mortgage Association ACES       1,298,862         Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (e)       1,298,862	22,027 18,478 47,129 16,853 129,350 11,455 95,302
Amount         Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42       \$ 110,247       \$         Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40       176,981       \$         Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41       222,209       \$         Series 2012-28, Class B, 6.500% 6/25/39       15,429       \$         Series 2013-9, Class BC, 6.500% 7/25/42       106,717       \$         Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42       57,662       \$         Series 2012-51, Class B, 7.000% 5/25/42       77,953       \$         Federal National Mortgage Association ACES       \$       1,298,862         Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (e)       1,298,862       \$         Series 2019-M28, Class AV, 2.232% 2/25/27       436,483       \$         Series 2020-M6, Class A, 2.500% 10/25/37       97,189       \$         Series 2019-M19, Class A2, 2.560% 9/25/29       1,189,655       \$	22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873
Amount         Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42       \$ 110,247       \$         Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40       176,981       \$         Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41       222,209       \$         Series 2012-28, Class B, 6.500% 6/25/39       15,429       \$         Series 2013-9, Class BC, 6.500% 7/25/42       106,717       \$         Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42       57,662       \$         Series 2012-51, Class B, 7.000% 5/25/42       77,953       \$         Federal National Mortgage Association ACES       1,298,862       \$         Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (e)       1,298,862       \$         Series 2019-M28, Class AV, 2.232% 2/25/27       436,483       \$         Series 2020-M6, Class A, 2.500% 10/25/37       97,189	22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272
Amount         Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42       \$ 110,247       \$         Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40       176,981       \$         Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41       222,209       \$         Series 2012-28, Class B, 6.500% 6/25/39       15,429       \$         Series 2013-9, Class BC, 6.500% 7/25/42       106,717       \$         Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42       57,662       \$         Series 2012-51, Class B, 7.000% 5/25/42       77,953       \$         Federal National Mortgage Association ACES       \$       1,298,862         Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (e)       1,298,862       \$         Series 2019-M28, Class AV, 2.232% 2/25/27       436,483       \$         Series 2020-M6, Class A, 2.500% 10/25/37       97,189       \$         Series 2019-M19, Class A2, 2.560% 9/25/29       1,189,655       \$	22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272 1,305,507
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209           Series 2012-28, Class B, 6.500% 6/25/39         15,429           Series 2013-9, Class BC, 6.500% 7/25/42         106,717           Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42         57,662           Series 2012-51, Class B, 7.000% 5/25/42         77,953           Federal National Mortgage Association ACES         8           Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (e)         1,298,862           Series 2019-M28, Class AV, 2.232% 2/25/27         436,483           Series 2020-M6, Class AV, 2.500% 10/25/37         97,189           Series 2019-M19, Class A2, 2.560% 9/25/29         1,189,655           Series 2017-M8, Class A2, 3.061% VRN 5/25/27 (e)         100,000           Series 2019-M5, Class A2, 3.273% 2/25/29         620,000           Series 2019-M4, Class A2, 3.610% 2/25/31         330,000	22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272 1,305,507 112,805
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209           Series 2012-28, Class B, 6.500% 6/25/39         15,429           Series 2013-9, Class BC, 6.500% 7/25/42         106,717           Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42         57,662           Series 2012-51, Class B, 7.000% 5/25/42         77,953           Federal National Mortgage Association ACES         8           Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (e)         1,298,862           Series 2019-M28, Class AV, 2.232% 2/25/27         436,483           Series 2020-M6, Class AV, 2.500% 10/25/37         97,189           Series 2019-M19, Class A2, 2.560% 9/25/29         1,189,655           Series 2017-M8, Class A2, 3.061% VRN 5/25/27 (e)         100,000           Series 2019-M4, Class A2, 3.610% 2/25/31         330,000           Government National Mortgage Association         330,000	22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272 1,305,507 112,805 704,935 392,939
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209           Series 2012-28, Class B, 6.500% 6/25/39         15,429           Series 2013-9, Class BC, 6.500% 7/25/42         106,717           Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42         57,662           Series 2012-51, Class B, 7.000% 5/25/42         77,953           Federal National Mortgage Association ACES         1,298,862           Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (e)         1,298,862           Series 2019-M28, Class AV, 2.232% 2/25/27         436,483           Series 2019-M5, Class A, 2.500% 10/25/37         97,189           Series 2019-M19, Class A2, 2.560% 9/25/29         1,189,655           Series 2019-M5, Class A2, 3.061% VRN 5/25/27 (e)         100,000           Series 2019-M5, Class A2, 3.73% 2/25/29         620,000           Series 2019-M4, Class A2, 3.610% 2/25/31         330,000           Government National Mortgage Association         4,883,469	22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272 1,305,507 112,805 704,935 392,939
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209           Series 2012-28, Class B, 6.500% 6/25/39         15,429           Series 2012-74, Class BC, 6.500% 7/25/42         106,717           Series 2012-51, Class B, 7.000% 5/25/42         57,662           Series 2012-51, Class B, 7.000% 5/25/42         77,953           Federal National Mortgage Association ACES         8           Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (e)         1,298,862           Series 2019-M28, Class AV, 2.232% 2/25/27         436,483           Series 2019-M98, Class AV, 2.232% 2/25/29         97,189           Series 2019-M19, Class A2, 2.560% 9/25/29         1,189,655           Series 2019-M5, Class A2, 3.061% VRN 5/25/27 (e)         100,000           Series 2019-M5, Class A2, 3.273% 2/25/29         620,000           Series 2019-M4, Class A2, 3.610% 2/25/31         330,000           Government National Mortgage Association         4,883,469           Series 2012-144, Class IO, 0.393% VRN 1/16/53 (e)         4,883,469           Series 2018-H07, Class FD, 1 mo. USD LIBOR + .300% 0.455% FRN 5/20/68         447,130	22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272 1,305,507 112,805 704,935 392,939
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209           Series 2012-28, Class B, 6.500% 6/25/39         15,429           Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42         106,717           Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42         77,953           Federal National Mortgage Association ACES         8           Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (e)         1,298,862           Series 2019-M28, Class AV, 2.232% 2/25/27         436,483           Series 2020-M6, Class A, 2.500% 10/25/37         97,189           Series 2019-M19, Class A2, 2.560% 9/25/29         1,189,655           Series 2019-M5, Class A2, 3.273% 2/25/27 (e)         100,000           Series 2019-M5, Class A2, 3.273% 2/25/29         620,000           Series 2019-M4, Class A2, 3.610% 2/25/31         330,000           Government National Mortgage Association         4,883,469           Series 2012-144, Class IO, 0.393% VRN 1/16/53 (e)         4,883,469           Series 2012-144, Class IO, 0.393% VRN 1/16/53 (e)         4,883,469           Series 2018-H07, Class FD, 1 mo. USD LIBOR + .400% 0.555% FRN 5/20/68         447,130 </td <td>22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272 1,305,507 112,805 704,935 392,939 104,938 444,835 126,116</td>	22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272 1,305,507 112,805 704,935 392,939 104,938 444,835 126,116
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209           Series 2012-28, Class B, 6.500% 6/25/39         15,429           Series 2012-74, Class BC, 6.500% 7/25/42         106,717           Series 2012-75, Class B, 7.000% 5/25/42         77,953           Federal National Mortgage Association ACES         77,953           Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (c)         1,298,862           Series 2019-M28, Class AV, 2.232% 2/25/27         436,483           Series 2019-M19, Class AV, 2.232% 2/25/27         436,483           Series 2019-M19, Class AV, 2.300% 9/25/29         1,189,655           Series 2019-M36, Class AV, 2.3001% VRN 5/25/27 (c)         100,000           Series 2019-M4, Class AV, 2.3004% VRN 5/25/27 (c)         100,000           Series 2019-M5, Class AV, 2.3008 VRN 1/16/53 (c)         330,000           Government National Mortgage Association         4,883,469           Series 2012-144, Class 10, 0.393% VRN 1/16/53 (c)         4,883,469           Series 2012-144, Class 10, 0.393% VRN 1/16/53 (c)         3,717,150	22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272 1,305,507 112,805 704,935 392,939 104,938 444,835 126,116 97,222
Series 2012-35, Class SC, 1 mo. USD LIBOR + 6.500% 6.352% FRN 4/25/42         \$ 110,247           Series 2011-87, Class SG, 1 mo. USD LIBOR + 6.550% 6.402% FRN 4/25/40         176,981           Series 2011-96, Class SA, 1 mo. USD LIBOR + 6.550% 6.402% FRN 10/25/41         222,209           Series 2012-28, Class B, 6.500% 6/25/39         15,429           Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42         106,717           Series 2012-74, Class SA, 1 mo. USD LIBOR + 6.650% 6.502% FRN 3/25/42         77,953           Federal National Mortgage Association ACES         8           Series 2020-M36, Class X1, 1.564% VRN 9/25/34 (e)         1,298,862           Series 2019-M28, Class AV, 2.232% 2/25/27         436,483           Series 2020-M6, Class A, 2.500% 10/25/37         97,189           Series 2019-M19, Class A2, 2.560% 9/25/29         1,189,655           Series 2019-M5, Class A2, 3.273% 2/25/27 (e)         100,000           Series 2019-M5, Class A2, 3.273% 2/25/29         620,000           Series 2019-M4, Class A2, 3.610% 2/25/31         330,000           Government National Mortgage Association         4,883,469           Series 2012-144, Class IO, 0.393% VRN 1/16/53 (e)         4,883,469           Series 2012-144, Class IO, 0.393% VRN 1/16/53 (e)         4,883,469           Series 2018-H07, Class FD, 1 mo. USD LIBOR + .400% 0.555% FRN 5/20/68         447,130 </td <td>22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272 1,305,507 112,805 704,935 392,939 104,938 444,835 126,116</td>	22,027 18,478 47,129 16,853 129,350 11,455 95,302 141,119 454,873 104,272 1,305,507 112,805 704,935 392,939 104,938 444,835 126,116

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

	Principal Amount	Value
Series 2020-H13, Class FC, 1 mo. USD LIBOR + .450% 0.606% FRN 7/20/70	\$ 98,827	\$ 97,904
Series 2011-H08, Class FG, 1 mo. USD LIBOR + .480% 0.635% FRN 3/20/61	113,493	113,569
Series 2011-H09, Class AF, 1 mo. USD LIBOR + .500% 0.655% FRN 3/20/61	80,738	80,833
Series 2014-186, Class IO, 0.699% VRN 8/16/54 (e)	1,549,203	54,661
Series 2017-41, Class IO, 0.742% VRN 7/16/58 <sup>(e)</sup>	1,650,564	89,202
Series 2017-H18, Class BI, 0.842% VRN 9/20/67 <sup>(e)</sup>	4,542,295	363,654
Series 2020-H09, Class FL, 1 mo. USD LIBOR + 1.150% 1.306% FRN 5/20/70	599,409	620,061
Series 2020-H09, Class NF, 1 mo. USD LIBOR + 1.250% 1.406% FRN 4/20/70	189,402	194,745
Series 2012-H27, Class AI, 1.759% VRN 10/20/62 (e)	619,719	32,397
Series 2017-H20, Class IB, 1.996% VRN 10/20/67 (e)	91,075	9,117
Series 2017-H15, Class KI, 2.306% VRN 7/20/67 (e)	177,285	19,045
Series 2014-22, Class IA, 2.440% FRN 11/20/42 (e)	31,531	1,263
Series 2020-123, Class NI, 2.500% 8/20/50	499,055	68,574
Series 2020-123, Class IL, 2.500% 8/20/50	199,630	27,383
Series 2013-107, Class AD, 2.695% VRN 11/16/47 <sup>(e)</sup> Series 2019-123, Class A, 3.000% 10/20/49	348,940 287,175	365,448 297,831
Series 2012-66, Class CI, 3.500% 2/20/38	61,751	1,630
Series 2013-53, Class OI, 3.500% 4/20/43	704,103	70,616
Series 2020-47, Class MI, 3.500% 4/20/50	391,353	63,728
Series 2020-47, Class NI, 3.500% 4/20/50	97,796	16,272
Series 2014-176, Class IA, 4.000% 11/20/44	76,656	9,807
Series 2015-167, Class OI, 4.000% 4/16/45 Series 2016-84, Class IG, 4.500% 11/16/45	83,555	13,487
Series 2010-84, Class IG, 4.300% 11/10/43 Series 2014-117, Class SJ, 1 mo. USD LIBOR + 5.600% 5.444% FRN 8/20/44	388,467 114,471	62,488 20,995
	•	,,,,,
	Principal	\$7.1
Series 2016-135, Class SB, 1 mo. USD LIBOR + 6.100% 5.948% FRN 10/16/46	Amount \$ 143,652	<b>Value</b> \$ 40,338
Series 2016-133, Class SB, 1 Inc. USD LIBOR + 6.150% 5.994% FRN 2/20/46	99,159	21,712
Series 2010-31, Class GS, 1 mo. USD LIBOR + 6.500% 6.344% FRN 3/20/39	600	3
Series 2010-85, Class HS, 1 mo. USD LIBOR + 6.650% 6.494% FRN 1/20/40	27,550	2,527
		13,646,550
Pass-Through Securities — 19.2% Federal Home Loan Mortgage Corp.		
Pool #840698 2.446% FRN 3/01/47 <sup>(e)</sup>	49,891	50,753
Pool #ZS8669 3.000% 9/01/32	154,955	163,332
Pool #ZS8673 3.000% 10/01/32	109,274	115,181
	1 005 569	
Pool #G67701 3.000% 10/01/46	1,005,568	1,089,418
Pool #G67701 3.000% 10/01/46 Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup>	184,425	1,089,418 193,418
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47	184,425 1,950,976	193,418 2,111,829
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47	184,425 1,950,976 866,541	193,418 2,111,829 924,682
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48	184,425 1,950,976 866,541 231,148	193,418 2,111,829 924,682 249,989
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49	184,425 1,950,976 866,541 231,148 324,078	193,418 2,111,829 924,682 249,989 344,235
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49	184,425 1,950,976 866,541 231,148 324,078 704,268	193,418 2,111,829 924,682 249,989 344,235 760,617
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49	184,425 1,950,976 866,541 231,148 324,078	193,418 2,111,829 924,682 249,989 344,235
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 10/01/42	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 1/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 2/01/44	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 1/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 2/01/44 Pool #U99124 3.500% 3/01/45	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850
Pool #ZS4697 3.000% 1/01/47 (f) Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #RA3474 3.000% 9/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99124 3.500% 3/01/44 Pool #U99124 3.500% 3/01/45 Pool #ZM2846 3.500% 3/01/47 Pool #ZM2846 3.500% 3/01/47	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550
Pool #ZS4697 3.000% 1/01/47 (f) Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #RA3474 3.000% 9/01/42 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 3/01/44 Pool #U99124 3.500% 3/01/45 Pool #Q41209 3.500% 6/01/46 Pool #ZM2846 3.500% 3/01/47 Pool #ZM3481 3.500% 6/01/48	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557
Pool #ZS4697 3.000% 1/01/47 (f) Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/42 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 3/01/44 Pool #U99124 3.500% 3/01/45 Pool #ZM2846 3.500% 3/01/47 Pool #ZM3481 3.500% 6/01/47 Pool #ZM3481 3.500% 6/01/48 Pool #QA7238 3.500% 2/01/50	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482 183,160	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557 196,854
Pool #ZS4697 3.000% 1/01/47 (f) Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 3/01/44 Pool #U99124 3.500% 3/01/45 Pool #Q41209 3.500% 6/01/46 Pool #ZM2846 3.500% 3/01/47 Pool #ZM381 3.500% 6/01/48 Pool #ZA5433 3.500% 6/01/48 Pool #QA7238 3.500% 2/01/50 Pool #RA2313 3.500% 3/01/50	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482 183,160 1,409,269	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557 196,854 1,511,547
Pool #ZS4697 3.000% 1/01/47 (f) Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/42 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 3/01/44 Pool #U99124 3.500% 3/01/45 Pool #ZM2846 3.500% 3/01/47 Pool #ZM3481 3.500% 6/01/47 Pool #ZM3481 3.500% 6/01/48 Pool #QA7238 3.500% 2/01/50	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482 183,160	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557 196,854
Pool #ZS4697 3.000% 1/01/47 (f) Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 3/01/44 Pool #U99124 3.500% 3/01/45 Pool #ZM2846 3.500% 3/01/47 Pool #ZM3481 3.500% 6/01/47 Pool #ZM3481 3.500% 6/01/48 Pool #QA7238 3.500% 3/01/50 Pool #RA2313 3.500% 3/01/50 Pool #RA2313 3.500% 3/01/50 Pool #RA2313 3.500% 3/01/50 Pool #RA2362 3.500% 3/01/50	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482 183,160 1,409,269 377,504	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557 196,854 1,511,547 400,514 311,588 418,463
Pool #ZS4697 3.000% 1/01/47 (f) Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/48 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 2/01/44 Pool #U99124 3.500% 3/01/45 Pool #ZM2846 3.500% 3/01/46 Pool #ZM28481 3.500% 6/01/46 Pool #ZM28481 3.500% 6/01/47 Pool #ZA5433 3.500% 6/01/48 Pool #QA7238 3.500% 6/01/48 Pool #QA7238 3.500% 6/01/50 Pool #RA2362 3.500% 3/01/50 Pool #RA2362 3.500% 3/01/50 Pool #RA2658 3.500% 5/01/50 Pool #RA2658 3.500% 5/01/50 Pool #U99316 4.000% 10/01/42	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482 183,160 1,409,269 377,504 289,408 387,775 72,744	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557 196,854 1,511,547 400,514 311,588 418,463 79,889
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/48 Pool #RA1103 3.000% 9/01/48 Pool #RA1293 3.000% 9/01/49 Pool #RA1293 3.000% 1/01/50 Pool #QA5768 3.000% 1/01/50 Pool #RA3175 3.000% 1/01/50 Pool #RA3474 3.000% 9/01/50 Pool #RA3474 3.000% 9/01/50 Pool #RA3474 3.000% 9/01/50 Pool #RA9474 3.000% 10/01/42 Pool #U99143 3.500% 3/01/43 Pool #U99114 3.500% 3/01/44 Pool #U99124 3.500% 3/01/45 Pool #ZM2846 3.500% 3/01/47 Pool #ZM3481 3.500% 6/01/46 Pool #ZM2846 3.500% 3/01/47 Pool #ZM3481 3.500% 6/01/48 Pool #QA7238 3.500% 6/01/48 Pool #RA2362 3.500% 3/01/50 Pool #RA2362 3.500% 3/01/50 Pool #RA2362 3.500% 3/01/50 Pool #RA2688 3.500% 5/01/50 Pool #RA2688 3.500% 5/01/50 Pool #RA2688 3.500% 5/01/50 Pool #U991254 4.000% 10/01/42 Pool #U991254 4.000% 10/01/42	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482 183,160 1,409,269 377,504 289,408 387,775 72,744 95,305	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557 196,854 1,511,547 400,514 311,588 418,463 79,889 104,518
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 9/01/49 Pool #RA1293 3.000% 9/01/49 Pool #RA1293 3.000% 9/01/50 Pool #QA5768 3.000% 1/01/50 Pool #RA3175 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 2/01/44 Pool #U99124 3.500% 3/01/45 Pool #ZM2846 3.500% 3/01/47 Pool #ZM2846 3.500% 3/01/47 Pool #ZM2846 3.500% 6/01/47 Pool #ZM2846 3.500% 6/01/47 Pool #ZA5433 3.500% 6/01/48 Pool #QA7238 3.500% 6/01/50 Pool #RA2313 3.500% 3/01/50 Pool #RA2362 3.500% 3/01/50 Pool #RA2658 3.500% 5/01/50 Pool #RA2658 3.500% 5/01/50 Pool #RA2658 3.500% 5/01/50 Pool #RA2658 3.500% 5/01/50 Pool #U90316 4.000% 10/01/42 Pool #U91254 4.000% 4/01/43 Pool #U91254 4.000% 4/01/43	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482 183,160 1,409,269 377,504 289,408 387,775 72,744 95,305 39,048	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557 196,854 1,511,547 400,514 311,588 418,463 79,889 104,518 43,874
Pool #ZS4697 3.000% 1/01/47 (f) Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61637 3.000% 9/01/48 Pool #RA1103 3.000% 9/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99124 3.500% 3/01/44 Pool #U99124 3.500% 3/01/45 Pool #ZM2846 3.500% 3/01/47 Pool #ZM2846 3.500% 6/01/46 Pool #ZM2846 3.500% 6/01/47 Pool #ZA5433 3.500% 6/01/48 Pool #ZM2846 3.500% 3/01/50 Pool #RA2313 3.500% 6/01/50 Pool #RA2362 3.500% 3/01/50 Pool #RA2658 3.500% 3/01/50 Pool #RA2658 3.500% 5/01/50 Pool #RA2658 3.500% 6/01/42 Pool #U991254 4.000% 4/01/50 Pool #U991254 4.000% 6/01/43 Pool #Q19135 4.000% 6/01/43 Pool #Q19236 4.000% 6/01/43	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482 183,160 1,409,269 377,504 289,408 387,775 72,744 95,305 39,048 32,986	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557 196,854 1,511,547 400,514 311,588 418,463 79,889 104,518 43,874 36,649
Pool #ZS4697 3.000% 1/01/47 <sup>(f)</sup> Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 9/01/49 Pool #RA1293 3.000% 9/01/49 Pool #RA1293 3.000% 9/01/50 Pool #QA5768 3.000% 1/01/50 Pool #RA3175 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #ZN0480 3.500% 10/01/42 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 2/01/44 Pool #U99124 3.500% 3/01/45 Pool #ZM2846 3.500% 3/01/47 Pool #ZM2846 3.500% 3/01/47 Pool #ZM2846 3.500% 6/01/47 Pool #ZM2846 3.500% 6/01/47 Pool #ZA5433 3.500% 6/01/48 Pool #QA7238 3.500% 6/01/50 Pool #RA2313 3.500% 3/01/50 Pool #RA2362 3.500% 3/01/50 Pool #RA2658 3.500% 5/01/50 Pool #RA2658 3.500% 5/01/50 Pool #RA2658 3.500% 5/01/50 Pool #RA2658 3.500% 5/01/50 Pool #U90316 4.000% 10/01/42 Pool #U91254 4.000% 4/01/43 Pool #U91254 4.000% 4/01/43	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482 183,160 1,409,269 377,504 289,408 387,775 72,744 95,305 39,048	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557 196,854 1,511,547 400,514 311,588 418,463 79,889 104,518 43,874
Pool #ZS4697 3.000% 1/01/47 (f) Pool #G60985 3.000% 5/01/47 Pool #G61637 3.000% 9/01/47 Pool #G61739 3.000% 9/01/48 Pool #RA1103 3.000% 7/01/49 Pool #RA1293 3.000% 9/01/49 Pool #QA5768 3.000% 1/01/50 Pool #QA5770 3.000% 1/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3175 3.000% 7/01/50 Pool #RA3474 3.000% 9/01/50 Pool #RA3474 3.000% 9/01/50 Pool #U99045 3.500% 3/01/43 Pool #U99114 3.500% 2/01/44 Pool #U99124 3.500% 3/01/45 Pool #Q41209 3.500% 6/01/46 Pool #ZM3481 3.500% 6/01/47 Pool #ZM3483 3.500% 6/01/47 Pool #ZA5433 3.500% 6/01/48 Pool #QA7238 3.500% 6/01/50 Pool #RA2313 3.500% 6/01/50 Pool #RA2362 3.500% 3/01/50 Pool #RA2658 3.500% 5/01/50 Pool #RA2658 3.500% 5/01/50 Pool #U991254 4.000% 6/01/43 Pool #U91254 4.000% 6/01/43 Pool #U91254 4.000% 6/01/43 Pool #U99054 4.000% 6/01/43 Pool #U99054 4.000% 6/01/43 Pool #U99054 4.000% 6/01/43	184,425 1,950,976 866,541 231,148 324,078 704,268 95,087 93,948 1,093,103 398,543 92,081 370,655 47,393 406,029 277,442 101,470 229,266 1,536,482 183,160 1,409,269 377,504 289,408 387,775 72,744 95,305 39,048 32,986 952,901	193,418 2,111,829 924,682 249,989 344,235 760,617 100,652 99,590 1,168,009 425,853 99,944 402,443 51,458 440,850 300,791 107,725 246,550 1,658,557 196,854 1,511,547 400,514 311,588 418,463 79,889 104,518 43,874 36,649 1,046,503

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Pool #U95137 4.000% 8/01/43	\$ 45,627	\$ 50,038
Pool #C09071 4.000% 2/01/45	392,482	425,970
Pool #Q40459 4.000% 3/01/46	839,483	911,418
Pool #ZS4699 4.000% 1/01/47	96,888	104,927
Pool #SD0247 4.000% 7/01/47	83,061	90,030
Pool #V83342 4.000% 8/01/47	210,620	229,194 850,319
Pool #ZM5146 4.000% 12/01/47 Pool #ZA5454 4.000% 6/01/48	793,416 514,161	553,447
Pool #G67713 4.000% 6/01/48 <sup>(f)</sup>	1,156,402	1,260,235
Pool #ZA6680 4.000% 6/01/49	892,225	978,521
Pool #RA2141 4.000% 2/01/50	249,638	267,230
Pool #RA2358 4.000% 3/01/50	172,355	184,329
Pool #U99076 4.500% 12/01/43	327,906	363,147
Pool #U92272 4.500% 12/01/43	54,299	60,135
Pool #U99084 4.500% 2/01/44	305,827	338,695
Pool #U99091 4.500% 3/01/44	100,843	111,523
Pool #Q26207 4.500% 5/01/44	31,878	35,204
Pool #SD0422 4.500% 7/01/45 <sup>(f)</sup>	97,532	109,690
Pool #Q47940 4.500% 2/01/47	333,394 1,909,588	363,494 2,088,557
Pool #V83157 4.500% 4/01/47 Pool #Q49177 4.500% 6/01/47	257,989	2,088,337
Pool #G61374 4.500% 4/01/48	346,191	383,072
Pool #ZT0474 4.500% 8/01/48	56,449	62,427
Pool #G67721 4.500% 4/01/49	241,002	265,605
Pool #RA2353 4.500% 3/01/50	186,672	202,206
Pool #G06496 5.000% 6/01/41	53,140	60,811
Pool #Q55401 5.000% 4/01/48	385,601	423,293
Pool #Q56002 5.000% 5/01/48	161,472	177,211
Pool #ZM7733 5.000% 8/01/48	293,362	321,850
Pool #ZN1436 5.000% 11/01/48 Pool #SD0291 5.000% 3/01/50	147,295 948,778	161,346 1,038,838
Pool #G06875 5.500% 12/01/38	7,423	8,638
Pool #G06669 6.500% 9/01/39	16,418	19,575
Pool #G07509 6.500% 9/01/39	14,237	17,114
Pool #G07335 7.000% 3/01/39	36,117	43,672
Federal National Mortgage Association		
Pool #BL6352 1.850% 4/01/32	100,000	106,099
Pool #BL6295 1.950% 4/01/32	100,000	107,160
Pool #BL6028 2.140% 4/01/30 Pool #BL4525 2.240% 10/01/31	100,000 100,000	108,050 109,010
	396,767	432,375
Pool #RL 5850 2 260% 4/01/30		110,371
Pool #BL5850 2.260% 4/01/30 Pool #BL5742 2.320% 2/01/32	· · · · · · · · · · · · · · · · · · ·	
Pool #BL5850 2.260% 4/01/30 Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28	100,000 103,790	109,947
Pool #BL5742 2.320% 2/01/32	100,000 103,790	
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28	100,000	54,560 241,313
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37	100,000 103,790 50,000 227,853 120,930	54,560 241,313 127,317
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43	100,000 103,790 50,000 227,853 120,930 48,855	54,560 241,313 127,317 51,680
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43	100,000 103,790 50,000 227,853 120,930 48,855 50,512	54,560 241,313 127,317 51,680 53,433
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43	100,000 103,790 50,000 227,853 120,930 48,855	54,560 241,313 127,317 51,680
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242 <b>Principal</b>	54,560 241,313 127,317 51,680 53,433 388,263
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242 Principal Amount	54,560 241,313 127,317 51,680 53,433 388,263
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242 Principal Amount \$ 246,020	\$ 54,560 241,313 127,317 51,680 53,433 388,263 <b>Value</b> 264,089
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 7/01/46 Pool #BC1509 3.000% 8/01/46	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242 Principal Amount \$ 246,020 64,092	\$ 54,560 241,313 127,317 51,680 53,433 388,263 <b>Value</b> 264,089 68,218
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242 Principal Amount \$ 246,020 64,092 605,907	\$ 54,560 241,313 127,317 51,680 53,433 388,263 <b>Value</b> 264,089 68,218 646,433
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 7/01/46 Pool #BC1509 3.000% 8/01/46	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242 Principal Amount \$ 246,020 64,092	\$ 54,560 241,313 127,317 51,680 53,433 388,263 <b>Value</b> 264,089 68,218
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BI2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7738 4.000% 8/01/46 Pool #AS7844 3.000% 9/01/46	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242 Principal Amount \$ 246,020 64,092 605,907 120,706	\$ 54,560 241,313 127,317 51,680 53,433 388,263 <b>Value</b> 264,089 68,218 646,433 128,478
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242 Principal Amount \$ 246,020 64,092 605,907 120,706 184,203	\$ 54,560 241,313 127,317 51,680 53,433 388,263 <b>Value</b> 264,089 68,218 646,433 128,478 196,063 136,807 285,476
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #AL9397 3.000% 10/01/46 Pool #BD8104 3.000% 10/01/46 Pool #BB8104 3.000% 10/01/46 Pool #AS8359 3.000% 11/01/46	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242 Principal Amount \$ 246,020 64,092 605,907 120,706 184,203 128,531 263,793 625,089	\$ 54,560 241,313 127,317 51,680 53,433 388,263 Value 264,089 68,218 646,433 128,478 196,063 136,807 285,476 656,545
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR 1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BD8104 3.000% 10/01/46 Pool #BD8104 3.000% 11/01/46 Pool #BB8072 3.000% 11/01/46	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242 Principal Amount \$ 246,020 64,092 605,907 120,706 184,203 128,531 263,793 625,089 1,145,511	\$ 54,560 241,313 127,317 51,680 53,433 388,263 Value 264,089 68,218 646,433 128,478 196,063 136,807 285,476 656,545 1,228,930
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BC49397 3.000% 10/01/46 Pool #BD8104 3.000% 10/01/46 Pool #BB8104 3.000% 10/01/46 Pool #BB81072 3.000% 11/01/46 Pool #BB072 3.000% 11/01/46	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242  Principal Amount \$ 246,020 64,092 605,907 120,706 184,203 128,531 263,793 625,089 1,145,511 2,040,521	\$ 54,560 241,313 127,317 51,680 53,433 388,263 Value 264,089 68,218 646,433 128,478 196,063 136,807 285,476 656,545 1,228,930 2,177,002
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BB104 3.000% 10/01/46 Pool #AS8359 3.000% 10/01/46 Pool #BB0072 3.000% 11/01/46 Pool #BB0072 3.000% 11/01/46 Pool #BB0072 3.000% 11/01/46 Pool #BM4579 3.000% 4/01/47 Pool #BM4579 3.000% 4/01/47	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242  Principal Amount \$ 246,020 64,092 605,907 120,706 184,203 128,531 263,793 625,089 1,145,511 2,040,521 1,103,460	\$ 54,560 241,313 127,317 51,680 53,433 388,263 Value 264,089 68,218 646,433 128,478 196,063 136,807 285,476 656,545 1,228,930 2,177,002 1,194,162
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #BC7338 3.000% 8/01/46 Pool #AS7338 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BD8104 3.000% 10/01/46 Pool #BBB104 3.000% 11/01/46 Pool #BBB104 3.000% 11/01/46 Pool #BBB1055 3.000% 11/01/46 Pool #BBB1565 3.000% 4/01/47 Pool #B90843 3.000% 9/01/47	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242  Principal Amount \$ 246,020 64,092 605,907 120,706 184,203 128,531 263,793 625,089 1,145,511 2,040,521 1,103,460 597,896	\$ 54,560 241,313 127,317 51,680 53,433 388,263 Value 264,089 68,218 646,433 128,478 196,063 136,807 285,476 656,545 1,228,930 2,177,002 1,194,162 641,436
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AR1202 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BC2817 3.000% 10/01/46 Pool #BD8104 3.000% 10/01/46 Pool #BB8043 3.000% 11/01/46 Pool #BB8072 3.000% 11/01/46 Pool #BB8072 3.000% 11/01/46 Pool #BB8072 3.000% 11/01/46 Pool #BB8072 3.000% 4/01/47 Pool #BM4579 3.000% 4/01/47 Pool #BN1565 3.000% 4/01/47 Pool #BN7652 3.000% 7/01/49	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242  Principal Amount \$ 246,020 64,092 605,907 120,706 184,203 128,531 263,793 625,089 1,145,511 2,040,521 1,103,460 597,896 1,747,055	\$ 54,560 241,313 127,317 51,680 53,433 388,263 Value 264,089 68,218 646,433 128,478 196,063 136,807 285,476 656,545 1,228,930 2,177,002 1,194,162 641,436 1,855,717
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #BC7338 3.000% 8/01/46 Pool #AS7338 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BD8104 3.000% 10/01/46 Pool #BBB104 3.000% 11/01/46 Pool #BBB104 3.000% 11/01/46 Pool #BBB1055 3.000% 11/01/46 Pool #BBB1565 3.000% 4/01/47 Pool #B90843 3.000% 9/01/47	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242  Principal Amount \$ 246,020 64,092 605,907 120,706 184,203 128,531 263,793 625,089 1,145,511 2,040,521 1,103,460 597,896 1,747,055 81,538	\$ 54,560 241,313 127,317 51,680 53,433 388,263 Value 264,089 68,218 646,433 128,478 196,063 136,807 285,476 656,545 1,228,930 2,177,002 1,194,162 641,436 1,855,717 86,610
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BC2817 3.000% 10/01/46 Pool #BB104 3.000% 10/01/46 Pool #BB104 3.000% 10/01/46 Pool #BB8359 3.000% 11/01/46 Pool #BE0072 3.000% 11/01/46 Pool #BE0072 3.000% 4/01/47 Pool #BM1565 3.000% 4/01/47 Pool #BM1565 3.000% 4/01/47 Pool #BN7652 3.000% 7/01/49 Pool #CA3809 3.000% 7/01/49	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242  Principal Amount \$ 246,020 64,092 605,907 120,706 184,203 128,531 263,793 625,089 1,145,511 2,040,521 1,103,460 597,896 1,747,055	\$ 54,560 241,313 127,317 51,680 53,433 388,263 Value 264,089 68,218 646,433 128,478 196,063 136,807 285,476 656,545 1,228,930 2,177,002 1,194,162 641,436 1,855,717
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BC2817 3.000% 9/01/46 Pool #BC3817 3.000% 1/01/46 Pool #BC3817 3.000% 1/01/46 Pool #BB104 3.000% 10/01/46 Pool #BB072 3.000% 11/01/46 Pool #BB072 3.000% 11/01/46 Pool #BB072 3.000% 10/01/46 Pool #BB072 3.000% 10/01/49 Pool #BN753 3.000% 9/01/47 Pool #BN753 3.000% 9/01/49 Pool #CA4133 3.000% 9/01/49 Pool #CA4133 3.000% 9/01/49 Pool #BO8932 3.000% 1/01/50	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242  Principal Amount \$ 246,020 64,092 605,907 120,706 184,203 128,531 263,793 625,089 1,145,511 2,040,521 1,103,460 597,896 1,747,055 81,538 1,320,745 353,115 85,414	\$ 54,560 241,313 127,317 51,680 53,433 388,263 Value 264,089 68,218 646,433 128,478 196,063 136,807 285,476 656,545 1,228,930 2,177,002 1,194,162 641,436 1,855,717 86,610 1,422,704 378,057 90,450
Pool #BL5742 2.320% 2/01/32 Pool #AL6613 2.500% 6/01/28 Pool #AM8674 2.810% 4/01/25 Pool #MA2832 3.000% 12/01/36 Pool #BJ2544 3.000% 12/01/37 Pool #AQ7306 3.000% 1/01/43 Pool #AR1202 3.000% 1/01/43 Pool #BC0884 3.000% 5/01/46  Pool #BC1509 3.000% 8/01/46 Pool #BC3738 3.000% 8/01/46 Pool #AS7738 3.000% 8/01/46 Pool #AS7844 3.000% 9/01/46 Pool #AS7844 3.000% 9/01/46 Pool #BC397 3.000% 10/01/46 Pool #BC397 3.000% 10/01/46 Pool #BD8104 3.000% 10/01/46 Pool #BB8104 3.000% 10/01/46 Pool #BB8104 3.000% 10/01/46 Pool #BB8105 3.000% 11/01/46 Pool #BB8105 3.000% 4/01/47 Pool #BB852 3.000% 4/01/47 Pool #BBN565 3.000% 4/01/47 Pool #BN7652 3.000% 9/01/49 Pool #BN7653 3.000% 9/01/49 Pool #BN7753 3.000% 9/01/49 Pool #BN7753 3.000% 9/01/49 Pool #BCA8133 3.000% 9/01/49	100,000 103,790 50,000 227,853 120,930 48,855 50,512 364,242  Principal Amount \$ 246,020 64,092 605,907 120,706 184,203 128,531 263,793 625,089 1,145,511 2,040,521 1,103,460 597,896 1,747,055 81,538 1,320,745 353,115	\$ 54,560 241,313 127,317 51,680 53,433 388,263 Value 264,089 68,218 646,433 128,478 196,063 136,807 285,476 656,545 1,228,930 2,177,002 1,194,162 641,436 1,855,717 86,610 1,422,704 378,057

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Pool #CA5225 3.000% 2/01/50	1,994.894	2,139,855
Pool #CA6000 3.000% 6/01/50	587,281	623,717
Pool #CA6053 3.000% 6/01/50	806,304	856,328
Pool #BP7009 3.000% 8/01/50	199,373	210,643
Pool #AN8048 3.080% 1/01/28	210,000	239,405
Pool #BL2454 3.160% 5/01/29	88,490	96,998
Pool #MA1177 3.500% 9/01/42	37,274	40,457
Pool #MA1213 3.500% 10/01/42	229,555	249,157
Pool #AL3026 3.500% 12/01/42	57,349	62,371
Pool #BM4751 3.500% 3/01/43	713,025	775,469
Pool #BM4750 3.500% 2/01/45	151,016	164,241
Pool #AY6181 3.500% 4/01/45	177,035	190,492
Pool #AS6340 3.500% 12/01/45	163,749	177,782
Pool #AS6328 3.500% 12/01/45	886,829	950,637
Pool #AS6541 3.500% 1/01/46	166,391	182,471
Pool #AS6562 3.500% 1/01/46	158,389	171,864
Pool #AL9546 3.500% 11/01/46	391,422	422,203
Pool #BM4897 3.500% 12/01/46	1,029,604	1,119,773
Pool #FM3347 3.500% 5/01/47	722,449	772,624
Pool #BH4101 3.500% 10/01/47	290,705	308,079
Pool #CA0858 3.500% 12/01/47	529,346	561,313
Pool #CA0907 3.500% 12/01/47	69,801	75,434
Pool #CA1053 3.500% 1/01/48	407,300	431,387
Pool #FM3753 3.500% 4/01/48 <sup>(f)</sup>	93,909	101,047
Pool #CA1526 3.500% 4/01/48	663,815	717,178
Pool #BM5521 3.500% 7/01/48	1,264,194	1,351,993
Pool #FM3469 3.500% 8/01/48	956,936	1,023,396
Pool #FM3141 3.500% 11/01/48	1,005,078	1,072,369
Pool #FM3773 3.500% 11/01/48	1,003,358	1,072,102
Pool #890876 3.500% 2/01/49	150,833	162,959
Pool #CA3860 3.500% 7/01/49	1,238,486	1,328,757

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

		Principal Amount		Value
Pool #BO2252 3.500% 10/01/49	\$	537,224	\$	576,213
Pool #FM2091 3.500% 12/01/49		178,453		191,683
Pool #CA5164 3.500% 2/01/50		717,898		770,000
Pool #FM2333 3.500% 2/01/50 Pool #CA5561 3.500% 4/01/50		356,496 744,557		382,369 799,292
Pool #FM4281 3.500% 8/01/50		700,000		755,178
Pool #BF0145 3.500% 3/01/57		2,181,107		2,411,652
Pool #AK8441 4.000% 4/01/42		26,319		29,087
Pool #AO2711 4.000% 5/01/42		28,677		31,692
Pool #AO6086 4.000% 6/01/42 Pool #AP0692 4.000% 7/01/42		30,871 25,980		34,078 28,528
Pool #AP5333 4.000% 7/01/42		155,696		171,873
Pool #AP2530 4.000% 8/01/42		24,822		27,401
Pool #AP2958 4.000% 8/01/42		20,966		23,145
Pool #AP4903 4.000% 9/01/42 Pool #AP7399 4.000% 9/01/42		41,407 69,832		45,709 77,088
Pool #AP9229 4.000% 10/01/42		19,776		21,831
Pool #AP9766 4.000% 10/01/42		126,791		139,213
Pool #MA1217 4.000% 10/01/42		179,604		197,200
Pool #AQ3599 4.000% 11/01/42 Pool #MA1253 4.000% 11/01/42		20,020 105,869		22,075 116,241
Pool #AQ7003 4.000% 12/01/42		50,582		55,775
Pool #AQ4555 4.000% 12/01/42		57,853		63,792
Pool #AQ7082 4.000% 1/01/43		76,654		84,523
Pool #AL3508 4.000% 4/01/43		45,056		50,610
Pool #AQ4078 4.000% 6/01/43 Pool #AQ4080 4.000% 6/01/43		41,878 37,230		47,041 41,354
Pool #AT8394 4.000% 6/01/43		39,217		44,052
Pool #AB9683 4.000% 6/01/43		64,841		71,477
Pool #AT9637 4.000% 7/01/43		122,651		136,239
Pool #AT9653 4.000% 7/01/43 Pool #AT9657 4.000% 7/01/43		85,851 70,691		96,435 77,926
Pool #AS0070 4.000% 8/01/43		40,817		44,752
Pool #MA1547 4.000% 8/01/43		45,898		50,323
Pool #AS4347 4.000% 1/01/45		77,901		86,239
Pool #AS9453 4.000% 4/01/47		102,122		111,233
Pool #AS9588 4.000% 5/01/47 Pool #MA3088 4.000% 8/01/47		214,102 1,042,086		233,137 1,117,476
Pool #BH2623 4.000% 8/01/47		1,782,947		1,911,377
Pool #MA3149 4.000% 10/01/47		387,694		415,620
Pool #BJ6133 4.000% 1/01/48		59,297		63,510
Pool #FM3023 4.000% 2/01/48 Pool #FM2173 4.000% 9/01/48		82,467 96,892		89,515 105,778
Pool #FM3158 4.000% 11/01/48		261,175		284,068
Pool #FM3542 4.000% 5/01/49		89,263		97,255
Pool #B00968 4.000% 6/01/49		216,846		231,572
Pool #FM2158 4.000% 10/01/49		87,505		95,285
Pool #CA4819 4.000% 12/01/49 <sup>(f)</sup> Pool #CA4823 4.000% 12/01/49		89,151 325,340		97,049 347,961
1 001 #CA4025 4.000/0 12/01/4/		323,340		347,701
		Principal		X7.1
Pool #BF0104 4.000% 2/01/56	\$	Amount 125,554	\$	Value 140,797
Pool #BF0183 4.000% 1/01/57	Φ	67,725	Ψ	75,947
Pool #BF0191 4.000% 6/01/57		133,251		149,262
Pool #MA0706 4.500% 4/01/31		21,469		23,749
Pool #MA0734 4.500% 5/01/31		69,435		76,810
Pool #MA0776 4.500% 6/01/31 Pool #MA0913 4.500% 11/01/31		23,679 17,407		26,194 19,255
Pool #MA0939 4.500% 12/01/31		19,375		21,433
Pool #993117 4.500% 1/01/39		2,300		2,567
Pool #AA0856 4.500% 1/01/39		10,462		11,789
Pool #AA3495 4.500% 2/01/39 Pool #935520 4.500% 8/01/39		12,207 20,673		13,712 23,250
Pool #AD5481 4.500% 5/01/40		488,511		549,405
Pool #AD6914 4.500% 6/01/40		51,762		58,215
Pool #AD8685 4.500% 8/01/40		135,165		152,013
Pool #MA1591 4.500% 9/01/43 Pool #MA1629 4.500% 10/01/43		87,286 85,340		96,639 94,485
1 001 #191A1027 4.J00 /0 10/01/45		85,340		74,483

Pool #AL4341 4.500% 10/01/43

5,806

5,250

Pool #AU6423 4.500% 10/01/43	170,118	188,134
Pool #MA1664 4.500% 11/01/43	42,789	47,374
Pool #MA1711 4.500% 12/01/43	86,177	95,411
Pool #AL4741 4.500% 1/01/44	39,366	43,584
Pool #AW0318 4.500% 2/01/44	218,908	241,680
Pool #AL5562 4.500% 4/01/44	17,646	19,515
Pool #890604 4.500% 10/01/44	358,523	402,429
Pool #AS4271 4.500% 1/01/45	42,264	48,866
Pool #CA0148 4.500% 8/01/47	141,298	153,744
Pool #CA0717 4.500% 11/01/47	278,351	301,827
Pool #CA1565 4.500% 4/01/48	839,773	909,286
Pool #BM4014 4.500% 5/01/48	63,243	69,781
Pool #BJ2763 4.500% 5/01/48	311,130	336,787
Pool #BJ9257 4.500% 6/01/48	333,308	370,376
Pool #CA2047 4.500% 7/01/48	437,383	486,026
Pool #CA2199 4.500% 8/01/48	738,250	820,353
Pool #CA2482 4.500% 10/01/48	575,036	638,808
Pool #BK7700 4.500% 10/01/48	813,148	903,327
Pool #BM4781 4.500% 10/01/48	63,958	70,772
Pool #BN1623 4.500% 11/01/48	348,924	387,620
Pool #CA2805 4.500% 12/01/48	957,201	1,040,323
Pool #CA3055 4.500% 2/01/49	163,162	180,390
Pool #FM1991 4.500% 5/01/49	358,153	389,254
Pool #CA3842 4.500% 7/01/49 <sup>(f)</sup>	209,848	229,579
Pool #CA4033 4.500% 8/01/49 <sup>(f)</sup>	213,299	233,354
Pool #FM3572 4.500% 9/01/49	175,963	195,532
Pool #FM2745 4.500% 3/01/50	432,040	466,858
Pool #CA5379 4.500% 3/01/50	376,618	419,444
Pool #BF0148 4.500% 4/01/56	2,751,374	3,133,887
Pool #BF0222 4.500% 9/01/57	663,664	751,367
Pool #915154 5.000% 4/01/37	44,064	50,898

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Pool #974965 5.000% 4/01/38	\$ 136,606	\$ 157,084
Pool #983077 5.000% 5/01/38	37,529	43,212
Pool #310088 5.000% 6/01/38	36,463	41,914
Pool #AE2266 5.000% 3/01/40 Pool #BM3904 5.000% 5/01/48	81,232 138,745	93,207
Pool #CA2251 5.000% 8/01/48	136,743	152,357 136,509
Pool #MA3501 5.000% 0/01/48	483,132	529,595
Pool #CA2652 5.000% 11/01/48	792,245	872,893
Pool #MA3527 5.000% 11/01/48	656,330	719,450
Pool #BN0341 5.000% 12/01/48	245,511	269,122
Pool #FM1727 5.000% 9/01/49	1,362,920	1,530,197
Pool #FM3155 5.000% 12/01/49	200,320	219,397 430,316
Pool #FM3957 5.000% 3/01/50 Pool #937948 5.500% 6/01/37	392,115 8,283	9,735
Pool #995072 5.500% 8/01/38	18,967	22,288
Pool #BF0141 5.500% 9/01/56	628,500	727,964
Pool #481473 6.000% 2/01/29	20	23
Pool #867557 6.000% 2/01/36	1,952	2,231
Pool #AE0469 6.000% 12/01/39	145,155	173,845
Pool #BM1948 6.000% 7/01/41 <sup>(f)</sup>	164,891	197,418
Pool #AL4324 6.500% 5/01/40	93,276	112,082
Pool #AE0758 7.000% 2/01/39 Government National Mortgage Association I	50,965	62,196
Pool #AA5649 3.000% 9/15/42	131,727	139,789
Pool #AB2892 3.000% 9/15/42	163,426	173,428
Pool #AB9108 3.000% 10/15/42	966,001	1,025,122
Pool #AB9109 3.000% 10/15/42	86,183	91,457
Pool #AB9207 3.000% 11/15/42	74,660	79,229
Pool #784571 3.500% 6/15/48	332,177	356,195
Pool #BS8439 3.500% 5/15/50 Pool #487588 6.000% 4/15/29	298,222 1,505	313,727 1,692
Pool #595077 6.000% 10/15/32	309	358
Pool #596620 6.000% 10/15/32	211	245
Pool #604706 6.000% 10/15/33	39,786	46,453
Pool #636251 6.000% 3/15/35	4,057	4,741
Pool #782034 6.000% 1/15/36	46,131	53,768
Pool #658029 6.000% 7/15/36 Government National Mortgage Association II	16,605	19,530
Pool #MA2677 3.000% 3/20/45	316,440	333,787
Pool #MA4068 3.000% 11/20/46	50,799	53,457
Pool #MA1995 3.500% 6/20/44	112,745	121,627
Pool #MA2678 3.500% 3/20/45	51,860	55,816
Pool #BC4732 3.500% 10/20/47	501,533	543,553
Pool #BD0384 3.500% 10/20/47 Pool #784674 3.500% 4/20/48	316,904 2,555,066	343,455 2,840,995
Pool #784825 3.500% 10/20/49	424,653	442,449
Pool #BM7534 3.500% 2/20/50	197,906	218,754
	Principal Amount	Value
Pool #MA4511 4.000% 6/20/47	\$ 779,459	\$ 840,190
Pool #MA4720 4.000% 9/20/47	1,093,799	1,177,997
Pool #MA4838 4.000% 11/20/47	857,211	923,197
Pool #MA4901 4.000% 12/20/47	325,969	350,450
Pool #MA5020 4.000% 2/20/48	332,961	357,968
Pool #MA5078 4.000% 3/20/48	404,948	435,360
Pool #MA5137 4.000% 4/20/48 Pool #BM9734 4.000% 10/20/49	336,955 98,452	360,787 106,984
Pool #BM9743 4.000% 10/20/49 Pool #BM9743 4.000% 11/20/49	97,039	105,449
Pool #BS1728 4.000% 1/20/50	98,884	107,670
Pool #BS1742 4.000% 2/20/50	97,441	106,099
Pool #BS1757 4.000% 3/20/50	99,181	107,993
Pool #BS8420 4.000% 4/20/50	397,191	433,103
Pool #783298 4.500% 4/20/41	157,186 22,380	175,157 24,939
Pool #783368 4.500% 7/20/41 Pool #MA5193 4.500% 5/20/48	920,206	24,939 998,673
Pool #MA5265 4.500% 6/20/48	620,838	671,449
Pool #MA5331 4.500% 7/20/48	154,202	166,773
Pool #MA5467 4.500% 9/20/48	743,796	804,430
Pool #MA5529 4.500% 10/20/48	606,850	654,661

D. 1/07/15/50 4.5000/10/00/40	216 220	222 214
Pool #MA5652 4.500% 12/20/48	216,338	233,314
Pool #MA5711 4.500% 1/20/49	1,477,508	1,592,992
Pool #MA5818 4.500% 3/20/49	207,803	223,769
Pool #4747 5.000% 7/20/40	94,648	107,969
Pool #MA5530 5.000% 10/20/48	75,674	82,281
Pool #MA5712 5.000% 1/20/49	1,038,921	1,128,977
Government National Mortgage Association II TBA Pool #8 2.000% 3/01/50 (f)	2,200,000	2,285,766
Government National Mortgage Association TBA Pool #264 2.500% 2/01/50 (f)	2,400,000	2,519,813
Uniform Mortgage Backed Securities TBA		
Pool #97 1.500% 8/01/35 <sup>(f)</sup>	2,100,000	2,148,562
Pool #505 2.000% 5/01/35 <sup>(f)</sup>	8,000,000	8,316,250
Pool #1082 2.000% 4/01/50 <sup>(f)</sup>	12,600,000	13,029,187
	· · · · · · · · ·	143,326,301
Whole Loans — 0.6%	-	· · · · · · · · · · · · · · · · · · ·
Federal Home Loan Mortgage Corp. Structured Agency Credit Risk Debt Notes		
Series 2015-HQ1, Class M3, 1 mo. USD LIBOR + 3.800% 3.948% FRN 3/25/25	251,959	253,117
Series 2017-DNA1, Class B1, 1 mo. USD LIBOR + 4.950% 5.098% FRN 7/25/29	1,450,000	1,468,283

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

		Principal Amount		Value
Federal National Mortgage Association Connecticut Avenue Securities Trust Series 2019-R07, Class 1M2, 1 mo. USD LIBOR + 2.100% 2.248% FRN 10/25/39 (c)	ď	(1( 002	¢.	(12.245
Series 2018-C03, Class 1M2, 1 mo. USD LIBOR + 2.100% 2.248% FRN 10/25/39 Series 2018-C03, Class 1M2, 1 mo. USD LIBOR + 2.150% 2.298% FRN 10/25/30	\$	616,992 1,342,203	\$	613,245 1,316,484
Series 2019-R02, Class 1M2, 1 mo. USD LIBOR + 2.300% 2.448% FRN 8/25/31 <sup>(c)</sup>		903,114		897,484
		, , , , , , ,		4,548,613
TOTAL U.S. GOVERNMENT AGENCY OBLIGATIONS AND INSTRUMENTALITIES (Cost \$157,550,068)				161,521,464
U.S. TREASURY OBLIGATIONS — 16.4%				
U.S. Treasury Bonds & Notes — 16.4%				
U.S. Treasury Bond 1.250% 5/15/50		10,280,000		9,771,217
1.375% 8/15/50		5,670,000		5,564,337
2.000% 2/15/50		3,150,000		3,572,266
3.000% 2/15/48		16,000		21,787
3.750% 11/15/43		9,010,000		13,403,570
U.S. Treasury Inflation Index 0.750% 2/15/42		825,458		1 020 707
0.750% 2/15/45		594,065		1,039,787 757,340
1.000% 2/15/46		1,574,395		2,127,258
1.000% 2/15/48		3,109,569		4,295,578
1.000% 2/15/49		8,411,015		11,754,503
1.375% 2/15/44		2,234,216		3,182,739
2.125% 2/15/40		1,713,955		2,629,113
2.125% 2/15/41		626,969		974,986
Wo To an analysis of the state	_	Principal Amount		Value
U.S. Treasury Note 0.250% 5/31/25	\$	47 920 000	¢	47 921 755
0.250% 6/30/25	Э	47,820,000 40,000	\$	47,821,755 39,984
0.500% 6/30/27		7,120,000		7,147,543
0.500% 8/31/27		6,050,000		6,067,005
0.625% 5/15/30		170,000		169,529
0.625% 8/15/30		370,000		368,164
U.S. Treasury Strip		2 450 000		2 240 222
0.000% 5/15/49		3,450,000		2,240,322 122,948,783
TOTAL U.S. TREASURY OBLIGATIONS (Cost \$114,263,905)				122,948,783
TOTAL BONDS & NOTES (Cost \$712,236,287)				743,432,884
TOTAL PURCHASED OPTIONS (#) — 0.0% (Cost \$173,133)				78,375
TOTAL LONG-TERM INVESTMENTS (Cost \$712,409,420)				743,511,259
SHORT-TERM INVESTMENTS — 3.2%				
Discount Notes — 0.1% Federal Home Loan Bank, 0.000%, due 10/28/20		500,000		499,977
Repurchase Agreement — 1.3%  Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (j)		9,535,524		9,535,524
U.S. Treasury Bill — 1.8%  U.S. Treasury Bill		),JJJ,JZ <del>T</del>		7,333,324
0.000% 10/27/20		3,440,000		3,439,808
0.000% 11/03/20		3,510,000		3,509,702
0.000% 12/03/20		3,520,000		3,519,415

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

	Principal Amount			Value		
United States Cash Management Bill 0.000% 12/08/20 0.000% 1/05/21	\$	1,490,000 1,570,000	\$	1,489,606 1,569,603 13,528,134		
TOTAL SHORT-TERM INVESTMENTS (Cost \$23,563,593)				23,563,635		
TOTAL INVESTMENTS — 102.6% (Cost \$735,973,013) (k)				767,074,894		
Less Unfunded Loan Commitments — 0.0%				(44,226)		
NET INVESTMENTS — 102.6% (Cost \$735,928,787)				767,030,668		
Other Assets/(Liabilities) — (2.6)%				(19,521,526)		
NET ASSETS — 100.0%			\$	747,509,142		

#### **Abbreviation Legend**

CLO Collateralized Loan Obligation

DAC Designated Activity Company

FRN Floating Rate Note

IO Interest Only

OFZ Obligatsyi Federal'novo Zaima (Federal Loan Obligations)

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) Unfunded or partially unfunded loan commitments.
- (b) All or a portion of the security represents unsettled loan commitments at September 30, 2020 where the rate will be determined at time of settlement.
- (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, 2020, the aggregate market value of these securities amounted to \$111,904,720 or 14.97% of net assets.
- (d) Security is perpetual and has no stated maturity date.
- (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, 2020.
- (f) A portion of this security is purchased on a when-issued, delayed-delivery or forward commitment basis. (Note 2).
- (g) The principal amount of the security is in foreign currency. The market value is in U.S. dollars.
- (h) The Government of Argentina announced a re-profiling of government debt to extend maturity dates and instituted foreign exchange restrictions. Holders of the impacted security will receive 15% of the outstanding maturity proceeds on the original maturity date; 25% of the original maturity date 90 calendar days later; and 60% of the original maturity date 180 calendar days later.
- (i) 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, 2020, these securities amounted to a value of \$191,900 or 0.03% of net assets.
- (j) Maturity value of \$9,535,524. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$9,726,300.
- (k) See Note 6 for aggregate cost for federal tax purposes.

### (#) Exchange-Traded Options Purchased

Description	Expiration Date	Exercise Price	No. of Contracts	Notiona	l Amount	Value	remiums Paid Received)	App	realized reciation/ reciation)
Call U.S. Treasury Long Bond Future	10/09/20	179.00	456	USD	80,384,250	\$ 78,375	\$ 173,133	\$	(94,758)

### **Exchange-Traded Options Written**

Description	Expiration Date	Exercise Price	No. of Contracts	Notional	l Amount	Value	remiums Paid Received)	App	realized reciation/ reciation)
Call U.S. Treasury Long Bond Future	10/09/20	177.00	152	USD	26,794,750	\$ (95,000)	\$ (153,425)	\$	58,425

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

#### **Forward contracts**

Counterparty	Settlement Date	Curren	cy Purchased	Curre	ncy Sold	Unrealized Appreciation (Depreciation)
BNP Paribas SA*	10/16/20	CAD	17,400,000	USD	12,712,692	\$ 355,394
BNP Paribas SA*	10/16/20	EUR	12,028,290	USD	13,980,435	126,209
BNP Paribas SA*	10/16/20	USD	38,580,696	EUR	34,162,160	(1,484,305)
BNP Paribas SA*	10/16/20	USD	1,611,920	MXN	36,282,059	(26,271)
BNP Paribas SA*	1/19/21	MXN	36,282,059	USD	1,594,760	26,076
Citibank N.A.*	10/16/20	ZAR	16,890,000	USD	962,344	44,298
Citibank N.A.*	10/16/20	AUD	1,197,575	USD	827,824	29,965
Citibank N.A.*	10/16/20	GBP	2,197,174	USD	2,742,273	93,045
Citibank N.A.*	10/16/20	MXN	124,240,000	USD	5,504,164	105,463
Citibank N.A.*	10/16/20	IDR	144,534,594,997	USD	9,840,318	(139,322)
Citibank N.A.*	10/16/20	EUR	600,000	USD	707,464	(3,791)
Citibank N.A.*	10/16/20	USD	8,103,795	MXN	182,718,904	(146,245)
Goldman Sachs International*	10/16/20	CAD	10,527,472	USD	7,748,822	157,725
Goldman Sachs International*	10/16/20	MXN	94,760,963	USD	4,140,022	138,581
Goldman Sachs International*	10/16/20	BRL	6,491,243	USD	1,208,055	(52,650)
Goldman Sachs International*	10/16/20	EUR	3,496,522	USD	4,141,399	(40,717)
Goldman Sachs International*	10/16/20	JPY	231,991,381	USD	2,197,421	2,613
Goldman Sachs International*	10/16/20	RUB	183,306,110	USD	2,314,471	41,104
Goldman Sachs International*	10/16/20	USD	2,531,153	RUB	183,306,110	175,578
Goldman Sachs International*	10/16/20	USD	984,524	ZAR	16,890,000	(22,118)
Goldman Sachs International*	10/16/20	USD	2,191,693	JPY	231,991,381	(8,341)
Goldman Sachs International*	1/19/21	ZAR	16,890,000	USD	973,936	21,874
Goldman Sachs International*	1/19/21	JPY	191,538,190	USD	1,817,966	1,192
Goldman Sachs International*	1/19/21	USD	2,291,183	RUB	183,306,110	(41,151)
						\$ (645,794)

#### **Futures contracts**

	Expiration Number of Notional Date Contracts Amount			Value/ Net Unrealized Appreciation/ (Depreciation)		
Long						
Euro-BTP	12/08/20	201	\$	34,065,962	\$	713,096
Euro-OAT	12/08/20	45		8,762,237		130,501
90 Day Eurodollar	12/14/20	282		69,446,711		880,564
U.S. Treasury Long Bond	12/21/20	438		77,599,095		(387,907)
U.S. Treasury Ultra Bond	12/21/20	152		34,162,311		(446,811)
U.S. Treasury Note 5 Year	12/31/20	299		37,625,958		57,386
					\$	946,829

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

	Expiration Date	Number of Contracts	Notional Amount	U Aj	Value/ Net Inrealized opreciation/ epreciation)
Short					
Euro-Bund	12/08/20	318	\$ (64,488,511)	\$	(579,356)
Euro-Buxl 30 Year Bond	12/08/20	4	(1,014,632)		(29,692)
Japanese Government Bond 10 Year	12/14/20	6	(8,638,271)		(15,406)
U.S. Treasury Note 10 Year	12/21/20	191	(26,631,408)		(19,061)
U.S. Treasury Ultra 10 Year	12/21/20	112	(17,967,922)		56,672
UK Long Gilt	12/29/20	78	(13,716,220)		17,124
U.S. Treasury Note 2 Year	12/31/20	20	(4,418,085)		(1,134)
90 Day Eurodollar	3/15/21	363	(90,433,726)		(139,312)
90 Day Eurodollar	12/13/21	469	(116,253,590)		(750,185)
				\$	(1,460,350)

## Centrally Cleared Credit Default Swap - Sell Protection††

Reference Obligation/ Index	Rate Received by Fund	Payment Frequency	Termination Date	Credit Rating	Notional	l Amount	Value	Upfront Premium Paid/ (Received)		Premium Paid/		emium Unro Paid/ Appro	
CDX.NA.IG Series 34†	1.000%	Quarterly	6/20/25	BBB+**	USD	93,300,000	\$ 643,303	\$	(138,394)	\$	781,697		
CDX.NA.HY		Quarterly											
Series 34†	5.000%		6/20/25	BB-**	USD	3,680,000	180,867		(157,563)		338,430		
CDX.NA.HY		Quarterly											
Series 35†	5.000%		12/20/25	BB-**	USD	15,480,000	634,278		643,840		(9,562)		
							\$ 1,458,448	\$	347,883	\$	1,110,565		

### **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)	App	realized reciation reciation)
28 Day-		Fixed									
MXN-TIIE-		7.450%									
Banxico	Monthly		Monthly	7/18/29	MXN	88,370,000	\$ 496,104	\$	37,243	\$	458,861
28 Day-		Fixed									
MXN-TIIE-		7.440%									
Banxico	Monthly		Monthly	7/20/29	MXN	91,920,000	513,025		46,911		466,114
3-Month		Fixed									
USD		0.190%	Semi-								
LIBOR	Quarterly		Annually	6/15/22	USD	26,407,000	(10,003)		(119)		(9,884)
Fixed		Fed Funds									
0.260%	Annually		Annually	5/15/27	USD	24,700,000	25,225		(82,911)		108,136
Fixed		3-Month									
0.450%	Semi-	USD									
	Annually	LIBOR	Quarterly	5/15/27	USD	13,486,000	25,255		(33,752)		59,007
Fixed		12-Month									
0.560%		USD									
	Annually	SOFR	Annually	7/20/45	USD	5,820,000	392,205		78,573		313,632
Fixed		12-Month									
0.740%		USD		0/40/45	****		40				
	Annually	SOFR	Annually	8/19/45	USD	4,020,000	105,730		_		105,730
Fixed		3-Month									
1.000%	Semi-	USD				. =					
	Annually	LIBOR	Quarterly	2/15/47	USD	8,708,000	266,028		104,498		161,530

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

MassMutual Select Strategic Bond Fund — Portfolio of Investments (Continued)

Paid by	y the Fund	Received	by the Fund									
Rate/ Reference	Frequency	Rate/ Reference	Frequency	Termination Date	Notional	Notional Amount Value		Upfront Premium Paid/ (Received)		Ap	nrealized preciation preciation)	
Fixed		3-Month										
0.900%	Semi-	USD										
	Annually	LIBOR	Quarterly	3/17/50	USD	2,610,000	\$	157,970	\$	3,078	\$	154,892
Fixed		3-Month										
0.792%	Semi-	USD										
	Annually	LIBOR	Quarterly	3/18/50	USD	1,319,000		117,153		_		117,153
Fixed		3-Month										
0.818%	Semi-	USD										
	Annually	LIBOR	Quarterly	3/19/50	USD	1,323,000		108,430		_		108,430
Fixed		3-Month										
0.885%	Semi-	USD										
	Annually	LIBOR	Quarterly	7/13/50	USD	1,320,000		86,036		(167)		86,203
							\$	2,283,158	\$	153,354	\$	2,129,804

#### **OTC Interest Rate Swaps**

Paid by	the Fund	Received	by the Fund									
Rate/		Rate/		_	Termination	Not	ional		Pı	pfront remium Paid/	App	realized reciation
Reference	Frequency	Reference	Frequency	Counterparty	Date	Am	ount	Value	(R	eceived)	(Dep	reciation)
BRL CDI		Fixed		Citibank								
	Maturity	7.024%	Maturity	N.A.*	1/04/27	BRL	9,300,000	\$ 25,768	\$	_	\$	25,768
BRL CDI		Fixed		Citibank								
	Maturity	7.024%	Maturity	N.A.*	1/04/27	BRL	11,000,000	30,478		5,820		24,658
BRL CDI		Fixed		Citibank								
	Maturity	7.024%	Maturity	N.A.*	1/04/27	BRL	11,846,000	32,822		7,253		25,569
	•							\$ 89,068	\$	13,073	\$	75,995

<sup>\*</sup> Contracts are subject to a Master Netting Agreement.

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

#### **Currency Legend**

ARS Argentinean Peso

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.

<sup>\*\*</sup> 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.

<sup>††</sup> 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.

MassMutual Select Diversified Value Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 97.3%		
COMMON STOCK — 96.2% Basic Materials — 3.9%		
Chemicals — 2.9%		
Albemarle Corp.	3,100	\$ 276,768
Celanese Corp.	3,500	376,075
CF Industries Holdings, Inc.	70,834	2,175,312
DuPont de Nemours, Inc. Eastman Chemical Co.	74,699 4,000	4,144,301 312,480
FMC Corp.	3,800	402,458
Huntsman Corp.	5,700	126,597
LyondellBasell Industries NV Class A	11,200	789,488
The Mosaic Co.	5,900	107,793
PPG Industries, Inc.	6,600	805,728
Forest Products & Paper — 0.6%		9,517,000
International Paper Co.	49,963	2,025,500
Iron & Steel — 0.2%	17,703	2,023,300
Nucor Corp.	9,000	403,740
Reliance Steel & Aluminum Co.	2,000	204,080
Steel Dynamics, Inc.	6,300	180,369
NV - 0.40/		788,189
Mining — 0.2%	40.200	(20, 202
Freeport-McMoRan, Inc.	40,300	630,292 12,960,981
Communications — 11.0%		12,900,961
Advertising — 0.1%		
The Interpublic Group of Cos., Inc.	9,400	156,698
Omnicom Group, Inc.	6,400	316,800
		473,498
Internet — 0.5%	2 200	262.066
CDW Corp. eBay, Inc.	2,200 23,400	262,966 1,219,140
eday, me.	25,400	1,482,106
Media — 4.1%		1,102,100
Comcast Corp. Class A	214,840	9,938,499
Discovery, Inc. Class A (a) (b)	4,400	95,788
Fox Corp. Class A	9,400	261,602
Fox Corp. Class B (a)	78,926	2,207,560
The Walt Disney Co.	8,690	1,078,255 13,581,704
Telecommunications — 6.3%		13,361,704
AT&T, Inc.	198,700	5,664,937
Ciena Corp. (a)	2,400	95,256
Cisco Systems, Inc.	175,568	6,915,623
Corning, Inc.	20,500	664,405
Juniper Networks, Inc.	9,800	210,700
	Number of	
	Shares	Value
Verizon Communications, Inc.	119,300	\$ 7,097,157
		20,648,078
a		36,185,386
Consumer, Cyclical — 3.7%		
Apparel — 0.1% Deckers Outdoor Corp. (a)	300	66,003
Hanesbrands, Inc.	5,400	85,050
Skechers U.S.A., Inc. Class A (a)	3,800	114,836
		265,889
Auto Manufacturers — 1.0%		
Cummins, Inc.	4,500	950,220
Ford Motor Co. General Motors Co.	58,700 34,900	390,942
PACCAR, Inc.	10,000	1,032,691 852,800
IACCAN, IIIC.	10,000	3,226,653
Auto Parts & Equipment — 0.2%		3,220,033
BorgWarner, Inc.	6,100	236,314
Gentex Corp.	7,000	180,250

Lear Corp. 1,700	185,385 601,949
Distribution & Wholesale — 0.3%	
HD Supply Holdings, Inc. (a) 4,300	177,332
LKQ Corp. (a) 9,100	252,343
W.W. Grainger, Inc.	570,832
	1,000,507
Home Builders — 0.6%	
D.R. Horton, Inc. 10,700	809,241
Lennar Corp. Class A 8,200	669,776
PulteGroup, Inc. 7,600	351,804
Toll Brothers, Inc. 2,000	97,320
	1,928,141
Home Furnishing — 0.1%	
Whirlpool Corp. 1,900	349,391
Housewares — 0.0%	
Newell Brands, Inc. 6,600	113,256
Leisure Time — 0.0%	
Brunswick Corp. 2,200	129,602
Lodging $-0.5\%$	
Las Vegas Sands Corp. 32,940	1,536,980
Retail — 0.9%	
Advance Auto Parts, Inc. 1,900	291,650
AutoZone, Inc. (a) 700	824,348
Best Buy Co., Inc. 7,600	845,804
Dollar Tree, Inc. (a) 3,700	337,958
Genuine Parts Co. 4,300	409,231

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

MassMutual Select Diversified Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Williams-Sonoma, Inc.	2,300	\$ 208,012
Thinking Solicina, not	2,500	2,917,003
		12,069,371
Consumer, Non-cyclical — 23.2%		
Agriculture — 2.2%	4.5.000	<b>-12</b> 010
Archer-Daniels-Midland Co.	16,000	743,840
Bunge Ltd. Darling Ingredients, Inc. (a)	2,200 2,500	100,540 90,075
Philip Morris International, Inc.	82,652	6,198,074
Thinp Month international, inc.	02,032	7,132,529
Biotechnology — 3.3%		
Alexion Pharmaceuticals, Inc. (a)	6,200	709,466
Amgen, Inc.	17,200	4,371,552
Bio-Rad Laboratories, Inc. Class A (a)	700	360,822
Biogen, Inc. (a)	5,300	1,503,504
Corteva, Inc. Gilead Sciences, Inc.	11,700 57,968	337,077 3,662,998
Glicau Sciences, inc.	37,900	10,945,419
Commercial Services — 0.3%		10,743,417
AMERCO	600	213,588
ManpowerGroup, Inc.	1,800	131,994
Quanta Services, Inc.	4,200	222,012
Robert Half International, Inc.	3,200	169,408
United Rentals, Inc. (a)	2,100	366,450
E 1 440/		1,103,452
Foods — 2.4% Conagra Brands, Inc.	57,051	2,037,291
Ingredion, Inc.	2,100	158,928
The J.M. Smucker Co.	3,200	369,664
Kellogg Co.	9,900	639,441
The Kraft Heinz Co.	33,900	1,015,305
The Kroger Co.	12,100	410,311
Tyson Foods, Inc. Class A	57,149	3,399,223
W. M. C. D. J. (1940)		8,030,163
Health Care – Products — 0.1%	4.200	252.754
Henry Schein, Inc. (a)  Health Care – Services — 4.2%	4,300	252,754
Anthem, Inc.	19,796	5,317,008
DaVita, Inc. (a)	4,100	351,165
HCA Healthcare, Inc.	9,800	1,221,864
Humana, Inc.	2,100	869,169
Laboratory Corp. of America Holdings (a)	2,800	527,156
Molina Healthcare, Inc. (a)	1,600	292,864
Quest Diagnostics, Inc. UnitedHealth Group, Inc.	3,900	446,511 4,650,049
Officulticatul Group, inc.	14,915	4,030,049
	Number of	
	Shares	Value
Universal Health Services, Inc. Class B	800	\$ 85,616
H l. 11 D l . 4. 0 W 100/		13,761,402
Household Products & Wares — 1.0% Avery Dennison Corp.	2,200	281,248
Kimberly-Clark Corp.	21,240	3,136,298
Kimberry-Clark Corp.	21,240	3,417,546
Pharmaceuticals — 9.7%		3,117,310
AbbVie, Inc.	27,644	2,421,338
AmerisourceBergen Corp.	5,900	571,828
Becton Dickinson and Co.	12,726	2,961,086
Cardinal Health, Inc.	8,600	403,770
Cigna Corp. CVS Health Corp.	10,000 50,942	1,694,100 2,975,013
Jazz Pharmaceuticals PLC (a)	1,700	242,403
Johnson & Johnson	54,865	8,168,301
McKesson Corp.	5,300	789,329
Merck & Co., Inc.	73,600	6,105,120
Perrigo Co. PLC	4,000	183,640
Pfizer, Inc.	149,839	5,499,091
		32,015,019
		76,658,284

Energy — 3.6%		
Oil & Gas — 2.7% Chevron Corp.	53,900	3,880,800
Occidental Petroleum Corp.	18,677	186,957
TOTAL SE (b)	120,632	4,141,662
TOTAL SE Sponsored ADR	24,800	850,640
TOTAL SE SPOISORE ADK	24,000	9,060,059
Oil & Gas Services — 0.3%		9,000,039
Halliburton Co.	74,891	902,437
Pipelines — 0.6%	74,071	702,137
Cheniere Energy, Inc. (a)	3,900	180,453
TC Energy Corp.	36,497	1,533,604
The Williams Cos., Inc.	19,000	373,350
	′ —	2,087,407
		12,049,903
Financial — 21.8%		
Banks — 11.2%		
Bank of America Corp.	256,400	6,176,676
The Bank of New York Mellon Corp.	26,500	910,010
Commerce Bancshares, Inc.	3,300	185,757
Cullen/Frost Bankers, Inc.	1,700	108,715
East West Bancorp, Inc.	3,800	124,412
Fifth Third Bancorp	152,058	3,241,876
The Goldman Sachs Group, Inc.	10,200	2,049,894
JP Morgan Chase & Co.	90,400	8,702,808

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

MassMutual Select Diversified Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Morgan Stanley	120,812	\$ 5,841,260
Northern Trust Corp.	6,200	483,414
The PNC Financial Services Group, Inc.	20,700	2,275,137
Signature Bank	1,500	124,485
State Street Corp.	42,484	2,520,576
SVB Financial Group (a)	1,600	384,992
Wells Fargo & Co.	165,631	3,893,985
Diversified Financial Services 2 00/		37,023,997
Diversified Financial Services — 3.0% Ally Financial, Inc.	5,800	145,406
American Express Co.	23,700	2,375,925
Ameriprise Financial, Inc.	4,100	631,851
BlackRock, Inc.	4,500	2,535,975
Capital One Financial Corp.	13,500	970,110
The Charles Schwab Corp.	30,600	1,108,638
Credit Acceptance Corp. (a) (b)	600	203,184
Eaton Vance Corp.	3,200	122,080
LPL Financial Holdings, Inc.	2,300	176,341
Raymond James Financial, Inc.	4,100	298,316
SEI Investments Co.	4,200	213,024
T. Rowe Price Group, Inc.	6,700	859,074
The Western Union Co.	11,700	250,731
Insurance — 6.3%		9,890,655
Aflac, Inc.	21,200	770,620
The Allstate Corp.	9,400	884,916
American International Group, Inc.	95,550	2,630,492
Arch Capital Group Ltd. (a)	11,900	348,075
Assurant, Inc.	1,800	218,358
Chubb Ltd.	45,210	5,249,785
Equitable Holdings, Inc.	13,500	246,240
Everest Re Group Ltd.	1,100	217,294
First American Financial Corp.	3,100	157,821
Globe Life, Inc.	6,700	535,330
Kemper Corp.	700	46,781
Loews Corp.	8,800	305,800
Markel Corp. (a)	430	418,691
MetLife, Inc. Old Republic International Corp.	101,485 6,200	3,772,197 91,388
Primerica, Inc.	1,100	124,454
Principal Financial Group, Inc.	4,100	165,107
The Progressive Corp.	16,200	1,533,654
Prudential Financial, Inc.	11,600	736,832
The Travelers Cos., Inc.	15,300	1,655,307
Voya Financial, Inc.	4,500	215,685
W.R. Berkley Corp.	4,700	287,405
		20,612,232
	Number of	
	Shares	Value
Real Estate — 0.1%		
CBRE Group, Inc. Class A (a)	9,900	\$ 465,003
Real Estate Investment Trusts (REITS) — 1.2%		
Equity Residential	22,966	1,178,845
SL Green Realty Corp. (b)	24,921	1,155,587
Weyerhaeuser Co.	52,906	1,508,879
		3,843,311
Industrial — 13.7%		71,835,198
Aerospace & Defense — 3.3%		
The Boeing Co.	12,973	2,143,918
General Dynamics Corp.	8,400	1,162,812
L3 Harris Technologies, Inc.	16,329	2,773,317
Lockheed Martin Corp.	8,200	3,142,896
Northrop Grumman Corp.	4,900	1,545,901
•	•	10,768,844
Building Materials — 0.9%	4.000	246,000
Fortune Brands Home & Security, Inc. Johnson Controls International PLC	4,000 45,283	346,080
Masco Corp.	45,283 8,200	1,849,811 452,066
•	6,200	
https://magamutual.progpostus.gyprogg.com/print.com?doctypo-onn?diantid-magamutpro?fundid-E7620CE20		160/40

Owens Corning	3,200	220,192 2,868,149
Electrical Components & Equipment — 0.3%		2,000,149
Emerson Electric Co.	17,000	1,114,690
Electronics — 1.2%	17,000	1,111,000
Arrow Electronics, Inc. (a)	2,300	180,918
Honeywell International, Inc.	19,000	3,127,590
Hubbell, Inc.	1,600	218,944
Jabil, Inc.	4,100	140,466
Sensata Technologies Holding PLC (a)	4,600	198,444
		3,866,362
Environmental Controls — 0.1%		
Pentair PLC	4,600	210,542
Hand & Machine Tools — 0.1%		
Lincoln Electric Holdings, Inc.	1,600	147,264
Snap-on, Inc.	1,600	235,408
		382,672
Machinery – Construction & Mining — 0.8%		
BWX Technologies, Inc.	1,500	84,465
Caterpillar, Inc.	15,900	2,371,485
Oshkosh Corp.	2,100	154,350
		2,610,300
Machinery – Diversified — 0.8%		
AGCO Corp.	2,200	163,394
Deere & Co.	9,100	2,016,833
Dover Corp.	4,100	444,194

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

MassMutual Select Diversified Value Fund — Portfolio of Investments (Continued)

	mber of Shares	Value
The Middleby Corp. (a)	900	\$ 80,739
Miscellaneous - Manufacturing — 2.4%		2,705,160
3M Co.	15,495	2,481,989
Carlisle Cos., Inc.	1,600	195,792
Eaton Corp. PLC General Electric Co.	11,900	1,214,157
ITT, Inc.	503,768 2,300	3,138,475 135,815
Parker-Hannifin Corp.	3,700	748,658
Textron, Inc.	3,600	129,924
,·	-,	8,044,810
Packaging & Containers — 0.4%		
Amcor PLC	24,500	270,725
Crown Holdings, Inc. (a)	4,000	307,440
Packaging Corp. of America	2,700	294,435
Sealed Air Corp.	4,300	166,883
Sonoco Products Co.	2,300	117,461 1,156,944
Transportation — 3.4%		1,130,944
CSX Corp.	22,400	1,739,808
Knight-Swift Transportation Holdings, Inc.	5,100	207,570
Norfolk Southern Corp.	6,950	1,487,230
United Parcel Service, Inc. Class B	47,671	7,943,419
		11,378,027
		45,106,500
Technology — 11.3%		
Computers — 1.6% Cognizant Technology Solutions Corp. Class A	15,000	1,041,300
HP, Inc.	39,700	753,903
International Business Machines Corp.	25,600	3,114,752
Leidos Holdings, Inc.	2,200	196,130
NetApp, Inc.	6,300	276,192
		5,382,277
Semiconductors — 6.6%		
Applied Materials, Inc.	23,000	1,367,350
Broadcom, Inc.	11,500	4,189,680
Intel Corp. KLA Corp.	125,000 2,400	6,472,500 464,976
Lam Research Corp.	3,400	1,127,950
Micron Technology, Inc. (a)	31,600	1,483,936
ON Semiconductor Corp. (a)	12,000	260,280
Qorvo, Inc. (a)	3,200	412,832
QUALCOMM, Inc.	48,693	5,730,192
Teradyne, Inc.	2,600	206,596
		21,716,292
	mber of	
	Shares	Value
Software — 3.1% CDK Global, Inc.	3,400	\$ 148,206
Electronic Arts, Inc. (a)	8,500	1,108,485
Microsoft Corp.	17,729	3,728,941
Oracle Corp.	90,100	5,378,970
	•	10,364,602
		37,463,171
Utilities — 4.0%		
Electric — 3.5%	10.200	221 412
AES Corp.	18,300	331,413
American Electric Power Co., Inc. Edison International	16,600 21,689	1,356,718 1,102,669
Evergy, Inc.	6,500	330,330
Exelon Corp.	15,200	543,552
NRG Energy, Inc.	7,300	224,402
OGE Energy Corp.	5,700	170,943
Pinnacle West Capital Corp.	5,000	372,750
Public Service Enterprise Group, Inc.	22,100	1,213,511
Sempra Energy The Southern Co.	9,184 83,475	1,087,018
Vistra Corp.	13,900	4,526,015 262,154
Tibua Corp.	13,700	202,134

Gas — 0.5% NiSource, Inc.	77,496	11,521,475 1,704,912 13,226,387
TOTAL COMMON STOCK (Cost \$320,766,127)		317,555,181
PREFERRED STOCK — 1.1% Consumer, Non-cyclical — 0.1% Pharmaceuticals — 0.1% Becton Dickinson and Co. Convertible 6.000% (b) Utilities — 1.0% Electric — 1.0% Sempra Energy Convertible 6.000% Sempra Energy Convertible 6.750% The Southern Co. Convertible 6.750%	9,601 22,837 2,159 15,036	2,248,303 211,604 699,775 3,159,682
TOTAL PREFERRED STOCK (Cost \$3,744,429)		3,665,174
TOTAL EQUITIES (Cost \$324,510,556)		321,220,355

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

MassMutual Select Diversified Value Fund — Portfolio of Investments (Continued)

	ľ	Number of Shares		Value
WARRANTS — 0.0%		Shares		vanue
Energy — 0.0%				
Oil & Gas — 0.0%			_	
Occidental Petroleum Corp., Expires 8/3/27 (a)		4,284	\$	12,852
TOTAL WARRANTS (Cost \$21,205)				12,852
MUTUAL FUNDS — 3.1%				
Diversified Financial Services — 3.1%				
iShares Russell 1000 Value ETF		44,300		5,233,159
State Street Navigator Securities Lending Prime Portfolio (c)		4,857,734		4,857,734
				10,090,893
TOTAL MUTUAL FUNDS (Cost \$10,184,379)				10,090,893
TOTAL LONG-TERM INVESTMENTS (Cost \$334,716,140)				331,324,100
SHORT-TERM INVESTMENTS — 0.7%				
Mutual Fund — 0.0%				
T. Rowe Price Government Reserve Investment Fund		104		104
		Principal		
		Amount		
Repurchase Agreement — 0.7%	Φ.	2 400 400		2 400 400
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (d)	\$	2,408,400		2,408,400
TOTAL SHORT-TERM INVESTMENTS (Cost \$2,408,504)				2,408,504
TOTAL INVESTMENTS — 101.1% (Cost \$337,124,644) (e)				333,732,604
Other Assets/(Liabilities) — (1.1)%				(3,781,788)
NET ASSETS — 100.0%			\$	329,950,816

#### **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, 2020, was \$6,022,825 or 1.83% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$1,410,411 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 \$2,408,400. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$2,456,642.
- (e) See Note 6 for aggregate cost for federal tax purposes.

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

MassMutual Select Fundamental Value Fund — Portfolio of Investments

**September 30, 2020** 

Colomos Tolomos — 1896           Base Materia — 1897         1 5 5 08         2 6 08 02 02 02 02 02 02 02 02 02 02 02 02 02		Number of Shares	Value
Biole         Clambale         Secue of Sec	EQUITIES — 98.9%		_
### Profusion & Potemists Fore			
Dalboat A Semours, Inc. (a)         153,86 (8,00.22)           Element Solvino, Inc. (a)         183,76 (46.49)           Element Solvino, Inc. (a)         183,60 (16.49)           Linde PLC         173,7 (20.50)           PPG I Gubatrics, Inc.         190,80 (20.50)           Barrick Gold Corp.         90,839 (20.80)           Kimms Gold Corp. (a)         134,60 (20.80)           Nevenout Corp.         28,279 (19.40)           Nevenout Corp.         28,279 (19.40)           Naman Gold, Inc.         373,52 (20.50)           Agaman Gold, Inc.         29,00 (20.50)           Tamber Corp.         20,00 (20.50)           Reconstruction.         2,00 (20.50)           Reconstruction.         1,00 (20.50)           Reconstruction.         1,00 (20.50)           Reconstruction.         1,00 (20.50)           Reconstruction.         1,00 (20.50)			
Belene Subinos, Inc. (a)         178,376         134,872,27           MCC Cope         15,60         1,40,873           Link PLC         17,737         42,271,27           PMC Industric, Inc.         10,00         1,235,98           Burnek Gold Corp.         9,03,99         2,008,53           Kinnso Gold Corp. (a)         32,00         1,784,90           Kowmont Corp.         22,00         1,784,100           Kowmont Corp.         22,00         7,811,82           Kowmont Corp.         22,00         7,811,82           Communications – 5,79         22,00         4,840,97           Relaced Link So (a)         2,06         4,340,97           Relaced Link Class A (a)         2,06         4,540,97           Alleced Link So (a)         2,06         4,930,97           Allece Link So (a)         3,05         5,932,22           Allece Link So (a)         2,09         7,932,22           Allece Link Link So (a)         2,09         7,932,22           Allece Link Link So (a)         2,09		,	
FMC corp.         15,66   15,48   11,245   12,245			
Post Distances, Inc.         12,000,000           Mining 1.5%         12,000,000           Braince Gold Corp.         30,300         2,700,000           Kernost Gold Corp.         30,300         2,700,000           Kernost Gold Corp.         31,400         1,187,200           Verment Corp.         28,200         2,121,200           Kernomications - 57%         2,121,200         2,121,200           Literact - 11%         2,100         2,132,200           Alphace Line Class A (a)         6,000         4,346,970           Speciosch, Inc. Class A (a)         6,000         4,346,970           Albred Line Class A (a)         6,000         1,705,470           Albred Line Class A (a)         1,705,470         1,705,470			
Mining — 1.5%         Earnick Gold Corp.         63.03         2,700,651           Kirnos Gold Corp.         134,00         135,20           Newmot Corp.         28,27         1,703,20           Variants Gold, Inc.         28,27         1,703,20           Variants Gold, Inc.         7,811,82         7,811,82           Variants Gold, Inc.         2,900         4,346,90           Internet — 11%         2,900         1,705,40           Internet — 15%         1,105,40         1,805,70           Role (15%), Inc. (188 A (a))         6,805,90         1,705,40           Consumitaction — 15%         1,105,40         1,805,40           Consume Cop., Class A         1,109,40         1,205,40           Class Cop.         3,100         2,206,40           Class Cop.         3,100         2,206,40           Paperd — 2,3%         3,100         3,200           Cumainstations, Inc.         3,100         3,200           Cumainstation — 1,2%         4			
Miner L-Née         66,359         2,708,858           Eimeis Gold Corp. (a)         134,604         1,187,207           Yaman Gold, Inc.         373,52         2,121,602           Yaman Gold, Inc.         2,007         4,314,903           Alphact, Inc. Class A (a)         6,005         5,575,208           Agelea, I.S.         3,502,508         6,105,508           Alcica LSA, Inc. Class A (a)         6,509,508         1,705,470           Alcica LSA, Inc. Class A (a)         6,509,508         1,705,470           Alcica LSA, Inc. Class A (a)         1,509,508         1,705,470           Alcica LSA, Inc. Class A (a)         1,509,508         1,705,470           Alice LSA, Inc. Class A (a)         1,509,508         1,705,470           Alcic LSA, Inc. Class A (a)<	PPG Industries, Inc.	10,206	
Barnic Gold Corp.         GASIGNS         2,708,750           Kimros Gold, 10         13,403         2,10,303           Newmon Corp.         28,207         1,781,403           Janana Gold, Le.         23,203         2,120,403           Vannau Colling, 10         2,120,403         2,120,403           Communications - 5,76         3,120,403         2,120,403           Life USA, Inc. Class A(s)         2,206         4,345,703           Pacebook, Inc. Class A(s)         1,575,238         2,120,403           Ballice USA, Inc. Class A(s)         1,575,238         3,120,403           Claice USA, Inc. (s)         1,575,238         3,120,403           Claice USA, Inc.	Mining — 1.5%	-	20,079,914
Newmott Copp.         2827 (17,042)           Yamana Gold, Inc.         373,532 (12) (20)           Yamana Gold, Inc.         373,532 (20)         (21) (20)           Communications – 5.7%         Tenter et — 1%         373,532 (20)         (20)         43,753,253         (20)         43,753,253         (20)         43,753,253         (20)         43,753,253         (20)         43,753,253         (20)         43,753,253         (20)         43,753,253         (20)         (20)         43,753,253         (20)	Barrick Gold Corp.	,	
Famma Gold, Inc.         373,532         2,12,16,26           Communications – 5,7%         Interest — 1,1%         2,78,91,73           Interest — 1,1%         3,200         4,45,46,79           Alphabel, Inc. Class A (a)         2,96         4,34,69,79           Alphabel, Inc. Class A (a)         6,595         1,705,470           Medic USA, Inc. Class A (a)         6,595         1,705,470           Concast Corp. Class A         6,595         1,705,470           Concast Corp. Class A         6,291         1,705,470           Class Ossystems, Inc.         19,372         6,277,663           Telecommunications, Inc.         19,372         6,277,663           Verzon Communications, Inc.         19,312         6,277,663           Telecommunications, Inc.         1,19,412         1,243,413           Telecommunications, Inc.         1,243,413         1,243,413           Telecommunications, Inc.         1,243,413         1,243,413           Telegostry,			
Communications – 5.7%         7.81.823           Internet — 1.1%         2.966         4.346,752           Alphabet, Inc. Class A (a)         2.966         4.346,753.28           Encebook, Inc. Class A (a)         6.5595         1.705,202.28           Media — 1.5%         6.5595         1.705,202.28           Media — 1.5%         6.5595         1.705,403.20           Alice USA, Inc. Class A (a)         6.599         1.705,803.20           Telecommunications — 3.1%         6.919         1.785,803.20           Telecommunications — 3.1%         6.919         1.785,803.20           Telecommunications inc.         6.919         7.885,803.20           Telecommunications inc.         6.919         7.982,120           Verbrow Communications inc.         6.919         4.331,30         4.794,10           Verbrow Communications inc.         1.112         2.345,40         4.331,30         4.794,10           Cross week of Science — 1.2%         1.184,12         4.244,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10         4.705,10 </td <td>•</td> <td></td> <td></td>	•		
Internet 1.5%         2.6%         4.346,90           Alphae, Inc. Class A (a)         6.05         1.575,236           Receboak, Inc. Class A (a)         6.05         1.575,236           Media - 1.5%         1.505,200         1.505,200           Media - 1.5%         1.505,200         1.505,200           Concast Cop, Class A         1.505,200         1.505,200           Telecommunications - 3.1%         2.509,200         1.505,200           Telecommunications - 1.5%         1.503,200         2.776,600           Telecommunications - 1.5%         1.503,200         2.778,500           Telecommunications - 1.5%         1.503,200         2.799,400           Telecommunications - 1.5%         1.503,200         2.503,200		_	
Mighibaber Inc. Class A (a)		-	27,891,737
Alphace Ir. Clasa A (a)         2.96         4.48,09           Ricebook, Ir. Clasa A (a)         1.57,32,32         <			
Media — 1.5%         5,022,028           Altice USA, Inc. Class A (a)         6.50,55         1,70,5,470           Comeast Cop. Class A         133,50         6.180,150           Telecommunications — 3.1%         133,50         1,70,856,20           TElecommunications — 1.5%         159,372         6.270,885,20           Cisco Systems, Inc.         159,372         6.270,40           Cisco Systems, Inc.         133,154         3,791,491           Verince Communications, Inc.         1,152         2,230,40           Verince Communications, Inc.         9,000,100         2,290,40,10           Consumer, Cyclical — 11,296         2,290,40,10         2,290,40,10           Tapperd — 0.3%         1,481,478         2,200,40,10           Consumer, Cyclical — 11,296         9,007         1,481,478           Auto Sunnificaturers — 0.5%         9,007         1,481,478           Comminis, Inc.         11,112         2,336,401           Cheminis, Inc.         11,121         2,346,401           Ear Corp.         7,67         83,652           Distribution & Wholesale — 0.2%         2,139,605           Ear Corp.         4,50,605         2,139,605           Marriott Acacions Worldwick Corp.         2,139,605		2,966	4,346,970
Media 1.5%         1.70,870           Altice USA, Inc. Class A (a)         6.58.01           Altice USA, Inc. Class A (a)         133,96         6.180.15           Telecommunications - 3.1%         6.29.9         1,798.28           ATEX, Inc.         6.29.9         4,271.68           Election Systems, Inc.         159.37         4,271.60           Fishbit US, Inc. (a)         33,154         3,791.49           Perizon Communications, Inc.         7,201.20         2,201.20           Consumer, Cyclical - 1.12%         2,201.20         2,201.20           Expared - 0.5%         3,154         1,481.78           Taylor D. S.         1,481.78         2,346.10           Auto Marcturers - 0.5%         7,671         83.622           Cors.         7,671         83.622           Distribution Wholesale - 0.2%         45,894         1,272.64           Extertament - 0.8%         2,302.20         2,304.60           Extertament - 0.8%         8         2,2074.64           Extertament - 0.8%         8         2,2074.62           Extertament - 0.8%         8         2,2074.62           Extertament - 0.8%         8         2,2074.62           Extertament - 0.8%         8         2,2074.62<	Facebook, Inc. Class A (a)	6,015	1,575,328
Alice USA, Inc. Class A (a)         65.591         170.5470           Comeast Copp. Class A (a)         133,596         16.108.15           Telecommunications – 3.1%         6.29.19         170.856.20           ATKT, Inc.         62.919         170.856.20           Cisco Systems, Inc.         150.372         62.776.63           Telebolic US, Inc. (a)         33.154         379.1491           Verzion Communications, Inc.         71,157         42.33.130           Consumer, Cyclical – 11.2%         1.60.96.105         2.99.0402           Tappard – 0.5%         94.957         1.484.178           Tappard – 0.5%         94.957         1.484.178           Cummins, Inc.         11,112         2.346.010           Cummins, Inc.         7,671         836.522           Distribution & Wholesale – 0.2%         1,612         2.346.01           Ear Corp.         45.894         1,272.64           Ener Corp.         2,556         2,139.66           Murriot Vacations Worldwide Corp.         25.562         2,139.66           Ear Corp.         80.91         2,074.24           Englisher         80.91         2,074.24           Food Services – 0.4%         80.91         2,159.25           L	Media 150/	-	5,922,298
Communications — 3.1%         133,598         6,180,151           Telecommunications — 3.1%         6,29,19         1,793,825           LATET, Inc.         6,29,19         1,793,821           Cisco Systems, Inc.         159,372         6,277,633           T-Mobile US, Inc. (a)         33,154         37,91,491           Vertizon Communications, Inc.         11,152         4,233,130           Vertizon Communications, Inc.         7,148,178         4,233,130           Vertizon Communications, Inc.         94,957         1,484,178           Consumer, Cyclical — 11,2%         94,957         1,484,178           Tapes Inc.         94,957         1,484,178           Auto Manufacturers — 0.5%         11,112         2,346,614           Cummins, Inc.         94,957         1,484,178           Auto Parts & Equipment — 0.2%         7,671         85,522           Lear Corp.         7,671         85,522           Use Corp. (a)         45,894         1,272,641           Entertainment         1,895         2,234,642           Entertainment         8         2,234,642           Entertainment, Inc. (a)         80,193         6,084,742           Entertainment, Inc. (a)         80,193         6,084,743 <td></td> <td>65,595</td> <td>1.705.470</td>		65,595	1.705.470
Person munications   18   1932   1793   1793   1787   1765   1893   1793   1787   1765   1893   18			
ATA T. In.         62,91         1,78,821           Cisco Systems, In.         159,32         6,271,663           T-Mobile US, Inc. (a)         33,154         3,79,491           Verizon Communications, Inc.         71,157         4,233,130           Consumer, Cyclical—11.2%         2,904,020           Appared — 0.3%         34,817           Tapestry, Inc.         94,957         1,484,178           Auto Manufacturers — 0.5%         11,112         2,346,401           Cummins, Inc.         11,112         2,346,401           Auto Parts & Equipment — 0.2%         7,671         8,652,201           Lear Corp.         7,671         8,652,201           Lear Corp.         2,505,201         2,102,201           Eave You Lear Corp.         2,102,201         2,102,201           Sea World Entertainment, Inc. (a)         8,16,60         2,159,201           Food Services — 0.4%         3,15,500         4,2		-	7,885,621
Gise Systems, Inc.         159,372         6277,663         37,164         37,104         18,701,601         37,104         42,33,130         16,006,105		62 919	1 793 821
Probatic US, Inc. (a)   33, 154   4, 291, 319, 100, 100, 100, 100, 100, 100, 100, 1	· · · · · · · · · · · · · · · · · · ·		
Consumer, Cyclical — 11.2%   29.04.02%		,	3,791,491
Consumer, Cyclical — 11.2%         29,904,024           Apparel — 0.3%         1,484,178           Tapestry, Inc.         94,957         1,484,178           Auto Manufacturers — 0.5%         11,112         2,346,401           Cummins, Inc.         11,112         2,346,401           Auto Parts & Equipment — 0.2%         7,671         836,522           LEQ Cop. (a)         45,894         1,272,641           Expectationment — 0.8%         105,194         2,207,426           Entertainment — 0.8%         105,194         2,207,426           Example — 0.4%         105,194         2,207,426           SeaWorld Entertainment, Inc. (a)         105,194         2,159,272           Ename Cop. Class A         81,636         2,159,272           Home Furnishing — 0.5%         14,758         2,713,849           Leisure Time — 0.5%         48,891         1,199,785           Milripool Corp.         48,891         1,199,785           Leisure Time — 0.2%         48,981         1,199,785           Leisure Time — 0.2	Verizon Communications, Inc.	71,157	
Consumer, Cyclical — 11.2%		-	
Resident   Section   Sec		-	25,501,021
Auto Manufacturers – 0.5%         1,112         2,346,410           Cummins, Inc.         7,671         3836,522           Lear Corp.         7,671         836,522           Distribution & Wholesale – 0.2%         45,894         1,272,641           LKQ Corp. (a)         45,894         1,272,641           Entertainment – 0.8%         Number of Shares         Value           SeaWorld Entertainment, Inc. (a)         105,194         2,074,426           SeaWorld Entertainment, Inc. (a)         105,194         2,074,426           Food Services – 0.4%         81,65         2,159,272           Armank         80,913         6,608,974           Home Builders – 1.3%         80,913         6,608,974           Lennar Corp. Class A         80,913         6,608,974           Home Furnishing – 0.5%         80,913         6,608,974           Whirlpool Corp.         14,758         2,713,849           Lodging – 1.5%         8,891         1,99,785           Lodging – 1.5%         8,991         3,155,802           Lodging – 1.5%         8,991         3,155,802           Lodging – 1.5%         2,602         2,095,091           Marriott International         96,326         2,095,091 <t< td=""><td></td><td>04.055</td><td>1 404 150</td></t<>		04.055	1 404 150
Cummins, Inc.         Auto Parts & Equipment — 0.2%         1,1,112         2,346,410           Lear Corp.         7,671         836,522           Distribution & Wholesale — 0.2%         45,894         1,272,641           LKQ Corp. (a)         23,562         2,139,665           Entertainment — 0.8%         2,139,665           Marriott Vacations Worldwide Corp.         105,194         4,214,091           SeaWorld Entertainment, Inc. (a)         105,194         4,214,091           Food Services — 0.4%         81,636         2,159,272           Aramark         81,636         2,159,272           Home Builders — 1.3%         80,913         6,608,974           Lennar Corp. Class A         80,913         6,608,974           Home Furnishing — 0.5%         80,913         6,608,974           Whirlpool Corp.         14,758         2,713,849           Leisure Time — 0.2%         80,913         1,997,858           Lodging — 1.5%         3,155,802           Lodging — 1.5%         3,155,802           Lodging — 1.5%         3,155,802           Lodging — 1.5%         3,155,802           Lodging — 1.5%         3,20,905,901           Lodging — 1.5%         3,20,905,901           Marriott Internati		94,957	1,484,178
Lear Corp.         7,671         836,522           Distribution & Wholesale — 0.2%         45,894         1,272,641           Extertainment — 0.8%         23,562         2,139,665           Marriott Vacations Worldwide Corp.         Number of Shares         Value           Sea World Entertainment, Inc. (a)         105,194         2,074,426           Sea World Entertainment, Inc. (a)         105,194         2,159,272           Food Services — 0.4%         81,636         2,159,272           Armank         80,913         6,608,974           Home Builders — 1.3%         80,913         6,608,974           Home Furnishing — 0.5%         80,913         6,608,974           Whirlpool Corp.         14,758         2,713,849           Leisur Time — 0.2%         14,758         2,713,849           Leisur Time — 0.2%         67,634         3,159,875           Lodging — 1.5%         5         2           Las Yegas Sands Corp.         67,634         3,159,816           Marriott International, Inc. Class A         96,326         2,095,091           May Gold Resorts International         96,326         2,095,091           Windlam Hotels & Resorts, Inc.         7,282,318           AutoZone, Inc. (a)         4,545         3		11,112	2,346,410
Number of Shares		·	
LKQ Corp. (a)		7,671	836,522
Entertainment — 0.8%         23,562         2,139,665           Marriott Vacations Worldwide Corp.         Number of Shares         Value           Sca World Entertainment, Inc. (a)         105,194         2,074,426           Food Services — 0.4%         4,214,091           Aramark         81,636         2,159,272           Home Builders — 1.3%         80,913         6,608,974           Lennar Corp. Class A         80,913         6,608,974           Home Furnishing — 0.5%         14,758         2,713,849           Whirlpool Corp.         14,758         2,713,849           Leisure Time — 0.2%         48,891         1,199,785           Lodging — 1.5%         48,891         1,199,785           Lodging — 1.5%         3,155,802           Las Vegas Sands Corp.         67,634         3,155,802           Marriott International, Inc. Class A         13,428         1,243,164           MGM Resorts International         96,326         2,095,091           Wyndham Hotels & Resorts, Inc.         7,828,318           Retail — 4.9%         40,498         4,545         5,352,374           Advance Auto Parts, Inc.         40,980         4,560,664         5,352,374           Best Buy Co., Inc.         40,980         4,560,6		45,894	1,272,641
SeaWorld Entertainment, Inc. (a)         Number of Shares         Value           Food Services — 0.4%         105,194         2,074,262           Aramark         81,636         2,159,272           Home Builders — 1.3%         80,913         6,608,974           Lennar Corp. Class A         80,913         6,608,974           Whirlpool Corp.         14,758         2,713,849           Leisure Time — 0.2%         48,891         1,199,785           Lodging — 1.5%         48,891         1,199,785           Lodging — 1.5%         67,634         3,155,802           Marriott International, Inc. Class A         13,428         1,243,164           MGM Resorts International         96,326         2,095,n04           Wyndham Hotels & Resorts, Inc.         26,421         1,334,261           Wyndham Hotels & Resorts, Inc.         12,518         1,921,513           Advance Auto Parts, Inc.         12,518         1,921,513           Advance Auto Parts, Inc.         4,545         5,352,374           Best Buy Co, Inc.         40,980         4,560,664	Entertainment — 0.8%	-	, , , , . ,
SeaWorld Entertainment, Inc. (a)         Shares         Value           Food Services — 0.4%         105,194         2,074,262           Aramark         81,636         2,159,272           Aramar Corp. Class A         80,913         6,608,974           Lennar Corp. Class A         80,913         6,608,974           Whirlpool Corp.         14,758         2,713,849           Leisure Time — 0.2%         48,891         1,199,785           Harley-Davidson, Inc.         48,891         1,199,785           Lough — 1.5%         3,155,802           Marriott International, Inc. Class A         13,428         1,243,164           MGM Resorts International         96,326         2,095,614           Wyndham Hotels & Resorts, Inc.         26,421         1,334,261           Wyndham Hotels & Resorts, Inc.         26,421         1,334,261           Advance Auto Parts, Inc.         12,518         1,921,513           Advance Auto Parts, Inc.         12,518         5,352,374           Best Buy Co., Inc. (a)         40,980         4,560,664	Marriott Vacations Worldwide Corp.	23,562	2,139,665
SeaWorld Entertainment, Inc. (a)         \$ 2,074,426           Food Services — 0.4%         4,214,091           Aramark         81,636         2,159,272           Home Builders — 1.3%         80,913         6,608,974           Lennar Corp. Class A         80,913         6,608,974           Home Furnishing — 0.5%         14,758         2,713,849           Leisure Time — 0.2%         48,891         1,199,785           Lodging — 1.5%         48,891         1,199,785           Lost Vegas Sands Corp.         67,634         3,155,802           Marriott International, Inc. Class A         13,428         1,243,164           MGM Resorts International         96,326         2,095,091           Wyndham Hotels & Resorts, Inc.         26,421         1,334,261           Retail — 4.9%         Advance Auto Parts, Inc.         12,518         1,921,513           AutoZone, Inc. (a)         4,545         5,352,374           Best Buy Co., Inc.         40,980         4,560,664		Number of	
Food Services — 0.4%           Aramark         81,636         2,159,272           Home Builders — 1.3%         80,913         6,608,974           Lennar Corp. Class A         80,913         6,608,974           Home Furnishing — 0.5%         14,758         2,713,849           Leisure Time — 0.2%         48,891         1,199,785           Harley-Davidson, Inc.         48,891         1,199,785           Lodging — 1.5%         67,634         3,155,802           Marriott International, Inc. Class A         13,428         1,243,164           MGM Resorts International         96,326         2,095,091           Wyndham Hotels & Resorts, Inc.         26,421         1,334,261           Retail — 4.9%         Advance Auto Parts, Inc.         12,518         1,921,513           Advance Auto Parts, Inc.         4,545         5,352,374           Best Buy Co., Inc.         40,980         4,560,664	_		
Food Services — 0.4%         81,636         2,159,272           Home Builders — 1.3%         80,913         6,608,974           Lennar Corp. Class A         80,913         6,608,974           Home Furnishing — 0.5%         14,758         2,713,849           Leisure Time — 0.2%         48,891         1,199,785           Lodging — 1.5%         48,891         1,199,785           Lodging — 1.5%         67,634         3,155,802           Marriott International, Inc. Class A         13,428         1,243,164           MGM Resorts International         96,326         2,095,091           Wyndham Hotels & Resorts, Inc.         26,421         1,334,261           Retail — 4.9%         7,828,318           Advance Auto Parts, Inc.         12,518         1,921,513           AutoZone, Inc. (a)         4,545         5,352,374           Best Buy Co., Inc.         40,980         4,560,664	SeaWorld Entertainment, Inc. (a)	105,194	
Aramark       81,636       2,159,272         Home Builders — 1.3%       80,913       6,608,974         Lennar Corp. Class A       80,913       6,608,974         Home Furnishing — 0.5%       14,758       2,713,849         Whirlpool Corp.       14,758       2,713,849         Leisure Time — 0.2%       48,891       1,199,785         Harley-Davidson, Inc.       48,891       1,199,785         Lodging — 1.5%       5       5         Las Vegas Sands Corp.       67,634       3,155,802         Marriott International, Inc. Class A       13,428       1,243,164         MGM Resorts International       96,326       2,095,091         Wyntham Hotels & Resorts, Inc.       26,421       1,334,261         Retail — 4.9%       7,828,318         Advance Auto Parts, Inc.       12,518       1,921,513         AutoZone, Inc. (a)       4,545       5,352,374         Best Buy Co., Inc.       40,980       4,560,664	Food Services — 0.4%	-	4,214,091
Lennar Corp. Class A       80,913       6,608,974         Home Furnishing—0.5%       14,758       2,713,849         Leisure Time—0.2%       48,891       1,199,785         Lodging—1.5%       1         Las Vegas Sands Corp.       67,634       3,155,802         Marriott International, Inc. Class A       13,428       1,243,164         MGM Resorts International       96,326       2,095,091         Wyndham Hotels & Resorts, Inc.       26,421       1,334,261         Retail—4.9%       Advance Auto Parts, Inc.       12,518       1,921,513         Advance Auto Parts, Inc.       4,545       5,352,374         Best Buy Co., Inc.       40,980       4,560,664	Aramark	81,636	2,159,272
Home Furnishing — 0.5%         Whirlpool Corp.       14,758       2,713,849         Leisure Time — 0.2%       Harley-Davidson, Inc.         Harley-Davidson, Inc.       48,891       1,199,785         Lodging — 1.5%       Las Vegas Sands Corp.       67,634       3,155,802         Marriott International, Inc. Class A       13,428       1,243,164         MGM Resorts International       96,326       2,095,091         Wyndham Hotels & Resorts, Inc.       26,421       1,334,261         Retail — 4.9%       Advance Auto Parts, Inc.       12,518       1,921,513         AutoZone, Inc. (a)       4,545       5,352,374         Best Buy Co., Inc.       40,980       4,560,664		00.012	6 600 054
Whirlpool Corp.       14,758       2,713,849         Leisure Time — 0.2%       Harley-Davidson, Inc.         Harley-Davidson, Inc.       48,891       1,199,785         Lodging — 1.5%       Las Vegas Sands Corp.       67,634       3,155,802         Marriott International, Inc. Class A       13,428       1,243,164         MGM Resorts International       96,326       2,095,091         Wyndham Hotels & Resorts, Inc.       26,421       1,334,261         Retail — 4.9%         Advance Auto Parts, Inc.       12,518       1,921,513         AutoZone, Inc. (a)       4,545       5,352,374         Best Buy Co., Inc.       40,980       4,560,664		80,913	6,608,974
Leisure Time — 0.2%         Harley-Davidson, Inc.       48,891       1,199,785         Lodging — 1.5%       Las Vegas Sands Corp.       67,634       3,155,802         Marriott International, Inc. Class A       13,428       1,243,164         MGM Resorts International       96,326       2,095,091         Wyndham Hotels & Resorts, Inc.       26,421       1,334,261         Retail — 4.9%         Advance Auto Parts, Inc.       12,518       1,921,513         AutoZone, Inc. (a)       4,545       5,352,374         Best Buy Co., Inc.       40,980       4,560,664	<u> </u>	14,758	2,713,849
Lodging — 1.5%         Las Vegas Sands Corp.       67,634       3,155,802         Marriott International, Inc. Class A       13,428       1,243,164         MGM Resorts International       96,326       2,095,091         Wyndham Hotels & Resorts, Inc.       26,421       1,334,261         Retail — 4.9%         Advance Auto Parts, Inc.       12,518       1,921,513         AutoZone, Inc. (a)       4,545       5,352,374         Best Buy Co., Inc.       40,980       4,560,664	Leisure Time — 0.2%	·	
Las Vegas Sands Corp.       67,634       3,155,802         Marriott International, Inc. Class A       13,428       1,243,164         MGM Resorts International       96,326       2,095,091         Wyndham Hotels & Resorts, Inc.       26,421       1,334,261         Retail — 4.9%         Advance Auto Parts, Inc.       12,518       1,921,513         AutoZone, Inc. (a)       4,545       5,352,374         Best Buy Co., Inc.       40,980       4,560,664		48,891	1,199,785
Marriott International, Inc. Class A       13,428       1,243,164         MGM Resorts International       96,326       2,095,091         Wyndham Hotels & Resorts, Inc.       26,421       1,334,261         Retail — 4.9%         Advance Auto Parts, Inc.       12,518       1,921,513         AutoZone, Inc. (a)       4,545       5,352,374         Best Buy Co., Inc.       40,980       4,560,664		67.634	3,155,802
Wyndham Hotels & Resorts, Inc.     26,421     1,334,261       7,828,318       Retail — 4.9%     7       Advance Auto Parts, Inc.     12,518     1,921,513       AutoZone, Inc. (a)     4,545     5,352,374       Best Buy Co., Inc.     40,980     4,560,664	Marriott International, Inc. Class A	13,428	1,243,164
Retail — 4.9%     7,828,318       Advance Auto Parts, Inc.     12,518     1,921,513       AutoZone, Inc. (a)     4,545     5,352,374       Best Buy Co., Inc.     40,980     4,560,664			
Retail — 4.9%         Advance Auto Parts, Inc.       12,518       1,921,513         AutoZone, Inc. (a)       4,545       5,352,374         Best Buy Co., Inc.       40,980       4,560,664	wynunam moters & resorts, mc.	20,421	
AutoZone, Inc. (a)       4,545       5,352,374         Best Buy Co., Inc.       40,980       4,560,664		-	
Best Buy Co., Inc. 40,980 4,560,664			
	https://massmutual.prospectus-express.com/print.asp?doctype=ann&clientid=massmutpre&fundid=57629S539	.0,200	167/49

Dollar General Corp.	3,502	734,089
Lowe's Cos., Inc.	59,294	9,834,503
The TJX Cos., Inc.	38,175	2,124,439
Williams-Sonoma, Inc.	12,256	1,108,432
	,	25,636,014
Textiles — 0.4%		
Mohawk Industries, Inc. (a)	20,746	2,024,602
	•	58,324,656
Consumer, Non-cyclical — 21.9%		
Beverages — 1.7%		
Coca-Cola European Partners PLC	186,072	7,221,455
Molson Coors Beverage Co. Class B	56,202	1,886,139
		9,107,594
Biotechnology — 1.1%		
Corteva, Inc.	194,188	5,594,556
Commercial Services — 1.3%		
Aaron's, Inc.	44,148	2,500,984
Quanta Services, Inc.	49,291	2,605,522
United Rentals, Inc. (a)	10,421	1,818,465
		6,924,971
Foods — 0.8%		
The Kroger Co.	115,507	3,916,842
Health Care – Products — 3.4%		
Avantor, Inc. (a)	92,313	2,076,119
Envista Holdings Corp. (a)	68,795	1,697,860
Hologic, Inc. (a)	19,219	1,277,487

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

MassMutual Select Fundamental Value Fund — Portfolio of Investments (Continued)

N	umber of Shares	Value
LivaNova PLC (a)	18,770	\$ 848,592
Medtronic PLC	98,965	10,284,443
Zimmer Biomet Holdings, Inc.	10,183	1,386,314
Health Care – Services — 3.4%		17,570,815
Anthem, Inc.	25,960	6,972,596
Humana, Inc.	3,769	1,559,952
UnitedHealth Group, Inc.	30,226	9,423,560
	30,220	17,956,108
Household Products & Wares — 0.5% Kimberly-Clark Corp.	17,526	2,587,889
Pharmaceuticals — 9.7%	17,520	2,307,007
AmerisourceBergen Corp.	31,915	3,093,202
Cigna Corp.	54,527	9,237,419
CVS Health Corp.	99,134	5,789,426
GlaxoSmithKline PLC Sponsored ADR	55,613	2,093,273
Johnson & Johnson	92,123	13,715,272
McKesson Corp.	21,154	3,150,465
Merck & Co., Inc.	35,945	2,981,638
Novartis AG Sponsored ADR	52,541	4,568,965
Pfizer, Inc.	168,451	6,182,152
		50,811,812
Energy — 4.1%		114,470,587
Oil & Gas — 3.9%		
Chevron Corp.	17,811	1,282,392
ConocoPhillips	105,052	3,449,907
Hess Corp.	94,517	3,868,581
Marathon Petroleum Corp.	92,832	2,723,691
Parsley Energy, Inc. Class A	121,408	1,136,379
Phillips 66	81,973	4,249,480
Valero Energy Corp.	83,659	3,624,108 20,334,538
Oil & Gas Services — $0.2\%$ Schlumberger NV	72,148	1,122,623
	. , -	21,457,161
Financial — 24.2% Banks — 9.9%		
Bank of America Corp.	268,658	6,471,971
The Bank of New York Mellon Corp.	36,673	1,259,351
Citigroup, Inc.	87,056	3,752,984
Fifth Third Bancorp	69,092	1,473,042
The Goldman Sachs Group, Inc.	10,220	2,053,913
Huntington Bancshares, Inc.	227,266	2,084,029
JP Morgan Chase & Co.	163,148	15,706,258
Northern Trust Corp.	51,538	4,018,418
	umber of	¥7.3
	Shares 104,689	<b>Value</b> \$ 3,983,417
Truist Financial Corp.		. , ,
US Bancorp Wells Fargo & Co.	160,815 223,310	5,765,218
wells Fargo & Co.	223,310	5,250,018 51,818,619
Diversified Financial Services — 2.0%		
American Express Co.	56,883	5,702,521
The Charles Schwab Corp.	61,585	2,231,225
Navient Corp.	84,585	714,743
SLM Corp.	174,538	1,412,012 10,060,501
Insurance — 9.4%		10,000,301
Aflac, Inc.	49,613	1,803,433
American International Group, Inc.	191,718	5,277,997
Aon PLC Class A	16,902	3,486,883
Assurant, Inc.	16,144	1,958,429
Axis Capital Holdings Ltd.	15,322	674,781
Berkshire Hathaway, Inc. Class B (a)	49,965	10,639,547
Chubb Ltd.	86,427	10,035,903
Everest Re Group Ltd.	12,997 52,656	2,567,427
Fidelity National Financial, Inc.	52,656	1,648,659

Marsh & McLennan Cos., Inc.	18,775	2,153,492
The Progressive Corp.	51,418	4,867,742
RenaissanceRe Holdings Ltd.	7,193	1,220,940
Willis Towers Watson PLC		
willis Towers watson FLC	13,886	2,899,674
D. LEAT. L. A. A. (DEITE) 2.28/		49,234,907
Real Estate Investment Trusts (REITS) — 2.3%	C4 100	2 241 704
American Campus Communities, Inc.	64,198	2,241,794
Corporate Office Properties Trust	27,763	658,538
Healthpeak Properties, Inc.	116,158	3,153,690
MGM Growth Properties LLC Class A	141,177	3,950,133
VICI Properties, Inc.	89,889	2,100,706
	<u> </u>	12,104,861
Savings & Loans — 0.6%		
New York Community Bancorp, Inc.	379,942	3,142,120
		126,361,008
Industrial — 13.4%		
Aerospace & Defense — 2.4%		
General Dynamics Corp.	35,295	4,885,887
Howmet Aerospace, Inc.	72,537	1,212,819
Northrop Grumman Corp.	4,642	1,464,504
Raytheon Technologies Corp.	89,798	5,166,977
		12,730,187
Building Materials — 1.4%		12,750,107
CRH PLC Sponsored ADR	41,436	1,495,425
Owens Corning	80,762	5,557,233
		7,052,658
		,,052,050

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

MassMutual Select Fundamental Value Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Electrical Components & Equipment — 0.6%	11 214	f 1.124.612
AMETEK, Inc. Emerson Electric Co.	11,314 33,341	\$ 1,124,612 2,186,169
Eliterson Electric Co.	33,341	3,310,781
Engineering & Construction — 0.8%		
AECOM (a)	49,455	2,069,197
Jacobs Engineering Group, Inc.	21,055	1,953,273 4,022,470
Hand & Machine Tools — 1.3%		1,022,170
Stanley Black & Decker, Inc.	42,295	6,860,249
Machinery – Construction & Mining — 1.0%	21.776	1 700 207
BWX Technologies, Inc. Caterpillar, Inc.	31,776 23,060	1,789,307 3,439,399
Cate/pinar, inc.	23,000	5,228,706
Machinery – Diversified — 3.7%		
Deere & Co.	51,093	11,323,741
Dover Corp. Otis Worldwide Corp.	22,048 22,380	2,388,680 1,396,960
Westinghouse Air Brake Technologies Corp.	68,867	4,261,490
		19,370,871
Miscellaneous - Manufacturing — 0.9%	40.200	4 027 020
Eaton Corp. PLC Shipbuilding — 0.2%	48,388	4,937,028
Huntington Ingalls Industries, Inc.	6,550	921,913
Transportation — 1.1%	*,***	
J.B. Hunt Transport Services, Inc.	15,736	1,988,716
Kansas City Southern	7,873	1,423,674
Union Pacific Corp.	11,068	2,178,957 5,591,347
		70,026,210
Technology — 8.9%		
Computers — 0.9%	60.102	4.000.004
Cognizant Technology Solutions Corp. Class A Semiconductors — 5.7%	69,183	4,802,684
Applied Materials, Inc.	53,471	3,178,851
Broadcom, Inc.	8,191	2,984,145
KLA Corp.	11,823 11,893	2,290,588
Lam Research Corp.  Marvell Technology Group Ltd.	55,377	3,945,503 2,198,467
Microchip Technology, Inc.	22,969	2,360,294
Micron Technology, Inc. (a)	70,147	3,294,103
NXP Semiconductor NV ON Semiconductor Corp. (a)	24,704 18,315	3,083,306 397,252
Qorvo, Inc. (a)	14,097	1,818,654
QUALCOMM, Inc.	18,013	2,119,770
	N	
	Number of Shares	Value
Texas Instruments, Inc.	16,045	\$ 2,291,066
		29,961,999
Software — 2.3% Microsoft Corp.	7,898	1,661,186
Oracle Corp.	135,060	8,063,082
SS&C Technologies Holdings, Inc	36,988	2,238,514
		11,962,782
T(224 - 4.00/		46,727,465
Utilities — 4.2% Electric — 4.2%		
CenterPoint Energy, Inc.	264,402	5,116,179
Edison International	79,907	4,062,472
Entergy Corp.	39,383 150,001	3,880,407 5,364,036
Exelon Corp. FirstEnergy Corp.	47,326	5,364,036 1,358,729
Vistra Corp.	101,995	1,923,626
		21,705,449
TOTAL COMMON STOCK (Cost \$507.754.035)		£17 070 307
TOTAL COMMON STOCK (Cost \$507,754,035)		516,868,297
TOTAL EQUITIES (Cost \$507,754,035)		516,868,297
https://magamutual.progpostus.gyprogg.gom/print.gop?doct/po=opp?diontid=magamutpro?fundid=57620C520		171//

TOTAL LONG-TERM INVESTMENTS (Cost \$507,754,035)  SHORT-TERM INVESTMENTS — 1.3%	Principal Amount	516,868,297
Repurchase Agreement — 1.3%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (b)	\$ 6,495,304	6,495,304
TOTAL SHORT-TERM INVESTMENTS (Cost \$6,495,304)	_	6,495,304
TOTAL INVESTMENTS — 100.2% (Cost \$514,249,339) (c)		523,363,601
Other Assets/(Liabilities) — (0.2)%	_	(847,704)
NET ASSETS — 100.0%	<u>\$</u>	522,515,897

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

MassMutual Select Fundamental Value Fund — Portfolio of Investments (Continued)

#### **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) Maturity value of \$6,495,304. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$6,625,263.
- (c) See Note 6 for aggregate cost for federal tax purposes.

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

United States	85.7%
Ireland	5.2%
Switzerland	2.8%
United Kingdom	1.9%
Bermuda	1.3%
Canada	1.2%
Netherlands	0.8%
Total Long-Term Investments	98.9%
Short-Term Investments and Other Assets and Liabilities	1.1%
Net Assets	100.0%

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

# MM S&P 500 Index Fund — Portfolio of Investments

**September 30, 2020** 

Description		Number of Shares	Value
Past   Past		Shares	, uiuc
Chemicals Less         3 (2) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3			
Air Products & Cemmicals. Inc.			
Celanes Corp.         13.474         1.447,78           C Findastris Holdings, Inc.         24.40         78,735           Davo, Inc.         81.418         3.71,867           Daylon de Nemours, Inc.         15.57         1.201,375           Eastman Chemical Co.         15.57         1.201,375           FAMC Corp.         11.59         1.201,375           India PT C         59.42         1.201,60           Linde PT C         59.42         1.201,60           Lyondal Based Industrics NV Class A         20.208         2.206,94           Lyondal Based Industrics NV Class A         20.83         3.231,388           Prof. To Mostre Corp.         4.77         6.113.20           Prof. Industrics, Prof. Corp.         4.77         7.811.20           Prof. Steel — 0.76         4.77         1.815.219           Rouer Corp.         4.77         1.815.219           Prof. Steel — 0.77         4.47         7.811.20           Rouer Corp.         4.47         7.811		25,161	\$ 7,494,457
CF Indistrist Foldings, Inc.         24,400         799,398           Davon, Inc.         84,36         30,40           Davon to Nemours, Inc.         83,587         4,637,407           Estiman Chemical         32,818         5,631,607           Evolita, Inc.         32,818         5,631,607           FORC Corp.         15,942         14,250,176           Linds PT.         59,422         14,250,176           Lyondell Based Industrics NV Class A         39,244         717,90           The Mosaic Co.         39,244         717,90           PFO Industries, Inc.         39,34         3,813,70           The Mosaic Co.         40,475         3,813,70           PFO and Products & Paper - 0.1%         181,212         1,813,21           Town & Steel - 0.056         3,412         1,813,21           Freeper McMofisar, Inc.         91,47         5,804,08           Newmont Corp.         91,47         5,804,08           Newmont Corp.         91,45         5,804,08           Town Linding - 0.25         1,41         1,41           Town Linding - 0.25         1,41         1,41           Town Linding - 0.25         1,41         1,41           Town Linding - 0.25         1,41 <th></th> <td></td> <td></td>			
Dwn.e.         \$4,418         3,071,807           Destront Chemical Co.         \$15,417         1,204,376           Estrona Chemical Co.         \$15,417         1,204,376           FMC Corp.         \$14,588         1,561,000           FMC Corp.         \$14,588         1,561,000           International Playors & Fragrance, Inc.         \$14,588         1,561,000           Lymell Blasell Industries NV Clars A         \$2,928         2,051,949           PLO Modistrics, Inc.         \$2,938         2,051,949           PR Schemin-Williance         \$2,938         3,281,383           International Paper Co.         \$3,119,322         5,011,932           International Paper Co.         \$4,776         \$1,815,219           International Paper Co.         \$3,211,338         1,251,119           International Paper Co.         \$3,211,338         1,251,119           International Paper Co.         \$3,211,338         1,251,119           Neer Corp.         \$3,211,338         1,251,119           Neer Corp.         \$3,211,338         1,251,119           Neer Corp.         \$4,475         \$1,815,119           Communications — Ic. 79         \$2,222         \$2,223,222           Advertising — O.15         \$4,475 <td< td=""><th></th><td></td><td></td></td<>			
Deben to Nomonus, Inc.         \$3.887         4,037,100,100           Estaman Chemisel (Co.         15,104,107         12,043,100         12,043,100         12,043,100         15,051,000         15,051,000         15,051,000         15,051,000         15,051,000         15,051,000         15,051,000         15,051,000         14,051,000         14,051,000         14,051,000         14,051,000         14,051,000         14,051,000         15,051,000			
Ecola Inc.         28.28   5.681.675           PMC Corp.         14.78   1.636.302         International Flavors & Fingrances Inc.         12.196         1.493.040         1.493.040         1.493.040         1.493.040         1.201.040	, , , , , , , , , , , , , , , , , , ,	83,587	4,637,407
FMC Cop.         14,788         1,563,020           Inder BIC         59,842         14,219,176           Londe BILS Industries NV Class A         92,280         20,603,47           The Mosair Co.         93,294         717,901           The Mosair Co.         93,294         717,901           PKP Lindustries, Inc.         93,203         65,003,731           The Stevenin-Williams Co.         44,77         81,818,81           Forest Products & Paper — 0,1%         44,77         1,815,219           Inc. Steel — 0,0%         44,77         1,815,219           New Corn         15,411,21         1,815,219           Froe Products & Paper — 0,1%         15,411,21         1,815,219           Inc. Steel — 0,0%         1,815,219         1,815,219           New Corn         16,541         2,837,106           New Corn         1,815,219         1,831,129           Communications — 16,7%         1,815,219         1,832,219           Communications — 16,7%         44,476         74,141           Advertising — 0,15%         1,942,466         1,911,062           The International Excisus Copy Inc.         44,476         1,911,062           Aphylate, Inc. Class Ca         33,442         4,916,063			
International Flavora & Engrances, Inc.         12,96         14,924,01           Linde PLC         52,96         2,20,31         2,20,61,20           Por Mostarics, Inc.         30,324         3,20,31         3,20,31           PET inch Mostarics, Inc.         26,80         3,20,31         3,20,31           Prost Products & Paper – 0.1%         44,76         2,81,32           Increst Froducts & Paper – 0.1%         44,76         3,81,31           Tom & Steel         44,76         2,81,51           Necc Cop.         34,35         2,54,10           Necc Cop.         45,54         2,54,10           Newmoul Cop.         16,54         2,58,10           Newmoul Cop.         44,47         2,81,10           Newmoul Cop.         44,47         3,14           The Interpublic Group of Cox, Inc.         44,47         1,41           Communications – 16,78         44,47         1,41           The Interpublic Group of Cox, Inc.         44,47         1,41           Aphabet, Inc. Class C. (a)         3,42         1,41           Aphabet, Inc. Class C. (a)         3,44         4,44           Alphabet, Inc. Class C. (a)         3,44         1,41           Aphabet, Inc. Class C. (a)         4,54 <th>,</th> <td></td> <td></td>	,		
Lind PLC         59.42         14,200,176           Londollable Industries NV Class A         39,280         20,603,617           The Mossia Co.         39,234         717,901           The Stewn-Williams Co.         93,34         65,301,373           The Stewn-Williams Co.         48,475         1,815,210           Forest Products & Paper – 0.1%         1         1,815,210           Iternational Paper Co.         44,476         1,815,210           Neur Corp.         9,435         1,811,210           Neuron Corp.         9,435         1,811,210           Neuron Corp.         9,435         2,871,050           Communications – 16,79         44,76         74,141           Communications – 16,79         44,476         74,145           Committed Group of Cox, Inc.         44,476         74,145           Unition Group, Inc.         44,476         74,145           Market Frager Link         44,476         74,145           The Internet — 118*         44,476         14,145           Alphabet, Inc. Class A (a)         34,225         50,100,160           Alphabet, Inc. Class A (a)         44,96         15,270,810           Alphabet, Inc. Class A (a)         45,96         15,708,810			
The Nosaic Co.         32,81 (38.6)         32,81 (38.6	Linde PLC	59,842	
PFO Industries, Inc.         26,878 (5,63),378 (5,63),378 (5,63),378 (5,63),378 (5,63),378 (5,63),378 (5,61),37	·		
The River Funducts & Paper — 0.1%         6,00,037         5,01,119,209           International Paper Co.         4,76         1,815,219           International Paper Co.         4,76         1,815,219           Nucor Corp.         3,434         1,541,120           Newmont Corp.         91,55         2,587,106           Newmont Corp.         91,55         3,819,105           Communications—16,7%         44,76         2,111,007           More Corp.         24,46         21,110,07           Internet—11,8%         44,47         21,110,07           Alphabet, Inc. Class A (a)         3,422         50,160,160           Alphabet, Inc. Class A (a)         4,664         7,978,612           CDW Corp.         25,184         1,240,243           EVER ADD. Financial Corp.         25,184         1,240,243           Every Loss, Class A (a)         1,542         1,417,111           Pacebook, Inc. Class A (a)         1,542         1,417,11           Pacebook, Inc. Class A (a)         1,542         1,417,11			
Porest Products & Paper — 0.1%         56,111,922           International Paper Co.         44,776         1,815,219           Tron & Steel — 0.0%         34,354         1,541,121           Nucor Corp.         34,354         1,541,121           Freeport McMoran, Inc.         165,416         2,587,106           Newmort Corp.         2,830,105         3,800,105           Communications—16,7%         444,76         741,415           Advertising—0.1%         24,466         1,211,050           The Interpublic Group of Cos., Inc.         44,476         741,415           Omnicom Group, Inc.         24,466         1,211,050           Internet—1,8%         33,422         50,160,160           Alphabet, Inc. Class A (a)         34,225         50,160,160           Alphabet, Inc. Class A (a)         34,225         50,160,160           Alphabet, Inc. Class A (a)         4,664         797,861           Alphabet, Inc. Class A (a)         4,664         797,861           Dooking Holdings, Inc. (a)         4,664         797,861           Exp. (a)         5,254         2,184         2,264           Exp. (b)         2,524         2,184         2,264         2,274         2,274         2,274         2,274			
International Paper Co.         44,76         1,815,219           Piona Steel - 00%         34,354         1,541,121           Mining - 0.2%		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Post   Post	•		
Numer Corp.         34,354         1,541,121           Mining—2.%         165,416         2,587,106           Nemont Corp.         165,416         2,587,106           Nemont Corp.         1,475         5,804,089           Communications—16.7%         3,311,20         6,785,940           Advertising—0.1%         44,476         741,415           The Interpublic Group of Cos., Inc.         44,476         741,151           Omnice Group, Inc.         44,476         741,151           Alphabet, Inc. Class A (a)         34,225         50,160,161           Alphabet, Inc. Class A (a)         34,225         50,160,161           Alphabet, Inc. Class A (a)         34,225         50,160,161           Alphabet, Inc. Class A (a)         45,464         79,78,612           Eoching Holdings, Inc. (a)         46,44         79,78,612           Eoching Holdings, Inc. (a)         16,24         1,614,44           Eappelia Group, Inc.         15,46         15,46           Eappelia Group, Inc.         15,46         1,73,14           Expedia Group, Inc.         15,46         1,73,14           Expedia Group, Inc.         15,46         1,73,14           Expedia Group, Inc.         15,46         1,73,14      <	1	44,776	1,815,219
Preport Mona (Inc.)   Newmont Corp.		24.254	1 541 121
Freeport-ModRan, Inc.         165,416         2,587,05           Newmont Corp.         91,475         5,801,089           Communications—16.7%         3,91,125           Advertising—0.1%         44,476         741,415           The Interpublic Group of Cos., Inc.         44,476         7,41,415           Demonstrate—11.8%         34,225         1,211,007           Alphabet, Inc. Class A (a)         34,225         50,160,160           Alphabet, Inc. Class A (a)         34,225         50,160,160           Alphabet, Inc. Class A (a)         34,245         49,146,363           Alphabet, Inc. Class A (a)         34,846         15,700,810           Alphabet, Inc. Class A (a)         48,466         7,978,612           CDW Cop.         16,244         7,978,612           CDW Cop.         16,244         1,941,645           EYRADE Financial Corp.         25,135         3,945,794           Esty, Inc. (a)         15,462         1,471,711           Eye, Inc. (a)         6,263         3,541,741           Exp. dia Group, Inc.         5,024         8,524,18           Exp. dia Group, Inc.         5,024         8,524,18           Exp. dia Group, Inc.         6,03         8,524           Shey, Inc		34,334	1,341,121
Communications—16.7%         8.391,95           Advertising—0.1%         3.200,000           Advertising—0.1%         44,476         7.41,415           Omnice Group, Inc.         44,476         7.41,415           Omnice Group, Inc.         24,466         1.211,000           Internet—11.8%         8.31,422         \$0,160,160           Alphabet, Inc. Class A (a)         34,225         \$0,160,160           Alphabet, Inc. Class C (a)         33,422         49,146,363           Amazon.com, Inc. (a)         48,64         7.978,612           Booking Holdings, Inc. (a)         4,664         7.978,612           CDW Corp         16,24         19,146,45           E*TRADE Financial Corp.         25,184         1,260,459           eBay, Inc.         15,462         1,471,171           Expedia Group, Inc.         15,462         1,712,418           Exp, Inc. (a)         15,462         1,712,418           Expedia Group, Inc.         15,002         1,724,418           Expedia Group, Inc.         15,025		165,416	2,587,106
Communications—16.7%         Communica	Newmont Corp.	91,475	
Communications – 16.79%         Advertising – 0.11%           The Interpublic Group of Cos., Inc.         44.476         74.14.15           Omnicon Group, Inc.         24.466         12.11.067           Internet – 11.89%			
Abterising—0.1%         44,476         741,416           The Interpublic Group of Cos., Inc.         24,466         1,211,067           The Interpublic Group of Cos., Inc.         24,466         1,211,067           The Interpublic Group of Cos., Inc.         3,242         50,160,160           Alphabet, Inc. Class A (a)         33,442         49,463,63           Alphabet, Inc. Class A (a)         34,664         7,978,612           Alphabet, Inc. (a)         4,664         7,978,612           CDW Cop.         16,244         7,978,612           CDW Cop.         16,244         1,941,645           E*TRADE Francial Crop.         16,244         1,941,645           Especia Group, Inc.         15,462         1,771,71           Expedia Group, Inc.         15,462         1,471,71           Expedia Group, Inc.         6,303         85,461           Expedia Group, Inc.         6,303         85,461	Communications 16.79/		67,859,467
Intertrephilic Group of Cos, Inc.         44,476         741,415           Omnicom Group, Inc.         24,666         1,211,067           Internet — 1.8%         1         1,952,482           Internet — 1.8%         34,225         5,01,60,160           Alphabet, Inc. Class A (a)         34,225         49,146,363           Alphabet, Inc. Class C (a)         33,442         49,146,303           Amazon. Com, Inc. (a)         46,64         7,978,612           CDW Corp.         16,244         1,204,645           E*TRADE Financial Corp.         25,184         1,204,645           E*TRADE Financial Corp.         15,402         1,417,411           Exp, Inc. (a)         15,402         1,417,411           Exp, Inc. (a)         6,968         8,5461           F5 Networks, Inc. (a)         6,968         8,5461           F5 Networks, Inc. (a)         7,124,458           Feebook, Inc. Class A (a)         7,124,458           F0 Stervorks, Inc. (a)         50,234         \$25,118,507           Norton, Iré-Losk, Inc. (a)         90,094         4,002,838           Verilix, Inc. (a)         90,094         4,002,838           Verilix, Inc. (a)         50,234         \$25,118,507           Norton, Iré-Losk, Inc.			
Internet — I1.8%         1,952,482           Alphabet, Inc. Class A (a)         34,225         50,160,160           Alphabet, Inc. Class C (a)         33,442         49,146,363           Amazon.com, Inc. (a)         48,696         152,700,810           Booking Holdings, Inc. (a)         16,244         1,914,645           CDW Corp.         16,224         1,914,645           E*TRADE Financial Corp.         25,184         1,204,599           eBay, Inc.         15,462         1,417,711           Exy, Inc. (a)         15,462         1,417,711           Ey Networks, Inc. (a)         6,968         855,461           Fe Networks, Inc. (a)         50,234         71,724,458           Netflix, Inc. (a)         50,234         25,118,507           Norton. LifeLock, Inc.         67,319         1,402,288           Netflix, Inc. (a)         50,234         25,118,507           Norton. LifeLock, Inc.         67,319         1,402,288           Weir Fign, Inc. (a)         50,234         25,118,507           Norton. LifeLock, Inc.         11,503         2,358,438           Verificing, Inc. (a)         11,703         2,358,438           Verificing, Inc. (a)         11,703         1,703           Come		44,476	741,415
Internet — 11.8%	Omnicom Group, Inc.	24,466	
Alphabet, Inc. Class A (a)         34,255         50,160,160           Alphabet, Inc. Class C (a)         33,442         49,146,363           Amazon.com, Inc. (a)         48,496         152,700,810           Booking Holdings, Inc. (a)         4,664         7,978,612           CDW Copp.         16,244         1,941,645           eBay, Inc.         25,184         1,260,459           eBay, Inc.         15,462         1,417,711           Ety, Inc. (a)         15,462         1,417,711           Exp. Inc. (a)         6,968         855,461           Facebook, Inc. Class A (a)         50,23         71,724,458           Pacebook, Inc. Class A (a)         50,23         71,724,458           Notflix, Inc. (a)         50,23         52,518,402           Netflix, Inc. (a)         50,23         52,518,402           Notflix, Inc. (a)         50,23         71,724,458           Twitte, Inc. (a)         50,23         71,724,458           Wetlix, Inc. (a)         90,94         4,001,813           Verisign, Inc. (a)         11,513         2,358,438           Verisign, Inc. (a)         11,513         2,358,438           Verisign, Inc. (a)         11,513         2,358,438           Verisign,	T. (		1,952,482
Alphabet, Inc. Class C (a)         33,442         49,146,363           Amazon.com, Inc. (a)         48,496         152,700,810           Booking Holdings, Inc. (a)         4,664         7,978,612           CDW Corp.         16,244         1,941,645           E*TRADE Financial Corp.         25,184         1,260,459           eBay, Inc.         75,735         3,945,794           Esy, Inc. (a)         15,462         1,417,711           F5 Networks, Inc. (a)         6,968         855,461           Facebook, Inc. Class A (a)         50,24         \$7,244,85           Netflix, Inc. (a)         50,24         \$2,118,507           NortonLifeLock, Inc.         67,319         1,402,228           Twitter, Inc. (a)         90,094         4,009,183           Verisign, Inc. (a)         90,094         4,009,183           Verisign, Inc. (a)         11,513         2,358,438           Veriter, Inc. (a)         90,094         4,009,183           Veriter, Inc. (a)         11,503         375,673,724           Media - 2.1%         11,503         375,673,724           Charter Communications, Inc. Class A (a)         11,083,737           Charter Communications, Inc. Class A (a)         18,249         397,281      <		34 225	50 160 160
Amazoncom, Inc. (a)         48,496         152,700,810           Booking Holdings, Inc. (a)         4,664         7,978,612           CDW Corp.         16,244         1,941,645           E*TRADE Financial Corp.         25,184         1,260,459           Ebay, Inc. (a)         15,755         3,945,794           Exp, Inc. (a)         15,62         1,417,711           Exp dia Group, Inc.         6,968         85,461           F5 Networks, Inc. (a)         6,968         85,461           F6 neebook, Inc. Class A (a)         71,724,458           Norton LifeLock, Inc.         67,319         1,402,928           Norton LifeLock, Inc.         67,319         1,402,928           VeriSign, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         15,15         2,355,437,244           Weitlier, Inc. (a)         15,15         2,355,437,244           Weitlier, Inc. (a)         15,10         2,355,437,244           Weitlier, Inc. (a)         15,10         2,355,437,244           Weitlier, Inc. (a)         15,10         2,355,437,244           Weitlier,			
CDW Corp.         16.244         1.941,645           E*TRADE Financial Corp.         25,184         1.260,459           Bay, Inc.         75,735         3.945,794           Ety, Inc. (a)         13,592         1.653,195           Expedia Group, Inc.         15,462         1.417,11           F5 Networks, Inc. (a)         6,668         855,461           Facebook, Inc. Class A (a)         71,724,458           Netflix, Inc. (a)         50,234         \$ 25,118,507           Norton LifeLock, Inc.         67,319         1.402,928           Wetflix, Inc. (a)         67,319         1.402,928           Werisign, Inc. (a)         90,094         4,090,183           Verisign, Inc. (a)         11,513         2,358,483           Verisign, Inc. (a)         11,513         2,358,433           Verisign, Inc. (a)         15	Amazon.com, Inc. (a)		
E*TRADĒ Financial Corp.         25,184         1,260,459           cBay, Inc.         75,755         3,945,794           Etsy, Inc. (a)         13,592         1,653,195           Expedia Group, Inc.         15,462         1,417,711           F5 Networks, Inc. (a)         6,698         855,461           Facebook, Inc. Class A (a)         273,862         7,1724,458           Netflix, Inc. (a)         50,234         \$ 25,118,507           NortonLifeLock, Inc.         67,319         1,402,928           Netflix, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         11,513         2,358,438           VeriSign, Inc. (a)         11,513         2,358,438           VeriSign, Inc. (a)         11,703         1,032,503           Media - 2.1%         11,703         1,037,503           Comcast Corp. Class A (a)         11,703         10,37,505           Comcast Corp. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class A (a) (b)         28,102         815,801           Every, Class A         39,121         1,088,737			
Bay, Inc.         75,755         3,945,794           Ety, Inc. (a)         13,592         1,653,196           Expedia Group, Inc.         15,462         1,417,711           F5 Networks, Inc. (a)         6,968         855,461           Facebook, Inc. Class A (a)         273,862         71,724,458           Netflix, Inc. (a)         50,234         \$25,118,507           NortonLifeLock, Inc.         67,319         1,402,928           Witter, Inc. (a)         90,094         4,009,183           Verisign, Inc. (a)         11,513         2,358,438           Verisign, Inc. (a)         11,513         2,358,438           Verisign, Inc. (a)         11,038         10,637,505           Charter Communications, Inc. Class A (a)         17,038         10,637,505           Comeast Corp. Class A         519,258         24,020,875           Discovery, Inc. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class C (a)         35,601         691,096           DISH Network Corp. Class A         39,121         1,088,737           Fox Corp. Class A         39,121         1,088,737           Fox Corp. Class B (a)         17,843         499,069           News Corp. Class B (a)         13,790 <t< td=""><th></th><td></td><td></td></t<>			
Ety, Inc. (a)         13,592         1,653,195           Expedia Group, Inc.         15,462         1,417,711           F5 Networks, Inc. (a)         6,568         855,461           Facebook, Inc. Class A (a)         273,862         71,724,458           Netflix, Inc. (a)         50,234         \$ 25,118,507           NortonLifeLock, Inc.         67,319         1,402,928           Twitter, Inc. (a)         90,094         4,091,183           VeriSign, Inc. (a)         11,513         2,358,438           VeriSign, Inc. (a)         17,938         10,637,505           Charter Communications, Inc. Class A (a)         11,703         10,637,505           Comeast Corp. Class A         519,258         24,020,875           Discovery, Inc. Class C (a)         35,260         691,096           Discovery, Inc. Class C (a)         35,260         691,096           Discovery, Inc. Class A         39,121         1,088,737           Fox Corp. Class A         39,121 <th< td=""><th></th><td></td><td></td></th<>			
F5 Networks, inc. (a)         6,968         855,461           Facebook, Inc. Class A (a)         273,862         71,724,458           Netflix, Inc. (a)         50,234         25,118,507           NortonLifeLock, Inc.         67,319         1,402,928           Twitter, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         11,513         2,358,438           Media – 2.1%         17,038         10,637,505           Concast Corp. Class A (a)         17,038         10,637,505           Discovery, Inc. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class C (a)         35,260         610,906           DISH Network Corp. Class A (a)         28,102         815,801           Fox Corp. Class B (a)         17,434         490,609           News Corp. Class B (a)         17,887,718         490,609           News Corp. Class B (b)         18,249         192,784           ViacomCBS, Inc. Class B (b)         192,784         192,784           ViacomCBS, Inc. Class B (b)         66,303,085	Etsy, Inc. (a)		
Facebook, Inc. Class A (a)         273,862         71,724,458           Netflix, Inc. (a)         50,234         \$ 25,118,507           NortonLifeLock, Inc.         67,319         1,402,928           Twitter, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         11,513         2,358,438           VeriSign, Inc. (a)         11,513         2,358,438           Media — 2.1%         17,038         10,637,505           Comcast Corp. Class A (a)         17,038         24,020,875           Discovery, Inc. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class A (a) (b)         35,260         691,096           DISH Network Corp. Class A (a)         28,102         815,801           Fox Corp. Class B (a)         39,121         1,088,737           Fox Corp. Class B (a)         17,843         490,696           News Corp. Class B (a)         44,309         621,212           News Corp. Class B (b)         44,309         621,212           News Corp. Class B (b)         66,303,085	1 1		
Netflix, Inc. (a)         Shares         Value           NortonLifeLock, Inc.         50,234         \$ 25,118,507           NortonLifeLock, Inc.         67,319         1,402,928           Twitter, Inc. (a)         90,094         4,009,183           Versign, Inc. (a)         11,513         2,358,438           Versign, Inc. (a)         11,513         2,358,438           Media — 2.1%         17,038         10,637,505           Comcast Corp. Class A (a)         118,249         397,281           Discovery, Inc. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class C (a)         35,260         691,096           DISH Network Corp. Class A (a)         28,102         815,801           Fox Corp. Class A (a)         39,121         1,088,737           Fox Corp. Class A (a)         39,121         1,088,737           Fox Corp. Class B (a)         17,843         499,069           News Corp. Class B (a)         13,790         621,212           News Corp. Class B (b)         64,217         1,798,718           ViacomCBS, Inc. Class B (b)         64,217         1,798,718           The Walt Disney Co.         205,835         25,540,007           Go. 30,30,85         66,303,085 <th></th> <td></td> <td></td>			
Netflix, Inc. (a)         Shares         Value           NortonLifeLock, Inc.         50,234         25,118,507           NortonLifeLock, Inc.         67,319         1,402,928           Twitter, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         11,513         2,358,438           VeriSign, Inc. (a)         17,038         10,637,505           Charter Communications, Inc. Class A (a)         17,038         10,637,505           Comcast Corp. Class A         519,258         24,020,875           Discovery, Inc. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class A (a) (b)         35,260         691,096           DISH Network Corp. Class A (a)         39,121         1,883,737           Fox Corp. Class B (a)         39,121         1,883,737           Fox Corp. Class B (a)         17,843         499,069           News Corp. Class B (a)         13,790         192,784           ViacomCBS, Inc. Class B (b)         64,217         1,798,718           ViacomCBS, Inc. Class B (b)         205,815         25,540,07           The Walt Disney Co.         205,805         26,630,3085	raccook, inc. class $A(a)$	273,802	/1,/24,430
Netflix, Inc. (a)         50,234         \$ 25,118,507           NortonLifeLock, Inc.         67,319         1,402,928           Twitter, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         11,513         2,358,488           VeriSign, Inc. (a)         11,513         2,358,488           Media — 2.1%           Charter Communications, Inc. Class A (a)         17,038         10,637,505           Comeast Corp. Class A         519,258         24,020,875           Discovery, Inc. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class C (a)         35,260         691,096           DISH Network Corp. Class A (a)         39,121         1,088,737           Fox Corp. Class B (a)         17,843         499,069           News Corp. Class B (a)         17,843         499,069           News Corp. Class B (b)         13,790         192,784           ViacomCBS, Inc. Class B (b)         64,217         1,798,718           The Walt Disney Co.         205,835         25,540,007           66,303,085         66,303,085			
NortonLifeLock, Inc.         67,319         1,402,928           Twitter, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         11,513         2,358,438           375,673,724           Media — 2.1%         Charter Communications, Inc. Class A (a)         17,038         10,637,505           Comcast Corp. Class A         519,258         24,020,875           Discovery, Inc. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class C (a)         35,260         691,096           DISH Network Corp. Class A (a)         28,102         815,801           Fox Corp. Class B (a)         39,121         1,088,737           Fox Corp. Class B (a)         17,843         499,069           News Corp. Class B (a)         44,309         621,212           ViacomCBS, Inc. Class B (b)         64,217         1,798,718           The Walt Disney Co.         205,835         25,540,007	Norflin Inc (a)		
Twitter, Inc. (a)         90,094         4,009,183           VeriSign, Inc. (a)         11,513         2,358,438           Media — 2.1%         Temperature of the properties of the prope			
VeriSign, Inc. (a)         11,513         2,358,438           Media — 2.1%         Charter Communications, Inc. Class A (a)         17,038         10,637,505           Comcast Corp. Class A         519,258         24,020,875           Discovery, Inc. Class A (a) (b)         18,249         397,281           Discovery, Inc. Class C (a)         35,260         691,096           DISH Network Corp. Class A (a)         28,102         815,801           Fox Corp. Class A         39,121         1,088,737           Fox Corp. Class B (a)         17,843         499,069           News Corp. Class A         44,309         621,212           News Corp. Class B         13,790         192,784           ViacomCBS, Inc. Class B (b)         64,217         1,798,718           The Walt Disney Co.         205,835         25,540,007			
Media — 2.1%         Charter Communications, Inc. Class A (a)       17,038       10,637,505         Comcast Corp. Class A       519,258       24,020,875         Discovery, Inc. Class A (a) (b)       18,249       397,281         Discovery, Inc. Class C (a)       35,260       691,096         DISH Network Corp. Class A (a)       28,102       815,801         Fox Corp. Class A       39,121       1,088,737         Fox Corp. Class B (a)       17,843       499,069         News Corp. Class A       44,309       621,212         News Corp. Class B       13,790       192,784         ViacomCBS, Inc. Class B (b)       64,217       1,798,718         The Walt Disney Co.       205,835       25,540,007         66,303,085	VeriSign, Inc. (a)	11,513	2,358,438
Charter Communications, Inc. Class A (a)       17,038       10,637,505         Comcast Corp. Class A       519,258       24,020,875         Discovery, Inc. Class A (a) (b)       18,249       397,281         Discovery, Inc. Class C (a)       35,260       691,096         DISH Network Corp. Class A (a)       28,102       815,801         Fox Corp. Class A       39,121       1,088,737         Fox Corp. Class B (a)       17,843       499,069         News Corp. Class A       44,309       621,212         News Corp. Class B (b)       13,790       192,784         ViacomCBS, Inc. Class B (b)       64,217       1,798,718         The Walt Disney Co.       205,835       25,540,007         66,303,085	N. W. 4407		375,673,724
Comcast Corp. Class A       519,258       24,020,875         Discovery, Inc. Class A (a) (b)       18,249       397,281         Discovery, Inc. Class C (a)       35,260       691,096         DISH Network Corp. Class A (a)       28,102       815,801         Fox Corp. Class A       39,121       1,088,737         Fox Corp. Class B (a)       17,843       499,069         News Corp. Class A       44,309       621,212         News Corp. Class B       13,790       192,784         ViacomCBS, Inc. Class B (b)       64,217       1,798,718         The Walt Disney Co.       205,835       25,540,007         66,303,085		17.038	10 637 505
Discovery, Inc. Class A (a) (b)       18,249       397,281         Discovery, Inc. Class C (a)       35,260       691,096         DISH Network Corp. Class A (a)       28,102       815,801         Fox Corp. Class A       39,121       1,088,737         Fox Corp. Class B (a)       17,843       499,069         News Corp. Class A       44,309       621,212         News Corp. Class B       13,790       192,784         ViacomCBS, Inc. Class B (b)       64,217       1,798,718         The Walt Disney Co.       205,835       25,540,007         66,303,085		,	
DISH Network Corp. Class A (a)       28,102       815,801         Fox Corp. Class A       39,121       1,088,737         Fox Corp. Class B (a)       17,843       499,069         News Corp. Class A       44,309       621,212         News Corp. Class B       13,790       192,784         ViacomCBS, Inc. Class B (b)       64,217       1,798,718         The Walt Disney Co.       205,835       25,540,007         66,303,085			
Fox Corp. Class A       39,121       1,088,737         Fox Corp. Class B (a)       17,843       499,069         News Corp. Class A       44,309       621,212         News Corp. Class B       13,790       192,784         ViacomCBS, Inc. Class B (b)       64,217       1,798,718         The Walt Disney Co.       205,835       25,540,007         66,303,085	Discovery, Inc. Class C (a)		
Fox Corp. Class B (a)       17,843       499,069         News Corp. Class A       44,309       621,212         News Corp. Class B       13,790       192,784         ViacomCBS, Inc. Class B (b)       64,217       1,798,718         The Walt Disney Co.       205,835       25,540,007         66,303,085			
News Corp. Class A       44,309       621,212         News Corp. Class B       13,790       192,784         ViacomCBS, Inc. Class B (b)       64,217       1,798,718         The Walt Disney Co.       205,835       25,540,007         66,303,085			
News Corp. Class B       13,790       192,784         ViacomCBS, Inc. Class B (b)       64,217       1,798,718         The Walt Disney Co.       205,835       25,540,007         66,303,085			
The Walt Disney Co. 205,835 25,540,007 66,303,085	News Corp. Class B	13,790	
66,303,085			
	THE WAIL DISTREY CO.	205,835	
	Telecommunications — 2.7%		

Arista Networks, Inc. (a)	6,235	1,290,209
AT&T, Inc.	811,579	23,138,117
CenturyLink, Inc.	112,514	1,135,266
Cisco Systems, Inc.	482,212	18,994,331
Corning, Inc.	86,630	2,807,678
Juniper Networks, Inc.	37,803	812,765
Motorola Solutions, Inc.	19,340	3,032,705
T-Mobile US, Inc. (a)	66,267	7,578,294
Verizon Communications, Inc.	471,349	28,040,552
· · · · · · · · · · · · · · · · · · ·		86,829,917
		530,759,208
Consumer, Cyclical — 8.3%		330,737,200
Airlines — 0.2%		
Alaska Air Group, Inc.	14,083	515,860
American Airlines Group, Inc. (b)	57,928	711,935
Delta Air Lines, Inc.	72,656	2,221,821
Southwest Airlines Co.		
	67,190	2,519,625
United Airlines Holdings, Inc. (a)	33,145	1,151,789
	_	7,121,030
Apparel — 0.7%	20.720	
Hanesbrands, Inc.	39,728	625,716
NIKE, Inc. Class B	141,798	17,801,321
PVH Corp.	8,100	483,084
Ralph Lauren Corp.	5,486	372,883
Tapestry, Inc.	31,523	492,705
Under Armour, Inc. Class A (a)	21,520	241,670
Under Armour, Inc. Class C (a)	22,150	217,956

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.	36,397	\$ 2,556,889
Auto Manufacturers — 0.5%		22,792,224
Cummins, Inc.	16,821	3,551,922
Ford Motor Co.	445,091	2,964,306
General Motors Co.	143,449	4,244,656
PACCAR, Inc.	39,428	3,362,420 14,123,304
Auto Parts & Equipment — 0.1%		14,123,304
Aptiv PLC	30,757	2,819,802
BorgWarner, Inc.	23,607	914,535 3,734,337
Distribution & Wholesale — 0.3%		3,734,337
Copart, Inc. (a)	23,533	2,474,730
Fastenal Co.	65,377	2,947,849
LKQ Corp. (a)	31,888	884,254
W.W. Grainger, Inc.	5,126	1,828,803 8,135,636
Entertainment — 0.0%		
Live Nation Entertainment, Inc. (a)	16,219	873,880
Home Builders — 0.3% D.R. Horton, Inc.	37.699	2 051 175
Lennar Corp. Class A	31,281	2,851,175 2,555,032
NVR, Inc. (a)	396	1,616,915
PulteGroup, Inc.	30,547	1,414,021
		8,437,143
Home Furnishing — 0.1% Leggett & Platt, Inc.	15,102	621,749
Whirlpool Corp.	7,096	1,304,884
Willipool Colp.	7,000	1,926,633
Housewares — 0.0%	42.014	520.120
Newell Brands, Inc.  Leisure Time — 0.1%	43,014	738,120
Carnival Corp. (b)	58,991	895,483
Norwegian Cruise Line Holdings Ltd. (a) (b)	31,395	537,169
Royal Caribbean Cruises Ltd.	20,295	1,313,695
		2,746,347
Lodging — 0.3% Hilton Worldwide Holdings, Inc.	31,587	2,695,003
Las Vegas Sands Corp.	37,411	1,745,597
Marriott International, Inc. Class A	30,292	2,804,434
MGM Resorts International	46,636	1,014,333
Wynn Resorts Ltd.	11,056	793,931
		9,053,298
	Number of	
Retail — 5.7%	Shares	Value
Advance Auto Parts, Inc.	7,887	\$ 1,210,655
AutoZone, Inc. (a)	2,661	3,133,700
Best Buy Co., Inc.	26,239	2,920,138
CarMax, Inc. (a)	18,577	1,707,412
Chipotle Mexican Grill, Inc. (a) Costco Wholesale Corp.	3,186 50,292	3,962,460 17,853,660
Darden Restaurants, Inc.	14,827	1,493,672
Dollar General Corp.	28,366	5,946,081
Dollar Tree, Inc. (a)	27,031	2,469,012
Domino's Pizza, Inc.	4,482	1,906,105
The Gap, Inc.	23,405	398,587
Genuine Parts Co. The Home Depot, Inc.	16,433 122,615	1,563,929 34,051,412
L Brands, Inc.	26,637	847,323
Lowe's Cos., Inc.	86,083	14,277,726
McDonald's Corp.	84,758	18,603,533
O'Reilly Automotive, Inc. (a)	8,436	3,889,671
Ross Stores, Inc.	40,563	3,785,339
Starbucks Corp. Target Corp.	133,156 57,023	11,440,764 8,976,561
Tiffany & Co.	12,304	1,425,418
	12,504	1,723,710

0/20/2021	Thirt bocament	
The TJX Cos., Inc. Tractor Supply Co. Ulta Bootty Inc. (c)	136,580 13,239	7,600,677 1,897,678
Ulta Beauty, Inc. (a) Walgreens Boots Alliance, Inc.	6,416 81,924	1,437,056 2,942,710
Walmart, Inc.	158,163	22,128,585
Yum! Brands, Inc.	34,331	3,134,420
Tuni: Dianus, inc.	54,551	181,004,284
Textiles — 0.0%		101,004,204
Mohawk Industries, Inc. (a)	6,812	664,783
Toys, Games & Hobbies — 0.0%	,	
Hasbro, Inc.	14,515	1,200,681
		262,551,700
Consumer, Non-cyclical — 22.0% Agriculture — 0.8%		
Altria Group, Inc.	211,682	8,179,392
Archer-Daniels-Midland Co.	63,291	2,942,399
Philip Morris International, Inc.	177,384	13,302,026
		24,423,817
Beverages — 1.7%		
Brown-Forman Corp. Class B	20,815	1,567,786
The Coca-Cola Co.	440,348	21,739,981
Constellation Brands, Inc. Class A	19,138	3,626,842
Molson Coors Beverage Co. Class B	21,466	720,399
Monster Beverage Corp. (a)	42,051	3,372,490

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
PepsiCo, Inc.	157,718	\$ 21,859,715
repsico, inc.	137,710	52,887,213
Biotechnology — 1.9%		
Alexion Pharmaceuticals, Inc. (a)	24,965	2,856,745
Amgen, Inc.	66,714	16,956,030
Bio-Rad Laboratories, Inc. Class A (a)	2,436	1,255,661
Biogen, Inc. (a)	18,033	5,115,602
Corteva, Inc.	85,266	2,456,514
Gilead Sciences, Inc.	142,807	9,023,974
Illumina, Inc. (a)	16,630	5,140,000
Incyte Corp. (a)	21,174	1,900,155
Regeneron Pharmaceuticals, Inc. (a)	11,908	6,665,860
Vertex Pharmaceuticals, Inc. (a)	29,669	8,073,528
Commercial Services — 2.4%		59,444,069
Automatic Data Processing, Inc.	48,976	6,831,662
Cintas Corp.	9,903	3,296,015
Equifax, Inc.	13,835	2,170,712
FleetCor Technologies, Inc. (a)	9,566	2,277,665
Gartner, Inc. (a)	10,164	1,269,992
Global Payments, Inc.	34,086	6,052,992
IHS Markit Ltd.	42,487	3,335,654
Market Axess Holdings, Inc.	4,327	2,083,840
Moody's Corp.	18,387	5,329,472
Nielsen Holdings PLC	40,687	576,942
PayPal Holdings, Inc. (a)	133,646	26,332,271
Quanta Services, Inc.	15,711	830,483
Robert Half International, Inc.	13,080	692,455
Rollins, Inc.	16,800	910,392
S&P Global, Inc.	27,451	9,898,831
United Rentals, Inc. (a)	8,210	1,432,645
Verisk Analytics, Inc.	18,497	3,427,679
•		76,749,702
Cosmetics & Personal Care — 1.6%		
Colgate-Palmolive Co.	97,663	7,534,700
The Estee Lauder Cos., Inc. Class A	25,694	5,607,716
The Procter & Gamble Co.	283,582	39,415,062
		52,557,478
Foods — 1.2%	22.060	1 115 410
Campbell Soup Co.	23,060	1,115,412
Conagra Brands, Inc.	55,593	1,985,226
General Mills, Inc.	69,587 16,791	4,292,126 2,406,822
The Hershey Co. Hormel Foods Corp.	31,985	1,563,747
The J.M. Smucker Co.	12,994	
Kellogg Co.	28,905	1,501,067 1,866,974
The Kraft Heinz Co.	73,807	2,210,520
The Krager Co.	88,610	3,004,765
The Rioger Co.	00,010	3,004,703
	Number of	
	Shares	Value
Lamb Weston Holdings, Inc.	16,552	\$ 1,096,901
McCormick & Co., Inc.	14,112	2,739,139
Mondelez International, Inc. Class A	162,696	9,346,885
Sysco Corp.	57,940	3,605,027
Tyson Foods, Inc. Class A	33,517	1,993,591
		38,728,202
Health Care – Products — 4.2%		
Abbott Laboratories	201,674	21,948,181
ABIOMED, Inc. (a)	5,131	1,421,595
Align Technology, Inc. (a)	8,167	2,673,549
Baxter International, Inc.	57,663	4,637,259
Boston Scientific Corp. (a)	162,962	6,226,778
The Cooper Cos., Inc.	5,597	1,886,861
Danaher Corp.	71,917	15,485,888
Dentsply Sirona, Inc.	24,888	1,088,352
Edwards Lifesciences Corp. (a)	70,820	5,652,852
Henry Schein, Inc. (a)	16,262	955,880
Hologic, Inc. (a)	29,472	1,959,004
IDEXX Laboratories, Inc. (a)	9,688	3,808,450

Intuitive Surgical, Inc. (a)	13,330	9,458,168
Medtronic PLC	153,114	15,911,607
ResMed, Inc.	16,512	2,830,652
Steris PLC	9,696	1,708,338
Stryker Corp.	37,222	7,755,948
Teleflex, Inc.	5,299	1,803,886
Thermo Fisher Scientific, Inc.	45,060	19,894,891
Varian Medical Systems, Inc. (a)	10,380	1,785,360
West Pharmaceutical Services, Inc.	8,411	2,312,184
Zimmer Biomet Holdings, Inc.	23,584	3,210,726
		134,416,409
Health Care – Services — 2.1%	_	
Anthem, Inc.	28,648	7,694,566
Catalent, Inc. (a)	18,696	1,601,499
Centene Corp. (a)	66,005	3,850,072
DaVita, Inc. (a)	9,171	785,496
HCA Healthcare, Inc.	30,033	3,744,515
Humana, Inc.	15,069	6,236,908
IQVIA Holdings, Inc. (a)	21,787	3,434,285
Laboratory Corp. of America Holdings (a)	11,095	2,088,856
Quest Diagnostics, Inc.	15,298	1,751,468
UnitedHealth Group, Inc.	108,247	33,748,167
Universal Health Services, Inc. Class B	8,866	948,839
		65,884,671
Household Products & Wares — 0.4%	_	
Avery Dennison Corp.	9,507	1,215,375
Church & Dwight Co., Inc.	28,170	2,639,811
<del>v</del>	-,	, ,-

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

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

	Number of	V-l
The Clause Co	Shares	<b>Value</b> \$ 3,021,614
The Clorox Co. Kimberly-Clark Corp.	14,377 38,847	\$ 3,021,614 5,736,148
Killiberry-Clark Corp.	30,047	12,612,948
Pharmaceuticals — 5.7%		12,012,946
AbbVie, Inc.	201,025	17,607,780
AmerisourceBergen Corp.	16,742	1,622,635
Becton Dickinson and Co.	33,018	7,682,628
Bristol-Myers Squibb Co.	256,736	15,478,613
Cardinal Health, Inc.	33,325	1,564,609
Cigna Corp.	41,826	7,085,743
CVS Health Corp. DexCom, Inc. (a)	149,069 10,906	8,705,629 4,495,780
Eli Lilly and Co.	90,426	13,384,856
Johnson & Johnson	299,894	44,648,219
McKesson Corp.	18,474	2,751,333
Merck & Co., Înc.	288,093	23,897,314
Mylan NV (a)	59,006	875,059
Perrigo Co. PLC	15,558	714,268
Pfizer, Inc.	632,961	23,229,669
Zoetis, Inc.	54,122	8,950,155
		182,694,290 700,398,799
Energy — 2.0%		/00,398,799
Oil & Gas — 1.7%		
Apache Corp.	43,079	407,958
Cabot Oil & Gas Corp.	45,491	789,724
Chevron Corp.	212,699	15,314,328
Concho Resources, Inc.	22,406	988,553
ConocoPhillips	122,172	4,012,129
Devon Energy Corp.	43,690	413,307
Diamondback Energy, Inc. EOG Resources, Inc.	18,015 66,321	542,612 2,383,577
Exxon Mobil Corp.	481,621	16,534,049
Hess Corp.	31,137	1,274,437
HollyFrontier Corp.	16,978	334,636
Marathon Oil Corp.	90,233	369,053
Marathon Petroleum Corp.	74,118	2,174,622
Noble Energy, Inc.	55,204	471,994
Occidental Petroleum Corp.	95,354	954,494
Phillips 66	49,742	2,578,625
Pioneer Natural Resources Co.	18,712	1,609,045
Valero Energy Corp.	46,446	2,012,041
Oil & Gas Services — 0.1%		53,165,184
Baker Hughes Co.	74,768	993,667
Halliburton Co.	100,136	1,206,639
National Oilwell Varco, Inc.	44,323	401,566
Schlumberger NV	158,113	2,460,238
	Number of	***
Tarkerin FMC DLC	Shares 48,012	Value
TechnipFMC PLC	48,012	\$ 302,956
Pipelines — 0.2%		5,365,066
Kinder Morgan, Inc.	221,734	2,733,980
ONEOK, Inc.	50,597	1,314,510
The Williams Cos., Inc.	138,231	2,716,239
		6,764,729
		65,294,979
Financial — 13.9%		
Banks — 4.0%		
Bank of America Corp.  The Paul of New York Mellon Comme	868,465	20,921,322
The Bank of New York Mellon Corp.	92,832	3,187,851
Citigroup, Inc.	237,137 48,618	10,222,976 1,229,063
Citizens Financial Group, Inc. Comerica, Inc.	15,873	607,142
Fifth Third Bancorp	81,128	1,729,649
First Republic Bank	19,605	2,138,121
The Goldman Sachs Group, Inc.	39,192	7,876,416
Huntington Bancshares, Inc.	115,765	1,061,565

5,15,151	2 3 3 4 3	
JP Morgan Chase & Co.	347,140	33,419,168
KeyCorp	111,172	1,326,282
M&T Bank Corp.	14,612	1,345,619
Morgan Stanley	136,498	6,599,678
Northern Trust Corp.	23,703	1,848,123
The PNC Financial Services Group, Inc.	48,353	5,314,478
Regions Financial Corp.	109,241	1,259,549
State Street Corp.	40,138	2,381,388
SVB Financial Group (a)	5,896	1,418,695
Truist Financial Corp.	153,501	5,840,713
US Bancorp	156,141	5,597,655
Wells Fargo & Co.	469,298	11,033,196
Zions Bancorp NA	18,708	546,648
		126,905,297
Diversified Financial Services — 3.9%		
American Express Co.	74,287	7,447,272
Ameriprise Financial, Inc.	13,699	2,111,153
BlackRock, Inc.	16,153	9,103,023
Capital One Financial Corp.	52,014	3,737,726
Cboe Global Markets, Inc.	12,388	1,086,923
The Charles Schwab Corp.	132,106	4,786,200
CME Group, Inc.	40,849	6,834,446
Discover Financial Services	34,903	2,016,695
Franklin Resources, Inc.	30,469	620,044
Intercontinental Exchange, Inc.	63,929	6,396,097
Invesco Ltd.	42,951	490,071
Mastercard, Inc. Class A	100,620	34,026,665
Nasdaq, Inc.	13,107	1,608,360

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
Raymond James Financial, Inc.	13,921	\$ 1,012,892
Synchrony Financial	61,839	1,618,327
T. Rowe Price Group, Inc.	25,855	3,315,128
Visa, Inc. Class A The Western Union Co.	192,046 46,898	38,403,439
The Western Union Co.	40,898	1,005,024 125,619,485
Insurance — 3.3%		123,019,463
Aflac, Inc.	75,521	2,745,188
The Allstate Corp.	35,575	3,349,030
American International Group, Inc.	98,122	2,701,299
Aon PLC Class A	26,386	5,443,432
Arthur J Gallagher & Co.	21,813	2,303,016
Assurant, Inc.	6,808	825,878
Berkshire Hathaway, Inc. Class B (a)	225,786	48,078,871
Chubb Ltd. Cincinnati Financial Corp.	51,413 17,040	5,970,077 1,328,609
Everest Re Group Ltd.	4,553	899,400
Globe Life, Inc.	11,176	892,962
The Hartford Financial Services Group, Inc.	40,801	1,503,925
Lincoln National Corp.	20,691	648,249
Loews Corp.	27,153	943,567
Marsh & McLennan Cos., Inc.	57,697	6,617,846
MetLife, Inc.	87,880	3,266,500
Principal Financial Group, Inc.	29,069	1,170,609
The Progressive Corp. Prudential Financial, Inc.	66,680	6,312,596
The Travelers Cos., Inc.	44,993 28,840	2,857,955 3,120,200
Unum Group	23,223	390,843
W.R. Berkley Corp.	16,018	979,501
Willis Towers Watson PLC	14,678	3,065,060
	,	105,414,613
Real Estate — 0.1%		
CBRE Group, Inc. Class A (a)	38,190	1,793,784
Real Estate Investment Trusts (REITS) — 2.6%	12.260	2 127 600
Alexandria Real Estate Equities, Inc.	13,360	2,137,600
American Tower Corp.	50,525 16,992	12,213,408
Apartment Investment and Management Co. Class A AvalonBay Communities, Inc.	16,992	572,970 2,394,219
Boston Properties, Inc.	16,132	1,295,400
Crown Castle International Corp.	47,803	7,959,199
Digital Realty Trust, Inc.	30,640	4,496,726
Duke Realty Corp.	42,209	1,557,512
Equinix, Inc.	10,087	7,667,431
Equity Residential	39,005	2,002,127
Essex Property Trust, Inc.	7,428	1,491,468
Extra Space Storage, Inc.	14,702	1,572,967
	Number of	
	Shares	Value
Federal Realty Investment Trust	7,840	\$ 575,770
Healthpeak Properties, Inc.	61,318	1,664,784
Host Hotels & Resorts, Inc.	80,468	868,250
Iron Mountain, Inc. (b)	32,854	880,159
Kimco Realty Corp.	49,371	555,917
Mid-America Apartment Communities, Inc. Prologis, Inc.	13,027 84,150	1,510,481 8,467,173
Public Storage	17,323	3,858,179
Realty Income Corp.	39,302	2,387,597
Regency Centers Corp.	17,969	683,181
SBA Communications Corp.	12,751	4,060,938
Simon Property Group, Inc.	34,843	2,253,645
SL Green Realty Corp. (b)	8,344	386,911
UDR, Inc.	33,655	1,097,490
Ventas, Inc.	42,497	1,783,174
Vornado Realty Trust Welltower, Inc.	17,854 47,533	601,858 2,618,593
Weyerhaeuser Co.	47,533 85,004	2,618,593 2,424,314
noyothucusot Co.	03,004	82,039,441
Savings & Loans — 0.0%		52,037,171
People's United Financial, Inc.	48,460	499,623
		400110

		442,272,243
Industrial — 8.1%	<del>-</del>	
Aerospace & Defense — 1.6%		
The Boeing Co.	60,436	9,987,653
General Dynamics Corp.	26,473	3,664,657
Howmet Aerospace, Inc.	44,711	747,568
L3 Harris Technologies, Inc.	24,626	4,182,480
Lockheed Martin Corp.	28,020	10,739,506
Northrop Grumman Corp.	17,660	5,571,553
Raytheon Technologies Corp.	174,009	10,012,478
Teledyne Technologies, Inc. (a)	4,199	1,302,572
TransDigm Group, Inc.	6,174	2,933,391
	_	49,141,858
Building Materials — 0.4%	<del>-</del>	
Carrier Global Corp.	92,742	2,832,341
Fortune Brands Home & Security, Inc.	15,736	1,361,479
Johnson Controls International PLC	84,751	3,462,078
Martin Marietta Materials, Inc.	7,093	1,669,408
Masco Corp.	29,790	1,642,323
Vulcan Materials Co.	15,087	2,044,892
	-	13,012,521
Electrical Components & Equipment — 0.2%	<del>-</del>	
AMETEK, Inc.	26,156	2,599,907
Emerson Electric Co.	68,069	4,463,284
	_	7,063,191
	-	.,,

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 — 1.3%	25.110	<u> </u>
Agilent Technologies, Inc.	35,118	\$ 3,544,811
Allegion PLC Amphenol Corp. Class A	10,506 33,987	1,039,148 3,679,772
FLIR Systems, Inc.	14,935	535,420
Fortive Corp.	38,394	2,926,007
Garmin Ltd.	16,991	1,611,766
Honeywell International, Inc.	79,937	13,158,430
Keysight Technologies, Inc. (a)	21,316	2,105,594
Mettler-Toledo International, Inc. (a) PerkinElmer, Inc.	2,729 12,736	2,635,532 1,598,495
Roper Technologies, Inc.	11,927	4,712,477
TE Connectivity Ltd.	37,593	3,674,340
Waters Corp. (a)	7,054	1,380,327
		42,602,119
Engineering & Construction — 0.0%	14.050	1 277 (24
Jacobs Engineering Group, Inc. Environmental Controls — 0.3%	14,850	1,377,634
Pentair PLC	18,916	865,785
Republic Services, Inc.	23,944	2,235,173
Waste Management, Inc.	44,271	5,010,149
		8,111,107
Hand & Machine Tools — 0.1% Snap-on, Inc.	6,204	912,794
Stanley Black & Decker, Inc.	18,189	2,950,256
3	10,105	3,863,050
Machinery – Construction & Mining — 0.3%	64 604	
Caterpillar, Inc.  Machinery – Diversified — 0.7%	61,681	9,199,721
Deere & Co.	35,695	7,911,083
Dover Corp.	16,399	1,776,668
Flowserve Corp.	14,858	405,475
IDEX Corp.	8,605	1,569,638
Ingersoll Rand, Inc. (a)	42,280	1,505,168
Otis Worldwide Corp.	46,370	2,894,415
Rockwell Automation, Inc.	13,209	2,914,962
Westinghouse Air Brake Technologies Corp.  Xylem, Inc.	20,376 20,498	1,260,867 1,724,292
Ayiem, mc.	20,496	21,962,568
Miscellaneous - Manufacturing — 1.1%		
3M Co.	65,612	10,509,730
A.O. Smith Corp.	15,419	814,123
Eaton Corp. PLC General Electric Co.	45,574 997,051	4,649,915 6,211,628
Illinois Tool Works, Inc.	32,772	6,331,878
Parker-Hannifin Corp.	14,652	2,964,686
	Nl C	
	Number of Shares	Value
Textron, Inc.	25,987	\$ 937,871
Trane Technologies PLC	27,264	3,305,760
		35,725,591
Packaging & Containers — 0.3% Amcor PLC	178,659	1,974,182
Ball Corp.	37,210	3,092,895
Packaging Corp. of America	10,802	1,177,958
Sealed Air Corp.	17,769	689,615
WestRock Co.	29,593	1,028,061
Shinhuilding 0.00/		7,962,711
Shipbuilding — 0.0% Huntington Ingalls Industries, Inc.	4,620	650,265
Transportation — 1.8%	ŕ	
C.H. Robinson Worldwide, Inc.	15,364	1,570,047
CSX Corp.	87,144	6,768,475
Expeditors International of Washington, Inc.	19,097 27,456	1,728,660
FedEx Corp.  J.B. Hunt Transport Services, Inc.	27,456 9,494	6,905,733 1,199,852
Kansas City Southern	10,747	1,943,380
Norfolk Southern Corp.	29,058	6,218,121
Old Dominion Freight Line, Inc.	10,959	1,982,702
https://macamutural.propagitus.pypropa.com/print.com/doct/po-com/ clientid-macamutura/fundid-E7620SE20		194/40

Union Pacific Corp. United Parcel Service, Inc. Class B  Technology — 23.7%	77,324 80,541	15,222,776 13,420,547 56,960,293 257,632,629
Computers — 8.1%		
Accenture PLC Class A	72,467	16,376,817
Apple, Inc.	1,831,195	212,070,693
Cognizant Technology Solutions Corp. Class A	61,764	4,287,657
DXC Technology Co.	28,966	517,043
Fortinet, Inc. (a)	15,314	1,804,142
Hewlett Packard Enterprise Co.	146,647	1,374,082
HP, Inc.	156,449	2,970,967
International Business Machines Corp.	101,442	12,342,448
Leidos Holdings, Inc.	15,240	1,358,646
NetApp, Inc.	25,245	1,106,741
Seagate Technology PLC	25,422	1,252,542
Western Digital Corp.	34,459	1,259,477
		256,721,255
Office & Business Equipment — 0.0%		
Zebra Technologies Corp. Class A (a)	6,076	1,533,947
Office Equipment/Supplies — 0.0%		
Xerox Holdings Corp.	20,381	382,551

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
Semiconductors — 5.1% Advanced Micro Devices, Inc. (a)	133,732	\$ 10,964,687
Analog Devices, Inc.	42,095	4,914,170
Applied Materials, Inc.	104,028	6,184,465
Broadcom, Inc.	45,811	16,689,863
Intel Corp.	484,442	25,084,407
IPG Photonics Corp. (a)	4,055 17,697	689,228 3,428,617
KLA Corp. Lam Research Corp.	16,588	5,503,069
Maxim Integrated Products, Inc.	30,431	2,057,440
Microchip Technology, Inc.	28,756	2,954,967
Micron Technology, Inc. (a)	126,549	5,942,741
NVIDIA Corp.	70,280	38,036,942
Qorvo, Inc. (a) QUALCOMM, Inc.	13,012 128,516	1,678,678 15,123,763
Skyworks Solutions, Inc.	19,026	2,768,283
Teradyne, Inc.	18,912	1,502,747
Texas Instruments, Inc.	104,331	14,897,423
Xilinx, Inc.	27,829	2,900,895
Software — 10.5%		161,322,385
Activision Blizzard, Inc.	87,942	7,118,905
Adobe, Inc. (a)	54,637	26,795,624
Akamai Technologies, Inc. (a)	18,522	2,047,422
ANSYS, Inc. (a)	9,772	3,197,692
Autodesk, Inc. (a)	24,977	5,769,937
Broadridge Financial Solutions, Inc. Cadence Design Systems, Inc. (a)	13,104 31,756	1,729,728 3,386,142
Cerner Corp.	34,785	2,514,608
Citrix Systems, Inc.	14,071	1,937,717
Electronic Arts, Inc. (a)	32,896	4,289,967
Fidelity National Information Services, Inc.	70,576	10,389,493
Fisery, Inc. (a) Intuit, Inc.	63,310 29,821	6,524,096 9,727,908
Jack Henry & Associates, Inc.	8,730	1,419,411
Microsoft Corp.	862,000	181,304,460
MSCI, Inc.	9,527	3,399,043
Oracle Corp.	220,211	13,146,597
Paychex, Inc.	36,493	2,911,047
Paycom Software, Inc. (a) salesforce.com, Inc. (a)	5,577 103,654	1,736,120 26,050,323
ServiceNow, Inc. (a)	21,847	10,595,795
Synopsys, Inc. (a)	17,287	3,699,072
Take-Two Interactive Software, Inc. (a)	13,024	2,151,825
	Number of	
	Shares	Value
Tyler Technologies, Inc. (a)	4,584	\$ 1,597,799
		333,440,731
TAPA - 2.00/		753,400,869
Utilities — 3.0% Electric — 2.8%		
AES Corp.	75,762	1,372,050
Alliant Energy Corp.	28,436	1,468,719
Ameren Corp.	28,144	2,225,628
American Electric Power Co., Inc.	56,515	4,618,971
CenterPoint Energy, Inc. CMS Energy Corp.	62,058 32,609	1,200,822 2,002,519
Consolidated Edison, Inc.	38,101	2,964,258
Dominion Energy, Inc.	95,696	7,553,285
DTE Energy Co.	21,944	2,524,438
Duke Energy Corp.	83,770	7,418,671
Edison International	43,082	2,190,289
Entergy Corp. Evergy, Inc.	22,805 25,837	2,246,977 1,313,036
Evergy, nic. Eversource Energy	39,032	3,261,124
Exelon Corp.	111,002	3,969,432
FirstEnergy Corp.	61,750	1,772,843
NextEra Energy, Inc.	55,774	15,480,631
NRG Energy, Inc.	27,866	856,601

Pinnacle West Capital Corp. PPL Corp. Public Service Enterprise Group, Inc. Sempra Energy The Southern Co. WEC Energy Group, Inc.	12,840 87,569 57,609 32,948 120,300 35,930	957,222 2,382,752 3,163,310 3,899,725 6,522,666 3,481,617
Xcel Energy, Inc.	59,840	4,129,558
Gas — 0.1%	_	88,977,144
Atmos Energy Corp.	14,051	1,343,135
NiSource, Inc.	43,690	961,180
Water 0.10/	_	2,304,315
Water — 0.1% American Water Works Co., Inc.	20,640	2,990,323 94,271,782
TOTAL COMMON STOCK (Cost \$1,806,158,149)	_	3,174,441,676
TOTAL EQUITIES (Cost \$1,806,158,149)	<u>-</u>	3,174,441,676

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
MUTUAL FUNDS — 0.1%	-	Sitties	 , with
Diversified Financial Services — 0.1%			
State Street Navigator Securities Lending Prime Portfolio (c)		2,507,873	\$ 2,507,873
TOTAL MUTUAL FUNDS (Cost \$2,507,873)			 2,507,873
TOTAL LONG-TERM INVESTMENTS (Cost \$1,808,666,022)			3,176,949,549
		Principal Amount	
SHORT-TERM INVESTMENTS — 0.8%			
Repurchase Agreement — 0.6%			
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (d)	\$	17,517,775	 17,517,775
U.S. Treasury Bill — 0.2%			
U.S. Treasury Bill			
0.000% 1/28/21 <sup>(e)</sup>		7,365,000	 7,362,535
TOTAL SHORT-TERM INVESTMENTS (Cost \$24,880,097)			 24,880,310
TOTAL INVESTMENTS — 100.7% (Cost \$1,833,546,119) (f)			3,201,829,859
Other Assets/(Liabilities) — (0.7)%			 (22,068,180)
NET ASSETS — 100.0%			\$ 3,179,761,679

#### 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, 2020, was \$5,409,068 or 0.17% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$3,084,725 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 \$17,517,775. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$17,868,177.
- (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	Uni Appi	lue/ Net realized reciation/ reciation)
Long					
S&P 500 E Mini Index	12/18/20	159	\$ 26,573,044	\$	75,356

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

MassMutual Select Equity Opportunities Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 98.5% COMMON STOCK — 97.7% Basic Materials — 6.3%		
Chemicals — 6.0%		
CF Industries Holdings, Inc.	112,800	\$ 3,464,088
DuPont de Nemours, Inc.	120,900	6,707,532
Ecolab, Inc.	68,709	13,730,806
Linde PLC	80,676	19,211,376 43,113,802
Forest Products & Paper — 0.3%		45,115,802
International Paper Co.	61,400	2,489,156
		45,602,958
Communications — 2.1%		
Media — 1.6% Comcast Corp. Class A	134,800	6,235,848
Fox Corp. Class B (a)	126,500	3,538,205
The Walt Disney Co.	13,900	1,724,712
		11,498,765
Telecommunications — 0.5%	02.000	2 (50 221
Cisco Systems, Inc.	92,900	3,659,331 15,158,096
Consumer, Cyclical — 11.9%		13,136,090
Apparel — 4.2%		
NIKE, Inc. Class B	238,875	29,988,367
Lodging — 0.3%	52 200	2 407 070
Las Vegas Sands Corp.  Retail — 7.4%	53,300	2,486,978
McDonald's Corp.	135,837	29,814,863
The TJX Cos., Inc.	415,126	23,101,762
		52,916,625
G W . L . 24204		85,391,970
Consumer, Non-cyclical — 34.8% Agriculture — 0.6%		
Philip Morris International, Inc.	60,250	4,518,148
Beverages — 10.0%	00,230	1,510,110
The Coca-Cola Co.	552,300	27,267,051
Diageo PLC	626,528	21,463,720
PepsiCo, Inc.	165,178	22,893,671 71,624,442
Biotechnology — 0.3%		/1,024,442
Gilead Sciences, Inc.	34,300	2,167,417
Cosmetics & Personal Care — 5.1%		
Colgate-Palmolive Co.	329,546	25,424,474
The Procter & Gamble Co.	79,184	11,005,784 36,430,258
		30,430,238
	Number of	
F. J. 400/	Shares	Value
Foods — 1.0% Conagra Brands, Inc.	68,200	\$ 2,435,422
Tyson Foods, Inc. Class A	78,400	4,663,232
1,55,11,55,00,51,15,15,15,15,15,15,15,15,15,15,15,15,	70,100	7,098,654
Health Care – Products — 6.8%		
Baxter International, Inc.	160,093	12,874,679
Danaher Corp. Medtronic PLC	52,175 239,054	11,234,843 24,842,491
Meditolile I EC	239,034	48,952,013
Health Care – Services — 4.5%		.0,552,515
Anthem, Inc.	20,150	5,412,088
UnitedHealth Group, Inc.	86,866	27,082,213
Household Products & Wares — 0.5%		32,494,301
Kimberly-Clark Corp.	25,600	3,780,096
Pharmaceuticals — 6.0%	25,000	2,700,070
AbbVie, Inc.	44,050	3,858,340
Becton Dickinson and Co.	20,300	4,723,404
CVS Health Corp.	82,100	4,794,640

Johnson & Johnson	201,507	30,000,362 43,376,746 250,442,075
Energy — 1.7% Oil & Gas — 1.2%		
Occidental Petroleum Corp.	30,000	300,300
TOTAL SE (b)	174,600	5,994,548
TOTAL SE Sponsored ADR	57,800	1,982,540
		8,277,388
Oil & Gas Services — 0.2%		
Halliburton Co.	118,000	1,421,900
Pipelines — 0.3%		
TC Energy Corp.	58,600	2,462,372
		12,161,660
Financial — 18.4%		
Banks — 3.8%		
Fifth Third Bancorp	212,400	4,528,368
Morgan Stanley	118,800	5,743,980
The PNC Financial Services Group, Inc.	72,894	8,011,779
State Street Corp.	50,700	3,008,031
Wells Fargo & Co.	264,800	6,225,448
		27,517,606
Diversified Financial Services — 4.7%	220 411	24.000.052
American Express Co.	239,411	24,000,953
Visa, Inc. Class A	47,633	9,525,171
		33,526,124

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

MassMutual Select Equity Opportunities Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Insurance — 6.7% American International Group, Inc.	153,900	\$ 4,236,867
Chubb Ltd.	215,442	25,017,125
Marsh & McLennan Cos., Inc.	126,201	14,475,255
MetLife, Inc.	120,800	4,490,136
Real Estate Investment Trusts (REITS) — 3.2%		48,219,383
American Tower Corp.	26,783	6,474,255
Equity Residential Public Storage	36,900 46,706	1,894,077
SL Green Realty Corp. (b)	40,000	10,402,360 1,854,800
Weyerhaeuser Co.	85,700	2,444,164
		23,069,656
Industrial — 14.1%		132,332,769
Aerospace & Defense — 5.7%		
The Boeing Co.	21,250	3,511,775
L3 Harris Technologies, Inc. Lockheed Martin Corp.	26,050 41,004	4,424,332 15,716,013
Northrop Grumman Corp.	54,769	17,279,072
	,, -,-	40,931,192
Building Materials — 0.2%  Johnson Controls International PLC	37,900	1,548,215
Machinery – Diversified — 1.7%	37,900	1,346,213
Deere & Co.	55,874	12,383,355
Miscellaneous - Manufacturing — 0.7%	012.000	5.050.760
General Electric Co.  Transportation — 5.8%	812,000	5,058,760
Canadian National Railway Co.	130,262	13,872,895
Union Pacific Corp.	104,533	20,579,412
United Parcel Service, Inc. Class B	44,100	7,348,383
		101,722,212
Technology — 6.5%		
Computers — 1.8%	50.072	12 122 017
Accenture PLC Class A Semiconductors — 1.3%	58,073	13,123,917
QUALCOMM, Inc.	78,100	9,190,808
Software — 3.4%		
Microsoft Corp.	118,162	24,853,014 47,167,739
Utilities — 1.9%		47,107,739
Electric — 1.5%		
Edison International	35,000	1,779,400
Sempra Energy	14,800	1,751,728
	Number of	X7.1
The Southern Co.	Shares 133,500	<b>Value</b> \$ 7,238,370
The Southern Co.	133,300	10,769,498
Gas — 0.4%	400.000	
NiSource, Inc.	123,000	2,706,000 13,475,498
		13,473,496
TOTAL COMMON STOCK (Cost \$631,389,862)		703,454,977
PREFERRED STOCK — 0.8% Consumer Non evelical = 0.1%		
Consumer, Non-cyclical — 0.1% Pharmaceuticals — 0.1%		
Becton Dickinson and Co. Convertible 6.000% (b)	15,000	789,750
Utilities — 0.7%		
Electric — 0.7% Sempra Energy Convertible 6.000%	36,700	3,613,115
Sempra Energy Convertible 6.750% (b)	2,750	269,528
The Southern Co. Convertible 6.750%	23,100	1,075,074
		4,957,717
TOTAL PREFERRED STOCK (Cost \$5,860,935)		5,747,467
		3,717,707

TOTAL EQUITIES (Cost \$637,250,797)		709,202,444
WARRANTS — 0.0% Energy — 0.0% Oil & Gas — 0.0% Occidental Petroleum Corp., Expires 8/03/27 (a)	6,250	18,750
TOTAL WARRANTS (Cost \$30,938)	_	18,750
MUTUAL FUNDS — 1.0%  Diversified Financial Services — 1.0%  State Street Navigator Securities Lending Prime Portfolio (c)	6,872,020	6,872,020
TOTAL MUTUAL FUNDS (Cost \$6,872,020)	_	6,872,020
TOTAL LONG-TERM INVESTMENTS (Cost \$644,153,755)		716,093,214

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

MassMutual Select Equity Opportunities Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
SHORT-TERM INVESTMENTS — 1.5% Mutual Fund — 0.0%		
T. Rowe Price Government Reserve Investment Fund	156 Principal Amount	\$ 156
Repurchase Agreement — 1.5% Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (d)	\$ 11,074,883	 11,074,883
TOTAL SHORT-TERM INVESTMENTS (Cost \$11,075,039)		 11,075,039
TOTAL INVESTMENTS — 101.0% (Cost \$655,228,794) (e)		727,168,253
Other Assets/(Liabilities) — (1.0)%		 (6,951,994)
NET ASSETS — 100.0%		\$ 720,216,259

## **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, 2020, was \$8,558,321 or 1.19% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$2,041,418 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 \$11,074,883. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$11,296,459.
- (e) See Note 6 for aggregate cost for federal tax purposes.

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

United States	81.4%
Ireland	8.2%
Switzerland	3.5%
United Kingdom	3.0%
Canada	2.3%
France	1.1%
Total Long-Term Investments	99.5%
Short-Term Investments and Other Assets and Liabilities	0.5%
Net Assets	100.0%

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

MassMutual Select Fundamental Growth Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 100.7% COMMON STOCK — 100.7%		
Basic Materials — 1.4%		
Chemicals — 1.4%		
Celanese Corp.	3,500	\$ 376,075
RPM International, Inc.	6,220	515,265
Communications — 6.8%		891,340
Internet — 5.7%		
CDW Corp.	12,457	1,488,985
Etsy, Inc. (a)	8,028	976,446
Expedia Group, Inc.	3,120	286,073
Zendesk, Inc. (a)	9,180	944,805
Telecommunications — 1.1%		3,696,309
NICE Systems Ltd. Sponsored ADR (a) (b)	3,040	690,171
THE Bystems Etc. Sponsored Tible (a) (b)	5,010	4,386,480
Consumer, Cyclical — 12.9%		
Entertainment — 1.6%		
Vail Resorts, Inc.	4,824	1,032,191
Food Services — 1.6% Aramark	40,173	1,062,576
Home Builders — 0.9%	40,173	1,002,370
D.R. Horton, Inc.	7,730	584,620
Retail — 8.8%	,	
Burlington Stores, Inc. (a)	7,562	1,558,453
Chipotle Mexican Grill, Inc. (a)	628	781,050
Domino's Pizza, Inc. Lululemon Athletica, Inc. (a)	2,662 950	1,132,095 312,901
O'Reilly Automotive, Inc. (a)	1,855	855,303
Ross Stores, Inc.	5,930	553,388
Ulta Beauty, Inc. (a)	2,220	497,236
		5,690,426
C N P 1 . 20.20/		8,369,813
Consumer, Non-cyclical — 30.2% Biotechnology — 6.6%		
Ascendis Pharma A/S ADR (a)	5,100	787,032
BioMarin Pharmaceutical, Inc. (a)	5,500	418,440
Bluebird Bio, Inc. (a)	10,606	572,194
Incyte Corp. (a)	10,644	955,192
Seattle Genetics, Inc. (a)	7,917	1,549,278
Commercial Services — 9.5%		4,282,136
Avalara, Inc. (a)	5,019	639,120
Bright Horizons Family Solutions, Inc. (a)	8,660	1,316,666
	Number of Shares	Value
CoStar Group, Inc. (a)	655	\$ 555,774
FleetCor Technologies, Inc. (a)	2,890	688,109
Global Payments, Inc.	5,460	969,587
Square, Inc. Class A (a)	2,680	435,634
TransUnion	17,984	1,512,994
Health Care – Products — 10.0%		6,117,884
ABIOMED, Inc. (a)	2,356	652,753
Align Technology, Inc. (a)	1,570	513,955
The Cooper Cos., Inc.	1,970	664,126
IDEXX Laboratories, Inc. (a)	6,877	2,703,418
Insulet Corp. (a)	1,390 1,850	328,860 436,711
Masimo Corp. (a) Penumbra, Inc. (a)	2,965	436,711 576,337
Steris PLC	3,270	576,141
	2,270	6,452,301
Health Care – Services — 3.2%		
ICON PLC (a)	8,799	1,681,401
Quest Diagnostics, Inc.	3,490	399,570
		2,080,971

Pharmaceuticals — 0.9%		
DexCom, Inc. (a)	1,490	614,223
	_	19,547,515
Financial — 7.9%	_	
Diversified Financial Services — 3.9%		
Hamilton Lane, Inc. Class A	20,404	1,317,894
Tradeweb Markets, Inc. Class A	20,571	1,193,118
	_	2,511,012
Insurance — 0.7%	_	_
Arthur J Gallagher & Co.	4,460	470,887
Real Estate Investment Trusts (REITS) — 3.3%	_	
SBA Communications Corp.	4,936	1,572,018
Sun Communities, Inc.	4,110	577,907
	_	2,149,925
	_	5,131,824
Industrial — 15.7%	=	
Aerospace & Defense — 3.0%		
Hexcel Corp.	22,604	758,364
Teledyne Technologies, Inc. (a)	1,760	545,970
TransDigm Group, Inc.	1,354	643,312
	_	1,947,646
Building Materials — 1.2%	_	
Fortune Brands Home & Security, Inc.	9,364	810,173
Electrical Components & Equipment — 0.8%	_	
AMETEK, Inc.	4,980	495,012
	_	

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

MassMutual Select Fundamental Growth Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Electronics — 3.4% Mettler-Toledo International, Inc. (a)	2,258	\$ 2,180,663
Environmental Controls — 0.4% Waste Connections, Inc.	2,750	285,450
Machinery – Construction & Mining — 2.6% BWX Technologies, Inc.	29,826	1,679,502
Machinery – Diversified — 1.0% Rockwell Automation, Inc.	2,860	631,145
Miscellaneous - Manufacturing — 0.9% Trane Technologies PLC	4,670	566,238
Transportation — 2.4%  J.B. Hunt Transport Services, Inc.	12,252	1,548,408
Technology — 25.8%		10,144,237
Computers — 2.3%	7.040	544.252
Cognizant Technology Solutions Corp. Class A Fortinet, Inc. (a)	7,840 5,720	544,253 673,873
NCR Corp. (a)	11,890	263,245
Semiconductors — 7.1%	,	1,481,371
Applied Materials, Inc.	8,870	527,321
KLA Corp.	7,517	1,456,344
Lam Research Corp.	1,260	418,005
Microchip Technology, Inc.	5,930	609,367
Monolithic Power Systems, Inc. NXP Semiconductor NV	3,867 4,140	1,081,252 516,713
NAP Semiconductor NV	4,140	4,609,002
Software — 16.4%	20,000	556 614
Dropbox, Inc. Class A (a) Fidelity National Information Services, Inc.	28,900 2,620	556,614 385,690
Guidewire Software, Inc. (a)	8,224	857,516
HubSpot, Inc. (a)	1,310	382,821
Medallia, Inc. (a) (b)	35,492	973,191
MongoDB, Inc. (a)	1,760	407,458
MSCI, Inc.	1,210	431,704
RingCentral, Inc. Class A (a)	1,080	296,579
Slack Technologies, Inc. Class A (a) (b) Splunk, Inc. (a)	19,196 4,980	515,605 936,887
SS&C Technologies Holdings, Inc	31,639	1,914,792
Take-Two Interactive Software, Inc. (a)	8,887	1,468,310
Twilio, Inc. Class A (a)	3,050	753,624
	Number of	
Talan Tasharalasian Ing. (a)	Shares	Value
Tyler Technologies, Inc. (a)	2,030	\$ 707,577 10,588,368
		16,678,741
TOTAL COMMON STOCK (Cost \$56,852,471)		65,149,950
TOTAL EQUITIES (Cost \$56,852,471)		65,149,950
MUTUAL FUNDS — 0.1%		_
Diversified Financial Services — 0.1% State Street Navigator Securities Lending Prime Portfolio (c)	64,652	64,652
TOTAL MUTUAL FUNDS (Cost \$64,652)		64,652
TOTAL LONG-TERM INVESTMENTS (Cost \$56,917,123)		65,214,602
101AL LONG-1ERM INVESTMENTS (COSt \$30,717,123)	Principal	03,214,002
SHORT-TERM INVESTMENTS — 0.4%	Amount	
Repurchase Agreement — 0.4%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (d)	\$ 287,525	287,525
TOTAL SHORT-TERM INVESTMENTS (Cost \$287,525)		287,525
TOTAL INVESTMENTS — 101.2% (Cost \$57,204,648) <sup>(e)</sup>		65,502,127

Other Assets/(Liabilities) — (1.2)%

NET ASSETS — 100.0% \$ 64,706,874

**Abbreviation Legend** 

ADR American Depositary Receipt

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

140

(795,253)

MassMutual Select 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, 2020, was \$1,539,283 or 2.38% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$1,522,946 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 \$287,525. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$293,358.
- (e) See Note 6 for aggregate cost for federal tax purposes.

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

MassMutual Select Blue Chip Growth Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 99.7%		
COMMON STOCK — 99.7% Basic Materials — 0.3%		
Chemicals — 0.3%	1 422	¢ 426.526
Air Products & Chemicals, Inc. Linde PLC	1,432 31,364	\$ 426,536 7,468,709
PPG Industries, Inc.	9,456	1,154,388
The Sherwin-Williams Co.	3,890	2,710,319 11,759,952
Communications — 33.5%		11,/39,932
Internet — 31.0%	901.297	225 562 059
Alibaba Group Holding Ltd. Sponsored ADR (a) Alphabet, Inc. Class A (a)	801,286 50,703	235,562,058 74,310,317
Alphabet, Inc. Class C (a)	101,436	149,070,346
Amazon.com, Inc. (a) Booking Holdings, Inc. (a)	131,359 11,441	413,614,024 19,571,890
Etsy, Inc. (a)	26,962	3,279,388
Facebook, Inc. Class A (a)	1,013,294	265,381,699
GoodRx Holdings, Inc. Class A (a) Match Group, Inc. (a)	12,483 170,693	694,055 18,887,180
Netflix, Inc. (a)	111,874	55,940,356
Shopify, Inc. Class A (a)	3,606	3,688,830
Snap, Inc. Class A (a) Spotify Technology SA (a)	138,746 45,557	3,622,658 11,050,761
Tencent Holdings Ltd.	921,200	61,345,815
Trip.com Group Ltd. ADR (a) Wix.com Ltd. (a)	24,267	755,674
wix.com Ltd. (a)	46,182	11,769,483 1,328,544,534
Media — 1.7%	5.040	
Charter Communications, Inc. Class A (a) FactSet Research Systems, Inc.	5,948 100,207	3,713,574 33,557,320
The Walt Disney Co.	302,310	37,510,625
T-1		74,781,519
Telecommunications — 0.8% Cisco Systems, Inc.	839,006	33,048,447
	,	1,436,374,500
Consumer, Cyclical — 4.2% Airlines — 0.0%		
United Airlines Holdings, Inc. (a)	1,012	35,167
Apparel — 0.3%	0.4.652	11.005.240
NIKE, Inc. Class B Auto Manufacturers — 0.0%	94,673	11,885,249
Tesla, Inc. (a)	1,700	729,317
Auto Parts & Equipment — 0.0% Aptiv PLC	14,577	1,336,419
Apuv r.c.	14,5//	1,330,419
	Number of Shares	Value
Lodging — 0.1%	5.521	¢ 470.161
Hilton Worldwide Holdings, Inc. Marriott International, Inc. Class A	5,534 16,002	\$ 472,161 1,481,465
	10,002	1,953,626
Retail — 3.8% Carvana Co. (a)	5,300	1 102 210
Chipotle Mexican Grill, Inc. (a)	11,422	1,182,218 14,205,655
Dollar General Corp.	143,769	30,136,858
Dollar Tree, Inc. (a) Domino's Pizza, Inc.	2,135 3,000	195,011 1,275,840
Lowe's Cos., Inc.	11,588	1,921,986
Lululemon Athletica, Inc. (a)	47,808	15,746,521
McDonald's Corp. Ross Stores, Inc.	5,900 150,046	1,294,991 14,002,293
Starbucks Corp.	411,426	35,349,722
The TJX Cos., Inc. Yum China Holdings, Inc.	20,290 338,284	1,129,138 17,912,138
Yum! Brands, Inc.	323,425	29,528,702
		163,881,073
		179,820,851

Consumer, Non-cyclical — 19.5%		
Beverages — 1.6%		
Monster Beverage Corp. (a)	870,010	69,774,802
Biotechnology — 3.7%		
Exact Sciences Corp. (a) (b)	43,813	4,466,735
Illumina, Inc. (a)	131,347	40,596,731
Incyte Corp. (a)	111,530	10,008,702
Regeneron Pharmaceuticals, Inc. (a)	112,182	62,797,240
Seattle Genetics, Inc. (a)	11,418	2,234,389
Vertex Pharmaceuticals, Inc. (a)	135,852	36,968,046
		157,071,843
Commercial Services — 4.1%		
Ant International Co. Ltd., Class C (Acquired 6/07/18, Cost \$3,358,253) (a) (c) (d) (e)	598,619	5,411,516
Automatic Data Processing, Inc.	90,729	12,655,788
Cintas Corp.	25,616	8,525,773
CoStar Group, Inc. (a)	19,967	16,942,199
Equifax, Inc.	54,950	8,621,655
Global Payments, Inc.	239,217	42,480,155
IHS Markit Ltd.	9,173	720,172
PayPal Holdings, Inc. (a)	317,268	62,511,314
S&P Global, Inc.	49,244	17,757,387
		175,625,959
Cosmetics & Personal Care — 0.7%		
Colgate-Palmolive Co.	395,664	30,525,478
Health Care – Products — 4.0%		
Align Technology, Inc. (a)	2,131	697,604

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

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

	Number of Shares	Value
Danaher Corp.		\$ 32,779,255
Edwards Lifesciences Corp. (a)	5,340	426,239
Intuitive Surgical, Inc. (a)	86,132	61,114,099
Stryker Corp.	143,511	29,903,387
Thermo Fisher Scientific, Inc.	66,136	29,200,367
Varian Medical Systems, Inc. (a)	93,030	16,001,160
•		170,122,111
Health Care – Services — 2.0% Anthem, Inc.	64,833	17,413,495
Centene Corp. (a)	223,675	13,046,963
HCA Healthcare, Inc.	29,490	3,676,813
Humana, Inc.	15,611	6,461,237
PPD, Inc. (a)	55,823	2,064,893
UnitedHealth Group, Inc.	141,607	44,148,814
Pharmaceuticals — 3.4%		86,812,215
AbbVie, Inc.	4,593	402,301
Becton Dickinson and Co.	3,030	705,020
Cigna Corp.	160,543	27,197,590
Novartis AG Sponsored ADR	399,814	34,767,825
Novo Nordisk A/S Sponsored ADR (b)	270,818	18,802,894
Roche Holding AG Sponsored ADR	1,359,308	58,191,976
Zoetis, Inc.	49,787	8,233,276
	· · · · · · · · · · · · · · · · · · ·	148,300,882
E 0.20/		838,233,290
Energy — 0.3% Oil & Gas — 0.0%		
Pioneer Natural Resources Co.	7,181	617,494
Oil & Gas Services — 0.3% Schlumberger NV	702,957	10,938,011
	-	11,555,505
Financial — 7.5%	•	<u> </u>
Banks — 0.4%	50.247	11 705 000
The Goldman Sachs Group, Inc.	58,247	11,705,899
Morgan Stanley	135,851	6,568,396
State Street Corp.	14,554	863,489 19,137,784
Diversified Financial Services — 6.7%		
The Charles Schwab Corp.	66,616	2,413,498
Intercontinental Exchange, Inc.	90,080	9,012,504
Mastercard, Inc. Class A	189,515	64,088,287
SEI Investments Co.	565,272	28,670,596
Visa, Inc. Class A	913,539	182,680,394 286,865,279
Insurance — 0.4%	2.604	, , , , , , , , , , , , , , , , , , , ,
Chubb Ltd.	3,694	428,947
	Number of Shares	Value
Marsh & McLennan Cos., Inc.		\$ 4,327,058
Willis Towers Watson PLC	53,589	11,190,455
Willis Towers Watson FEE	33,367	15,946,460
	-	321,949,523
Industrial — 5.2%	•	321,747,323
Aerospace & Defense — 1.4%		
The Boeing Co.	349,118	57,695,241
L3 Harris Technologies, Inc.	2,197	373,138
Northrop Grumman Corp.	1,420	447,996 58,516,375
Building Materials — 0.0%	-	
Johnson Controls International PLC  Electronics — 0.5%	45,605	1,862,964
Agilent Technologies, Inc.	5,581	563,346
Fortive Corp.	77,679	5,919,917
Honeywell International, Inc.	2,123	349,467
Roper Technologies, Inc.	33,629	13,287,154
TE Connectivity Ltd.	34,549	3,376,819
Machinery Diversified 179/		23,496,703
Machinery – Diversified — 1.7%		

5,25,252	2004	
Deere & Co.	325,037	72,037,950
Miscellaneous - Manufacturing — 0.0%		
Parker-Hannifin Corp.	5,578	1,128,653
Transportation — 1.6%		
Canadian Pacific Railway Ltd.	12,357	3,761,841
Expeditors International of Washington, Inc.	545,026	49,335,754
Kansas City Southern	11,736	2,122,221
Norfolk Southern Corp.	17,329	3,708,233
Union Pacific Corp.	42,252	8,318,151
•		67,246,200
		224,288,845
Technology — 29.2%		
Computers — 2.6%		
Apple, Inc.	963,200	111,548,192
Semiconductors — 6.0%		
Advanced Micro Devices, Inc. (a)	239,906	19,669,893
Applied Materials, Inc.	64,323	3,824,002
KLA Corp.	4,731	916,584
Lam Research Corp.	9,266	3,073,996
Marvell Technology Group Ltd.	425,557	16,894,613
Maxim Integrated Products, Inc.	74,564	5,041,272
NVIDIA Corp.	271,161	146,757,756
QUALCOMM, Inc.	497,565	58,553,449
Texas Instruments, Inc.	32,785	4,681,370
		259,412,935

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

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

	Number of Shares	Value
Software — 20.6%	20.525	<b>A 5.2</b> (0.1(0)
Atlassian Corp. PLC Class A (a)	29,535	\$ 5,369,168
Autodesk, Inc. (a)	378,904	87,530,613
Cerner Corp. Coupa Software, Inc. (a)	459,789 7,669	33,238,147 2,103,147
DocuSign, Inc. (a)	58,882	12,673,762
Electronic Arts, Inc. (a)	5,954	776,461
Fidelity National Information Services, Inc.	246,547	36,294,184
Fisery, Inc. (a)	262,143	27,013,836
Intuit, Inc.	141,792	46,253,968
Microsoft Corp.	952,919	200,427,453
MSCI, Inc.	9,711	3,464,691
Oracle Corp.	1,325,142	79,110,977
Paycom Software, Inc. (a)	14,236	4,431,667
salesforce.com, Inc. (a)	618,751	155,504,501
Sea Ltd. (a) ServiceNow, Inc. (a)	146,913 122,195	22,630,479 59,264,575
Snowflake, Inc. Class A (a) (b)	6,361	1,596,611
Splunk, Inc. (a)	105,677	19,881,014
Synopsys, Inc. (a)	76,349	16,337,159
Twilio, Inc. Class A (a)	6,725	1,661,680
Veeva Systems, Inc. Class A (a)	29,995	8,434,294
Workday, Inc. Class A (a)	234,180	50,379,143
Zoom Video Communications, Inc. Class A (a)	22,046	10,364,045
		884,741,575
		1,255,702,702
Utilities — 0.0%		
Electric — 0.0%		
Sempra Energy	9,336	1,105,009
TOTAL COMMON STOCK (Cost \$2,394,361,062)		4,280,790,177
TOTAL EQUITIES (Cost \$2,394,361,062)		4,280,790,177
MUTUAL FUNDS — 0.1%		
Diversified Financial Services — 0.1%		
State Street Navigator Securities Lending Prime Portfolio (f)	1,613,606	1,613,606
TOTAL MUTUAL FUNDS (Cost \$1,613,606)	1,015,000	1,613,606
		·
TOTAL LONG-TERM INVESTMENTS (Cost \$2,395,974,668)		4,282,403,783
	Number of	
CHOPT TERM INVESTMENTS AND	Shares	Value
SHORT-TERM INVESTMENTS — 0.3%		
Mutual Fund — 0.0%  T. Rowe Price Government Reserve Investment Fund	1,075	¢ 1.075
1. Nowe Frice Government reserve investment Fund	Principal	\$ 1,075
	Amount	
Repurchase Agreement — 0.3%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (g)	\$ 13,263,282	13,263,282
TOTAL SHORT-TERM INVESTMENTS (Cost \$13,264,357)		13,264,357
TOTAL INVESTMENTS — 100.1% (Cost \$2,409,239,025) (h)		4,295,668,140
Other Assets/(Liabilities) — (0.1)%		(3,192,219)
NET ASSETS — 100.0%		\$ 4,292,475,921
		Ψ 1,474,413,741

## **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, 2020, was \$3,686,014 or 0.09% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$2,151,303 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, 2020, these securities amounted to a value of \$5,411,516 or 0.13% of net assets.
- (e) Restricted security. Certain securities are restricted as to resale. At September 30, 2020, these securities amounted to a value of \$5,411,516 or 0.13% 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) Maturity value of \$13,263,282. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$13,528,586.
- (h) See Note 6 for aggregate cost for federal tax purposes.

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

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

## Notes to Portfolio of Investments (Continued)

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

United States	87.5%
Cayman Islands	7.4%
Switzerland	2.3%
Ireland	0.5%
Denmark	0.4%
Bermuda	0.4%
Israel	0.3%
Luxembourg	0.3%
Netherlands	0.3%
Canada	0.2%
United Kingdom	0.2%
Total Long-Term Investments	99.8%
Short-Term Investments and Other Assets and Liabilities	0.2%
Net Assets	100.0%

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

MassMutual Select Growth Opportunities Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 98.0%		<del></del>
COMMON STOCK — 98.0%		
Communications — 29.8% Internet — 26.4%		
Alphabet, Inc. Class A (a)	8,190 \$	12,003,265
Amazon.com, Inc. (a)	11,517	36,263,923
Facebook, Inc. Class A (a)	34,607	9,063,573
Match Group, Inc. (a)	190,542	21,083,472
Netflix, Inc. (a)	54,848	27,425,646
Uber Technologies, Inc. (a)	396,966	14,481,320 4,357,935
Wix.com Ltd. (a) Zillow Group, Inc. Class C (a) (b)	17,100 61,600	6,257,944
Zillow Group, nic. Class C (a) (b)	01,000 _	130,937,078
Media — 3.4%	<del>-</del>	
Charter Communications, Inc. Class A (a)	26,771 _	16,714,206 147,651,284
Consumer, Cyclical — 4.7%	_	147,031,264
Apparel — 1.7%		
NIKE, Inc. Class B	66,439	8,340,752
Entertainment — 0.8%	_	
Warner Music Group Corp. Class A	144,713	4,159,052
Retail — 2.2% Floor & Decor Holdings, Inc. Class A (a)	77,300	5,782,040
Starbucks Corp.	62,006	5,327,555
Switchest Corp.		11,109,595
	<del>-</del>	23,609,399
Consumer, Non-cyclical — 20.7%	<del>-</del>	
Beverages — 0.6%		
Monster Beverage Corp. (a)	34,328	2,753,106
Biotechnology — 2.7% Illumina, Inc. (a)	35,466	10,961,831
Mirati Therapeutics, Inc. (a)	15,950	2,648,498
man Therapeanes, me. (a)	13,530 _	13,610,329
	<del>-</del>	- , ,
Commercial Services — 6.9%		
CoStar Group, Inc. (a)	9,850	8,357,824
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a)	51,006	10,049,712
CoStar Group, Inc. (a)		10,049,712 15,980,128
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a)	51,006	10,049,712
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a)	51,006	10,049,712 15,980,128
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)	51,006 98,309	10,049,712 15,980,128
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8%	51,006 98,309	10,049,712 15,980,128 34,387,664 Value
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a)	51,006 98,309 _ - Number of	10,049,712 15,980,128 34,387,664 Value
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1%	51,006 98,309 Number of Shares	10,049,712 15,980,128 34,387,664 Value 3,774,720
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a)	51,006 98,309	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1%	51,006 98,309 Number of Shares 96,000 \$	10,049,712 15,980,128 34,387,664 Value 5 3,774,720 6,505,298 11,410,588 7,338,772
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)	51,006 98,309 Number of Shares 96,000 \$\frac{1}{2},872 142,954	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298 11,410,588
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4%	51,006 98,309 Number of Shares  96,000 \$\frac{1}{2}\$ 19,872 142,954 10,343	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a)	51,006 98,309 Number of Shares 96,000 \$\frac{1}{2},872 142,954	10,049,712 15,980,128 34,387,664 Value 5 3,774,720 6,505,298 11,410,588 7,338,772
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2%	51,006 98,309 Number of Shares  96,000 \$\frac{1}{2}\$ 19,872 142,954 10,343 44,024	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a)	51,006 98,309  Number of Shares  96,000 \$\frac{1}{2}\$ 19,872 142,954 10,343 44,024 9,275	10,049,712 15,980,128 34,387,664 Value 5 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2%	51,006 98,309 Number of Shares  96,000 \$\frac{1}{2}\$ 19,872 142,954 10,343 44,024	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a)	51,006 98,309  Number of Shares  96,000 \$\frac{1}{2}\$ 19,872 142,954 10,343 44,024 9,275 21,705	10,049,712 15,980,128 34,387,664 Value 5 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a) Zoetis, Inc.	51,006 98,309  Number of Shares  96,000 \$\frac{1}{2}\$ 19,872 142,954 10,343 44,024 9,275 21,705	10,049,712 15,980,128 34,387,664 Value 5 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a) Zoetis, Inc.  Financial — 9.3%	51,006 98,309  Number of Shares  96,000 \$\frac{1}{2}\$ 19,872 142,954 10,343 44,024 9,275 21,705	10,049,712 15,980,128 34,387,664 Value 5 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a) Zoetis, Inc.  Financial — 9.3% Diversified Financial Services — 7.9%	51,006 98,309  Number of Shares  96,000 \$  19,872  142,954  10,343  -  44,024  9,275  21,705  55,424	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933 102,756,913
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a) Zoetis, Inc.  Financial — 9.3% Diversified Financial Services — 7.9% Mastercard, Inc. Class A	51,006 98,309  Number of Shares  96,000 \$  19,872 142,954 10,343  -  44,024 9,275 21,705 55,424  31,637	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933 102,756,913
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a) Zoetis, Inc.  Financial — 9.3% Diversified Financial Services — 7.9%	51,006 98,309  Number of Shares  96,000 \$  19,872  142,954  10,343  -  44,024  9,275  21,705  55,424	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933 102,756,913 10,698,684 28,336,149
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeuties, Inc. (a) Zoetis, Inc.  Financial — 9.3% Diversified Financial Services — 7.9% Mastercard, Inc. Class A	51,006 98,309  Number of Shares  96,000 \$  19,872 142,954 10,343  -  44,024 9,275 21,705 55,424  31,637	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933 102,756,913
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a) Zoetis, Inc.  Financial — 9.3% Diversified Financial Services — 7.9% Mastercard, Inc. Class A Visa, Inc. Class A (b)	51,006 98,309  Number of Shares  96,000 \$  19,872 142,954 10,343  -  44,024 9,275 21,705 55,424  31,637	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933 102,756,913 10,698,684 28,336,149
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a) Zoetis, Inc.  Financial — 9.3% Diversified Financial Services — 7.9% Mastercard, Inc. Class A Visa, Inc. Class A (b)  Private Equity — 1.4% KKR & Co., Inc. Class A	51,006 98,309  Number of Shares  96,000 \$\frac{1}{2}\$ 19,872 142,954 10,343 44,024 9,275 21,705 55,424  31,637 141,702	10,049,712 15,980,128 34,387,664 Value 3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933 102,756,913 10,698,684 28,336,149 39,034,833
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a) Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a) Zoetis, Inc.  Financial — 9.3% Diversified Financial Services — 7.9% Mastercard, Inc. Class A Visa, Inc. Class A (b)  Private Equity — 1.4% KKR & Co., Inc. Class A Industrial — 2.8%	51,006 98,309  Number of Shares  96,000 \$\frac{1}{2}\$ 19,872 142,954 10,343 44,024 9,275 21,705 55,424  31,637 141,702	10,049,712 15,980,128 34,387,664 Value 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933 102,756,913 10,698,684 28,336,149 39,034,833 6,963,809
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a)  Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a) Zoetis, Inc.  Financial — 9.3% Diversified Financial Services — 7.9% Mastercard, Inc. Class A Visa, Inc. Class A (b)  Private Equity — 1.4% KKR & Co., Inc. Class A  Industrial — 2.8% Environmental Controls — 1.5%	51,006 98,309  Number of Shares  96,000 \$\frac{3}{19,872} \\ 142,954 \\ 10,343 \\ 44,024 \\ 9,275 \\ 21,705 \\ 55,424 \\ \end{array}  31,637 \\ 141,702 \\ 202,790 \\ \end{array}	10,049,712 15,980,128 34,387,664  Value  3,774,720 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933 102,756,913  10,698,684 28,336,149 39,034,833 6,963,809 45,998,642
CoStar Group, Inc. (a) PayPal Holdings, Inc. (a) Square, Inc. Class A (a)  Foods — 0.8% Grocery Outlet Holding Corp. (a) Health Care – Products — 5.1% Align Technology, Inc. (a) Edwards Lifesciences Corp. (a) Intuitive Surgical, Inc. (a) Health Care – Services — 1.4% IQVIA Holdings, Inc. (a) Pharmaceuticals — 3.2% DexCom, Inc. (a) Sarepta Therapeutics, Inc. (a) Zoetis, Inc.  Financial — 9.3% Diversified Financial Services — 7.9% Mastercard, Inc. Class A Visa, Inc. Class A (b)  Private Equity — 1.4% KKR & Co., Inc. Class A Industrial — 2.8%	51,006 98,309  Number of Shares  96,000 \$\frac{1}{2}\$ 19,872 142,954 10,343 44,024 9,275 21,705 55,424  31,637 141,702	10,049,712 15,980,128 34,387,664 Value 6,505,298 11,410,588 7,338,772 25,254,658 6,939,503 3,823,433 3,048,033 9,165,467 16,036,933 102,756,913 10,698,684 28,336,149 39,034,833 6,963,809

Packaging & Containers — 1.3% Ball Corp.	78,571	6,530,821 13,883,476
Technology — 30.7%	<del>-</del>	
Software — 30.7%		
Adobe, Inc. (a)	35,464	17,392,610
Atlassian Corp. PLC Class A (a)	24,100	4,381,139
Autodesk, Inc. (a)	30,739	7,101,016
Coupa Software, Inc. (a)	35,258	9,669,154
Intuit, Inc.	27,725	9,044,172
Microsoft Corp.	138,647	29,161,623
Paycom Software, Inc. (a)	23,113	7,195,077
Sea Ltd. (a)	135,400	20,857,016
ServiceNow, Inc. (a)	55,326	26,833,110
Snowflake, Inc. Class A (a) (b)	10,759	2,700,509

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

MassMutual Select Growth Opportunities Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Twilio, Inc. Class A (a)	 72,252	\$ 17,852,747
		152,188,173
TOTAL COMMON STOCK (Cost \$290,310,489)		486,087,887
TOTAL EQUITIES (Cost \$290,310,489)		486,087,887
MUTUAL FUNDS — 0.6% Diversified Financial Services — 0.6%		
State Street Navigator Securities Lending Prime Portfolio (c)	2,729,319	2,729,319
TOTAL MUTUAL FUNDS (Cost \$2,729,319)		2,729,319
TOTAL LONG-TERM INVESTMENTS (Cost \$293,039,808)		488,817,206
	Principal Amount	
SHORT-TERM INVESTMENTS — 2.3% Repurchase Agreement — 2.3%	 7 mount	
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (d)	\$ 11,492,652	11,492,652
TOTAL SHORT-TERM INVESTMENTS (Cost \$11,492,652)		11,492,652
TOTAL INVESTMENTS — 100.9% (Cost \$304,532,460) (e)		500,309,858
Other Assets/(Liabilities) — (0.9)%		(4,492,937)
NET ASSETS — 100.0%		\$ 495,816,921

#### 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, 2020, was \$19,908,909 or 4.02% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$17,541,119 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 \$11,492,652. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$11,722,541.
- (e) See Note 6 for aggregate cost for federal tax purposes.

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

MassMutual Select Mid-Cap Value Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 94.9%		
COMMON STOCK — 94.9% Basic Materials — 1.3%		
Forest Products & Paper — 1.3%		
Mondi PLC	62,813	\$ 1,321,930
Communications — 3.6% Internet — 1.4%		
F5 Networks, Inc. (a)	11,870	1,457,280
Media — 1.2%	,	
Fox Corp. Class B (a)	43,008	1,202,934
Telecommunications — 1.0% Rogers Communications, Inc. Class B	27,531	1,092,101
Rogers Communications, inc. Class B	27,331	3,752,315
Consumer, Cyclical — 11.6%		
Airlines — 1.5%	20.004	1 400 400
Southwest Airlines Co.  Auto Manufacturers — 2.8%	39,984	1,499,400
Cummins, Inc.	3,557	751,096
Honda Motor Co. Ltd. Sponsored ADR (b)	39,824	943,829
PACCAR, Inc.	14,228	1,213,364
Auto Parts & Equipment — 1.5%		2,908,289
Aptiv PLC	9,202	843,640
BorgWarner, Inc.	18,168	703,828
F 10 1 100		1,547,468
Food Services — 1.0% Sodexo SA	14,783	1,052,741
Retail — 4.3%	14,763	1,032,741
Advance Auto Parts, Inc.	10,754	1,650,739
Genuine Parts Co.	14,755	1,404,233
MSC Industrial Direct Co., Inc. Class A	22,746	1,439,367 4,494,339
Textiles — 0.5%		4,494,339
Mohawk Industries, Inc. (a)	5,409	527,864
		12,030,101
Consumer, Non-cyclical — 22.3% Commercial Services — 0.4%		
Euronet Worldwide, Inc. (a)	4,371	398,198
Foods — 8.4%	ŕ	
Conagra Brands, Inc.	43,891	1,567,348
The J.M. Smucker Co. Kellogg Co.	13,818 16,609	1,596,256 1,072,775
Koninklijke Ahold Delhaize NV	56,944	1,685,293
Mondelez International, Inc. Class A	10,903	626,377
Orkla ASA	96,693	978,547
	Number of	
	Shares	Value
Sysco Corp.	18,629	\$ 1,159,097
Health Care – Products — 6.4%		8,685,693
Envista Holdings Corp. (a)	65,475	1,615,923
Henry Schein, Inc. (a)	19,946	1,172,426
Hologic, Inc. (a)	11,277	749,582
Zimmer Biomet Holdings, Inc.	22,767	3,099,499 6,637,430
Health Care – Services — 3.4%		0,007,100
Quest Diagnostics, Inc.	15,007	1,718,151
Universal Health Services, Inc. Class B	16,989	1,818,163
Household Products & Wares — 0.4%		3,536,314
Kimberly-Clark Corp.	3,100	457,746
Pharmaceuticals — 3.3%		
Becton Dickinson and Co.	3,359	781,572
Cardinal Health, Inc. McKesson Corp.	25,883 10,026	1,215,207 1,493,172
	10,020	3,489,951

	_	23,205,332
Energy — 2.3%		
Oil & Gas — 2.1%		
Cimarex Energy Co.	10,268	249,820
ConocoPhillips	33,152	1,088,712
Noble Energy, Inc.	90,887	777,084
	_	2,115,616
Oil & Gas Services — 0.2%	_	
Baker Hughes Co.	18,185	241,678
	_	2,357,294
Financial — 18.9%		
Banks — 7.0%		
The Bank of New York Mellon Corp.	22,847	784,566
Commerce Bancshares, Inc.	21,074	1,186,255
Northern Trust Corp.	38,471	2,999,584
State Street Corp.	9,963	591,105
Truist Financial Corp.	25,623	974,955
Westamerica Bancorp.	14,105	766,607
	_	7,303,072
Diversified Financial Services — 2.9%	_	<u> </u>
Ameriprise Financial, Inc.	8,631	1,330,124
The Charles Schwab Corp.	22,644	820,392
T. Rowe Price Group, Inc.	6,827	875,358
	_	3,025,874
Insurance — 5.2%	<del>-</del>	
Aflac, Inc.	26,917	978,433

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

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

	Number of Shares	Value
Arthur J Gallagher & Co.	8,144	\$ 859,843
Brown & Brown, Inc.	4,773	216,074
Chubb Ltd.	20,855	2,421,683
Reinsurance Group of America, Inc.	9,654	918,964
Deal Federal Legisland Tourists (DEITS) 2.20/		5,394,997
Real Estate Investment Trusts (REITS) — 3.2% Healthpeak Properties, Inc.	21,631	587,282
MGM Growth Properties LLC Class A	30,199	844,968
Piedmont Office Realty Trust, Inc. Class A	19,356	262,661
Welltower, Inc.	9,800	539,882
Weyerhaeuser Co.	36,774	1,048,794
		3,283,587
Savings & Loans — 0.6% Capitol Federal Financial, Inc.	67,970	629,742
Capitor Pederar Pinancial, inc.	07,970	19,637,272
Industrial — 20.9%		19,037,272
Aerospace & Defense — 1.9%		
BAE Systems PLC	157,852	976,393
General Dynamics Corp.	7,327	1,014,277
D 111 M ( 11 100/		1,990,670
Building Materials — 1.8%  Johnson Controls International PLC	46,142	1,884,901
Electrical Components & Equipment — 2.3%	40,142	1,004,901
Emerson Electric Co.	36,422	2,388,190
Electronics — 4.8%	,	
Hubbell, Inc.	14,322	1,959,822
nVent Electric PLC	92,749	1,640,730
TE Connectivity Ltd.	13,967	1,365,135
Environmental Cantuals 170/		4,965,687
Environmental Controls — 1.7% Republic Services, Inc.	18,893	1,763,662
Hand & Machine Tools — 0.5%	10,093	1,703,002
Lincoln Electric Holdings, Inc.	5,062	465,906
Machinery – Construction & Mining — 0.8%	-,	
Oshkosh Corp.	11,876	872,886
Miscellaneous - Manufacturing — 1.9%		
IMI PLC	76,999	1,037,483
Textron, Inc.	24,836	896,331
Packaging & Containers — 3.4%		1,933,814
Graphic Packaging Holding Co.	47,708	672,205
Packaging Corp. of America	12,716	1,386,680
Sonoco Products Co.	29,714	1,517,494
		3,576,379
	N 1 6	
	Number of Shares	Value
Transportation — 1.8%	Shares	value
Heartland Express, Inc.	47,423	\$ 882,068
Norfolk Southern Corp.	4,501	963,169
		1,845,237
		21,687,332
Technology — 5.7%		
Computers — 1.1% HP, Inc.	62,844	1 102 409
Semiconductors — 2.7%	02,044	1,193,408
Applied Materials, Inc.	25,298	1,503,966
Maxim Integrated Products, Inc.	12,233	827,073
Microchip Technology, Inc.	4,134	424,810
		2,755,849
Software — 1.9%	20.122	1 455 415
Cerner Corp. Open Text Corp.	20,133 11,398	1,455,415 481,451
Open Text Corp.	11,398	1,936,866
		5,886,123
Utilities — 8.3%		2,000,120
Electric — 6.6%		
Ameren Corp.	7,425	587,169
Edison International	27,645	1,405,472

Evergy, Inc. Eversource Energy	14,462 3,279	734,959 273,960
NorthWestern Corp.	26,008	1,265,029
Pinnacle West Capital Corp.	23,305	1,737,388
Xcel Energy, Inc.	12,531	864,764
	_	6,868,741
Gas — 1.7%		
Atmos Energy Corp.	10,207	975,687
Spire, Inc.	14,285	759,962
		1,735,649
	_	8,604,390
TOTAL COMMON STOCK (Cost \$98,016,585)	<u>—</u>	98,482,089
TOTAL EQUITIES (Cost \$98,016,585)	_	98,482,089

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

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

	Number of Shares	Value
MUTUAL FUNDS — 2.3%	Shares	- varue
Diversified Financial Services — 2.3%		
iShares Russell Mid-Cap Value ETF (b)	27,453	\$ 2,219,301
State Street Navigator Securities Lending Prime Portfolio (c)	115,500	115,500
		2,334,801
TOTAL MUTUAL FUNDS (Cost \$2,198,289)		2,334,801
TOTAL LONG-TERM INVESTMENTS (Cost \$100,214,874)		100,816,890
	Principal	
-	Amount	
SHORT-TERM INVESTMENTS — 2.5%		
Repurchase Agreement — 2.5%  Final Learning Classing Comp. Properties Agreement dated 0/20/20, 0.000% dated 10/01/20 (4)	2 (20 155	2 (20 155
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (d)	2,629,155	2,629,155
TOTAL SHORT-TERM INVESTMENTS (Cost \$2,629,155)		2,629,155
TOTAL INVESTMENTS — 99.7% (Cost \$102,844,029) (e)		103,446,045
Other Assets/(Liabilities) — 0.3%		315,275
NET ASSETS — 100.0%		\$ 103,761,320

#### **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, 2020, was \$1,047,549 or 1.01% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$940,326 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 \$2,629,155. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$2,681,777.
- (e) See Note 6 for aggregate cost for federal tax purposes.

### **Forward contracts**

Counterparty	Settlement Date	Currency 1	Purchased	Currei	ncy Sold	App	realized reciation reciation)
Bank of America N.A.	12/30/20	USD	577,688	JPY	60,606,700	\$	2,251
Credit Suisse International	12/31/20	USD	2,390,462	EUR	2,036,409		(2,233)
Goldman Sachs & Co.	12/30/20	USD	822,019	NOK	7,686,320		(2,278)
JP Morgan Chase Bank N.A.	12/31/20	USD	2,810,110	GBP	2,205,615		(37,788)
Morgan Stanley & Co. LLC	12/31/20	USD	930,344	CAD	1,240,272		(1,558)
						\$	(41,606)

#### **Currency Legend**

CAD Canadian Dollar

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 Select Small Cap Value Equity Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 97.1%		
COMMON STOCK — 97.1% Basic Materials — 5.4%		
Chemicals — 3.6%		
Element Solutions, Inc. (a)	54,390	\$ 571,639
Ingevity Corp. (a)	3,500	173,040
Orion Engineered Carbons SA	46,620	583,216
Rogers Corp. (a) Stepan Co.	9,088 4,600	891,169 501,400
Stepan Co.	4,000	2,720,464
Forest Products & Paper — 0.7%		2,720,101
Neenah, Inc.	13,110	491,232
Iron & Steel — 1.0%		
Allegheny Technologies, Inc. (a)	87,478	762,808
Mining — 0.1% Ferroglobe PLC (a)	86,396	57,799
Ferroglobe Representation & Warranty Insurance Trust (a) (b) (c)	234,800	51,199
refregione representation & martaney insurance trust (a) (b) (c)	251,000	57,799
		4,032,303
Communications — 1.4%		
Telecommunications — 1.4%	10.021	<b>505.000</b>
Ciena Corp. (a)	19,831	787,092
Infinera Corp. (a)	45,484	280,182 1,067,274
		1,067,274
Consumer, Cyclical — 9.7%		1,007,271
Apparel — 0.8%		
Kontoor Brands, Inc.	24,280	587,576
Auto Parts & Equipment — 4.5%	72 (99	1.250.602
Adient PLC (a) American Axle & Manufacturing Holdings, Inc. (a)	72,688 140,472	1,259,683 810,524
Cooper Tire & Rubber Co.	15,410	488,497
Gentherm, Inc. (a)	20,496	838,286
	•	3,396,990
Food Services — 1.0%		
Aramark	29,750	786,887
Home Builders — 1.0% TRI Pointe Group, Inc. (a)	41,840	758,978
Home Furnishing — 1.4%	41,040	130,976
Whirlpool Corp.	5,637	1,036,588
Lodging — 0.6%		
Wyndham Hotels & Resorts, Inc.	8,950	451,975
	Nh af	
	Number of Shares	Value
Textiles — 0.4%	Shares	· muc
UniFirst Corp.	1,600	\$ 302,992
		7,321,986
Consumer, Non-cyclical — 12.6%		
Agriculture — 1.4% Darling Ingredients, Inc. (a)	29,009	1,045,194
Beverages — 0.5%	29,009	1,043,194
C&C Group PLC	134,326	339,219
Commercial Services — 3.8%		
AMN Healthcare Services, Inc. (a)	3,250	189,995
BrightView Holdings, Inc. (a)	37,120	423,168
CBIZ, Inc. (a) Forrester Research, Inc. (a)	16,940 12,057	387,418 395,349
Huron Consulting Group, Inc. (a)	17,080	671,756
ICF International, Inc.	7,490	460,860
Monro, Inc.	7,800	316,446
		2,844,992
Foods — 2.4%	12.00	
Cranswick PLC Post Holdings Inc. (a)	13,904	649,707 445,480
Post Holdings, Inc. (a) SunOpta, Inc. (a) (d)	5,180 93,314	445,480 692,390
ounopa, me. (a) (u)	93,314	1,787,577
		1,/0/,3//

Health Care – Products — 1.0% Invacare Corp. Lantheus Holdings, Inc. (a) Natus Medical, Inc. (a)	28,972 32,570 8,070	217,869 412,662 138,239
Natus Medical, Inc. (a)	8,070	768,770
Health Care – Services — 1.1%	•	
Encompass Health Corp. <b>Household Products &amp; Wares — 2.4%</b>	13,274	862,545
Acco Brands Corp.	73,760	427,808
Helen of Troy Ltd. (a)	2,220	429,614
Spectrum Brands Holdings, Inc.	16,830	962,003
	. <u>-</u>	1,819,425
	. <u>-</u>	9,467,722
Energy — 1.0% Oil & Gas — 0.6%		
Kosmos Energy Ltd.	129,460	126,301
Magnolia Oil & Gas Corp. Class A (a)	56,980	294,587
Oil & Gas Services — 0.4%		420,888
Thermon Group Holdings, Inc. (a)	29,110	326,905
Financial — 23.2% Banks — 8.9%		747,793
1st Source Corp.	9,130	281,569

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

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

Number of Shares	Value	
Atlantic Union Bankshares Corp. 17,630		
First Midwest Bancorp, Inc. 29,970		
Great Western Bancorp, Inc. 21,660		
Hancock Whitney Corp. 20,460		
International Bancshares Corp. 19,980		
OFG Bancorp Prosperity Bancshares, Inc.  70,270 18,672		
Synovus Financial Corp. 20,350		
Texas Capital Bancshares, Inc. (a) 35,24		
Umpqua Holdings Corp. 81,59:	, ,	
Webster Financial Corp. 12,710		
Diversified Financial Services — 1.5%	6,730,	
PRA Group, Inc. (a) 28,22	1,127,	,429
Insurance — 6.3%		
Alleghany Corp.	,	
Argo Group International Holdings Ltd.  4,100		
Assured Guaranty Ltd. 14,500		
Kemper Corp. 11,350 MGIC Investment Corp. 139,250		
Reinsurance Group of America, Inc. 5,680		
White Mountains Insurance Group Ltd.		
	4,700,	
Real Estate — 0.6% Alexander & Baldwin, Inc. 38,840	435,	396
Real Estate Investment Trusts (REITS) — 4.8%		370
Brandywine Realty Trust 54,060	558,	,980
Corporate Office Properties Trust 27,220		
Lexington Realty Trust 36,300		
Physicians Realty Trust  44,290		
Piedmont Office Realty Trust, Inc. Class A  14,060		
PotlatchDeltic Corp. 14,500 RPT Realty 78,080		
	3,603,	_
Savings & Loans — 1.1% Banc of California, Inc. 45,330	458,	740
Northwest Bancshares, Inc. 43,550		
Notifiwest Balteshates, Ilic.	843,	
	17,439,	
Industrial — 32.1%		
Aerospace & Defense — 0.7% Hexcel Corp.	270	115
Hexcel Corp. 11,300 Park Aerospace Corp. 13,49:		
raik Actospace Colp.	526,	
Number of		
Building Materials — 4.4%	Value	
American Woodmark Corp. (a) 9,350	\$ 734,	,349
Apogee Enterprises, Inc. 37,494		
Gibraltar Industries, Inc. (a) 15,10	983,	,744
Louisiana-Pacific Corp. 6,510	192,	,110
Tyman PLC 213,103		_
Electrical Components & Equipment — 1.7%	3,321,	,888,
Belden, Inc.	656,	,943
Encore Wire Corp. 13,87:	644,	,078
Floatronics 2.40/	1,301,	,021
Electronics — 3.4% Coherent, Inc. (a) 4,430	491,	420
FARO Technologies, Inc. (a) 16,49:		
II-VI, Inc. (a) (d) 26,315		
	2,564,	
Engineering & Construction — 3.2% Primoris Services Corp. 64,498	1,163,	544
WillScot Mobile Mini Holdings Corp. (a) 75,95:		
75,75.	2,430,	
Environmental Controls — 1.8% Clean Harbors, Inc. (a) 8,980		
8,980	, 503,	,1 <b>コ</b> ブ

Harsco Corp. (a) 59,943	833,807
Hand & Machine Tools — 3.4%	1,336,956
Colfax Corp. (a) 35,128	1,101,614
Kennametal, Inc.	973,079
Luxfer Holdings PLC 38,502	483,200
Luxier Holdings I Le	2,557,893
Machinery – Diversified — 0.4%	2,337,673
Albany International Corp. Class A 6,330	313,398
Metal Fabricate & Hardware — 1.9%	313,370
Mueller Industries, Inc. 27,780	751,727
Valmont Industries, Inc. 5,350	664,363
3,	1,416,090
Miscellaneous - Manufacturing — 3.2%	
Enerpac Tool Group Corp. 43,822	824,292
ESCO Technologies, Inc. 3,430	276,321
Federal Signal Corp. 26,429	773,048
Materion Corp. 10,528	547,772
	2,421,433
Packaging & Containers — 2.4%	
Sealed Air Corp. 21,930	851,103
TriMas Corp. (a) 40,100	914,280
	1,765,383

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

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

	Number of Shares	Value
Transportation — 3.3%	25.0	то ф 040 700
Air Transport Services Group, Inc. (a)	37,85	
Bristow Group, Inc. (a) Dorian LPG Ltd. (a)	5,23 27,85	
Forward Air Corp.	2,94	
Saia, Inc. (a)	3,81	
Scorpio Tankers, Inc. (d)	9,16	
SEACOR Holdings, Inc. (a)	13,66	
		2,431,132
Trucking & Leasing — 2.3%		
GATX Corp. (d)	8,79	
The Greenbrier Cos., Inc.	40,17	
		1,741,390
Trade alone 0.20/		24,128,158
Technology — 9.3% Computers — 1.1%		
Existervice Holdings, Inc. (a)	4,79	0 315,996
WNS Holdings Ltd. ADR (a)	8,34	
W105 Holdings Etc. ADR (a)	0,5-	849,423
Semiconductors — 6.5%		017,123
Brooks Automation, Inc.	25,63	0 1,185,644
Cohu, Inc.	47,81	
CTS Corp.	23,37	514,841
Diodes, Inc. (a)	17,22	
Onto Innovation, Inc. (a)	25,68	
Photronics, Inc. (a)	59,64	
		4,853,449
Software — 1.7%		
Allscripts Healthcare Solutions, Inc. (a)	61,23	,
CDK Global, Inc.	17,22	
		1,249,032
Helistica 2.40/		6,951,904
Utilities — 2.4% Electric — 0.5%		
Portland General Electric Co.	10,40	369,200
Gas — 1.9%	10,40	309,200
New Jersey Resources Corp.	14,80	399,896
Spire, Inc.	6,05	
	,	,
	Number of	
	Shares	Value
UGI Corp.	21,54	
		1,432,310
		1,801,510
TOTAL COMMON STOCK (Cost \$79,444,785)		72,958,357
TOTAL POLITIES (C. 1080 444 505)		<b>53.050.355</b>
TOTAL EQUITIES (Cost \$79,444,785)		72,958,357
MUTUAL FUNDS — 0.9%		
Diversified Financial Services — 0.9%		
State Street Navigator Securities Lending Prime Portfolio (e)	687,30	9 687,309
State Street (Vavigator Securities Lending 1 Time 1 ortiono (c)	007,50	007,309
TOTAL MUTUAL FUNDS (Cost \$687,309)		687,309
TOTAL MOTOAL PONDS (Cost \$607,507)		
TOTAL LONG-TERM INVESTMENTS (Cost \$80,132,094)		73,645,666
10 11 20 10 12 11 1 1 1 20 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2	Principal	70,010,000
	Amount	
SHORT-TERM INVESTMENTS — 2.8%		<del>_</del>
Repurchase Agreement — 2.8%		
Repurchase Agreement — 2.8% Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (f)	\$ 2,122,61	2 2,122,612
	\$ 2,122,61	2 2,122,612
	\$ 2,122,61	2 2,122,612 2,122,612
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (f)  TOTAL SHORT-TERM INVESTMENTS (Cost \$2,122,612)	\$ 2,122,61	
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (f)	\$ 2,122,61	
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (f)  TOTAL SHORT-TERM INVESTMENTS (Cost \$2,122,612)  TOTAL INVESTMENTS — 100.8% (Cost \$82,254,706) (g)	\$ 2,122,61	2,122,612 75,768,278
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (f)  TOTAL SHORT-TERM INVESTMENTS (Cost \$2,122,612)	\$ 2,122,61	2,122,612

NET ASSETS — 100.0% \$ 75,179,581

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

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

### **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) 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, 2020, 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, 2020, was \$2,222,242 or 2.96% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$1,605,261 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) Represents investment of security lending cash collateral. (Note 2).
- (f) Maturity value of \$2,122,612. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$2,165,144.
- (g) See Note 6 for aggregate cost for federal tax purposes.

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

MassMutual Select Small Company Value Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 98.2%		
COMMON STOCK — 98.2% Basic Materials — 3.0%		
Chemicals — 1.9%		
AdvanSix, Inc. (a) GCP Applied Technologies, Inc. (a)	5,610 29,541	\$ 72,257 618,884
Minerals Technologies, Inc.	19,305	986,485
Orion Engineered Carbons SA	119,368	1,493,294
Iron & Steel — 1.1%		3,170,920
Carpenter Technology Corp.	40,518	735,807
Schnitzer Steel Industries, Inc. Class A	53,220	1,023,420
Mining — 0.0%		1,759,227
Ferroglobe Representation & Warranty Insurance Trust (a) (b) (c)	49,975	
Communications — 2.0%		4,930,147
Internet — 0.7%		
Criteo SA Sponsored ADR (a)	95,151	1,159,891
Media — 0.5% Entravision Communications Corp. Class A	200,369	304,561
Houghton Mifflin Harcourt Co. (a)	217,222	375,794
Townsquare Media, Inc. Class A	17,707	82,514
Telecommunications — 0.8%		762,869
A10 Networks, Inc. (a)	86,789	552,846
Casa Systems, Inc. (a)	179,733	724,324
		1,277,170 3,199,930
Consumer, Cyclical — 21.5%		3,177,730
Airlines — 0.9%	49.256	1 442 010
SkyWest, Inc. Apparel — 2.3%	48,356	1,443,910
Crocs, Inc. (a)	25,390	1,084,915
Oxford Industries, Inc. Skechers U.S.A., Inc. Class A (a)	31,177 30,224	1,258,304 913,369
Tapestry, Inc.	31,929	499,050
	,	3,755,638
Auto Manufacturers — 1.2% Blue Bird Corp. (a)	80,441	978,162
REV Group, Inc.	117,803	929,466
		1,907,628
Auto Parts & Equipment — 2.6% Cooper Tire & Rubber Co.	32,324	1,024,671
	•	-,,
	Number of Shares	Value
Dana, Inc.	134,556	\$ 1,657,730
The Shyft Group, Inc.	80,240	1,514,931
Distribution & Wholesale — 0.1%		4,197,332
KAR Auction Services, Inc.	10,877	156,629
Entertainment — 0.3% Accel Entertainment, Inc. (a)	31,343	225 (92
Penn National Gaming, Inc. (a) (d)	3,424	335,683 248,925
	-,	584,608
Food Services — 0.3%  Healthcome Services Crown, Inc.	25 620	552 009
Healthcare Services Group, Inc.  Home Builders — 2.4%	25,639	552,008
KB Home	51,870	1,991,289
Skyline Champion Corp. (a) Taylor Morrison Home Corp. (a)	16,094 58,129	430,837 1,429,392
ray to 1 stortison frome Corp. (a)	30,129	3,851,518
Leisure Time — 2.4%		
Brunswick Corp. Callaway Golf Co.	6,166 80,354	363,239 1,537,976
Malibu Boats, Inc. Class A (a)	31,281	1,550,286

OneWater Marine, Inc. Class A (a)	20,476	419,553 3,871,054
Lodging — 0.1%	_	3,071,031
Hilton Grand Vacations, Inc. (a)	10,432	218,864
Office Furnishings — 0.5%	<del>-</del>	
Knoll, Inc.	65,239	786,782
Retail — 7.7%	<u> </u>	
BJ's Restaurants, Inc.	8,057	237,198
Boot Barn Holdings, Inc. (a) (d)	14,082	396,268
Citi Trends, Inc.	55,016	1,374,300
El Pollo Loco Holdings, Inc. (a)	91,874	1,488,359
Foot Locker, Inc.	36,380	1,201,631
Foundation Building Materials, Inc. (a)	33,562	527,595
GMS, Inc. (a)	15,848	381,937
MarineMax, Inc. (a)	14,875	381,841
Papa John's International, Inc.	16,690	1,373,253
Penske Automotive Group, Inc.	21,261	1,013,299
Red Robin Gourmet Burgers, Inc. (a) (d)	35,123	462,219
Regis Corp. (a) (d)	120,852	742,031
Ruth's Hospitality Group, Inc.	141,907	1,569,491
Williams-Sonoma, Inc.	15,220	1,376,497
		12,525,919
Textiles — 0.7%	_	
Mohawk Industries, Inc. (a)	4,808	469,213

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

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

	Number of Shares	Value
UniFirst Corp.	3,547	\$ 671,695
·		1,140,908
Consumer, Non-cyclical — 9.9%		34,992,798
Beverages — 0.9% Primo Water Corp.	99,867	1,418,111
Commercial Services — 3.2%	99,007	1,410,111
Barrett Business Services, Inc.	7,083	371,432
The Brink's Co.	22,844	938,660
Cardtronics PLC Class A (a)	21,952	434,650
Cass Information Systems, Inc.	6,344	255,283
Deluxe Corp.	25,206	648,550
Euronet Worldwide, Inc. (a)	2,547	232,032
EVERTEC, Inc. Herc Holdings, Inc. (a)	23,940 29,580	830,957 1,171,664
Korn Ferry	14,318	415,222
Kolii i Cii y	14,516	5,298,450
Cosmetics & Personal Care — 0.5%		3,270,130
Edgewell Personal Care Co. (a)	29,590	824,969
Foods — 1.9%	- ,	
The Hain Celestial Group, Inc. (a) (d)	44,504	1,526,487
Nomad Foods Ltd. (a)	62,438	1,590,921
		3,117,408
Health Care – Services — 1.9%		
ICON PLC (a)	6,409	1,224,696
Molina Healthcare, Inc. (a)	7,237	1,324,661
National HealthCare Corp. The Providence Service Corp. (c)	3,316 3,062	206,620 284,490
The Providence Service Corp. (a)	3,002	3,040,467
Household Products & Wares — 0.9%		3,040,407
Spectrum Brands Holdings, Inc.	25,433	1,453,750
Pharmaceuticals — 0.6%	20,.00	1,100,700
Patterson Cos., Inc.	4,324	104,230
Premier, Inc. Class A	25,541	838,511
		942,741
		16,095,896
Energy — 2.2%		
Energy – Alternate Sources — 0.4%		
Enviva Partners LP (e)	13,830	556,796
Oil & Gas — 0.0%  Forth store Francy, Inc. Class A (a) (d)	17 166	44.460
Earthstone Energy, Inc. Class A (a) (d) Oil & Gas Services — 1.8%	17,166	44,460
ChampionX Corp. (a)	70,567	563,830
Dril-Quip, Inc. (a)	39,933	988,741
Helix Energy Solutions Group, Inc. (a)	298,682	719,824
MRC Global, Inc. (a)	152,404	652,289
	Number of	
	Shares	Value
NCS Multistage Holdings, Inc. (a)	72,038	\$ 42,791
		2,967,475
		3,568,731
Financial — 33.7%		
Banks — 15.8%	27.520	0.40.064
1st Source Corp.	27,528 23,029	848,964 524,601
Ameris Bancorp Associated Banc-Corp.	64,199	524,601 810,191
Bank of Marin Bancorp	27,806	805,262
BankUnited, Inc.	108,969	2,387,511
Carter Bank & Trust	91,175	606,314
CrossFirst Bankshares, Inc. (a)	28,478	247,474
First Hawaiian, Inc.	15,541	224,878
First Horizon National Corp.	99,369	937,050
HarborOne Bancorp, Inc. (a)	153,797	1,241,142
Heritage Financial Corp.	57,632	1,059,852
Hilltop Holdings, Inc.	33,880	697,250
Home BancShares, Inc. Independent Bank Group, Inc.	82,014 50,807	1,243,332 2,244,653
Old National Bancorp	25,344	318,321
Cid Tidiolian Bancorp	23,377	310,321

Origin Bancorp, Inc.	20,652	441,127
Renasant Corp.	10,370	235,606
Sandy Spring Bancorp, Inc.	39,419	909,791
Signature Bank	9,196	763,176
South State Corp.	7,488	360,547
Synovus Financial Corp.	66,577	1,409,435
Texas Capital Bancshares, Inc. (a)	35,315	1,099,356
Towne Bank	19,367	317,619
TriCo Bancshares	44,936	1,100,483
UMB Financial Corp.	21,550	1,056,165
Umpqua Holdings Corp.	92,144	978,569
Valley National Bancorp	130,097	891,164
Webster Financial Corp.	51,972	1,372,580
Zions Bancorp NA	23,468	685,735
•	·	25,818,148
Diversified Financial Services — 2.0%	- -	25,818,148
Diversified Financial Services — 2.0% Ares Management Corp. Class A	7,500	25,818,148 303,150
	7,500 44,777	<u> </u>
Ares Management Corp. Class A Moelis & Co. Class A	44,777	303,150 1,573,464
Ares Management Corp. Class A	,	303,150
Ares Management Corp. Class A Moelis & Co. Class A	44,777	303,150 1,573,464 1,410,624
Ares Management Corp. Class A Moelis & Co. Class A Stifel Financial Corp.  Insurance — 4.5%	44,777 27,900 -	303,150 1,573,464 1,410,624 3,287,238
Ares Management Corp. Class A Moelis & Co. Class A Stifel Financial Corp.  Insurance — 4.5% Axis Capital Holdings Ltd.	44,777 27,900 - 26,713	303,150 1,573,464 1,410,624 3,287,238 1,176,441
Ares Management Corp. Class A Moelis & Co. Class A Stifel Financial Corp.  Insurance — 4.5% Axis Capital Holdings Ltd. Essent Group Ltd.	44,777 27,900 -	303,150 1,573,464 1,410,624 3,287,238
Ares Management Corp. Class A Moelis & Co. Class A Stifel Financial Corp.  Insurance — 4.5% Axis Capital Holdings Ltd. Essent Group Ltd. First American Financial Corp.	26,713 32,038	303,150 1,573,464 1,410,624 3,287,238 1,176,441 1,185,726 852,641
Ares Management Corp. Class A Moelis & Co. Class A Stifel Financial Corp.  Insurance — 4.5% Axis Capital Holdings Ltd. Essent Group Ltd. First American Financial Corp. The Hanover Insurance Group, Inc.	26,713 32,038 16,748	303,150 1,573,464 1,410,624 3,287,238 1,176,441 1,185,726
Ares Management Corp. Class A Moelis & Co. Class A Stifel Financial Corp.  Insurance — 4.5% Axis Capital Holdings Ltd. Essent Group Ltd. First American Financial Corp.	26,713 32,038 16,748 13,780	303,150 1,573,464 1,410,624 3,287,238 1,176,441 1,185,726 852,641 1,284,020
Ares Management Corp. Class A Moelis & Co. Class A Stifel Financial Corp.  Insurance — 4.5% Axis Capital Holdings Ltd. Essent Group Ltd. First American Financial Corp. The Hanover Insurance Group, Inc. James River Group Holdings Ltd.	26,713 32,038 16,748 13,780 16,696	303,150 1,573,464 1,410,624 3,287,238 1,176,441 1,185,726 852,641 1,284,020 743,473

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

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

	Number of Shares	Value
Selective Insurance Group, Inc.	23,852	\$ 1,228,139
State Auto Financial Corp.	25,980	357,485
•	- /	7,357,412
Investment Companies — 1.0%	01 227	1.540.220
Compass Diversified Holdings (e)  Real Estate Investment Trusts (REITS) — 8.0%	81,235	1,548,339
Armada Hoffler Properties, Inc.	64,365	596,020
Brandywine Realty Trust	65,634	678,656
CareTrust REIT, Inc.	8,342	148,446
City Office REIT, Inc.	80,730	607,090
Cousins Properties, Inc.	57,037	1,630,688
Four Corners Property Trust, Inc.	20,208	517,123
Highwoods Properties, Inc.	6,034	202,561
Independence Realty Trust, Inc.	126,000	1,460,340
Kite Realty Group Trust	59,309	686,798
Lexington Realty Trust National Health Investors, Inc.	30,318 4,215	316,823 254,038
National Storage Affiliates Trust	32,164	1,052,084
Physicians Realty Trust	101,529	1,818,384
RLJ Lodging Trust	92,530	801,310
Sabra Health Care REIT, Inc.	9,961	137,312
STAG Industrial, Inc. (d)	55,848	1,702,806
Summit Hotel Properties, Inc.	22,182	114,903
Weingarten Realty Investors	20,351	345,153
Springs 8 Lagra 2 40/		13,070,535
Savings & Loans — 2.4% Pacific Premier Bancorp, Inc.	82,088	1,653,252
Sterling Bancorp	91,236	959,803
WSFS Financial Corp.	49,676	1,339,762
	,.,.	3,952,817
		55,034,489
Industrial — 17.6%		
Aerospace & Defense — 0.6%		
AAR Corp.	52,239	982,093
Building Materials — 1.1%		
Eagle Materials, Inc.	1,187	102,462
Masonite International Corp. (a)	14,767	1,453,073
Tecnoglass, Inc.	62,698	332,299
Electrical Components & Equipment — 2.1%		1,887,834
Belden, Inc.	55,599	1,730,241
EnerSys	21,556	1,446,838
Graham Corp.	19,774	252,514
•	- 7	3,429,593
Electronics — 2.1%	5.772	262.252
Advanced Energy Industries, Inc. (a)	5,773	363,353
Avnet, Inc.	34,335	887,216
	Number of	¥7. 1
Cohorant Ina (a)	Shares	Value 954 272
Coherent, Inc. (a) II-VI, Inc. (a) (d)	7,701 21,718	\$ 854,272 880,882
TTM Technologies, Inc. (a)	1,120	12,779
Vishay Intertechnology, Inc.	33,042	514,464
visitay intercentrology, inc.	33,042	3,512,966
Engineering & Construction — 1.8%		
Arcosa, Inc.	8,051	354,969
Dycom Industries, Inc. (a)	12,468	658,560
NV5 Global, Inc. (a)	8,764	462,476
Primoris Services Corp.	82,003	1,479,334 2,955,339
Environmental Controls — 0.2%		2,933,339
CECO Environmental Corp. (a)	37,531	273,601
Hand & Machine Tools — 2.9%	•	
Colfax Corp. (a)	12,470	391,059
Hurco Cos., Inc.	7,278	206,695
Kennametal, Inc.	63,283	1,831,410
Luxfer Holdings PLC	18,327	230,004
Regal Beloit Corp.	21,780	2,044,489

		4,703,657
Machinery – Construction & Mining — 0.7%	50.040	1 141 252
	58,949	1,141,253
Machinery – Diversified — 1.2%	6.024	242 202
Albany International Corp. Class A	6,934	343,302
	60,770	1,166,176
CSW Industrials, Inc.	575	44,419
DXP Enterprises, Inc. (a)	22,516	363,183
75 ( ) 75 ( ) ( ) ( ) ( ) ( ) ( )		1,917,080
Metal Fabricate & Hardware — 0.5%		
	15,832	858,411
Miscellaneous - Manufacturing — 1.6%		
	10,949	617,633
	39,096	1,108,763
Trinseo SA	34,289	879,170
		2,605,566
Packaging & Containers — 1.8%		
Graphic Packaging Holding Co.	78,803	2,519,334
Pactiv Evergreen, Inc. (a) (d)	30,161	383,045
		2,902,379
Trucking & Leasing — 1.0%		
GATX Corp.	25,080	1,598,850
•		28,768,622
Technology — 6.1%		
Computers — 1.7%		
	38,965	862,685
• • • •	35,566	776,406
		,

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

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

	Number of Shares	Value
TTEC Holdings, Inc.	6,468	\$ 352,830
Unisys Corp. (a)	71,572	763,673
Somion dustors 160/		2,755,594
Semiconductors — 1.6% Kulicke & Soffa Industries, Inc.	66,701	1,494,102
Magnachip Semiconductor Corp. (a) (d)	73,340	1,004,758
MKS Instruments, Inc.	1,100	120,153
	1,100	2,619,013
Software — 2.8% CDK Global, Inc.	6,102	265,986
CommVault Systems, Inc. (a)	29,017	1,183,894
CSG Systems International, Inc.	13,860	567,567
Donnelley Financial Solutions, Inc. (a)	62,281	832,074
IBEX Ltd. (a)	2,563	39,419
InnerWorkings, Inc. (a)	63,399	189,563
Sapiens International Corp. NV	5,669	173,358
Teradata Corp. (a)	57,419	1,303,411
		4,555,272
Utilities — 2.2%		9,929,879
Electric — 1.3%		
Black Hills Corp.	14,292	764,479
Charah Solutions, Inc. (a)	76,405	234,563
PNM Resources, Inc. (d)	28,678	1,185,262
Gas — 0.9%		2,184,304
Southwest Gas Holdings, Inc.	22,910	1,445,621
Southwest Gus Holdings, inc.	22,710	3,629,925
		5,023,320
TOTAL COMMON STOCK (Cost \$178,897,383)		160,150,417
TOTAL EQUITIES (Cost \$178,897,383)		160,150,417
MUTUAL FUNDS — 0.5%		
Diversified Financial Services — 0.5%	0.00	0.00
State Street Navigator Securities Lending Prime Portfolio (f)	856,534	856,534
TOTAL MUTUAL FUNDS (Cost \$856,534)		856,534
TOTAL LONG-TERM INVESTMENTS (Cost \$179,753,917)		161,006,951
10 III E010-12Kii II (125 IVIEI 15 (00st #175/355517)		101,000,231
	Principal	
	Amount	Value
SHORT-TERM INVESTMENTS — 1.5%		
Repurchase Agreement — 1.5%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (g)	\$ 2,370,278	\$ 2,370,278
TOTAL SHORT-TERM INVESTMENTS (Cost \$2,370,278)		2,370,278
TOTAL INVESTMENTS — 100.2% (Cost \$182,124,195) (h)		163,377,229
Other Assets/(Liabilities) — (0.2)%		(271,283)
NET LOOPING 400.00/		
NET ASSETS — 100.0%		\$ 163,105,946

### **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) 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, 2020, 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, 2020, was \$7,216,958 or 4.42% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$6,455,098 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).
- Security is a Master Limited Partnership (e)
- (f)
- Represents investment of security lending cash collateral. (*Note 2*).

  Maturity value of \$2,370,278. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market (g) value, including accrued interest, of \$2,417,775.
- (h) See Note 6 for aggregate cost for federal tax purposes.

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

# MM S&P Mid Cap Index Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 99.9%		
COMMON STOCK — 99.9% Basic Materials — 3.7%		
Chemicals — 2.0%		
Ashland Global Holdings, Inc.	12,301	\$ 872,387
Cabot Corp.	12,756	459,599
The Chemours Co. Ingevity Corp. (a)	37,106 9,330	775,886 461,275
Minerals Technologies, Inc.	7,708	393,879
NewMarket Corp.	1,654	566,197
Olin Corp.	32,113	397,559
RPM International, Inc.	29,377	2,433,591
Sensient Technologies Corp. Valvoline, Inc.	9,571 41,808	552,629 796,024
varvoinie, inc.	41,000	7,709,024
Forest Products & Paper — 0.1%		7,705,020
Domtar Corp.	12,471	327,613
Iron & Steel — 1.0%		
Commercial Metals Co.	26,903	537,522
Reliance Steel & Aluminum Co. Steel Dynamics, Inc.	14,411 45,171	1,470,499 1,293,246
United States Steel Corp. (b)	49,766	365,282
emica succes seen corp. (b)	15,700	3,666,549
Mining — 0.6%		
Compass Minerals International, Inc.	7,672	455,333
Royal Gold, Inc.	14,825	1,781,520
		2,236,853
Communications — 3.5%		13,940,041
Internet — 0.6%		
GrubHub, Inc. (a)	20,857	1,508,587
TripAdvisor, Inc.	21,720	425,495
Yelp, Inc. (a)	15,538	312,158
Media — 2.2%		2,246,240
AMC Networks, Inc. Class A (a)	9,164	226,442
Cable One, Inc.	1,225	2,309,652
FactSet Research Systems, Inc.	8,587	2,875,615
John Wiley & Sons, Inc. Class A	9,870	312,978
The New York Times Co. Class A (b)	32,634	1,396,409
TEGNA, Inc. World Wrothing Entertainment Inc. Class A (b)	49,490	581,507
World Wrestling Entertainment, Inc. Class A (b)	10,553	427,080 8,129,683
Telecommunications — 0.7%		0,127,003
Ciena Corp. (a)	34,716	1,377,878
InterDigital, Inc.	6,963	397,309
	Number of	
	Shares	Value
Telephone & Data Systems, Inc.	22,499	\$ 414,881
ViaSat, Inc. (a)	14,494	498,449
		2,688,517
C		13,064,440
Consumer, Cyclical — 17.2% Airlines — 0.2%		
JetBlue Airways Corp. (a)	61,576	697,656
Apparel — 1.1%	01,570	
Carter's, Inc.	9,863	853,939
Columbia Sportswear Co.	6,878	598,248
Deckers Outdoor Corp. (a) Skeehers U.S.A. Inc. Class A. (a)	6,334	1,393,543
Skechers U.S.A., Inc. Class A (a) Urban Outfitters, Inc. (a)	30,808 15,471	931,018 321,952
Cioni Cucinteis, inc. (a)	13,4/1	4,098,700
Auto Parts & Equipment — 1.4%		
Adient PLC (a)	21,220	367,742
Dana, Inc.	32,646	402,199
Delphi Technologies PLC (a) Fox Factory Holding Corp. (a)	19,511 9,366	326,029 696,175
1 ox 1 woody from the Corp. (a)	9,300	030,173

Gentex Corp.	55,553	1,430,490
Lear Corp.	12,330	1,344,586
The The Goodyear Tire & Rubber Co.	52,667	403,956
Visteon Corp. (a)	6,287	435,186
riscon corp. (u)	0,207	5,406,363
Distribution & Wholesale — 2.1%		3,100,303
Avient Corp.	20,652	546,452
IAA, Inc. (a)	30,276	1,576,471
KAR Auction Services, Inc.	29,197	420,437
	· · · · · · · · · · · · · · · · · · ·	· ·
Pool Corp.	9,058	3,030,263
Univar Solutions, Inc. (a)	38,213	645,036
Watsco, Inc.	7,419	1,727,811
		7,946,470
Entertainment — 2.2%		
Caesars Entertainment, Inc. (a)	45,004	2,522,924
Churchill Downs, Inc.	8,022	1,314,164
Cinemark Holdings, Inc. (b)	24,179	241,790
Marriott Vacations Worldwide Corp.	9,280	842,717
Penn National Gaming, Inc. (a) (b)	32,538	2,365,513
Scientific Games Corp. Class A (a) (b)	12,630	440,913
Six Flags Entertainment Corp.	17,051	346,135
	.,	8,074,156
Food Services — 0.1%		0,07.,120
Healthcare Services Group, Inc.	16,815	362,027
Home Builders — 1.2%	10,013	302,027
KB Home	19,904	764,114
	29,315	720,856
Taylor Morrison Home Corp. (a)		
Thor Industries, Inc.	12,472	1,188,083

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
Toll Brothers, Inc.	,	\$ 1,262,922
TRI Pointe Group, Inc. (a)	29,457	534,350 4,470,325
Home Furnishing — 0.3% Tempur Sealy International, Inc. (a)	10,839	966,730
Housewares — 0.9% The Scotts Miracle-Gro Co.	9,202	1,407,078
The Toro Co.	24,252	2,035,955
	, -	3,443,033
Leisure Time — 0.8%	17 902	1.054.077
Brunswick Corp. Harley-Davidson, Inc.	17,893 34,637	1,054,077 849,992
Polaris, Inc.	13,032	1,229,439
		3,133,508
Lodging — 0.7% Boyd Gaming Corp.	18,127	556,318
Choice Hotels International, Inc.	6,507	559,342
Wyndham Destinations, Inc.	19,269	592,714
Wyndham Hotels & Resorts, Inc.	21,057	1,063,378
Office Furnishings — 0.2%	-	2,771,752
Herman Miller, Inc.	13,306	401,309
HNI Corp.	9,636	302,378
D.4.1 5.00/	-	703,687
Retail — 5.8% American Eagle Outfitters, Inc. (b)	33,667	498,608
AutoNation, Inc. (a)	13,208	699,099
BJ's Wholesale Club Holdings, Inc. (a)	31,179	1,295,487
Casey's General Stores, Inc.	8,342 5,354	1,481,956
Cracker Barrel Old Country Store, Inc. Dick's Sporting Goods, Inc.	14,722	613,890 852,109
Dunkin' Brands Group, Inc.	18,596	1,523,198
FirstCash, Inc.	9,364	535,714
Five Below, Inc. (a) Foot Locker, Inc.	12,622 23,560	1,602,994
Jack in the Box, Inc.	5,123	778,187 406,305
Kohl's Corp.	35,662	660,817
Lithia Motors, Inc. Class A	5,072	1,156,112
MSC Industrial Direct Co., Inc. Class A Nordstrom, Inc. (b)	10,290 24,478	651,151 291,778
Nu Skin Enterprises, Inc. Class A	11,615	581,795
Ollie's Bargain Outlet Holdings, Inc. (a)	12,856	1,122,972
Papa John's International, Inc.	7,417	610,271
RH (a) (b) Sally Beauty Holdings, Inc. (a) (b)	3,488 25,504	1,334,579 221,630
Surf Beauty Holdings, He. (a) (b)	25,501	221,030
	Number of	¥7.1
Texas Roadhouse, Inc.	Shares 14,746	Value 896,409
The Wendy's Co.	40,471	902,301
Williams-Sonoma, Inc.	17,584	1,590,297
Wingstop, Inc. World Fuel Services Corp.	6,690	914,189 304,098
world ruer services Corp.	14,351	21,525,946
Toys, Games & Hobbies — 0.2%	•	21,020,510
Mattel, Inc. (a)	78,383	917,081
Consumor Non avaliant 19 30/		64,517,434
Consumer, Non-cyclical — 18.3% Agriculture — 0.5%		
Darling Ingredients, Inc. (a)	36,608	1,318,986
Sanderson Farms, Inc.	4,472	527,562
Beverages — 0.5%	-	1,846,548
The Boston Beer Co., Inc. Class A (a)	2,059	1,818,838
Biotechnology — 1.5%	-	
Arrowhead Pharmaceuticals, Inc. (a) (b)	23,121	995,590
Emergent BioSolutions, Inc. (a) Exelixis, Inc. (a)	10,168 69,842	1,050,660 1,707,637
Ligand Pharmaceuticals, Inc. (a) (b)	3,634	346,393
-	,	, -

Nektar Therapeutics (a) (b)	40,436	670,833
United Therapeutics Corp. (a)	10,038	· · · · · · · · · · · · · · · · · · ·
Officed Therapeduces Corp. (a)	10,038	1,013,838
C	-	5,784,951
Commercial Services — 4.1%	15.156	0.50.720
Aaron's, Inc.	15,176	859,720
Adtalem Global Education, Inc. (a)	11,725	287,732
ASGN, Inc. (a)	11,863	754,012
Avis Budget Group, Inc. (a)	11,653	306,707
The Brink's Co.	11,408	468,755
CoreLogic, Inc.	17,960	1,215,353
FTI Consulting, Inc. (a)	8,271	876,478
Graham Holdings Co. Class B	938	379,055
Grand Canyon Education, Inc. (a)	10,691	854,639
H&R Block, Inc.	43,600	710,244
HealthEquity, Inc. (a)	17,334	890,448
Insperity, Inc.	8,156	534,136
Liveramp Holdings, Inc. (a)	14,890	770,855
ManpowerGroup, Inc.	13,126	962,530
Paylocity Holding Corp. (a)	8,393	1,354,798
Sabre Corp.	70,432	458,512
Service Corp. International	39,830	1,680,029
Strategic Education, Inc.	5,517	504,640
	,	,
WEX, Inc. (a)	9,967	1,385,114
WW International, Inc. (a)	10,607	200,154
	<u>-</u>	15,453,911

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
Cosmetics & Personal Care — 0.1%	62.094	\$ 172,757
Coty, Inc. Class A Edgewell Personal Care Co. (a)	63,984 12,278	\$ 172,757 342,310
	12,276	515,067
Foods — 1.9% Flowers Foods, Inc.	44,480	1,082,198
Grocery Outlet Holding Corp. (a)	18,841	740,828
The Hain Celestial Group, Inc. (a)	18,884	647,721
Ingredion, Inc.	15,141	1,145,871
Lancaster Colony Corp.	4,417	789,760
Pilgrim's Pride Corp. (a) Post Holdings, Inc. (a)	11,032 14,232	165,094 1,223,952
Sprouts Farmers Market, Inc. (a)	26,659	557,973
Tootsie Roll Industries, Inc. (b)	3,945	121,900
TreeHouse Foods, Inc. (a)	12,771	517,609
H 10 C P 1 4 4404		6,992,906
Health Care – Products — 4.4% Avanos Medical, Inc. (a)	10,811	359,141
Bio-Techne Corp.	8,713	2,158,471
Cantel Medical Corp.	8,480	372,611
Globus Medical, Inc. Class A (a)	17,026	843,128
Haemonetics Corp. (a)	11,459	999,798
Hill-Rom Holdings, Inc. ICU Medical, Inc. (a)	15,055 4,401	1,257,243 804,327
Integra LifeSciences Holdings Corp. (a)	16,000	755,520
LivaNova PLC (a)	11,000	497,310
Masimo Corp. (a)	11,426	2,697,222
NuVasive, Inc. (a)	11,580	562,441
Penumbra, Inc. (a) Quidel Corp. (a)	7,590 8,628	1,475,344 1,892,811
Repligen Corp. (a)	11,036	1,628,251
	,	16,303,618
Health Care – Services — 3.9% Acadia Healthcare Co., Inc. (a)	20,097	592,460
Amedisys, Inc. (a)	7,338	1,734,923
Charles River Laboratories International, Inc. (a)	11,229	2,542,807
Chemed Corp.	3,598	1,728,299
Encompass Health Corp.	22,478	1,460,621
LHC Group, Inc. (a) MEDNAX, Inc. (a)	7,140 19,298	1,517,678 314,171
Medpace Holdings, Inc. (a)	6,162	688,604
Molina Healthcare, Inc. (a)	13,403	2,453,285
Syneos Health, Inc. (a)	15,779	838,812
Tenet Healthcare Corp. (a)	23,821	583,853
		14,455,513
	Number of Shares	Value
Household Products & Wares — 0.3%	Shares	value
Helen of Troy Ltd. (a)	5,724	\$ 1,107,709
Pharmaceuticals — 1.1%	10.505	1.505.266
Jazz Pharmaceuticals PLC (a) Patterson Cos., Inc.	12,535 19,601	1,787,366 472,482
PRA Health Sciences, Inc. (a)	14,457	1,466,518
Prestige Consumer Healthcare, Inc. (a)	11,344	413,148
		4,139,514
		68,418,575
Energy — 3.6% Energy – Alternate Sources — 2.3%		
Energy – Arternate Sources — 2.3 % Enphase Energy, Inc. (a)	28,481	2,352,246
First Solar, Inc. (a)	19,144	1,267,333
SolarEdge Technologies, Inc. (a)	11,328	2,700,029
Sunrun, Inc. (a)	28,682	2,210,521
Oil & Gas — 0.9%		8,530,129
Cimarex Energy Co.	23,070	561,293
CNX Resources Corp. (a)	50,715	478,750
EQT Corp. Murphy Oil Corp. (b)	57,743 32,635	746,617 291,104
Murphy USA, Inc. (a)	6,133	786,680
https://macamustual.processetus.express.com/print.com/doct/po-com/ alientid-macamustare/fundid-E762005520	-,	222/40

WPX Energy, Inc. (a)	91,295	447,346 3,311,790
Oil & Gas Services — 0.1%	=	5,511,750
ChampionX Corp. (a)	41,973	335,364
Pipelines — 0.3%	· <del>-</del>	
Antero Midstream Corp. (b)	64,634	347,084
Equitrans Midstream Corp.	91,834	776,916
	_	1,124,000
	_	13,301,283
Financial — 22.2%	_	
Banks — 5.2%		
Associated Banc-Corp.	34,723	438,204
BancorpSouth Bank	21,793	422,348
Bank of Hawaii Corp.	9,052	457,307
Bank OZK	27,314	582,335
Cathay General Bancorp	16,917	366,761
CIT Group, Inc.	22,226	393,622
Commerce Bancshares, Inc.	22,681	1,276,714
Cullen/Frost Bankers, Inc.	12,613	806,601
East West Bancorp, Inc.	31,969	1,046,665
F.N.B. Corp.	72,997	494,920
First Financial Bankshares, Inc.	32,097	895,827
First Horizon National Corp.	125,015	1,178,891
Fulton Financial Corp.	36,633	341,786
Glacier Bancorp, Inc.	21,565	691,158

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
Hancock Whitney Corp.	19,496	\$	366,720
Home BancShares, Inc.	34,354	*	520,807
International Bancshares Corp.	12,581		327,861
PacWest Bancorp	26,389		450,724
Pinnacle Financial Partners, Inc.	17,143		610,119
Prosperity Bancshares, Inc.	20,937		1,085,165
Signature Bank	12,104		1,004,511
Synovus Financial Corp.	33,280		704,538
TCF Financial Corp.	34,409		803,794
Texas Capital Bancshares, Inc. (a)	11,394		354,695
Trustmark Corp.	14,330		306,805
UMB Financial Corp.	9,769		478,779
Umpqua Holdings Corp.	49,758		528,430
United Bankshares, Inc.	29,328		629,672
Valley National Bancorp	91,270		625,200
Webster Financial Corp.	20,374		538,077
Wintrust Financial Corp.	13,008		520,970
			19,250,006
Diversified Financial Services — 2.5% Affiliated Managers Group, Inc.	10,522		719,494
Alliance Data Systems Corp.	10,785		452,754
Eaton Vance Corp.	25,806		984,499
Evercore, Inc. Class A	9,175		600,596
Federated Hermes, Inc.	21,513		462,745
Interactive Brokers Group, Inc. Class A	17,868		863,560
Janus Henderson Group PLC	34,076		740,131
Jefferies Financial Group, Inc.	48,814		878,652
LendingTree, Inc. (a) (b)	1,779		545,957
Navient Corp.	43,833		370,389
SEI Investments Co.	27,484		1,393,988
SLM Corp.	84,754		685,660
Stifel Financial Corp.	15,496		783,478
•	ŕ		9,481,903
Insurance — 4.7% Alleghany Corp.	3,235		1,683,656
American Financial Group, Inc.	16,210		1,085,746
Brighthouse Financial, Inc. (a)	21,026		565,810
Brown & Brown, Inc.	53,057		2,401,890
CNO Financial Group, Inc.	32,032		513,793
Essent Group Ltd.	25,411		940,461
First American Financial Corp.	25,206		1,283,238
Genworth Financial, Inc. Class A (a)	114,373		383,150
The Hanover Insurance Group, Inc.	8,526		794,453
Kemper Corp.	13,881		927,667
Mercury General Corp.	6,006		248,468
Old Republic International Corp.	63,910		942,033
Primerica, Inc.	8,933		1,010,680
	Number of		
	Shares		Value
Reinsurance Group of America, Inc.	15,355	\$	1,461,642
RenaissanceRe Holdings Ltd.	11,576		1,964,910
RLI Corp.	8,941		748,630
Selective Insurance Group, Inc.	13,519		696,093
•	,		17,652,320
Real Estate — 0.3%  Jones Lang LaSalle, Inc.	11,704		1,119,605
Real Estate Investment Trusts (REITS) — 9.0%	11,704		1,119,003
American Campus Communities, Inc.	31,109		1,086,326
Brixmor Property Group, Inc.	66,984		783,043
Camden Property Trust	22,014		1,958,806
CoreSite Realty Corp.	9,614		1,142,912
Corporate Office Properties Trust	25,345		601,183
Cousins Properties, Inc.	33,580		960,052
CyrusOne, Inc.	26,417		1,849,982
Douglas Emmett, Inc.	37,249		934,950
EastGroup Properties, Inc.	8,890		1,149,744
EPR Properties	16,864		463,760
First Industrial Realty Trust, Inc.	28,743		1,143,971
The GEO Group, Inc.	27,422		310,965
	21,722		510,705

Healthcare Realty Trust, Inc.	30,751	926,220
Highwoods Properties, Inc.	23,473	787,989
Hudson Pacific Properties, Inc.	34,663	760,160
JBG SMITH Properties	25,402	679,249
Kilroy Realty Corp.	23,691	1,230,984
Lamar Advertising Co. Class A	19,527	1,292,102
Life Storage, Inc.	10,605	1,116,388
The Macerich Co. (b)	25,337	172,038
Medical Properties Trust, Inc.	119,530	2,107,314
National Retail Properties, Inc.	39,225	1,353,655
Omega Healthcare Investors, Inc.	51,302	1,535,982
Park Hotels & Resorts, Inc.	53,233	531,798
Pebblebrook Hotel Trust (b)	29,545	370,199
Physicians Realty Trust	47,046	842,594
PotlatchDeltic Corp.	15,128	636,889
PS Business Parks, Inc.	4,533	554,794
Rayonier, Inc.	30,856	815,833
Rexford Industrial Realty, Inc.	27,980	1,280,365
Sabra Health Care REIT, Inc.	46,447	640,272
Service Properties Trust	37,184	295,613
Spirit Realty Capital, Inc.	23,291	786,071
STORE Capital Corp.	51,557	1,414,209
Taubman Centers, Inc.	13,949	464,362
Urban Edge Properties	24,795	241,007
Weingarten Realty Investors	27,209	461,465
		33,683,246
Savings & Loans — 0.5%		
New York Community Bancorp, Inc.	104,828	866,927

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	
Sterling Bancorp 43,9	_	2,228
Washington Federal, Inc.		5,831
	1,685	
Industrial — 20.1%	82,873	,066
Aerospace & Defense — 0.4%		
Hexcel Corp. 18,8		2,921
Mercury Systems, Inc. (a) 12,6		),488
Building Materials — 2.5%	1,613	,409
Builders FirstSource, Inc. (a) 26,3	860	,614
Eagle Materials, Inc. 9,4		1,688
Lennox International, Inc. 7,8 Louisiana-Pacific Corp. 25,3	· ·	1,896 9,111
MDU Resources Group, Inc. 45,3		
Owens Corning 24,4		
Trex Co., Inc. (a) 26,1		
Electrical Components & Equipment — 2.1%	9,142	,031
Acuity Brands, Inc. 8,9	57 916	5,749
Belden, Inc.		3,129
Energizer Holdings, Inc.		5,239
EnerSys Generac Holdings, Inc. (a)  9,6 14,1		1,419
Littelfuse, Inc. (a) 5,5		5,725
Universal Display Corp. 9,6		
	7,864	,409
Electronics — 3.6%	1 290	160
Arrow Electronics, Inc. (a) 17,5 Avnet, Inc. 22,3		5,620
Coherent, Inc. (a) 5,4		7,896
Hubbell, Inc.	1,677	7,248
II-VI, Inc. (a) (b)		),402
Jabil, Inc. 30,6 National Instruments Corp. 29,7		
nVent Electric PLC 38,4		9,455
SYNNEX Corp. 9,3		
Trimble, Inc. (a) 56,5		
Vishay Intertechnology, Inc. 29,9 Woodward, Inc. 13,1		5,322
woodward, mc.	13,557	
Engineering & Construction — 1.5%		<del>/</del>
AECOM (a)	· ·	
Dycom Industries, Inc. (a) 7,1 EMCOR Group, Inc. 12,4	96 380 10 840	),093 ),281
Fluor Corp. 28,1		3,424
KBR, Inc. 32,1		,478
Number of		
Shares	Value	
MasTec, Inc. (a) 12,6		5,138
TopBuild Corp. (a) 7,4		
Environmental Controls — 0.8%	5,516	<u>,,447</u>
Clean Harbors, Inc. (a)	70 648	3,267
Stericycle, Inc. (a) 20,6		
Tetra Tech, Inc.		
Hand & Machine Tools — 1.2%	3,115	,412
Colfax Corp. (a) 22,7	15 713	3,283
Kennametal, Inc.		2,191
Lincoln Electric Holdings, Inc.		
MSA Safety, Inc.  8,1		
Regal Beloit Corp. 9,1	4,448	3,240
Machinery – Construction & Mining — 0.4%		,2 10
Oshkosh Corp.		
Terex Corp. 15,6		3,255
	1,434	,/14

Machinery – Diversified — 2.9%		
AGCO Corp.	13,881	1,030,942
Cognex Corp.	39,113	2,546,256
Crane Co.	11,148	558,849
Curtiss-Wright Corp.	9,398	876,458
Graco, Inc.	37,681	2,311,729
The Middleby Corp. (a)	12,571	1,127,745
Nordson Corp.	12,199	2,340,012
		10,791,991
Metal Fabricate & Hardware — 0.5%		
The Timken Co.	15,277	828,319
Valmont Industries, Inc.	4,826	599,292
Worthington Industries, Inc.	8,151	332,398
		1,760,009
Miscellaneous - Manufacturing — 2.0%		
AptarGroup, Inc.	14,573	1,649,664
Axon Enterprise, Inc. (a)	14,347	1,301,273
Carlisle Cos., Inc.	12,337	1,509,679
Donaldson Co., Inc.	28,499	1,322,923
ITT, Inc.	19,529	1,153,187
Trinity Industries, Inc. (b)	20,116	392,262
		7,328,988
Packaging & Containers — 0.6%		
Greif, Inc. Class A	5,975	216,355
O-I Glass, Inc.	35,476	375,691
Silgan Holdings, Inc.	17,795	654,322
Sonoco Products Co.	22,688	1,158,676
		2,405,044

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

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

	iber of nares		Value
Transportation — 1.5%			
Kirby Corp. (a)	13,566	\$	490,682
Knight-Swift Transportation Holdings, Inc. Landstar System, Inc.	28,468 8,675		1,158,647 1,088,626
Ryder System, Inc.	12,165		513,850
Werner Enterprises, Inc.	13,119		550,867
XPO Logistics, Inc. (a) (b)	20,642		1,747,552
			5,550,224
Trucking & Leasing — 0.1%	<b>7</b> 011		504.226
GATX Corp.	7,911		504,326
Technology — 7.8%			75,032,863
Computers — 1.8%			
CACI International, Inc. Class A (a)	5,673		1,209,257
Lumentum Holdings, Inc. (a)	16,997		1,276,985
MAXIMUS, Inc.	13,854		947,752
NCR Corp. (a)	29,022		642,547
NetScout Systems, Inc. (a) Perspecta, Inc.	16,377 30,885		357,510 600,713
Qualys, Inc. (a)	7,629		747,718
Science Applications International Corp.	13,147		1,030,988
	, ,		6,813,470
Semiconductors — 2.6%			
Cirrus Logic, Inc. (a)	13,190		889,665
CMC Materials, Inc.	6,567		937,833
Cree, Inc. (a)	24,791		1,580,178 1,361,006
MKS Instruments, Inc. Monolithic Power Systems, Inc.	12,460 9,542		2,668,039
Semtech Corp. (a)	14,721		779,624
Silicon Laboratories, Inc. (a)	9,899		968,617
Synaptics, Inc. (a)	7,737		622,210
			9,807,172
Software — 3.4%	26.205		605 400
ACI Worldwide, Inc. (a) Blackbaud, Inc.	26,307 11,212		687,402 625,966
CDK Global, Inc.	27,472		1,197,505
Ceridian HCM Holding, Inc. (a)	29,343		2,425,199
CommVault Systems, Inc. (a)	10,486		427,829
Fair Isaac Corp. (a)	6,555		2,788,366
j2 Global, Inc. (a)	10,115		700,160
Manhattan Associates, Inc. (a)	14,358		1,371,045
PTC, Inc. (a)	23,621		1,953,929
Teradata Corp. (a)	24,637		559,260 12,736,661
		-	29,357,303
			27,337,303
Num	ber of		
	nares		Value
Utilities — 3.5%			
Electric — 1.5% ALLETE, Inc.	11,727	\$	606,755
Black Hills Corp.	14,179	φ	758,435
Hawaiian Electric Industries, Inc.	24,678		820,297
IDACORP, Inc.	11,400		910,860
NorthWestern Corp.	11,432		556,052
OGE Energy Corp.	45,229		1,356,418
PNM Resources, Inc.	17,998		743,857
Con 1.40/			5,752,674
Gas — 1.4% National Fuel Gas Co.	20,558		834,449
New Jersey Resources Corp.	21,683		585,875
ONE Gas, Inc.	11,962		825,498
Southwest Gas Holdings, Inc.	12,638		797,458
Spire, Inc.	11,636		619,035
UGI Corp.	47,086		1,552,896
W.4 0.60/			5,215,211
Water — 0.6% Essential Utilities, Inc.	50,425		2,029,606
Localidat Catheres, IIIC.	50,725		12,997,491
			12,771,171

TOTAL COMMON STOCK (Cost \$362,270,433)	373,502,496
TOTAL EQUITIES (Cost \$362,270,433)	373,502,496
MUTUAL FUNDS — 0.3%  Diversified Financial Services — 0.3%  State Street Navigator Securities Lending Prime Portfolio (c)  1,085,92	1 1,085,921
TOTAL MUTUAL FUNDS (Cost \$1,085,921)	1,085,921
TOTAL LONG-TERM INVESTMENTS (Cost \$363,356,354)	374,588,417

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

### MM S&P Mid Cap Index Fund — Portfolio of Investments (Continued)

	Principal Amount		Value
SHORT-TERM INVESTMENTS — 0.7%  Repurchase Agreement — 0.2%  Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (d)  U.S. Treasury Bill — 0.5%	\$ 797,299	\$	797,299
U.S. Treasury Bill 0.000%1/28/21(e)	1,930,000		1,929,354
TOTAL SHORT-TERM INVESTMENTS (Cost \$2,726,597)			2,726,653
TOTAL INVESTMENTS — 100.9% (Cost \$366,082,951) (f)			377,315,070
Other Assets/(Liabilities) — (0.9)%			(3,379,424)
NET ASSETS — 100.0%		\$	373,935,646

#### 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, 2020, was \$10,010,431 or 2.68% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$9,028,521 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 \$797,299. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$813,299.
- (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	Un App	lue/ Net realized reciation/ reciation)
Long					
S&P Midcap 400 E Mini Index	12/18/20	13	\$ 2,393,396	\$	19,274

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

# MM Russell 2000 Small Cap Index Fund — Portfolio of Investments

# **September 30, 2020**

	Number of Shares	Value
EQUITIES — 99.5%		
COMMON STOCK — 99.5%		
Basic Materials — 3.1% Chemicals — 1.5%		
AdvanSix, Inc. (a)	3,673	\$ 47,308
AgroFresh Solutions, Inc. (a)	4,352	10,575
American Vanguard Corp.	4,076	53,559
Amyris, Inc. (a) (b)	14,491	42,314
Balchem Corp.	4,390	428,596
Bluegreen Vacations Holding Corp.	1,760	23,566
Codexis, Inc. (a) (b)	7,287 11,315	85,549 140,306
Ferro Corp. (a) GCP Applied Technologies, Inc. (a)	6,643	139,171
Glatfelter Corp.	6,027	82,992
H.B. Fuller Co.	7,022	321,467
Hawkins, Inc.	1,319	60,806
Ingevity Corp. (a)	5,664	280,028
Innospec, Inc.	3,331	210,919
Intrepid Potash, Inc. (a) Koppers Holdings, Inc. (a)	1,353 2,798	11,419 58,506
Kraton Corp. (a)	4,246	75,664
Kronos Worldwide, Inc.	2,981	38,336
Marrone Bio Innovations, Inc. (a)	9,848	12,014
Minerals Technologies, Inc.	4,628	236,491
Oil-Dri Corp. of America	744	26,613
Orion Engineered Carbons SA	8,215	102,770
Poseida Therapeutics, Inc. (a)	1,818	16,126
PQ Group Holdings, Inc. (a) Quaker Chemical Corp. (b)	5,331 1,815	54,696 326,174
Rayonier Advanced Materials, Inc. (a)	8,740	27,968
Rogers Corp. (a)	2,542	249,268
Sensient Technologies Corp.	5,786	334,083
Stepan Co.	2,940	320,460
Tronox Holdings PLC Class A (a)	12,085	95,109 3,912,853
Forest Products & Paper — 0.2%		
Clearwater Paper Corp. (a)	2,189	83,051
Domtar Corp.	7,496	196,920
Neenah, Inc. Schweitzer-Mauduit International, Inc.	2,244 4,286	84,083 130,251
Verso Corp. Class A	4,248	33,517
	1,210	527,822
Iron & Steel — 0.5% Allegheny Technologies, Inc. (a)	17,287	150,743
Carpenter Technology Corp.	6,555	119,039
Cleveland-Cliffs, Inc. (b)	53,887	345,954
Commercial Metals Co.	16,198	323,636
Schnitzer Steel Industries, Inc. Class A	3,569	68,632
	Number of	¥7-1
United States Steel Corp. (b)	Shares 29,871	<b>Value</b> \$ 219,253
•	29,871	1,227,257
Mining — 0.9%	25.546	207 100
Alcoa Corp. (a) Arconic Corp. (a)	25,546 13,580	297,100 258,699
Caledonia Mining Corp. PLC	1,575	26,759
Century Aluminum Co. (a)	6,945	49,449
Coeur Mining, Inc. (a)	33,034	243,791
Compass Minerals International, Inc.	4,660	276,571
Energy Fuels, Inc. (a) (b)	16,455	27,644
Ferroglobe Representation & Warranty Insurance Trust (c) (d)	10,133	20.061
Gold Resource Corp. Hecla Mining Co.	8,493 71,209	28,961 361,742
Kaiser Aluminum Corp.	2,141	114,736
Livent Corp. (a) (b)	20,011	179,499
Novagold Resources, Inc. (a)	32,434	385,640
United States Lime & Minerals, Inc.	252	22,705
Uranium Energy Corp. (a) (b)	24,194	24,117
https://massmutual.prospectus-express.com/print.asp?doctype=ann&clientid=massmutpre&fundid=57629S539		242/4

	2,297,413
	7,965,345
Communications — 4.3%	·
Advertising — 0.1%	
Boston Omaha Corp. Class A (a) (b) 1,7	72 28,352
Fluent, Inc. (a) 6,0	64 15,039
National CineMedia, Inc. 8,8	48 24,022
Quotient Technology, Inc. (a) 11,8	57 87,505
	154,918
Internet — 2.1%	·
1-800-Flowers.com, Inc. Class A (a) (b) 3,3	80 84,297
Boingo Wireless, Inc. (a) 6,0	38 61,558
Cargurus, Inc. (a)	80 254,802
CarParts.com, Inc. (a) 2,8	10 30,376
Cars.com, Inc. (a) 9,2	52 74,756
ChannelAdvisor Corp. (a) 3,7	45 54,190
Cogent Communications Holdings, Inc. 5,8	01 348,350
Comscore, Inc. (a) 8,2	42 16,814
DHI Group, Inc. (a) 7,1	01 16,048
Endurance International Group Holdings, Inc. (a) 9,1	05 52,263
ePlus, Inc. (a) 1,8	32 134,102
Eventbrite, Inc. Class A (a) (b) 8,6	58 93,939
Everquote, Inc. Class A (a) 1,9	13 73,918
Groupon, Inc. (a) 3,2	03 65,341
HealthStream, Inc. (a) 3,4	82 69,884
Lands' End, Inc. (a)	20 21,109

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

Limelight Networks, Inc. (a) Liquidity Services, Inc. (a) Livexlive Media, Inc. (a) (b) Magnite, Inc. (a) (b)

### MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

Liquidity Services, Inc. (a)	3,922	29,258
Livexlive Media, Inc. (a) (b)	6,218	16,136
Magnite, Inc. (a) (b)	14,242	98,907
Mimecast Ltd. (a) NIC, Inc.	7,796 8,975	365,788 176,808
Overstock.com, Inc. (a)	5,821	422,896
Perficient, Inc. (a)	4,440	189,766
Q2 Holdings, Inc. (a) (b)	6,770	617,830
QuinStreet, Inc. (a)	6,376	100,996
Realreal, Inc. (a)	8,505	123,067
Shutterstock, Inc.	2,984	155,287
Stamps.com, Inc. (a)	2,320	559,004
Stitch Fix, Inc. Class A (a)	7,672	208,141
TechTarget, Inc. (a)	3,215	141,332
TrueCar, Inc. (a) Tucows, Inc. Class A (a) (b)	14,368 1,276	71,840 87,916
Upwork, Inc. (a)	12,649	220,599
VirnetX Holding Corp. (b)	8,505	44,821
Yelp, Inc. (a)	9,707	195,014
Zix Corp. (a) (b)	7,535	44,004
	_	5,413,455
Media — 0.6%	_	
AMC Networks, Inc. Class A (a)	5,272	130,271
Central European Media Enterprises Ltd. Class A (a)	12,531	52,505
The E.W. Scripps Co. Class A	7,706	88,157
Entercom Communications Corp. Class A (b)	16,937	27,269
Entravision Communications Corp. Class A	8,492 17,495	12,908 22,744
Gannett Co., Inc. (b) Gray Television, Inc. (a)	11,815	162,693
Hemisphere Media Group, Inc. (a)	2,373	20,621
Houghton Mifflin Harcourt Co. (a)	14,891	25,761
iHeartMedia, Inc. Class A (a) (b)	8,134	66,048
Liberty Latin America Ltd. Class A (a)	6,166	50,870
Liberty Latin America Ltd. Class C (a)	27,200	221,405
Meredith Corp.	5,394	70,769
MSG Networks, Inc. Class A (a) (b)	5,234	50,089
Saga Communications, Inc. Class A	539	10,715
Scholastic Corp.	3,951	82,931
Sinclair Broadcast Group, Inc. Class A (b)	6,010	115,572
TEGNA, Inc.	29,919	351,548
Tribune Publishing Co. Value Line, Inc.	2,018 150	23,530 3,705
WideOpenWest, Inc. (a)	7,381	38,307
WideOpen West, Inc. (a)	7,501	1,628,418
	_	1,020,110
	Number of	
_	Shares	Value
Telecommunications — 1.5%	0.500 *	
A10 Networks, Inc. (a)	8,566 \$	· ·
Acacia Communications, Inc. (a)	5,303 6,573	357,422 67,406
ADTRAN, Inc. Alaska Communications Systems Group, Inc.	6,373 6,407	67,406 12,814
Anterix, Inc. (a) (b)	1,478	48,345
ATN International, Inc.	1,498	75,110
CalAmp Corp. (a)	4,728	33,994
Calix, Inc. (a)	7,177	127,607
Cambium Networks Corp. (a)	720	12,146
Casa Systems, Inc. (a)	4,151	16,729
Cincinnati Bell, Inc. (a)	6,799	101,985
Clearfield, Inc. (a)	1,479	29,831
Consolidated Communications Holdings, Inc. (a)	9,876	56,194
DZS, Inc. (a)	1,761	16,501
Extreme Networks, Inc. (a)	16,534	66,467
Gogo, Inc. (a) (b) GTT Communications Inc. (a) (b)	7,525	69,531
GTT Communications, Inc. (a) (b) Harmonic, Inc. (a)	4,439 13,031	22,905 72,713
HC2 Holdings, Inc. (a) (b)	5,081	12,296
IDT Corp. Class B (a)	2,199	14,469
Infinera Corp. (a)	21,620	133,179
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https://massmutual.prospectus-express.com/print.asp?doctype=ann&clientid=massmutpre&fundid=57629S539		244/497

Number of Shares

16,024 3,922

Value

92,298 29,258 16,136 98,907

Inseego Corp. (a) (b)	9,411	97,122
InterDigital, Inc.	4,197	239,481
Iridium Communications, Inc. (a)	16,043	410,380
KVH Industries, Inc. (a)	2,321	20,912
Loral Space & Communications, Inc. (b)	1,812	33,160
Luna Innovations, Inc. (a)	3,808	22,772
Maxar Technologies, Inc.	8,400	209,496
NeoPhotonics Corp. (a)	6,707	40,846
NETGEAR, Inc. (a)	3,992	123,033
Ooma, Inc. (a)	2,846	37,140
ORBCOMM, Inc. (a)	10,444	35,510
PCTEL, Inc.	2,577	14,586
Plantronics, Inc. (b)	4,685	55,470
Powerfleet, Inc. (a) (b)	4,003	22,537
Preformed Line Products Co.	435	21,193
Resonant, Inc. (a) (b)	7,252	17,260
Ribbon Communications, Inc. (a)	9,549	36,955
Shenandoah Telecommunications Co.	6,577	292,249
Spok Holdings, Inc.	2,248	21,379
Viavi Solutions, Inc. (a)	31,134	365,202
Vonage Holdings Corp. (a)	31,591	323,176
Totalings Cosp. (u)	51,571	3,842,068
	_	
		11,038,859

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
Consumer, Cyclical — 14.6%		
Airlines — 0.3%	1.706	Ф 212.0 <i>C</i> 2
Allegiant Travel Co. Hawaiian Holdings, Inc.	1,786 6,221	\$ 213,963 80,189
Mesa Air Group, Inc. (a)	4,085	12,051
SkyWest, Inc.	6,721	200,689
Spirit Airlines, Inc. (a)	12,106	194,906
		701,798
Apparel — 0.9%	0.100	200.220
Crocs, Inc. (a) Deckers Outdoor Corp. (a)	9,109 3,819	389,228 840,218
Kontoor Brands, Inc. (a) (b)	7,027	170,053
Lakeland Industries, Inc. (a)	1,067	21,127
Oxford Industries, Inc.	2,253	90,931
Rocky Brands, Inc.	871	21,627
Steven Madden Ltd.	11,216	218,712
Superior Group of Cos, Inc. Unifi, Inc. (a)	1,434 1,766	33,312 22,675
Urban Outfitters, Inc. (a)	9,415	195,926
Weyco Group, Inc.	861	13,922
Wolverine World Wide, Inc.	10,888	281,346
		2,299,077
Auto Manufacturers — 0.3%	0.050	27.204
Blue Bird Corp. (a) Navistar International Corp. (a)	2,252 6,810	27,384 296,508
REV Group, Inc.	3,827	30,195
Wabash National Corp.	7,225	86,411
Workhorse Group, Inc. (a) (b)	12,861	325,126
		765,624
Auto Parts & Equipment — 1.2% Adient PLC (a)	11,994	207,856
American Axle & Manufacturing Holdings, Inc. (a)	15,318	88,385
Cooper Tire & Rubber Co.	6,864	217,589
Cooper-Standard Holding, Inc. (a)	2,309	30,502
Dana, Inc.	19,720	242,950
Dorman Products, Inc. (a)	3,633	328,351
Douglas Dynamics, Inc. Fox Factory Holding Corp. (a)	3,115 5,644	106,533 419,518
Gentherm, Inc. (a)	4,450	182,005
Meritor, Inc. (a)	9,451	197,904
Methode Electronics, Inc.	5,013	142,870
Miller Industries, Inc.	1,556	47,567
Modine Manufacturing Co. (a)	6,643	41,519
Motorcar Parts of America, Inc. (a)	2,630	40,923 89,661
The Shyft Group, Inc. Standard Motor Products, Inc.	4,749 2,873	128,279
Telenay, Inc. (a)	4,324	15,566
	NIl C	
	Number of Shares	Value
Tenneco, Inc. Class A (a) (b)	7,021	\$ 48,726
The The Goodyear Tire & Rubber Co.	31,513	241,705
Visteon Corp. (a)	3,780	261,652
XPEL, Inc. (a)	2,298	59,932
Distribution & Wholesale — 1.0%		3,139,993
A-Mark Precious Metals, Inc.	625	21,075
Avient Corp.	12,464	329,797
Core-Mark Holding Co., Inc.	6,096	176,357
EVI Industries, Inc. (a)	606	16,126
Fossil Group, Inc. (a)	6,455	37,052
G-III Apparel Group Ltd. (a) H&E Equipment Services, Inc.	5,988 4,397	78,503 86,445
KAR Auction Services, Inc.	17,605	253,512
Resideo Technologies, Inc. (a)	16,897	185,867
ScanSource, Inc. (a)	3,466	68,731
SiteOne Landscape Supply, Inc. (a)	5,995	731,090
Systemax, Inc.	1,654	39,597
Titan Machinery, Inc. (a)	2,686	35,536
Triton International Ltd.	6,807	276,841

Veritiv Corp. (a)	1,787	22,623
VSE Corp.	1,196	36,645
1	· · · · · · · · · · · · · · · · · · ·	
WESCO International, Inc. (a)	6,691	294,538
T	_	2,690,335
Entertainment — 2.1%		
Accel Entertainment, Inc. (a)	5,924	63,446
AMC Entertainment Holdings, Inc. Class A (b)	7,340	34,571
Caesars Entertainment, Inc. (a) (b)	18,973	1,063,626
Churchill Downs, Inc.	5,190	850,226
Cinemark Holdings, Inc. (b)	14,580	145,800
Eros STX Global Corp. (a) (b)	20,541	45,396
Everi Holdings, Inc. (a)	11,173	92,177
GAN Ltd. (a)	1,084	18,320
Golden Entertainment, Inc. (a)	2,183	30,191
IMAX Corp. (a)	6,691	80,024
International Game Technology PLC (b)	13,567	151,001
Liberty Media Corp-Liberty Braves Class A (a)	1,413	29,503
Liberty Media Corp-Liberty Braves Class C (a)	5,003	105,113
Marriott Vacations Worldwide Corp.	5,527	501,907
Monarch Casino & Resort, Inc. (a)	1,723	76,846
Penn National Gaming, Inc. (a) (b)	20,761	1,509,325
RCI Hospitality Holdings, Inc. (b)	1,123	22,909
	· · · · · · · · · · · · · · · · · · ·	
Red Rock Resorts, Inc. Class A	8,984	153,626
Scientific Games Corp. Class A (a)	7,791	271,984
SeaWorld Entertainment, Inc. (a)	6,923	136,522

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
Twin River Worldwide Holdings, Inc.	2,441	\$ 64,125 5,446,638
Food Services — 0.1%		
Healthcare Services Group, Inc.  Home Builders — 1.6%	10,177	219,111
Beazer Homes USA, Inc. (a)	4,023	53,104
Cavco Industries, Inc. (a)	1,253	225,928
Century Communities, Inc. (a)	3,981	168,516
Forestar Group, Inc. (a) Green Brick Partners, Inc. (a)	2,232 3,245	39,506 52,245
Installed Building Products, Inc. (a)	3,118	317,256
KB Home	12,035	462,024
LCI Industries	3,361	357,241
LGI Homes, Inc. (a) M.D.C. Holdings, Inc.	3,041 6,935	353,273 326,638
M/I Homes, Inc. (a)	3,799	174,944
Meritage Home Corp. (a)	5,074	560,119
Skyline Champion Corp. (a)	7,172	191,994
Taylor Morrison Home Corp. (a) TRI Pointe Group, Inc. (a)	17,219 17,668	423,415 320,498
Winnebago Industries, Inc.	4,249	219,546
	-,,	4,246,247
Home Furnishing — 0.4% Casper Sleep, Inc. (a)	3,434	24,690
Daktronics, Inc.	5,294	20,964
Ethan Allen Interiors, Inc.	3,070	41,568
Hamilton Beach Brands Holding Co. Class A	917	17,836
Hooker Furniture Corp.	1,645	42,490
iRobot Corp. (a) (b) Purple Innovation, Inc. (a)	3,764 3,023	285,688 75,152
Sleep Number Corp. (a)	3,693	180,625
Sonos, Inc. (a)	10,986	166,767
Universal Electronics, Inc. (a)	1,869	70,536
VOXX International Corp. (a)	2,595	19,956 946,272
Housewares — 0.1%		
Lifetime Brands, Inc.	1,682	15,895
Tupperware Brands Corp.	6,692	134,911 150,806
Leisure Time — 0.7%	4.651	156,000
Acushnet Holdings Corp. Callaway Golf Co.	4,671 12,739	156,992 243,824
Camping World Holdings, Inc. Class A	4,478	133,221
Clarus Corp. (b)	3,295	46,525
Escalade, Inc.	1,497	27,380
Johnson Outdoors, Inc. Class A	737	60,353
	Number of Shares	Value
Liberty TripAdvisor Holdings, Inc. Class A (a)	10,063	\$ 17,409
Lindblad Expeditions Holdings, Inc. (a)	3,634	30,925
Malibu Boats, Inc. Class A (a)	2,783	137,926
Marine Products Corp.  MasterCraft Boat Holdings, Inc. (a)	925 2,553	14,467 44,652
Nautilus, Inc. (a) (b)	4,073	69,893
OneSpaWorld Holdings Ltd.	6,070	39,455
OneWater Marine, Inc. Class A (a)	648	13,278
Vista Outdoor, Inc. (a) YETI Holdings, Inc. (a)	7,928 10,916	159,987 494,713
	10,710	1,691,000
Lodging — 0.2% Bluegreen Vacations Corp.	755	3,700
Boyd Gaming Corp.	11,093	340,444
Century Casinos, Inc. (a)	3,932	21,547
Hilton Grand Vacations, Inc. (a)	11,619	243,767
The Marcus Corp.  Toward Hamitality Cours (a) (b)	3,039	23,491
Target Hospitality Corp. (a) (b)	3,365	4,105 637,054
Office Furnishings — 0.3%	220	
CompX International, Inc.  https://massmutual.prospectus-express.com/print.asp?doctype=ann&clientid=massmutpre&fundid=57629S539	230	3,439 248/49
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Herman Miller, Inc. HNI Corp. Interface, Inc. Kimball International, Inc. Class B Knoll, Inc. Steelcase, Inc. Class A	8,025 5,787 8,058 5,092 7,021 11,885	242,034 181,596 49,315 53,670 84,673 120,157 734,884
Retail — 5.3%		<del></del>
Abercrombie & Fitch Co. Class A	8,503	118,447
America's Car-Mart, Inc. (a)	842	71,469
American Eagle Outfitters, Inc. (b)	20,583	304,834
Asbury Automotive Group, Inc. (a)	2,629	256,196
Aspen Aerogels, Inc. (a)	2,841	31,109
At Home Group, Inc. (a)	7,318	108,745
Beacon Roofing Supply, Inc. (a)	7,441	231,192
Bed Bath & Beyond, Inc. (b)	17,305	259,229
Big Lots, Inc.	5,356	238,878
Biglari Holdings, Inc. (a)	134	11,927
Biglari Holdings, Inc. Class A (a)	7	3,415
BJ's Restaurants, Inc.	3,009	88,585
BJ's Wholesale Club Holdings, Inc. (a)	18,689	776,528
Bloomin' Brands, Inc.	11,934	182,232
BMC Stock Holdings, Inc. (a)	9,176	393,008
Boot Barn Holdings, Inc. (a) (b)	3,864	108,733

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

# MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

Brinker International, Inc. The Buckle, Inc. (b) Caleres, Inc. Cannae Holdings, Inc. (a) Carrols Restaurant Group, Inc. (a) (b) The Cato Corp. Class A The Cheesecake Factory, Inc. (b) Chico's FAS, Inc. (b) The Children's Place, Inc. (b) Chuy's Holdings, Inc. (a) Citi Trends, Inc. Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) First Cash, Inc. Foundation Building Materials, Inc. (a) FirstCash, Inc. GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Gian, Inc. (a) Gian, Inc. (a) GianeStop Corp. (a) GameStop Corp. (a) Haverty Furniture Cos., Inc. Kura Sushi USA, Inc. Class A (a) (b) Jack in the Box, Inc. Lithia Motors, Inc. Class A Lithia	6,133 3,954 5,029 11,812 4,717 2,951 5,775 15,527 1,943 2,671 1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264 2,268	\$	262,002 80,622 48,077 440,115 30,425 23,077 160,198 15,100 55,084 52,298 33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873 47,408
The Buckle, Inc. (b) Caleres, Inc. Cannae Holdings, Inc. (a) Carrols Restaurant Group, Inc. (a) (b) The Cato Corp. Class A The Cheesecake Factory, Inc. (b) Chico's FAS, Inc. (b) The Children's Place, Inc. (b) Chu's Holdings, Inc. (a) Citi Trends, Inc. Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Express, Inc. (a) Express, Inc. (a) FirstCash, Inc. FirstCash, Inc. FirstCash, Inc. (a) Gaia, Inc. (a) Grands Group, Class A (a) (b) Genesco, Inc. (a) Growgeneration Corp. (a) Growgeneration Corp. (a) Growgeneration Corp. (a) Growgeneration Corp. (a) Havetry Furniture Cos., Inc. Hibbett Sports, Inc. (a) Holdings, Inc. Class A (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Lithia Motors, Inc. Class A (a) Lithia Motors, Inc. Class A	3,954 5,029 11,812 4,717 2,951 5,775 15,527 1,943 2,671 1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		80,622 48,077 440,115 30,425 23,077 160,198 15,100 55,084 52,298 33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Calnea Holdings, Inc. (a) Carnols Restaurant Group, Inc. (a) (b) The Cato Corp. Class A The Cheesecake Factory, Inc. (b) Chico's FAS, Inc. (b) The Children's Place, Inc. (b) Chiy's Holdings, Inc. (a) Citi Trends, Inc. Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. (2lass B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Group I Automotive, Inc. GrowGeneration Corp. (a) Guess', Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a)	5,029 11,812 4,717 2,951 5,775 15,527 1,943 2,671 1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		48,077 440,115 30,425 23,077 160,198 15,100 55,084 52,298 33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Cannae Holdings, Inc. (a) Carrols Restaurant Group, Inc. (a) (b) The Cato Corp. Class A The Cheesecake Factory, Inc. (b) Chico's FAS, Inc. (b) The Children's Place, Inc. (b) Chuy's Holdings, Inc. (a) Citi Trends, Inc. Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) Gaia, Inc. (a) Group I Automotive, Inc. GrowGeneration Corp. (a) Guess', Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) La-Z-Boy, Inc. Lithia Motors, Inc. Class A (a) Lithia Motors, Inc. Class A	11,812 4,717 2,951 5,775 15,527 1,943 2,671 1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		440,115 30,425 23,077 160,198 15,100 55,084 52,298 33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Carrols Restaurant Group, Inc. (a) (b) The Cato Corp. Class A The Cheesceake Factory, Inc. (b) Chico's FAS, Inc. (b) The Children's Place, Inc. (b) Chuy's Holdings, Inc. (a) Citi Trends, Inc. Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Dillard's, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Group I Automotive, Inc. GrowGeneration Corp. (a) Guess', Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc.	4,717 2,951 5,775 15,527 1,943 2,671 1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		30,425 23,077 160,198 15,100 55,084 52,298 33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
The Cato Corp. Class A The Cheesecake Factory, Inc. (b) Chico's FAS, Inc. (b) The Children's Place, Inc. (b) Chuy's Holdings, Inc. (a) Citi Trends, Inc. Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) FirstCash, Inc. GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GameStop Corp. (a) GameStop Corp. (a) GameStop Corp. (a) Guss', Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. (Class A) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	2,951 5,775 15,527 1,943 2,671 1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		23,077 160,198 15,100 55,084 52,298 33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
The Cheesecake Factory, Inc. (b) Chico's FAS, Inc. (b) The Childran's Place, Inc. (b) Chuy's Holdings, Inc. (a) Citi Trends, Inc. Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Dillard's, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Express, Inc. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Class A (a) (b) La-Z-Boy, Inc. Kura Sushi USA, Inc. Class A (a)	5,775 15,527 1,943 2,671 1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		160,198 15,100 55,084 52,298 33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Chico's FAS, Inc. (b) The Children's Place, Inc. (a) Citi Trends, Inc. Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. (a) Express, Inc. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) Express, Inc. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guses?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc. Class A Lithia Motors, Inc. Class A Lithia Motors, Inc. Class A Lithia Motors, Inc. Class A	15,527 1,943 2,671 1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		15,100 55,084 52,298 33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
The Children's Place, Inc. (b) Chuy's Holdings, Inc. (a) Citi Trends, Inc. Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Express, Inc. (a) Express, Inc. (a) Express, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Group I Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc. Class A Lta-Z-Boy, Inc. Lithia Motors, Inc. Class A	1,943 2,671 1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		55,084 52,298 33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Chuy's Holdings, Inc. (a) Citi Trends, Inc. Com's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loce Holdings, Inc. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Gusss?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc. Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	2,671 1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		52,298 33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Citi Trends, Inc. (a) Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	1,352 2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		33,773 26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Conn's, Inc. (a) The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Dillard's, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	2,463 2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		26,059 15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
The Container Store Group, Inc. (a) (b) Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc. Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A (a) Lithia Motors, Inc. Class A	2,531 3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		15,718 371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Cracker Barrel Old Country Store, Inc. Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc. Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	3,237 6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		371,154 91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Dave & Buster's Entertainment, Inc. (b) Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc. Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	6,026 3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		91,354 31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Del Taco Restaurants, Inc. (a) Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc. Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	3,838 8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		31,472 84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Denny's Corp. (a) Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) GMS, Inc. (a) Group I Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc. Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	8,460 8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		84,600 46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Designer Brands, Inc. Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	8,512 1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		46,220 38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Dillard's, Inc. Class A (b) Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	1,065 2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		38,894 116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Dine Brands Global, Inc. Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	2,133 1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		116,440 18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Duluth Holdings, Inc. Class B (a) El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc. Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	1,520 2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		18,574 40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
El Pollo Loco Holdings, Inc. (a) Envela Corp. (a) Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	2,528 1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		40,954 4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Envela Corp. (a)  Express, Inc. (a) (b)  Fiesta Restaurant Group, Inc. (a)  FirstCash, Inc.  Foundation Building Materials, Inc. (a)  Freshpet, Inc. (a)  Gaia, Inc. (a)  GameStop Corp. Class A (a) (b)  Genesco, Inc. (a)  GMS, Inc. (a)  Group 1 Automotive, Inc.  GrowGeneration Corp. (a)  Guess?, Inc.  Haverty Furniture Cos., Inc.  Hibbett Sports, Inc. (a) (b)  Hudson Ltd. Class A (a) (b)  Jack in the Box, Inc.  Kura Sushi USA, Inc.Class A (a) (b)  La-Z-Boy, Inc.  Lithia Motors, Inc. Class A	1,130 8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		4,848 5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Express, Inc. (a) (b) Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	8,879 2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		5,416 22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Fiesta Restaurant Group, Inc. (a) FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	2,393 5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		22,422 317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
FirstCash, Inc. Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	5,554 2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		317,744 45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Foundation Building Materials, Inc. (a) Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	2,877 5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		45,226 590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Freshpet, Inc. (a) Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	5,286 1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		590,182 16,888 78,744 41,228 139,105 209,926 78,094 66,873
Gaia, Inc. (a) GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		16,888 78,744 41,228 139,105 209,926 78,094 66,873
GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	1,718 7,720 1,914 5,772 2,375 4,887 5,755 2,264		16,888 78,744 41,228 139,105 209,926 78,094 66,873
GameStop Corp. Class A (a) (b) Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	7,720 1,914 5,772 2,375 4,887 5,755 2,264		78,744 41,228 139,105 209,926 78,094 66,873
Genesco, Inc. (a) GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	1,914 5,772 2,375 4,887 5,755 2,264		41,228 139,105 209,926 78,094 66,873
GMS, Inc. (a) Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	5,772 2,375 4,887 5,755 2,264		139,105 209,926 78,094 66,873
Group 1 Automotive, Inc. GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	2,375 4,887 5,755 2,264		209,926 78,094 66,873
GrowGeneration Corp. (a) Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	4,887 5,755 2,264		78,094 66,873
Guess?, Inc. Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	5,755 2,264		66,873
Haverty Furniture Cos., Inc. Hibbett Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	2,264		
Hibbert Sports, Inc. (a) (b) Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A			
Hudson Ltd. Class A (a) (b) Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A			88,951
Jack in the Box, Inc. Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	5,461		41,504
Kura Sushi USA, Inc.Class A (a) (b) La-Z-Boy, Inc. Lithia Motors, Inc. Class A	3,092		245,227
La-Z-Boy, Inc. Lithia Motors, Inc. Class A			
Lithia Motors, Inc. Class A	496		6,498
	6,059		191,646
The Lovesac Co. (a) (b)	3,045		694,077
T 1 T' '1 - TT 11' T / \	1,311		36,328
Lumber Liquidators Holdings, Inc. (a)	3,894		85,863
Macy's, Inc. (b)	42,604		242,843
MarineMax, Inc. (a)	2,820		72,389
.,	lumber of Shares		Value
The Michaels Cos., Inc. (a) (b)	10,300	\$	99,446
Movado Group, Inc.	2,217	Ψ	22,037
National Vision Holdings, Inc. (a)	10,977		419,760
Noodles & Co. (a)	4,144		28,469
The ODP Corp.	7,160		139,262
OptimizeRx Corp. (a)	1,954		40,741
Papa John's International, Inc.	4,467		367,545
PC Connection, Inc.	1,535		63,027
PetIQ, Inc. (a) (b)	2,905		95,633
PetMed Express, Inc. (b)	2,633		83,255
PriceSmart, Inc.	3,104		206,261
Red Robin Gourmet Burgers, Inc. (a)	2,102		27,662
Regis Corp. (a) (b)	3,322		20,397
RH (a)	2,122		811,920
Rite Aid Corp. (a) (b)	7,569		71,830
Rush Enterprises, Inc. Class A	3,726		188,312
Rush Enterprises, Inc. Class B	555		24,586
Ruth's Hospitality Group, Inc.	4,419		48,874
Sally Beauty Holdings, Inc. (a) (b)	15,382		133,670
Shake Shack, Inc. Class A (a)	4,789		308,795
Shoe Carnival, Inc.	.,,		41,975
, <del></del>	1,250		,,,,

Number of Shares

Value

Signet Jewelers Ltd. (b)	7,151	133,724
Sonic Automotive, Inc. Class A	3,295	132,327
Sportsman's Warehouse Holdings, Inc. (a)	5,821	83,298
Texas Roadhouse, Inc.	8,970	545,286
Tilly's, Inc. Class A	3,112	18,765
Vera Bradley, Inc. (a)	2,852	17,426
Waitr Holdings, Inc. (a)	11,207	36,087
Wingstop, Inc.	4,044	552,613
Winmark Corp.	399	68,700
World Fuel Services Corp.	8,525	180,645
Zumiez, Inc. (a)	2,851	79,315
	,	13,727,810
Textiles — 0.1%		
UniFirst Corp.	2,050	388,208
Toys, Games & Hobbies — 0.0%	2,000	
Funko, Inc. (a) (b)	3,517	20,363
1 uliko, ilic. (a) (b)	3,317	37,805,220
Consumer, Non-cyclical — 26.4%		37,803,220
Agriculture — 0.7%		
Alico, Inc.	733	20,978
The Andersons, Inc.	4,248	81,434
Cadiz, Inc. (a) (b)	2,813	27,933
Darling Ingredients, Inc. (a)	21,956	791,075
Fresh Del Monte Produce, Inc.	4,241	97,204
Greenlane Holdings, Inc. Class A (a) (b)	1,398	3,132

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Shares	Value
Limoneira Co. (b)	2,296	\$ 32,833
		,
Sanderson Farms, Inc.	2,750	324,417
Tejon Ranch Co. (a)	2,953	41,785
Turning Point Brands, Inc.	1,619	45,170
Universal Corp.	3,318	138,958
Vector Group Ltd.	19,034	184,439
	-	
Vital Farms, Inc. (a)	1,396	56,580
		1,845,938
Beverages — 0.3%		
	4.7.40	107.050
Celsius Holdings, Inc. (a) (b)	4,749	107,850
Coca-Cola Consolidated, Inc.	642	154,517
,		
Craft Brew Alliance, Inc. (a) (d)	1,646	27,175
Farmer Brothers Co. (a)	2,351	10,391
MGP Ingredients, Inc.	1,754	69,704
National Beverage Corp. (a) (b)	1,616	109,904
NewAge, Inc. (a)	12,423	21,492
Primo Water Corp.	21,323	302,787
Timo water corp.	21,323	
		803,820
Biotechnology — 8.9%		
Abeona Therapeutics, Inc. (a)	7,838	7,995
	-	,
ADMA Biologics, Inc. (a) (b)	8,810	21,056
Aduro Biotech, Inc. (a)	9,298	22,594
Adverum Biotechnologies, Inc. (a)	11,842	121,973
Affimed NV (a)	11,192	37,941
	-	-
Agenus, Inc. (a)	20,688	82,752
Akero Therapeutics, Inc. (a)	1,844	56,777
1 ' ' ' '		
Akouos, Inc. (a)	1,979	45,260
Albireo Pharma, Inc. (a)	1,829	61,034
Allakos, Inc. (a)	3,323	270,658
Allogene Therapeutics, Inc. (a)	7,356	277,395
ALX Oncology Holdings, Inc. (a)	1,304	49,213
AMAG Pharmaceuticals, Inc. (a)	4,104	38,578
Amicus Therapeutics, Inc. (a)	34,682	489,710
AnaptysBio, Inc. (a)	3,000	44,250
	3,000	
	7,217	32,837
Anavex Life Sciences Corp. (a) (b)		
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a)	1,279	36,081
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a)		
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a)	1,279 2,009	36,081 60,732
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a)	1,279 2,009 8,194	36,081 60,732 247,213
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a)	1,279 2,009	36,081 60,732
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a)	1,279 2,009 8,194 3,416	36,081 60,732 247,213 16,602
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a)	1,279 2,009 8,194 3,416 1,693	36,081 60,732 247,213 16,602 53,871
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a)	1,279 2,009 8,194 3,416	36,081 60,732 247,213 16,602
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875	36,081 60,732 247,213 16,602 53,871 38,925
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014	36,081 60,732 247,213 16,602 53,871 38,925 24,397
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875	36,081 60,732 247,213 16,602 53,871 38,925
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcus Biosciences, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcus Biosciences, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares 7,933	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Apriar Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcturus Therapeutics, Inc. (a) Arcturis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Apriar Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Athersys, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Attersys, Inc. (a) (b) Atteca, Inc. Class A (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcutus Holdings, Inc. (a) Arcutus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Atara Biotherapeutics, Inc. (a) Athersys, Inc. (a) (b) Attrea, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcutus Holdings, Inc. (a) Arcutus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Atara Biotherapeutics, Inc. (a) Athersys, Inc. (a) (b) Attrea, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Apriea Therapeutics, Inc. (a) (b) Aprinyx, Inc. (a) (b) Aravive, Inc. (a) Arcurus Therapeutics Holdings, Inc. (a) Arcurus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Bioservices, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Apriled Therapeutics, Inc. (a) Aprae Therapeutics, Inc. (a) (b) Aravive, Inc. (a) Arcuturus Therapeutics Holdings, Inc. (a) Arcuturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Atara Biotherapeutics, Inc. (a) Atara Biotherapeutics, Inc. (a) Athersys, Inc. (a) (b) Atreca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Biosciences, Inc. (a) Avidity Biosciences, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Apriled Therapeutics, Inc. (a) Aprae Therapeutics, Inc. (a) (b) Aravive, Inc. (a) Arcuturus Therapeutics Holdings, Inc. (a) Arcuturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Atara Biotherapeutics, Inc. (a) Atara Biotherapeutics, Inc. (a) Athersys, Inc. (a) (b) Atreca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Biosciences, Inc. (a) Avidity Biosciences, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aravive, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcuts Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Atthersys, Inc. (a) (b) Atreca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avidity Biosciences, Inc. (a) Avidity Biosciences, Inc. (a) Avrobio, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Apriled Therapeutics, Inc. (a) Aprae Therapeutics, Inc. (a) (b) Aravive, Inc. (a) Arcuturus Therapeutics Holdings, Inc. (a) Arcuturus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Atara Biotherapeutics, Inc. (a) Atara Biotherapeutics, Inc. (a) Athersys, Inc. (a) (b) Atreca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Biosciences, Inc. (a) Avidity Biosciences, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Apried Therapeutics, Inc. (a) Apried Therapeutics, Inc. (a) Apravive, Inc. (a) Arcutrus Therapeutics Holdings, Inc. (a) Arcutrus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Athersys, Inc. (a) (b) Atreca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Bioservices, Inc. (a) Avidity Biosciences, Inc. (a) Avidity Biosciences, Inc. (a) Beam Therapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcutrus Therapeutics Holdings, Inc. (a) Arcuts Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Attraca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Bioservices, Inc. (a) Avidity Biosciences, Inc. (a) Beam Therapeutics, Inc. (a) (b) BioCryst Pharmaceuticals, Inc. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820 24,074	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668 82,694
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Apried Therapeutics, Inc. (a) Apried Therapeutics, Inc. (a) Apravive, Inc. (a) Arcutrus Therapeutics Holdings, Inc. (a) Arcutrus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Athersys, Inc. (a) (b) Atreca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Bioservices, Inc. (a) Avidity Biosciences, Inc. (a) Avidity Biosciences, Inc. (a) Beam Therapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Apried Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aravive, Inc. (a) Arcurus Therapeutics Holdings, Inc. (a) Arcuris Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Athersys, Inc. (a) (b) Atreca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Bioservices, Inc. (a) Avidity Biosciences, Inc. (a) Avrobio, Inc. (a) Beam Therapeutics, Inc. (a) (b) BioCryst Pharmaceuticals, Inc. (a) Biohaven Pharmaceutical Holding Co. Ltd. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820 24,074 6,573	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668 82,694 427,311
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Apellis Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcutrus Therapeutics Holdings, Inc. (a) Arcutrus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Attraca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Bioservices, Inc. (a) Avidity Biosciences, Inc. (a) Avidity Biosciences, Inc. (a) Beam Therapeutics, Inc. (a) Biohaven Pharmaceutical Holding Co. Ltd. (a) Bilack Diamond Therapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820 24,074 6,573 2,464	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668 82,694 427,311 74,487
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcutis Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Avida Bioservices, Inc. (a) Avid Biosciences, Inc. (a) Avid Biosciences, Inc. (a) Avidity Biosciences, Inc. (a) Avrobio, Inc. (a) Beam Therapeutics, Inc. (a) Biohaven Pharmaceuticals Inc. (a) Biohaven Pharmaceutical Holding Co. Ltd. (a) Bilack Diamond Therapeutics, Inc. (a) (b) Biucprint Medicines Corp. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820 24,074 6,573 2,464 7,561	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668 82,694 427,311 74,487 700,905
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcutis Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Avida Bioservices, Inc. (a) Avid Biosciences, Inc. (a) Avid Biosciences, Inc. (a) Avidity Biosciences, Inc. (a) Avrobio, Inc. (a) Beam Therapeutics, Inc. (a) Biohaven Pharmaceuticals Inc. (a) Biohaven Pharmaceutical Holding Co. Ltd. (a) Bilack Diamond Therapeutics, Inc. (a) (b) Biucprint Medicines Corp. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820 24,074 6,573 2,464 7,561	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668 82,694 427,311 74,487 700,905
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applies Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) (b) Applinyx, Inc. (a) (b) Aravive, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcutus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Athersys, Inc. (a) (b) Atreca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Bioservices, Inc. (a) Avid Bioservices, Inc. (a) Avidity Biosciences, Inc. (a) Beam Therapeutics, Inc. (a) Biochyst Pharmaceutical, Inc. (a) Biohaven Pharmaceutical Holding Co. Ltd. (a) Biohaven Pharmaceutical Col. (a) (b) Blueprint Medicines Corp. (a) BrainStorm Cell Therapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820 24,074 6,573 2,464 7,561 3,937	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668 82,694 427,311 74,487 700,905 66,614
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Aprea Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcutis Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Avida Bioservices, Inc. (a) Avid Biosciences, Inc. (a) Avid Biosciences, Inc. (a) Avidity Biosciences, Inc. (a) Avrobio, Inc. (a) Beam Therapeutics, Inc. (a) Biohaven Pharmaceuticals Inc. (a) Biohaven Pharmaceutical Holding Co. Ltd. (a) Bilack Diamond Therapeutics, Inc. (a) (b) Biucprint Medicines Corp. (a)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820 24,074 6,573 2,464 7,561	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668 82,694 427,311 74,487 700,905
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) (b) Aptinyx, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeuties Holdings, Inc. (a) Arcutis Biotherapeuties, Inc. (a) Arcutis Biotherapeuties, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeutics, Inc. (a) Attara Biotherapeuticals, Inc. (a) Attara Biotherapeuticals, Inc. (a) Avid Bioservices, Inc. (a) Avid Bioservices, Inc. (a) Avidbioservices, Inc. (a) Beam Therapeutics, Inc. (a) Biohaven Pharmaceuticals, Inc. (a) Biohaven Pharmaceuticals, Inc. (a) Biohaven Pharmaceuticals, Inc. (a) Biohaven Pharmaceutical, Inc. (a) Biohave	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820 24,074 6,573 2,464 7,561 3,937 9,939	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668 82,694 427,311 74,487 700,905 66,614 372,911
Anavex Life Sciences Corp. (a) (b) ANI Pharmaceuticals, Inc. (a) Annexon, Inc. (a) Applies Pharmaceuticals, Inc. (a) Applied Genetic Technologies Corp. (a) Applied Molecular Transport, Inc. (a) Applied Molecular Transport, Inc. (a) Applied Therapeutics, Inc. (a) Applied Therapeutics, Inc. (a) (b) Applinyx, Inc. (a) (b) Aravive, Inc. (a) (b) Aravive, Inc. (a) Arcturus Therapeutics Holdings, Inc. (a) Arcutus Biosciences, Inc. (a) Arcutis Biotherapeutics, Inc. (a) (b) Ardelyx, Inc. (a)  Arena Pharmaceuticals, Inc. (a) Arrowhead Pharmaceuticals, Inc. (a) Aspira Women's Health, Inc. (a) (b) Assembly Biosciences, Inc. (a) Atara Biotherapeutics, Inc. (a) Athersys, Inc. (a) (b) Atreca, Inc. Class A (a) (b) AVEO Pharmaceuticals, Inc. (a) Avid Bioservices, Inc. (a) Avid Bioservices, Inc. (a) Avidity Biosciences, Inc. (a) Beam Therapeutics, Inc. (a) Biochyst Pharmaceutical, Inc. (a) Biohaven Pharmaceutical Holding Co. Ltd. (a) Biohaven Pharmaceutical Col. (a) (b) Blueprint Medicines Corp. (a) BrainStorm Cell Therapeutics, Inc. (a) (b)	1,279 2,009 8,194 3,416 1,693 1,875 1,014 3,594 1,525 2,182 5,752 2,464 10,050  Number of Shares  7,933 13,696 10,760 4,215 9,871 23,886 3,831 2,964 7,743 2,281 4,220 4,820 24,074 6,573 2,464 7,561 3,937	36,081 60,732 247,213 16,602 53,871 38,925 24,397 12,148 7,167 93,608 98,589 72,195 52,762 Value \$ 593,309 589,750 33,195 69,295 127,928 46,578 53,519 17,606 59,002 64,210 54,944 118,668 82,694 427,311 74,487 700,905 66,614

Number of Shares

Value

0/20/2021	Third Boodinesia	
Calithera Biosciences, Inc. (a)	9,056	31,243
Cara Therapeutics, Inc. (a) (b)	5,581	71,018
CASI Pharmaceuticals, Inc. (a)	8,562	13,100
Catabasis Pharmaceuticals, Inc. (a) (b)	2,640	16,342
CEL-SCI Corp. (a) (b)	4,654	59,338
Centogene NV (a)	1,149	10,870
Cerecor, Inc. (a)	4,672	10,629
Champions Oncology, Inc. (a)	1,056	9,768
Checkmate Pharmaceuticals, Inc. (a)	676	7,781
ChemoCentryx, Inc. (a)	6,765	370,722
ChromaDex Corp. (a) (b)	5,817	23,326
Cohbar, Inc. (a)	3,580	3,400
Constellation Pharmaceuticals, Inc. (a)	4,185	84,788
ContraFect Corp. (a)	3,316	17,508
Cortexyme, Inc. (a)	2,162	108,100
Crinetics Pharmaceuticals, Inc. (a) (b)	3,727	58,402
Cue Biopharma, Inc. (a)	3,941	59,312
Cymabay Therapeutics, Inc. (a)	9,519	68,918
CytomX Therapeutics, Inc. (a)	6,336	42,134
Deciphera Pharmaceuticals, Inc. (a)	5,104	261,835
Denali Therapeutics, Inc. (a)	8,580	307,421
Dermtech, Inc. (a) (b)	1,044	12,476
Dicerna Pharmaceuticals, Inc. (a)	8,923	160,525
Dyadic International, Inc. (a) (b)	2,688	20,348
Dynavax Technologies Corp. (a) (b)	14,473	62,523
Editas Medicine, Inc. (a) (b)	8,566	240,362
Eiger BioPharmaceuticals, Inc. (a) (b)	3,736	30,411

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Shares	Value
Emergent BioSolutions, Inc. (a)	6,092	\$ 629,486
Enochian Biosciences, Inc. (a) (b)	1,957	7,006
Enzo Biochem, Inc. (a)	6,263	13,215
Epizyme, Inc. (a)	12,103	144,389
Esperion Therapeutics, Inc. (a) (b)		
1 1 / ////	3,531	131,247
Evelo Biosciences, Inc. (a)	2,702	14,240
Evolus, Inc. (a) (b)	3,187	12,461
Exagen, Inc. (a) (b)	699	7,577
Exicure, Inc. (a)	7,723	13,515
Fate Therapeutics, Inc. (a)	9,773	390,627
FibroGen, Inc. (a)	11,491	472,510
Five Prime Therapeutics, Inc. (a)	3,919	18,419
Forma Therapeutics Holdings, Inc. (a)	2,198	109,548
Frequency Therapeutics, Inc. (a) (b)	3,422	65,737
Galera Therapeutics, Inc. (a)		11,571
1	1,280	
Generation Bio Co., (a)	1,673	51,712
Genprex, Inc. (a) (b)	3,710	12,466
Geron Corp. (a) (b)	39,145	68,112
GlycoMimetics, Inc. (a)	5,176	15,890
Gossamer Bio, Inc. (a) (b)	7,722	95,830
Halozyme Therapeutics, Inc. (a)	18,529	486,942
Harvard Bioscience, Inc. (a)	4,981	14,993
Homology Medicines, Inc. (a) (b)	4,680	50,076
iBio, Inc. (a) (b)	7,541	15,308
IGM Biosciences, Inc. (a)	977	72,112
Immunic, Inc. (a)	751	13,946
ImmunoGen, Inc. (a)	23,604	84,974
Immunovant, Inc. (a)	4,765	167,680
Innoviva, Inc. (a)	8,666	90,560
Inovio Pharmaceuticals, Inc. (a) (b)	21,388	248,101
Inozyme Pharma, Inc. (a)	1,105	29,050
Insmed, Inc. (a)	13,814	443,982
Intercept Pharmaceuticals, Inc. (a)	3,550	147,183
	-	35,920
1 Lens Theraneutics Inc (a)		
iTeos Therapeutics, Inc. (a)	1,456	
IVERIC bio, Inc. (a)	10,937	61,685
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b)	10,937 1,453	61,685 16,085
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b)	10,937 1,453 2,162	61,685 16,085 167,166
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a)	10,937 1,453 2,162 9,527	61,685 16,085 167,166 139,094
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a)	10,937 1,453 2,162 9,527 936	61,685 16,085 167,166 139,094 36,101
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126	61,685 16,085 167,166 139,094 36,101 19,970
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a)	10,937 1,453 2,162 9,527 936	61,685 16,085 167,166 139,094 36,101
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126	61,685 16,085 167,166 139,094 36,101 19,970 22,540
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106
IVERIC bio, Inc. (a)  Kaleido Biosciences, Inc. (a) (b)  Karuna Therapeutics, Inc. (a) (b)  Karyopharm Therapeutics, Inc. (a)  Keros Therapeutics, Inc. (a)  Kezar Life Sciences, Inc. (a)  Kindred Biosciences, Inc. (a)  Kiniksa Pharmaceuticals Ltd. Class A (a)  Kodiak Sciences, Inc. (a)  Krystal Biotech, Inc. (a)  Lexicon Pharmaceuticals, Inc. (a) (b)  Ligand Pharmaceuticals, Inc. (a) (b)  Liquidia Technologies, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 <b>Value</b>
IVERIC bio, Inc. (a)  Kaleido Biosciences, Inc. (a) (b)  Karuna Therapeutics, Inc. (a) (b)  Karyopharm Therapeutics, Inc. (a)  Keros Therapeutics, Inc. (a)  Kezar Life Sciences, Inc. (a)  Kindred Biosciences, Inc. (a)  Kiniksa Pharmaceuticals Ltd. Class A (a)  Kodiak Sciences, Inc. (a)  Krystal Biotech, Inc. (a)  Lexicon Pharmaceuticals, Inc. (a) (b)  Ligand Pharmaceuticals, Inc. (a) (b)  Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a)  Lyra Therapeutics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value  \$ 14,156 6,719
IVERIC bio, Inc. (a)  Kaleido Biosciences, Inc. (a) (b)  Karuna Therapeutics, Inc. (a) (b)  Karyopharm Therapeutics, Inc. (a)  Keros Therapeutics, Inc. (a)  Kezar Life Sciences, Inc. (a)  Kindred Biosciences, Inc. (a)  Kiniksa Pharmaceuticals Ltd. Class A (a)  Kodiak Sciences, Inc. (a)  Krystal Biotech, Inc. (a)  Lexicon Pharmaceuticals, Inc. (a) (b)  Ligand Pharmaceuticals, Inc. (a) (b)  Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a)  Lyra Therapeutics, Inc. (a)  MacroGenics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value \$ 14,156 6,719 181,368
IVERIC bio, Inc. (a)  Kaleido Biosciences, Inc. (a) (b)  Karuna Therapeutics, Inc. (a) (b)  Karyopharm Therapeutics, Inc. (a)  Keros Therapeutics, Inc. (a)  Kezar Life Sciences, Inc. (a)  Kindred Biosciences, Inc. (a)  Kiniksa Pharmaceuticals Ltd. Class A (a)  Kodiak Sciences, Inc. (a)  Krystal Biotech, Inc. (a)  Lexicon Pharmaceuticals, Inc. (a) (b)  Ligand Pharmaceuticals, Inc. (a) (b)  Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a)  Lyra Therapeutics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value  \$ 14,156 6,719
IVERIC bio, Inc. (a)  Kaleido Biosciences, Inc. (a) (b)  Karuna Therapeutics, Inc. (a) (b)  Karyopharm Therapeutics, Inc. (a)  Keros Therapeutics, Inc. (a)  Kezar Life Sciences, Inc. (a)  Kindred Biosciences, Inc. (a)  Kiniksa Pharmaceuticals Ltd. Class A (a)  Kodiak Sciences, Inc. (a)  Krystal Biotech, Inc. (a)  Lexicon Pharmaceuticals, Inc. (a) (b)  Ligand Pharmaceuticals, Inc. (a) (b)  Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a)  Lyra Therapeutics, Inc. (a)  MacroGenics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value \$ 14,156 6,719 181,368
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b) Liquidia Technologies, Inc. (a) Magenta Therapeutics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value \$ 14,156 6,719 181,368 19,407 6,495
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) MEI Pharma, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kendred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) MEI Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) Lyra Therapeutics, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) MeI Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b) Liquidia Technologies, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marer Therapeutics, Inc. (a) Marer Therapeutics, Inc. (a) Meli Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106 Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kezar Life Sciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marer Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) MeiraCTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Molecular Templates, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) (b) Myriad Genetics, Inc. (a) Myriad Genetics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919 9,704	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106   Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345 126,540
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MacroGenics, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Meli Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) Myriad Genetics, Inc. (a) Nyriad Genetics, Inc. (a) NantKwest, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919 9,704 4,198	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106   Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345 126,540 29,113
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karuna Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b) Liquidia Technologies, Inc. (a) Magenta Therapeutics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Meli Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) (b) Myriad Genetics, Inc. (a) NantKwest, Inc. (a) NantKwest, Inc. (a) NeoGenomics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919 9,704 4,198 14,135	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106   Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345 126,540 29,113 521,440
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MacroGenics, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Meli Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) Myriad Genetics, Inc. (a) Nyriad Genetics, Inc. (a) NantKwest, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919 9,704 4,198	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106   Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345 126,540 29,113
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MarroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Magenta Therapeutics, Inc. (a) Maria Therapeutics, Inc. (a) Meli Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) (b) Myriad Genetics, Inc. (a) NantKwest, Inc. (a) NextCure, Inc. (a) (b) NextCure, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919 9,704 4,198 14,135 2,172	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106   Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345 126,540 29,113 521,440
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) LogicBio Therapeutics, Inc. (a) Magenta Therapeutics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Meli Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) (b) Myriad Genetics, Inc. (a) NantKwest, Inc. (a) (b) NeoGenomics, Inc. (a) NextCure, Inc. (a) (b) NeoGenomics, Inc. (a) NextCure, Inc. (a) (b) NeoGenomics, Inc. (a) NextCure, Inc. (a) (b) NeoMerama Cuticals, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919 9,704 4,198 14,135 2,172 3,328	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106   Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345 126,540 29,113 521,440 19,114 52,948
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kerar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) MeIr Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Molecular Templates, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) (b) Myriad Genetics, Inc. (a) NantKwest, Inc. (a) (b) NeoGenomics, Inc. (a) NextCure, Inc. (a) (b) NGM Biopharmaceuticals, Inc. (a) NKarta, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919 9,704 4,198 14,135 2,172 3,328 2,216	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106  Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345 126,540 29,113 521,440 19,114 52,948 66,613
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) Meli Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) (b) Myriad Genetics, Inc. (a) NantKwest, Inc. (a) (b) NeoGenomics, Inc. (a) NextCure, Inc. (a) (b) NeoGenomics, Inc. (a) NextCure, Inc. (a) (b) Night Biopharmaceuticals, Inc. (a) Novavax, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919 9,704 4,198 14,135 2,172 3,328 2,216 8,411	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106  Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345 126,540 29,113 521,440 19,114 52,948 66,613 911,332
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karuna Therapeutics, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b)  LogicBio Therapeutics, Inc. (a) MarcroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Magenta Therapeutics, Inc. (a) Marl Pharma, Inc. (a) Mel Pharma, Inc. (a) Mel Pharma, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Molecular Templates, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) (b) Myriad Genetics, Inc. (a) Nyaria Genetics, Inc. (a) NextCure, Inc. (a) (b) NeoGenomics, Inc. (a) NextCure, Inc. (a) (b) NGM Biopharmaceuticals, Inc. (a) Novavax, Inc. (a) (b) Nurix Therapeutics, Inc. (a)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919 9,704 4,198 14,135 2,172 3,328 2,216 8,411 1,514	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106  Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345 126,540 29,113 521,440 19,114 52,948 66,613 911,332 52,854
IVERIC bio, Inc. (a) Kaleido Biosciences, Inc. (a) (b) Karyopharm Therapeutics, Inc. (a) Keros Therapeutics, Inc. (a) Kezar Life Sciences, Inc. (a) Kezar Life Sciences, Inc. (a) Kindred Biosciences, Inc. (a) Kindred Biosciences, Inc. (a) Kiniksa Pharmaceuticals Ltd. Class A (a) Kodiak Sciences, Inc. (a) Krystal Biotech, Inc. (a) Lexicon Pharmaceuticals, Inc. (a) (b) Ligand Pharmaceuticals, Inc. (a) (b) Liquidia Technologies, Inc. (a) (b) Liquidia Technologies, Inc. (a) MacroGenics, Inc. (a) Magenta Therapeutics, Inc. (a) Marker Therapeutics, Inc. (a) MeiraGTx Holdings PLC (a) (b) Mersana Therapeutics, Inc. (a) Mirati Therapeutics, Inc. (a) Molecular Templates, Inc. (a) Molecular Templates, Inc. (a) Mustang Bio, Inc. (a) (b) Myriad Genetics, Inc. (a) NantKwest, Inc. (a) (b) NeoGenomics, Inc. (a) NextCure, Inc. (a) (b) NeoGenomics, Inc. (a) NextCure, Inc. (a) (b) Nowawax, Inc. (a) (b) Nowawax, Inc. (a) (b)	10,937 1,453 2,162 9,527 936 4,126 5,254 3,640 3,937 1,844 5,873 1,965 3,680  Number of Shares  1,559 601 7,200 2,854 4,330 14,239 2,897 7,260 5,127 3,648 3,919 9,704 4,198 14,135 2,172 3,328 2,216 8,411	61,685 16,085 167,166 139,094 36,101 19,970 22,540 55,765 233,110 79,384 8,457 187,304 18,106  Value  \$ 14,156 6,719 181,368 19,407 6,495 44,426 38,356 135,181 851,338 39,836 12,345 126,540 29,113 521,440 19,114 52,948 66,613 911,332

Number of Shares

Value

Oncocyte Corp. (a) (b)	8,488	11,798
Organogenesis Holdings, Inc. (a)	2,611	10,026
Orgenesis, Inc. (a)	2,322	11,703
Osmotica Pharmaceuticals PLC (a) (b)	1,749	9,462
Ovid Therapeutics, Inc. (a) (b)	6,040	34,670
Oyster Point Pharma, Inc. (a)	849	17,922
Pacific Biosciences of California, Inc. (a) (b)	22,758	224,621
Pandion Therapeutics, Inc. (a)	1,013	11,609
PDL BioPharma, Inc. (a)	15,084	47,515
Phathom Pharmaceuticals, Inc. (a) (b)	1,481	54,308
Pieris Pharmaceuticals, Inc. (a)	6,493	13,440
Pliant Therapeutics, Inc. (a)	1,422	32,208
Precigen, Inc. (a) (b)	9,087	31,804
Prevail Therapeutics, Inc. (a)	1,868	19,016
Protara Therapeutics, Inc. (a)	237	3,989
Prothena Corp. PLC (a)	4,092	40,879
Provention Bio, Inc. (a) (b)	6,490	83,267
PTC Therapeutics, Inc. (a)	8,429	394,056
Puma Biotechnology, Inc. (a)	4,286	43,246
Radius Health, Inc. (a)	6,200	70,308
RAPT Therapeutics, Inc. (a)	1,479	47,624
REGENXBIO, Inc. (a)	4,703	129,427
Relay Therapeutics, Inc. (a)	4,389	186,927
Replimune Group, Inc. (a)	2,845	65,492
Retrophin, Inc. (a)	6,669	123,110
REVOLUTION Medicines, Inc. (a)	5,262	183,118
Rigel Pharmaceuticals, Inc. (a) (b)	23,238	55,771
Rocket Pharmaceuticals, Inc. (a)	4,599	105,133

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Shares		Value
Rubius Therapeutics, Inc. (a)	4,972	\$	24,910
Sangamo Therapeutics, Inc. (a)	15,691		148,280
Satsuma Pharmaceuticals, Inc. (a) (b)	1,297		5,045
Savara, Inc. (a) (b)	6,793		7,404
Scholar Rock Holding Corp. (a)	3,136		55,476
Selecta Biosciences, Inc. (a)	9,415		23,349
Solid Biosciences, Inc. (a)	3,617		7,342
Sorrento Therapeutics, Inc. (a) (b)	30,185		336,563
SpringWorks Therapeutics, Inc. (a)	2,890		137,766
Stoke Therapeutics, Inc. (a) (b)	1,661		55,627
Strongbridge Biopharma PLC (a)	4,568		9,593
Sutro Biopharma, Inc. (a) (b)	3,534		35,517
Syndax Pharmaceuticals, Inc. (a) (b)	3,705		54,686 70.248
TCR2 Therapeutics, Inc. (a) (b) Tela Bio, Inc. (a) (b)	3,462 968		70,348
	6,360		16,011 94,033
Theravance Biopharma, Inc. (a) (b) Translate Bio, Inc. (a) (b)	9,295		126,505
TransMedics Group, Inc. (a)	3,423		47,169
Turning Point Therapeutics, Inc. (a)	4,660		407,098
Twist Bioscience Corp. (a)	4,465		339,206
Tyme Technologies, Inc. (a) (b)	9,595		9,403
Ultragenyx Pharmaceutical, Inc. (a)	7,848		645,027
UNITY Biotechnology, Inc. (a) (b)	4,462		15,439
Vaxart, Inc. (a) (b)	7,127		47,395
VBI Vaccines, Inc. (a)	23,378		66,861
Veracyte, Inc. (a)	7,811		253,779
Verastem, Inc. (a) (b)	23,075		27,921
Vericel Corp. (a)	6,132		113,626
Veru, Inc. (a)	7,255		19,008
Viela Bio, Inc. (a) (b)	2,950		82,836
Viking Therapeutics, Inc. (a) (b)	8,929		51,967
Vir Biotechnology, Inc. (a) (b)	7,308		250,884
VolitionRX Ltd. (a) (b)	3,440		11,042
VYNE Therapeutics, Inc. (a) (b)	19,702		32,705
WaVe Life Sciences Ltd. (a) (b)	3,339		28,348
X4 Pharmaceuticals, Inc. (a)	2,353		15,930
XBiotech, Inc. (a)	2,013		38,428
Xencor, Inc. (a)	7,564		293,408
XOMA Corp. (a) (b)	792		14,921
Y-mAbs Therapeutics, Inc. (a)	4,078		156,554
Zentalis Pharmaceuticals, Inc. (a)	1,572		51,389
ZIOPHARM Oncology, Inc. (a) (b)	29,172		73,513
			23,016,243
Commercial Services — 4.0%			
Aaron's, Inc.	9,199		521,123
ABM Industries, Inc.	9,139		335,036
Acacia Research Corp. (a)	6,712		23,291
Adtalem Global Education, Inc. (a)	7,065		173,375
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	Number of		Valer -
	Shares	<u>e</u>	Value
Alta Equipment Group, Inc. (a) (b)	2,216	\$	17,351
American Public Education, Inc. (a) AMN Healthcare Services, Inc. (a)	1,984 6,367		55,929 372,215
Arlo Technologies, Inc. (a)  Arlo Technologies, Inc. (a)	10,915		372,215 57,413
ASGN, Inc. (a)	6,942		441,234
Aspen Group, Inc. /CO (a)	2,617		29,232
Avis Budget Group, Inc. (a)	7,183		189,057
Barrett Business Services, Inc.	1,055		55,324
BG Staffing, Inc.	1,096		9,283
BrightView Holdings, Inc. (a)	5,516		62,882
The Brink's Co.	6,852		281,549
CAI International, Inc.	2,316		63,759
Cardtronics PLC Class A (a)	4,979		98,584
Carriage Services, Inc.	2,321		51,781
Cass Information Systems, Inc.	1,940		78,066
CBIZ, Inc. (a)	7,070		161,691
Cimpress PLC (a) (b)	2,424		182,188
Collectors Universe, Inc.	1,281		63,397
Corvel Corp. (a)	1,191		101,747
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Number of Shares

Value

CRA International, Inc.	1,063	39,831
Cross Country Healthcare, Inc. (a)	5,051	32,781
Deluxe Corp.	5,722	147,227
Emerald Holding, Inc. (b)	3,563	7,269
Ennis, Inc.	3,633	63,360
EVERTEC, Inc.	8,199	284,587
Evo Payments, Inc. Class A (a)	5,646	140,303
Forrester Research, Inc. (a)	1,501	49,218
Franchise Group, Inc.	2,975	75,446
Franklin Covey Co. (a)	1,767	31,347
Genasys, Inc. (a)	4,812	29,594
GP Strategies Corp. (a)	1,811	17,458
Green Dot Corp. Class A (a)	6,950	351,739
GreenSky, Inc. Class A (a)	8,291	36,812
The Hackett Group, Inc.	3,514	39,287
HealthEquity, Inc. (a)	10,284	528,289
Heidrick & Struggles International, Inc.	2,656	52,190
Here Holdings, Inc. (a)	3,290	130,317
Hertz Global Holdings, Inc. (a)	21,250	23,587
HMS Holdings Corp. (a)	12,017	287,807
Huron Consulting Group, Inc. (a)	3,126	122,946
ICF International, Inc.	2,474	152,225
Information Services Group, Inc. (a)	5,062	10,681
Insperity, Inc.	4,949	324,110
K12, Inc. (a)	5,443	143,369
Kelly Services, Inc. Class A	4,616	78,657
Kforce, Inc.	2,663	85,669
Korn Ferry	7,732	224,228
Laureate Education, Inc. Class A (a)	14,654	194,605

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

	Number of Shares		Value
Liveramp Holdings, Inc. (a)	8,746	\$	452,780
Medifast, Inc.	1,542		253,582
Money Gram International, Inc. (a) (b)	8,198 4,498		23,159 182,484
Monro, Inc. National Research Corp. Class A	1,805		88,824
Nesco Holdings, Inc. (a) (b)	1,646		6,831
Perdoceo Education Corp. (a)	9,559		117,002
PFSweb, Inc. (a)	2,046		13,688
Priority Technology Holdings, Inc. (a)	994		3,136
Progyny, Inc. (a) (b) Quad/Graphics, Inc.	3,632 4,871		106,890 14,759
R1 RCM, Inc. (a)	14,584		250,116
Rent-A-Center, Inc.	6,607		197,483
Repay Holdings Corp. (a)	8,115		190,702
Resources Connection, Inc.	4,290		49,549
ServiceSource International, Inc. (a) ShotSpotter, Inc. (a) (b)	12,713 1,115		18,688 34,610
SP Plus Corp. (a)	3,170		56,901
Strategic Education, Inc.	3,292		301,119
Team, Inc. (a)	4,235		23,292
Textainer Group Holdings Ltd. (a)	7,038		99,658
TriNet Group, Inc. (a) TrueBlue, Inc. (a)	5,616 4,925		333,141 76,288
Universal Technical Institute, Inc. (a) (b)	3,749		19,045
Vectrus, Inc. (a)	1,585		60,230
Viad Corp.	2,772		57,741
Vivint Smart Home, Inc. (a)	9,973		170,339
Willdan Group, Inc. (a)	1,455		37,117
WW International, Inc. (a)	6,428		121,296 10,490,896
Cosmetics & Personal Care — 0.2%		_	10,490,690
Edgewell Personal Care Co. (a)	7,433		207,232
elf Beauty, Inc. (a)	6,161		113,177
Inter Parfums, Inc.	2,452		91,582
Revlon, Inc. Class A (a) (b)	980		6,194 418,185
Foods — 1.2%			410,103
B&G Foods, Inc. (b)	8,707		241,793
BellRing Brands, Inc. Class A (a)	5,499		114,049
Bridgford Foods Corp. (a)	245		4,486
Cal-Maine Foods, Inc. (a) Calavo Growers, Inc.	4,268 2,244		163,763 148,710
The Chefs' Warehouse, Inc. (a)	4,112		59,789
HF Foods Group, Inc. (a)	5,015		33,149
Hostess Brands, Inc. (a)	16,645		205,233
Ingles Markets, Inc. Class A	1,943		73,912
J&J Snack Foods Corp.	2,043		266,387
	Number of		
-	Shares		Value
John B Sanfilippo & Son, Inc.	1,195	\$	90,079
Lancaster Colony Corp. Landec Corp. (a)	2,588 3,363		462,734 32,688
Nathan's Famous, Inc.	358		18,348
Natural Grocers by Vitamin Cottage, Inc.	1,295		12,769
Performance Food Group Co. (a)	17,879		618,971
Seneca Foods Corp. Class A (a)	924		33,015
The Simply Good Foods Co. (a) SpartanNash Co.	11,623 4,831		256,287 78,987
Tootsie Roll Industries, Inc. (b)	2,183		67,455
United Natural Foods, Inc. (a)	7,435		110,558
Village Super Market, Inc. Class A	1,186		29,187
Weis Markets, Inc.	1,336		64,128
Health Care Draducts 4 20/			3,186,477
Health Care – Products — 4.2% Accelerate Diagnostics, Inc. (a) (b)	4,170		44,452
Accuray, Inc. (a)	12,629		30,310
Acutus Medical, Inc. (a)	1,341		39,962
Alpha Pro Tech Ltd. (a)	1,726		25,510
Alphatec Holdings, Inc. (a)	6,281		41,706

AngioDynamics, Inc. (a)	5,176	62,423
Apyx Medical Corp. (a) (b)	4,647	21,887
AtriCure, Inc. (a)	5,966	238,043
Atrion Corp.	192	120,192
Avanos Medical, Inc. (a)	6,493	215,697
AxoGen, Inc. (a)	5,020	58,383
Axonics Modulation Technologies, Inc. (a) (b)	4,127	210,642
Bellerophon Therapeutics, Inc. (a) (b)	503	5,121
BioLife Solutions, Inc. (a)	1,873	54,205
BioSig Technologies, Inc. (a) (b)	3,102	15,293
BioTelemetry, Inc. (a)	4,567	208,164
Cantel Medical Corp. (b)	5,175	227,389
Cardiovascular Systems, Inc. (a)	5,273	207,493
CareDx, Inc. (a)	6,533	247,862
Castle Biosciences, Inc. (a)	1,601	82,371
Cerus Corp. (a)	22,390	140,161
Chembio Diagnostics, Inc. (a)	2,519	12,242
Co-Diagnostics, Inc. (a) (b)	3,701	50,297
CONMED Corp.	3,708	291,708
CryoLife, Inc. (a)	5,078	93,791
Cutera, Inc. (a)	2,365	44,864
CytoSorbents Corp. (a)	5,595	44,620
Electromed, Inc. (a)	1,018	10,597
FONAR Corp. (a)	805	16,808
GenMark Diagnostics, Inc. (a)	9,558	135,724
Glaukos Corp. (a) (b)	5,820	288,206
Hanger, Inc. (a)	5,100	80,682

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

## MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Shares	Value
Inari Medical, Inc. (a)	1,049	\$ 72,402
InfuSystem Holdings, Inc. (a)	1,915	24,550
Inogen, Inc. (a)	2,507	72,703
Inspire Medical Systems, Inc. (a)	3,572	460,967
Integer Holdings Corp. (a)	4,462	263,303
Intersect ENT, Inc. (a)	4,398	71,731
Invacare Corp.	4,492	33,780
iRadimed Corp. (a)	847	18,109
iRhythm Technologies, Inc. (a)	3,742	891,008
Lantheus Holdings, Inc. (a)	9,145	115,867
LeMaitre Vascular, Inc.	2,213	71,989
LivaNova PLC (a)	6,663	301,234
Luminex Corp.	5,890	154,612
Meridian Bioscience, Inc. (a)	5,773	98,026
Merit Medical Systems, Inc. (a)	7,393	321,595
Milestone Scientific, Inc. (a)	6,054	8,415
Misonix, Inc. (a)	1,624	19,049
NanoString Technologies, Inc. (a)	5,156	230,473
Natera, Inc. (a)	9,661	697,911
Natus Medical, Inc. (a)	4,602	78,832
Nemaura Medical, Inc. (a)	983	3,490
Nevro Corp. (a)	4,582	638,273
NuVasive, Inc. (a)	7,010	340,476
Nymox Pharmaceutical Corp. (a) (b)	5,768	14,189
OraSure Technologies, Inc. (a)	9,691	117,939
Orthofix Medical, Inc. (a)	2,495	77,694
OrthoPediatrics Corp. (a) (b)	1,787	82,059
PAVmed, Inc. (a) (b)	5,247	9,340
Precision BioSciences, Inc. (a)	6,442	39,683
Pulse Biosciences, Inc. (a)	1,709	20,149
Quanterix Corp. (a) (b)	2,867	96,733
Quotient Ltd. (a) (b)	7,827	40,231
Repro-Med Systems, Inc. (a)	3,595	25,956
Retractable Technologies, Inc. (a) (b)	1,941	12,927
SeaSpine Holdings Corp. (a)	3,646	52,138
Shockwave Medical, Inc. (a) (b)	3,882	294,256
Sientra, Inc. (a) (b)	6,448	21,923
		246,661
Silk Road Medical, Inc. (a)	3,670	· ·
Soleno Therapeutics, Inc. (a)	8,071	20,258
Soliton, Inc. (a) (b)	779	5,952
STAAR Surgical Co. (a)	6,264 5,819	354,292 20,832
Stereotaxis, Inc. (a) (b) Surgalign Holdings, Inc. (a)	8,059	14,587
Surmodies, Inc. (a) The tile Surface Technology Inc. (a)	1,817	70,699
Tactile Systems Technology, Inc. (a)	2,501	91,512
Utah Medical Products, Inc.	478	38,178 67,848
Varex Imaging Corp. (a)	5,334	
Venus Concept, Inc. (a)	2,696	6,255
ViewRay, Inc. (a) (b)	15,365	53,777
	Number of	
	Shares	Value
Wright Medical Group NV (a) (b)	17,559	\$ 536,252
Zynex, Inc. (a)	2,545	44,410
Harli Cara Cartan 210		10,832,330
Health Care – Services — 2.1%	1 505	(1,600
Accolade, Inc. (a)	1,585	61,609
Addus HomeCare Corp. (a)	1,883	177,962
American Renal Associates Holdings, Inc. (a)	2,004	13,828
Apollo Medical Holdings, Inc. (a) (b)	2,694	48,330
Avalon GloboCare Corp. (a) (b)	1,488	1,860
Brookdale Senior Living, Inc. (a)	24,965	63,411
Cellular Biomedicine Group, Inc. (a)	1,738	31,875
Community Health Systems, Inc. (a)	11,478	48,437
The Ensign Group, Inc.	6,979	398,222
Five Star Senior Living, Inc. (a)	2,764	14,013
Fulgent Genetics, Inc. (a) (b)	1,364	54,615
Invitae Corp. (a) (b) The Leint Corp. (c)	15,750	682,763
The Joint Corp. (a)	1,872	32,554
LHC Group, Inc. (a)	4,143	880,636

Number of Shares

Magellan Health, Inc. (a)	3,250	246,285
MEDNAX, Inc. (a)	10,143	165,128
Medpace Holdings, Inc. (a)	3,726	416,381
National HealthCare Corp.	1,735	108,108
OPKO Health, Inc. (a) (b)	54,236	200,131
The Pennant Group, Inc. (a)	3,477	134,073
Personalis, Inc. (a) (b)	3,229	69,972
Progenity, Inc. (a)	463	4,176
The Providence Service Corp. (a)	1,648	153,116
RadNet, Inc. (a) (b)	5,974	91,701
Select Medical Holdings Corp. (a)	14,812	308,386
SI-BONE, Inc. (a)	3,452	81,881
Surgery Partners, Inc. (a)	3,097	67,824
Tenet Healthcare Corp. (a)	14,257	349,439
Tivity Health, Inc. (a)	5,967	83,657
Triple-S Management Corp. Class B (a)	3,071	54,879
U.S. Physical Therapy, Inc.	1,721	149,521
Vapotherm, Inc. (a) (b)	2,728	79,112
Viemed Healthcare, Inc. (a)	4,680	40,435
		5,314,320
Household Products & Wares — 0.5%		
Acco Brands Corp.	12,652	73,382
Central Garden & Pet Co. (a)	1,362	54,385
Central Garden & Pet Co. Class A (a)	5,338	192,915
Helen of Troy Ltd. (a)	3,452	668,031
Quanex Building Products Corp.	4,474	82,500
WD-40 Co.	1,862	352,495
		1,423,708

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

Pharmaceuticals — 4.3% 89bio, Inc. (a) (b)

AcelRx Pharmaceuticals, Inc. (a) (b) AdaptHealth Corp. (a)

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

AcelRx Pharmaceuticals, Inc. (a) (b)	11,146	15,827
AdaptHealth Corp. (a)	3,409	74,350
Aeglea BioTherapeutics, Inc. (a)	5,924	42,001
Aerie Pharmaceuticals, Inc. (a) (b)	4,907	57,755
Agile Therapeutics, Inc. (a) (b)	9,581	29,126
Aimmune Therapeutics, Inc. (a) (b)	6,344	218,551
Akcea Therapeutics, Inc. (a)	2,280	41,359
Akebia Therapeutics, Inc. (a)	19,487	48,912
Alector, Inc. (a)	6,309	66,465
Allovir, Inc. (a)	2,440	67,100
Amneal Pharmaceuticals, Inc. (a) (b)	13,674	53,055
Amphastar Pharmaceuticals, Inc. (a)	4,870	91,312
Anika Therapeutics, Inc. (a)	1,897	67,135
1 , , , ,		61,371
Antares Pharma, Inc. (a)	22,730	
Aquestive Therapeutics, Inc. (a)	2,908	14,118
Arvinas, Inc. (a)	3,968	93,684
Athenex, Inc. (a)	8,450	102,245
Avenue Therapeutics, Inc. (a)	975	10,559
Axcella Health, Inc. (a)	2,034	9,397
Axsome Therapeutics, Inc. (a) (b)	3,780	269,325
Aytu BioScience, Inc. (a) (b)	3,351	3,988
Beyond Air, Inc. (a) (b)	1,913	9,928
Beyondspring, Inc. (a)	1,982	26,380
BioDelivery Sciences International, Inc. (a)	11,903	44,398
BioSpecifics Technologies Corp. (a)	863	45,592
Bioxcel Therapeutics, Inc. (a)	1,598	69,289
Calyxt, Inc. (a) (b)	1,512	8,301
Cassava Sciences, Inc. (a) (b)	3,065	35,278
Catalyst Biosciences, Inc. (a)	2,840	12,212
Catalyst Pharmaceuticals, Inc. (a) (b)	13,540	40,214
Checkpoint Therapeutics, Inc. (a)	5,979	16,024
Chiasma, Inc. (a) (b)	6,821	29,330
Chimerix, Inc. (a)	6,814	16,967
Cidara Therapeutics, Inc. (a)	4,889	13,934
Cidara Therapeutics, inc. (a)	4.009	13,934
		(5,005
Clovis Oncology, Inc. (a) (b)	11,301	65,885
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b)	11,301 7,849	143,951
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a)	11,301 7,849 4,701	143,951 97,875
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a)	11,301 7,849 4,701 3,865	143,951 97,875 37,954
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394	143,951 97,875 37,954 16,909
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106	143,951 97,875 37,954 16,909 228,110
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394	143,951 97,875 37,954 16,909
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106	143,951 97,875 37,954 16,909 228,110
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041	143,951 97,875 37,954 16,909 228,110 24,367
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050	143,951 97,875 37,954 16,909 228,110 24,367 19,000
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517 Number of Shares	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517 Number of Shares	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value \$ 75,088
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value \$ 75,088 10,254
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value \$ 75,088 10,254 118,021
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a) Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Endo International PLC (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value \$ 75,088 10,254 118,021 101,911
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value \$ 75,088 10,254 118,021 101,911 15,208
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value \$ 75,088 10,254 118,021 101,911 15,208 24,657
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b) Fortress Biotech, Inc. (a) (b) Fortress Biotech, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b) Fortress Biotech, Inc. (a) (b) Fortress Biotech, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Flexion Therapeutics, Inc. (a) Filcrum Therapeutics, Inc. (a) Fulcrum Therapeutics, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328 14,211
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Corcert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Fortress Biotech, Inc. (a) Fulcrum Therapeutics, Inc. (a) (b) Galectin Therapeutics, Inc. (a) (b) Galectin Therapeutics, Inc. (a) (b) Galectin Therapeutics, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792 4,646	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328 14,211 53,661
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Corcert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a) Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b) Fortress Biotech, Inc. (a) Fulcrum Therapeutics, Inc. (a) (b) Gil Therapeutics, Inc. (a) (b) Gil Therapeutics, Inc. (a) (b) Gilectin Therapeutics, Inc. (a) (b) Gritstone Oncology, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792 4,646 5,247	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328 14,211 53,661 14,009
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Corbus Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a)  Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Fennec Pharmaceutics, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b) Flortress Biotech, Inc. (a) Fulcrum Therapeutics, Inc. (a) (b) Gil Therapeutics, Inc. (a) (b) Galectin Therapeutics, Inc. (a) (b) Gritstone Oncology, Inc. (a) Harpoon Therapeutics, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792 4,646 5,247 3,855 1,478	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442   Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328 14,211 53,661 14,009 10,216
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) Eidos Therapeutics, Inc. (a)  Eidos Therapeuticals, Inc. (a)  Eidos Therapeutics, In	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792 4,646 5,247 3,855 1,478 3,275	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328 14,211 53,661 14,009 10,216 25,111 18,307
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evorem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Fennec Pharmaceutics, Inc. (a) (b) Fortress Biotech, Inc. (a) Fulcrum Therapeutics, Inc. (a) (b) G1 Therapeutics, Inc. (a) (b) G3 Editor Therapeutics, Inc. (a) (b) G3 Editor Therapeutics, Inc. (a) (b) G3 Editor Therapeutics, Inc. (a) Harpoon Therapeutics, Inc. (a) Harrow Health, Inc. (a) Heron Therapeutics, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792 4,646 5,247 3,855 1,478 3,275 11,948	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442   Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328 14,211 53,661 14,009 10,216 25,111 18,307 177,069
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a) Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Fencer Pharmaceutics, Inc. (a) (b) Gil Therapeutics, Inc. (a) Fulcrum Therapeutics, Inc. (a) (b) Gil Therapeutics, Inc. (a) (b) Gritstone Oncology, Inc. (a) Harrow Health, Inc. (a) Heron Therapeutics, Inc. (a) Heron Therapeutics, Inc. (a) Heron Therapeutics, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792 4,646 5,247 3,855 1,478 3,275 11,948 958	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442   Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328 14,211 53,661 14,009 10,216 25,111 18,307 177,069 94,641
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) Cordedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a)  Eidos Therapeutics, Inc. (a)  Eidos Therapeuticals, Inc. (a)  Eidos Therapeuticals, Inc. (a)  Eidos Therapeuticals, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Fevofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b) Fortress Biotech, Inc. (a) Fulcrum Therapeutics, Inc. (a) (b) Galectin Therapeutics, Inc. (a) (b) Galectin Therapeutics, Inc. (a) Harpoon Therapeutics, Inc. (a) Harrow Health, Inc. (a) Heron Therapeutics, Inc. (a) Hersa Corp. (a) (b) Hookipa Pharma, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792 4,646 5,247 3,855 1,478 3,275 11,948 958 1,633	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328 14,211 53,661 14,009 10,216 25,111 18,307 177,069 94,641 15,465
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) CorMedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a) Eidos Therapeutics, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Evofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Fentress Biotech, Inc. (a) Fulcrum Therapeutics, Inc. (a) (b) Galectin Therapeutics, Inc. (a) (b) Gritstone Oncology, Inc. (a) Harpoon Therapeutics, Inc. (a) Harpoon Therapeutics, Inc. (a) Harpoon Therapeutics, Inc. (a) Harrow Health, Inc. (a) Heron Therapeutics, Inc. (a)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792 4,646 5,247 3,855 1,478 3,275 11,948 958 1,633 2,166	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442   Value  \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328 14,211 53,661 14,009 10,216 25,111 18,307 177,069 94,641 15,465 27,205
Clovis Oncology, Inc. (a) (b) Coherus Biosciences, Inc. (a) (b) Collegium Pharmaceutical, Inc. (a) Concert Pharmaceuticals, Inc. (a) Corbus Pharmaceuticals Holdings, Inc. (a) (b) Corcept Therapeutics, Inc. (a) Cordedix, Inc. (a) (b) Cyclerion Therapeutics, Inc. (a) (b) Cytokinetics, Inc. (a) Durect Corp. (a) Eagle Pharmaceuticals, Inc. (a)  Eidos Therapeutics, Inc. (a)  Eidos Therapeutics, Inc. (a)  Eidos Therapeuticals, Inc. (a)  Eidos Therapeuticals, Inc. (a)  Eidos Therapeuticals, Inc. (a) (b) Eloxx Pharmaceuticals, Inc. (a) (b) Enanta Pharmaceuticals, Inc. (a) Endo International PLC (a) Eton Pharmaceuticals, Inc. (a) (b) Fevofem Biosciences, Inc. (a) (b) Fennec Pharmaceuticals, Inc. (a) (b) Flexion Therapeutics, Inc. (a) (b) Fortress Biotech, Inc. (a) Fulcrum Therapeutics, Inc. (a) (b) Galectin Therapeutics, Inc. (a) (b) Galectin Therapeutics, Inc. (a) Harpoon Therapeutics, Inc. (a) Harrow Health, Inc. (a) Heron Therapeutics, Inc. (a) Hersa Corp. (a) (b) Hookipa Pharma, Inc. (a) (b)	11,301 7,849 4,701 3,865 9,394 13,106 4,041 3,125 9,050 27,196 1,517  Number of Shares  1,486 3,899 2,578 30,882 1,925 10,448 2,995 5,965 8,497 1,792 4,646 5,247 3,855 1,478 3,275 11,948 958 1,633	143,951 97,875 37,954 16,909 228,110 24,367 19,000 195,932 46,505 64,442 Value \$ 75,088 10,254 118,021 101,911 15,208 24,657 18,150 62,096 34,328 14,211 53,661 14,009 10,216 25,111 18,307 177,069 94,641 15,465

Number of Shares

> 887 \$

11,146

Value

22,760

15,827

Intellia Therapeutics, Inc. (a) (b)	6,832	135,820
Intra-Cellular Therapies, Inc. (a)	8,919	228,862
Ironwood Pharmaceuticals, Inc. (a)	21,758	195,713
Jounce Therapeutics, Inc. (a) (b)	2,397	19,560
Kadmon Holdings, Inc. (a)	23,508	92,151
Kala Pharmaceuticals, Inc. (a) (b)	5,577	41,828
KalVista Pharmaceuticals, Inc. (a) (b)  KalVista Pharmaceuticals, Inc. (a) (b)	1,896	23,871
Kura Oncology, Inc. (a)	7,237	221,742
La Jolla Pharmaceutical Co. (a) (b)	2,637	10,627
Lannett Co., Inc. (a) (b)	4,424	27,031
Lifevantage Corp. (a)	1,764	21,291
Madrigal Pharmaceuticals, Inc. (a)	1,704	143,188
Mallinckrodt PLC (a) (b)	10.943	10,651
MannKind Corp. (a) (b)	29,920	56,250
Marinus Pharmaceuticals, Inc. (a) (b)	3,410	43,822
MediciNova, Inc. (a) (b)	5,819	30,492
Minerva Neurosciences, Inc. (a) (b)	4,765	15,153
Mirum Pharmaceuticals, Inc. (a) (b)	738	14,221
Momenta Pharmaceuticals, Inc. (a)	16,087	844,246
Morphic Holding, Inc. (a)	1.847	50,497
MyoKardia, Inc. (a)	6,931	944,903
Nature's Sunshine Products, Inc. (a)	1,236	14,301
Neogen Corp. (a)	7,198	563,243
Neoleukin Therapeutics, Inc. (a) (b)	4,389	52,668
Neubase Therapeutics, Inc. (a)	2,350	17,837
NeuroBo Pharmaceuticals, Inc. (a) (b)	627	3,524
Ocular Therapeutix, Inc. (a)	8,244	62,737
Odonate Therapeutics, Inc. (a)	1,742	23,395
Optinose, Inc. (a) (b)	4,753	18,537
Opiniose, inc. (a) (b)	4,733	10,557

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

	Number of Shares		Value
Option Care Health, Inc. (a)	5,987	\$	80,046
ORIC Pharmaceuticals, Inc. (a)	1,228		30,712
Owens & Minor, Inc.	8,582		215,494
Pacira BioSciences, Inc. (a) Paratek Pharmaceuticals, Inc. (a) (b)	5,703 5,968		342,864 32,287
Passage Bio, Inc. (a)	1,882		24,673
Patterson Cos., Inc.	11,576		279,039
PhaseBio Pharmaceuticals, Inc. (a) (b)	2,190		7,687
Phibro Animal Health Corp. Class A	2,732		47,537
Prestige Consumer Healthcare, Inc. (a)	6,869		250,169
Protagonist Therapeutics, Inc. (a) Recro Pharma, Inc. (a)	4,133 2,781		80,800 5,840
Relmada Therapeutics, Inc. (a)	1,995		75,052
Revance Therapeutics, Inc. (a)	8,586		215,852
Rhythm Pharmaceuticals, Inc. (a)	4,579		99,227
Rockwell Medical, Inc. (a) (b)	10,017		10,718
scPharmaceuticals, Inc. (a)	786		5,856
Seres Therapeutics, Inc. (a) SIGA Technologies, Inc. (a)	7,242 7,088		205,021 48,695
Spectrum Pharmaceuticals, Inc. (a)	19,635		80,111
Spero Therapeutics, Inc. (a) (b)	1,948		21,740
Supernus Pharmaceuticals, Inc. (a)	6,749		140,649
Syros Pharmaceuticals, Inc. (a) (b)	5,595		49,460
TG Therapeutics, Inc. (a)	15,152		405,468
TherapeuticsMD, Inc. (a) (b)	32,541		51,415
Tricida, Inc. (a) (b) UroGen Pharma Ltd. (a) (b)	3,894 2,667		35,280 51,446
USANA Health Sciences, Inc. (a)	1,576		116,072
Vanda Pharmaceuticals, Inc. (a)	7,451		71,977
Vaxcyte, Inc. (a)	2,483		122,611
Verrica Pharmaceuticals, Inc. (a) (b)	1,630		12,616
Voyager Therapeutics, Inc. (a)	3,646		38,903
vTv Therapeutics, Inc. Class A (a) Xeris Pharmaceuticals, Inc. (a) (b)	1,420 6,261		2,513 37,128
Zogenix, Inc. (a)	7,575		135,820
Zogomi, me. (u)	7,575		11,052,445
			68,384,362
Diversified — 0.0%			
Holding Company – Diversified — 0.0%			
Professional Holding Corp. Class A (a) (b)	1,534		20,571
Energy — 2.8%			
Coal — 0.1% Advanced Emissions Solutions, Inc. (b)	2,335		9,480
CONSOL Energy, Inc. (a)	3,655		16,192
NACCO Industries, Inc. Class A	525		9,560
Peabody Energy Corp.	8,739		20,100
	37 A 0		
	Number of Shares		Value
SunCoke Energy, Inc.	11,714	\$	40,062
Warrior Met Coal, Inc.	7,054	Ψ	120,482
Harrier France County Inter	7,00		215,876
Energy – Alternate Sources — 1.2%			
Clean Energy Fuels Corp. (a)	17,868		44,313
FuelCell Energy, Inc. (a) (b)	28,965		61,985
FutureFuel Corp. Green Plains, Inc. (a)	3,422		38,908
Maxeon Solar Technologies Ltd. (a) (b)	4,646 1,348		71,920 22,862
Plug Power, Inc. (a) (b)	46,510		623,699
Renewable Energy Group, Inc. (a)	5,218		278,746
REX American Resources Corp. (a)	772		50,651
Sunnova Energy International, Inc. (a)	7,244		220,290
SunPower Corp. (a) (b)	10,441		130,617
Sunrun, Inc. (a) TPI Composites, Inc. (a)	16,212 4,164		1,249,459 120,589
Vivint Solar, Inc. (a) (b)	6,712		284,253
111111 001mi, 1110. (u) (v)	0,/12		3,198,292
Oil & Gas — 1.1%			2,170,272
Adams Resources & Energy, Inc.	248		4,935
Antero Resources Corp. (a)	33,087		90,989
			004/40

Berry Corp.	9,036	28,644
Bonanza Creek Energy, Inc. (a)	2,642	49,670
Brigham Minerals, Inc. Class A	5,021	44,787
CNX Resources Corp. (a)	30,369	286,683
Comstock Resources, Inc. (a)	3,442	15,076
Contango Oil & Gas Co. (a) (b)	11,950	16,013
CVR Energy, Inc. (b)	4,047	50,102
Delek US Holdings, Inc.	8,513	94,750
Earthstone Energy, Inc. Class A (a) (b)	2,874	7,444
Evolution Petroleum Corp.	3,884	8,700
Falcon Minerals Corp.	5,472	13,352
Goodrich Petroleum Corp. (a)	1,281	9,851
Gulfport Energy Corp. (a) (b)	20,682	10,901
Kosmos Energy Ltd.	55,103	53,759
Magnolia Oil & Gas Corp. Class A (a)	17,218	89,017
Matador Resources Co. (a)	15,050	124,313
Montage Resources Corp. (a)	2,996	13,152
Murphy USA, Inc. (a)	3,764	482,808
Nabors Industries Ltd. (b)	986	24,098
Ovintiv, Inc. (b)	35,719	291,467
Par Pacific Holdings, Inc. (a)	5,509	37,296
Patterson-UTI Energy, Inc.	24,928	71,045
PBF Energy, Inc. Class A	13,031	74,146
PDC Energy, Inc. (a)	13,556	168,027
Penn Virginia Corp. (a)	1,947	19,178
PrimeEnergy Corp. (a)	71	4,700

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

N	lumber of Shares	Value
ProPetro Holding Corp. (a)	11,024	\$ 44,757
Range Resources Corp.	29,222	193,450
SM Energy Co.	15,895	25,273
Southwestern Energy Co. (a) Tales From Lag (c) (b)	81,747 1,613	192,105
Talos Energy, Inc. (a) (b) Tellurian, Inc. (a) (b)	21,343	10,404 17,006
Transocean Ltd. (a) (b)	79,611	64,238
Trecora Resources (a)	3,535	21,705
W&T Offshore, Inc. (a) (b)	13,301	23,942
Whiting Petroleum Corp. (a)	171	2,957
		2,780,740
Oil & Gas Services — 0.4%		
Archrock, Inc.	17,881	96,200
ChampionX Corp. (a)	25,342	202,482
DMC Global, Inc. (b)	1,969	64,859
Dril-Quip, Inc. (a) Exterran Corp. (a)	4,791 3,814	118,625 15,866
Frank's International NV (a)	20,810	32,047
Helix Energy Solutions Group, Inc. (a) (b)	19,212	46,301
Liberty Oilfield Services, Inc. Class A (b)	8,918	71,255
Matrix Service Co. (a)	3,612	30,160
MRC Global, Inc. (a)	10,965	46,930
National Energy Services Reunited Corp. (a)	2,677	17,079
Newpark Resources, Inc. (a)	12,620	13,251
NexTier Oilfield Solutions, Inc. (a)	22,314	41,281
NOW, Inc. (a)	15,053	68,341
Oceaneering International, Inc. (a) Oil States International, Inc. (a)	13,505 8,157	47,538 22,269
RPC, Inc. (a)	8,248	21,775
Select Energy Services, Inc. Class A (a)	7,925	30,432
Solaris Oilfield Infrastructure, Inc. Class A	3,607	22,868
Thermon Group Holdings, Inc. (a)	4,583	51,467
US Silica Holdings, Inc.	9,841	29,523
		1,090,549
Pipelines — 0.0%	2.652	<b>7</b> .002
NextDecade Corp. (a)	2,652	7,903 7,293,360
Financial — 20.9% Banks — 7.0%		
The The Bank of Princeton	795	14,445
1st Constitution Bancorp (b)	1,091	12,983
1st Source Corp.	2,232	68,835
ACNB Corp.	1,193	24,814
Alerus Financial Corp.	1,975	38,710
N	lumber of	
	Shares	Value
Allegiance Bancshares, Inc.	2,610	\$ 60,996
Altabancorp Amalgamated Bank Class A	2,241 1,863	45,089
Amargamated Bank Class A American National Bankshares, Inc.	1,503	19,711 31,443
Ameris Bancorp	9,001	205,043
Ames National Corp.	1,257	21,231
Arrow Financial Corp.	1,862	46,724
Atlantic Capital Bancshares, Inc. (a)	2,947	33,448
Atlantic Union Bankshares Corp.	10,585	226,201
Auburn National Bancorp, Inc.	342	12,401
BancFirst Corp.	2,542	103,815
The Bancorp, Inc. (a) Rencorp South Bank	7,076	61,137
BancorpSouth Bank Bank First Corp. (b)	13,446 888	260,584 52,126
Bank First Corp. (b) Bank of Commerce Holdings	2,192	15,278
Bank of Marin Bancorp	1,819	52,678
The Bank of NT Butterfield & Son Ltd.	6,901	153,754
Bank7 Corp.	415	3,901
BankUnited, Inc.	12,510	274,094
Bankwell Financial Group, Inc.	801	11,334
Banner Corp.	4,809	155,138
Bar Harbor Bankshares  Raycom Corp. (a) (b)	2,020	41,511
Baycom Corp. (a) (b)	1,438	14,811

BCB Bancorp, Inc.	2,107	16,856
Bogota Financial Corp. (a)	846	6,447
Bridge Bancorp, Inc.	2,280	39,740
C 17	*	
Bridgewater Bancshares, Inc. (a)	3,108	29,495
Bryn Mawr Bank Corp.	2,684	66,751
Business First Bancshares, Inc. (b)	2,614	39,210
Byline Bancorp, Inc.	3,190	35,983
C&F Financial Corp.	478	14,197
Cadence BanCorp	16,791	144,235
California Bancorp, Inc. (a)	903	10,231
Cambridge Bancorp	894	47,525
Camden National Corp.	2,093	63,261
Capital Bancorp, Inc. /MD (a)	1,135	10,737
Capital City Bank Group, Inc.	1,892	35,551
Capstar Financial Holdings, Inc.	2,329	22,848
Carter Bank & Trust	2,820	18,753
Cathay General Bancorp	10,250	222,220
CB Financial Services, Inc.	590	11,257
CBTX, Inc.	2,483	40,572
Central Pacific Financial Corp.	3,775	51,227
Central Valley Community Bancorp	1,491	18,414
Century Bancorp, Inc. Class A	402	26,428
Chemung Financial Corp.	443	12,789
ChoiceOne Financial Services, Inc.	998	25,968
CIT Group, Inc.	13,444	238,093
CIT Group, me.	13,444	230,093

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

	Number of Shares	Value
Citizens & Northern Corp.	1,883	\$ 30,580
Citizens Holding Co.	685	15,358
City Holding Co.	2,133	122,882
Civista Bancshares, Inc.	1,998	25,015
CNB Financial Corp.	2,088	31,049
Coastal Financial Corp. (a)	1,135	13,904
Codorus Valley Bancorp, Inc.	1,336	17,502
Colony Bankcorp, Inc.	1,052	11,309
Columbia Banking System, Inc.	9,764	232,871
Community Bank System, Inc.	7,181	391,077
The Community Financial Corp.	761	16,247
Community Trust Bancorp, Inc.	2,108	59,572
ConnectOne Bancorp, Inc.	5,055	71,124
County Bancorp, Inc.	732	13,762
CrossFirst Bankshares, Inc. (a) (b)	6,486	56,363
Customers Bancorp, Inc. (a)	4,027	45,102
CVB Financial Corp.	17,624	293,087
Eagle Bancorp, Inc.	4,431	118,707
Enterprise Bancorp, Inc.	1,150	24,173
Enterprise Financial Services Corp.	3,363	91,709
Equity Bancshares, Inc. Class A (a)	1,915	29,683
Esquire Financial Holdings, Inc. (a)	985	14,775
Evans Bancorp, Inc.	672	14,952
Farmers & Merchants Bancorp, Inc. /Archbold OH (b)	1,427	28,554
Farmers National Banc Corp.	3,511	38,340
FB Financial Corp.	4,338	108,971
Fidelity D&D Bancorp, Inc. (b)	556	27,083
Financial Institutions, Inc.	2,235	34,419
First BanCorp	29,225	152,555
First Bancorp	4,009	83,908
First Bancorp, Inc.	1,427	30,081
The First Bancshares, Inc.	2,788	58,464
First Bank	2,348	14,558
First Busey Corp.	6,888	109,450
First Business Financial Services, Inc.	1,169	16,705
First Choice Bancorp	1,305	17,343
First Commonwealth Financial Corp.	13,035	100,891
First Community Bancshares, Inc.	2,436	43,970
First Community Corp.	1,047	14,271
First Financial Bancorp	13,144	157,794
First Financial Bankshares, Inc.	17,597	491,132
First Financial Corp.	1,907	59,880
First Foundation, Inc.	5,500	71,885
First Guaranty Bancshares, Inc.	425	5,147
First Internet Bancorp	1,334	19,650
First Interstate BancSystem, Inc. Class A	5,703	181,641
First Merchants Corp.	7,256	168,049
	Number of	
	Shares	Value
	Dini co	

	Number of	
	Shares	Value
First Mid Bancshares, Inc.	2,051	\$ 51,172
First Midwest Bancorp, Inc.	15,405	166,066
First Northwest Bancorp	1,317	13,038
The First of Long Island Corp.	3,200	47,392
First United Corp.	982	11,499
Flagstar Bancorp, Inc.	5,821	172,476
FNCB Bancorp, Inc. (b)	2,425	12,901
Franklin Financial Services Corp.	585	12,507
Fulton Financial Corp.	21,549	201,052
FVCBankcorp, Inc. (a) (b)	1,739	17,390
German American Bancorp Inc.	3,452	93,687
Glacier Bancorp, Inc.	13,060	418,573
Great Southern Bancorp, Inc.	1,554	56,286
Great Western Bancorp, Inc.	7,407	92,217
Guaranty Bancshares, Inc.	907	22,575
Hancock Whitney Corp.	11,715	220,359
Hanmi Financial Corp.	3,970	32,594
HarborOne Bancorp, Inc. (a)	7,280	58,750
Hawthorn Bancshares, Inc.	833	15,777
HBT Financial, Inc.	1,184	13,284

Heartland Financial USA, Inc.       4,678         Heritage Commerce Corp.       7,765         Heritage Financial Corp.       4,962         Hilltop Holdings, Inc.       9,809         Home BancShares, Inc.       20,772         HomeStreet, Inc.       2,996         Hope Bancorp, Inc.       16,117         Horizon Bancorp, Inc.       5,885         Howard Bancorp, Inc. (a)       1,934         Independent Bank Corp.       4,477	140,317 51,676 91,251 201,869 314,904 77,177 122,247 59,380 17,367
Heritage Financial Corp.       4,962         Hilltop Holdings, Inc.       9,809         Home BancShares, Inc.       20,772         HomeStreet, Inc.       2,996         Hope Bancorp, Inc.       16,117         Horizon Bancorp, Inc.       5,885         Howard Bancorp, Inc. (a)       1,934	91,251 201,869 314,904 77,177 122,247 59,380
Hilltop Holdings, Inc.       9,809         Home BancShares, Inc.       20,772         HomeStreet, Inc.       2,996         Hope Bancorp, Inc.       16,117         Horizon Bancorp, Inc.       5,885         Howard Bancorp, Inc. (a)       1,934	201,869 314,904 77,177 122,247 59,380
Home BancShares, Inc.       20,772         HomeStreet, Inc.       2,996         Hope Bancorp, Inc.       16,117         Horizon Bancorp, Inc.       5,885         Howard Bancorp, Inc. (a)       1,934	314,904 77,177 122,247 59,380
HomeStreet, Inc.       2,996         Hope Bancorp, Inc.       16,117         Horizon Bancorp, Inc.       5,885         Howard Bancorp, Inc. (a)       1,934	77,177 122,247 59,380
Hope Bancorp, Inc.       16,117         Horizon Bancorp, Inc.       5,885         Howard Bancorp, Inc. (a)       1,934	122,247 59,380
Horizon Bancorp, Inc. 5,885 Howard Bancorp, Inc. (a) 1,934	59,380
Howard Bancorp, Inc. (a) 1,934	
	17,367
Independent Bank Corn	
independent Dank Corp.	234,505
Independent Bank Corp. of Michigan 2,980	37,459
Independent Bank Group, Inc. 5,047	222,976
International Baneshares Corp. 7,255	189,065
Investar Holding Corp. 1,489	19,089
Kearny Financial Corp. 10,911	78,668
Lakeland Bancorp, Inc. 6,552	65,192
Lakeland Financial Corp. 3,355	138,226
Landmark Bancorp, Inc. 441	9,415
LCNB Corp. 1,505	20,543
Level One Bancorp, Inc. 723	11,279
Limestone Bancorp, Inc. (a) 738	7,764
Live Oak Bancshares, Inc. 3,878	98,230
Luther Burbank Corp. 2,706	22,595
Macatawa Bank Corp. 3,327	21,725
Mackinac Financial Corp. 1,305	12,593
MainStreet Bancshares, Inc. (a) 1,003	12,277
Mercantile Bank Corp. 2,083	37,536
Merchants Bancorp 1,131	22,292
Meridian Corp. 786	12,678

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

	Number of Shares	Value
Meta Financial Group, Inc.	4,516	\$ 86,798
Metrocity Bankshares, Inc. (b)	2,309	30,410
Metropolitan Bank Holding Corp. (a)	995	27,860
Mid Penn Bancorp, Inc.	976	16,895
Middlefield Banc Corp.	874	16,868
Midland States Bancorp, Inc.	2,841	36,507
MidWestOne Financial Group, Inc.	2,071	37,009
MVB Financial Corp.	1,252	19,994
National Bank Holdings Corp. Class A	3,938	103,373
National Bankshares, Inc.	935	23,684
NBT Bancorp, Inc.	5,777	154,939
Nicolet Bankshares, Inc. (a)	1,255	68,536
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Northeast Bank (a)	1,065	19,596
Northrim BanCorp, Inc.	916	23,349
Norwood Financial Corp.	747	18,167
Oak Valley Bancorp (b)	971	11,128
OFG Bancorp	6,957	86,684
Ohio Valley Banc Corp.	631	13,036
Old National Bancorp	22,297	280,050
Old Second Bancorp, Inc.	3,788	28,391
OP Bancorp	1,847	10,565
Origin Bancorp, Inc.	3,002	64,123
Orrstown Financial Services, Inc.	1,598	20,454
Park National Corp.	1,954	160,150
Parke Bancorp, Inc.	1,313	15,677
Partners Bancorp	985	5,546
PCB Bancorp	1,829	16,077
PCSB Financial Corp.	2,088	25,202
Peapack Gladstone Financial Corp.	2,580	39,087
Penns Woods Bancorp, Inc.	973	19,314
Peoples Bancorp of North Carolina, Inc.	652	10,060
Peoples Bancorp, Inc.	2,392	45,663
Peoples Financial Services Corp.	985	34,239
Pioneer Bancorp, Inc. (a)	1,697	15,069
Plumas Bancorp	680	13,382
Ponce de Leon Federal Bank (a)	1,059	9,340
Preferred Bank	1,874	60.193
Premier Financial Bancorp, Inc.	1,874	19,969
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Premier Financial Corp.	5,094	79,339
Provident Bancorp, Inc.	1,232	9,597
QCR Holdings, Inc.	2,000	54,820
RBB Bancorp	2,199	24,937
Red River Bancshares, Inc. (b)	696	29,928
Reliant Bancorp, Inc.	2,166	31,407
Renasant Corp.	7,368	167,401
Republic Bancorp, Inc. Class A	1,372	38,636
Republic First Bancorp, Inc. (a)	5,271	10,437
Richmond Mutual BanCorp, Inc.	1,523	16,113
	Number of	
	Shares	Value

	Number of	
	Shares	Value
S&T Bancorp, Inc.	5,225	\$ 92,430
Salisbury Bancorp, Inc.	371	11,727
Sandy Spring Bancorp, Inc.	6,336	146,235
SB Financial Group, Inc.	1,039	14,016
Seacoast Banking Corp. of Florida (a)	7,131	128,572
Select Bancorp, Inc. (a)	2,240	16,106
ServisFirst Bancshares, Inc.	6,623	225,381
Shore Bancshares, Inc.	1,754	19,259
Sierra Bancorp	1,836	30,826
Silvergate Capital Corp. (a) (b)	2,175	31,320
Simmons First National Corp. Class A	14,744	233,766
SmartFinancial, Inc.	1,833	24,910
South Plains Financial, Inc.	1,550	19,236
South State Corp.	9,546	459,640
Southern First Bancshares, Inc. (a)	934	22,556
Southern National Bancorp of Virginia, Inc.	2,453	21,292
Southside Bancshares, Inc.	4,383	107,077
Spirit of Texas Bancshares, Inc. (a)	1,689	18,849
Standard AVB Financial Corp.	564	18,415

Sterling Bancorp, Inc.	2,325	6,998
Stock Yards Bancorp, Inc.	2,762	94,019
Summit Financial Group, Inc.	1,593	23,592
Texas Capital Bancshares, Inc. (a)	6,890	214,486
Tompkins Financial Corp.	1,941	110,268
Towne Bank	9,283	152,241
TriCo Bancshares	3,705	90,735
TriState Capital Holdings, Inc. (a)	3,684	48,776
Triumph Bancorp, Inc. (a)	3,103	96,627
TrustCo Bank Corp NY	12,893	67,301
Trustmark Corp.	8,563	183,334
UMB Financial Corp.	5,934	290,825
United Bankshares, Inc.	16,872	362,242
United Community Banks, Inc.	10,582	179,153
United Security Bancshares/Fresno CA	1,910	11,670
Unity Bancorp, Inc.	1,117	12,935
Univest Corp. of Pennsylvania	3,851	55,339
Valley National Bancorp	54,115	370,688
Veritex Holdings, Inc.	6,443	109,724
Walker & Dunlop, Inc.	3,857	204,421
Washington Trust Bancorp, Inc.	2,389	73,247
WesBanco, Inc.	8,859	189,228
West BanCorp, Inc.	2,083	32,995
Westamerica Bancorp.	3,557	193,323
Western New England Bancorp, Inc.	2,841	15,995
		18,148,231

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

	Number of Shares	Value	
Diversified Financial Services — 2.4%	576		7.200
Altisource Portfolio Solutions SA (a) (b) Amerant Bancorp, Inc. (a) (b)	576 3,199		7,298 9,783
Arlington Asset Investment Corp. Class A	5,131		4,572
Artisan Partners Asset Management, Inc. Class A	7,508		2,737
Assetmark Financial Holdings, Inc. (a)	2,320		0,437
Associated Capital Group, Inc. Class A	274		9,900
Atlanticus Holdings Corp. (a)	739		8,794
B. Riley Financial, Inc. BGC Partners, Inc. Class A	2,526 40,808		3,302 7,939
Blucora, Inc. (a)	6,748		3,566
Boston Private Financial Holdings, Inc.	11,106	61	1,305
Brightsphere Investment Group, Inc.	8,366	107	7,921
Calamos Asset Management, Inc. (c) (d)	2,722	100	
Cohen & Steers, Inc. Columbia Financial, Inc. (a)	3,337 6,633		6,004 3,626
Cowen, Inc.	3,620		8,897
Curo Group Holdings Corp.	2,679		8,887
Diamond Hill Investment Group, Inc.	421		3,181
Encore Capital Group, Inc. (a)	4,258		4,316
Enova International, Inc. (a) EZCORP, Inc. Class A (a)	4,064 6,841		6,609 4,410
Federal Agricultural Mortgage Corp. Class C	1,243		9,129
Federated Hermes, Inc.	13,179		3,480
First Western Financial, Inc. (a)	914		1,836
Focus Financial Partners, Inc. Class A (a)	4,353		2,735
GAMCO Investors, Inc. Class A Greenhill & Co., Inc.	603 1,994		6,977 2,632
Hamilton Lane, Inc. Class A	4,115		5,788
Hannon Armstrong Sustainable Infrastructure Capital, Inc.	9,860		6,782
Houlihan Lokey, Inc.	6,993		2,937
I3 Verticals, Inc. Class A (a)	1,968		9,692
International Money Express, Inc. (a) (b) LendingClub Corp. (a)	3,215 9,410		6,184 4,321
Marlin Business Services Corn.	1.240	X	8.742
Marlin Business Services Corp. MMA Capital Holdings, Inc. (a)	1,240 681		8,742 5,329
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A	681 7,220	15 253	5,329 3,711
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a)	681 7,220 10,446	15 253 233	5,329 3,711 3,155
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp.	681 7,220 10,446 26,109	15 253 233 220	5,329 3,711 3,155 0,621
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a)	681 7,220 10,446 26,109 2,345	15 253 233 220	5,329 3,711 3,155
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A	681 7,220 10,446 26,109 2,345 Number of Shares	15 253 233 220 141 <b>Value</b>	5,329 3,711 3,155 0,621 1,286
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b)	681 7,220 10,446 26,109 2,345 Number of Shares 2,743	15 253 233 220 141 <b>Value</b> \$ 32	5,329 3,711 3,155 0,621 1,286
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A	681 7,220 10,446 26,109 2,345 Number of Shares 2,743 1,224	15 253 233 220 141 <b>Value</b> \$ 32 27	5,329 3,711 3,155 0,621 1,286 2,340 7,320
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b)	681 7,220 10,446 26,109 2,345 Number of Shares 2,743 1,224 4,344	15 253 233 220 141 <b>Value</b> \$ 32 27 24	5,329 3,711 3,155 0,621 1,286
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A	681 7,220 10,446 26,109 2,345 Number of Shares 2,743 1,224	15 253 233 220 141 Value \$ 32 27 24 336	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214	15 253 233 220 141  Value  \$ 32 27 24 336 173 194	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a)	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998	15 253 233 220 141 Value \$ 32 27 24 336 173 194 246	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a)	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18 28 4	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093 8,857 4,810 1,904
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp.	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18 28 4 11 459	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,993 8,857 4,810 1,904 9,692
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. Stonex Group, Inc. (a)	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18 28 4 11 459	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,6012 0,709 8,093 8,857 4,810 1,904 9,692 4,189
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMae Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. Stonex Group, Inc. (a) Virtus Investment Partners, Inc.	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232 996	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18 28 4 111 459 114 138	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093 8,857 4,810 1,904 9,692 4,189 8,095
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. Stonex Group, Inc. (a)	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18 28 4 11 459 114 138 130	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,6012 0,709 8,093 8,857 4,810 1,904 9,692 4,189
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. Stonex Group, Inc. (a) Virtus Investment Partners, Inc. Waddell & Reed Financial, Inc. Class A (b) Westwood Holdings Group, Inc. WisdomTree Investments, Inc.	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232 996 8,786 1,145 19,392	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18 28 4 11 459 114 138 130 12 62	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093 8,857 4,810 1,904 9,692 4,189 8,095 0,472 2,755 2,054
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. Stonex Group, Inc. (a) Virtus Investment Partners, Inc. Waddell & Reed Financial, Inc. Class A (b) Westwood Holdings Group, Inc.	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232 996 8,786 1,145	15 253 233 220 141  Value  \$ 32 27 24 3366 173 194 246 10 18 28 4 11 459 114 138 130 12 62	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093 8,857 4,810 1,904 9,692 9,692 2,755 2,054 7,763
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. (a) Virtus Investment Partners, Inc. Waddell & Reed Financial, Inc. Class A (b) Westwood Holdings Group, Inc. WisdomTree Investments, Inc. World Acceptance Corp. (a) (b) Insurance — 2.8%	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232 996 8,786 1,145 19,392 642	15 253 233 220 141  Value  \$ 32 27 24 3366 173 194 246 10 18 28 4 11 459 114 138 130 12 62 67 6,213	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093 8,857 4,810 1,904 9,692 4,189 8,095 0,472 2,755 2,054 7,763 3,294
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. Stonex Group, Inc. (a) Virtus Investment Partners, Inc. Waddell & Reed Financial, Inc. Class A (b) Westwood Holdings Group, Inc. WisdomTree Investments, Inc. World Acceptance Corp. (a) (b) Insurance — 2.8% Ambac Financial Group, Inc. (a)	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232 996 8,786 1,145 19,392 642	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18 28 4 11 459 114 138 130 12 62 67 6,213	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093 8,857 4,810 1,904 9,692 4,189 8,095 0,472 2,755 2,054 7,763 3,294 9,097
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. Stonex Group, Inc. (a) Virtus Investment Partners, Inc. Waddell & Reed Financial, Inc. Class A (b) Westwood Holdings Group, Inc. WisdomTree Investments, Inc. World Acceptance Corp. (a) (b)  Insurance — 2.8% Ambac Financial Group, Inc. (a) American Equity Investment Life Holding Co.	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232 996 8,786 1,145 19,392 642  6,194 12,371	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18 28 4 11 459 114 138 130 12 62 67 6,213	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093 8,857 4,810 1,904 9,692 4,189 8,095 2,755 2,054 7,763 3,294 9,097 2,038
MMA Capital Holdings, Inc. (a) Moelis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. Stonex Group, Inc. (a) Virtus Investment Partners, Inc. Waddell & Reed Financial, Inc. Class A (b) Westwood Holdings Group, Inc. Wirdd Acceptance Corp. (a) (b)  Insurance — 2.8% Ambac Financial Group, Inc. (a) American Equity Investment Life Holding Co. AMERISAFE, Inc.	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232 996 8,786 1,145 19,392 642	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18 28 4 11 459 114 138 130 12 62 67 6,213	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093 8,857 4,810 1,904 9,692 4,189 8,095 0,472 2,755 2,054 7,763 3,294 9,097
MMA Capital Holdings, Inc. (a) Moclis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJT Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Asset Management Group, Inc. Class A Stifel Financial Corp. Stonex Group, Inc. (a) Virtus Investment Partners, Inc. Waddell & Reed Financial, Inc. Class A (b) Westwood Holdings Group, Inc. WisdomTree Investments, Inc. World Acceptance Corp. (a) (b)  Insurance — 2.8% Ambae Financial Group, Inc. (a) American Equity Investment Life Holding Co. AMERISAFE, Inc. Argo Group International Holdings Ltd. BRP Group, Inc. (a)	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232 996 8,786 1,145 19,392 642  6,194 12,371 2,608	15 253 233 220 141  Value  \$ 32 27 24 336 173 194 246 10 18 28 4 11 459 114 138 130 12 62 67 6,213	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093 8,857 4,810 1,904 9,692 4,189 8,095 2,755 2,054 7,763 3,294 9,097 2,038 9,595
MMA Capital Holdings, Inc. (a) Moclis & Co. Class A Mr Cooper Group, Inc. (a) Navient Corp. Nelnet, Inc. Class A  Oportun Financial Corp. (a) (b) Oppenheimer Holdings, Inc. Class A Paysign, Inc. (a) (b) PennyMac Financial Services, Inc. Piper Sandler Cos. PJTP Partners, Inc. Class A PRA Group, Inc. (a) Pzena Investment Management, Inc. Class A Regional Management Corp. (a) Sculptor Capital Management, Inc. (b) Siebert Financial Corp. (a) (b) Silvercrest Assett Management Group, Inc. Class A Stifel Financial Corp. Stonex Group, Inc. (a) Virtus Investment Partners, Inc. Waddell & Reed Financial, Inc. Class A (b) Westwood Holdings Group, Inc. WisdomTree Investments, Inc. World Acceptance Corp. (a) (b)  Insurance — 2.8% Ambac Financial Group, Inc. (a) American Equity Investment Life Holding Co. AMERISAFE, Inc. Argo Group International Holdings Ltd.	681 7,220 10,446 26,109 2,345  Number of Shares  2,743 1,224 4,344 5,792 2,374 3,214 6,158 1,998 1,086 2,458 1,489 1,138 9,092 2,232 996 8,786 1,145 19,392 642  6,194 12,371 2,608 4,501	15 253 233 220 141  Value  Value  322 27 24 336 173 194 246 10 18 28 4 11 459 114 138 130 12 62 67 6,213 79 272 149 154 114	5,329 3,711 3,155 0,621 1,286 2,340 7,320 4,674 6,631 3,302 4,801 6,012 0,709 8,093 8,857 4,810 1,904 9,692 4,189 8,095 0,472 2,755 0,472 2,755 0,472 2,755 0,472 2,755 4,809 8,093 8,003 8,003 8,003 8,003 8,003 8,003 8,003 8,003 8,003 8,003 8,003

ONE FILL LLG	10.206	200.660
CNO Financial Group, Inc.	19,306	309,668
Crawford & Co. Class A	2,305	15,075
Donegal Group, Inc. Class A	1,599	22,498
eHealth, Inc. (a)	3,478	274,762
Employers Holdings, Inc.	3,915	118,429
Enstar Group Ltd. (a)	1,640	264,860
Essent Group Ltd.	15,043	556,742
FBL Financial Group, Inc. Class A	1,302	62,756
Fednat Holding Co.	1,547	9,777
Genworth Financial, Inc. Class A (a)	68,835	230,597
Goosehead Insurance, Inc. Class A	1,762	152,572
Greenlight Capital Re Ltd. Class A (a)	3,807	25,621
GWG Holdings, Inc. (a) (b)	411	3,535
HCI Group, Inc.	867	42,734
Heritage Insurance Holdings, Inc.	3,548	35,906
Horace Mann Educators Corp.	5,646	188,576
Independence Holding Co.	578	21,796

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

	Number of Shares	Value
Investors Title Co.	160	\$ 20,810
James River Group Holdings Ltd.	4,076 2,888	181,504 549,240
Kinsale Capital Group, Inc. MBIA, Inc. (a) (b)	7,198	43,620
National General Holdings Corp.	9,307	314,111
National Western Life Group, Inc. Class A	349	63,787
NI Holdings, Inc. (a) NMI Holdings, Inc. Class A (a)	1,160 11,218	19,592 199,680
Palomar Holdings, Inc. (a)	2,767	288,432
ProAssurance Corp.	7,307	114,282
ProSight Global, Inc. (a) Protective Insurance Corp. Class B	1,365 1,101	15,479 14,456
Radian Group, Inc.	26,081	381,043
RLI Corp.	5,403	452,393
Safety Insurance Group, Inc. Security National Financial Corp. Class A (a)	1,970 1,392	136,107 8,909
Selective Insurance Group, Inc.	8,069	415,473
Selectquote, Inc. (a)	4,349	88,067
State Auto Financial Corp.	2,477	34,084
Stewart Information Services Corp. Third Point Reinsurance Ltd. (a)	3,593 11,096	157,122 77,117
Tiptree, Inc.	3,091	15,301
Trean Insurance Group, Inc. (a)	1,631	24,873
Trupanion, Inc. (a) (b) United Fire Group, Inc.	4,057 2,854	320,097 57,993
United Insurance Holdings Corp.	2,834	17,720
Universal Insurance Holdings, Inc.	3,745	51,831
Vericity, Inc. (b)	272	2,774
Watford Holdings Ltd. (a) (b)	2,359	 54,116
Investment Companies — 0.0%		 7,263,115
Grid Dynamics Holdings, Inc. (a)	2,789	21,559
Rafael Holdings, Inc. Class B (a)	1,344	 20,832
Private Equity — 0.1% Kennedy-Wilson Holdings, Inc.	16,679	 42,391 242,179
Real Estate — 0.8%	0.800	
Alexander & Baldwin, Inc. American Realty Investors, Inc. (a)	9,890 159	110,867 1,442
CTO Realty Growth, Inc.	592	26,107
Cushman & Wakefield PLC (a) (b)	15,078	158,470
eXp World Holdings, Inc. (a) Fathom Holdings, Inc. (a)	3,342 653	134,816 10,278
FRP Holdings, Inc. (a)	949	39,545
Griffin Industrial Realty, Inc.	379	20,258
Legacy Housing Corp. (a) (b)	1,078	14,747
	Number of Shares	 Value
Marcus & Millichap, Inc. (a)	3,178	\$ 87,459 10,430
Maui Land & Pineapple Co., Inc. (a) McGrath RentCorp	964 3,283	195,634
Newmark Group, Inc. Class A	19,458	84,059
RE/MAX Holdings, Inc. Class A	2,380	77,897
Realogy Holdings Corp. Redfin Corp. (a)	15,643 13,229	147,670 660,524
The RMR Group, Inc. Class A	2,051	56,341
The St. Joe Co. (a)	4,479	92,402
Stratus Properties, Inc. (a)	831	17,916
Transcontinental Realty Investors, Inc. (a)	198	 4,936 1,951,798
Real Estate Investment Trusts (REITS) — 6.9% Acadia Realty Trust	11,464	 120,372
Agree Realty Corp.	7,277	463,108
Alexander's, Inc.	293	71,849
Alpine Income Property Trust, Inc.	991 6 858	15,410
American Assets Trust, Inc. American Finance Trust, Inc.	6,858 14,912	165,209 93,498
Anworth Mortgage Asset Corp. (b)	13,877	22,758
Apollo Commercial Real Estate Finance, Inc.	20,261	182,552

Arbor Realty Trust, Inc.	14,426	165,466
Ares Commercial Real Estate Corp.	4,126	37,712
Armada Hoffler Properties, Inc.	7,661	70,941
ARMOUR Residential REIT, Inc.	8,979	85,390
Blackstone Mortgage Trust, Inc. Class A	18,826	413,607
Bluerock Residential Growth REIT, Inc.	3,332	25,257
Broadmark Realty Capital, Inc.	17,551	173,053
BRT Apartments Corp.	1,443	16,999
Capstead Mortgage Corp.	12,971	72,897
CareTrust REIT, Inc.	13,037	231,993
Catchmark Timber Trust, Inc. Class A	6,704	59,867
Chatham Lodging Trust	6,539	49,827
Cherry Hill Mortgage Investment Corp.	2,144	19,253
Chimera Investment Corp.	26,217	214,979
CIM Commercial Trust Corp.	1,564	15,421
City Office REIT, Inc.	5,808	43,676
Clipper Realty, Inc.	1,893	11,453
Colony Capital, Inc.	65,535	178,911
Colony Credit Real Estate Inc.	11,364	55,797
Columbia Property Trust, Inc.	15,605	170,251
Community Healthcare Trust, Inc.	2,918	136,446
CoreCivic, Inc.	16,309	130,472
CorEnergy Infrastructure Trust, Inc.	2,008	11,727

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

	Number of Shares	Value
CorePoint Lodging Inc.	5,140	\$ 28,013
DiamondRock Hospitality Co.	27,103	137,412
Diversified Healthcare Trust	32,334	113,816
Dynex Capital, Inc. (b)	2,981	45,341
Easterly Government Properties, Inc.	10,929	244,919
EastGroup Properties, Inc.	5,277	682,474
Ellington Financial, Inc.	5,583	68,448
Ellington Residential Mortgage REIT	1,165	12,931
Essential Properties Realty Trust, Inc.	12,709	232,829
Farmland Partners, Inc. (b)	3,641	24,249
Four Corners Property Trust, Inc.	9,610	245,920
Franklin Street Properties Corp.	14,098	51,599
Front Yard Residential Corp.	6,897	60,280
The GEO Group, Inc.	16,076	182,302
Getty Realty Corp.	4,665	121,337
Gladstone Commercial Corp.	4,604	77,577
Gladstone Land Corp.	2,676	40,193
Global Medical REIT, Inc.	5,671	76,558
Global Net Lease, Inc.	12,259	194,918
Granite Point Mortgage Trust, Inc.	7,345	52,076
Great Ajax Corp. (b)	2,919	24,198
Healthcare Realty Trust, Inc.	18,455	555,865
Hersha Hospitality Trust	4,719	26,143
Independence Realty Trust, Inc.	12,883	149,314
Industrial Logistics Properties Trust	8,870	193,987
Innovative Industrial Properties, Inc.	2,903	360,291
Invesco Mortgage Capital, Inc. (b)	24,881	67,427
Investors Real Estate Trust	1,730	112,744
iStar, Inc. (b)	9,938	117,368
Jernigan Capital, Inc.	3,152	54,025
Kite Realty Group Trust	11,272	130,530
KKR Real Estate Finance Trust, Inc.	3,889	64,285
Ladder Capital Corp.	14,344	102,129
Lexington Realty Trust	37,336	390,161
LTC Properties, Inc.	5,305	184,932
The Macerich Co. (b)	20,440	138,788
Mack-Cali Realty Corp. MFA Financial, Inc.	11,838	149,396
,	61,890	165,865
Monmouth Real Estate Investment Corp.	12,966 5,873	179,579 353,966
National Health Investors, Inc. National Storage Affiliates Trust	8,550	279,670
NETSTREIT Corp. (a)	1,635	29.855
New Senior Investment Group, Inc.	11,563	46,252
New York Mortgage Trust, Inc.	51,682	131,789
NexPoint Residential Trust, Inc.	2,939	130,345
Office Properties, Inc. ome Trust	6,496	134,597
One Liberty Properties, Inc.	2,076	33,963
Orchid Island Capital, Inc. (b)	9,051	45,345
	Number of	
	Shares	Value

	Number of	
	Shares	Value
Pebblebrook Hotel Trust	17,761	\$ 222,545
PennyMac Mortgage Investment Trust	13,532	217,459
Physicians Realty Trust	28,516	510,722
Piedmont Office Realty Trust, Inc. Class A	17,207	233,499
Plymouth Industrial REIT, Inc.	2,078	25,643
PotlatchDeltic Corp.	8,946	376,627
Preferred Apartment Communities, Inc. Class A	6,678	36,061
PS Business Parks, Inc.	2,745	335,961
QTS Realty Trust, Inc. Class A	8,390	528,738
Ready Capital Corp. REIT	5,722	64,086
Redwood Trust, Inc.	15,613	117,410
Retail Opportunity Investments Corp.	15,860	165,182
Retail Properties of America, Inc. Class A	29,240	169,884
Retail Value, Inc.	2,315	29,100
RLJ Lodging Trust	22,390	193,897
RPT Realty	11,187	60,857
Ryman Hospitality Properties, Inc.	6,887	253,442
Sabra Health Care REIT, Inc.	28,035	386,462
Safehold, Inc. (b)	2,362	146,680

Saul Centers, Inc.	1,570	41,731
Seritage Growth Properties Class A (a) (b)	4,679	62,933
Service Properties Trust	22,368	177,826
SITE Centers Corp.	21,033	151,438
STAG Industrial, Înc.	20,473	624,222
Summit Hotel Properties, Inc.	14,062	72,841
Sunstone Hotel Investors, Inc.	29,321	232,809
Tanger Factory Outlet Centers, Inc. (b)	12,328	74,338
Terreno Realty Corp.	9,105	498,590
TPG RE Finance Trust, Inc.	8,182	69,220
Two Harbors Investment Corp.	37,366	190,193
UMH Properties, Inc.	4,981	67,443
Uniti Group, Inc.	26,377	277,882
Universal Health Realty Income Trust	1,749	99,675
Urban Edge Properties	15,834	153,906
Urstadt Biddle Properties, Inc. Class A	3,880	35,696
Washington Real Estate Investment Trust	11,255	226,563
Western Asset Mortgage Capital Corp. (b)	7,372	15,039
Whitestone REIT	5,139	30,834
Xenia Hotels & Resorts, Inc.	15,651	137,416
		17,887,002
Savings & Loans — 0.9%	•	
Axos Financial, Inc. (a)	7,832	182,564
Banc of California, Inc.	6,183	62,572
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The accompanying notes are an integral part of the financial statements.

	Number of Shares		Value
BankFinancial Corp.	1,983	\$	14,317
Berkshire Hills Bancorp, Inc.	6,035		61,014
Brookline Bancorp, Inc.	10,701		92,510
Capitol Federal Financial, Inc.	18,010		166,863
Community Bankers Trust Corp.	3,111		15,804
Dime Community Bancshares, Inc.	4,025		45,523
Eagle Bancorp Montana, Inc. ESSA Bancorp, Inc.	920 1,326		16,210 16,350
First Capital, Inc. (b)	459		25,727
First Savings Financial Group, Inc.	273		14,835
Flushing Financial Corp.	3,644		38,335
FS Bancorp, Inc.	482		19,762
Greene County Bancorp, Inc.	471		10,216
Hingham Institution for Savings	183		33,672
Home Bancorp Inc. (b)	1,132		27,338
HomeTrust Bancshares, Inc.	2,206		29,957
Investors Bancorp, Inc.	31,365		227,710
Meridian Bancorp, Inc.	6,375		65,981
Northfield Bancorp, Inc.	6,259		57,082
Northwest Bancshares, Inc.	15,894		146,225
OceanFirst Financial Corp. Oconee Federal Financial Corp.	7,996 153		109,465 3,335
Pacific Premier Bancorp, Inc.	10,848		218,479
Provident Financial Holdings, Inc.	838		9,972
Provident Financial Services, Inc.	9,760		119,072
Prudential Bancorp, Inc.	1,234		13,006
Riverview Bancorp, Inc.	2,450		10,167
Southern Missouri Bancorp, Inc.	1,099		25,914
Territorial Bancorp, Inc.	1,147		23,204
Timberland Bancorp, Inc.	1,050		18,900
Washington Federal, Inc.	10,266		214,149
Waterstone Financial, Inc.	3,214		49,785
WSFS Financial Corp.	6,809		183,639
Vertein Certiful 0.00/			2,369,654
Venture Capital — 0.0% Safeguard Scientifics, Inc.	2,307		12,642
Saleguard Scientifics, inc.	2,307		54,130,306
Government — 0.0%			34,130,300
Multi-National — 0.0%			
Banco Latinoamericano de Comercio Exterior SA	4,119		50,046
Industrial — 13.8%			
Aerospace & Defense — 0.7%	4.507		96.424
AAR Corp. Aerojet Rocketdyne Holdings, Inc. (a)	4,597 10,011		86,424 399,339
Aeroyironment, Inc. (a)	2,953		177,210
Astronics Corp. (a)	3,255		25,129
Barnes Group, Inc.	6,387		228,271
	· ,- · · ·		,
	Number of		Value
Ducommun Inc. (a)	Shares 1,485	\$	Value 48,886
Ducommun, Inc. (a) Kaman Corp.	3,751	Ф	146,176
Kratos Defense & Security Solutions, Inc. (a)	16,561		319,296
Moog, Inc. Class A	4,053		257,487
National Presto Industries, Inc.	688		56,320
Park Aerospace Corp.	2,822		30,816
Triumph Group, Inc.	7,083		46,110
Duilding Matarials 100/			1,821,464
Building Materials — 1.9% AAON, Inc.	5,598		337,280
American Woodmark Corp. (a)	2,304		180,956
Apogee Enterprises, Inc.	3,507		74,945
Boise Cascade Co.	5,330		212,774
Builders FirstSource, Inc. (a)	15,778		514,678
Caesarstone Ltd.	3,095		30,331
Cornerstone Building Brands, Inc. (a)	5,855		46,723
Forterra, Inc. (a)	2,679		31,666
Gibraltar Industries, Inc. (a)	4,446		289,613
Griffon Corp.	5,860		114,504
JELD-WEN Holding, Inc. (a)	9,254		209,140

Louisiana-Pacific Corp.	15,391	454,188
LSI Industries, Inc.	3,562	24,044
Masonite International Corp. (a)	3,324	327,082
Patrick Industries, Inc.	3,043	175,033
PGT Innovations, Inc. (a)	7,770	136,130
Research Frontiers, Inc. (a) (b)	3,882	10,481
Simpson Manufacturing Co., Inc.	5,945	577,616
SPX Corp. (a)	5,854	271,509
Summit Materials, Inc. Class A (a)	15,621	258,371
UFP Industries, Inc.	8,159	461,065
US Concrete, Inc. (a)	2,205	64,033
	_	4,802,162
Electrical Components & Equipment — 0.6%	_	
American Superconductor Corp. (a)	2,932	42,455
Belden, Inc.	6,002	186,782
Encore Wire Corp.	2,757	127,980
EnerSys	5,784	388,222
Graham Corp.	1,363	17,405
Insteel Industries, Inc.	2,541	47,517
nLight, Inc. (a)	4,749	111,507
Novanta, Inc. (a)	4,667	491,622
Orion Energy Systems, Inc. (a)	3,758	28,448
Powell Industries, Inc.	1,265	30,524
Ultralife Corp. (a)	1,329	7,841
Vicor Corp. (a)	2,631	204,508
	_	1,684,811

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

	imber of Shares		Value
Electronics — 2.2%	£ 102	¢	226 155
Advanced Energy Industries, Inc. (a) Akoustis Technologies, Inc. (a) (b)	5,182 4,378	\$	326,155 35,725
Alarm.com Holdings, Inc. (a)	6,485		358,296
Allied Motion Technologies, Inc.	1,034		42,684
API Group Corp. (a) (e)	19,101		271,807
Applied Optoelectronics, Inc. (a) (b) Atkore International Group, Inc. (a)	2,867 6,445		32,254 146,495
Badger Meter, Inc.	3,973		259,715
Bel Fuse, Inc. Class B	1,404		14,995
Benchmark Electronics, Inc.	5,031		101,375
Brady Corp. Class A	6,417		256,808 46,942
Comtech Telecommunications Corp. CyberOptics Corp. (a)	3,353 992		31,585
Digimarc Corp. (a) (b)	1,656		36,979
FARO Technologies, Inc. (a)	2,452		149,523
Fitbit, Inc. Class A (a)	33,225		231,246
Fluidigm Corp. (a) (b) GoPro, Inc. Class A (a)	9,516 17,713		70,704 80,240
II-VI, Inc. (a) (b)	13,754		557,862
IntriCon Corp. (a)	1,164		14,178
Itron, Inc. (a)	5,468		332,126
Kimball Electronics, Inc. (a)	3,152		36,437
Knowles Corp. (a) Mesa Laboratories, Inc.	12,050 646		179,545 164,575
Napco Security Technologies, Inc. (a) (b)	1,642		38,587
NVE Corp.	614		30,135
OSI Systems, Inc. (a)	2,304		178,813
Plexus Corp. (a)	3,915		276,517
Sanmina Corp. (a) SMART Clobal Holdings Inc. (a)	9,161		247,805 53,586
SMART Global Holdings, Inc. (a) Stoneridge, Inc. (a)	1,960 3,650		67,051
Transcat, Inc. (a)	991		29,036
TTM Technologies, Inc. (a)	13,845		157,971
Turtle Beach Corp. (a)	1,797		32,705
Vishay Intertechnology, Inc.	18,105		281,895
Vishay Precision Group, Inc. (a) Watts Water Technologies, Inc. Class A	1,634 3,734		41,373 373,960
Wrap Technologies, Inc. (a) (b)	1,672		11,319
	Ź		5,599,004
Engineering & Construction — 1.8%			
Aegion Corp. (a) Arcosa, Inc.	4,211 6,622		59,501 291,964
Comfort Systems USA, Inc.	4,900		252,399
Concrete Pumping Holdings, Inc. (a)	3,763		13,434
Construction Partners, Inc. Class A (a)	3,586		65,265
Dycom Industries, Inc. (a)	4,188		221,210
Nu	ımber of		
	Shares		Value
EMCOR Group, Inc.	7,412	\$	501,867
Exponent, Inc. Fluor Corp.	7,002 19,210		504,354 169,240
Granite Construction, Inc. (b)	6,380		112,352
Great Lakes Dredge & Dock Corp. (a)	8,614		81,919
IES Holdings, Inc. (a)	1,127		35,805
Iteris, Inc. (a)	5,101		20,914
KBR, Inc.	19,427		434,388
MasTec, Inc. (a) Mistras Group, Inc. (a)	7,729 2,577		326,164 10,076
MYR Group, Inc. (a)	2,210		82,168
NV5 Global, Inc. (a)	1,491		78,680
Primoris Services Corp.	6,481		116,917
Sterling Construction Co., Inc. (a)	3,901		55,238
TopBuild Corp. (a) Tutor Perini Corp. (a)	4,515 5,541		770,665 61,671
WillScot Mobile Mini Holdings Corp. (a)	21,889		365,109
····	21,007		4,631,300
Environmental Controls — 0.9%	10.061		204 144
Advanced Disposal Services, Inc. (a)	10,061		304,144

0,20,202	2 3 3 4	
Casella Waste Systems, Inc. Class A (a)	6,272	350,291
CECO Environmental Corp. (a)	4,369	31,850
Covanta Holding Corp.	16,404	127,131
Energy Recovery, Inc. (a) (b)	5,347	43,845
Evoqua Water Technologies Corp. (a)	12,452	264,232
Harsco Corp. (a)	10,646	148,086
Heritage-Crystal Clean, Inc. (a)	2,137	28,529
Montrose Environmental Group, Inc. (a)	1,489	35,468
Pure Cycle Corp. (a)	2,443	22,012
Sharps Compliance Corp. (a)	2,089	13,098
Tetra Tech, Inc.	7,348	701,734
US Ecology, Inc.	4,293	140,252
		2,210,672
Hand & Machine Tools — 0.3%		
Franklin Electric Co., Inc.	6,280	369,453
Hurco Cos., Inc.	918	26,071
Kennametal, Inc.	11,327	327,803
Luxfer Holdings PLC	4,022	50,476
		773,803
Machinery – Construction & Mining — 0.3%		
Argan, Inc.	2,005	84,029
Astec Industries, Inc.	3,059	165,951
Bloom Energy Corp. Class A (a) (b)	12,098	217,401
Hyster-Yale Materials Handling, Inc.	1,397	51,898
The Manitowoc Co., Inc. (a)	4,790	40,284

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

	Number of Shares	Value
Terex Corp.	9,149	\$ 177,125
		736,688
Machinery – Diversified — 1.2% Alamo Group, Inc.	1,370	148,001
Albany International Corp. Class A	4,188	207,348
Altra Industrial Motion Corp.	8,796	325,188
Applied Industrial Technologies, Inc.	5,261	289,881
Cactus, Inc. Class A Chart Industries, Inc. (a)	6,549 4,925	125,675 346,080
CIRCOR International, Inc. (a)	2,715	74,255
Columbus McKinnon Corp.	3,186	105,457
CSW Industrials, Inc.	1,864	143,994
DXP Enterprises, Inc. (a)	2,314	37,325
Eastman Kodak Co. (a) (b) Gencor Industries, Inc. (a)	2,250 1,288	19,845 14,207
The Gorman-Rupp Co.	2,405	70,851
Ichor Holdings Ltd. (a)	2,977	64,214
Intevac, Inc. (a)	3,386	18,657
Kadant, Inc.	1,556	170,569
Lindsay Corp. Mueller Water Products, Inc. Class A	1,476 21,303	142,700 221,338
NN, Inc. (b)	5,953	30,717
Ranpak Holdings Corp. (a)	3,826	36,423
SPX FLOW, Inc. (a)	5,802	248,442
Tennant Co.	2,484	149,934
Welbilt, Inc. (a)	17,864	110,042 3,101,143
Metal Fabricate & Hardware — 0.9%		3,101,143
Advanced Drainage Systems, Inc.	7,586	473,670
AZZ, Inc.	3,580	122,150
The Eastern Co.	673	13,137
Helios Technologies, Inc. Lawson Products, Inc. (a)	4,236 647	154,190 26,546
LB Foster Co. Class A (a)	1,418	19,030
Mayville Engineering Co., Inc. (a)	1,064	9,778
Mueller Industries, Inc.	7,596	205,548
Northwest Pipe Co. (a)	1,244	32,916
Olympic Steel, Inc. Omega Flex, Inc.	1,318 386	14,973 60,494
Park-Ohio Holdings Corp. (b)	1,233	19,814
RBC Bearings, Inc. (a)	3,359	407,144
Rexnord Corp.	16,634	496,359
Ryerson Holding Corp. (a) Standex International Corp.	2,299 1,683	13,173 99,634
TimkenSteel Corp. (a)	6,344	22,521
Tredegar Corp.	3,514	52,253
Worthington Industries, Inc.	4,978	203,003
		2,446,333
	Number of	
	Shares	Value
Miscellaneous - Manufacturing — 1.2%		
American Outdoor Brands, Inc. (a)	1,924	\$ 25,070
Chase Corp. Enerpac Tool Group Corp.	1,018 7,488	97,117 140,849
EnPro Industries, Inc.	2,866	161,671
ESCO Technologies, Inc.	3,483	280,591
Fabrinet (a)	5,005	315,465
Federal Signal Corp.	8,152	238,446
Haynes International, Inc. Hillenbrand, Inc.	1,610 10,104	27,515 286,549
John Bean Technologies Corp.	4,271	392,462
Lydall, Inc. (a)	2,413	39,911
Materion Corp.	2,811	146,256
Myers Industries, Inc.	4,893	64,734
NL Industries, Inc.	1,160	4,930 472 546
Proto Labs, Inc. (a) Raven Industries, Inc.	3,649 4,935	472,546 106,201
Smith & Wesson Brands, Inc. (b)	7,438	115,438
Sturm, Ruger & Co., Inc.	2,316	141,647

Trinseo SA	5,218	133,790
D 1 1 0 C 11 0 00/		3,191,188
Packaging & Containers — 0.2%	2.466	125 504
Greif, Inc. Class A	3,466	125,504
Greif, Inc. Class B	813	32,097
Matthews International Corp. Class A	4,162	93,062
O-I Glass, Inc.	21,374	226,351
TriMas Corp. (a)	5,874	133,927
UFP Technologies, Inc. (a)	937	38,811
		649,752
Transportation — 1.4%	0.040	***
Air Transport Services Group, Inc. (a)	8,019	200,956
ArcBest Corp.	3,431	106,567
Ardmore Shipping Corp.	4,733	16,850
Atlas Air Worldwide Holdings, Inc. (a)	3,511	213,820
Bristow Group, Inc. (a)	921	19,571
Costamare, Inc.	7,002	42,502
Covenant Logistics Group, Inc. (a)	1,579	27,617
CryoPort, Inc. (a) (b)	4,672	221,453
Daseke, Inc. (a)	6,090	32,703
DHT Holdings, Inc.	15,192	78,391
Diamond S Shipping, Inc. (a) (b)	3,860	26,518
Dorian LPG Ltd. (a)	5,118	40,995
Eagle Bulk Shipping, Inc. (a)	898	14,700
Echo Global Logistics, Inc. (a)	3,586	92,411
Forward Air Corp.	3,790	217,470
Frontline Ltd. (b)	16,166	105,079
Genco Shipping & Trading Ltd.	2,207	15,228
Golar LNG Ltd. (a) (b)	12,416	75,179

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

	Number of Shares	Value
Heartland Express, Inc.	6,613	\$ 123,002
Hub Group, Inc. Class A (a)	4,467	224,221
International Seaways, Inc.	3,264	47,687
Marten Transport Ltd.	8,186	133,596
Matson, Inc.	5,836	233,965
Nordic American Tankers Ltd. (b)	19,746	68,914
Overseas Shipholding Group, Inc. Class A (a)	9,164	19,611
PAM Transportation Services, Inc. (a)	271	10,190
Pangaea Logistics Solutions Ltd.	1,543	3,996
Radiant Logistics, Inc. (a)	4,997	25,685
Safe Bulkers, Inc. (a)	7,230	7,447 452,464
Saia, Inc. (a) Scorpio Bulkers, Inc.	3,587 1,209	17,119
Scorpio Tankers, Inc. (b)	7,019	77,700
SEACOR Holdings, Inc. (a)	2,613	75,986
SFL Corp. Ltd.	13,125	98,306
Tidewater, Inc. (a) (b)	5,345	35,865
Universal Logistics Holdings, Inc.	984	20,526
US Xpress Enterprises, Inc. Class A (a)	3,102	25,623
Werner Enterprises, Inc.	8,315	349,147
		3,599,060
Trucking & Leasing — 0.2% GATX Corp.	4,745	302,494
General Finance Corp. (a)	1,480	9,369
The Greenbrier Cos., Inc.	4,388	129,007
Willis Lease Finance Corp. (a)	412	7,601
		448,471
Technology — 10.4%		35,695,851
Computers — 2.2%	15 007	70.054
3D Systems Corp. (a) (b) Conduent, Inc. (a)	15,897 22,363	78,054 71,114
Cubic Corp.	4,281	249,026
Diebold Nixdorf, Inc. (a) (b)	9,737	74,391
Exlservice Holdings, Inc. (a)	4,574	301,747
The ExOne Co. (a) (b)	1,529	18,684
iCAD, Inc. (a) (b)	2,836	24,985
Insight Enterprises, Inc. (a)	4,724	267,284
Mastech Holdings, Inc. (a)	571	10,284
MAXIMUS, Inc.	8,338	570,403
Mitek Systems, Inc. (a)	5,436	69,255
MTS Systems Corp.	2,653	50,699
NetScout Systems, Inc. (a)	9,469	206,708
Onespan, Inc. (a)	4,577	95,934
PAE, Inc. (a) (b)	8,040	68,340
PAR Technology Corp. (a) (b)	2,192	88,798
	Number of Shares	Value
Parsons Corp. (a)	3,066	\$ 102,834
Perspecta, Inc.	18,986	369,278
Ping Identity Holding Corp. (a)	4,993	155,832
PlayAGS, Inc. (a)	3,860	13,664
Qualys, Inc. (a)	4,646	455,354
Quantum Corp. (a)	4,068	18,713
Rackspace Technology, Inc. (a)	4,617	89,062
Rapid7, Inc. (a)	6,875	421,025
Rimini Street, Inc. (a)	2,884	9,286
SecureWorks Corp. Class A (a)	1,306	14,875
Startek, Inc. (a) Sung Micro Computer Inc. (a)	2,354	12,358
Super Micro Computer, Inc. (a)	6,180 5,261	163,152 179,979
Sykes Enterprises, Inc. (a) Tenable Holdings, Inc. (a)	5,261 9,513	359,116
TTEC Holdings, Inc.	9,513 2,475	135,011
Unisys Corp. (a)	8,435	90,001
Varonis Systems, Inc. (a) (b)	4,253	490,881
Virtusa Corp. (a)	3,987	196,001
Vocera Communications, Inc. (a)	4,373	127,167
Office & Business Equipment — 0.0%	, , ,	5,649,295
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Pitney Bowes, Inc.	23,613	125,385
Semiconductors — 2.4%	·	
Alpha & Omega Semiconductor Ltd. (a)	2,729	34,986
Ambarella, Inc. (a)	4,512	235,436
Amkor Technology, Inc. (a)	13,603	152,354
Atomera, Inc. (a) (b)	2,097	21,914
Axcelis Technologies, Inc. (a)	4,612	101,464
AXT, Inc. (a) (b)	5,509	33,715
Brooks Automation, Inc.	9,909	458,390
CEVA, Inc. (a)	2,992	117,795
CMC Materials, Inc.	3,962	565,813
Cohu, Inc.	5,501	94,507
CTS Corp.	4,242	93,451
Diodes, Inc. (a)	5,781	326,337
DSP Group, Inc. (a)	2,851	37,576
FormFactor, Inc. (a)	10,628	264,956
GSI Technology, Inc. (a)	2,283	12,876
Impinj, Inc. (a) (b)	2,270	59,815
Intellicheck, Inc. (a)	2,524	16,835
Lattice Semiconductor Corp. (a)	18,347	531,329
MACOM Technology Solutions Holdings, Inc. (a)	6,408	217,936
MaxLinear, Inc. (a)	9,182	213,390
Onto Innovation, Inc. (a)	6,467	192,587
Photronics, Inc. (a)	8,710	86,752
Pixelworks, Inc. (a)	4,974	10,197
Power Integrations, Inc.	8,046	445,748

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

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

	Shares		Value
Rambus, Inc. (a)	15,451	\$	211,524
Semtech Corp. (a)	8,810		466,578
Silicon Laboratories, Inc. (a)	5,916		578,881
SiTime Corp. (a)	1,245		104,617
Synaptics, Inc. (a)	4,643		373,390
Ultra Clean Holdings, Inc. (a)	5,500		118,030
Veeco Instruments, Inc. (a)	6,665		77,781
			6,256,960
Software — 5.8%	10.727		204.210
1Life Healthcare, Inc. (a)	10,727		304,218
8x8, Inc. (a)	14,136		219,815
ACI Worldwide, Inc. (a) Agilysys, Inc. (a)	15,618 2,498		408,098
Agnysys, inc. (a) Akerna Corp. (a)	1,039		60,352 3,782
Allscripts Healthcare Solutions, Inc. (a)	22,054		179,520
Altair Engineering, Inc. Class A (a)	5,843		245,289
American Software, Inc. Class A	4,132		58,013
Appfolio, Inc. Class A (a)	2,218		314,535
Appian Corp. (a) (b)	4,856		314,426
Asure Software, Inc. (a)	1,967		14,851
Avaya Holdings Corp. (a)	11,281		171,471
Avid Technology, Inc. (a) (b)	4,407		37,724
Bandwidth, Inc. Class A (a) (b)	2,619		457,199
Benefitfocus, Inc. (a) (b)	4,092		45,830
Blackbaud, Inc.	6,742		376,406
Blackline, Inc. (a)	6,849		613,876
Bottomline Technologies de, Inc. (a)	5,902		248,828
Box, Inc. Class A (a)	18,926		328,555
Brightcove, Inc. (a)	5,506		56,381
Cardlytics, Inc. (a) (b)	3,578		252,499
Cerence, Inc. (a) (b)	5,016		245,132
Cloudera, Inc. (a) (b)	27,947		304,343
CommVault Systems, Inc. (a)	5,700		232,560
Computer Programs & Systems, Inc.	1,731		47,793
Cornerstone OnDemand, Inc. (a)	8,272		300,770
Covetrus, Inc. (a) CSG Systems International, Inc.	13,387 4,453		326,643 182,350
Daily Journal Corp. (a) (b)	154		37,268
Digi International, Inc. (a)	4,038		63,114
Digital Turbine, Inc. (a)	11,241		368,030
Domo, Inc. Class B (a)	3,478		133,312
Donnelley Financial Solutions, Inc. (a)	4,201		56,125
Ebix, Inc. (b)	3,620		74,572
eGain Corp. (a)	2,775		39,322
Envestnet, Inc. (a)	7,246		559,101
Evolent Health, Inc. Class A (a)	10,296		127,773
Glu Mobile, Inc. (a)	19,928		152,947
	37 1 0		
	Number of Shares		Value
GTY Technology Holdings, Inc. (a) (b)	6,487	\$	17,191
Health Catalyst, Inc. (a) (b)	4,552	φ	166,603
IBEX Ltd. (a)	642		9,874
Immersion Corp. (a)	2,275		16,039
Inovalon Holdings, Inc. Class A (a)	10,063		266,166
Intelligent Systems Corp. (a)	1,014		39,526
j2 Global, Inc. (a)	6,179		427,710
LivePerson, Inc. (a) (b)	8,415		437,496
ManTech International Corp. Class A	3,705		255,200
MicroStrategy, Inc. Class A (a)	1,053		158,540
MobileIron, Inc. (a)	13,474		94,453
Model N, Inc. (a)	4,648		163,981
NantHealth, Inc. (a)	3,944		9,229
NextGen Healthcare, Inc. (a)	7,671		97,728
Omnicell, Inc. (a)	5,795		432,655
Ontrak, Inc. (a) (b)	1,107		66,420
Park City Group, Inc. (a)	1,806		8,904
PDF Solutions, Inc. (a)	4,017		75,158
Phreesia, Inc. (a) Progress Software Corp.	3,852 6,120		123,765 224,482
Hogicos Software Corp.	0,120		44,404
https://massmutual.prospectus-express.com/print.asp?doctype=ann&clientid=massmutpre&fundid=57629S539			286/49
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Number of Shares

Value

DDOG H H' I ()	5 2 5 2	170.075
PROS Holdings, Inc. (a)	5,353	170,975
QAD, Inc. Class A	1,572	66,338
Red Violet, Inc. (a)	891	16,448
Rosetta Stone, Inc. (a)	3,193	95,726
SailPoint Technologies Holding, Inc. (a)	12,015	475,434
Sapiens International Corp. NV	3,498	106,969
Schrodinger, Inc. /United States (a) (b)	3,982	189,185
Seachange International, Inc. (a)	4,410	3,838
Simulations Plus, Inc.	1,923	144,917
Smith Micro Software, Inc. (a)	4,894	18,255
Sprout Social, Inc. Class A (a)	3,718	143,143
SPS Commerce, Inc. (a)	4,795	373,387
SVMK, Inc. (a)	16,606	367,159
SWK Holdings Corp. (a)	519	7,266
Synchronoss Technologies, Inc. (a)	5,844	17,590
Tabula Rasa HealthCare, Inc. (a) (b)	2,792	113,830
Upland Software, Inc. (a)	3,550	133,835
Verint Systems, Inc. (a)	8,739	421,045
Veritone, Inc. (a) (b)	3,239	29,669
Verra Mobility Corp. (a)	18,236	176,160
Workiva, Inc. (a)	5,337	297,591
Xperi Holding Corp.	14,647	168,294
Yext, Inc. (a) (b)	13,792	209,363
Zuora, Inc. Class A (a) (b)	13,824	142,940
	· · · · · ·	14,943,300
	-	26,974,940

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

	Number of Shares	Value
Utilities — 3.2%		
Electric — 1.7% ALLETE, Inc.	7,109	\$ 367,820
Ameresco, Inc. Class A (a)	3,284	109,686
Atlantic Power Corp. (a) (b)	12,791	25,070
Avista Corp. Black Hills Corp.	9,189 8,584	313,529 459,158
Brookfield Renewable Corp.	9,341	547,383
Clearway Energy, Inc. Class A	4,713	116,411
Clearway Energy, Inc. Class C Genie Energy Ltd. Class B	11,104 1,661	299,364 13,288
MGE Energy, Inc.	4,973	311,608
NorthWestern Corp.	6,921	336,637
Ormat Technologies, Inc.	5,462	322,859
Otter Tail Corp. PNM Resources, Inc.	5,579 10,841	201,792 448,058
Portland General Electric Co.	12,282	436,011
Spark Energy, Inc. Class A	1,677	13,953
Unitil Corp.	2,022	78,130 4,400,757
Gas — 1.0% Brookfield Infrastructure Corp. Class A	4,445	246,208
Chesapeake Utilities Corp.	2,202	185,629
New Jersey Resources Corp.	13,007	351,449
Northwest Natural Holding Co.	4,156	188,641
ONE Gas, Inc. RGC Resources, Inc.	7,158 990	493,974 23,215
South Jersey Industries, Inc.	13,767	265,290
Southwest Gas Holdings, Inc.	7,647	482,526
Spire, Inc.	6,854	364,633 2,601,565
Water — 0.5% American States Water Co.	5,034	377,298
Arch Resources, Inc.	2,060	87,509
Artesian Resources Corp. Class A	1,135	39,123
California Water Service Group	6,802	295,547
Consolidated Water Co. Ltd. Global Water Resources, Inc.	2,120 1,602	22,069 17,270
Middlesex Water Co.	2,320	144,188
PICO Holdings, Inc. (a)	2,096	18,780
SJW Group	3,603	219,279
	Number of Shares	Value
The York Water Co.	1,777	\$ 75,115
		1,296,178
		8,298,500
TOTAL COMMON STOCK (Cost \$258,080,229)		257,657,360
TOTAL EQUITIES (Cost \$258,080,229)		257,657,360
WARRANTS — 0.0% Consumer, Non-cyclical — 0.0% Health Care – Products — 0.0% Pulse Biosciences, Inc. (c) (d)	49	234
TOTAL WARRANTS (Cost \$—)		234
RIGHTS — 0.0% Consumer, Non-cyclical — 0.0% Biotechnology — 0.0%		
Tobira Therapeutics, Inc. CVR (c) (d)  Pharmaceuticals — 0.0%	1,376	10,471
GTx, Inc. CVR (b) (c) (d)	111	_
Omthera Pharmaceuticals, Inc. CVR (c) (d)	428	
		10,471
TOTAL RIGHTS (Cost \$310)		10,471

MUTUAL FUNDS — 3.7%	
Diversified Financial Services — 3.7%	
State Street Navigator Securities Lending Prime Portfolio (f)	9,561,888
TOTAL MUTUAL FUNDS (Cost \$9,561,888)	
TOTAL LONG-TERM INVESTMENTS (Cost \$267,642,427)	

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

189

9,561,888

9,561,888

267,229,953

MM Russell 2000 Small Cap Index Fund — Portfolio of Investments (Continued)

		Principal Amount	Value
SHORT-TERM INVESTMENTS — 0.4% U.S. Treasury Bill — 0.4% U.S. Treasury Bill 0.112%1/28/21(g)	<b>'</b> \$	1,155,000	\$ 1,154,613
TOTAL SHORT-TERM INVESTMENTS (Cost \$1,154,580)			1,154,613
TOTAL INVESTMENTS — 103.6% (Cost \$268,797,007) (h)			268,384,566
Other Assets/(Liabilities) — (3.6)%			 (9,338,269)
NET ASSETS — 100.0%			\$ 259,046,297

### **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, 2020, was \$27,159,368 or 10.48% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$18,356,870 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, 2020, these securities amounted to a value of \$37,880 or 0.01% 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, 2020, the aggregate market value of these securities amounted to \$271,807 or 0.10% of net assets.
- (f) Represents investment of security lending cash collateral. (*Note 2*).
- (g) A portion of this security is pledged/held as collateral for open derivatives. (Note 2).
- (h) See Note 6 for aggregate cost for federal tax purposes.

#### **Futures contracts**

	Expiration Date	Number of Contracts	Notional Amount	Uni Appi	lue/ Net realized reciation/ reciation)
Long					
Russell 2000 E Mini Index	12/18/20	21	\$ 1,571,699	\$	7,921

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

MassMutual Select Mid Cap Growth Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 97.9%		
COMMON STOCK — 97.5%  Basic Materials — 1.6%		
Chemicals — 1.1%		
FMC Corp. Procore Technologies, Inc. (Acquired 7/15/20, Cost \$724,815) (a) (b) (c) (d)	342,806 16,107	\$ 36,306,584 724,815
RPM International, Inc.	381,000	31,562,040
The Sherwin-Williams Co.	34,279	23,883,550
M:-: 0.50/		92,476,989
Mining — 0.5%  Kirkland Lake Gold Ltd. (e)	900,000	43,857,000
111111111 2 1111 (e)	,,,,,,,	136,333,989
Communications — 4.4%		
Internet — 3.7% Etsy, Inc. (d)	287,000	34,907,810
GoodRx Holdings, Inc. Class A (d)	34,682	1,928,319
IAC/InterActiveCorp (d)	482,033	57,737,913
Match Group, Inc. (d) Okta, Inc. (d)	952,000 158,763	105,338,800 33,951,467
Spotify Technology SA (d)	232,000	56,276,240
Twitter, Inc. (d)	750,020	33,375,890
Telecommunications — 0.7%		323,516,439
Corning, Inc.	1,719,000	55,712,790
		379,229,229
Consumer, Cyclical — 14.6% Airlines — 0.2%		
Alaska Air Group, Inc.	381,000	13,956,030
Apparel — 0.4%	Ź	<del></del>
Tapestry, Inc.	231,000	3,610,530
VF Corp.	383,000	26,905,750 30,516,280
Auto Parts & Equipment — 0.7%		
Aptiv PLC	676,000	61,975,680
Visteon Corp. (d)	12,701	879,163 62,854,843
Entertainment — 1.7%		02,031,013
Caesars Entertainment, Inc. (d) (e)	1,323,573	74,199,502
DraftKings, Inc. Class A (d) (e) Vail Resorts, Inc.	394,000 252,000	23,182,960 53,920,440
van Resorts, me.	232,000	151,302,902
Leisure Time — 0.2%		
Planet Fitness, Inc. Class A (d)  Lodging — 1.7%	216,135	13,318,239
Hilton Worldwide Holdings, Inc.	764,000	65,184,480
	N	
	Number of Shares	Value
Marriott International, Inc. Class A	279,000	\$ 25,829,820
MGM Resorts International	2,759,000	60,008,250
Retail — 9.4%		151,022,550
Advance Auto Parts, Inc.	61,953	9,509,786
Burlington Stores, Inc. (d)	521,816	107,541,059
CarMax, Inc. (d) Carvana Co. (d) (e)	180,000 133,470	16,543,800 29,771,818
Casey's General Stores, Inc.	445,000	79,054,250
Chipotle Mexican Grill, Inc. (d)	38,000	47,260,980
Dollar General Corp. Dollar Tree, Inc. (d)	626,983 620,000	131,428,176 56,630,800
Domino's Pizza, Inc.	61,566	26,182,789
Dunkin' Brands Group, Inc.	667,000	54,633,970
Five Below, Inc. (d) Floor & Decor Holdings, Inc. Class A (d)	112,000 294,256	14,224,000 22,010,349
Lululemon Athletica, Inc. (d)	154,083	50,750,318
O'Reilly Automotive, Inc. (d)	217,583	100,323,170
Ross Stores, Inc.	544,626	50,824,498
Ulta Beauty, Inc. (d)	82,000	18,366,360

	815,056,123
Toys, Games & Hobbies — 0.3%	
Mattel, Inc. (d) 2,497,59	29,221,826
	1,267,248,793
Consumer, Non-cyclical — 32.1%	
Biotechnology — 5.1%	
ACADIA Pharmaceuticals, Inc. (d) 327,02	13,489,822
Alnylam Pharmaceuticals, Inc. (d) 240,00	34,944,000
Argenx SE ADR (d) 141,00	37,015,320
Ascendis Pharma A/S ADR (d) 86,00	00 13,271,520
BioMarin Pharmaceutical, Inc. (d) 212,63	16,177,042
Exact Sciences Corp. (d) (e) 748,60	76,320,586
Illumina, Inc. (d) 30,48	9,422,613
Incyte Corp. (d) 810,53	72,737,142
Ionis Pharmaceuticals, Inc. (d) 576,00	27,331,200
Moderna, Inc. (d) 151,23	10,699,735
Royalty Pharma PLC Class A 365,49	15,376,417
Seattle Genetics, Inc. (d) 528,18	34 103,360,327
Ultragenyx Pharmaceutical, Inc. (d) 87,00	7,150,530
	437,296,254
Commercial Services — 9.7%	
Booz Allen Hamilton Holding Corp. 120,4	5 9,992,037
Bright Horizons Family Solutions, Inc. (d) 228,18	34,693,095
Cintas Corp. 133,42	25 44,407,843
CoStar Group, Inc. (d) 92,00	78,062,920
Dun & Bradstreet Holdings, Inc. (d) 791,00	20,297,060

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

MassMutual Select Mid Cap Growth Fund — Portfolio of Investments (Continued)

	Number of	Volum
P. 16. T	Shares	Value
Equifax, Inc.	335,000	\$ 52,561,500
FleetCor Technologies, Inc. (d)	290,000	69,049,000
Gartner, Inc. (d)	173,000	21,616,350
Global Payments, Inc. IHS Markit Ltd.	516,104	91,649,748
	1,056,749 67,000	82,965,364
MarketAxess Holdings, Inc. Moody's Corp.	77,124	32,266,530 22,354,391
Quanta Services, Inc.	525,659	27,786,335
Square, Inc. Class A (d)	531,922	86,463,921
TransUnion	819,000	68,902,470
Verisk Analytics, Inc.	405,000	75,050,550
Wework Companies, Inc., Class A (Acquired 5/26/15, Cost \$240,273) (a) (b) (c) (d)	16,955	75,050,550
WEX, Inc. (d)	135,000	18,760,950
WEA, Inc. (d)	155,000	836,880,064
Foods — 0.5%		030,000,001
Sprouts Farmers Market, Inc. (d)	859,000	17,978,870
TreeHouse Foods, Inc. (d)	670,000	27,155,100
rectiouse roots, me. (a)	070,000	45,133,970
Health Care – Products — 10.5%		43,133,770
Alcon, Inc. (d)	786,660	44,800,287
Align Technology, Inc. (d)	72,000	23,569,920
Avantor, Inc. (d)	2,489,000	55,977,610
Bruker Corp.	1,838,000	73,060,500
The Cooper Cos., Inc.	339,973	114,611,698
Edwards Lifesciences Corp. (d)	147,261	11,754,373
Hologic, Inc. (d)	2,852,925	189,633,925
ICU Medical, Inc. (d)	156,000	28,510,560
IDEXX Laboratories, Inc. (d)	133,895	52,635,463
Insulet Corp. (d)	158,723	37,552,274
Quidel Corp. (d)	105,500	23,144,590
ResMed, Inc.	99,423	17,044,085
Steris PLC	126,677	22,319,221
Teleflex, Inc.	491,636	167,362,727
West Pharmaceutical Services, Inc.	162,000	44,533,800
	ŕ	906,511,033
Health Care – Services — 2.4%		700,511,035
Health Care – Services — 2.4% Acadia Healthcare Co., Inc. (d)	958,000	28,241,840
Health Care – Services — 2.4% Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d)	958,000 1,524,000	28,241,840
Acadia Healthcare Co., Inc. (d)	· ·	
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d)	1,524,000	28,241,840 130,545,840
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc.	1,524,000 39,312 72,000	28,241,840 130,545,840 16,270,844
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d)	1,524,000 39,312	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d)	1,524,000 39,312 72,000	28,241,840 130,545,840 16,270,844 13,178,880
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)	1,524,000 39,312 72,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8%	1,524,000 39,312 72,000 552,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884 49,601,920
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp.	1,524,000 39,312 72,000 552,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp.	1,524,000 39,312 72,000 552,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884 49,601,920 22,566,940
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp.	1,524,000 39,312 72,000 552,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884 49,601,920 22,566,940
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp.	1,524,000 39,312 72,000 552,000 388,000 737,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884 49,601,920 22,566,940
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp.	1,524,000 39,312 72,000 552,000 388,000 737,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884 49,601,920 22,566,940 72,168,860
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.	1,524,000 39,312 72,000 552,000 388,000 737,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884 49,601,920 22,566,940 72,168,860
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.	1,524,000 39,312 72,000 552,000 388,000 737,000 Number of Shares 1,465,000 334,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860   Value  \$ 24,275,050 14,605,820
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d)	1,524,000 39,312 72,000 552,000 388,000 737,000 Number of Shares 1,465,000 334,000 57,234	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d)	1,524,000 39,312 72,000 552,000 388,000 737,000 Number of Shares 1,465,000 334,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d)	1,524,000 39,312 72,000 552,000 388,000 737,000 Number of Shares 1,465,000 334,000 57,234 1,790,000 256,083	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d)	1,524,000 39,312 72,000 552,000 388,000 737,000 Number of Shares 1,465,000 334,000 57,234 1,790,000 256,083 67,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d)	1,524,000 39,312 72,000 552,000 388,000 737,000 Number of Shares 1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d)	1,524,000 39,312 72,000 552,000 388,000 737,000 Number of Shares 1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860   Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560 271,660,639
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC PRA Health Sciences, Inc. (d)	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860   Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC PRA Health Sciences, Inc. (d)	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560 271,660,639
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC PRA Health Sciences, Inc. (d)  Diversified — 0.4% Holding Company — Diversified — 0.4%	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000 574,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560 271,660,639 2,778,306,704
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC PRA Health Sciences, Inc. (d)  Diversified — 0.4% Holding Company — Diversified — 0.4% Churchill Capital Corp. III Class A (d) (e)	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000 574,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560 271,660,639 2,778,306,704
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC PRA Health Sciences, Inc. (d)  Diversified — 0.4% Holding Company — Diversified — 0.4%	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000 574,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560 271,660,639 2,778,306,704
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC PRA Health Sciences, Inc. (d)  Diversified — 0.4% Holding Company — Diversified — 0.4% Churchill Capital Corp. III Class A (d) (e) Pershing Square Tontine Holdings Ltd. Class A (d)	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000 574,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560 271,660,639 2,778,306,704
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC PRA Health Sciences, Inc. (d)  Diversified — 0.4% Holding Company — Diversified — 0.4% Churchill Capital Corp. III Class A (d) (e) Pershing Square Tontine Holdings Ltd. Class A (d) Energy — 0.7%	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000 574,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560 271,660,639 2,778,306,704
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC PRA Health Sciences, Inc. (d)  Diversified — 0.4% Holding Company – Diversified — 0.4% Churchill Capital Corp. III Class A (d) (e) Pershing Square Tontine Holdings Ltd. Class A (d) Energy — 0.7% Oil & Gas — 0.7%	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000 574,000  1,919,000 720,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560 271,660,639 2,778,306,704  19,669,750 16,336,800 36,006,550
Acadia Healthcare Co., Inc. (d) Catalent, Inc. (d) Humana, Inc. Molina Healthcare, Inc. (d) PPD, Inc. (d)  Household Products & Wares — 0.8% Avery Dennison Corp. Reynolds Consumer Products, Inc.  Pharmaceuticals — 3.1% Alkermes PLC (d) Dentsply Sirona, Inc. DexCom, Inc. (d) Elanco Animal Health, Inc. (d) Horizon Therapeutics PLC (d) MyoKardia, Inc. (d) Neurocrine Biosciences, Inc. (d) Perrigo Co. PLC PRA Health Sciences, Inc. (d)  Diversified — 0.4% Holding Company — Diversified — 0.4% Churchill Capital Corp. III Class A (d) (e) Pershing Square Tontine Holdings Ltd. Class A (d) Energy — 0.7%	1,524,000 39,312 72,000 552,000  388,000 737,000  Number of Shares  1,465,000 334,000 57,234 1,790,000 256,083 67,000 285,000 970,000 574,000	28,241,840 130,545,840 16,270,844 13,178,880 20,418,480 208,655,884  49,601,920 22,566,940 72,168,860  Value  \$ 24,275,050 14,605,820 23,593,572 49,994,700 19,892,527 9,134,110 27,405,600 44,532,700 58,226,560 271,660,639 2,778,306,704

Pioneer Natural Resources Co. Venture Global LNG, Inc., Series B (Acquired 3/08/18, Cost \$652,320) (a) (b) (c) (d) Venture Global LNG, Inc., Series C (Acquired 10/16/17-3/08/18, Cost \$4,872,708) (a) (b) (c) (d)	240,000 216 1,328	20,637,600 831,168 5,110,144 60,463,072
Financial — 5.0%	_	,,
Banks — 0.5%		
SVB Financial Group (d)	94,062	22,633,198
Webster Financial Corp.	782,000	20,652,620
		43,285,818
Diversified Financial Services — 1.6%		
Cboe Global Markets, Inc.	574,000	50,362,760
Nasdaq, Inc.	173,227	21,256,685
Raymond James Financial, Inc.	235,000	17,098,600
Tradeweb Markets, Inc. Class A	844,000	48,952,000
		137,670,045
Insurance — 1.6%		
Aon PLC Class A	170,925	35,261,827
Assurant, Inc.	371,000	45,006,010
Axis Capital Holdings Ltd.	707,000	31,136,280
GoHealth, Inc. Class A (d)	512,000	6,668,800
Kemper Corp.	219,000	14,635,770

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

MassMutual Select Mid Cap Growth Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Selectquote, Inc. (d)	326,000	\$ 6,601,500
		139,310,187
Private Equity — 0.9%  KKR & Co., Inc. Class A  Proof Forting Annual Trusts (DEUTS) — 0.49/	2,347,737	80,621,289
Real Estate Investment Trusts (REITS) — 0.4% SBA Communications Corp.	109,274	34,801,584
SDA Communications Corp.	107,274	435,688,923
Industrial — 16.6%		
Aerospace & Defense — 0.6% L3 Harris Technologies, Inc.	314,928	53,487,372
Building Materials — 0.7% Builders FirstSource, Inc. (d)	437,163	14 260 257
Martin Marietta Materials, Inc.	76,000	14,260,257 17,887,360
Masco Corp.	165,824	9,141,877
Vulcan Materials Co.	134,165	18,184,724
Commercial Services — 0.7%		59,474,218
Terminix Global Holdings, Inc. (d)	1,473,000	58,743,240
Electronics — 5.1% Agilent Technologies, Inc.	1,247,211	125,893,478
Allegion PLC	117,000	11,572,470
Amphenol Corp. Class A	456,709	49,447,883
Fortive Corp.	919,000	70,036,990
Keysight Technologies, Inc. (d)	755,000 1,214,000	74,578,900
National Instruments Corp. Roper Technologies, Inc.	1,214,000	43,339,800 64,344,059
resper recimiologics, me.	102,031	439,213,580
Environmental Controls — 0.8%		
Stericycle, Inc. (d)	256,524	16,176,404
Waste Connections, Inc.	484,303	50,270,651 66,447,055
Hand & Machine Tools — 0.6%		
Colfax Corp. (d)	1,596,000	50,050,560
Machinery – Construction & Mining — 0.5% BWX Technologies, Inc.	824,000	46,399,440
Machinery – Diversified — 2.6%	226,000	14.712.600
Cognex Corp. IDEX Corp.	226,000 483,000	14,712,600 88,104,030
Ingersoll Rand, Inc. (d)	2,691,000	95,799,600
Rockwell Automation, Inc.	108,145	23,865,439
Miscellaneous - Manufacturing — 0.9%		222,481,669
Textron, Inc.	2,318,000	83,656,620
Packaging & Containers — 2.9%		
Ball Corp. Packaging Corp. of America	2,310,847 187,000	192,077,603 20,392,350
	Number of	
	Shares	Value
Sealed Air Corp.	1,046,000	\$ 40,595,260
Transportation — 1.2%		253,065,213
J.B. Hunt Transport Services, Inc.	619,000	78,229,220
Knight-Swift Transportation Holdings, Inc.	603,949	24,580,724
		102,809,944
Technology — 21.1%		1,435,828,911
Computers — 0.7%		
Crowdstrike Holdings, Inc. Class A (d)	174,000	23,893,680
Genpact Ltd.	393,250	15,317,088
Leidos Holdings, Inc.	213,742	19,055,099 58,265,867
Semiconductors — 8.2%		30,203,007
Advanced Micro Devices, Inc. (d)	630,503	51,694,941
Cree, Inc. (d)	182,377	11,624,710
Entegris, Inc. Inphi Corp. (d)	590,000 192,000	43,860,600 21,552,000
KLA Corp.	203,510	39,428,027
Lam Research Corp.	121,886	40,435,680

Marvell Technology Group Ltd.	3,288,489	130,553,013
Maxim Integrated Products, Inc.	872,000	58,955,920
Microchip Technology, Inc. (e)	1,497,106	153,842,613
Monolithic Power Systems, Inc.	55,844	15,614,541
Skyworks Solutions, Inc.	382,000	55,581,000
Xilinx, Inc.	854,744	89,098,515
,		712,241,560
Software — 12.2%		, , , , , , , , , , , , ,
Atlassian Corp. PLC Class A (d)	476,018	86,535,312
Autodesk, Inc. (d)	74,833	17,287,172
Bentley Systems, Inc. Class A (d) (e)	89,428	2,808,039
Bill.com Holdings, Inc. (d)	115,000	11,535,650
Black Knight, Inc. (d)	715,000	62,240,750
Broadridge Financial Solutions, Inc.	191,000	25,212,000
Ceridian HCM Holding, Inc. (d)	775,000	64,053,750
Citrix Systems, Inc.	96,000	13,220,160
Clarivate PLC (d)	2,851,000	88,352,490
Coupa Software, Inc. (d)	149,496	40,997,783
DocuSign, Inc. (d)	477,000	102,669,480
Dynatrace, Inc. (d)	402,070	16,492,911
Electronic Arts, Inc. (d)	150,320	19,603,231
Fisery, Inc. (d)	192,000	19,785,600
Five9, Inc. (d)	300,072	38,913,337
MongoDB, Inc. (d) (e)	155,515	36,003,278
MSCI, Inc.	76,477	27,285,464
Paycom Software, Inc. (d)	98,793	30,754,261
RingCentral, Inc. Class A (d)	139,728	38,370,706

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

MassMutual Select Mid Cap Growth Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
Slack Technologies, Inc. Class A (d) (e)	471,000	\$ 12,651,060
Snowflake, Inc. Class A (d) (e)	13,980	3,508,980
Splunk, Inc. (d)	598,270	112,552,535
SS&C Technologies Holdings, Inc	332,000	20,092,640
Veeva Systems, Inc. Class A (d)	409,130	115,043,265
Workday, Inc. Class A (d)	92,640	19,929,643
Zynga, Inc. Class A (d)	3,387,000	30,889,440
		1,056,788,937
Utilities — 1.0%		1,827,296,364
Electric — 0.8%		
Eversource Energy	190,000	15,874,500
Sempra Energy	429,000	50,776,440
C 0.20/		66,650,940
Gas — 0.2%	225 000	21 507 750
Atmos Energy Corp.	225,000	21,507,750
		88,158,690
TOTAL COMMON STOCK (Cost \$6,358,116,117)		8,444,561,225
PREFERRED STOCK — 0.4% Communications — 0.1%		
Internet — 0.1%		
Roofoods, Ltd., Series F (Acquired 9/12/17, Cost \$5,955,543) (a) (b) (c) (d)	16,844	6,546,421
Roofoods, Ltd., Series G (Acquired 9/12/17, Cost \$5,955,543) (a) (b) (c) (d)	630	263,278
		6,809,699
Consumer, Cyclical — 0.3%		
Auto Manufacturers — 0.3%		
Rivian Automotive, Inc., Series D (Acquired 12/23/19, Cost \$11,560,694) (a) (b) (c) (d)	1,076,014	16,667,457
Rivian Automotive, Inc., Series E (Acquired 7/10/20, Cost \$6,096,028) (a) (b) (c) (d)	393,546	6,096,028
		22,763,485
Consumer, Non-cyclical — 0.0%		
Commercial Services — 0.0%  Wework Companies, Inc., Series D-1 (Acquired 12/09/14, Cost \$1,394,302) (a) (b) (c) (d)	92.726	
Wework Companies Inc. Series D-1 (Acquired 17/09/14 Cost \$1.394.307) (a) (b) (c) (d)		
	83,736	
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)	65,792	
	65,792	
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%	65,792 <b>Number of</b>	Value
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%	Number of Shares	
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%  DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d)	Number of Shares 9,982	\$ 2,291,178
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%	Number of Shares	\$ 2,291,178 483,210
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%  DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d)	Number of Shares 9,982	\$ 2,291,178
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%  DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d)  Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)	Number of Shares 9,982	\$ 2,291,178 483,210 2,774,388
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%  DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d)  Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)	Number of Shares 9,982	\$ 2,291,178 483,210 2,774,388 32,347,572
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%  DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d)  Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)	Number of Shares 9,982	\$ 2,291,178 483,210 2,774,388
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%  DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d)  Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0%	Number of Shares 9,982	\$ 2,291,178 483,210 2,774,388 32,347,572
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%  DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d)  Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0%  Diversified — 0.0%	Number of Shares 9,982	\$ 2,291,178 483,210 2,774,388 32,347,572
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%  DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d)  Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0%  Diversified — 0.0%  Holding Company — Diversified — 0.0%	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%  DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d)  Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0%  Diversified — 0.0%	Number of Shares 9,982	\$ 2,291,178 483,210 2,774,388 32,347,572
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0%  Software — 0.0%  DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d)  Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0%  Diversified — 0.0%  Holding Company — Diversified — 0.0%	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0% Software — 0.0% DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d) Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0% Diversified — 0.0% Holding Company — Diversified — 0.0% Pershing Square Tontine Holdings Ltd., Expires 7/24/25 (d)  TOTAL WARRANTS (Cost \$454,870)	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0% Software — 0.0% DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d) Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0% Diversified — 0.0% Holding Company — Diversified — 0.0% Pershing Square Tontine Holdings Ltd., Expires 7/24/25 (d)  TOTAL WARRANTS (Cost \$454,870)  MUTUAL FUNDS — 0.5%	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0% Software — 0.0% DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d) Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0% Diversified — 0.0% Pershing Square Tontine Holdings Ltd., Expires 7/24/25 (d)  TOTAL WARRANTS (Cost \$454,870)  MUTUAL FUNDS — 0.5% Diversified Financial Services — 0.5%	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797 573,736
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0% Software — 0.0% DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d) Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0% Diversified — 0.0% Holding Company — Diversified — 0.0% Pershing Square Tontine Holdings Ltd., Expires 7/24/25 (d)  TOTAL WARRANTS (Cost \$454,870)  MUTUAL FUNDS — 0.5%	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0% Software — 0.0% DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d) Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0% Diversified — 0.0% Pershing Square Tontine Holdings Ltd., Expires 7/24/25 (d)  TOTAL WARRANTS (Cost \$454,870)  MUTUAL FUNDS — 0.5% Diversified Financial Services — 0.5%	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797 573,736
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0% Software — 0.0% DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d) Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0% Diversified — 0.0% Holding Company — Diversified — 0.0% Pershing Square Tontine Holdings Ltd., Expires 7/24/25 (d)  TOTAL WARRANTS (Cost \$454,870)  MUTUAL FUNDS — 0.5% Diversified Financial Services — 0.5% State Street Navigator Securities Lending Prime Portfolio (f)	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797 573,736 573,736
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0% Software — 0.0% DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d) Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0% Diversified — 0.0% Holding Company — Diversified — 0.0% Pershing Square Tontine Holdings Ltd., Expires 7/24/25 (d)  TOTAL WARRANTS (Cost \$454,870)  MUTUAL FUNDS — 0.5% Diversified Financial Services — 0.5% State Street Navigator Securities Lending Prime Portfolio (f)  TOTAL MUTUAL FUNDS (Cost \$47,853,363)  TOTAL LONG-TERM INVESTMENTS (Cost \$6,435,564,901)	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797 573,736 573,736 47,853,363 47,853,363
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0% Software — 0.0% DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d) Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0% Diversified — 0.0% Holding Company – Diversified — 0.0% Pershing Square Tontine Holdings Ltd., Expires 7/24/25 (d)  TOTAL WARRANTS (Cost \$454,870)  MUTUAL FUNDS — 0.5% Diversified Financial Services — 0.5% State Street Navigator Securities Lending Prime Portfolio (f)  TOTAL MUTUAL FUNDS (Cost \$47,853,363)  TOTAL LONG-TERM INVESTMENTS (Cost \$6,435,564,901)  SHORT-TERM INVESTMENTS — 3.0%	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797 573,736 573,736 47,853,363 47,853,363
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0% Software — 0.0% DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d) Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0% Diversified — 0.0% Holding Company — Diversified — 0.0% Pershing Square Tontine Holdings Ltd., Expires 7/24/25 (d)  TOTAL WARRANTS (Cost \$454,870)  MUTUAL FUNDS — 0.5% Diversified Financial Services — 0.5% State Street Navigator Securities Lending Prime Portfolio (f)  TOTAL MUTUAL FUNDS (Cost \$47,853,363)  TOTAL LONG-TERM INVESTMENTS (Cost \$6,435,564,901)  SHORT-TERM INVESTMENTS — 3.0% Mutual Fund — 1.8%	Number of Shares  9,982 10,738  80,019	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797 573,736 573,736 47,853,363 47,853,363 8,525,335,896
Wework Companies, Inc., Series D-2 (Acquired 12/09/14, Cost \$1,095,513) (a) (b) (c) (d)  Technology — 0.0% Software — 0.0% DoorDash, Inc., Series H (Acquired 6/17/20, Cost \$2,291,178) (a) (b) (c) (d) Procore Technologies, Inc., Series B (Acquired 7/15/20, Cost \$483,210) (a) (b) (c) (d)  TOTAL PREFERRED STOCK (Cost \$29,140,551)  TOTAL EQUITIES (Cost \$6,387,256,668)  WARRANTS — 0.0% Diversified — 0.0% Holding Company – Diversified — 0.0% Pershing Square Tontine Holdings Ltd., Expires 7/24/25 (d)  TOTAL WARRANTS (Cost \$454,870)  MUTUAL FUNDS — 0.5% Diversified Financial Services — 0.5% State Street Navigator Securities Lending Prime Portfolio (f)  TOTAL MUTUAL FUNDS (Cost \$47,853,363)  TOTAL LONG-TERM INVESTMENTS (Cost \$6,435,564,901)  SHORT-TERM INVESTMENTS — 3.0%	Number of Shares  9,982 10,738	\$ 2,291,178 483,210 2,774,388 32,347,572 8,476,908,797 573,736 573,736 47,853,363 47,853,363

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

MassMutual Select Mid Cap Growth Fund — Portfolio of Investments (Continued)

	Principal Amount	Value
Repurchase Agreement — 1.2%  Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (g)	\$ 102,123,408	\$ 102,123,408
TOTAL SHORT-TERM INVESTMENTS (Cost \$255,944,303)		 255,944,303
TOTAL INVESTMENTS — 101.4% (Cost \$6,691,509,204) (h)		8,781,280,199
Other Assets/(Liabilities) — (1.4)%		 (119,945,764)
NET ASSETS — 100.0%		\$ 8,661,334,435

### **Abbreviation Legend**

ADR American Depositary Receipt

### Notes to Portfolio of Investments

Percentages are stated as a percent of net assets.

- (a) This security is fair valued in good faith in accordance with procedures approved by the Board of Trustees. At September 30, 2020, these securities amounted to a value of \$39,013,699 or 0.45% of net assets.
- (b) Investment was valued using significant unobservable inputs.
- (c) Restricted security. Certain securities are restricted as to resale. At September 30, 2020, these securities amounted to a value of \$39,013,699 or 0.45% of net assets. The Fund generally bears the costs, if any, associated with the disposition of restricted securities.
- (d) Non-income producing security.
- (e) Denotes all or a portion of security on loan. The total value of securities on loan as of September 30, 2020, was \$121,136,704 or 1.40% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$74,854,579 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).
- (f) Represents investment of security lending cash collateral. (Note 2).
- (g) Maturity value of \$102,123,408. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$104,166,016.
- (h) See Note 6 for aggregate cost for federal tax purposes.

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

MassMutual Select Small Cap Growth Equity Fund — Portfolio of Investments

**September 30, 2020** 

	Number of Shares	Value
EQUITIES — 98.3%		
COMMON STOCK — 98.1%		
Basic Materials — 0.9% Chemicals — 0.7%		
Cabot Corp.	31,618	\$ 1,139,197
Ingevity Corp. (a)	31,571	1,560,870
Methanex Corp. (b)	49,267	1,202,115
		3,902,182
Mining — 0.2%  SSR Mining Inc. (a) (b)	65 240	1 220 047
SSR Mining, Inc. (a) (b)	65,348	1,220,047 5,122,229
Communications — 3.4%		3,122,227
Internet — 2.4%		
Mimecast Ltd. (a)	69,210	3,247,333
Perficient, Inc. (a)	78,582	3,358,595
Q2 Holdings, Inc. (a) (b) Shutterstock, Inc.	44,400 25,124	4,051,944 1,307,453
Stamps.com, Inc. (a)	9,204	2,217,704
Veracode, Inc. (Escrow Shares) (Acquired 8/26/14, Cost \$57,059) (a) (c) (d) (e)	30,294	20,327
		14,203,356
Media — 0.8%		
Cable One, Inc.	1,806	3,405,087
The New York Times Co. Class A (b)	36,190	1,548,570
Telecommunications — 0.2%		4,953,657
Ciena Corp. (a)	29,668	1,177,523
C.C.L. CO.P. (a)	27,000	20,334,536
Consumer, Cyclical — 17.0%		·
Apparel — 1.6%		
Carter's, Inc.	18,191	1,574,977
Deckers Outdoor Corp. (a) Skechers U.S.A., Inc. Class A (a)	6,887 61,804	1,515,209 1,867,717
Steven Madden Ltd.	53,265	1,038,667
Wolverine World Wide, Inc.	141,604	3,659,047
		9,655,617
Auto Parts & Equipment — 0.9%		
Fox Factory Holding Corp. (a)	48,079	3,573,712
Visteon Corp. (a)	23,202	1,606,042
Distribution & Wholesale — 1.2%		5,179,754
Pool Corp.	14,655	4,902,684
SiteOne Landscape Supply, Inc. (a)	20,203	2,463,756
		7,366,440
Entertainment — 1.9%	16.462	2 (0( 0(0
Churchill Downs, Inc.	16,463	2,696,969
	Number of	
	Shares	Value
Cinemark Holdings, Inc. (b)	108,628	\$ 1,086,280
DraftKings, Inc. PIPE (Acquired 8/22/17-8/04/20, Cost \$1,598,094) (a) (c) (d)	87,703	5,132,169
Penn National Gaming, Inc. (a)	34,282	2,492,301
Home Builders — 2.2%		11,407,719
Cavco Industries, Inc. (a)	10,659	1,921,924
Century Communities, Inc. (a)	34,736	1,470,375
KB Home	16,053	616,275
Meritage Home Corp. (a)	21,844	2,411,359
Skyline Champion Corp. (a)	148,879	3,985,491
Thor Industries, Inc. (b)	24,661	2,349,207 12,754,631
Home Furnishing — 0.2%		12,/34,031
iRobot Corp. (a) (b)	16,262	1,234,286
Leisure Time — 1.7%		
Acushnet Holdings Corp.	49,120	1,650,923
BRP, Inc.	36,292	1,917,421
Planet Fitness, Inc. Class A (a) Polaris, Inc.	16,971 21,294	1,045,753 2,008,876
YETI Holdings, Inc. (a)	76,248	3,455,560
	, 0,2 10	
https://massmutual.prospectus-express.com/print.asp?doctype=ann&clientid=massmutpre&fundid=57629S539		300/49

	10,078,533
Lodging — 0.2%	
Choice Hotels International, Inc. 14,980	1,287,681
Retail — 7.1%	
BJ's Wholesale Club Holdings, Inc. (a) 56,289	2,338,808
BMC Stock Holdings, Inc. (a) 102,666	4,397,185
Denny's Corp. (a) 94,200	942,000
FirstCash, Inc. 25,484	1,457,940
Five Below, Inc. (a) 41,749	5,302,123
Floor & Decor Holdings, Inc. Class A (a) 33,996	2,542,901
Freshpet, Inc. (a) 49,581	5,535,719
La-Z-Boy, Inc. 56,688	1,793,041
Lithia Motors, Inc. Class A 8,480	1,932,931
Nu Skin Enterprises, Inc. Class A 42,018	2,104,682
Ollie's Bargain Outlet Holdings, Inc. (a) 27,924	2,439,161
Papa John's International, Inc.	1,553,858
Rush Enterprises, Inc. Class A 75,319	3,806,622
Vroom, Inc. (a) 30,347	1,571,368
Wingstop, Inc. 29,864	4,080,915
	41,799,254
	100,763,915

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

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

	Number of Shares	Value
Consumer, Non-cyclical — 28.2%		
Agriculture — 0.2%	10.557	Ф 1.245.400
Sanderson Farms, Inc. Vital Farms, Inc. (a)	10,557 6,349	\$ 1,245,409 257,325
vitai rainis, nic. (a)	0,349	1,502,734
Beverages — 0.2%		
The Boston Beer Co., Inc. Class A (a)	1,590	1,404,542
Biotechnology — 7.5%	26.255	2.054.475
Acceleron Pharma, Inc. (a) Akero Therapeutics, Inc. (a)	26,255 15,056	2,954,475 463,574
Allakos, Inc. (a) (b)	15,443	1,257,832
ALX Oncology Holdings, Inc. (a)	33,847	1,277,386
Amicus Therapeutics, Inc. (a)	198,433	2,801,874
Apellis Pharmaceuticals, Inc. (a) Arena Pharmaceuticals, Inc. (a)	77,315 26,905	2,332,594 2,012,225
Ascendis Pharma A/S ADR (a)	8,367	1,291,196
Biohaven Pharmaceutical Holding Co. Ltd. (a)	11,460	745,015
Blueprint Medicines Corp. (a)	13,413	1,243,385
ChemoCentryx, Inc. (a)	32,238	1,766,642
Constellation Pharmaceuticals, Inc. (a)	58,904	1,193,395
CRISPR Therapeutics AG (a) Deciphera Pharmaceuticals, Inc. (a)	8,543 18,023	714,537 924,580
Dicerna Pharmaceuticals, Inc. (a)	44,985	809,280
Freeline Therapeutics Holdings plc (a)	40,000	624,400
Halozyme Therapeutics, Inc. (a)	43,103	1,132,747
ImmunoGen, Inc. (a)	181,259	652,532
Iovance Biotherapeutics, Inc. (a) Kodiak Sciences, Inc. (a) (b)	32,628 41,702	1,074,114 2,469,175
Mersana Therapeutics, Inc. (a)	42,897	798,742
Mirati Therapeutics, Inc. (a)	11,506	1,910,571
NeoGenomics, Inc. (a)	65,936	2,432,379
PTC Therapeutics, Inc. (a)	27,772	1,298,341
RAPT Therapeutics, Inc. (a) Theravance Biopharma, Inc. (a) (b)	19,252 33,737	619,914 498,802
Turning Point Therapeutics, Inc. (a)	28,731	2,509,940
Ultragenyx Pharmaceutical, Inc. (a)	15,576	1,280,192
Veracyte, Inc. (a) (b)	73,224	2,379,048
Y-mAbs Therapeutics, Inc. (a)	75,039	2,880,747 44,349,634
Commercial Services — 4.2%		41,515,051
2U, Inc. (a) (b)	35,913	1,216,014
Avalara, Inc. (a)	29,621	3,771,938
Cardtronics PLC Class A (a) Chegg, Inc. (a)	64,879 41,394	1,284,604 2,957,187
Green Dot Corp. Class A (a)	20,385	1,031,685
Here Holdings, Inc. (a)	38,700	1,532,907
HMS Holdings Corp. (a)	53,252	1,275,386
	Number of	
Linnana Haldina Ing (a)	Shares	Value
Liveramp Holdings, Inc. (a) Monro, Inc.	68,841 6,311	\$ 3,563,899 256,037
Paylocity Holding Corp. (a)	26,720	4,313,143
TriNet Group, Inc. (a)	60,182	3,569,996
	,	24,772,796
Foods — 0.8% BellRing Brands, Inc. Class A (a)	78,731	1,632,881
Grocery Outlet Holding Corp. (a)	43,329	1,703,696
Performance Food Group Co. (a)	41,171	1,425,340
		4,761,917
Health Care – Products — 10.4%	0.101	1.010.022
10X Genomics, Inc. Class A (a) Avanos Medical, Inc. (a)	8,101 40,173	1,010,033 1,334,547
Axonics Modulation Technologies, Inc. (a) (b)	39,474	2,014,753
Bio-Techne Corp.	8,741	2,165,408
CareDx, Inc. (a)	53,010	2,011,200
GenMark Diagnostics, Inc. (a)	48,334	686,343
Glaukos Corp. (a) (b) Globus Medical, Inc. Class A (a)	17,614 77,902	872,245 3,857,707
Haemonetics Corp. (a)	16,533	1,442,504
£1 C79	10,033	1, 2, 2 0 1

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Hill-Rom Holdings, Inc.	16,579	1,384,512
Inspire Medical Systems, Inc. (a) (b)	33,012	4,260,199
Insulet Corp. (a)	26,095	6,173,816
Integer Holdings Corp. (a)	10,499	619,546
iRhythm Technologies, Inc. (a)	13,682	3,257,821
Masimo Corp. (a)	21,239	5,013,678
NanoString Technologies, Inc. (a) (b)	27,427	1,225,987
Novocure Ltd. (a)	8,838	983,758
Penumbra, Inc. (a)	13,264	2,578,256
Quidel Corp. (a)	20,839	4,571,660
Repligen Corp. (a)	42,720	6,302,909
Silk Road Medical, Inc. (a)	30,211	2,030,481
Tandem Diabetes Care, Inc. (a)	67,634	7,676,459
		61,473,822
Health Care – Services — 2.9%		
Acadia Healthcare Co., Inc. (a)	42,893	1,264,486
Addus HomeCare Corp. (a)	9,829	928,939
Amedisys, Inc. (a)	23,736	5,611,902
LHC Group, Inc. (a)	22,670	4,818,735
Medpace Holdings, Inc. (a)	38,771	4,332,659
		16,956,721
Pharmaceuticals — 2.0%		
Akebia Therapeutics, Inc. (a)	67,631	169,754
Global Blood Therapeutics, Inc. (a)	43,384	2,392,194
Heron Therapeutics, Inc. (a)	76,528	1,134,145
MyoKardia, Inc. (a)	18,707	2,550,325
PRA Health Sciences, Inc. (a)	13,810	1,400,886

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

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

	Number of Shares	Value
Reata Pharmaceuticals, Inc. Class A (a) (b)	5,024	\$ 489,438
Revance Therapeutics, Inc. (a)	48,715	1,224,695
TG Therapeutics, Inc. (a)	42,597	1,139,896
Tricida, Inc. (a) (b)	27,978	253,481
UroGen Pharma Ltd. (a) (b)	44,173	852,097 11,606,911
		166,829,077
Diversified — 0.2%		
Holding Company – Diversified — 0.2%		
BowX Acquisition Corp. (a)	132,557	1,360,035
Energy — 1.4% Energy – Alternate Sources — 1.3%		
Atlantica Sustainable Infrastructure PLC	52,118	1,491,096
First Solar, Inc. (a)	61,682	4,083,348
Maxeon Solar Technologies Ltd. (a) (b)	17,694	300,090
SunPower Corp. (a) (b)	141,556	1,770,866
011.0 G 0.40/		7,645,400
Oil & Gas — 0.1% Delek US Holdings, Inc.	55,607	618,906
Viper Energy Partners LP	49,516	372,360
viper Energy 1 artifets Er	47,510	991,266
		8,636,666
Financial — 10.9%		
Banks — 1.9%	(7.041	1 547 606
Ameris Bancorp Atlantic Union Bankshares Corp.	67,941 68,781	1,547,696 1,469,850
First Interstate BancSystem, Inc. Class A	49,972	1,591,608
National Bank Holdings Corp. Class A	55,419	1,454,749
Pinnacle Financial Partners, Inc.	26,694	950,039
Seacoast Banking Corp. of Florida (a)	79,354	1,430,753
Western Alliance Bancorp	94,832	2,998,588
D''C.   E' '.   C ' 2.20/		11,443,283
Diversified Financial Services — 3.3% Air Lease Corp.	44,911	1,321,282
Ares Management Corp. Class A	39,797	1,608,595
Artisan Partners Asset Management, Inc. Class A	13,944	543,676
Cohen & Steers, Inc.	21,966	1,224,385
Hamilton Lane, Inc. Class A	57,057	3,685,312
Hannon Armstrong Sustainable Infrastructure Capital, Inc. (b)	99,297	4,197,284
LPL Financial Holdings, Inc. PRA Group, Inc. (a)	42,918 92,236	3,290,523
rka Group, Inc. (a)	92,230	3,684,828 19,555,885
	Number of	Value
Insurance — 2.0%	Shares	<u>Value</u>
Assured Guaranty Ltd.	53,200	\$ 1,142,736
James River Group Holdings Ltd.	67,059	2,986,137
Kemper Corp.	22,077	1,475,406
Kinsale Capital Group, Inc.	13,127	2,496,493
MGIC Investment Corp. Selective Insurance Group, Inc.	163,610 26,668	1,449,585 1,373,135
Third Point Reinsurance Ltd. (a)	152,992	1,063,294
Time I one removalance Etc. (a)	132,772	11,986,786
Investment Companies — 0.1% StepStone Group, Inc. Class A (a) Real Estate — 0.7%	18,866	502,024
McGrath RentCorp	29,414	1,752,780
Redfin Corp. (a) (b)	40,956	2,044,933
	- / 4	3,797,713
Real Estate Investment Trusts (REITS) — 2.2%	105 100	2 202 601
Essential Properties Realty Trust, Inc.	185,190	3,392,681
First Industrial Realty Trust, Inc.  JBG SMITH Properties	66,936 50,999	2,664,053 1,363,713
Life Storage, Inc.	16,355	1,721,691
PotlatchDeltic Corp.	36,408	1,532,777
PS Business Parks, Inc.	13,897	1,700,854
Xenia Hotels & Resorts, Inc.	99,849	876,674
		13,252,443
		_

Savings & Loans — 0.7%		
OceanFirst Financial Corp.	89,567	1,226,172
Sterling Bancorp	252,167	2,652,797
		3,878,969
		64,417,103
Industrial — 17.3%		
Aerospace & Defense — 0.8%		
Aerojet Rocketdyne Holdings, Inc. (a)	71,246	2,842,003
Mercury Systems, Inc. (a)	22,947	1,777,475
		4,619,478
Building Materials — 2.6%		_
The AZEK Co., Inc. (a)	41,841	1,456,485
Gibraltar Industries, Inc. (a)	25,498	1,660,940
Louisiana-Pacific Corp.	114,641	3,383,056
Simpson Manufacturing Co., Inc.	27,575	2,679,187
SPX Corp. (a)	45,685	2,118,870
Trex Co., Inc. (a)	54,700	3,916,520
		15,215,058
Electrical Components & Equipment — 1.6%		
EnerSys	26,442	1,774,787
Generac Holdings, Inc. (a)	17,677	3,422,974
Novanta, Inc. (a)	37,353	3,934,765
		9,132,526

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

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

Number of Shares	Value
Electronics — 0.3%	1 020 07
II-VI, Inc. (a) (b) Engineering & Construction — 1.1%	3 \$ 1,828,97
Comfort Systems USA, Inc. 58,686	
TopBuild Corp. (a) 21,746	
Environmental Controls — 1.4%	6,734,74
Casella Waste Systems, Inc. Class A (a) 68,480	3,824,60
Clean Harbors, Inc. (a) 25,606	
Tetra Tech, Inc.	
Hand & Machine Tools — 0.9%	8,469,06
Colfax Corp. (a) 34,729	1,089,10
Kennametal, Inc.	3,764,08
Regal Beloit Corp. 6,250	
Machinery – Construction & Mining — 0.5%	5,439,87
Argan, Inc. 74,640	3,128,16
Machinery – Diversified — 2.0%	
Albany International Corp. Class A 24,402	
Chart Industries, Inc. (a) 79,756 Curtiss-Wright Corp. 28,150	
SPX FLOW, Inc. (a) 49,404	
	11,553,34
Metal Fabricate & Hardware — 2.3%	0.551.50
Advanced Drainage Systems, Inc. 136,957 Rexnord Corp. 169,351	
Rexhiota Corp.	13,605,029
Miscellaneous - Manufacturing — 2.0%	
Axon Enterprise, Inc. (a)	
Enerpac Tool Group Corp. 80,009 Federal Signal Corp. 59,621	
ITT, Inc. 93,864	
John Bean Technologies Corp. 16,306	
	11,556,99
Packaging & Containers — 0.3% Graphic Packaging Holding Co. 132,718	3 1,869,99
Transportation — 1.3%	1,009,99
CryoPort, Inc. (a) (b) 55,385	
Kirby Corp. (a) 23,205	· · · · · · · · · · · · · · · · · · ·
Saia, Inc. (a) 34,569	9 4,360,534 7,825,10
Trucking & Leasing — 0.2%	7,023,100
GATX Corp. 21,266	
	102,334,05
Number of	
Shares	Value
Technology — 18.6% Computers — 3.0%	
Endava PLC Sponsored ADR (a) (b) 23,691	1,496,08
Globant SA (a) 16,089	
Kornit Digital Ltd. (a) 80,347	
Lumentum Holdings, Inc. (a) 16,231 Rapid7, Inc. (a) 74,382	
Varonis Systems, Inc. (a) 20,355	
20,555	17,715,63
Semiconductors — 5.6%	
ACM Research, Inc. Class A (a) (b) Entegris, Inc. 67,882	
FormFactor, Inc. (a) 28,400	
Inphi Corp. (a) 20,557	2,307,52
Lattice Semiconductor Corp. (a)  190,583	
MACOM Technology Solutions Holdings, Inc. (a) 46,486 MKS Instruments, Inc. 53,205	
Monolithic Power Systems, Inc. 20,824	
Power Integrations, Inc.	661,47
Tower Semiconductor Ltd. (a) 233,283	
	32,963,63

Software — 10.0%		
1Life Healthcare, Inc. (a)	64,407	1,826,583
Bandwidth, Inc. Class A (a) (b)	41,916	7,317,276
Bill.com Holdings, Inc. (a)	13,425	1,346,662
Cardlytics, Inc. (a) (b)	38,244	2,698,879
Cloudera, Inc. (a) (b)	143,230	1,559,775
Digital Turbine, Inc. (a)	50,587	1,656,218
Duck Creek Technologies, Inc. (a)	8,279	376,115
Envestnet, Inc. (a)	24,144	1,862,951
Everbridge, Inc. (a)	8,685	1,091,965
Five9, Inc. (a)	50,895	6,600,064
Health Catalyst, Inc. (a) (b)	51,835	1,897,161
HubSpot, Inc. (a)	17,704	5,173,640
j2 Global, Inc. (a) (b)	23,211	1,606,665
Jamf Holding Corp. (a)	8,905	334,917
JFrog Ltd. (a)	2,765	234,057
Manhattan Associates, Inc. (a)	47,403	4,526,512
ManTech International Corp. Class A	17,758	1,223,171
MongoDB, Inc. (a) (b)	14,183	3,283,506
nCino, Inc. (a) (b)	2,570	204,778
Oak Street Health, Inc. (a)	10,399	555,723
Omnicell, Inc. (a)	37,359	2,789,223
PagerDuty, Inc. (a) (b)	49,054	1,329,854
Phreesia, Inc. (a)	40,985	1,316,848
SailPoint Technologies Holding, Inc. (a)	31,598	1,250,333

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

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

	1	Number of Shares	Value
Sprout Social, Inc. Class A (a) (b)		43,763	\$ 1,684,876
Sumo Logic, Inc. (a) (b)		6,303	137,405
SVMK, Inc. (a) Vertex, Inc. Class A (a)		78,308 11,620	1,731,390 267,260
Zynga, Inc. Class A (a)		396,453	3,615,651
			59,499,458
Tiditation 0.20/			 110,178,725
Utilities — 0.2% Electric — 0.2%			
Portland General Electric Co.		36,148	1,283,254
TOTAL COMMON STOCK (Cost \$469,335,745)			 581,259,590
PREFERRED STOCK — 0.2% Communications — 0.1% Internet — 0.1%			
The Honest Company, Inc., Series D (Acquired 8/03/15, Cost \$650,636) (a) (c) (d) (e) Technology — 0.1% Software — 0.1%		14,220	 587,570
MarkLogic Corp., Series F (Acquired 4/27/15, Cost \$894,502) (a) (c) (d) (e)		77,018	 696,243
TOTAL PREFERRED STOCK (Cost \$1,545,139)			 1,283,813
TOTAL EQUITIES (Cost \$470,880,884)			 582,543,403
MUTUAL FUNDS — 1.6% Diversified Finance — 1.6%		10 (55	2 000 200
iShares Russell 2000 Growth ETF (b) iShares Russell 2000 ETF (b)		12,677 7,480	2,808,209 1,120,429
State Street Navigator Securities Lending Prime Portfolio (f)		5,473,204	5,473,204
		, ,	9,401,842
TOTAL MUTUAL FUNDS (Cost \$9,397,029)			 9,401,842
TOTAL LONG-TERM INVESTMENTS (Cost \$480,277,913)			 591,945,245
	1	Principal Amount	Value
SHORT-TERM INVESTMENTS — 1.3%	-		 ,
Repurchase Agreement — 1.3%  Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (g)	\$	7,422,792	\$ 7,422,792
TOTAL SHORT-TERM INVESTMENTS (Cost \$7,422,792)			 7,422,792
TOTAL INVESTMENTS — 101.2% (Cost \$487,700,705) (h)			599,368,037
Other Assets/(Liabilities) — (1.2)%			 (7,153,633)
NET ASSETS — 100.0%			\$ 592,214,404

### **Abbreviation Legend**

ADR American Depositary Receipt

ETF Exchange-Traded Fund

PIPE Private Investment in Public Equity

### 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, 2020, was \$46,520,081 or 7.86% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$42,103,432 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, 2020, these securities amounted to a value of \$6,436,309 or 1.09% of net assets.
- (d) Restricted security. Certain securities are restricted as to resale. At September 30, 2020, these securities amounted to a value of \$6,436,309 or 1.09% 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 \$7,422,792. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market

value, including accrued interest, of \$7,571,389.

(h) 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, 2020** 

	Number of Shares	Value	
EQUITIES — 97.2%			
COMMON STOCK — 96.6% Australia — 6.3%			
Afterpay Ltd. (a)	3,105	\$ 181,	
The AGL Energy Ltd.	9,014		092
AMP Ltd. (b) Ampol Ltd.	48,431 3,489		579 008
APA Group	16,884	125,	
Aristocrat Leisure Ltd.	8,145	175,	
ASX Ltd. Aurizon Holdings Ltd.	2,783 26,607	163,	008
AusNet Services	29,454		869
Australia & New Zealand Banking Group Ltd.	40,179	497,	
BHP Group Ltd.	41,965	1,079,	
BlueScope Steel Ltd. Brambles Ltd.	6,989 21,514	63, 161,	801
CIMIC Group Ltd. (a) (b)	1,649		970
Coca-Cola Amatil Ltd.	7,769	52,	973
Cochlear Ltd.	904	128,	
Coles Group Ltd. Commonwealth Bank of Australia	18,986 25,187	231, 1,151,	
Computershare Ltd.	7,251		662
Crown Resorts Ltd.	4,509		477
CSL Ltd.	6,463	1,331,	
Dexus Evolution Mining Ltd.	15,362 23,269		039 604
Fortescue Metals Group Ltd.	24,067	281,	
Goodman Group	23,310	300,	
The GPT Group	27,308		530
Insurance Australia Group Ltd.	33,446	105,	
Lendlease Corp Ltd.  Macquarie Group Ltd.	9,141 4,775	410,	403
Magellan Financial Group Ltd.	1,757		610
Medibank Pvt. Ltd.	38,844		973
Mirvae Group	51,971		396
National Australia Bank Ltd. Newcrest Mining Ltd.	45,308 11,539	578, 260,	
Northern Star Resources Ltd.	10,690	105,	
Orica Ltd.	6,092		504
Origin Energy Ltd.	24,056		386
Qantas Airways Ltd. (a) QBE Insurance Group Ltd.	12,901 20,980	37, 129,	588 843
Ramsay Health Care Ltd.	2,540	120,	
REA Group Ltd. (b)	820		792
Rio Tinto Ltd.	5,303	359,	
Santos Ltd. Scentre Group	24,380 74,843	85, 118,	558 424
Seema Group	71,013	110,	121
	Number of	<b>17.1</b> .	
SEEK Ltd.	Shares 4,665	<b>Value</b> \$ 71,	363
Sonic Healthcare Ltd.	6,529	155,	
South32 Ltd.	66,958	98,	180
Stockland	34,082		579
Suncorp Group Ltd. Sydney Airport	17,505 18,958	106,	338 806
Tabcorp Holdings Ltd.	29,581		991
Telstra Corp. Ltd.	60,171	120,	032
TPG Telecom Ltd. (a)	4,863		783
Transurban Group Treasury Wine Estates Ltd.	39,184 10,344	397, 66	108 371
Vicinity Centres	54,847		197
Washington H Soul Pattinson & Co. Ltd. (b)	1,775		958
Wesfarmers Ltd.	16,109	513,	
Westpac Banking Corp. WiseTech Global Ltd.	51,379 2,222	619,	941 778
Woodside Petroleum Ltd.	13,266	167,	
Woolworths Group Ltd.	18,139	474,	221
		12,622,	817

Austria — 0.1%		
ANDRITZ AG	1,108	34,134
Erste Group Bank AG (a)	3,996	83,570
OMV AG (a)	1,984	54,198
Raiffeisen Bank International AG (a)	2,364	36,139
Verbund AG	945	51,593
voestalpine AG	1,629	42,826
•	<u> </u>	302,460
Belgium — 0.9%		
Ageas	2,542	103,739
Anheuser-Busch InBev SA	10,833	584,739
Colruyt SA	850	55,156
Elia Group SA/NV (b)	475	47,425
Galapagos NV (a)	603	85,648
Groupe Bruxelles Lambert SA	1,604	144,570
KBC Group NV	3,615	181,014
Proximus SADP	2,002	36,546
Sofina SA	197	53,746
Solvay SA	1,032	88,746
Telenet Group Holding NV	750	29,073
UCB SA	1,836	208,498
Umicore SA	2,843	118,378
		1,737,278
Bermuda — 0.2%		
CK Infrastructure Holdings Ltd.	9,000	42,117
Dairy Farm International Holdings Ltd.	5,200	19,683
Hongkong Land Holdings Ltd.	17,600	65,547

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
Jardine Matheson Holdings Ltd.	3,100	\$ 123,040
Jardine Strategic Holdings Ltd.	3,400	67,359
Kerry Properties Ltd.	11,000	28,107
Pacific Century Premium Developments Ltd. (a)	7,143	1,879 347,732
Cayman Islands — 0.6% ASM Pacific Technology Ltd.	4,100	41,908
BeiGene Ltd. ADR (a)	581	166,422
Budweiser Brewing Co. APAC Ltd. (c) CK Asset Holdings Ltd.	24,225 37,245	70,766 181,721
CK Hutchison Holdings Ltd.	38,745	234,907
Melco Resorts & Entertainment Ltd. ADR	2,996	49,883
Microport Scientific Corp.	9,000	35,985
Sands China Ltd.	33,600	130,747
WH Group Ltd. (c) Wharf Real Estate Investment Co. Ltd.	137,072 24,000	111,566 98,247
Wynn Macau Ltd. (a)	22,800	36,498
Denmark — 2.5%	,	1,158,650
Ambu A/S Class B (b)	2,350	66,535
AP Moller - Maersk A/S Class A	49	71,573
AP Moller - Maersk A/S Class B Carlsberg A/S Class B	91 1,514	144,272 203,860
Chr Hansen Holding A/S	1,526	169,600
Coloplast A/S Class B	1,679	265,531
Danske Bank A/S (a)	9,994	135,374
Demant A/S (a) (b)	1,501	47,218
DSV PANALPINA A/S Genmab A/S (a)	2,930 941	478,145 341,689
GN Store Nord A/S	1,801	136,273
H Lundbeck A/S	941	31,019
Novo Nordisk A/S Class B	24,455	1,698,688
Novozymes A/S Class B	2,937	184,734
Orsted A/S (c) Pandora A/S	2,682 1,446	369,941 104,053
Tryg A/S	1,868	58,876
Vestas Wind Systems A/S	2,785	450,631 4,958,012
Finland — 1.2% Elisa OYJ	2,052	120,949
Fortum OYJ	6,328	120,949
Kone OYJ Class B	4,870	428,132
Neste OYJ	5,989	314,924
Nokia OYJ (a)	80,279	314,661
Nordea Bank Abp (a)	46,319	352,829
	Number of Shares	Value
Orion OYJ Class B	1,474	\$ 66,707
Sampo OYJ Class A	6,663	263,601
Stora Enso OYJ Class R UPM-Kymmene OYJ	8,217 7,651	128,766 232,866
Wartsila OYJ Abp	6,191	48,715
	0,171	2,400,228
France — 9.7%		
	2 685	75 098
Accor SA (a) Aeroports de Paris	2,685 422	75,098 42,020
Accor SA (a) Aeroports de Paris Air Liquide SA	422 6,723	42,020 1,066,828
Accor SA (a) Aeroports de Paris Air Liquide SA Alstom SA (a)	422 6,723 2,784	42,020 1,066,828 138,609
Accor SA (a) Aeroports de Paris Air Liquide SA Alstom SA (a) Amundi SA (a) (c)	422 6,723 2,784 846	42,020 1,066,828 138,609 59,642
Accor SA (a) Aeroports de Paris Air Liquide SA Alstom SA (a) Amundi SA (a) (c) Arkema SA	422 6,723 2,784 846 952	42,020 1,066,828 138,609 59,642 100,996
Accor SA (a) Aeroports de Paris Air Liquide SA Alstom SA (a) Amundi SA (a) (c)	422 6,723 2,784 846	42,020 1,066,828 138,609 59,642
Accor SA (a) Aeroports de Paris Air Liquide SA Alstom SA (a) Amundi SA (a) (c) Arkema SA Atos SE (a) AXA SA BioMerieux	422 6,723 2,784 846 952 1,404 27,490 596	42,020 1,066,828 138,609 59,642 100,996 113,098 507,474 93,298
Accor SA (a) Aeroports de Paris Air Liquide SA Alstom SA (a) Amundi SA (a) (c) Arkema SA Atos SE (a) AXA SA BioMerieux BNP Paribas SA (a)	422 6,723 2,784 846 952 1,404 27,490 596 16,022	42,020 1,066,828 138,609 59,642 100,996 113,098 507,474 93,298 580,413
Accor SA (a) Aeroports de Paris Air Liquide SA Alstom SA (a) Amundi SA (a) (c) Arkema SA Atos SE (a) AXA SA BioMerieux BNP Paribas SA (a) Bollore SA	422 6,723 2,784 846 952 1,404 27,490 596 16,022 12,570	42,020 1,066,828 138,609 59,642 100,996 113,098 507,474 93,298 580,413 46,918
Accor SA (a) Aeroports de Paris Air Liquide SA Alstom SA (a) Amundi SA (a) (c) Arkema SA Atos SE (a) AXA SA BioMerieux BNP Paribas SA (a)	422 6,723 2,784 846 952 1,404 27,490 596 16,022	42,020 1,066,828 138,609 59,642 100,996 113,098 507,474 93,298 580,413
Accor SA (a) Aeroports de Paris Air Liquide SA Alstom SA (a) Amundi SA (a) (c) Arkema SA Atos SE (a) AXA SA BioMerieux BNP Paribas SA (a) Bollore SA Bouygues SA Bureau Veritas SA (a) Capgemini SE	422 6,723 2,784 846 952 1,404 27,490 596 16,022 12,570 3,261 4,103 2,269	42,020 1,066,828 138,609 59,642 100,996 113,098 507,474 93,298 580,413 46,918 113,055 92,158 290,604
Accor SA (a) Aeroports de Paris Air Liquide SA Alstom SA (a) Amundi SA (a) (c) Arkema SA Atos SE (a) AXA SA BioMerieux BNP Paribas SA (a) Bollore SA Bouygues SA Bureau Veritas SA (a)	422 6,723 2,784 846 952 1,404 27,490 596 16,022 12,570 3,261 4,103	42,020 1,066,828 138,609 59,642 100,996 113,098 507,474 93,298 580,413 46,918 113,055 92,158

Cie de Saint-Gobain (a)	7,328	307,672
Cie Generale des Etablissements Michelin SCA	2,458	263,018
CNP Assurances (a)	2,465	30,805
Covivio	751	53,011
Credit Agricole SA (a)	16,693	145,909
Danone SA	8,862	573,204
Dassault Aviation SA (a)	33	28,011
Dassault Systemes SE	1,900	354,416
Edenred	3,506	157,298
Eiffage SA (a)	1,191	97,071
Electricite de France SA	9,048	95,720
Engie SA (a)	25,949	346,821
EssilorLuxottica SA (a)	4,044	549,925
Eurazeo SE (a)	586	31,715
Faurecia SE (a)	1,104	47,675
Gecina SA	692	91,552
Getlink SE (a)	6,255	84,808
Hermes International	457	393,926
ICADE	432	24,249
Iliad SA	231	42,497
Ingenico Group SA (a) (b)	874	135,239
Ipsen SA	525	55,079
JCDecaux SA (a)	1,295	22,439
Kering SA	1,080	717,536
Klepierre (b)	2,405	33,740
L'Oreal SA	3,582	1,165,590

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

La Francaise des Jeux SAEM (c) Legrand SA LVMH Moet Hennessy Louis Vuitton SE Natixis SA (a)

### MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

Natixis SA (a)	13,748	30,898
Orange SA	28,162	293,041
Orpea (a)	733	83,251
Pernod Ricard SA	3,002	479,089
Peugeot SA (a) (b)	8,460	152,537
Publicis Groupe SA	3,151	102,113
Remy Cointreau SA	315	57,498
Renault SA (a)	2,693	69,512
Safran SA (a)	4,541	446,852
Sanofi	16,061	1,610,421
Sartorius Stedim Biotech	397	136,732
Schneider Electric SE	7,902	980,757
SCOR SE (a)	2,098	58,129
SEB SA	321	52,214
Societe Generale SA (a)	11,688	154,663
Sodexo SA	1,255	89,372
Suez SA	5,173	95,764
Teleperformance	825	254,070
Thales SA	1,523	114,040
TOTAL SE (b)	35,145	1,206,635
Ubisoft Entertainment SA (a)	1,307	118,113
Unibail Rodamco Westfield (b)	11,160	19,689
Unibail Rodamco Westfield (b)	1,582	58,373
Valeo SA	3,236	98,903
Veolia Environnement SA	7,796	168,128
Vinci SA	7,307	609,483
Vivendi SA	11,661	325,018
Wendel SE	408	37,010
Worldline SA (a) (c)	1,975	161,945
Germany — 8.7%		19,571,928
adidas AG (a)	2,711	877,451
Allianz SE Registered	5,929	1,137,292
BASF SE	13,090	797,105
Bayer AG Registered	13,966	872,884
Bayerische Motoren Werke AG	4,772	346,495
Beiersdorf AG	1,438	163,526
Brenntag AG	2,193	139,541
Carl Zeiss Meditec AG	567	71,762
Commerzbank AG (a)	13,241	65,078
Continental AG	1,573	170,522
Covestro AG (c)	2,426	120,455
Daimler AG Registered	12,172	656,320
Delivery Hero AG (a) (c)	1,861	214,071
Deutsche Bank AG Registered (a)	27,861	234,905
	,	,
	Number of	
_	Shares	Value
Deutsche Boerse AG	2,702	\$ 474,523
Deutsche Lufthansa AG Registered (a)	4,041	34,831
Deutsche Post AG Registered	14,072	641,699
Deutsche Telekom AG Registered	47,403	794,106
Deutsche Wohnen SE	4,856	242,978
E.ON SE	31,882	352,254
Evonik Industries AG	2,943	76,244
Fraport AG Frankfurt Airport Services Worldwide (a)	688	27,244
Fresenius Medical Care AG & Co. KGaA	3,021	255,087
Fresenius SE & Co. KGaA	5,931	269,977
GEA Group AG	2,095	73,849
Hannover Rueck SE	877	135,952
HeidelbergCement AG	2,101	128,878
Henkel AG & Co. KGaA	1,477	138,348
HOCHTIEF AG	407	31,684
Infineon Technologies AG	17,776	502,825
KION Group AG	899	77,207
Knorr-Bremse AG LANXESS AG	1,042	123,087
LANAL 35 AU	1,262	72,428
https://massmutual.prospectus-express.com/print.asp?doctype=ann&clientid=massmutpre&fundid=57629S539		314/49

Number of Shares

1,192 3,836 3,955 13,748 Value

43,779 306,242

1,848,946 30,898

LEG Immobilien AG	982	140,183
Merck KGaA	1,831	267,368
METRO AG	2,772	27,686
MTU Aero Engines AG	765	127,234
Muenchener Rueckversicherungs-Gesellschaft AG in Muenchen Registered	1,990	505,260
Nemetschek SE	888	65,039
Puma SE (a)	186	16,759
Puma SE (a)	980	88,312
RWE AG	9,262	347,245
SAP SE	14,853	2,312,959
Scout24 AG (c)	1,498	130,751
Siemens AG Registered	10,875	1,375,097
Siemens Energy AG <sup>(a)</sup> (f)	5,438	146,630
Siemens Healthineers AG (c)	3,862	173,418
Symrise AG	1,852	256,209
Teamviewer AG (a) (c)	1,870	92,342
Telefonica Deutschland Holding AG	14,241	36,528
thyssenkrupp AG (a)	6,262	31,649
Uniper SE	2,854	92,212
United Internet AG Registered	1,454	55,638
Volkswagen AG (a)	427	74,645
Vonovia SE	7,309	502,264
Zalando SE (a) (c)	2,192	205,175
		17,391,211
Hong Kong — 2.5%		
AIA Group Ltd.	171,780	1,692,236

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
The Bank of East Asia Ltd.	19,595	\$ 36,125
BOC Hong Kong Holdings Ltd.	53,500	141,922
CLP Holdings Ltd.	22,999	214,380
Galaxy Entertainment Group Ltd. Hang Lung Properties Ltd.	31,000 27,000	209,819 68,851
Hang Seng Bank Ltd.	10,900	161,799
Henderson Land Development Co. Ltd.	19,325	71,293
HK Electric Investments & HK Electric Investments Ltd. Class SS	40,206	41,525
HKT Trust & HKT Ltd.	52,840	70,006
Hong Kong & China Gas Co. Ltd. Hong Kong Exchanges & Clearing Ltd.	152,753 17,181	219,515 807,582
Link REIT	29,895	244,373
MTR Corp. Ltd.	21,028	104,357
New World Development Co. Ltd.	21,722	105,749
PCCW Ltd.	66,136	39,527
Power Assets Holdings Ltd. Sino Land Co. Ltd.	19,500 42,341	102,559 49,276
SJM Holdings Ltd.	30,000	35,429
Sun Hung Kai Properties Ltd.	18,758	240,476
Swire Pacific Ltd. Class A	8,000	38,792
Swire Properties Ltd.	17,196	45,437
Techtronic Industries Co. Ltd.	19,903	261,718
Ireland — 0.8%		5,002,746
CRH PLC	11,108	401,123
DCC PLC Flutter Entertainment PLC (a)	1,424 2,192	109,741 347,332
James Hardie Industries PLC	6,382	152,011
Kerry Group PLC Class A	2,287	293,589
Kingspan Group PLC (a)	2,215	201,461
Smurfit Kappa Group PLC	3,115	122,230
Israel — $0.6\%$		1,627,487
Azrieli Group Ltd.	547	24,371
Bank Hapoalim B.M.	15,145	80,859
Bank Leumi Le-Israel BM Check Point Software Technologies Ltd. (a)	19,460 1,671	85,613 201,088
CyberArk Software Ltd. (a)	534	55,226
Elbit Systems Ltd.	414	50,283
Israel Chemicals Ltd.	11,207	39,563
Israel Discount Bank Ltd. Class A	17,833	48,067
Mizrahi Tefahot Bank Ltd. Nice Ltd. (a)	1,929 868	34,182 196,679
Teva Pharmaceutical Industries Ltd. Sponsored ADR (a)	15,796	142,322
	Number of	
	Shares	Value
Wix.com Ltd. (a)	742	\$ 189,099
Italy — 1.7%		1,147,352
Assicurazioni Generali SpA	16,054	226,096
Atlantia SpA (a) (b)	6,990	109,614
DiaSorin SpA	361	72,764
Enel SpA Eni SpA	115,630 36,854	1,004,033 288,303
FinecoBank Banca Fineco SpA (a)	8,740	120,260
Infrastrutture Wireless Italiane SpA (c)	3,366	37,325
Intesa Sanpaolo SpA (a)	233,863	439,131
Leonardo SpA (b)	5,414	31,657
Mediobanca Banca di Credito Finanziario SpA Moncler SpA (a)	8,084 2,716	63,393 111,243
Nexi SpA (a) (c)	5,359	107,464
Pirelli & C SpA (a) (c)	6,657	28,513
Poste Italiane SpA (c)	8,000	70,866
Prysmian SpA  Pagardati Industria Chimiaa a Farmagautiaa SpA	3,395	98,717
Recordati Industria Chimica e Farmaceutica SpA Snam SpA	1,409 29,531	72,087 151,842
Telecom Italia SpA	123,893	49,575
Terna Rete Elettrica Nazionale SpA	19,590	137,252
UniCredit SpA (a)	30,619	252,506

		3,472,641
Japan — 25.2%		
ABC-Mart, Inc.	500	26,026
Acom Co. Ltd. (b)	6,300	27,294
Advantest Corp.	2,900	140,856
Aeon Co. Ltd.	9,400	252,687
Aeon Mall Co. Ltd.	1,500	21,086
AGC, Inc.	2,900	84,932
Air Water, Inc.	2,800	37,878
Aisin Seiki Co. Ltd.	2,200	70,341
Ajinomoto Co. Inc.	6,500	133,624
Alfresa Holdings Corp.	2,900	63,441
Amada Holdings Co. Ltd.	4,900	45,925
ANA Holdings, Inc. (a)	1,700	39,387
Aozora Bank Ltd. (b)	1,900	31,575
Asahi Group Holdings Ltd.	6,500	226,392
Asahi Intecc Co. Ltd.	2,700	84,813
Asahi Kasei Corp.	17,300	151,018
Astellas Pharma, Inc.	26,800	398,959
Bandai Namco Holdings, Inc.	2,800	204,538
The Bank of Kyoto Ltd.	800	38,648
Benesse Holdings, Inc.	1,100	28,244
Bridgestone Corp.	7,600	240,059
Brother Industries Ltd.	3,400	54,002

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	
Calbee, Inc.	1,300	\$ 42	2,857
Canon, Inc.	14,400	239	9,009
Casio Computer Co. Ltd. (b)	2,900		5,823
Central Japan Railway Co.	2,100		1,281
Century Tokyo Leasing Corp.	600		2,651
The Chiba Bank Ltd. (b)	8,000		4,148
Chubu Electric Power Co. Inc.	9,100		0,686
Chugai Pharmaceutical Co. Ltd.	9,600		0,791
The Chugoku Electric Power Co., Inc.	3,900		8,828
Coca-Cola Bottlers Japan Holdings, Inc.	1,900 12,700		1,803 4,270
Concordia Financial Group Ltd. (b) Cosmos Pharmaceutical Corp.	300		+,270 2,184
CyberAgent, Inc.	1,500		2,767
Dai Nippon Printing Co. Ltd.	3,600		2,919
Dai-ichi Life Holdings, Inc.	15,500		3,756
Daicel Corp.	3,800		7,386
Daifuku Co. Ltd.	1,400		),910
Daiichi Sankyo Co. Ltd.	24,300		5,703
Daikin Industries Ltd.	3,600		3,806
Daito Trust Construction Co. Ltd.	900		,795
Daiwa House Industry Co. Ltd.	8,100		8,117
Daiwa House REIT Investment Corp.	26	66	5,579
Daiwa Securities Group, Inc. (b)	19,300	81	1,006
Denso Corp.	6,200	271	1,576
Dentsu Group, Inc.	3,000		3,641
Disco Corp.	400		7,330
East Japan Railway Co.	4,300		1,957
Eisai Co. Ltd.	3,600		3,503
Electric Power Development Co. Ltd.	2,200		3,950
ENEOS Holdings, Inc.	43,500		5,336
FamilyMart Co. Ltd. (b)	2,500		5,537
FANUC Corp.	2,700		7,960
Fast Retailing Co. Ltd.	800		1,968
Fuji Electric Co. Ltd.	1,700 5,200		3,712 5,233
FUJIFILM Holdings Corp. Fujitsu Ltd.	2,800		3,405
Fukuoka Financial Group, Inc.	2,700		5,457
GLP J-REIT	51		3,730
GMO Payment Gateway, Inc.	600		4,526
Hakuhodo DY Holdings, Inc.	3,700		7,814
Hamamatsu Photonics KK	1,900		5,736
Hankyu Hanshin Holdings, Inc.	3,100		9,726
Hikari Tsushin, Inc.	300		1,490
Hino Motors Ltd.	4,200		7,219
Hirose Electric Co. Ltd.	525		7,595
Hisamitsu Pharmaceutical Co., Inc.	800		0,843
Hitachi Construction Machinery Co. Ltd. (b)	1,500	54	4,320
	Number of		
	Shares	Value	
Hitachi Ltd.	13,900		9,677
Hitachi Metals Ltd.	2,800		3,043
Honda Motor Co. Ltd.	23,100		5,022
Hoshizaki Corp.	700		5,825
Hoya Corp.	5,400		3,686
Hulic Co. Ltd.	4,500	42	2,208

	1 (dilloct of	
	Shares	Value
Hitachi Ltd.	13,900	\$ 469,677
Hitachi Metals Ltd.	2,800	43,043
Honda Motor Co. Ltd.	23,100	545,022
Hoshizaki Corp.	700	55,825
Hoya Corp.	5,400	608,686
Hulic Co. Ltd.	4,500	42,208
Idemitsu Kosan Co. Ltd. (b)	2,671	56,907
Iida Group Holdings Co. Ltd.	2,000	40,437
Inpex Corp.	14,200	75,966
Isetan Mitsukoshi Holdings Ltd. (b)	4,700	24,930
Isuzu Motors Ltd.	7,700	67,457
Ito En Ltd.	800	57,076
ITOCHU Corp. (b)	19,400	496,073
Itochu Techno-Solutions Corp.	1,400	53,281
Japan Airlines Co. Ltd. (a)	1,800	33,790
Japan Airport Terminal Co. Ltd.	800	35,297
Japan Exchange Group, Inc.	7,300	204,287
Japan Post Bank Co. Ltd.	5,000	39,052
Japan Post Holdings Co. Ltd.	22,700	154,835
Japan Post Insurance Co. Ltd.	2,900	45,629

Japan Prime Realty Investment Corp.	12	37,264
Japan Real Estate Investment Corp.	18	92,032
Japan Retail Fund Investment Corp.	40	61,942
Japan Tobacco, Inc.	17,100	312,260
JFE Holdings, Inc. (a)	6,800	47,559
JGC Holdings Corp.	3,300	34,277
JSR Corp. (b)	3,000	71,156
JTEKT Corp.	3,300	25,862
Kajima Corp.	6,700	80,248
Kakaku.com, Inc. (b)	2,100	55,518
Kamigumi Co. Ltd.	1,600	31,501
The Kansai Electric Power Co., Inc.	9,500	92,089
Kansai Paint Co. Ltd. (b)	2,500	62,095
Kao Corp.	6,800	510,273
Kawasaki Heavy Industries Ltd. (a)	2,300	31,128
KDDI Corp.	23,000	581,807
Keihan Holdings Co. Ltd.	1,500	62,209
Keikyu Corp. (b)	3,100	47,616
Keio Corp.	1,400	86,573
Keisei Electric Railway Co. Ltd.	2,000	56,541
Keyence Corp.	2,600	1,211,711
Kikkoman Corp. (b)	2,000	110,988
Kintetsu Group Holdings Co. Ltd.	2,500	106,649
Kirin Holdings Co. Ltd.	11,800	221,628
Kobayashi Pharmaceutical Co. Ltd.	700	67,758
Kobe Bussan Co. Ltd.	900	49,485
Koito Manufacturing Co. Ltd.	1,500	76,470
Komatsu Ltd.	12,500	275,183
Konami Holdings Corp. (b)	1,200	52,015

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
Kose Corp.	500	\$ 61,135
Kubota Corp.	14,800	264,755
Kuraray Co. Ltd.	5,100	49,530
Kurita Water Industries Ltd.	1,400	46,206
Kyocera Corp.	4,600	262,835
Kyowa Kirin Co. Ltd.	3,800	107,935
Kyushu Electric Power Co, Inc.	5,300	48,140
Kyushu Railway Co.	2,200	46,997
Lasertec Corp. Lawson, Inc.	1,100 800	90,974 38,112
LINE Corp. (a)	600	30,563
Lion Corp.	3,400	69,923
LIXIL Group Corp. (b)	3,500	70,373
M3, Inc.	6,200	384,970
Makita Corp.	3,100	147,862
Marubeni Corp.	22,700	128,790
Marui Group Co. Ltd. (b)	2,900	55,631
Maruichi Steel Tube Ltd.	900	22,509
Mazda Motor Corp. (b)	7,100	41,517
McDonald's Holdings Co. Japan Ltd.	900	43,781
Mebuki Financial Group Inc.	13,300	30,176
Medipal Holdings Corp.	2,700	54,064
MEIJI Holdings Co. Ltd.	1,600	122,246
Mercari, Inc. (a)	1,300	60,068
MinebeaMitsumi, Inc.	5,100	96,223
MISUMI Group, Inc. (b)	3,900	109,003
Mitsubishi Chemical Holding Corp. Mitsubishi Corp.	17,300 18,900	99,885 452,152
Mitsubishi Electric Corp.	26,200	353,721
Mitsubishi Estate Co. Ltd.	16,800	253,916
Mitsubishi Gas Chemical Co., Inc.	2,100	38,960
Mitsubishi Heavy Industries Ltd.	4,400	97,729
Mitsubishi Materials Corp.	1,800	35,537
Mitsubishi Motors Corp. (a)	10,600	23,398
Mitsubishi UFJ Financial Group, Inc.	172,200	683,362
Mitsubishi UFJ Lease & Finance Co. Ltd.	6,400	29,601
Mitsui & Co. Ltd.	23,000	395,077
Mitsui Chemicals, Inc.	2,500	60,477
Mitsui Fudosan Co. Ltd.	13,300	231,656
Miura Co. Ltd.	1,300	63,566
Mizuho Financial Group, Inc.	34,600	432,207
MonotaRO Co. Ltd.	1,700	84,668
MS&AD Insurance Group Holdings, Inc.	6,300	170,636
Murata Manufacturing Co. Ltd.	8,100 1,600	522,627 58,297
Nabtesco Corp. Nagoya Railroad Co. Ltd.	2,800	76,726
NEC Corp.	3,600	210,729
The corp.		210,727
	Number of Shares	Value
Nexon Co. Ltd.	7,000	\$ 173,844
NGK Insulators Ltd.	3,500	49,938
NGK Spark Plug Co. Ltd.	1,800	31,402
NH Foods Ltd.	1,200	53,552
Nidec Corp.	6,300	585,906
Nihon M&A Center, Inc.	2,100	119,786
Nikon Corp. (b)	4,700 1,600	31,756

	Shares	Value
Nexon Co. Ltd.	7,000	\$ 173,844
NGK Insulators Ltd.	3,500	49,938
NGK Spark Plug Co. Ltd.	1,800	31,402
NH Foods Ltd.	1,200	53,552
Nidec Corp.	6,300	585,906
Nihon M&A Center, Inc.	2,100	119,786
Nikon Corp. (b)	4,700	31,756
Nintendo Co. Ltd.	1,600	909,569
Nippon Building Fund, Inc.	18	102,187
Nippon Express Co. Ltd.	1,000	58,213
Nippon Paint Holdings Co. Ltd.	2,100	216,111
Nippon Prologis REIT, Inc.	30	101,297
Nippon Shinyaku Co. Ltd.	700	57,713
Nippon Steel Corp. (a)	11,400	107,673
Nippon Telegraph & Telephone Corp.	18,200	372,355
Nippon Yusen KK	2,300	39,873
Nissan Chemical Corp. (b)	1,800	96,019
Nissan Motor Co. Ltd. (a)	34,400	122,263
Nisshin Seifun Group, Inc.	2,700	43,051
Nissin Foods Holdings Co. Ltd. (b)	900	84,601

Nitori Holdings Co. Ltd.	1,100	228,789
Nitto Denko Corp.	2,200	143,428
Nomura Holdings, Inc.	45,300	206,647
Nomura Real Estate Holdings, Inc.	1,300	24,726
Nomura Real Estate Master Fund, Inc.	59	74,177
Nomura Research Institute Ltd.	4,500	132,255
NSK Ltd.	5,700	43,628
NTT Data Corp.	8,900	114,092
NTT DOCOMO, Inc.	16,100	597,061
Obayashi Corp.	9,800	88,818
Obic Co. Ltd.	1,000	175,955
Odakyu Electric Railway Co. Ltd. (b)	4,000	100,638
Oji Holdings Corp.	13,200	60,579
Olympus Corp.	16,500	342,494
Omron Corp.	2,600	202,523
Ono Pharmaceutical Co. Ltd.	5,200	163,249
Oracle Corp.	500	54,209
Oriental Land Co. Ltd. (b)	2,800	392,260
ORIX Corp.	18,700	232,804
Orix JREIT, Inc.	39	60,165
Osaka Gas Co. Ltd.	5,300	103,259
Otsuka Corp.	1,600	81,881
Otsuka Holdings Co. Ltd.	5,600	237,500
Pan Pacific International Holding Corp.	5,800	135,111
Panasonic Corp.	31,800	269,373
Park24 Co. Ltd.	1,500	24,215
PeptiDream, Inc. (a)	1,300	61,083
Persol Holdings Co. Ltd.	2,400	39,036

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
Pigeon Corp.	1,600	\$ 71,484
Pola Orbis Holdings, Inc.	1,200	22,664
Rakuten, Inc.	12,300	132,871
Recruit Holdings Co. Ltd.	18,200	722,129
Renesas Electronics Corp. (a)	11,500	84,229
Resona Holdings, Inc.	28,200	96,107
Ricoh Co. Ltd. (b)	9,200	62,020
Rinnai Corp.	500	48,849
Rohm Co. Ltd.	1,200	92,657
Ryohin Keikaku Co. Ltd.	3,600	59,797
Santen Pharmaceutical Co. Ltd.	5,100	104,575
SBI Holdings, Inc.	3,342	86,477
SCSK Corp.	800	44,758
Secom Co. Ltd.	3,000	274,122
Sega Sammy Holdings, Inc.	2,800	34,057
Seibu Holdings, Inc.	2,900	31,195
Seiko Epson Corp. (b)	4,100	47,132
Sekisui Chemical Co. Ltd.	5,500	87,921
Sekisui House Ltd.	8,700	153,866
Seven & i Holdings Co. Ltd.	10,900	336,952
Seven Bank Ltd. (b)	9,000	21,822
SG Holdings Co. Ltd. (b)	2,300	119,542
Sharp Corp.	3,200	39,647
Shimadzu Corp.	3,000	91,520
Shimamura Co. Ltd.	300	29,326
Shimano, Inc.	1,000	196,883
Shimizu Corp.	8,300	62,243
Shin-Etsu Chemical Co. Ltd.	5,000	652,610
Shinsei Bank Ltd. (b)	2,400	29,737
Shionogi & Co. Ltd.	3,700	197,954
Shiseido Co. Ltd.	5,700	327,069
The Shizuoka Bank Ltd.	6,600	45,648
Showa Denko KK	2,100 800	38,492
SMC Corp.		445,246
Softbank Corp. (b) SoftBank Group Corp.	40,800 22,300	457,159 1,376,964
Sohgo Security Services Co. Ltd.	1,100	52,416
Sompo Holdings, Inc.	4,800	166,263
Sony Corp.	17,900	1,369,080
Square Enix Holdings Co. Ltd.	1,300	86,432
Stanley Electric Co. Ltd.	1,900	54,523
Subaru Corp.	8,800	170,831
Sumco Corp.	3,600	50,633
Sumitomo Chemical Co. Ltd.	22,800	75,494
Sumitomo Corp. (b)	16,700	200,247
Sumitomo Dainippon Pharma Co. Ltd. (b)	2,600	34,237
Sumitomo Electric Industries Ltd.	10,400	116,863
Sumitomo Heavy Industries Ltd.	1,800	41,875
	Number of	
	Shares	Value

	Number of	
	Shares	Value
Sumitomo Metal Mining Co. Ltd.	3,200	\$ 99,059
Sumitomo Mitsui Financial Group, Inc.	18,800	523,131
Sumitomo Mitsui Trust Holdings, Inc.	4,700	125,065
Sumitomo Realty & Development Co. Ltd.	4,300	127,216
Sumitomo Rubber Industries Ltd.	3,000	27,828
Sundrug Co. Ltd.	1,100	41,415
Suntory Beverage & Food Ltd.	1,900	71,413
Suzuken Co. Ltd.	800	30,492
Suzuki Motor Corp.	5,300	227,007
Sysmex Corp.	2,400	229,042
T&D Holdings, Inc.	7,100	70,217
Taiheiyo Cement Corp.	1,900	48,491
Taisei Corp.	2,600	87,609
Taisho Pharmaceutical Holdings Co. Ltd.	500	32,975
Taiyo Nippon Sanso Corp. (b)	2,100	32,461
Takeda Pharmaceutical Co. Ltd.	22,541	802,955
TDK Corp.	1,800	196,837
Teijin Ltd.	2,800	43,413
Terumo Corp.	9,300	370,526

THK Co. Ltd.	1,900	47,669
TIS, Inc.	3,400	72,263
Tobu Railway Co. Ltd.	2,700	83,396
Toho Co. Ltd.	1,600	65,951
Toho Gas Co. Ltd.	1,000	49,575
Tohoku Electric Power Co., Inc.	6,000	60,123
Tokio Marine Holdings, Inc.	9,000	394,130
Tokyo Electric Power Co. Holdings, Inc. (a)	18,500	50,862
Tokyo Electron Ltd.	2,100	549,632
Tokyo Gas Co. Ltd.	5,400	123,371
Tokyu Corp.	6,700	86,962
Tokyu Fudosan Holdings Corp.	9,000	38,747
Toppan Printing Co. Ltd.	3,400	47,888
Toray Industries, Inc.	19,100	87,342
Toshiba Corp.	5,600	142,543
Tosoh Corp.	3,500	56,907
TOTO Ltd. (b)	1,900	87,176
Toyo Suisan Kaisha Ltd. (b)	1,200	63,418
Toyoda Gosei Co. Ltd.	1,100	25,212
Toyota Industries Corp.	2,000	126,465
Toyota Motor Corp.	30,200	1,997,415
Toyota Tsusho Corp.	3,200	89,368
Trend Micro, Inc.	1,900	115,934
Tsuruha Holdings, Inc.	500	70,762
Unicharm Corp.	5,800	259,109
United Urban Investment Corp.	43	47,955

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
USS Co. Ltd. 3,00	0	\$ 53,663
Welcia Holdings Co. Ltd.		61,553
West Japan Railway Co. 2,30		113,680
Yakult Honsha Co. Ltd. 1,70		94,321
Yamada Denki Co. Ltd. 9,50		47,370
Yamaha Corp.  1,90		90,946
Yamaha Motor Co. Ltd. 4,30 Yamato Holdings Co. Ltd. 4,40		62,525 115,820
Yamazaki Baking Co. Ltd. 1,70		29,692
Yaskawa Electric Corp. 3,40		132,774
Yokogawa Electric Corp. 3,10		49,249
The Yokohama Rubber Co. Ltd.		25,619
Z Holdings Corp. 38,20		255,220
ZOZO, Inc. (b) 1,60	0	44,625
Luxembourg — 0.2%		 50,585,990
ArcelorMittal SA (a) 10,25	6	136,774
Aroundtown SA (a)		81,394
Eurofins Scientific SE (a)		151,203
SES SA 5,37		38,005
Tenaris SA 7,09	5	35,366
N. d. J. J. 520/		442,742
Netherlands — 5.2% ABN AMRO Bank NV (c) 5,83	2	48,768
Adyen NV (a) (c) 26		479,143
Aegon NV 24,09		62,582
AerCap Holdings NV (a) 1,80		45,468
Airbus SE (a) 8,41		610,510
Akzo Nobel NV 2,70		273,746
Altice Europe NV (a) 8,74		41,868
Argenx SE (a) 61 ASML Holding NV 6,05		161,472
ASML Holding NV CNH Industrial NV (a) 6,05 14,22		2,234,163 110,528
Davide Campari-Milano NV 8,68		94,871
EXOR NV 1,53		83,531
Ferrari NV 21		39,904
Ferrari NV 1,55		286,076
Fiat Chrysler Automobiles NV (a) (b) 11,14		136,192
Fiat Chrysler Automobiles NV (a) 4,00	4	49,018
Heineken Holding NV 1,61		125,765
Heineken NV 3,66		326,051
ING Groep NV (a) 55,32		391,748
Just Eat Takeaway (a) (b) (c)  1,80		201,578
Koninklijke Ahold Delhaize NV Koninklijke DSM NV  2.47		467,640 407,870
Koninklijke KPN NV 51,79		121,792
Koninklijke Philips NV (a) 13,11		617,709
Koninklijke Vopak NV 1,05		59,382
Number of		
Shares		Value
NN Group NV 4,00	6	\$ 150,472
Prosus NV (a) 6,92	4	638,517
QIAGEN NV (a) 3,23		168,226
Randstad NV (a)		88,080
STMicroelectronics NV 9,02		275,992
Unilever NV 20,76		1,253,527
Wolters Kluwer NV 3,86	/	 330,149 10,382,338
New Zealand — 0.3%		
The a2 Milk Co. Ltd. (a) 10,47		106,687
Auckland International Airport Ltd. (a)  18,95  Fisher & Parkel Healthcare Corn. Ltd.		91,817
Fisher & Paykel Healthcare Corp. Ltd. 8,35		183,953
Mercury NZ Ltd. 10,34 Meridian Energy Ltd. 17,22		34,909 56,177
Meridian Energy Ltd. 17,22 Ryman Healthcare Ltd. 5,54		51,870
Spark New Zealand Ltd. 24,52		76,480
27,32	_	 601,893
Norway — 0.5%	2	
Adevinta ASA (a) 3,05	3	52,359

DNB ASA (a) Equinor ASA Gjensidige Forsikring ASA (b) Mowi ASA	13,721 14,548 2,996 6,193	189,510 205,310 60,819 109,859
Norsk Hydro ASA (a)	19,981	54,999
Orkla ASA Schibsted ASA Class B (a)	10,367 1,466	104,916 58,573
Telenor ASA	10,351	173,431
Yara International ASA	2,530	97,415
Tata Ilicinational ASA	2,330	1,107,191
Papua New Guinea — 0.0%		1,107,171
Oil Search Ltd.  Portugal — 0.2%	29,456	55,943
Banco Espirito Santo SA (a) (d)	39,664	_
EDP - Energias de Portugal SA	40,312	198,136
Galp Energia SGPS SA	7,206	66,793
Jeronimo Martins SGPS SA	3,859	62,000
		326,929
Singapore — 1.0%		
Ascendas REIT	42,944	102,522
CapitaLand Commercial Trust	40,643	49,200
CapitaLand Ltd. (b)	34,246	68,426
CapitaLand Mall Trust	35,200	50,119
City Developments Ltd.	6,800	38,245
DBS Group Holdings, Ltd.	25,763	378,931
Genting Singapore Ltd.	97,400	47,853
Jardine Cycle & Carriage Ltd.	1,177	15,612
Keppel Corp. Ltd.	20,100	65,930
Mapletree Commercial Trust	28,500	40,787

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
Mapletree Logistics Trust	42,100	\$ 63,242
Oversea-Chinese Banking Corp. Ltd.	47,129	292,800
Singapore Airlines Ltd.	17,949	45,878
Singapore Exchange Ltd.	11,300	76,042
Singapore Technologies Engineering Ltd. Singapore Telecommunications Ltd.	23,600 114,900	60,144 179,239
Suntec REIT	28,100	30,080
United Overseas Bank Ltd.	16,693	234,339
UOL Group Ltd.	6,669	32,664
Venture Corp. Ltd.	3,800	53,880
Wilmar International Ltd.	26,900	87,141
Yangzijiang Shipbuilding Holdings Ltd.	39,700	28,948 2,042,022
Spain — 2.2%  ACS Actividades de Construccion y Servicios SA	3,853	87,298
Aena SME SA (a) (c)	954	132,884
Amadeus IT Group SA	6,346	352,177
Banco Bilbao Vizcaya Argentaria SA	96,142	265,715
Banco Santander SA (a)	234,873	437,559
Bankinter SA	9,963	42,867
CaixaBank SA Cellnex Telecom SAU (c)	51,453 4,533	109,095 275,497
Enagas SA	3,429	79,000
Endesa SA	4,453	119,094
Ferrovial SA	6,860	166,419
Grifols SA (b)	4,268	123,002
Iberdrola SA	84,437	1,039,237
Industria de Diseno Textil SA Mapfre SA	15,789 17,511	438,977 27,419
Naturgy Energy Group SA	4,127	82,752
Red Electrica Corp. SA	6,111	114,664
Repsol SA	21,151	141,272
Siemens Gamesa Renewable Energy SA	3,396	91,535
Telefonica SA	68,530	235,047 4,361,510
Sweden — 3.1%	4.502	
Alfa Laval AB (a) Assa Abloy AB Class B	4,502 14,225	99,362 332,026
Atlas Copco AB Class A	9,632	458,418
Atlas Copco AB Class B	5,476	228,147
Boliden AB	3,825	113,725
Electrolux AB Series B	3,058	71,276
Epiroc AB Class A	9,143	132,705
Epiroc AB Class B EQT AB	5,116 3,425	71,154 66,286
	Number of	
<u> </u>	Shares	Value
Essity AB Class B (a)	8,765	\$ 296,177
Evolution Gaming Group AB (c) Hennes & Mauritz AB Class B	1,833 11,575	121,162 199,652
Hexagon AB Class B (a)	4,053	306,309
Husqvarna AB Class B	6,352	69,941
ICA Gruppen AB (b)	1,485	75,491
Industrivarden AB Class C (a)	2,212	58,942
Investment AB Latour	2,105	49,352
Investor AB Class B	6,549	427,047
Kinnevik AB L E Lundbergforetagen AB Class B (a)	3,537	143,176
Lundin Energy AB	1,060 2,607	52,433 51,636
Nibe Industrier AB Class B (a)	4,477	115,389
Sandvik AB (a)	16,043	312,952
Securitas AB Class B (a)	4,370	66,879
Skandinaviska Enskilda Banken AB Class A (a)	22,957	203,213
Skanska AB Class B (a)	4,803	101,200
SKF AB Class B Svenska Cellulosa AB Class B (a)	5,429 8,480	111,875 116,240
Svenska Handelsbanken AB Class A (a)	21,993	184,711
Swedbank AB Class A (a)	12,833	200,704
Swedish Match AB	2,243	183,002

Tele2 AB Class B (b)	6,980	98,553
Telefonaktiebolaget LM Ericsson Class B	41,920	458,338
Telia Co AB	35,052	144,147
Volvo AB Class B (a)	21,100	405,259
		6,126,879
Switzerland — 10.1%		
ABB Ltd. Registered	26,254	665,407
Adecco Group AG Registered	2,198	116,153
Alcon, Inc. (a)	6,982	396,396
Baloise Holding AG Registered	648	95,321
Banque Cantonale Vaudoise Registered	452	45,821
Barry Callebaut AG Registered	43	95,609
Chocoladefabriken Lindt & Spruengli AG	15	126,600
Chocoladefabriken Lindt & Spruengli AG Registered	1	88,995
Cie Financiere Richemont SA Registered	7,437	498,136
Clariant AG	2,675	52,592
Coca-Cola HBC AG	2,837	70,128
Credit Suisse Group AG Registered	35,085	351,157
EMS-Chemie Holding AG Registered	115	103,186
Geberit AG Registered	537	318,189
Givaudan SA Registered	133	573,234

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
Julius Baer Group Ltd.	3,179	\$ 135,525
Kuehne & Nagel International AG Registered	770	149,307
LafargeHolcim Ltd. Registered	3,036	138,391
LafargeHoleim Ltd. Registered Logitech International SA Registered	4,338 2,398	197,741 185,566
Lonza Group AG Registered	1,058	653,083
Nestle SA Registered	42,414	5,031,958
Novartis AG Registered	31,592	2,745,385
Partners Group Holding AG	268	246,606
Roche Holding AG Schindler Holding AG	10,000 607	3,421,272 165,732
Schindler Holding AG Registered	264	71,823
SGS SA Registered	88	235,873
Sika AG Registered	2,013	494,534
Sonova Holding AG Registered (a)	796	201,855
Straumann Holding AG Registered The Swatch Group AG	150 434	150,910 101,095
The Swatch Group AG Registered	681	30,575
Swiss Life Holding AG Registered	463	174,932
Swiss Prime Site AG Registered	1,082	98,205
Swiss Re AG	4,188	309,979
Swisscom AG Registered Temenos Group AG Registered	374 935	198,389 125,913
UBS Group AG Registered	52,145	582,129
Vifor Pharma AG	641	87,258
Zurich Insurance Group AG	2,151	747,872
United Kingdom — 12.8%		20,278,832
3i Group PLC	13,955	179,134
Admiral Group PLC	2,726	91,941
Anglo American PLC	17,464 5,591	421,731
Antofagasta PLC Ashtead Group PLC	6,511	73,716 233,283
Associated British Foods PLC	5,080	122,371
AstraZeneca PLC	18,675	2,032,604
Auto Trader Group PLC (c)	14,569	105,385
Aveva Group PLC	902	55,773
Aviva PLC BAE Systems PLC	57,106 45,510	209,989 281,502
Barclays PLC (a)	245,388	308,787
Barratt Developments PLC	14,242	87,080
The Berkeley Group Holdings PLC	1,733	94,282
BHP Group PLC	30,074	641,142
BP PLC British American Tobacco PLC	287,991 32,625	836,154 1,172,639
The British Land Co. PLC	12,184	52,971
BT Group PLC	128,791	163,669
	Number of Shares	Volue
Bunzl PLC	4,868	<b>Value</b> \$ 157,059
Burberry Group PLC	5,684	113,806
Coca-Cola European Partners PLC	2,980	115,654
Compass Group PLC	25,401	381,298
Croda International PLC	1,843	148,797
Diageo PLC Direct Line Insurance Group PLC	33,251 18,830	1,139,119 65,546
Evraz PLC	6,253	27,881
Experian PLC	12,893	482,467
Ferguson PLC	3,199	321,872
GlaxoSmithKline PLC	71,375	1,336,988
Glencore PLC (a) GVC Holdings PLC (a)	141,761 8,343	293,688 105,010
Halma PLC	5,343 5,377	162,065
Hargreaves Lansdown PLC	4,735	94,916
Hikma Pharmaceuticals PLC	2,449	82,026
HSBC Holdings PLC	289,943	1,126,405
Imperial Brands PLC	13,425	236,640
Informa PLC (a) InterContinental Hotels Group PLC (a)	21,085 2,385	102,231 125,215
moreonimental fioles Group i De (a)	2,363	123,213

Intertek Group PLC	2,318	188,551
J Sainsbury PLC	25,225	62,012
JD Sports Fashion PLC	5,518	57,748
Johnson Matthey PLC	2,681	81,074
Kingfisher PLC	30,388	116,137
Land Securities Group PLC	9,957	67,046
Legal & General Group PLC	86,592	209,857
Lloyds Banking Group PLC (a)	1,018,550	345,649
London Stock Exchange Group PLC	4,499	514,689
M&G PLC	37,138	76,009
Melrose Industries PLC (a)	69,715	102,860
Mondi PLC	6,856	144,288
National Grid PLC	49,871	574,101
Natwest Group PLC (a)	67,215	91,776
Next PLC	1,867	143,083
Ocado Group PLC (a)	6,497	229,603
Pearson PLC	10,964	77,541
Persimmon PLC	4,559	144,800
Prudential PLC	37,144	530,295
Reckitt Benckiser Group PLC	10,114	986,046
RELX PLC	27,477	608,201
Rentokil Initial PLC (a)	26,837	184,699
Rio Tinto PLC	15,974	963,841
Rolls-Royce Holdings PLC	26,729	44,351
Royal Dutch Shell PLC Class A	58,273	721,256
Royal Dutch Shell PLC Class B	52,820	638,964
RSA Insurance Group PLC	13,850	80,568
The Sage Group PLC	15,473	143,298

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
Schroders PLC	1,719	\$ 59,909
Segro PLC	17,203	206,799
Severn Trent PLC	3,356	105,521
Smith & Nephew PLC Smiths Group PLC	12,655 5,678	246,600 99,824
Spirax-Sarco Engineering PLC	1,064	151,274
SSE PLC	14,963	232,954
St. James's Place PLC	7,489	89,485
Standard Chartered PLC (a)	37,873	173,632
Standard Life Aberdeen PLC	33,227	96,737
Taylor Wimpey PLC	51,802	72,083
Tesco PLC	139,247	381,758
Unilever PLC United Utilities Group PLC	16,669 9,730	1,027,109 107,594
Vodafone Group PLC	383,818	509,204
Whitbread PLC (a)	2,873	78,362
Wm Morrison Supermarkets PLC	34,257	75,200
WPP PLC	17,539	136,975
		25,762,199
TOTAL COMMON STOCK (Cost \$186,398,693)		193,815,010
PREFERRED STOCK — 0.6% Germany — 0.6%		
Bayerische Motoren Werke AG 6.470%	763	41,806
Fuchs Petrolub SE 2.180%	973	49,482
Henkel AG & Co. KGaA 1.980%	2,566	268,688
Porsche Automobil Holding SE 3.240%	2,125	126,873
Sartorius AG 0.290%	515	211,559
Volkswagen AG 2.680%	2,663	428,579 1,126,987
Italy — 0.0% Telecom Italia SpA 5.420%	73,532	29,787
TOTAL PREFERRED STOCK (Cost \$1,091,123)		1,156,774
TOTAL EQUITIES (Cost \$187,489,816)		194,971,784
	Number of	
	Shares	Value
MUTUAL FUNDS — 1.0% United States — 1.0%		
iShares Core MSCI EAFE ETF	4,600	\$ 277,288
State Street Navigator Securities Lending Prime Portfolio (e)	1,799,705	1,799,705
	, ,	2,076,993
TOTAL MUTUAL FUNDS (Cost \$2,035,489)		2,076,993
TOTAL LONG-TERM INVESTMENTS (Cost \$189,525,305)		197,048,777
TOTAL LONG-TERM INVESTMENTS (Cost \$187,323,303)	Principal Amount	197,040,777
SHORT-TERM INVESTMENTS — 0.6%	· ······ · · · · · · · · · · · · · · ·	
Repurchase Agreement — 0.6%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (g)	\$ 1,320,257	1,320,257
TOTAL SHORT-TERM INVESTMENTS (Cost \$1,320,257)		1,320,257
TOTAL INVESTMENTS — 98.8% (Cost \$190,845,562) <sup>(h)</sup>		198,369,034
Other Assets/(Liabilities) — 1.2%		2,321,981
NET ASSETS — 100.0%		\$ 200,691,015

Abbreviation Legend
ADR American Depositary Receipt
ETF Exchange-Traded Fund

### MM MSCI EAFE International Index 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, 2020, was \$5,511,655 or 2.75% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$3,988,536 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) 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, 2020, the aggregate market value of these securities amounted to \$3,362,436 or 1.68% of net assets.
- (d) This security is fair valued in good faith in accordance with procedures approved by the Board of Trustees. At September 30, 2020, these securities amounted to a value of \$0 or 0.00% of net assets.
- (e) Represents investment of security lending cash collateral. (Note 2).
- (f) A portion of this security is purchased on a when-issued, delayed-delivery or forward commitment basis. (Note 2).
- (g) Maturity value of \$1,320,257. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$1,346,677.
- (h) See Note 6 for aggregate cost for federal tax purposes.

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

Consumer, Non-cyclical	28.1%
Financial	17.6%
Industrial	13.5%
Consumer, Cyclical	12.7%
Basic Materials	6.6%
Communications	6.1%
Technology	5.5%
Utilities	3.8%
Energy	3.1%
Mutual Funds	1.0%
Diversified	0.2%
Total Long-Term Investments	98.2%
Short-Term Investments and Other Assets and Liabilities	1.8%
Net Assets	100.0%

#### Forward contracts

Counterparty	Settlement Date	Currency	Purchased	Curre	ncy Sold	Unrealized Appreciation (Depreciation)
Bank of New York Mellon*	12/16/20	SEK	804,954	USD	92,230	\$ (2,266)
Bank of New York Mellon*	12/16/20	HKD	184,325	USD	23,768	9
Bank of New York Mellon*	12/16/20	EUR	1,060,667	USD	1,257,687	(12,012)
Bank of New York Mellon*	12/16/20	USD	11,238	NOK	101,065	401
Bank of New York Mellon*	12/16/20	USD	182,717	AUD	250,348	3,370
BNP Paribas SA*	12/16/20	USD	170,344	CHF	154,345	2,391
Citibank N.A.*	12/16/20	DKK	164,266	USD	26,284	(376)
Citibank N.A.*	12/16/20	GBP	29,397	USD	37,650	300
Citibank N.A.*	12/16/20	CHF	126,669	USD	139,807	(1,970)
Citibank N.A.*	12/16/20	JPY	23,880,000	USD	229,082	(2,427)
Citibank N.A.*	12/16/20	USD	35,073	ILS	119,805	61
Citibank N.A.*	12/16/20	USD	1,948	SGD	2,658	1
Morgan Stanley & Co. LLC*	12/16/20	AUD	95,440	USD	69,592	(1,220)
Morgan Stanley & Co. LLC*	12/16/20	JPY	106,662,353	USD	1,007,779	4,597
Morgan Stanley & Co. LLC*	12/16/20	GBP	120,000	USD	154,147	768
Morgan Stanley & Co. LLC*	12/16/20	USD	510,975	EUR	430,410	5,490
Morgan Stanley & Co. LLC*	12/16/20	USD	448,324	JPY	47,272,738	(360)
						\$ (3,243)

Contracts are subject to a Master Netting Agreement.

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

## MM MSCI EAFE International Index Fund — Portfolio of Investments (Continued)

#### **Futures contracts**

	Expiration Date	Number of Contracts	Notional Amount	U Ap	falue/ Net nrealized preciation/ epreciation)
Long					
Hang Seng Index	10/29/20	1	\$ 151,558	\$	(398)
Topix Index	12/10/20	9	1,375,945		11,198
SPI 200 Index	12/17/20	5	528,804		(9,344)
Euro Stoxx 50 Index	12/18/20	63	2,426,216		(66,989)
FTSE 100 Index	12/18/20	13	1,004,660		(24,775)
				\$	(90,308)

**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.

MassMutual Select Overseas Fund — Portfolio of Investments

## **September 30, 2020**

	Number of Shares	Value
EQUITIES — 97.2% COMMON STOCK — 97.0%	Shares	<u> </u>
Australia — 1.2%		
AMP Ltd. (a) Brambles Ltd.	2,246,638 243,700	\$ 2,114,361 1,834,589
Orica Ltd.	297,577	3,297,365
Belgium — 1.0%	,	7,246,315
Anheuser-Busch InBev SA	37,200	2,007,966
KBC Group NV	84,495	4,230,923
Dravil 0.20/		6,238,889
Brazil — 0.2% Ambey SA ADR	468,035	1,057,759
Canada — 2.4%	70.040	0 511 271
Canadian National Railway Co. Cenovus Energy, Inc.	79,949 679,517	8,511,371 2,648,562
Open Text Corp.	49,000	2,071,060
Suncor Energy, Inc.	112,394	1,372,480
C 11 1 120/		14,603,473
Cayman Islands — 1.3% Alibaba Group Holding Ltd. (b)	34,440	1,273,545
Alibaba Group Holding Ltd. Sponsored ADR (b)	700	205,786
Baidu, Inc. Sponsored ADR (b)	16,770	2,122,914
Tencent Holdings Ltd.	43,700	2,910,131
Trip.com Group Ltd. ADR (b)	49,400	1,538,316 8,050,692
Denmark — 1.8%		0,030,072
Carlsberg A/S Class B	21,360	2,876,127
Novo Nordisk A/S Class B	120,020	8,336,802 11,212,929
Finland — 0.4% UPM-Kymmene OYJ	89,700	2.720.112
France — 15.5%	89,700	2,730,113
Accor SA (b)	171,021	4,783,379
Air Liquide SA	75,905	12,044,855
BNP Paribas SA (b) Bureau Veritas SA (b)	256,201 80,661	9,281,143 1,811,729
Capgemini SE	37,960	4,861,754
Danone SA	85,255	5,514,388
Dassault Systemes SE	12,522	2,335,787
Engie SA (b) EssilorLuxottica SA (b)	286,579 46,010	3,830,265 6,256,690
Hermes International	980	844,744
L'Oreal SA	15,310	4,981,906
Legrand SA	46,016	3,673,624
	Number of	***
LVMH Moet Hennessy Louis Vuitton SE	Shares 16,280	<b>Value</b> \$ 7,610,832
Pernod Ricard SA	39,105	6,240,770
Publicis Groupe SA	144,877	4,694,965
Schneider Electric SE	112,901	14,012,706
Valeo SA	93,830	2,867,755 95,647,292
Germany — 12.3%		
Allianz SE Registered	25,950	4,977,692
Bayer AG Bayer AG Registered	400 178,457	25,024 11,153,682
Bayerische Motoren Werke AG	102,985	7,477,751
Beiersdorf AG	62,552	7,113,286
Continental AG	65,880	7,141,740
Daimler AG Registered Deutsche Boerse AG	162,273 29,335	8,749,834 5,151,786
Fresenius Medical Care AG & Co. KGaA	23,500	1,984,290
Henkel AG & Co. KGaA	8,500	796,178
Merck KGaA	37,300	5,446,650
MTU Aero Engines AG SAP SE	10,395 76,581	1,728,883 11,925,453
	70,301	11,723,133

thyssenkrupp AG (b) thyssenkrupp AG (b)	500 444,717	2,521 2,247,658 75,922,428
Hong Kong — 1.7%		
AIA Group Ltd.	1,069,200	10,532,880
India — 2.1%	(2( 805	2 (00 572
Axis Bank Ltd. (b)	636,805	3,689,573
Housing Development Finance Corp. Ltd.	122,319	2,891,299
Tata Consultancy Services Ltd.	179,512	6,065,675
Indeposits 0.40/		12,646,547
Indonesia — 0.4%	6.040.600	2 220 012
Bank Mandiri Persero Tbk PT	6,940,600	2,329,013
Ireland — 2.1% Linde PLC	10.106	4 5 42 250
	19,196	4,543,359
Ryanair Holdings PLC (b)	11,700	155,575
Ryanair Holdings PLC Sponsored ADR (b)	98,585	8,060,310
Israel — $0.8\%$		12,759,244
	42.560	5 242 002
Check Point Software Technologies Ltd. (b)	43,569	5,243,093
Italy — 2.2% Eni SpA	216,154	1,690,940
•	,	
Intesa Sanpaolo SpA (b)	6,176,785	11,598,319
		13,289,259

MassMutual Select Overseas Fund — Portfolio of Investments (Continued)

	Number of Shares	<b>Value</b>
Japan — 11.2%	46.800	0.011.015
Daikin Industries Ltd. (a)	46,700 41,000	\$ 8,611,042
Denso Corp. FANUC Corp.	5,500	1,795,906 1,055,105
Hitachi Ltd.	163,800	5,534,753
Hoya Corp.	85,900	9,682,618
Japan Tobacco, Inc.	174,600	3,188,336
Koito Manufacturing Co. Ltd.	52,000	2,650,976
Komatsu Ltd. Kose Corp.	145,100 18,700	3,194,321 2,286,442
Kubota Corp.	324,000	5,795,986
Kyocera Corp.	82,700	4,725,310
Olympus Corp.	338,300	7,022,164
Shin-Etsu Chemical Co. Ltd.	17,600	2,297,186
SMC Corp.	2,800	1,558,361
Terumo Corp.	170,300	6,785,012
Toyota Motor Corp.	42,400	2,804,317 68,987,835
Mexico — 0.3%		00,767,633
Grupo Televisa SAB Sponsored ADR (b)	296,700	1,833,606
Netherlands — 5.4%		-
Akzo Nobel NV	56,782	5,750,590
CNH Industrial NV (b)	996,797	7,746,708
EXOR NV	84,100 481,317	4,576,501
ING Groep NV (b) Koninklijke Philips NV (b)	481,317 112,411	3,408,136 5,295,709
QIAGEN NV (b)	60,968	3,166,538
Randstad NV (b)	66,886	3,490,108
	Ź	33,434,290
Portugal — 0.4%		
Galp Energia SGPS SA	255,624	2,369,403
Republic of Korea — 0.7% NAVER Corp.	8,635	2,186,304
Samsung Electronics Co. Ltd.	36,750	1,851,673
ballisting Electronics Co. Etc.	30,730	4,037,977
Singapore — 0.6%		
DBS Group Holdings, Ltd.	232,600	3,421,157
South Africa — 0.8%		
Naspers Ltd.	29,100	5,132,559
Spain — 1.5% Amadeus IT Group SA	170,347	9,453,572
Sweden — 2.5%	170,547	9,433,372
Essity AB Class B (b)	107,321	3,626,465
Hennes & Mauritz AB Class B	260,694	4,496,604
SKF AB Class B	170,800	3,519,667
	Number of	
	Shares	Value
Volvo AB Class B (b)	186,000	\$ 3,572,426
		15,215,162
Switzerland — 12.1%	15 225	000 044
Alcon, Inc. (b) Cie Financiere Richemont SA Registered	15,337 91,392	870,744 6,121,508
Credit Suisse Group AG Registered	769,725	7,703,993
Julius Baer Group Ltd.	58,776	2,505,695
LafargeHolcim Ltd. Registered	49,684	2,264,770
Nestle SA Registered	139,506	16,550,865
Novartis AG Registered	90,790	7,889,766
Roche Holding AG Sika AG Pagistered	39,218 14,785	13,417,546
Sika AG Registered The Swatch Group AG	14,785 12,440	3,632,232 2,897,758
UBS Group AG Registered	486,400	5,430,007
Zurich Insurance Group AG	14,723	5,118,977
	•	74,403,861
Taiwan — 1.2%  Taiwan Samisanduatar Manufacturing Co. Ltd. Spansored ADP	00 (22	7 105 477
Taiwan Semiconductor Manufacturing Co. Ltd. Sponsored ADR United Kingdom — 14.4%	88,633	7,185,477
Ashtead Group PLC	94,390	3,381,906
Bunzl PLC	48,931	1,578,683
Compass Group PLC	429,679	6,449,980
https://massmutual.prospectus-express.com/print.asp?doctype=app&clientid=massmutpre&fundid=57629S539		336/4

Diageo PLC	168,575	5,775,076
Experian PLC	201,109	7,525,663
Ferguson PLC	16,167	1,626,664
G4S PLC (b)	859,000	2,217,105
Glencore PLC (b)	4,452,900	9,225,123
Liberty Global PLC Class C (b)	2,000	41,070
Liberty Global PLC Series A (b)	172,300	3,620,023
Lloyds Banking Group PLC (b)	25,658,300	8,707,249
Natwest Group PLC (b)	2,325,500	3,175,276
Prudential PLC	264,700	3,779,054
Reckitt Benckiser Group PLC	54,267	5,290,660
RELX PLC	190,286	4,243,744
RELX PLC	89,016	1,970,363
Rio Tinto PLC	62,771	3,787,482
Rolls-Royce Holdings PLC (a)	1,313,406	2,179,311
Schroders PLC	300	7,163
Schroders PLC	85,868	2,992,588
Smiths Group PLC	235,367	4,137,955
Tesco PLC	1,363,650	3,738,563
WPP PLC	426,944	3,334,327
		88,785,028

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

MassMutual Select Overseas Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
United States — 0.5% Yum China Holdings, Inc.	60,659	\$ 3,211,894
TOTAL COMMON STOCK (Cost \$585,513,309)		596,981,747
PREFERRED STOCK — 0.2% Germany — 0.2% Henkel AG & Co. KGaA 1.980%	12.200	1,277,474
TOTAL PREFERRED STOCK (Cost \$1,207,163)		1,277,474
TOTAL EQUITIES (Cost \$586,720,472)		598,259,221
MUTUAL FUNDS — 0.3% United States — 0.3% State Street Navigator Securities Lending Prime Portfolio (c)	1,960,355	1,960,355
	1,900,333	
TOTAL MUTUAL FUNDS (Cost \$1,960,355)		1,960,355
TOTAL LONG-TERM INVESTMENTS (Cost \$588,680,827)	Principal Amount	600,219,576
SHORT-TERM INVESTMENTS — 1.9% Repurchase Agreement — 1.9%		
Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (d)	\$ 11,579,242	11,579,242
TOTAL SHORT-TERM INVESTMENTS (Cost \$11,579,242)		11,579,242
TOTAL INVESTMENTS — 99.4% (Cost \$600,260,069) (e)		611,798,818
Other Assets/(Liabilities) — 0.6%		3,458,943
NET ASSETS — 100.0%		<u>\$ 615,257,761</u>

### **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, 2020, was \$10,880,192 or 1.77% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$9,511,020 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) Represents investment of security lending cash collateral. (Note 2).
- (d) Maturity value of \$11,579,242. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$11,810,921.
- (e) See Note 6 for aggregate cost for federal tax purposes.

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

Consumer, Non-cyclical	30.2%
Financial	17.5%
Industrial	15.4%
Consumer, Cyclical	13.8%
Basic Materials	6.9%
Technology	6.8%
Communications	4.7%
Energy	1.3%
Utilities	0.6%
Mutual Funds	0.3%
Total Long-Term Investments	97.5%
Short-Term Investments and Other Assets and Liabilities	2.5%
Net Assets	100.0%

MassMutual Select Overseas Fund — Portfolio of Investments (Continued)

#### **Forward contracts**

	Settlement					-	realized reciation
Counterparty	Date	Currency 1	Purchased	Curren	icy Sold		reciation)
State Street Bank and Trust Co.*	12/16/20	USD	1,901,869	CHF	1,797,000	\$	(53,567)

<sup>\*</sup> 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, 2020** 

	Number of Shares	Value
Suzano SA (b)	89,089	\$ 722,592
British Virgin Islands — 0.1%		8,518,358
Mail.ru Group Ltd. GDR (b) (c)  Canada — 2.7%	45,093	1,232,522
Element Fleet Management Corp.	281,770	2,344,645
Franco-Nevada Corp.	16,928	2,365,509
Lightspeed POS, Inc. (a) (b) Lundin Mining Corp.	20,849 52,623	667,957 293,634
Magna International, Inc.	181,821	8,318,311
Manulife Financial Corp.	104,977	1,460,083
National Bank of Canada	111,350	5,530,914
Seven Generations Energy Ltd. Class A (b)	492,848	1,328,771
Sun Life Financial, Inc.	132,916	5,416,261
TC Energy Corp. (a) TMX Group Ltd.	52,948 28,940	2,222,818 2,976,263
Waste Connections, Inc.	21,529	2,234,710
	21,327	35,159,876
Cayman Islands — 7.7% Alibaba Group Holding Ltd. Sponsored ADR (b)	101,911	20 050 706
Alibaba Group Holding Ltd. (b)	192,080	29,959,796 7,102,862
Baidu, Inc. Sponsored ADR (b)	43,281	5,478,942
China Mengniu Dairy Co. Ltd.	1,540,000	7,267,970
CK Hutchison Holdings Ltd.	677,500	4,107,605
ENN Energy Holdings Ltd.	81,600	890,226
Farfetch Ltd. Class A (a) (b)	48,762	1,226,852
Greentown Service Group Co. Ltd. Hengan International Group Co. Ltd.	334,000 98,000	408,782 712,433
JOYY, Inc. ADR	33,537	2,705,430
Kingboard Holdings Ltd.	100,500	332,166
Meituan Dianping Class B (b) (c)	27,100	852,275
Pagseguro Digital Ltd. Class A (a) (b)	29,637	1,117,611
Shimao Group Holdings Ltd.	54,500	226,483
Sino Biopharmaceutical Ltd. StoneCo Ltd. Class A (b)	1,229,000 57,007	1,347,057 3,015,100
Sunny Optical Technology Group Co. Ltd.	61,000	934,212
TAL Education Group Sponsored ADR (b)	34,896	2,653,492
Tencent Holdings Ltd.	376,000	25,039,108
Tencent Music Entertainment Group ADR (b)	59,100	872,907
Tongcheng-Elong Holdings Ltd. (b)	173,200	317,493
Trip.com Group Ltd. ADR (b)	48,050 19,617	1,496,277 306,810
Vipshop Holdings Ltd. ADR (b) Weibo Corp. Sponsored ADR (a) (b)	5,904	215,083
	Number of	
	Shares	Value
EQUITIES — 98.1% COMMON STOCK — 97.1%		
Australia — 2.4%		
Australia & New Zealand Banking Group Ltd.	108,100	\$ 1,338,309
BHP Group Ltd.	280,159	7,209,275
Challenger Ltd.	187,081	515,086
CSL Ltd.	4,614	950,677
Downer EDI Ltd. IGO Ltd.	665,459	2,106,026
Incitec Pivot Ltd.	438,437 1,050,769	1,320,624 1,533,536
Macquarie Group Ltd.	27,605	2,371,197
Rio Tinto Ltd. (a)	13,390	906,552
Scentre Group	1,353,902	2,142,283
South32 Ltd.	3,255,776	4,773,928
Suncorp Group Ltd. Treasury Wine Estates Ltd.	242,466 354,781	1,472,912 2,276,398
Worley Ltd.	383,797	2,636,991
none, and	303,131	31,553,794
Austria — 0.5%  PAWAC Crown AC (b) (c)	75.050	
BAWAG Group AG (b) (c) Erste Group Bank AG (b)	75,958 159,687	2,737,668 3,339,582
Elon Group Bullet 110 (0)	137,007	6,077,250
		5,577,230

Belgium — 0.6%		
Anheuser-Busch InBev SA	30,752	1,659,919
Galapagos NV (b)	10,908	1,549,330
KBC Group NV	59,888	2,998,775
Umicore SA	39,179	1,631,346
		7,839,370
Bermuda — 0.6%		
China Resources Gas Group Ltd.	44,000	196,992
Credicorp Ltd.	33,021	4,094,274
Haier Electronics Group Co. Ltd.	67,000	243,056
Hiscox Ltd. (b)	214,197	2,465,360
Hongkong Land Holdings Ltd.	306,100	1,139,986
Kunlun Energy Co. Ltd	348,000	229,357
		8,369,025
Brazil — 0.7%		
B3 SA - Brasil Bolsa Balcao	196,400	1,923,817
Banco BTG Pactual SA	12,100	156,963
BRF SA (b)	39,000	127,641
CCR SA	77,100	173,945
EDP - Energias do Brasil SA	443,308	1,374,311
Lojas Renner SA	159,958	1,129,353
Porto Seguro SA	54,314	466,648
Raia Drogasil SA	585,830	2,443,088

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Value
XP, Inc. (b)	67,470	\$ 2,812,824
Chile — 0.1%		101,399,796
Banco Santander Chile Sponsored ADR China — 3.1%	115,060	1,594,732
Anhui Conch Cement Co. Ltd. Class H	512,500	3,543,424
BTG Hotels Group Co. Ltd. Class A	439,025	1,150,615
China Merchants Bank Co. Ltd. Class H	222,000	1,057,160
Fuyao Glass Industry Group Co. Ltd. Gree Electric Appliances, Inc. of Zhuhai Class A	52,800 844,600	252,114 6,637,942
Guangzhou Automobile Group Co. Ltd. Class H	344,000	288,398
Hangzhou Hikvision Digital Technology Co. Ltd. Class A	370,161	2,079,744
Hisense Home Appliances Group Co. Ltd. Jiangsu Hengrui Medicine Co. Ltd. Class A	115,700	211,044 941,177
Kweichow Moutai Co. Ltd. Class A	71,100 23,198	5,702,826
Midea Group Co. Ltd. Class A	112,000	1,197,487
PICC Property & Casualty Co. Ltd. Class H	4,998,000	3,497,168
Ping An Bank Co. Ltd. Class A Ping An Insurance Group Co. of China Ltd. Class A	144,600 32,800	322,392 367,652
Ping An Insurance Group Co. of China Ltd. Class H	668,000	6,891,244
Postal Savings Bank of China Co. Ltd.	324,500	214,999
Shanghai International Airport Co. Ltd. Class A	78,700	793,735
Sinopharm Group Co. Ltd. Class H Tsingtao Brewery Co. Ltd. Class H	395,600 338,000	839,672 2,760,607
Yifeng Pharmacy Chain Co. Ltd. Class A	113,120	1,650,234
Zhejiang Expressway Co. Ltd. Class H	368,000	265,888
Czech Republic — 0.0%		40,665,522
Komercni banka AS (b)  Denmark — 0.1%	27,660	581,339
Ascendis Pharma A/S ADR (b)	4,825	744,594
Novo Nordisk A/S Class B	15,120	1,050,262
E' l 1 120/		1,794,856
Finland — 1.2% Nokia OYJ (b)	544,333	2,133,565
Nordea Bank Abp (b)	546,373	4,161,930
Sampo OYJ Class A	169,032	6,687,219
		0,007,219
	Number of Shares	
Stora Enso OYJ Class R	Number of Shares 176,992	Value \$ 2,773,574
	Shares	Value
France — 6.5% Air Liquide SA	Shares 176,992 30,198	Value \$ 2,773,574 15,756,288 4,791,918
France — 6.5% Air Liquide SA AXA SA	Shares 176,992 30,198 479,255	Value \$ 2,773,574 15,756,288 4,791,918 8,847,206
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b)	30,198 479,255 183,938	Value \$ 2,773,574 15,756,288 4,791,918 8,847,206 6,663,342
France — 6.5% Air Liquide SA AXA SA	30,198 479,255 183,938 5,691	Value \$ 2,773,574 15,756,288 4,791,918 8,847,206
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b)	30,198 479,255 183,938 5,691 201,975 465,927	Value \$ 2,773,574 15,756,288 4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b)	30,198 479,255 183,938 5,691 201,975 465,927 50,331	Value \$ 2,773,574 15,756,288 4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312	Value \$ 2,773,574 15,756,288 4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b)	30,198 479,255 183,938 5,691 201,975 465,927 50,331	Value \$ 2,773,574 15,756,288 4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA Ipsen SA Kering SA L'Oreal SA	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298	Value  \$ 2,773,574  15,756,288  4,791,918  8,847,206  6,663,342  4,830,624  2,136,723  6,227,336  6,844,283  1,198,117  1,410,647  1,873,566  3,676,393
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA Ipsen SA Kering SA L'Oreal SA Legrand SA	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119	Value  \$ 2,773,574  15,756,288  4,791,918  8,847,206  6,663,342  4,830,624  2,136,723  6,227,336  6,844,283  1,198,117  1,410,647  1,873,566  3,676,393  1,606,173
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA Ipsen SA Kering SA L'Oreal SA Legrand SA LVMH Moet Hennessy Louis Vuitton SE	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348	Value  \$ 2,773,574  15,756,288  4,791,918  8,847,206  6,663,342  4,830,624  2,136,723  6,227,336  6,844,283  1,198,117  1,410,647  1,873,566  3,676,393  1,606,173  1,097,680
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA Ipsen SA Kering SA L'Oreal SA Legrand SA LVMH Moet Hennessy Louis Vuitton SE Orange SA Safran SA (b)	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348 144,196 17,506	Value \$ 2,773,574 15,756,288  4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117 1,410,647 1,873,566 3,676,393 1,606,173 1,097,680 1,500,436 1,722,657
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA Ipsen SA Kering SA L'Oreal SA Legrand SA LVMH Moet Hennessy Louis Vuitton SE Orange SA Safran SA (b) Sanofi	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348 144,196 17,506 100,276	Value \$ 2,773,574 15,756,288  4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117 1,410,647 1,873,566 3,676,393 1,606,173 1,097,680 1,500,436 1,722,657 10,054,578
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA Ipsen SA Kering SA L'Oreal SA Legrand SA LVMH Moet Hennessy Louis Vuitton SE Orange SA Safran SA (b) Sanofi Teleperformance	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348 144,196 17,506 100,276 5,282	Value \$ 2,773,574 15,756,288  4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117 1,410,647 1,873,566 3,676,393 1,606,173 1,097,680 1,500,436 1,722,657 10,054,578 1,626,661
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA Ipsen SA Kering SA L'Oreal SA Legrand SA LVMH Moet Hennessy Louis Vuitton SE Orange SA Safran SA (b) Sanofi	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348 144,196 17,506 100,276	Value \$ 2,773,574 15,756,288  4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117 1,410,647 1,873,566 3,676,393 1,606,173 1,097,680 1,500,436 1,722,657 10,054,578
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA Ipsen SA Kering SA L'Oreal SA Legrand SA Leyrand SA LVMH Moet Hennessy Louis Vuitton SE Orange SA Safran SA (b) Sanofi Teleperformance Thales SA TOTAL SE (a)	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348 144,196 17,506 100,276 5,282 138,923	\$ 2,773,574 15,756,288 4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117 1,410,647 1,873,566 3,676,393 1,606,173 1,097,680 1,500,436 1,722,657 10,054,578 1,626,661 10,402,377
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA Ipsen SA Kering SA L'Oreal SA L'Oreal SA LUMH Moet Hennessy Louis Vuitton SE Orange SA Safran SA (b) Sanofi Teleperformance Thales SA	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348 144,196 17,506 100,276 5,282 138,923 260,080	\$\frac{2,773,574}{15,756,288}\$  4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117 1,410,647 1,873,566 3,676,393 1,606,173 1,097,680 1,500,436 1,722,657 10,054,578 1,626,661 10,402,377 8,929,336 85,440,053
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Eutelsat Communications SA Ipsen SA Kering SA L'Oreal SA Legrand SA LVMH Moet Hennessy Louis Vuitton SE Orange SA Safran SA (b) Sanofi Teleperformance Thales SA TOTAL SE (a)  Germany — 6.1%	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348 144,196 17,506 100,276 5,282 138,923	\$ 2,773,574 15,756,288 4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117 1,410,647 1,873,566 3,676,393 1,606,173 1,097,680 1,500,436 1,722,657 10,054,578 1,626,661 10,402,377 8,929,336
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Estelsat Communications SA Ipsen SA Kering SA L'Oreal SA L'Oreal SA Legrand SA LVMH Moet Hennessy Louis Vuitton SE Orange SA Safran SA (b) Sanofi Teleperformance Thales SA TOTAL SE (a)  Germany — 6.1% BASF SE Bayer AG Registered Covestro AG (c)	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348 144,196 17,506 100,276 5,282 138,923 260,080	\$\ \frac{2,773,574}{15,756,288}\$  4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117 1,410,647 1,873,566 3,676,393 1,606,173 1,097,680 1,500,436 1,722,657 10,054,578 1,626,661 10,402,377 8,929,336 85,440,053  3,844,617 12,264,382 3,721,995
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) EssilorLuxottica SA (b) Estelsat Communications SA Ipsen SA Kering SA L'Oreal SA Legrand SA Legrand SA LVMH Moet Hennessy Louis Vuitton SE Orange SA Safran SA (b) Sanofi Teleperformance Thales SA TOTAL SE (a)  Germany — 6.1% BASF SE Bayer AG Registered Covestro AG (c) Daimler AG Registered	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348 144,196 17,506 100,276 5,282 138,923 260,080  63,136 196,228 74,962 53,785	\$\ \ \frac{2,773,574}{15,756,288}\$  4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117 1,410,647 1,873,566 3,676,393 1,606,173 1,097,680 1,500,436 1,722,657 10,054,578 1,626,661 10,402,377 8,929,336 85,440,053  3,844,617 12,264,382 3,721,995 2,900,112
France — 6.5% Air Liquide SA AXA SA BNP Paribas SA (b) Dassault Aviation SA (b) Electricite de France SA Engie SA (b) EssilorLuxottica SA (b) Estelsat Communications SA Ipsen SA Kering SA L'Oreal SA L'Oreal SA Legrand SA LVMH Moet Hennessy Louis Vuitton SE Orange SA Safran SA (b) Sanofi Teleperformance Thales SA TOTAL SE (a)  Germany — 6.1% BASF SE Bayer AG Registered Covestro AG (c)	30,198 479,255 183,938 5,691 201,975 465,927 50,331 123,312 13,446 2,820 11,298 20,119 2,348 144,196 17,506 100,276 5,282 138,923 260,080	\$\ \frac{2,773,574}{15,756,288}\$  4,791,918 8,847,206 6,663,342 4,830,624 2,136,723 6,227,336 6,844,283 1,198,117 1,410,647 1,873,566 3,676,393 1,606,173 1,097,680 1,500,436 1,722,657 10,054,578 1,626,661 10,402,377 8,929,336 85,440,053  3,844,617 12,264,382 3,721,995

CEA Command	(4.066	2 200 047
GEA Group AG	64,966	2,290,047
HeidelbergCement AG	26,764	1,641,743
KION Group AG	29,247	2,511,765
Knorr-Bremse AG	31,991	3,778,960
MorphoSys AG (b)	11,167	1,418,415
Muenchener Rueckversicherungs-Gesellschaft AG in Muenchen Registered	25,763	6,541,207
SAP SE	63,315	9,859,626
Siemens AG Registered	90,923	11,496,821
Siemens Energy AG (b) (h)	45,462	1,225,931
Siemens Healthineers AG (c)	46,312	2,079,580
Stroeer SE & Co KGaA (b)	17,441	1,357,272
Teamviewer AG (b) (c)	37,049	1,829,499
Telefonica Deutschland Holding AG	526,906	1,351,493
Zalando SE (b) (c)	42,970	4,022,066
		80,137,209

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
Hong Kong — 2.1%	1.004.000	Ф	10.756.644
AIA Group Ltd.	1,904,000 235,000	\$	18,756,644 707,825
Beijing Enterprises Holdings Ltd. China Resources Beer Holdings Company Ltd.	306,000		1,877,082
CNOOC Ltd.	275,000		266,191
CSPC Pharmaceutical Group Ltd.	641,600		1,244,968
Fosun International Ltd.	1,531,000		1,789,470
Galaxy Entertainment Group Ltd.	195,000		1,319,831
Guangdong Investment Ltd.	156,000		247,691
Hong Kong Exchanges & Clearing Ltd.	18,600		874,281 27,083,983
Hungary — 0.2%			27,083,983
OTP Bank Nyrt (b)	87,056		2,618,389
India — 2.5%			
Ambuja Cements Ltd.	125,397		369,789
Ashok Leyland Ltd.	152,355 423,329		154,808
Axis Bank Ltd. (b) Bharti Infratel Ltd.	455,004		2,452,718 1,080,850
HDFC Bank Ltd. (b)	210,152		3,094,881
Hindalco Industries Ltd.	50,690		120,691
Housing Development Finance Corp. Ltd.	450,622		10,651,516
ICICI Bank Ltd. (b)	67,969		328,552
ICICI Bank Ltd. Sponsored ADR (b)	140,913		1,385,175
Infosys Ltd.	249,532		3,439,699
Kotak Mahindra Bank Ltd. (b) Maruti Suzuki India Ltd.	91,092 32,556		1,566,025 2,986,405
NTPC Ltd.	2,699,431		3,117,912
Reliance Industries Ltd.	8,452		257,039
Shriram Transport Finance Co. Ltd.	164,914		1,393,339
Tata Consultancy Services Ltd.	18,296		618,218
Tech Mahindra Ltd.	26,732		287,442
Y 1			33,305,059
Indonesia — 0.7% Astra International Tbk PT	3,386,400		1,018,822
Bank Central Asia Tbk PT	2,951,400		5,386,228
Bank Rakyat Indonesia Persero Tbk PT	1,238,300		254,025
Sarana Menara Nusantara Tbk PT	37,340,300		2,604,440
			9,263,515
Ireland — 0.5% DCC PLC	21,593		1,664,065
Linde PLC (b)	21,488		5,085,835
	21,400		6,749,900
Italy — 1.1%	202.006		2 020 702
Banca Mediolanum SpA	282,086		2,029,783
	Number of		
	Shares	Φ.	Value
DiaSorin SpA Eni SpA	12,245 202,332	\$	2,468,122 1,582,812
Intesa Sanpaolo SpA (b)	549,310		1,031,455
Leonardo SpA (a)	252,409		1,475,876
Moncler SpA (b)	52,394		2,145,970
Prysmian SpA	145,644		4,234,924
Y 46204			14,968,942
Japan — 16.3% Asahi Group Holdings Ltd.	35,300		1,229,482
Asahi Kasei Corp.	226,900		1,980,698
Asics Corp.	110,200		1,542,624
Astellas Pharma, Inc.	578,000		8,604,419
Benesse Holdings, Inc.	51,400		1,319,779
Bridgestone Corp.	48,600		1,535,114
Central Japan Railway Co.	10,800		1,549,443
CyberAgent, Inc. Daiichi Sankyo Co. Ltd.	37,300 58,800		2,306,801 1,806,837
Denso Corp.	62,700		2,746,422
DIC Corp.	71,500		1,786,321
Disco Corp.	5,600		1,362,619
Electric Power Development Co. Ltd.	74,600		1,151,200
en-japan, Inc.	22,200		559,388
Ezaki Glico Co. Ltd.	47,200		2,113,633

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Fujitsu General Ltd.	132,000	3,827,309
Fujitsu Ltd.	34,200	4,683,021
Hamamatsu Photonics KK	37,600	1,894,570
Hitachi Ltd.	114,300	3,862,163
Hitachi Metals Ltd.	155,100	2,384,269
Honda Motor Co. Ltd.	34,800	821,072
Hoshizaki Corp.	21,000	1,674,749
Japan Tobacco, Inc.	120,400	2,198,600
JGC Holdings Corp.	123,100	1,278,618
Kansai Paint Co. Ltd. (a)	68,900	1,711,351
Kao Corp.	24,200	1,815,971
Kirin Holdings Co. Ltd.	163,300	3,067,103
Matsumotokiyoshi Holdings Co. Ltd.	51,900	1,893,392
Mitsubishi Corp.	63,500	1,519,135
Mitsubishi Electric Corp.	618,900	8,355,641
Mitsubishi Estate Co. Ltd.	148,200	2,239,905
Mitsubishi Motors Corp. (b)	428,200	945,189
Mitsubishi UFJ Financial Group, Inc.	1,169,400	4,640,672
Mitsubishi UFJ Lease & Finance Co. Ltd.	190,200	879,695
Mitsui Fudosan Co. Ltd.	272,200	4,741,114
Mitsui Mining & Smelting Co. Ltd.	27,300	663,524
Murata Manufacturing Co. Ltd.	100,100	6,458,639
Nippon Shokubai Co. Ltd. (a)	30,900	1,649,097
Nippon Telegraph & Telephone Corp.	764,900	15,649,131
NTT Data Corp.	199,300	2,554,896

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

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments (Continued)

Numbe Shar		Value
Omron Corp.	21,200	\$ 1,651,33
ORIX Corp.	254,000	3,162,15
Otsuka Holdings Co. Ltd.	257,700	10,929,25
Outsourcing, Inc.	146,600	1,359,38
Pan Pacific International Holding Corp.	88,200	2,054,62
Panasonic Corp.	171,900	1,456,13
Persol Holdings Co. Ltd.	265,900	4,324,88
Pola Orbis Holdings, Inc.	22,300	421,17
Recruit Holdings Co. Ltd. Renesas Electronics Corp. (b)	58,300 116,400	2,313,19 852,54
Seven & i Holdings Co. Ltd.	160,900	4,973,90
Shimadzu Corp.	46,400	1,415,51
SMC Corp.	1,800	1,001,80
SoftBank Group Corp.	28,900	1,784,49
Sompo Holdings, Inc.	75,400	2,611,71
Sony Corp.	31,100	2,378,68
Stanley Electric Co. Ltd.	232,700	6,677,58
Sumitomo Corp. (a) Sumitomo Mitsui Trust Holdings, Inc.	364,700 40,800	4,373,05 1,085,67
Sumitomo Rubber Industries Ltd.	58,100	538,94
Suzuki Motor Corp.	78,400	3,357,99
Takeda Pharmaceutical Co. Ltd.	310,131	11,047,48
Takeda Pharmaceutical Co. Ltd. Sponsored ADR	58,739	1,047,90
TechnoPro Holdings, Inc.	24,500	1,515,02
Terumo Corp.	25,100	1,000,02
THK Co. Ltd.	63,700	1,598,16
Tokio Marine Holdings, Inc. Tokyo Electron Ltd.	65,700 19,300	2,877,14 5,051,37
Tosoh Corp.	21,300	346,32
Toyota Motor Corp.	134,900	8,922,22
Welcia Holdings Co. Ltd.	25,200	1,107,94
Z Holdings Corp.	,221,400	8,160,35
		214,401,62
Luxembourg — 0.2%		
Samsonite International SA (b) (c)	571,800	583,52
Tenaris SA	34,665	172,79
Tenaris SA ADR	187,444	1,846,32 2,602,64
Mexico — 0.3%		2,002,04
Grupo Aeroportuario del Pacifico SAB de CV ADR (a)	1,952	157,40
Grupo Aeroportuario del Sureste SAB de CV ADR (b)	10,951	1,270,64
Grupo Mexico SAB de CV Series B	92,194	234,66
Orbia Advance Corp. SAB de CV	173,300	302,37
Wal-Mart de Mexico SAB de CV	677,800	1,621,88
		3,586,97
Numbe	c	
Shar		Value
Netherlands — 6.5%		
ABN AMRO Bank NV (c)	169,027	\$ 1,413,41
Adyen NV (b) (c)	799	1,472,44
Airbus SE (b)	42,702	3,099,51 6,610,92
Akzo Nobel NV ASML Holding NV	65,277 35,839	13,215,07
CNH Industrial NV (b)	352,949	2,742,97
ING Groep NV (b)	911,260	6,452,50
Koninklijke DSM NV	18,069	2,977,69
Koninklijke Philips NV (b)	326,875	15,399,15
NXP Semiconductor NV	107,141	13,372,26
Prosus NV (b)	79,125	7,296,74
Unilever NV V5 Patail Group NV GDP	139,953	8,448,99
X5 Retail Group NV GDR Yandex NV Class A (a) (b)	48,665 17,200	1,800,35 1,122,30
Tunden 111 Class 21 (a) (b)	17,200	85,424,37
Norway — 0.5%		03,121,37
DNB ASA (b)	217,517	3,004,27
Equinor ASA	168,161	2,373,19
Storebrand ASA (b)	290,250	1,520,27
DL:1:: 0.40/		6,897,74
Philippines — 0.4%		

	= = = =	
PLDT, Inc.	5,900	162,875
SM Investments Corp.	208,710	3,788,636
Universal Robina Corp.	456,750	1,262,480
		5,213,991
Poland — 0.2%	·	
Powszechny Zaklad Ubezpieczen SA (b)	346,913	2,221,498
Portugal — 0.8%	·	
Banco Comercial Portugues SA (b)	5,380,813	504,137
Galp Energia SGPS SA	657,583	6,095,198
Jeronimo Martins SGPS SA	255,117	4,098,771
	·	10,698,106
Republic of Korea — 5.0%	·	
Amorepacific Corp.	1,309	182,246
KT Corp.	34,569	677,951
KT Corp. Sponsored ADR	170,669	1,640,129
LG Household & Health Care Ltd.	7,799	9,682,188
NAVER Corp.	57,945	14,671,151
Paradise Co. Ltd.	11,846	137,837
POSCO	8,380	1,408,343
Samsung Electronics Co. Ltd.	679,502	34,237,166
SK Hynix, Inc.	42,936	3,080,732
		65,717,743
Russia — 0.8%	·	
LUKOIL PJSC Sponsored ADR	5,362	310,025

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
Mobile TeleSystems PJSC	37,550	\$ 163,852
Novatek PJSC Sponsored GDR Registered	695	95,097
Sberbank of Russia PJSC Sponsored ADR (b)	892,127	10,408,179
Saudi Arabia — 0.1%		10,977,153
Al Rajhi Bank	62,267	1,091,234
Singapore — 0.6%	<b>50.00</b> 0	1 000 505
DBS Group Holdings, Ltd. United Overseas Bank Ltd.	70,200 337,900	1,032,525 4,743,494
Wilmar International Ltd.	624,700	2,023,683
Yangzijiang Shipbuilding Holdings Ltd.	431,800	314,857
Sanda Africa 1 40/		8,114,559
South Africa — 1.4% Capitec Bank Holdings Ltd.	30,008	1,857,402
Clicks Group Ltd.	79,626	1,055,320
FirstRand Ltd.	492,706	1,210,709
Naspers Ltd. Sanlam Ltd.	62,214 253,352	10,973,093 784,773
Shoprite Holdings Ltd. (a)	210,547	1,715,972
Telkom SA SOC Ltd.	103,522	161,852
5 0.60/		17,759,121
Spain — 0.6% Amadeus IT Group SA	52,888	2,935,071
Iberdrola SA	388,321	4,779,390
Indra Sistemas SA (b)	106,191	753,637
Sweden — 1.4%		8,468,098
Assa Abloy AB Class B	52,310	1,220,971
Elekta AB (a)	157,005	1,974,463
Essity AB Class B (b)	80,674	2,726,041
Getinge AB Class B Lundin Energy AB	81,126 85,282	1,764,446 1,689,163
Svenska Handelsbanken AB Class A (b)	225,977	1,897,900
Swedbank AB Class A (b)	202,951	3,174,084
Telefonaktiebolaget LM Ericsson Class B	318,901	3,486,747
Switzerland — 6.5%		17,933,815
ABB Ltd. Registered	122,258	3,098,628
Adecco Group AG Registered	28,768	1,520,245
Alcon, Inc. (b) Barry Callebaut AG Registered	46,712 652	2,652,029 1,449,698
Julius Baer Group Ltd.	97,389	4,151,816
LafargeHolcim Ltd. Registered	3,219	146,733
	Number of	
	Shares	Value
Lonza Group AG Registered	11,174	\$ 6,897,490
Nestle SA Registered	165,856	19,677,006
Novartis AG Registered PSP Swiss Property AG Registered	165,654 3,247	14,395,543 392,746
Roche Holding AG	59,417	20,328,173
Temenos Group AG Registered	13,980	1,882,636
UBS Group AG Registered Zurich Insurance Group AG	249,863 19,199	2,789,387
Zurich insurance Group AG	19,199	6,675,218 86,057,348
Taiwan — 4.0%		
Hon Hai Precision Industry Co. Ltd.	158,000	422,985
Largan Precision Co. Ltd. MediaTek, Inc.	44,000 57,000	5,140,847 1,201,954
President Chain Store Corp.	181,000	1,645,343
Taiwan Semiconductor Manufacturing Co. Ltd.	2,804,000	42,112,086
Uni-President Enterprises Corp.	249,000	538,353
Vanguard International Semiconductor Corp.	313,000	1,044,350 52,105,918
Thailand — $0.5\%$		52,103,316
Airports of Thailand PCL	445,400	794,165
CP ALL PCL (b) Land & Houses PCL	2,966,000	5,639,495
Land & Houses FCL	1,066,600	229,256 6,662,916
		0,002,710

Turkey — 0.1%		
BIM Birlesik Magazalar AS	81,940	738,025
United Arab Emirates — 0.2%		
First Abu Dhabi Bank PJSC	930,972	2,852,000
United Kingdom — 9.8%		
Amcor PLC	645,873	7,182,169
Antofagasta PLC	291,064	3,837,598
Ashtead Group PLC	84,432	3,025,120
ASOS PLC (b)	101,232	6,717,508
AstraZeneca PLC Sponsored ADR	131,860	7,225,928
Aviva PLC	313,832	1,154,017
BHP Group PLC	98,505	2,100,010
boohoo Group PLC (b)	468,113	2,258,749
BP PLC Sponsored ADR	139,671	2,438,656
British American Tobacco PLC	70,319	2,527,473
BT Group PLC	1,290,194	1,639,597
Bunzl PLC	40,727	1,313,994
Burberry Group PLC	126,477	2,532,344
Close Brothers Group PLC	35,105	460,697
Compass Group PLC	106,256	1,595,026
Diageo PLC	78,277	2,681,629
Direct Line Insurance Group PLC	187,325	652,064

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments (Continued)

	Number of Shares	Va	alue
Fresnillo PLC	17,224	\$	265,618
GlaxoSmithKline PLC Sponsored ADR	238,110		8,962,460
Great Portland Estates PLC	367,979		2,839,700
HomeServe PLC	146,939		2,334,084
HSBC Holdings PLC	342,164		1,329,280
Imperial Brands PLC	121,383		2,139,599
Informa PLC (b)	215,687		1,045,763
Investec PLC	252,167		463,710
Johnson Matthey PLC	69,845 669,185		2,112,131 2,557,502
Kingfisher PLC Lloyds Banking Group PLC (b)	10,662,757		3,618,450
London Stock Exchange Group PLC	45,181		5,168,739
Meggitt PLC	759,528		2,518,819
Melrose Industries PLC (b)	1,253,724		1,849,781
Mondi PLC	48,558		1,021,926
National Grid PLC	201,924		2,324,491
Network International Holdings PLC (b) (c)	817,188		2,886,820
Next PLC	57,018		4,369,744
Persimmon PLC	53,226		1,690,533
Playtech PLC (b)	221,422		1,035,140
Rolls-Royce Holdings PLC (a)	435,963		723,386
Royal Dutch Shell PLC Class B Sponsored ADR	42,410		1,027,170
Royal Dutch Shell PLC Class B	241,755		2,924,512
Royalty Pharma PLC Class A	10,083		424,192
Smith & Nephew PLC	93,441		1,820,826
Smiths Group PLC Standard Chartered PLC (b)	119,435 124,840		2,099,770 572,338
THG Holdings Ltd. (b)	97,453		752,227
Unilever PLC	136,375		8,403,140
Vodafone Group PLC	2,221,217		2,946,845
Vodafone Group PLC Sponsored ADR	139,322		1,869,701
The Weir Group PLC	70,643		1,138,617
WPP PLC	526,243		4,109,827
		1	28,689,420
United States — 1.4%			
Autoliv, Inc.	19,565		1,434,257
Booking Holdings, Inc. (b)	807		1,380,519
Broadcom, Inc.	8,432		3,071,946
MercadoLibre, Inc. (b)	2,307		2,497,282
Philip Morris International, Inc.	91,011		6,824,915
Southern Copper Corp.	27,175		1,230,212
Visa, Inc. Class A	12,060		2,411,638
TOTAL COMMON STOCK (Co. 4 84 257 227 484)			18,850,769
TOTAL COMMON STOCK (Cost \$1,256,336,194)		1,2	277,174,855
	Number of		
77 77 77 77 77 77 77 77 77 77 77 77 77	Shares	Va	alue
PREFERRED STOCK — 1.0%			
Brazil — 0.4%	29 100	¢.	121 (04
Banco Bradesco SA 3.340%	38,100	\$	131,684
Itau Unibanco Holding SA 0.550% Petroleo Brasileiro SA 0.250%	1,295,350		5,189,796
Petroleo Brasileiro SA 0.250%	86,200		300,999 5,622,479
Germany — 0.3%			3,022,479
Sartorius AG 0.290%	1,495		614,136
Volkswagen AG 2.680%	16,780		2,700,548
	10,700		3,314,684
Italy — 0.1%			-,,
Telecom Italia SpA 5.420%	1,982,342		803,026
Republic of Korea — 0.2%	, ,		
Samsung Electronics Co. Ltd. 3.760%	57,492		2,480,383
United States — 0.0%	,		
Roofoods Ltd., Series G, (Acquired 5/16/19, Cost \$550,376) (b) (d) (e) (f)	1,317		550,376
TOTAL PREFERRED STOCK (Cost \$16,969,240)			12,770,948
TOTAL EQUITIES (Cost \$1,273,305,434)		1,2	289,945,803

MUTUAL FUNDS — 0.8% United States — 0.8%		
iShares MSCI Taiwan ETF	1,100	49,390
State Street Navigator Securities Lending Prime Portfolio (g)	10,108,088	10,108,088
	-	10,157,478
TOTAL MUTUAL FUNDS (Cost \$10,156,217)		10,157,478
RIGHTS — 0.0% Russia — 0.0%		
Moscow Exchange (b)	83,990	158,326
TOTAL RIGHTS (Cost \$150,842)		158,326
TOTAL LONG-TERM INVESTMENTS (Cost \$1,283,612,493)		1,300,261,607

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
SHORT-TERM INVESTMENTS — 1.4% Mutual Fund — 1.3%		 
T. Rowe Price Government Reserve Investment Fund	17,663,937 Principal Amount	\$ 17,663,937
Repurchase Agreement — 0.1% Fixed Income Clearing Corp., Repurchase Agreement, dated 9/30/20, 0.000%, due 10/01/20 (i)	\$ 1,000,000	1,000,000
TOTAL SHORT-TERM INVESTMENTS (Cost \$18,663,937)		 18,663,937
TOTAL INVESTMENTS — 100.3% (Cost \$1,302,276,430) (j)		1,318,925,544
Other Assets/(Liabilities) — (0.3)%		 (4,492,460)
NET ASSETS — 100.0%		\$ 1,314,433,084

#### **Abbreviation Legend**

ADR American Depositary Receipt ETF Exchange-Traded Fund

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, 2020, was \$28,926,497 or 2.20% of net assets. Total securities on loan may be less than the amounts identified in the Portfolio of Investments. The Fund received \$20,353,180 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) 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, 2020, the aggregate market value of these securities amounted to \$22,831,809 or 1.74% of net assets.
- (d) Investment was valued using significant unobservable inputs.
- (e) Restricted security. Certain securities are restricted as to resale. At September 30, 2020, these securities amounted to a value of \$550,376 or 0.04% 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, 2020, these securities amounted to a value of \$550,376 or 0.04% of net assets.
- (g) Represents investment of security lending cash collateral. (Note 2).
- (h) A portion of this security is purchased on a when-issued, delayed-delivery or forward commitment basis. (Note 2).
- (i) Maturity value of \$1,000,000. Collateralized by U.S. Government Agency obligations with a rate of 2.375%, maturity date of 3/15/22, and an aggregate market value, including accrued interest, of \$1,020,035.
- (j) See Note 6 for aggregate cost for federal tax purposes.

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

Consumer, Non-cyclical	24.2%
Financial	19.4%
Communications	13.5%
Technology	11.6%
Industrial	9.8%
Consumer, Cyclical	9.2%
Basic Materials	5.6%
Energy	2.7%
Utilities	1.8%
Mutual Funds	0.8%
Diversified	0.3%
Total Long-Term Investments	98.9%
Short-Term Investments and Other Assets and Liabilities	1.1%
Net Assets	100.0%

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

MassMutual Select T. Rowe Price International Equity Fund — Portfolio of Investments (Continued)

### **OTC Options Written**

Description	Counterparty	Expiration Date	Exercise Price	No. of Contracts	Notional	Amount	Value	Premiums Paid (Received)	Unrealized Appreciation/ (Depreciation)
Call								(,	( · <b>p</b> ··· · · )
Farfetch Ltd.	JP Morgan Chase Bank								
	N.A.*	10/16/20	25.00	41	USD	102,500 \$	(5,892)	\$ (8,661)	\$ 2,769
Farfetch Ltd.	JP Morgan Chase Bank								
	N.A.*	10/16/20	26.00	76	USD	197,600	(7,690)	(18,195)	10,505
NXP	JP Morgan								
Semiconduct									
NV	N.A.*	1/15/21	140.00	7	USD	98,000	(3,822)	(5,060)	1,238
NXP	JP Morgan								
Semiconduct	ors Chase Bank								
NV	N.A.*	1/15/21	145.00	7	USD	101,500	(2,928)	(3,944)	1,016
NXP	JP Morgan								
Semiconduct	ors Chase Bank								
NV	N.A.*	1/15/21	150.00	10	USD	150,000	(3,178)	(7,477)	4,299
NXP	JP Morgan								
Semiconduct	ors Chase Bank								
NV	N.A.*	1/15/21	150.00	23	USD	345,000	(7,309) (30,819)	(18,869) \$ (62,206)	\$ 31,387

<sup>\*</sup> Contracts are subject to a Master Netting Agreement.

#### Currency Legend USD U.S. Dollar

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

### MassMutual Select Funds – Financial Statements

Statements of Assets and Liabilities September 30, 2020

	MassMutual Select Total Return Bond Fund	MassMutual Select Strategic Bond Fund
Assets:		
Investments, at value (Note 2) (a)	\$ 908,228,519	\$ 743,467,033
Repurchase agreements, at value (Note 2) (b)	_	9,535,524
Other short-term investments, at value (Note 2) (c)	99,516,393	14,028,111
Total investments <sup>(d)</sup>	1,007,744,912	767,030,668
Cash	10,110,159	46,096
Foreign currency, at value <sup>(e)</sup> Receivables from:	_	3,030,874
Investments sold	21 521 460	521 224
Regular delivery Delayed delivery	21,521,460 43,077,336	521,324 108,297
Closed swap agreements, at value		5,520
Open forward contracts (Note 2)	_	1,319,117
Fund shares sold	635,079	506,765
Collateral pledged for open futures and options contracts (Note 2)	1,925,000	1,459,536
Collateral pledged for open swap agreements ( <i>Note 2</i> )  Variation margin on open derivative instruments ( <i>Note 2</i> )		6,148,820 2,232,827
Interest and dividends	3,264,743	4,510,217
Interest tax reclaim	912	1,092
Foreign taxes withheld	_	
Open swap agreements, at value (Note 2)	- 42.741	89,068
Prepaid expenses Total assets	42,741 1,088,322,342	35,595 787,045,816
Liabilities:	1,000,322,342	787,043,810
Payables for:		
Investments purchased		
Regular delivery	23,151,910	1,450,262
Delayed delivery	150,107,343	31,062,575
Written options outstanding, at value (Note 2) (f) Open forward contracts (Note 2)	_	95,000
Foreign currency overdraft		1,964,911
Fund shares repurchased	4,237,711	4,380,406
Collateral held for securities on loan (Note 2) (g)	<u> </u>	_
Trustees' fees and expenses (Note 3)	173,587	56,388
Variation margin on open derivative instruments (Note 2)	40,312	_
Affiliates (Note 3):	225 559	222 000
Investment advisory fees Administration fees	225,558 56,454	233,898 67,063
Service fees	92,801	80,066
Shareholder service fees	7,793	17,924
Distribution fees	17,277	9,932
Commitment and Contingent Liabilities (Note 9)		
Accrued expense and other liabilities  Total liabilities	82,387 178,193,133	118,249 39,536,674
Net assets	\$ 910,129,209	\$ 747,509,142
Net assets consist of:	\$ 710,127,207	\$ 747,507,142
Paid-in capital	\$ 836,473,029	\$ 682,946,649
Accumulated Gain (Loss)	73,656,180	64,562,493
Net assets	<u>\$ 910,129,209</u>	\$ 747,509,142
(a) Cost of investments:	\$ 881,165,613	\$ 712,365,194
(b) Cost of repurchase agreements:	\$	\$ 9,535,524
(c) Cost of other short-term investments:	\$ 99,510,715	\$ 14,028,069
<ul><li>(d) Securities on loan with market value of:</li><li>(e) Cost of foreign currency:</li></ul>	\$ — \$ —	\$ — \$ 3,039,094
(f) Premiums on written options:	\$ — \$ —	\$ 153,425
(g) Non-cash collateral is not included.	4	55,.25

	MassMutual Select Diversified Value Fund		sMutual Select Tundamental Value Fund		MM S&P 500 Index Fund	S	MassMutual elect Equity ortunities Fund	Fu	Mutual Select indamental rowth Fund
\$	331,324,100	\$	516,868,297	\$	3,176,949,549	\$	716,093,214	\$	65,214,602
*	2,408,400	*	6,495,304	*	17,517,775	*	11,074,883	*	287,525
	104				7,362,535		156		
	333,732,604		523,363,601		3,201,829,859		727,168,253		65,502,127
	_		117,935		17,905		40.102		43,058
	_		211,845		_		48,182		_
	321,746		1,084,597		_		614,493		264,239
	_		_		_		_		_
	_		_		_		_		_
	891,841		866,400		1,064,620		517,394		29,723
	· —		_		· · · —		_		· —
	_		_				_		_
	525.7(2		639.231		154,483		1,513,036		14.421
	525,762		039,231		2,232,785		1,513,036		14,421
	20,890		137,568		_		100,141		_
	_		_		_		_		_
	48,970		44,801		40,824		45,019		39,478
	335,541,813		526,465,978		3,205,340,476		730,006,518		65,893,046
	30,671		2,004,013		_		56,312		96,652
	_		_		_		_		_
	_		_		_		_		_
	27		_		_		_		_
	310,910		1,331,123		21,088,826		2,158,692		899,304
	4,857,734		200 542		2,507,873		6,872,020		64,652
	156,962		208,543		496,947		130,501		18,048
	135,997		261,094		251,106		411,275		34,578
	19,822		33,232		347,755		40,296		11,143
	24,660		29,266		504,693		42,918		12,450
	6,025		12,409		65,079		14,783		3,881
	969		643		135,596		2,167		1,765
	47,220		69,758		180,922		61,295		43,699
	5,590,997		3,950,081		25,578,797		9,790,259	-	1,186,172
\$	329,950,816	\$	522,515,897	\$	3,179,761,679	\$	720,216,259	\$	64,706,874
\$	336,777,580	\$	528,040,297	\$	1,432,786,577	\$	609,436,991	\$	26,026,056
	(6,826,764)		(5,524,400)		1,746,975,102		110,779,268		38,680,818
\$	329,950,816	\$	522,515,897	\$	3,179,761,679	\$	720,216,259	\$	64,706,874
\$	334,716,140	\$	507,754,035	\$	1,808,666,022	\$	644,153,755	\$	56,917,123
\$	2,408,400	\$	6,495,304	\$	17,517,775	\$	11,074,883	\$	287,525
\$	104	\$	_	\$	7,362,322	\$	156	\$	
\$	6,022,825	\$	207.755	\$	5,409,068	\$	8,558,321	\$	1,539,283
\$ \$	_	\$ \$	207,755	\$ \$	_	\$ \$	47,903	\$ \$	_

## MassMutual Select Funds - Financial Statements (Continued)

Statements of Assets and Liabilities September 30, 2020

	MassMutual Select Total Return Bond Fund	MassMutual Select Strategic Bond Fund
Class I shares:		
Net assets	\$ 616,931,936	\$ 423,904,264
Shares outstanding (a)	57,106,404	37,509,403
Net asset value, offering price and redemption price per share	\$ 10.80	\$ 11.30
Class R5 shares:		
Net assets	\$ 38,177,115	\$ 89,644,394
Shares outstanding (a)	3,539,678	7,928,777
Net asset value, offering price and redemption price per share	\$ 10.79	\$ 11.31
Service Class shares:		
Net assets	\$ 93,185,323	\$ 37,610,832
Shares outstanding (a)	8,610,454	3,326,191
Net asset value, offering price and redemption price per share	\$ 10.82	\$ 11.31
Administrative Class shares:		
Net assets	\$ 20,595,716	\$ 70,366,048
Shares outstanding (a)	1,912,868	6,252,751
Net asset value, offering price and redemption price per share	\$ 10.77	\$ 11.25
Class A shares:		
Net assets	\$ 11,334,493	\$ 60,452,366
Shares outstanding (a)	1,057,224	5,390,377
Net asset value, and redemption price per share	\$ 10.72	\$ 11.21
Offering price per share (100/[100-maximum sales charge] of net asset value)	\$ 11.20	\$ 11.71
Class R4 shares:		
Net assets	\$ 102,119,963	\$ 49,770,364
Shares outstanding (a)	9,430,318	4,452,570
Net asset value, offering price and redemption price per share	\$ 10.83	\$ 11.18
Class R3 shares:		
Net assets	\$ 27,784,663	\$ 15,760,874
Shares outstanding (a)	2,588,520	1,423,828
Net asset value, offering price and redemption price per share	\$ 10.73	\$ 11.07

(a) Authorized unlimited number of shares with no par value.

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

Sele	MassMutual Select Diversified Value Fund		MassMutual Select Fundamental Value Fund		MM S&P 500 Index Fund		MassMutual Select Equity Opportunities Fund		Mutual Select indamental rowth Fund
\$	197,914,979	\$	268,367,577	\$	1,210,250,675	\$	402,371,388	\$	12,278,346
	20,059,870		35,689,631		62,660,983		23,366,246		1,473,376
\$	9.87	\$	7.52	\$	19.31	\$	17.22	\$	8.33
\$	62,820,936	\$	132,369,735	\$	416,360,072	\$	156,171,413	\$	12,350,673
	6,353,279		17,475,789		21,480,644		9,028,844		1,475,406
\$	9.89	\$	7.57	\$	19.38	\$	17.30	\$	8.37
\$	13,966,553	\$	21,653,746	\$	381,744,733	\$	48,503,517	\$	6,285,029
	1,412,176		2,875,607		19,663,003		2,873,268		775,308
\$	9.89	\$	7.53	\$	19.41	\$	16.88	\$	8.11
\$	16,358,677	\$	56,879,719	\$	370,740,200	\$	45,175,226	\$	13,485,367
	1,642,206		7,485,604		19,521,196		2,723,160		1,727,796
\$	9.96	\$	7.60	\$	18.99	\$	16.59	\$	7.80
\$	27,574,680	\$	34,647,437	\$	23,908,135	\$	55,831,835	\$	15,843,002
	2,799,446		4,644,873		1,287,322		3,569,831		2,185,746
\$	9.85	\$	7.46	\$	18.57	\$	15.64	\$	7.25
\$	10.42	\$	7.89	\$	19.65	\$	16.55	\$	7.67
\$	9,823,040	\$	7,608,549	\$	561,314,700	\$	8,715,894	\$	1,661,709
	1,012,468		1,039,551		29,998,762		568,180		232,722
\$	9.70	\$	7.32	\$	18.71	\$	15.34	\$	7.14
\$	1,491,951	\$	989,134	\$	215,443,164	\$	3,446,986	\$	2,802,748
	152,650		135,975		11,891,008		242,342		434,634
\$	9.77	\$	7.27	\$	18.12	\$	14.22	\$	6.45

## MassMutual Select Funds - Financial Statements (Continued)

Statements of Assets and Liabilities September 30, 2020

	MassMutual Select Blue Chip Growth Fund	MassMutual Select Growth Opportunities Fund
Assets:		
Investments, at value (Note 2) (a)	\$4,282,403,783	\$ 488,817,206
Repurchase agreements, at value (Note 2) (b)	13,263,282	11,492,652
Other short-term investments, at value (Note 2) (c)	1,075	
Total investments <sup>(d)</sup>	4,295,668,140	500,309,858
Cash	6,728,673	_
Foreign currency, at value <sup>(e)</sup> Receivables from:	_	_
Investments sold	5 105 720	(11.25)
Regular delivery	5,195,738	611,356
Open forward contracts (Note 2) Fund shares sold	1,494,992	163,894
Investment adviser (Note 3)		- 103,074
Variation margin on open derivative instruments ( <i>Note 2</i> )	_	_
Interest and dividends	760,085	18,558
Foreign taxes withheld	1,033,198	10,968
Prepaid expenses	39,268	45,112
Total assets	4,310,920,094	501,159,746
Liabilities:		
Payables for: Investments purchased		
Regular delivery	7,294,138	519,707
Open forward contracts (Note 2)	-,25 1,150	
Fund shares repurchased	6,416,044	1,576,099
Collateral held for securities on loan (Note 2) (f)	1,613,606	2,729,319
Trustees' fees and expenses (Note 3)	264,794	112,535
Variation margin on open derivative instruments (Note 2)	_	_
Affiliates (Note 3):		
Investment advisory fees	2,130,565	285,941
Administration fees Service fees	193,691 236,868	31,922 28,397
Shareholder service fees	80,010	13,423
Distribution fees	37,923	604
Due to custodian	_	_
Commitment and Contingent Liabilities (Note 9)	_	_
Accrued expense and other liabilities	176,534	44,878
Total liabilities	18,444,173	5,342,825
Net assets	<u>\$4,292,475,921</u>	\$ 495,816,921
Net assets consist of:		
Paid-in capital	\$2,275,921,514	\$ 214,020,838
Accumulated Gain (Loss)	2,016,554,407	281,796,083
Net assets	<u>\$4,292,475,921</u>	\$ 495,816,921
(a) Cost of investments:	\$ 2,395,974,668	\$ 293,039,808
(b) Cost of repurchase agreements:	\$ 13,263,282	\$ 11,492,652
(c) Cost of other short-term investments: (d) Securities on loan with market value of:	\$ 1,075	\$ — \$ 19,908,909
(e) Cost of foreign currency:	\$ 3,686,014 \$ —	\$ 19,908,909 \$ —
(f) Non-cash collateral is not included.	φ —	ψ —
7 A Total Collection to Hot Moradon		

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

 MassMutual Select Mid-Cap Value Fund	MassMutual Select Small Cap Value Equity Fund		MassMutual Select Small Company Value Fund		MM S&P Mid Cap Index Fund		MM Russell 2000 Small Cap Index Fund	
\$ 100,816,890	\$	73,645,666	\$	161,006,951	\$	374,588,417	\$	267,229,953
2,629,155		2,122,612		2,370,278		797,299		_
 _		_		_		1,929,354		1,154,613
 103,446,045		75,768,278		163,377,229		377,315,070		268,384,566
5		69		_		_		13
505,700		63,999		901,765		_		478,949
2,251		705 421		 520 010		202.070		244.547
405,871 23,742		705,431		529,919		283,079		344,547
		_		_		19,666		_
208,224		83,576		137,996		368,499		259,028
2,006		_		_		_		_
 46,523		40,320		41,366		44,098		43,239
 104,640,367		76,661,673		164,988,275		378,030,412		269,510,342
343,617		126,954		367,239		582,713		133,191
43,857				200 525		2.021.762		200 720
239,930 115,500		539,093 687,309		390,725 856,534		2,021,763 1,085,921		398,739 9,561,888
21,944		23,180		73,704		40,482		29,233
								581
59,867		46,745		115,766		31,027		21,438
6,064		7,477		13,012		59,489		40,178
2,733		5,526		7,585		134,138		74,325
497		1,091		3,113		9,763		8,302
242		475		141		63,920		29,921 118,054
_		_		_		_		116,034
44,796		44,242		54,510		65,550		48,195
 879,047		1,482,092		1,882,329		4,094,766		10,464,045
\$ 103,761,320	\$	75,179,581	\$	163,105,946	\$	373,935,646	\$	259,046,297
\$ 107,449,277	\$	83,358,394	\$	191,191,733	\$	343,914,679	\$	253,685,284
 (3,687,957)		(8,178,813)		(28,085,787)		30,020,967		5,361,013
\$ 103,761,320	\$	75,179,581	\$	163,105,946	\$	373,935,646	\$	259,046,297
\$ 100,214,874	\$	80,132,094	\$	179,753,917	\$	363,356,354	\$	267,642,427
\$ 2,629,155	\$	2,122,612	\$	2,370,278	\$	797,299	\$	· · ·
\$ _	\$	_	\$	_	\$	1,929,298	\$	1,154,580
\$ 1,047,549	\$	2,222,242	\$	7,216,958	\$	10,010,431	\$	27,159,368
\$ 5	\$	69	\$	_	\$	_	\$	13

# MassMutual Select Funds - Financial Statements (Continued)

Statements of Assets and Liabilities September 30, 2020

	MassMutual Select Blue Chip Growth Fund	MassMutual Select Growth Opportunities Fund
Class I shares:		
Net assets	\$2,729,246,062	\$ 248,332,735
Shares outstanding (a)	94,168,738	23,504,579
Net asset value, offering price and redemption price per share	\$ 28.98	\$ 10.57
Class R5 shares:		
Net assets	\$ 604,630,431	\$ 112,882,035
Shares outstanding (a)	20,901,402	10,922,895
Net asset value, offering price and redemption price per share	\$ 28.93	\$ 10.33
Service Class shares:		
Net assets	\$ 184,567,298	\$ 31,955,270
Shares outstanding (a)	6,444,132	3,270,521
Net asset value, offering price and redemption price per share	\$ 28.64	\$ 9.77
Administrative Class shares:		
Net assets	\$ 388,847,496	\$ 57,076,066
Shares outstanding (a)	13,801,045	6,300,552
Net asset value, offering price and redemption price per share	\$ 28.18	\$ 9.06
Class A shares:		
Net assets	\$ 202,793,810	\$ 41,810,289
Shares outstanding (a)	7,569,617	5,414,844
Net asset value, and redemption price per share	\$ 26.79	\$ 7.72
Offering price per share (100/[100-maximum sales charge] of net asset value)	\$ 28.35	\$ 8.17
Class R4 shares:		
Net assets	\$ 121,842,904	\$ 2,776,661
Shares outstanding (a)	4,552,839	354,213
Net asset value, offering price and redemption price per share	\$ 26.76	\$ 7.84
Class R3 shares:		
Net assets	\$ 60,547,920	\$ 983,865
Shares outstanding (a)	2,445,752	153,847
Net asset value, offering price and redemption price per share	\$ 24.76	\$ 6.40

(a) Authorized unlimited number of shares with no par value.

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

MassMutual Select Mid-Cap Value Fund	 MassMutual Select Small Cap Value Equity Fund		MassMutual Select Small Company Value Fund		MM S&P Mid Cap Index Fund		MM Russell 2000 Small Cap Index Fund	
\$ 97,456,588	\$ 51,492,453	\$	86,121,434	\$	83,944,158	\$	75,987,207	
8,666,743	 5,904,590		11,698,388		6,496,291		6,552,692	
\$ 11.24	\$ 8.72	\$	7.36	\$	12.92	\$	11.60	
\$ 843,227	\$ 10,194,336	\$	48,006,314	\$	22,831,625	\$	14,075,535	
74,209	 1,165,942		6,473,191		1,773,195		1,214,817	
\$ 11.36	\$ 8.74	\$	7.42	\$	12.88	\$	11.59	
\$ 202,996	\$ 2,572,032	\$	4,280,612	\$	19,643,323	\$	8,862,599	
17,993	 292,709		581,121		1,533,806		771,398	
\$ 11.28	\$ 8.79	\$	7.37	\$	12.81	\$	11.49	
\$ 872,866	\$ 3,126,215	\$	12,971,062	\$	42,109,041	\$	44,133,912	
75,875	359,162		1,804,146		3,289,856		3,836,078	
\$ 11.50	\$ 8.70	\$	7.19	\$	12.80	\$	11.50	
\$ 3,070,893	\$ 4,714,788	\$	10,693,814	\$	30,053,340	\$	19,729,663	
272,411	550,882		1,556,899		2,354,242		1,727,834	
\$ 11.27	\$ 8.56	\$	6.87	\$	12.77	\$	11.42	
\$ 11.93	\$ 9.06	\$	7.27	\$	13.51	\$	12.08	
\$ 933,738	\$ 2,331,647	\$	881,611	\$	77,571,713	\$	50,001,399	
83,839	274,373		130,127		6,106,130		4,395,094	
\$ 11.14	\$ 8.50	\$	6.78	\$	12.70	\$	11.38	
\$ 381,012	\$ 748,110	\$	151,099	\$	97,782,446	\$	46,255,982	
34,321	 88,904		24,268		7,739,078		4,090,627	
\$ 11.10	\$ 8.41	\$	6.23	\$	12.63	\$	11.31	

# MassMutual Select Funds - Financial Statements (Continued)

Statements of Assets and Liabilities September 30, 2020

	MassMutual Select Mid Cap Growth Fund	MassMutual Select Small Cap Growth Equity Fund
Assets:		
Investments, at value (Note 2) (a)	\$ 8,525,335,896	\$ 591,945,245
Repurchase agreements, at value (Note 2) (b)	102,123,408	7,422,792
Other short-term investments, at value (Note 2) (c)	153,820,895	_
Total investments <sup>(d)</sup>	8,781,280,199	599,368,037
Cash	37,440	
Foreign currency, at value (e)	_	12
Receivables from:		12
Investments sold		
Regular delivery	7,919,555	2,503,633
Open forward contracts (Note 2)	_	_
Fund shares sold	2,373,273	322,184
Collateral pledged for open futures contracts (Note 2)	_	_
Investment adviser ( <i>Note 3</i> ) Variation margin on open derivative instruments ( <i>Note 2</i> )	_	_
Interest and dividends	1,645,673	192,811
Foreign taxes withheld		
Prepaid expenses	65,175	45,570
Total assets	8,793,321,315	602,432,247
Liabilities:		
Payables for:		
Investments purchased	10.066.406	2.050.004
Regular delivery Delayed delivery	18,966,486	2,850,984
	_	_
Written options outstanding, at value ( <i>Note 2</i> ) <sup>(f)</sup> Open forward contracts ( <i>Note 2</i> )	_	_
Fund shares repurchased	58,918,136	1,246,633
Collateral held for securities on loan ( <i>Note 2</i> ) <sup>(g)</sup>	47,853,363	5,473,204
Trustees' fees and expenses ( <i>Note 3</i> )	553,257	118,631
Affiliates (Note 3):	333,237	110,051
Investment advisory fees	4,815,401	383,173
Administration fees	297,792	31,363
Service fees	263,837	33,314
Shareholder service fees	69,573	9,068
Distribution fees	19,468	2,541
Commitment and Contingent Liabilities ( <i>Note 9</i> ) Accrued expense and other liabilities	229,567	68,932
Total liabilities	131,986,880	10.217.843
Net assets	\$ 8,661,334,435	\$ 592,214,404
Net assets consist of:	<u> </u>	Φ 372,211,101
Paid-in capital	\$ 6,096,482,129	\$ 448,079,478
Accumulated Gain (Loss)	2,564,852,306	144,134,926
Net assets	\$ 8,661,334,435	\$ 592,214,404
(a) Cost of investments:	\$6,435,564,901	
(b) Cost of repurchase agreements:	\$ 102,123,408	. , ,
(c) Cost of other short-term investments:	\$ 153,820,895	
(d) Securities on loan with market value of:	\$ 121,136,704	
(e) Cost of foreign currency: (f) Premiums on written options:	\$ — \$ —	- \$ 12 - \$ —
(g) Non-cash collateral is not included.	φ —	φ —
Control San Solution to lot metados.		

MM MSCI EAFE International Index Fund		MassMutual elect Overseas Fund	]	ssMutual Select F. Rowe Price International Equity Fund
\$ 197,048,777 1,320,257	\$	600,219,576 11,579,242	\$	1,300,261,607 1,000,000 17,663,937
198,369,034	-	611,798,818		1,318,925,544
5,012 1,397,790		36,859 34,796		167,596 1,141,744
17,388		1,828,650		1,467,814
17,388 183,219		3,110,096		101,640
		34,326		107,324
1,529,597 666,339		676,270		4,269,519
747,336 43,241		2,331,804 44,755		1,980,536 9,509
202,958,956		619,896,374		1,328,171,226
140,318		1,024,049 — —		1,338,789 1,163,356 30,819
20,631 90,501 1,799,705 33,039		53,567 572,078 1,960,355 116,494		851,644 10,108,088 38,077
16,674 31,910 55,930 6,604 21,142		409,540 35,274 34,351 7,848 3,492		8,297 — —
51,487		421,565	-	199,072
\$ 2,267,941 \$ 200,691,015	\$	4,638,613 <b>615,257,761</b>	\$	13,738,142 1,314,433,084
\$ 194,538,838 6,152,177 <b>\$ 200,691,015</b>	\$ \$	618,593,344 (3,335,583) <b>615,257,761</b>	\$ <b>\$</b>	1,351,320,254 (36,887,170) 1,314,433,084
\$ 189,525,305 \$ 1,320,257 \$ — \$ 5,511,655 \$ 1,410,840 \$ —	\$ \$ \$ \$ \$ \$	588,680,827 11,579,242 — 10,880,192 34,704 —	\$ \$ \$ \$ \$ \$ \$	1,283,612,493 1,000,000 17,663,937 28,926,497 1,132,470 62,206

# MassMutual Select Funds - Financial Statements (Continued)

Statements of Assets and Liabilities September 30, 2020

	MassMutual Select Mid Cap Growth Fund	MassMutual Select Small Cap Growth Equity Fund
Class I shares:		
Net assets	\$ 6,188,462,580	\$ 342,888,088
Shares outstanding (a)	242,599,184	20,882,876
Net asset value, offering price and redemption price per share	\$ 25.51	\$ 16.42
Class R5 shares:		
Net assets	\$ 1,471,580,498	\$ 134,136,491
Shares outstanding (a)	58,386,668	8,315,623
Net asset value, offering price and redemption price per share	\$ 25.20	\$ 16.13
Service Class shares:		
Net assets	\$ 335,782,096	\$ 31,976,994
Shares outstanding (a)	13,723,066	2,133,501
Net asset value, offering price and redemption price per share	\$ 24.47	\$ 14.99
Administrative Class shares:		
Net assets	\$ 261,188,275	\$ 29,067,009
Shares outstanding (a)	11,257,285	2,110,604
Net asset value, offering price and redemption price per share	\$ 23.20	\$ 13.77
Class A shares:		
Net assets	\$ 196,755,603	\$ 34,698,828
Shares outstanding (a)	9,333,811	2,963,954
Net asset value, and redemption price per share	\$ 21.08	\$ 11.71
Offering price per share (100/[100-maximum sales charge] of net asset value)	\$ 22.31	\$ 12.39
Class R4 shares:		
Net assets	\$ 176,500,337	\$ 15,517,479
Shares outstanding (a)	8,295,499	1,312,547
Net asset value, offering price and redemption price per share	\$ 21.28	\$ 11.82
Class R3 shares:		
Net assets	\$ 31,065,046	\$ 3,929,515
Shares outstanding (a)	1,621,663	401,889
Net asset value, offering price and redemption price per share	\$ 19.16	\$ 9.78

(a) Authorized unlimited number of shares with no par value.

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

5,313,467     46,370,718     138,190,06       \$ 11.96     \$ 7.99     \$ 9.5       \$ 15,217,012     \$ 132,845,341     \$ -1       \$ 1,273,454     16,559,160        \$ 11.95     \$ 8.02     \$       \$ 3,670,538     \$ 37,996,564     \$       \$ 306,399     4,767,232        \$ 11.98     \$ 7.97     \$       \$ 32,705,675     \$ 19,033,891     \$       \$ 11.87     \$ 8.05     \$       \$ 19,155,852     \$ 30,720,947     \$       \$ 11.83     \$ 7.85     \$       \$ 11.83     \$ 7.85     \$       \$ 2,900,335     \$ 2,347,756        \$ 32,240,196     \$ 6,092,508     \$       \$ 32,240,196     \$ 6,092,508     \$       \$ 32,240,196     \$ 6,092,508     \$       \$ 2,749,275     \$ 784,871	 MM MSCI EAFE International Index Fund	 MassMutual Select Overseas Fund	 MassMutual Select T. Rowe Price International Equity Fund
\$ 11.96 \$ 7.99 \$ 9.5  \$ 15.217,012 \$ 132,845,341 \$ \$	\$ 63,542,248	\$ 370,549,314	\$ 1,314,433,084
\$ 15,217,012	 5,313,467	 46,370,718	 138,190,069
1,273,454     16,559,160       \$ 11.95     \$ 8.02       \$ 3,670,538     \$ 37,996,564       \$ 306,399     4,767,232       \$ 11.98     \$ 7.97       \$ 2,754,825     19,033,891       \$ 11.87     \$ 8.05       \$ 19,155,852     \$ 30,720,947       \$ 11,619,651     3,911,368       \$ 12.52     \$ 8.31       \$ 34,159,494     \$ 18,019,196       \$ 2,900,335     2,347,756       \$ 32,240,196     \$ 6,092,508       \$ 2,749,275     \$ 784,871	\$ 11.96	\$ 7.99	\$ 9.51
\$     11.95     \$     8.02     \$     -       \$     3,670,538     \$     37,996,564     \$     -       \$     306,399     4,767,232     -       \$     11.98     \$     7.97     \$       \$     32,705,675     \$     19,033,891     \$     -       \$     2,754,825     2,365,434     -       \$     11.87     \$     8.05     \$     -       \$     19,155,852     \$     30,720,947     \$     -       \$     11.83     \$     7.85     \$       \$     11.83     \$     7.85     \$       \$     11.83     \$     7.85     \$       \$     12.52     \$     8.31     \$       \$     34,159,494     \$     18,019,196     \$       \$     2,900,335     2,347,756     \$       \$     32,240,196     \$     6,092,508     \$       \$     32,240,196     \$     6,092,508     \$       \$     2,749,275     784,871     -	\$ 15,217,012	\$ 132,845,341	\$ _
\$ 3,670,538 \$ 37,996,564 \$ —  306,399 \$ 4,767,232 \$ —  \$ 11.98 \$ 7.97 \$ —  \$ 32,705,675 \$ 19,033,891 \$ —  2,754,825 \$ 2,365,434 \$ —  \$ 11.87 \$ 80.5 \$ —  \$ 19,155,852 \$ 30,720,947 \$ —  \$ 1,619,651 \$ 3,911,368 \$ —  \$ 11.83 \$ —  \$ 11.83 \$ —  \$ 12.52 \$ 8.31 \$ —  \$ 34,159,494 \$ 18,019,196 \$ —  \$ 2,900,335 \$ —  \$ 32,240,196 \$ —  \$ 6,092,508 \$ —  \$ 32,240,196 \$ —  \$ 6,092,508 \$ —  \$ 784,871 \$ —	1,273,454	16,559,160	
306,399   4,767,232	\$ 11.95	\$ 8.02	\$
\$     11.98     \$     7.97     \$       \$     32,705,675     \$     19,033,891     \$       \$     2,754,825     2,365,434     -       \$     11.87     \$     8.05     \$       \$     19,155,852     \$     30,720,947     \$     -       \$     1,619,651     3,911,368     -       \$     11.83     \$     7.85     \$       \$     12.52     \$     8.31     \$       \$     34,159,494     \$     18,019,196     \$       \$     2,990,335     2,347,756     -       \$     11.78     \$     7.68     \$       \$     32,240,196     \$     6,092,508     \$       \$     2,749,275     784,871     -	\$ 3,670,538	\$ 37,996,564	\$ _
\$ 32,705,675  \$ 19,033,891  \$ - 2,754,825  \$ 2,365,434  \$ - \$ \$ 11.87  \$ 8.05  \$ - \$  \$ 19,155,852  \$ 30,720,947  \$ - 1,619,651  \$ 3,911,368  \$ - \$  \$ 11.83  \$ 7.85  \$ - \$  \$ 12.52  \$ 8.31  \$ - \$  \$ 34,159,494  \$ 18,019,196  \$ - 2,900,335  \$ - \$  \$ 11.78  \$ 7.68  \$ - \$  \$ 32,240,196  \$ 6,092,508  \$ - \$  \$ 2,749,275  \$ 784,871	306,399	4,767,232	_
2,754,825         2,365,434         —           \$         11.87         \$         8.05         \$           \$         19,155,852         \$         30,720,947         \$         —           \$         1,619,651         3,911,368         —         —           \$         11.83         \$         7.85         \$         —           \$         12.52         \$         8.31         \$         —           \$         34,159,494         \$         18,019,196         \$         —           \$         2,900,335         \$         2,347,756         —           \$         11.78         \$         7.68         \$         —           \$         32,240,196         \$         6,092,508         \$         —         —           \$         2,749,275         784,871         — <td< td=""><td>\$ 11.98</td><td>\$ 7.97</td><td>\$ _</td></td<>	\$ 11.98	\$ 7.97	\$ _
\$     11.87     \$     8.05     \$     -       \$     19,155,852     \$     30,720,947     \$     -       \$     1,619,651     \$     3,911,368     -       \$     11.83     \$     7.85     \$       \$     12.52     \$     8.31     \$       \$     34,159,494     \$     18,019,196     \$       \$     2,900,335     \$     -       \$     11.78     \$     7.68     \$       \$     32,240,196     \$     6,092,508     \$       \$     2,749,275     784,871     -	\$ 32,705,675	\$ 19,033,891	\$ _
\$ 19,155,852 \$ 30,720,947 \$ —  1,619,651 \$ 3,911,368 —  \$ 11.83 \$ 7.85 \$ —  \$ 12.52 \$ 8.31 \$ —  \$ 34,159,494 \$ 18,019,196 \$ —  \$ 2,900,335 \$ —  \$ 7.68 \$ —  \$ 32,240,196 \$ —  \$ 6,092,508 \$ —  \$ 2,749,275 \$ —  \$ 784,871 —	2,754,825	2,365,434	 
1,619,651     3,911,368       \$     11.83       \$     7.85       \$     8.31       \$     34,159,494       \$     18,019,196       \$     2,900,335       \$     7.68       \$     32,240,196       \$     6,092,508       \$     784,871	\$ 11.87	\$ 8.05	\$ 
\$     11.83     \$     7.85     \$     -       \$     12.52     \$     8.31     \$     -       \$     34,159,494     \$     18,019,196     \$     -       \$     2,900,335     \$     2,347,756     -       \$     11.78     \$     7.68     \$     -       \$     32,240,196     \$     6,092,508     \$     -       \$     2,749,275     784,871     -	\$ 19,155,852	\$ 30,720,947	\$ _
\$ 12.52 \$ 8.31 \$ - \$  \$ 34,159,494 \$ 18,019,196 \$ - \$  2,900,335 \$ 2,347,756 \$ - \$  \$ 11.78 \$ 7.68 \$ - \$  \$ 32,240,196 \$ 6,092,508 \$ - \$  2,749,275 \$ 784,871 - \$	1,619,651	3,911,368	
\$ 34,159,494 \$ 18,019,196 \$ - 2,900,335 \$ 2,347,756 \$ - 11.78 \$ 7.68 \$ - 2,347,756 \$ - 2,749,275 \$ 784,871 \$ - 2,749,275	\$ 11.83	\$ 7.85	\$ 
2,900,335     2,347,756       \$     11.78       \$     7.68       \$     6,092,508       2,749,275     784,871	\$ 12.52	\$ 8.31	\$ 
\$ 11.78 \$ 7.68 \$ —  \$ 32,240,196 \$ 6,092,508 \$ —  2,749,275 784,871 —	\$ 34,159,494	\$ 18,019,196	\$ _
\$ 32,240,196 2,749,275 \$ 6,092,508 784,871 \$ -	2,900,335	2,347,756	 
2,749,275 784,871 —	\$ 11.78	\$ 7.68	\$ _
	\$ 32,240,196	\$ 6,092,508	\$ _
\$ 11,73 \$ 7.76 \$ -	 2,749,275	 784,871	
	\$ 11.73	\$ 7.76	\$ 

MassMutual Select Funds - Financial Statements (Continued)

Statements of Operations For the Year Ended September 30, 2020

	MassMutual Select Total Return Bond Fund	MassMutual Select Strategic Bond Fund
Investment income (Note 2):		
Dividends <sup>(a)</sup>	\$ —	\$ —
Interest (b)	21,471,995	23,144,434
Securities lending net income	45,833	6,425
Total investment income	21,517,828	23,150,859
Expenses (Note 3):		
Investment advisory fees	2,621,615	2,706,888
Custody fees	123,822	246,580
Audit fees	56,501	52,903
Legal fees	26,230	21,708
Proxy fees	1,222	1,222
Accounting & Administration fees	99,049	170,781
Shareholder reporting fees	49,567	43,607
Trustees' fees	41,351	33,772
Registration and filing fees	99,649	97,735
Transfer agent fees	2,978	2,978
	3,121,984	3,378,174
Administration fees:		
Class R5	35,767	73,889
Service Class	151,939	52,057
Administrative Class	30,784	109,204
Class A	13,075	79,936
Class R4	262,775	111,689
Class R3	56,718	34,396
Distribution and Service fees:		
Class A	21,792	133,227
Class R4	328,468	139,611
Class R3	141,794	85,991
Shareholder service fees:	50.647	17.252
Service Class	50,647	17,352
Administrative Class	30,784	109,204
Class A	13,075	79,936
Total expenses	4,259,602	4,404,666
Net investment income (loss)	17,258,226	18,746,193

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

MassMutual Select Diversified Value Fund		MassMutual Select Fundamental Value Fund		MM S&P 500 Index Fund		MassMutual Select Equity Opportunities Fund		MassMutual Select Fundamental Growth Fund	
\$	10,118,265	\$	14,705,503	\$	61,941,321	\$	15,215,666	\$	815,111
	12,753		23,443		115,456		44,183		7,224
	14,421		4,478		38,866		25,660		1,602
	10,145,439		14,733,424		62,095,643		15,285,509		823,937
	1,689,488		3,528,287		3,093,046		4,471,902		652,262
	32,404		60,505		249,955		45,214		29,193
	35,311		36,585		38,066		38,072		39,346
	9,978		14,957		95,084		18,643		3,265
	1,222		1,222		1,222		1,222		1,222
	44,228		40,238		149,530		48,071		31,961
	23,712		38,108		161,727		34,110		26,973
	16,436		30,699		155,359		30,197		5,356
	99,244		100,220		98,221		100,575		98,810
	1,999		2,978		2,978		2,978		2,979
	1,954,022		3,853,799		4,045,188		4,790,984		891,367
	67,809		162,033		450,689		163,659		26,010
	17,175		35,623		778,694		73,390		10,807
	26,952		79,525		826,085		75,727		20,475
	46,018		79,985		51,884		86,455		23,059
	17,849		15,668		1,421,968		15,370		2,859
	3,298		3,174		530,284		6,839		5,605
	76,697		133,308		64,855		144,092		38,432
	22,311		19,585		1,421,968		19,213		3,574
	8,244		7,936		1,060,569		17,097		14,012
	5,725		11,874		194,673		24,463		3,603
	26,952		79,525		619,564		75,727		20,475
	46,018		79,985		38,913		86,455		23,059
	2,319,070		4,562,020		11,505,334		5,579,471		1,083,337
	7,826,369		10,171,404		50,590,309		9,706,038		(259,400)

MassMutual Select Funds - Financial Statements (Continued)

Statements of Operations For the Year Ended September 30, 2020

	MassMutual Select Total Return Bond Fund	MassMutual Select Strategic Bond Fund
Realized and unrealized gain (loss):		
Net realized gain (loss) on:		
Investment transactions	\$ 35,940,594	\$ 11,845,710
Futures contracts	5,524,862	24,087,451
Written options	200,400	8,555,472
Swap agreements	29,678	(23,601,067)
Foreign currency transactions	663,110	(1,747)
Forward contracts	328,894	(5,042,358)
Net realized gain (loss)	42,687,538	15,843,461
Net change in unrealized appreciation (depreciation) on:		
Investment transactions	5,114,709	991,336
Futures contracts	225,789	(1,629,385)
Written options	_	(92,263)
Swap agreements	130,016	10,334,441
Translation of assets and liabilities in foreign currencies	20	45,610
Forward contracts	_	(86,878)
Net change in unrealized appreciation (depreciation)	5,470,534	9,562,861
Net realized gain (loss) and change in unrealized appreciation (depreciation)	48,158,072	25,406,322
Net increase (decrease) in net assets resulting from operations	\$ 65,416,298	\$ 44,152,515
(a) Net of foreign withholding tax of:	\$	\$ —
(b) Net of foreign withholding tax of:	\$ 570	\$ —

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

MassMutual Select Diversified Value Fund		MassMutual Select Fundamental Value Fund		MM S&P 500 Index Fund		MassMutual Select Equity Opportunities Fund		MassMutual Select Fundamental Growth Fund	
\$	(7,083,837)	\$	(14,561,741)	\$	389,472,134 7,294,092	\$	39,967,330	\$	35,588,200
	_		_		_		_		_
	3,158		11,454		_		7,221		(603)
	(7,080,679)		(14,550,287)		396,766,226		39,974,551		35,587,597
	(24,286,484)		(44,852,123)		15,322,919 190,147		(30,901,065)		(9,850,354)
	_		_				_		_
	_		_		_		_		_
	1,997		11,528		_		(685)		_
	(24,284,487)		(44,840,595)		15,513,066		(30,901,750)		(9,850,354)
	(31,365,166)		(59,390,882)		412,279,292		9,072,801		25,737,243
\$	(23,538,797)	\$	(49,219,478)	\$	462,869,601	\$	18,778,839	\$	25,477,843
\$	76,609	\$	53,337	\$	_	\$	152,769	\$	986
\$	_	\$	_	\$	_	\$	_	\$	_

MassMutual Select Funds - Financial Statements (Continued)

Statements of Operations For the Year Ended September 30, 2020

	MassMutual Select Blue Chip Growth Fund	MassMutual Select Growth Opportunities Fund
Investment income (Note 2):		
Dividends <sup>(a)</sup>	\$ 24,671,758	\$ 1,982,291
Interest	48,189	51,568
Securities lending net income	63,578	520,565
Total investment income	24,783,525	2,554,424
Expenses (Note 3):		
Investment advisory fees	21,742,700	3,315,349
Custody fees	233,009	34,369
Audit fees	37,305	38,085
Legal fees	82,654	10,637
Proxy fees	1,222	1,222
Accounting & Administration fees	145,091	40,352
Shareholder reporting fees	112,316	29,430
Trustees' fees	163,617	22,451
Registration and filing fees	110,342	99,621
Transfer agent fees	2,978	2,977
Administration fees:	22,631,234	3,594,493
Class R5	499,146	125,096
Service Class	189,601	85,852
Administrative Class	505,194	74,906
Class A	282,208	55,124
Class R4	220,068	11,496
Class R3	118,410	1,718
Distribution and Service fees:	110,110	1,710
Class A	470,346	91,873
Class R4	275,085	14,370
Class R3	296,026	4,296
Shareholder service fees:		
Service Class	63,200	28,618
Administrative Class	505,194	74,906
Class A	282,208	55,124
Total expenses	26,337,920	4,217,872
Expenses waived (Note 3):		
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	_	(10.074)
Class I advisory fees waived Class R5 advisory fees waived	_	(18,974)
Service Class advisory fees waived	_	(12,388)
Administrative Class advisory fees waived	_	(5,662) (4,948)
Class A advisory fees waived	_	(3,642)
Class R4 advisory fees waived  Class R4 advisory fees waived		(569)
Class R4 advisory fees waived	_	(85)
Net expenses:	26,337,920	4,171,604
Net investment income (loss)	(1,554,395)	(1,617,180)
ret myestment income (1055)	(1,334,393)	(1,01/,100)

MassMutual Select Mid-Cap Value Fund	MassMutual Select Small Cap Value Equity Fund	MassMutual Select Small Company Value Fund	MM S&P Mid Cap Index Fund	MM Russell 2000 Small Cap Index Fund
\$ 2,409,900	\$ 981,907	\$ 2,930,132	\$ 6,382,298	\$ 3,373,445
6,944	10,981	13,922	27,936	18,498
5,630	3,176	16,850	62,349	418,329
2,422,474	996,064	2,960,904	6,472,583	3,810,272
663,636	592,644	1,511,953	413,295	271,074
54,250	38,354	50,604	48,659	84,378
38,531	38,561	37,763	33,441	33,405
2,835	1,966	8,224	9,986	7,061
1,222	1,222	1,222	1,222	1,222
33,953	31,730	34,818	42,116	53,095
46,172	15,202	29,563	88,920	49,804
4,497	3,887	8,854	20,374	13,263
98,920	99,272	100,588	98,681	97,273
2,978	2,978	2,978	2,977	2,978
946,994	825,816	1,786,567	759,671	613,553
1,202	12,869	60,541	29,474	14,621
306	5,092	7,895	39,880	18,174
1,358	4,667	16,194	94,734	93,012
4,490	8,702	21,343	65,438	43,340
1,915	7,511	1,378	221,740	131,797
930	1,547	575	272,911	123,334
7,482	14,505	35,572	81,797	54,175
2,394	9,389	1,722	221,740	131,797
2,326	3,869	1,438	545,822	246,667
102	1,697	2,632	9,970	4,543
1,358	4,667	16,194	71,051	69,759
4,490	8,702	21,343	49,078	32,505
975,347	909,033	1,973,394	2,463,306	1,577,277
(175,133)	_	_	_	(2,957)
(2,390)	_	_	_	(565)
(415)	_	_	_	(361)
(1,846)	_	_	_	(1,907)
(5,928)	_	_	_	(884)
(1,895)	_	_	_	(2,075)
(944)	_	_	_	(1,885)
_	_	_	_	_
_	_	_	_	_
_	_	_	_	_
_	_	_	_	_
_	_	_	_	_
_	_	_	_	_
	<u> </u>	<del></del>	<u> </u>	<u> </u>
786,796	909,033	1,973,394	2,463,306	1,566,643
1,635,678	87,031	987,510	4,009,277	2,243,629

MassMutual Select Funds - Financial Statements (Continued)

Statements of Operations For the Year Ended September 30, 2020

	MassMutual Select Blue Chip Growth Fund	MassMutual Select Growth Opportunities Fund
Realized and unrealized gain (loss):		
Net realized gain (loss) on:		
Investment transactions	\$ 174,866,127	\$ 97,446,596
Futures contracts	_	_
Foreign currency transactions	743	_
Forward contracts	_	_
Net realized gain (loss)	174,866,870	97,446,596
Net change in unrealized appreciation (depreciation) on:		·
Investment transactions	903,520,530	76,888,644
Futures contracts	_	_
Translation of assets and liabilities in foreign currencies	10	_
Forward contracts	_	_
Net change in unrealized appreciation (depreciation)	903,520,540	76,888,644
Net realized gain (loss) and change in unrealized appreciation (depreciation)	1,078,387,410	174,335,240
Net increase (decrease) in net assets resulting from operations	\$1,076,833,015	\$ 172,718,060
(a) Net of foreign withholding tax of:	\$ 467,085	\$ 6,505

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

Sel	AassMutual lect Mid-Cap Value Fund	\$ MassMutual Select Small Cap Value Equity Fund	\$	MassMutual Select Small Company Value Fund		MM S&P Mid Cap Index Fund	200	AM Russell 00 Small Cap Index Fund
\$	(2,469,802) — (3,945)	\$ (545,336) — 124	\$	(9,516,572) — —	\$	19,934,445 2,504,647	\$	9,674,633 1,659,982
	(48,709) (2,522,456)	 (545,212)		(9,516,572)		22,439,092		11,334,615
		 <u> </u>	-		-			
	(4,991,540)	(13,486,311)		(20,020,210)		(36,156,640) 75,707		(12,638,103) 95,632
	38	2		_		_		_
	(144,954) (5,136,456)	 (13,486,309)		(20,020,210)	-	(36,080,933)		(12,542,471)
	(7,658,912)	 (14,031,521)	-	(29,536,782)		(13,641,841)		(1,207,856)
\$	(6,023,234)	\$ (13,944,490)	\$	(28,549,272)	\$	(9,632,564)	\$	1,035,773
\$	28,029	\$ 3,408	\$	13,772	\$	1,393	\$	3,710

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, 2020

	Se	IassMutual lect Mid Cap rowth Fund	Se Ca	nssMutual lect Small p Growth juity Fund
Investment income (Note 2):				
Dividends (a)	\$	58,912,921	\$	3,400,261
Interest (b)		2,220,415		39,929
Securities lending net income		627,301		175,503
Total investment income		61,760,637		3,615,693
Expenses (Note 3):				
Investment advisory fees		57,290,989		4,279,385
Custody fees		462,776		64,191
Audit fees		35,058		41,560
Legal fees		213,658		21,842
Proxy fees		1,222		1,222
Accounting & Administration fees		321,614		42,696
Shareholder reporting fees		565,922		55,589
Trustees' fees		402,555 106,211		25,490
Registration and filing fees				102,387
Transfer agent fees		2,977		2,978
A during the state of the state		59,402,982		4,637,340
Administration fees: Class R5		1,465,813		126,923
Service Class		506,070		47,660
Administrative Class		397,033		42,573
Class A		397,033		42,373
Class R4		396,064		26,665
Class R3		61,028		6,343
Distribution and Service fees:		01,020		0,545
Class A		514,177		82,372
Class R4		495,080		33,331
Class R3		152,570		15,858
Shareholder service fees:		,- , ,		,
Service Class		168,690		15,887
Administrative Class		397,033		42,573
Class A		308,506		49,423
Total expenses		64,573,552		5,176,371
Expenses waived (Note 3):		, ,		, ,
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:		64,573,552		5,176,371
Net investment income (loss)		(2,812,915)		(1,560,678)

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

MM MSCI EAFE International Index Fund	MassMutual Select Overseas Fund	MassMutual Select T. Rowe Price International Equity Fund
5,300,395	\$ 8,872,608	\$ 26,429,972
1,265	43,527	212,668
25,000	41,937	131,401
5,326,660	8,958,072	26,774,041
-,,		
215,789	4,717,577	6,948,382
89,238	253,172	698,924
34,896	54,291	43,058
5,646	15,354	42,802
1,222	716	1,222
48,271	64,591	54,172
43,374	33,744	42,124
10,505	28,047	57,213
96,951	100,288	63,801
2,978	2,977	2,907
548,870	5,270,757	7,954,605
20,854	134,151	_
7,145	53,880	_
73,164	29,345	_
44,160	44,255	_
91,396	32,389	_
88,271	7,937	_
55,200	73,758	_
91,396	40,487	_
176,542	19,842	_
1,786	17,960	_
54,873	29,345	_
33,120	44,255	
1,286,777	5,798,361	7,954,605
_	(208,466)	(1,207,625)
_	(78,030)	· · · · · · · · · · · · · · · · · · ·
_	(21,323)	_
_	(11,231)	_
_	(19,621)	_
_	(10,011)	_
<u> </u>	(2,458)	
1,286,777	5,447,221	6,746,980
4,039,883	3,510,851	20,027,061

MassMutual Select Funds - Financial Statements (Continued)

Statements of Operations For the Year Ended September 30, 2020

	MassMutual Select Mid Cap Growth Fund	MassMutual Select Small Cap Growth Equity Fund
Realized and unrealized gain (loss):		
Net realized gain (loss) on:		
Investment transactions	\$ 524,223,254	\$ 44,667,622
Futures contracts	_	_
Written options	_	_
Foreign currency transactions	28	(1,119)
Forward contracts		
Net realized gain (loss)	524,223,282	44,666,503
Net change in unrealized appreciation (depreciation) on:		
Investment transactions	648,992,660	57,341,832
Futures contracts	_	_
Written options	_	_
Translation of assets and liabilities in foreign currencies	_	(6)
Forward contracts		
Net change in unrealized appreciation (depreciation)	648,992,660	57,341,826
Net realized gain (loss) and change in unrealized appreciation (depreciation)	1,173,215,942	102,008,329
Net increase (decrease) in net assets resulting from operations	\$ 1,170,403,027	\$ 100,447,651
(a) Net of foreign withholding tax of:	\$ 141,702	\$ 8,718
(b) Net of foreign withholding tax of:	\$ —	\$ —
* 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 Select Overseas Fund		MassMutual Select T. Rowe Price International Equity Fund
\$ 1,460,407 161,670	\$	(2,831,288)	\$	(29,268,852)
		_		314,225
110,216		(61,045)		(174,147)
94,785		(8,879)		(13,812)
1,827,078		(2,901,212)		(29,142,586)
(4,318,865)		(159,169)*		49,004,913
(137,532)		_		9.059
110,940		40,314		8,958 188,683
7,485		(83,000)		(8,318)
 (4,337,972)	-	(201,855)		49,194,236
 (2,510,894)	-	(3,103,067)	-	20,051,650
\$ 1,528,989	\$	407,784	\$	40,078,711
\$ 481,929	\$	1,720,604	\$	2,844,303
\$ 	\$		\$	431
\$ _	\$	58,766	\$	_

MassMutual Select Funds - Financial Statements (Continued)

# Statements of Changes in Net Assets

		Select Total Return Bond Fund		
	Year Ended September 30, 2020	Year Ended September 30, 2019		
Increase (Decrease) in Net Assets:				
Operations:				
Net investment income (loss)	\$ 17,258,226	\$ 24,805,835		
Net realized gain (loss)	42,687,538	26,041,923		
Net change in unrealized appreciation (depreciation)	5,470,534	33,455,202		
Net increase (decrease) in net assets resulting from operations	65,416,298	84,302,960		
Distributions to shareholders (Note 2):				
Class I	(14,496,136)	(12,861,958)		
Class R5	(1,165,597)	(1,467,037)		
Service Class	(3,168,205)	(3,296,801)		
Administrative Class	(542,340)	(1,374,011)		
Class A	(209,443)	(182,951)		
Class R4	(3,964,383)	(4,142,266)		
Class R3	(674,501)	(680,228)		
Total distributions	(24,220,605)	(24,005,252)		
Net fund share transactions (Note 5):		·		
Class I	110,388,950	19,472,489		
Class R5	(8,128,950)	(10,184,144)		
Service Class	(27,486,984)	(23,131,382)		
Administrative Class	(1,525,261)	(35,168,941)		
Class A	2,495,648	3,600,258		
Class R4	(64,423,288)	(22,621,508)		
Class R3	(3,957,393)	(5,192,468)		
Increase (decrease) in net assets from fund share transactions	7,362,722	(73,225,696)		
Total increase (decrease) in net assets	48,558,415	(12,927,988)		
Net assets				
Beginning of year	861,570,794	874,498,782		
End of year	\$ 910,129,209	\$ 861,570,794		

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

MassMutual

MassMutual Select Strategic Bond Fund MassMutual Select Diversified Value Fund

Bond	Fund		Value Fund					
 Year Ended September 30, 2020		Year Ended tember 30, 2019	Sep	Year Ended September 30, 2020		Year Ended September 30, 2019		
\$ 18,746,193	\$	21,515,269	\$	7,826,369	\$	8,379,422		
15,843,461		16,042,025		(7,080,679)		16,734,845		
 9,562,861		39,876,091	-	(24,284,487)		(23,965,507)		
 44,152,515		77,433,385		(23,538,797)		1,148,760		
(16,309,511)		(8,470,181)		(15,492,478)		(28,659,584)		
(2,772,395)		(2,165,273)		(5,283,654)		(20,081,978)		
(1,377,962)		(1,196,330)		(713,075)		(1,299,372)		
(2,903,139)		(1,764,483)		(1,352,099)		(2,096,273)		
(1,857,498)		(956,568)		(2,365,876)		(5,991,866)		
(2,464,809)		(1,563,692)		(491,606)		(775,376)		
(634,788)		(414,599)		(133,835)		(334,894)		
 (28,320,102)		(16,531,126)		(25,832,623)		(59,239,343)		
36,368,845		58,765,471		14,587,695		33,417,897		
8,061,676		(5,685,479)		(716,037)		(45,265,898)		
800,340		(20,483,012)		5,839,105		(2,224,736)		
(7,485,686)		(550,903)		(1,213,744)		7,101,576		
9,386,747		612,512		(5,078,648)		(2,497,800)		
(17,912,908)		(6,646,992)		4,942,031		2,629,146		
(3,082,511)		(2,567,947)		386,797		(454,914)		
26,136,503		23,443,650	<u> </u>	18,747,199		(7,294,729)		
 41,968,916		84,345,909		(30,624,221)		(65,385,312)		
705,540,226		621,194,317		360,575,037		425,960,349		
\$ 747,509,142	\$	705,540,226	\$	329,950,816	\$	360,575,037		

MassMutual Select Funds – Financial Statements (Continued)

Statements of Changes in Net Assets

	Sel Fundame	viutuai lect ntal Value ind
	Year Ended September 30, 2020	Year Ended September 30, 2019
Increase (Decrease) in Net Assets:		
Operations:		
Net investment income (loss)	\$ 10,171,404	\$ 17,333,770
Net realized gain (loss)	(14,550,287)	125,035,162
Net change in unrealized appreciation (depreciation)	(44,840,595)	(158,835,512)
Net increase (decrease) in net assets resulting from operations	(49,219,478)	(16,466,580)
Distributions to shareholders (Note 2):		
Class I	(68,929,847)	(73,708,191)
Class R5	(40,227,396)	(32,593,317)
Service Class	(5,484,269)	(5,125,760)
Administrative Class	(11,771,480)	(9,316,716)
Class A	(13,438,208)	(8,857,469)
Class R4	(1,849,486)	(1,053,343)
Class R3	(501,573)	(328,097)
Total distributions	(142,202,259)	(130,982,893)
Net fund share transactions (Note 5):		
Class I	6,514,392	(199,844,345)
Class R5	(10,279,554)	(72,882,287)
Service Class	(1,612,739)	(13,502,374)
Administrative Class	13,491,438	(16,077,434)
Class A	(11,590,568)	(8,162,544)
Class R4	1,021,203	977,854
Class R3	(718,135)	(117,749)
Increase (decrease) in net assets from fund share transactions	(3,173,963)	(309,608,879)
Total increase (decrease) in net assets	(194,595,700)	(457,058,352)
Net assets		
Beginning of year	717,111,597	1,174,169,949
End of year	\$ 522,515,897	\$ 717,111,597

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

MassMutual

MassMutual Select Equity Opportunities Fund

MM S&P 500 Index Fund

Index Fund					Fund				
Year Ended September 30, 2020		Ended Ended		Ended Ended Ended		Ended	Year Ended September 30, 2019		
\$	50,590,309	\$	51,688,195	\$	9,706,038	\$	9,220,524		
	396,766,226		144,404,884		39,974,551		55,293,513		
	15,513,066		(73,830,725)		(30,901,750)		(1,480,715)		
	462,869,601		122,262,354		18,778,839		63,033,322		
	(75,810,865)		(124,447,157)		(24,583,662)		(24,257,844)		
	(31,948,165)		(71,529,319)		(15,717,523)		(16,380,730)		
	(25,666,923)		(60,024,630)		(4,589,902)		(4,548,999)		
	(29,315,593)		(82,715,153)		(4,621,502)		(6,378,705)		
	(1,633,249)		(4,330,792)		(5,706,449)		(6,773,750)		
	(37,696,711)		(91,379,754)		(727,168)		(1,011,804)		
	(13,900,835)		(35,840,947)		(352,956)		(268,342)		
	(215,972,341)		(470,267,752)		(56,299,162)		(59,620,174)		
	6,634,993		333,952,990		139,953,914		1,469,995		
	(94,195,929)		11,094,676		(11,465,936)		(7,926,725)		
	(42,962,537)		(39,048,606)		(1,744,551)		3,076,615		
	(124,897,747)		(61,649,576)		(6,354,201)		(18,911,812)		
	(6,231,995)		(2,633,381)		(3,617,657)		(13,919,302)		
	(70,233,986)		(12,865,178)		2,191,280		(2,598,514)		
	(22,623,021)		237,194		422,466		584,920		
	(354,510,222)		229,088,119		119,385,315		(38,224,823)		
	(107,612,962)		(118,917,279)		81,864,992		(34,811,675)		
	3,287,374,641		3,406,291,920		638,351,267		673,162,942		
\$	3,179,761,679	\$	3,287,374,641	\$	720,216,259	\$	638,351,267		

MassMutual Select Funds - Financial Statements (Continued)

Statements of Changes in Net Assets

	MassM Selo Fundar Growtl	ect nental
	Year Ended September 30, 2020	Year Ended September 30, 2019
Increase (Decrease) in Net Assets:		
Operations:		
Net investment income (loss)	\$ (259,400)	\$ 218,554
Net realized gain (loss)	35,587,597	23,131,178
Net change in unrealized appreciation (depreciation)	(9,850,354)	(18,402,166)
Net increase (decrease) in net assets resulting from operations	25,477,843	4,947,566
Distributions to shareholders (Note 2):		
Class I	(11,328,772)	(12,107,941)
Class R5	(5,192,507)	(5,727,800)
Service Class	(1,680,311)	(1,806,108)
Administrative Class	(2,362,047)	(2,415,550)
Class A	(2,838,685)	(3,200,614)
Class R4	(222,136)	(540,125)
Class R3	(552,331)	(647,771)
Total distributions	(24,176,789)	(26,445,909)
Net fund share transactions (Note 5):		
Class I	(55,999,329)	12,614,277
Class R5	(18,902,368)	3,117,335
Service Class	(3,559,568)	1,557,092
Administrative Class	(1,281,251)	3,909,630
Class A	644,543	(963,441)
Class R4	378,011	(969,477)
Class R3	(9,495)	18,898
Increase (decrease) in net assets from fund share transactions	(78,729,457)	19,284,314
Total increase (decréase) in net assets	(77,428,403)	(2,214,029)
Net assets	( , ,,,,,,,,	( ) , )
Beginning of year	142,135,277	144,349,306
End of year	\$ 64,706,874	\$ 142,135,277
End of year	<u> </u>	<u> </u>

MassMutual Select Blue Chip Growth Fund MassMutual Select Growth Opportunities Fund

	Growti	ı runu		Fund				
Septe	Year Ended September 30, 2020		Year Ended otember 30, 2019	Year Ended September 30, 2020		Year Ended September 30, 2019		
\$	(1,554,395) 174,866,870	\$	6,847,416 216,007,985	\$	(1,617,180) 97,446,596	\$	(2,208,466) 162,514,440	
	903,520,540		(106.607.979)		76,888,644		(156,877,363)	
	1,076,833,015		116,247,422		172,718,060		3,428,611	
	(116,241,249)		(102,738,297)		(50,975,012)		(76,357,844)	
	(26,463,154)		(27,201,261)		(39,010,130)		(30,171,346)	
	(5,702,690)		(6,197,046)		(23,180,329)		(13,542,503)	
	(17,893,032)		(16,625,240)		(15,284,502)		(11,409,550)	
	(10,722,606)		(10,484,536)		(12,819,694)		(11,000,480)	
	(6,055,123)		(6,375,294)		(3,621,672)		(3,732,083)	
	(3,671,493)		(3,632,300)		(396,148)		(234,569)	
	(186,749,347)		(173,253,974)		(145,287,487)		(146,448,375)	
	211,010,413		173,871,531		58,103,654		(147,202,085)	
	30,492,892		(35,038,220)		(22,026,799)		5,902,924	
	34,842,807		(5,799,817)		(37,421,325)		15,689,762	
	(6,008,712)		3,638,511		5,062,756		3,378,588	
	(23,567,107)		(11,139,179)		4,455,751		(2,244,807)	
	(10,343,604)		978,189		(5,021,408)		(3,542,464)	
	(13,830,028)		2,368,031		104,590		132,464	
	222,596,661		128,879,046		3,257,219		(127,885,618)	
	1,112,680,329		71,872,494		30,687,792		(270,905,382)	
	3,179,795,592		3,107,923,098		465,129,129		736,034,511	
\$	4,292,475,921	\$	3,179,795,592	\$	495,816,921	\$	465,129,129	

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

MassMutual Select Funds - Financial Statements (Continued)

Statements of Changes in Net Assets

	Select M	id-Cap
	Value Year	<u>Fund</u> Year
	Ended	Ended
	September	September
	30, 2020	30, 2019
Increase (Decrease) in Net Assets:		
Operations:		
Net investment income (loss)	\$ 1,635,678	\$ 1,579,725
Net realized gain (loss)	(2,522,456)	(979,226)
Net change in unrealized appreciation (depreciation)	(5,136,456)	2,414,117
Net increase (decrease) in net assets resulting from operations	(6,023,234)	3,014,616
Distributions to shareholders (Note 2):		
Class I	(1,720,169)	(11,503,586)
Class R5	(23,976)	(158,819)
Service Class	(3,523)	(31,116)
Administrative Class	(13,705)	(104,376)
Class A	(41,913)	(253,992)
Class R4	(14,160)	(128,818)
Class R3	(6,426)	(48,457)
Total distributions	(1,823,872)	(12,229,164)
Net fund share transactions (Note 5):	· · · · · · · · · · · · · · · · · · ·	
Class I	10,970,630	11,119,289
Class R5	(233,144)	483,437
Service Class	8,330	(15,667)
Administrative Class	86,175	81,246
Class A	673,589	523,247
Class R4	(23,803)	811,697
Class R3	(64,818)	153,602
Increase (decrease) in net assets from fund share transactions	11,416,959	13,156,851
Total increase (decrease) in net assets	3,569,853	3,942,303
Net assets		
Beginning of year	100,191,467	96,249,164
End of year	<b>\$ 103,761,320</b>	\$ 100,191,467
-		

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

MassMutual

MassMutual Select Small Cap Value Equity Fund MassMutual Select Small Company Value Fund

	Value Eq	uity Funa		Fund							
Septe	Year Ended September 30, 2020		Year Ended tember 30, 2019	Sep	Year Ended stember 30, 2020	Year Ended September 30, 2019					
\$	87,031 (545,212)	\$	308,455 8,373,565	\$	987,510 (9,516,572)	\$	1,265,717 9,995,093				
	(13,486,309)		(20,758,491)		(20,020,210)		(30,227,625)				
	(13,944,490)		(12,076,471)		(28,549,272)		(18,966,815)				
	(5,187,429)		(12,834,546)		(4,994,472)		(13,734,961)				
	(1,558,062)		(11,337,240)		(3,427,906)		(9,717,111)				
	(368,640)		(1,323,324)		(343,971)		(1,044,583)				
	(304,272)		(1,349,612)		(580,242)		(1,890,023)				
	(603,450)		(3,228,716)		(884,442)		(2,762,400)				
	(415,594)		(841,985)		(28,852)		(91,622)				
	(81,577)		(400,490)		(17,675)		(74,193)				
	(8,519,024)		(31,315,913)		(10,277,560)		(29,314,893)				
	18,951,494		13,787,316		10,302,017		14,500,126				
	(3,671,876)		(9,187,418)		(17,443,639)		19,825,300				
	(1,160,570)		773,912		(1,459,392)		(3,282)				
	549,107		(112,637)		3,160,641		159,355				
	(1,867,912)		717,581		(2,353,825)		323,059				
	(938,133)		2,085,499		480,905		27,392				
	88,436		(148,766)		(216,899)		114,371				
	11,950,546		7,915,487		(7,530,192)		34,946,321				
	(10,512,968)		(35,476,897)		(46,357,024)		(13,335,387)				
	85,692,549		121,169,446		209,462,970		222,798,357				
\$	75,179,581	\$	85,692,549	\$	163,105,946	\$	209,462,970				

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 Index	
	Year Ended September 30, 2020	Year Ended September 30, 2019
Increase (Decrease) in Net Assets:		
Operations:		
Net investment income (loss)	\$ 4,009,277	\$ 4,738,828
Net realized gain (loss)	22,439,092	10,654,270
Net change in unrealized appreciation (depreciation)	(36,080,933)	(31,453,055)
Net increase (decrease) in net assets resulting from operations	(9,632,564)	(16,059,957)
Distributions to shareholders (Note 2):		
Class I	(3,459,749)	(4,293,020)
Class R5	(1,311,412)	(1,337,826)
Service Class	(809,111)	(1,650,071)
Administrative Class	(2,028,235)	(4,009,925)
Class A	(1,187,910)	(2,022,709)
Class R4	(3,602,840)	(7,946,180)
Class R3	(4,138,636)	(8,491,936)
Total distributions	(16,537,893)	(29,751,667)
Net fund share transactions (Note 5):		
Class I	8,475,321	21,910,360
Class R5	(7,629,918)	11,985,229
Service Class	(550,871)	(3,368,055)
Administrative Class	(8,469,243)	(5,527,823)
Class A	(3,908,120)	2,455,640
Class R4	(27,109,750)	(14,693,206)
Class R3	(23,749,232)	(11,526,582)
Increase (decrease) in net assets from fund share transactions	(62,941,813)	1,235,563
Total increase (decrease) in net assets	(89,112,270)	(44,576,061)
Net assets	(05,112,210)	(,-,-,0,001)
Beginning of year	463,047,916	507,623,977
End of year	\$ 373,935,646	\$ 463,047,916
End of year	\$ 575,755,040	Ψ 700,071,710

MM Russell 2000 Small Cap Index Fund MassMutual Select Mid Cap Growth Fund

	Fu	ınd		Growth Fund					
Sej	Year Ended ptember 30, 2020	Sep	Year Ended tember 30, 2019	Se	Year Ended ptember 30, 2020	Year Ended September 30, 2019			
\$	2,243,629	\$	2,869,104	\$	(2,812,915)	\$	6,976,804		
	11,334,615		14,101,666		524,223,282		544,145,992		
	(12,542,471)		(47,573,309)		648,992,660		(8,142,217)		
	1,035,773		(30,602,539)		1,170,403,027		542,980,579		
	(5,018,091)		(4,859,403)		(322,407,169)		(441,755,322)		
	(972,716)		(1,227,006)		(83,304,762)		(120,458,826)		
	(624,710)		(1,027,598)		(20,001,203)		(32,706,464)		
	(3,215,208)		(3,462,205)		(16,621,612)		(27,875,145)		
	(1,467,484)		(1,758,380)		(13,974,500)		(23,553,867)		
	(3,581,019)		(4,654,801)		(13,362,278)		(20,553,850)		
	(3,210,572)		(4,158,147)		(2,187,663)		(3,485,296)		
	(18,089,800)		(21,147,540)		(471,859,187)		(670,388,770)		
	6,433,683		16,872,438		(245,077,176)		545,699,703		
	(467,867)		(3,473,580)		(180,492,380)		44,591,111		
	363,633		(7,609,543)		(64,780,429)		(22,747,183)		
	(2,867,442)		4,996,603		(48,419,613)		(36,972,890)		
	(1,985,638)		(1,326,081)		(42,279,216)		(33,908,807)		
	(6,991,898)		(3,139,704)		(57,002,375)		983,439		
	(6,972,564)		(3,829,184)		(3,660,990)		(983,218)		
	(12,488,093)		2,490,949		(641,712,179)		496,662,155		
	(29,542,120)		(49,259,130)		56,831,661		369,253,964		
	288,588,417		337,847,547		8,604,502,774		8,235,248,810		
\$	259,046,297	\$	288,588,417	\$	8,661,334,435	\$	8,604,502,774		

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 Year			
	Year Ended September 30, 2020	Year Ended September 30, 2019		
Increase (Decrease) in Net Assets:				
Operations:				
Net investment income (loss)	\$ (1,560,678)			
Net realized gain (loss)	44,666,503	64,756,184		
Net change in unrealized appreciation (depreciation)	57,341,826	(84,314,977)		
Net increase (decrease) in net assets resulting from operations	100,447,651	(20,351,809)		
Distributions to shareholders (Note 2):				
Class I	(32,558,345)	(53,822,840)		
Class R5	(15,279,790)	(20,516,696)		
Service Class	(4,338,467)	(4,720,329)		
Administrative Class	(3,706,126)	(5,468,942)		
Class A	(5,215,987)	(7,811,191)		
Class R4	(1,960,542)	(2,518,076)		
Class R3	(480,410)	(568,996)		
Total distributions	(63,539,667)	(95,427,070)		
Net fund share transactions (Note 5):				
Class I	48,838,806	(50,423,111)		
Class R5	(2,199,711)	10,239,283		
Service Class	(3,632,842)	6,209,414		
Administrative Class	(964,948)	(156,954)		
Class A	212,385	(102,073)		
Class R4	2,093,781	1,884,803		
Class R3	979,023	733,765		
Increase (decrease) in net assets from fund share transactions	45,326,494	(31,614,873)		
Total increase (decrease) in net assets	82,234,478	(147,393,752)		
Net assets				
Beginning of year	509,979,926	657,373,678		
End of year	\$ 592,214,404	\$ 509,979,926		

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

MM MSCI EAFE International Index

MassMutual Select Overseas Fund

	Fu	ınd			Fund					
	Year Ended September 30, 2020	Sep	Year Ended tember 30, 2019	Sep	Year Ended otember 30, 2020	Year Ended September 30, 2019				
\$	4,039,883 1,827,078	\$	6,273,139 539,631	\$	3,510,851 (2,901,212)	\$	13,057,717 6,844,156			
	(4,337,972)		(10,623,653)		(201,855)		(25,929,592)			
	1,528,989		(3,810,883)		407,784		(6,027,719)			
	(2,128,393)		(1,978,597)		(14,676,789)		(35,516,273)			
	(812,776)		(566,304)		(5,799,133)		(12,169,771)			
	(95,838)		(1,092,714)		(1,434,801)		(3,746,863)			
	(1,358,826)		(1,509,852)		(801,623)		(2,773,420)			
	(719,248)		(831,254)		(1,012,176)		(3,438,284)			
	(1,238,985)		(1,930,293)		(579,655)		(1,327,602)			
	(1,140,187)		(1,654,082)		(123,568)		(380,242)			
	(7,494,253)		(9,563,096)		(24,427,745)		(59,352,455)			
	8,504,269		11,779,930		34,680,466		25,315,923			
	(6,778,443)		10,171,965		17,613,241		823,626			
	478,095		(21,714,698)		3,311,529		1,168,660			
	(6,818,236)		4,231,809		(1,943,738)		(6,257,211)			
	(4,071,851)		2,751,176		2,584,426		(7,479,197)			
	(6,346,733)		(4,117,818)		3,655,707		3,233,507			
	(7,991,296)		(2,192,418)		2,895,431		(197,348)			
_	(23,024,195)		909,946	•	62,797,062	•	16,607,960			
	(28,989,459)		(12,464,033)	-	38,777,101		(48,772,214)			
	229,680,474		242,144,507		576,480,660		625,252,874			
\$	200,691,015	\$	229,680,474	\$	615,257,761	\$	576,480,660			

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

MassMutual Select Funds - Financial Statements (Continued)

Statements of Changes in Net Assets

	\$ 20,027,061 \$ 27,465,7 (29,142,586) (36,296,9 49,194,236 14,812,8					
	Ended					
Increase (Decrease) in Net Assets:						
Operations:						
Net investment income (loss)	\$	20,027,061	\$	27,465,770		
Net realized gain (loss)		(29,142,586)		(36,296,937)		
Net change in unrealized appreciation (depreciation)		49,194,236		14,812,828		
Net increase (decrease) in net assets resulting from operations		40,078,711		5,981,661		
Distributions to shareholders (Note 2):						
Class I		(28,120,959)		(14,075,026)		
Total distributions		(28,120,959)		(14,075,026)		
Net fund share transactions (Note 5):						
Class I		166,534,812		334,418,347		
Increase (decrease) in net assets from fund share transactions		166,534,812		334,418,347		
Total increase (decrease) in net assets		178,492,564		326,324,982		
Net assets						
Beginning of year		1,135,940,520		809,615,538		
End of year	\$	1,314,433,084	\$	1,135,940,520		

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

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## MassMutual Select Total Return Bond Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income (	come (loss) from investment operations		Less distributions to shareholders						Ratios / Supp	lemental Da	ata	
v beg o	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations	investment	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	Net assets, end of the period (000's)	daily net assets before expense waivers	daily net assets after expense waivers	Ratio of expenses to average daily net assets after expense waivers (excluding interest expense)	Net investment income (loss) to average daily net assets (including interest expense)
Class I														
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	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	N/A	3.03%
9/30/18	9.99	0.25	(0.34)	(0.09)	(0.28)	_	(0.28)	9.62	(0.98%)	426,828	0.34%	N/A	N/A	2.62%
9/30/17	10.43	0.22	(0.18)	0.04	(0.27)	(0.21)	(0.48)	9.99	0.57%	361,805	0.35%	N/A	N/A	2.18%
9/30/16	10.17	0.21	0.30	0.51	(0.22)	(0.03)	(0.25)	10.43	5.10%	303,783	0.37%	0.34%	0.34%	2.02%
Class R5														
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	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	N/A	2.93%
9/30/18	9.96	0.24	(0.34)	(0.10)	(0.26)	_	(0.26)	9.60	(1.01%)	51,708	0.44%	N/A	N/A	2.49%
9/30/17	10.41	0.20	(0.18)	0.02	(0.26)	(0.21)	(0.47)	9.96	0.36%	68,491	0.45%	N/A	N/A	2.04%
9/30/16	10.15	0.20	0.30	0.50	(0.21)	(0.03)	(0.24)	10.41	5.01%	115,428	0.47%	0.44%	0.44%	1.94%
Service Class														
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	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	N/A	2.83%
9/30/18	10.00	0.23	(0.34)	(0.11)	(0.26)	_	(0.26)	9.63	(1.17%)	131,813	0.54%	N/A	N/A	2.41%
9/30/17	10.45	0.19	(0.19)	_	(0.24)	(0.21)	(0.45)	10.00	0.25%	158,965	0.55%	N/A	N/A	1.95%
9/30/16	10.17	0.19	0.31	0.50	(0.19)	(0.03)	(0.22)	10.45	5.04%	193,887	0.57%	0.54%	0.54%	1.83%

io turnover rate
io turnover rate

2020 2019 2018 2017 2016 217% 316% 243% 289% 264%

Year ended September 30

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

Per share amount calculated on the average shares method.

Computed after giving effect to an agreement by MML Advisers to waive certain fees and expenses of the Fund.

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.

Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

		Income	(loss) from in	vestment										
			operations		Less distri	butions to	shareholders		_		Ratios / Suj	oplemental l	Data	
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	on	Total income (loss) from investment operations		From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	Net assets, end of the period (000's)	Ratio of expenses to average daily net assets before expense waivers (including interest expense)	Ratio of expenses to average daily net assets after expense waivers (including interest expense) <sup>j</sup>	Ratio of expenses to average daily net assets after expense waivers (excluding interest expense)	Net investment income (loss) to average daily net assets (including interest expense)
Administra	tive Class													
9/30/20	\$ 10.25	\$ 0.19	\$ 0.59	\$ 0.78	\$ (0.26)	<b>\$</b> —	\$ (0.26)	\$ 10.77	7.79%	\$ 20,596	0.66%	N/A	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	N/A	2.77%
9/30/18	9.93	0.22	(0.34)	(0.12)	(0.24)	_	(0.24)	9.57	(1.21%)	53,849	0.64%	N/A	N/A	2.30%
9/30/17	10.37	0.18	(0.18)	_	(0.23)	(0.21)	(0.44)	9.93	0.19%	63,399	0.65%	N/A	N/A	1.86%
9/30/16	10.11	0.17	0.31	0.48	(0.19)	(0.03)	(0.22)	10.37	4.80%	80,444	0.67%	0.64%	0.64%	1.73%
Class A														
9/30/20	\$ 10.23	\$ 0.16	\$ 0.58	\$ 0.74	\$ (0.25)	<b>\$</b> —	\$ (0.25)	\$ 10.72	7.45%	\$ 11,334	0.91%	N/A	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	N/A	2.48%
9/30/18	9.93	0.20	(0.35)	(0.15)	(0.22)	_	(0.22)	9.56	(1.51%)	4,327	0.89%	N/A	N/A	2.07%
9/30/17	10.38	0.17	(0.19)	(0.02)	(0.22)	(0.21)	(0.43)	9.93	(0.01%)	4,703	0.90%	N/A	N/A	1.68%
9/30/16	10.13	0.15	0.31	0.46	(0.18)	(0.03)	(0.21)	10.38	4.62%	1,943	0.92%	0.89%	0.89%	1.47%
Class R4														
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	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	N/A	2.58%
9/30/18	9.99	0.21	(0.35)	(0.14)	(0.22)	_	(0.22)	9.63	(1.42%)	172,390	0.79%	N/A	N/A	2.15%
9/30/17	10.43	0.17	(0.19)	(0.02)	(0.21)	(0.21)	(0.42)	9.99	0.02%	221,969	0.80%	N/A	N/A	1.71%
9/30/16	10.16	0.16	0.31	0.47	(0.17)	(0.03)	(0.20)	10.43	4.70%	295,696	0.82%	0.79%	0.79%	1.58%
Class R3														
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	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	N/A	2.33%
9/30/18	9.90	0.18	(0.34)	(0.16)	(0.19)	_	(0.19)	9.55	(1.61%)	33,583	1.04%	N/A	N/A	1.91%
9/30/17	10.35	0.14	(0.19)	(0.05)	(0.19)	(0.21)	(0.40)	9.90	(0.27%)	35,633	1.05%	N/A	N/A	1.46%
9/30/16	10.08	0.13	0.32	0.45	(0.15)	(0.03)	(0.18)	10.35	4.49%	46,206	1.07%	1.04%	1.04%	1.33%

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

MassMutual Select Strategic Bond Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income (	(loss) from in operations	vestment	Less distril	outions to	shareholders			Ratios / Supplemental Data			)ata
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized	investment	From net investment income	From net		Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Class I													
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% <sup>n</sup>	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%	$0.47\%^{\mathrm{n}}$	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%
9/30/16	10.22	0.29	0.46	0.75	(0.30)	_	(0.30)	10.67	7.62%	99,498	0.54%	0.48%	2.80%
Class R5	5												
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% <sup>n</sup>	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% <sup>n</sup>	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%
9/30/16	10.22	0.28	0.46	0.74	(0.29)	_	(0.29)	10.67	7.51%	61,789	0.64%	0.58%	2.70%
Service	Class												
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% <sup>n</sup>	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%	$0.67\%^{\mathrm{n}}$	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%
9/30/16	10.22	0.27	0.47	0.74	(0.29)	_	(0.29)	10.67	7.42%	47,296	0.74%	0.68%	2.61%

	Year ended September 30							
	2020	2019	2018	2017	2016			
Portfolio turnover rate	193%	262%	294%	224%	207%			

c Per share amount calculated on the average shares method.

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

j Computed after giving effect to an agreement by MML Advisers to waive certain fees and expenses of the Fund.

<sup>1</sup> Employee retirement benefit plans that invest plan assets in the Separate Investment Accounts (SIAs) may be subject to certain charges as set forth in their respective Plan Documents. Total return figures would be lower for the periods presented if they reflected these charges.

m Total return excludes sales charges, if any, and would be lower for the period presented if it reflected these charges.

n Expenses incurred during the period fell under the expense cap.

aa The amount shown for a share outstanding does not correspond with the aggregate net realized and unrealized gain (loss) for the period due to the timing of purchases and redemptions of Fund shares in relation to the fluctuating market values of the Fund.

		Income (loss) from investment								D 1 (6 )			
	-		operations			Less distributions to shareholders				Ratios / Supplemental Data			
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations			Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Administrative Class													
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%	$0.77\%^{\mathrm{n}}$	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% <sup>n</sup>	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%
9/30/16	10.18	0.26	0.47	0.73	(0.27)	_	(0.27)	10.64	7.39%	42,980	0.84%	0.78%	2.50%
Class A													
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% <sup>n</sup>	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% <sup>n</sup>	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%
9/30/16	10.15	0.23	0.47	0.70	(0.25)		(0.25)	10.60	7.12%	45,782	1.09%	1.03%	2.25%
Class R4													
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% <sup>n</sup>	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% <sup>n</sup>	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%
9/30/16	10.15	0.24	0.47	0.71	(0.28)		(0.28)	10.58	7.20%	26,419	0.99%	0.93%	2.36%
Class R3													
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% <sup>n</sup>	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% <sup>n</sup>	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%
9/30/16	10.06	0.22	0.46	0.68	(0.24)		(0.24)	10.50	6.95%	5,810	1.24%	1.18%	2.12%

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

# MassMutual Select Diversified Value Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income	(loss) from in	vestment								
			operations		Less distri	butions to s	hareholders			Ratios	/ Supplemen	tal Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments		From net investment income	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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												
9/30/20	\$ 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%
9/30/16	13.64	0.27	1.20	1.47	(0.21)	_	(0.21)	14.90	10.89%	251,684	0.57%	1.90%
Class R	5											
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%
9/30/16	13.64	0.28	1.18	1.46	(0.20)	_	(0.20)	14.90	10.78%	46,830	0.67%	2.00%
Service	Class											
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%
9/30/16	13.63	0.25	1.21	1.46	(0.19)	_	(0.19)	14.90	10.75%	8,656	0.77%	1.78%

2020

52%

2019

42%

Year ended September 30

2018

75%

2017

71%

2016

39%

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

268

Portfolio turnover rate

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.

	Incon		(loss) from in operations	vestment	Less distri	ibutions to s	hareholders			Ratios	/ Supplemen	ntal Data
	Net asset value, beginning of the period strative Clas \$ 11.59 13.58	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments		From net investment income	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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
Admini	strative Cla	SS										
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%
9/30/16	13.68	0.24	1.20	1.44	(0.16)	_	(0.16)	14.96	10.57%	6,903	0.87%	1.66%
Class A												
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%
9/30/16	13.58	0.20	1.20	1.40	(0.13)	_	(0.13)	14.85	10.33%	19,968	1.12%	1.43%
Class R	4											
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%
9/30/16	13.57	0.22	1.18	1.40	(0.16)	_	(0.16)	14.81	10.38%	711	1.02%	1.57%
Class R	3											
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%
9/30/16	13.62	0.19	1.19	1.38	(0.17)	_	(0.17)	14.83	10.17%	1,635	1.27%	1.36%

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

MassMutual Select Fundamental Value Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income	(loss) from in	vestment								
			operations		Less distri	butions to s	hareholders			Ratios	/ Supplemen	tal Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments		From net investment income	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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												
9/30/20	\$ 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%
9/30/16	12.46	0.25	1.27	1.52	(0.23)	(1.36)	(1.59)	12.39	13.21%	500,270	0.63%	2.04%
Class R	5											
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%
9/30/16	12.49	0.23	1.29	1.52	(0.22)	(1.36)	(1.58)	12.43	13.12%	372,531	0.73%	1.95%
Service	Class											
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%
9/30/16	12.44	0.22	1.29	1.51	(0.21)	(1.36)	(1.57)	12.38	13.06%	124,126	0.83%	1.86%

Portfolio turnover rate

2020

54%

2019

103%

Year ended September 30

2018

46%

2017

13%

2016

16%

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

Per share amount calculated on the average shares method.
 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.

	_		(loss) from in operations	vestment	Less distri	butions to s	shareholders			Ratios	/ Supplemen	ital Data
	Net asset value, beginning of the period strative Clas \$ 10.41 12.00	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments		From net investment income	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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
Admini	strative Cla	iss										
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%
9/30/16	12.49	0.21	1.29	1.50	(0.19)	(1.36)	(1.55)	12.44	12.93%	94,316	0.93%	1.75%
Class A												
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%
9/30/16	12.35	0.18	1.26	1.44	(0.15)	(1.36)	(1.51)	12.28	12.58%	161,322	1.18%	1.50%
Class R	4											
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%
9/30/16	12.32	0.20	1.26	1.46	(0.21)	(1.36)	(1.57)	12.21	12.78%	6,905	1.08%	1.66%
Class R	3											
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%
9/30/16	12.25	0.16	1.25	1.41	(0.16)	(1.36)	(1.52)	12.14	12.41%	1,512	1.33%	1.34%

MM S&P 500 Index Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income	(loss) from in	vestment								
			operations		Less distri	butions to s	hareholders			Ratios	/ Supplemen	tal Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments		From net investment income	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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												
9/30/20	\$ 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%
9/30/16	17.50	0.38	2.24	2.62	(0.36)	(0.36)	(0.72)	19.40	15.30%	1,078,531	0.12%	2.05%
Class R	5											
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%
9/30/16	17.52	0.37	2.24	2.61	(0.34)	(0.36)	(0.70)	19.43	15.20%	828,915	0.22%	1.95%
Service	Class											
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%
9/30/16	17.52	0.34	2.24	2.58	(0.31)	(0.36)	(0.67)	19.43	15.03%	499,673	0.37%	1.80%

	2020	2019	2018	2017	2016
Portfolio turnover rate	6%	4%	3% <sup>q</sup>	5%	4%

Year ended September 30

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.

		Income	(loss) from in operations	vestment	Less distri	butions to s	hareholders			Ratios	/ Supplemen	ıtal Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments		From net investment income	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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
Admini	strative Cla	SS										
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%
9/30/16	17.30	0.32	2.22	2.54	(0.29)	(0.36)	(0.65)	19.19	14.96%	506,085	0.47%	1.70%
Class A												
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%
9/30/16	17.12	0.27	2.19	2.46	(0.30)	(0.36)	(0.66)	18.92	14.63%	21,320	0.72%	1.46%
Class R	4											
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%
9/30/16	17.16	0.29	2.19	2.48	(0.27)	(0.36)	(0.63)	19.01	14.72%	632,838	0.62%	1.55%
Class R												
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%
9/30/16	16.95	0.24	2.17	2.41	(0.30)	(0.36)	(0.66)	18.70	14.49%	95,197	0.87%	1.29%

MassMutual Select Equity Opportunities Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income (	(loss) from in operations	vestment		distribut harehold				Ratios	s / Supplemen	tal Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations	investment	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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												
9/30/20	\$ 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%
9/30/16	19.31	0.25	2.13	2.38	(0.36)	(2.93)	(3.29)	18.40	13.56%	213,648	0.73%	1.43%
Class R5	;											
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%
9/30/16	19.34	0.23	2.14	2.37	(0.34)	(2.93)	(3.27)	18.44	13.44%	203,817	0.83%	1.32%
Service (	Class											
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%
9/30/16	19.11	0.21	2.10	2.31	(0.31)	(2.93)	(3.24)	18.18	13.31%	69,632	0.93%	1.22%

Portfolio turnover rate

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

Year ended September 30

 2020
 2019
 2018
 2017
 2016

 41%
 33%
 35%
 131%
 36%

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.

		Income (	loss) from in operations	vestment		distribut sharehold				Ratio	s / Supplemen	tal Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments		investment	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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
Adminis	trative Class	s										_
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%
9/30/16	18.94	0.20	2.07	2.27	(0.29)	(2.93)	(3.22)	17.99	13.19%	89,646	1.03%	1.12%
Class A												_
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%
9/30/16	18.38	0.15	2.01	2.16	(0.24)	(2.93)	(3.17)	17.37	12.93%	146,239	1.28%	0.87%
Class R4	ļ											
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%
9/30/16	18.35	0.16	2.02	2.18	(0.32)	(2.93)	(3.25)	17.28	13.11%	6,065	1.18%	0.98%
Class R3	}											
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%
9/30/16	17.72	0.12	1.93	2.05	(0.29)	(2.93)	(3.22)	16.55	12.76%	3,539	1.43%	0.74%

MassMutual Select Fundamental Growth Fund - Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income (	loss) from in operations	vestment	Less distri	butions to	shareholders			R	atios / Sup	plemental	Data
	Net asset value, beginning of the period \$ 8.03	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations	investment		Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Class I													
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%
9/30/16	8.02	0.07	0.86	0.93	(0.08)	(0.86)	(0.94)	8.01	12.02%	56,680	0.82%	0.70%	0.86%
Class R5													
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%
9/30/16	8.03	0.06	0.86	0.92	(0.07)	(0.86)	(0.93)	8.02	11.88%	23,154	0.92%	0.80%	0.76%
Service Cla	ass												
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%
9/30/16	7.91	0.05	0.84	0.89	(0.06)	(0.86)	(0.92)	7.88	11.69%	6,561	1.02%	0.90%	0.67%

Per share amount calculated on the average shares method.

Portfolio turnover rate

Year ended September 30

2018

47%

2017

52%

2016

49%

2019

123%

2020

164%

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

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.

		Income (	loss) from in	vestment	I am Jintail	L 4 4	ah awah aldam			D	-4: / S		D.4.
	-		operations Net		Less distri	outions to	shareholders			K	Ratio of expenses to	Ratio of expenses	Net
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	realized and unrealized	Total income (loss) from investment operations			Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	Net assets, end of the period (000's)	average daily net assets before expense waivers	average daily net assets after expense waivers <sup>j</sup>	investment income (loss) to average daily net assets
Administra	ative Class												
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%
9/30/16	7.77	0.04	0.83	0.87	(0.06)	(0.86)	(0.92)	7.72	11.54%	10,205	1.12%	1.00%	0.56%
Class A													
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% <sup>e</sup>
9/30/17	7.43	0.04	1.26	1.30	(0.04)	(0.94)	(0.98)	7.75	19.91%	15,687	1.39%	1.25%	0.53%
9/30/16	7.50	0.02	0.80	0.82	(0.03)	(0.86)	(0.89)	7.43	11.30%	16,594	1.37%	1.25%	0.31%
Class R4													
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%
9/30/16	7.49	0.03	0.79	0.82	(0.06)	(0.86)	(0.92)	7.39	11.33%	720	1.27%	1.15%	0.42%
Class R3													
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%
9/30/16	7.19	0.01	0.76	0.77	(0.06)	(0.86)	(0.92)	7.04	11.15%	1,343	1.52%	1.40%	0.20%

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

# MassMutual Select Blue Chip Growth Fund - Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income	(loss) from in	vestment								
			operations		Less distri	butions to s	hareholders			Ratios	Supplemen	tal Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments		From net investment income	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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												
9/30/20	\$ 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%
9/30/16	17.24	0.05	2.33	2.38	(0.10)	(2.86)	(2.96)	16.66	14.57%	511,543	0.66%	0.34%
Class R	5											
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%
9/30/16	17.22	0.04	2.31	2.35	(0.08)	(2.86)	(2.94)	16.63	14.38%	367,547	0.76%	0.23%
Service	Class											
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%
9/30/16	17.09	0.02	2.31	2.33	(0.07)	(2.86)	(2.93)	16.49	14.37%	212,993	0.86%	0.14%

Portfolio turnover rate

2020

28%

2019

25%

Year ended September 30

2018

17%

2017

27%

2016

30%

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

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.

		Income				butions to s	hareholders			Ratios	/ Supplemen	ıtal Data
_	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	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 <sup>l,m</sup>	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
	strative Cla											
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%
9/30/16	16.90	0.01	2.27	2.28	(0.04)	(2.86)	(2.90)	16.28	14.23%	232,088	0.96%	0.04%
Class A												
9/30/20	\$ 21.13	\$ (0.11)	\$ 7.03	\$ 6.92	\$ <i>-</i>	\$ (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%)
9/30/16	16.35	(0.03)	2.20	2.17	(0.01)	(2.86)	(2.87)	15.65	13.93%	161,079	1.21%	(0.22%)
Class R	4											
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%)
9/30/16	16.38	(0.02)	2.21	2.19	(0.05)	(2.86)	(2.91)	15.66	14.08%	44,451	1.11%	(0.11%)
Class R	3											
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%)
9/30/16	15.65	(0.05)	2.09	2.04	(0.05)	(2.86)	(2.91)	14.78	13.77%	22,853	1.36%	(0.36%)

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

MassMutual Select Growth Opportunities Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income	(loss) from in operations	vestment	Less distri	butions to	shareholders			Ra	itios / Supp	lemental I	<b>Data</b>
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	on	Total income (loss) from investment operations			Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	Net assets, end of the period	Ratio of expenses to average daily net assets before expense waivers	Ratio of expenses to average daily net assets after expense waivers <sup>j</sup>	Net investment income (loss) to average daily net assets
Class I													
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%)
9/30/16	10.98	(0.01)	1.07	1.06	_	(1.22)	(1.22)	10.82	9.61%	352,915	0.74%	N/A	(0.10%)
Class R5													
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%)
9/30/16	10.92	(0.01)	1.05	1.04	_	(1.22)	(1.22)	10.74	9.47%	192,509	0.84%	N/A	(0.14%)
Service (	Class												
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%)
9/30/16	10.72	(0.03)	1.03	1.00	_	(1.22)	(1.22)	10.50	9.26%	149,667	0.94%	N/A	(0.31%)
									Yea	r ended Sej	otember 30	l	

Portfolio turnover rate

2019

33%

2020

47%

2018

28%

2017

19%

2016

22%

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

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.

		Income (	(loss) from in	vestment									
	-		operations		Less distri	butions to	shareholders			Ra	tios / Supp		)ata
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	investment	From net investment income		Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
	trative Class												
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%)
9/30/16	10.46	(0.04)	1.01	0.97		(1.22)	(1.22)	10.21	9.21%	90,616	1.04%	N/A	(0.43%)
Class A													
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%)
9/30/16	9.97	(0.07)	0.97	0.90		(1.22)	(1.22)	9.65	8.93%	103,902	1.29%	N/A	(0.72%)
Class R4													
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%)
9/30/16	9.99	(0.05)	0.96	0.91	_	(1.22)	(1.22)	9.68	9.02%	6,861	1.19%	N/A	(0.58%)
Class R3													
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%)
9/30/16	9.46	(0.07)	0.91	0.84	_	(1.22)	(1.22)	9.08	8.77%	859	1.44%	N/A	(0.81%)

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

# MassMutual Select Mid-Cap Value Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

	Net asset value, beginning in of the period \$ 12.42 14.05	Income (	(loss) from in operations	vestment		distribut harehold				1	Ratios / Supj	plemental E	ata
		Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments		investment	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Class I													
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%
9/30/16	13.71	0.15	1.93	2.08	(0.20)	(2.00)	(2.20)	13.59	17.08%	106,786	0.94%	0.80%	1.19%
Class R5													_
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%
9/30/16	13.75	0.15	1.93	2.08	(0.16)	(2.00)	(2.16)	13.67	17.03%	7,072	1.04%	0.90%	1.12%
Service (	Class												
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%
9/30/16	13.72	0.12	1.94	2.06	(0.16)	(2.00)	(2.16)	13.62	16.87%	2,158	1.14%	1.00%	0.95%

		Year e	ended Septeml	per 30				
	2020 2019 2018 2017 2016							
Portfolio turnover rate	74%	54%	98%	88%	96%			

c Per share amount calculated on the average shares method.

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

j Computed after giving effect to an agreement by MML Advisers to waive certain fees and expenses of the Fund.

I 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.

		Income (	(loss) from in operations	vestment		distribut harehold				]	Ratios / Sup	plemental D	)ata
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations			Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Administ	trative Class												
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%
9/30/16	13.81	0.13	1.94	2.07	(0.07)	(2.00)	(2.07)	13.81	16.74%	656	1.24%	1.10%	0.97%
Class A													
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%
9/30/16	13.67	0.08	1.93	2.01	(0.07)	(2.00)	(2.07)	13.61	16.46%	1,755	1.49%	1.35%	0.62%
Class R4													
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%
9/30/16	13.65	0.10	1.92	2.02	(0.13)	(2.00)	(2.13)	13.54	16.62%	94	1.39%	1.25%	0.75%
Class R3													
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%
9/30/16	13.60	0.07	1.90	1.97	(0.09)	(2.00)	(2.09)	13.48	16.25%	102	1.64%	1.50%	0.52%

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

# MassMutual Select Small Cap Value Equity Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

	_	Income (	loss) from in operations	vestment		distribut harehold				]	Ratios / Sup	plemental D	ata
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations		From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Class I													_
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%
9/30/16	14.62	0.08	2.08	2.16	(0.09)	(0.50)	(0.59)	16.19	15.20%	122,745	0.87%	0.80%	0.55%
Class R5													_
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%
9/30/16	14.62	0.06	2.09	2.15	(0.07)	(0.50)	(0.57)	16.20	15.15%	49,774	0.97%	0.90%	0.43%
Service (	Class												
9/30/20	\$ 11.24	\$ 0.00 <sup>d</sup>	\$ (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%
9/30/16	14.66	0.06	2.07	2.13	(0.07)	(0.50)	(0.57)	16.22	14.97%	7,326	1.07%	1.00%	0.37%

		icai c	nucu Septemi	761 50	
	2020	2019	2018	2017	2016
Portfolio turnover rate	77%	30%	24%	21%	26%

Vear ended Sentember 30

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

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.

<sup>1</sup> 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.

		Income (	loss) from in operations	vestment		distribut harehold					Ratios / Sup	plemental <b>L</b>	)ata
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	on	Total income (loss) from investment operations	investment		Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Administ	rative Class	6											
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%
9/30/16	14.57	0.03	2.08	2.11	(0.03)	(0.50)	(0.53)	16.15	14.89%	4,908	1.17%	1.10%	0.22%
Class A													
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%
9/30/16	14.52	$0.00^{d}$	2.07	2.07	(0.01)	(0.50)	(0.51)	16.08	14.59%	8,850	1.42%	1.35%	0.00% <sup>e</sup>
Class R4													
9/30/20	\$ 10.93	\$ (0.02)	\$ (1.36)	\$ (1.38)	\$ <i>-</i>	\$ (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%
9/30/16	14.51	0.02	2.05	2.07	(0.07)	(0.50)	(0.57)	16.01	14.66%	1,748	1.32%	1.25%	0.12%
Class R3													
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	(0.01)	(0.89)	(0.89)	17.81	17.14%	1,214	1.56%	1.50%	(0.18%)
9/30/16	14.48	(0.02)	2.05	2.03	(0.01)	(0.50)	(0.51)	16.00	14.37%	440	1.57%	1.50%	(0.12%)

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

MassMutual Select Small Company Value Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

	_	Income (	(loss) from in operations	vestment		distribut harehold				]	Ratios / Sup	plemental <b>E</b>	)ata
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	on	Total income (loss) from investment operations	investment	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Class I													
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% <sup>k</sup>	0.73%
9/30/18	13.45	0.06	0.93	0.99	(0.09)	(2.31)	(2.40)	12.04	8.45%	103,334	0.95%	0.93%	0.47%
9/30/17	11.30	0.09	2.27	2.36	(0.13)	(0.08)	(0.21)	13.45	20.96%	112,070	0.95%	0.93%	0.72%
9/30/16	13.03	0.10	1.26	1.36	(0.09)	(3.00)	(3.09)	11.30	13.23%	125,482	0.94%	0.92%	0.96%
Class R5 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%	$1.08\%^{\mathrm{k}}$	0.64%
9/30/18	13.50	0.04	0.95	0.99	(0.08)	(2.31)	(2.39)	12.10	8.35%	74,247	1.05%	1.03%	0.37%
9/30/17	11.35	0.08	2.27	2.35	(0.12)	(0.08)	(0.20)	13.50	20.77%	84,951	1.05%	1.03%	0.63%
9/30/16	13.06	0.09	1.27	1.36	(0.07)	(3.00)	(3.07)	11.35	13.18%	106,993	1.04%	1.02%	0.85%
Service C	Class												
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%	$1.18\%^{\mathrm{k}}$	0.52%
9/30/18	13.43	0.03	0.94	0.97	(0.06)	(2.31)	(2.37)	12.03	8.25%	8,664	1.15%	1.13%	0.27%
9/30/17	11.29	0.06	2.26	2.32	(0.10)	(0.08)	(0.18)	13.43	20.65%	12,810	1.15%	1.13%	0.50%
9/30/16	13.00	0.08	1.26	1.34	(0.05)	(3.00)	(3.05)	11.29	13.05%	15,783	1.14%	1.12%	0.77%

		Year e	nded Septeml	per 30				
	2020 2019 2018 2017 2016							
Portfolio turnover rate	57%	146%	65%	57%	60%			

Per share amount calculated on the average shares method.

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

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.

		Income (	loss) from in operations	vestment		distribut harehold				1	Ratios / Sup	plemental Data	
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations			Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Administ	rative Class	3											
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%	$1.28\%^{\mathrm{k}}$	0.42%
9/30/18	13.22	0.02	0.92	0.94	(0.05)	(2.31)	(2.36)	11.80	8.14%	14,411	1.25%	1.23%	0.17%
9/30/17	11.12	0.05	2.23	2.28	(0.10)	(0.08)	(0.18)	13.22	20.53%	14,943	1.25%	1.23%	0.41%
9/30/16	12.85	0.07	1.24	1.31	(0.04)	(3.00)	(3.04)	11.12	12.95%	16,447	1.24%	1.22%	0.66%
Class A													
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% <sup>k</sup>	0.17%
9/30/18	12.85	(0.01)	0.89	0.88	(0.02)	(2.31)	(2.33)	11.40	7.84%	21,061	1.50%	1.48%	(0.08%)
9/30/17	10.80	0.02	2.17	2.19	(0.06)	(0.08)	(0.14)	12.85	20.31%	23,325	1.50%	1.48%	0.15%
9/30/16	12.56	0.04	1.20	1.24	$(0.00)^{d}$	(3.00)	(3.00)	10.80	12.59%	26,790	1.49%	1.47%	0.40%
Class R4													
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%
9/30/16	12.52	0.05	1.21	1.26	(0.04)	(3.00)	(3.04)	10.74	12.80%	184	1.39%	1.37%	0.51%
Class R3													
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%	$1.68\%^{\mathrm{k}}$	0.04%
9/30/18	12.09	(0.02)	0.83	0.81	(0.02)	(2.31)	(2.33)	10.57	7.76%	418	1.65%	1.63%	(0.19%)
9/30/17	10.19	$(0.00)^{d}$	2.05	2.05	(0.07)	(0.08)	(0.15)	12.09	20.14%	180	1.65%	1.63%	(0.03%)
9/30/16	12.03	0.03	1.13	1.16	_	(3.00)	(3.00)	10.19	12.42%	84	1.64%	1.62%	0.28%

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 in operations	vestment		distribut harehold					Ratios / Sup	plemental <b>E</b>	)ata
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations	investment		Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Class I													
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% <sup>n</sup>	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% <sup>n</sup>	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%	$0.18\%^{\mathrm{n}}$	1.22%
9/30/16	12.44	0.19	1.61	1.80	(0.16)	(0.52)	(0.68)	13.56	15.15%	73,807	0.20%	0.20% <sup>n</sup>	1.49%
Class R5													
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%	$0.28\%^{\mathrm{n}}$	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%	$0.26\%^{\mathrm{n}}$	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% <sup>n</sup>	1.13%
9/30/16	12.41	0.18	1.60	1.78	(0.15)	(0.52)	(0.67)	13.52	15.01%	21,499	0.30%	0.30% <sup>n</sup>	1.44%
Service C	Class												
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% <sup>n</sup>	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% <sup>n</sup>	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%	$0.43\%^{\mathrm{n}}$	0.99%
9/30/16	12.36	0.16	1.59	1.75	(0.13)	(0.52)	(0.65)	13.46	14.77%	23,328	0.45%	0.45% <sup>n</sup>	1.26%

		Year e	ended Septeml	oer 30	
	2020	2019	2018	2017	2016
Portfolio turnover rate	18%	15%	13%	33%	48%

c Per share amount calculated on the average shares method.

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

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.

		Income (	(loss) from in operations	vestment		distribut harehold				ı	Ratios / Sup	plemental D	ata
	of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations			Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
	trative Clas		O (O 45)	A (0.22)	A (0.15)	A (0.26)	(0.51)	0.12.00	(2.(20/)	A 42 100	0.530/	37/4	1.020/
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% <sup>n</sup>	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% <sup>n</sup>	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% <sup>n</sup>	0.90%
9/30/16	12.35	0.15	1.59	1.74	(0.12)	(0.52)	(0.64)	13.45	14.69%	62,951	0.55%	0.55% <sup>n</sup>	1.17%
Class A 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%
9/30/20	15.09	0.12	(0.74)	(0.62)	(0.12)	(0.74)	(0.87)	13.60	(3.24%)	36,013	0.78%	0.78% <sup>n</sup>	0.78%
9/30/19	14.14	0.12	1.71	1.83	(0.13) $(0.08)$	(0.74) $(0.80)$	(0.88)	15.09	13.42%	36,885	0.76%	0.76% <sup>n</sup>	0.83%
9/30/18	13.42	0.12	1.71	2.08	(0.14)	(1.22)	(1.36)	14.14	16.34%	33,142	0.78%	0.78% <sup>n</sup>	0.65%
9/30/17	12.32	0.09	1.61	1.72	(0.14) $(0.10)$	(0.52)	(0.62)	13.42	14.49%	42,316	0.78%	0.7876 0.80% <sup>n</sup>	0.0376
Class R4		0.11	1.01	1./2	(0.10)	(0.32)	(0.02)	13.42	14.4970	42,310	0.8070	0.8070	0.9170
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% <sup>n</sup>	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% <sup>n</sup>	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% <sup>n</sup>	0.76%
9/30/16	12.32	0.13	1.59	1.72	(0.13)	(0.52)	(0.65)	13.39	14.56%	36,917	0.70%	0.70% <sup>n</sup>	1.04%
Class R3													
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%	$0.93\%^{\mathrm{n}}$	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% <sup>n</sup>	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%	$0.93\%^{\mathrm{n}}$	0.51%
9/30/16	12.31	0.10	1.58	1.68	(0.12)	(0.52)	(0.64)	13.35	14.25%	33,905	0.95%	0.95% <sup>n</sup>	0.81%

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 in operations	vestment		distribut harehold				]	Ratios / Sup	plemental D	ata
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations	investment	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Class I													
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% <sup>n</sup>	1.24%
9/30/17	12.57	0.17	2.34	2.51	(0.19)	(0.73)	(0.92)	14.16	20.64%	49,853	0.22%	0.20%	1.28%
9/30/16	11.28	0.17	1.54	1.71	(0.14)	(0.28)	(0.42)	12.57	15.62%	127,660	0.21%	0.20%	1.48%
Class R5													
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%
9/30/16	11.28	0.16	1.53	1.69	(0.13)	(0.28)	(0.41)	12.56	15.42%	15,287	0.31%	0.30%	1.40%
Service (	Class												
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% <sup>n</sup>	0.98%
9/30/17	12.48	0.13	2.32	2.45	(0.16)	(0.73)	(0.89)	14.04	20.33%	19,390	0.47%	0.45%	1.03%
9/30/16	11.21	0.14	1.52	1.66	(0.11)	(0.28)	(0.39)	12.48	15.23%	13,347	0.46%	0.45%	1.22%

		Year e	ended Septeml	ber 30			
	2020 2019 2018 2017 2016						
Portfolio turnover rate	17%	16%	20%	38%	37%		

c Per share amount calculated on the average shares method.

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

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.

<sup>1</sup> 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.

		Income (	(loss) from in operations	vestment		distribut harehold				1	Ratios / Sup	plemental <b>L</b>	Data
	Net asset value, beginning i of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations			Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Administ	rative Class												
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% <sup>n</sup>	0.87%
9/30/17	12.50	0.12	2.32	2.44	(0.15)	(0.73)	(0.88)	14.06	20.16%	52,240	0.57%	0.55%	0.93%
9/30/16	11.23	0.13	1.52	1.65	(0.10)	(0.28)	(0.38)	12.50	15.11%	44,061	0.56%	0.55%	1.14%
Class A													
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%	$0.80\%^{\mathrm{n}}$	0.63%
9/30/17	12.43	0.09	2.30	2.39	(0.12)	(0.73)	(0.85)	13.97	19.85%	23,317	0.82%	0.80%	0.68%
9/30/16	11.16	0.10	1.52	1.62	(0.07)	(0.28)	(0.35)	12.43	14.91%	19,806	0.81%	0.80%	0.89%
Class R4													
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% <sup>n</sup>	0.73%
9/30/17	12.40	0.10	2.31	2.41	(0.14)	(0.73)	(0.87)	13.94	20.08%	63,118	0.72%	0.70%	0.76%
9/30/16	11.17	0.11	1.51	1.62	(0.11)	(0.28)	(0.39)	12.40	14.93%	29,129	0.71%	0.70%	1.00%
Class R3													
9/30/20	\$ 12.03	\$ 0.05	\$ (0.05)	\$ 0.00 <sup>d</sup>	\$ (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%	$0.95\%^{\mathrm{n}}$	0.48%
9/30/17	12.36	0.07	2.29	2.36	(0.12)	(0.73)	(0.85)	13.87	19.73%	57,433	0.97%	0.95%	0.51%
9/30/16	11.16	0.09	1.49	1.58	(0.10)	(0.28)	(0.38)	12.36	14.60%	22,081	0.96%	0.95%	0.75%

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

# MassMutual Select Mid Cap Growth Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income	(loss) from in	vestment								
			operations		Less distri	ibutions to s	shareholders			Ratios	/ Supplemen	tal Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments		From net investment income	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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												
9/30/20	\$ 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%	$(0.00\%)^{e}$
9/30/16	18.74	0.01	1.91	1.92	_	(1.50)	(1.50)	19.16	10.74%	1,668,899	0.73%	0.07%
Class R	5											
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%)
9/30/16	18.63	$(0.00)^{d}$	1.88	1.88	_	(1.50)	(1.50)	19.01	10.58%	826,289	0.83%	(0.03%)
Service	Class											
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%)
9/30/16	18.30	(0.02)	1.86	1.84	_	(1.50)	(1.50)	18.64	10.55%	234,465	0.93%	(0.13%)

		Year e	nded Septemb	oer 30		
_	2020	2019	2018	2017	2016	
_	37%	37%	34%	36%	36%	

c Per share amount calculated on the average shares method.

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

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.

		Income	(loss) from in operations	vestment	Less distri	butions to s	hareholders			Ratios	/ Supplemen	ital Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	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 <sup>l,m</sup>	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
Admini	strative Cla	iss										
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%)
9/30/16	17.71	(0.04)	1.79	1.75	_	(1.50)	(1.50)	17.96	10.38%	340,187	1.03%	(0.23%)
Class A												
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%)
9/30/16	16.75	(0.08)	1.69	1.61	_	(1.50)	(1.50)	16.86	10.12%	297,498	1.28%	(0.48%)
Class R	4											
9/30/20	\$ 19.74	\$ (0.08)	\$ 2.88	\$ 2.80	\$ <i>—</i>	\$ (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%)
9/30/16	16.79	(0.06)	1.69	1.63	_	(1.50)	(1.50)	16.92	10.22%	54,177	1.18%	(0.39%)
Class R	3											
9/30/20	\$ 17.93	\$ (0.12)	\$ 2.61	\$ 2.49	\$ <i>-</i>	\$ (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%)
9/30/16	15.81	(0.10)	1.59	1.49	_	(1.50)	(1.50)	15.80	9.95%	14,056	1.43%	(0.63%)

MassMutual Select Small Cap Growth Equity Fund – Financial Statements (Continued)

Financial Highlights (For a share outstanding throughout each period)

		Income (	(loss) from in operations	vestment	Less d	listributio	ns to share	eholders			Ratios /	Suppleme	ental Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	Net realized and unrealized	investment	From net investment	From net	Tax return of		Net asset value, end of the period	Total return <sup>l,m</sup>	Net assets, end of the period		Net investment income (loss) to average daily net assets
Class I													
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%)
9/30/16	15.17	$(0.00)^{d}$	1.05	1.05	_	(3.17)	$(0.00)^{d}$	(3.17)	13.05	8.25%	276,267	0.87%	(0.03%)
Class R5													
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%)
9/30/16	15.07	(0.02)	1.05	1.03	_	(3.17)	$(0.00)^{d}$	(3.17)	12.93	8.16%	119,577	0.97%	(0.15%)
Service Cla	ass												
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%)
9/30/16	14.53	(0.03)	1.00	0.97	_	(3.17)	$(0.00)^{d}$	(3.17)	12.33	8.02%	36,718	1.07%	(0.23%)

		Year e	ended Septeml	ber 30	
	2020	2019	2018	2017	2016
Portfolio turnover rate	79%	71%	85%	86%	85%

c Per share amount calculated on the average shares method.

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

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.

		Income (	(loss) from in operations	vestment	Less	listributio	ns to share	eholders			Ratios /	Suppleme	ental Data
	Net asset value, beginning of the period	Net investment income (loss) <sup>c</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations				Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	Net assets, end of the		Net investment income (loss) to average daily net assets
Administra	tive Class												<u>.</u>
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%)
9/30/16	13.95	(0.04)	0.95	0.91	_	(3.17)	$(0.00)^{d}$	(3.17)	11.69	7.92%	29,335	1.17%	(0.34%)
Class A													
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%)
9/30/16	12.97	(0.06)	0.87	0.81	_	(3.17)	$(0.00)^{d}$	(3.17)	10.61	7.70%	40,045	1.42%	(0.59%)
Class R4													
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%)
9/30/16	13.00	(0.05)	0.87	0.82		(3.17)	$(0.00)^{d}$	(3.17)	10.65	7.78%	1,781	1.32%	(0.45%)
Class R3													
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%)
9/30/16	12.02	(0.06)	0.78	0.72	_	(3.17)	$(0.00)^{d}$	(3.17)	9.57	7.52%	1,254	1.57%	(0.69%)

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) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations			Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets	
Class I														
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%	$0.25\%^{\mathrm{n}}$	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%	
9/30/16	11.68	0.34	0.38	0.72	(0.27)	(0.03)	(0.30)	12.10	6.26%	93,913	0.24%	$0.24\%^n$	2.89%	
Class R5														
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%	$0.35\%^{\mathrm{n}}$	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%	
9/30/16	11.68	0.34	0.36	0.70	(0.26)	(0.03)	(0.29)	12.09	6.11%	32,195	0.34%	$0.34\%^n$	2.96%	
Service (	Class													
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%	$0.50\%^{\mathrm{n}}$	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%	$0.48\%^{\mathrm{n}}$	2.66%	
9/30/18	13.33	0.31	(0.01)	0.30	(0.40)	(0.18)	(0.58)	13.05	2.26%	27,218	0.57%	0.50%	2.31%	
9/30/17	12.05	0.32	1.75	2.07	(0.58)	(0.21)	(0.79)	13.33	18.58%	25,208	0.56%	0.50%	2.62%	
9/30/16	11.64	0.32	0.36	0.68	(0.24)	(0.03)	(0.27)	12.05	5.94%	16,897	0.49%	0.49% <sup>n</sup>	2.79%	

Portfolio turnover rate

2020

9%

2019

7%

Year ended September 30

2018

15%

2017

35%

2016

26%

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

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.

<sup>1</sup> 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.

	Income (loss) from investment operations					Less distributions to shareholders				Ratios / Supplemental Data				
	Net asset value, beginning <sup>i</sup> of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations	investment		Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets	
Administ	rative Class													
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%	$0.60\%^{\rm n}$	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%	$0.58\%^{\mathrm{n}}$	2.78%	
9/30/18	13.31	0.31	(0.03)	0.28	(0.38)	(0.18)	(0.56)	13.03	2.15%	38,753	0.67%	0.60%	2.31%	
9/30/17	12.03	0.29	1.77	2.06	(0.57)	(0.21)	(0.78)	13.31	18.48%	43,896	0.66%	0.60%	2.39%	
9/30/16	11.62	0.32	0.35	0.67	(0.23)	(0.03)	(0.26)	12.03	5.87%	39,646	0.59%	$0.59\%^{\mathrm{n}}$	2.72%	
Class A														
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%	$0.85\%^{\mathrm{n}}$	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% <sup>n</sup>	2.59%	
9/30/18	13.27	0.28	(0.03)	0.25	(0.36)	(0.18)	(0.54)	12.98	1.87%	22,344	0.92%	0.85%	2.15%	
9/30/17	12.00	0.26	1.76	2.02	(0.54)	(0.21)	(0.75)	13.27	18.16%	18,255	0.91%	0.85%	2.17%	
9/30/16	11.59	0.27	0.38	0.65	(0.21)	(0.03)	(0.24)	12.00	5.63%	13,495	0.84%	$0.84\%^{\rm n}$	2.35%	
Class R4														
9/30/20	\$ 12.16	\$ 0.20	\$ (0.20)	\$ 0.00 <sup>d</sup>	\$ (0.32)	\$ (0.06)	\$ (0.38)	\$ 11.78	(0.18%)	\$ 34,159	0.75%	$0.75\%^{\mathrm{n}}$	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% <sup>n</sup>	2.65%	
9/30/18	13.21	0.30	(0.04)	0.26	(0.37)	(0.18)	(0.55)	12.92	1.95%	48,486	0.82%	0.75%	2.25%	
9/30/17	11.96	0.29	1.74	2.03	(0.57)	(0.21)	(0.78)	13.21	18.31%	45,031	0.81%	0.75%	2.39%	
9/30/16	11.59	0.32	0.33	0.65	(0.25)	(0.03)	(0.28)	11.96	5.66%	25,933	0.74%	0.74% <sup>n</sup>	2.74%	
Class R3														
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% <sup>n</sup>	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%	$0.98\%^{\mathrm{n}}$	2.39%	
9/30/18	13.17	0.26	(0.04)	0.22	(0.34)	(0.18)	(0.52)	12.87	1.69%	45,563	1.07%	1.00%	2.01%	
9/30/17	11.93	0.25	1.75	2.00	(0.55)	(0.21)	(0.76)	13.17	18.05%	40,921	1.06%	1.00%	2.06%	
9/30/16	11.58	0.28	0.34	0.62	(0.24)	(0.03)	(0.27)	11.93	5.44%	24,798	0.99%	0.99% <sup>n</sup>	2.46%	

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

# MassMutual Select 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) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations	investment	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Class I													
9/30/20	\$ 8.35	\$ 0.05	\$ (0.07)	\$ (0.02)	\$ (0.19)	\$ (0.15)	\$ (0.34)	\$ 7.99	(0.59%)	\$ 370,549		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%
9/30/16	7.68	0.14	0.19	0.33	(0.13)	_	(0.13)	7.88	4.28%	328,518	0.92%	N/A	1.88%
Class R5													
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%
9/30/16	7.70	0.13	0.19	0.32	(0.12)	_	(0.12)	7.90	4.15%	138,668	1.02%	N/A	1.71%
Service (	Class												
9/30/20	\$ 8.33	\$ 0.04	\$ (0.08)	\$ (0.04)	\$ (0.17)	\$ (0.15)	\$ (0.32)	<b>\$ 7.97</b>	(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%
9/30/16	7.66	0.12	0.19	0.31	(0.11)	_	(0.11)	7.86	4.07%	69,873	1.12%	N/A	1.63%

Portfolio turnover rate

Year ended September 30

2018

46%

2017

29%

2016

38%

2019

27%

2020

34%

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

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.

<sup>1</sup> 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.

	Income (loss) from investmer operations			vestment		distribut harehold				Ratios / Supplemental Data				
	Net asset value, beginning of the period	Net investment income (loss) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments		From net investment income	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets	
Administ	rative Clas	s												
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%	
9/30/16	7.72	0.12	0.18	0.30	(0.10)	_	(0.10)	7.92	3.93%	37,189	1.22%	N/A	1.54%	
Class A														
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%	
9/30/16	7.55	0.10	0.18	0.28	(0.08)	_	(0.08)	7.75	3.73%	58,816	1.47%	N/A	1.31%	
Class R4														
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%	
9/30/16	7.47	0.12	0.16	0.28	(0.11)	_	(0.11)	7.64	3.79%	6,660	1.37%	N/A	1.57%	
Class R3														
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%	
9/30/16	7.52	0.09	0.18	0.27	(0.09)	_	(0.09)	7.70	3.63%	1,918	1.62%	N/A	1.25%	

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) <sup>c,j</sup>	Net realized and unrealized gain (loss) on investments	Total income (loss) from investment operations	investment	From net realized gains	Total distributions	Net asset value, end of the period	Total return <sup>l,m</sup>	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 <sup>j</sup>	Net investment income (loss) to average daily net assets
Class I													
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 <sup>g</sup>	10.00	0.19	(0.49)	(0.30)	_	_	_	9.70	$(3.00\%)^{b}$	809,616	0.89% <sup>a</sup>	0.67% <sup>a</sup>	3.03% <sup>a</sup>

	Year e Septem	ended 1ber 30	Period ended	
	2020	2019	September 30, 2018 <sup>b</sup>	
Portfolio turnover rate	30%	26%	24% <sup>q</sup>	

a Annualized.

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

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.

#### 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 Select Total Return Bond Fund ("Total Return Bond Fund")

MassMutual Select Strategic Bond Fund ("Strategic Bond Fund")

MassMutual Select Diversified Value Fund ("Diversified Value Fund")

MassMutual Select Fundamental Value Fund ("Fundamental Value Fund")

MM S&P 500<sup>®</sup> Index Fund ("S&P 500 Index Fund")

MassMutual Select Equity Opportunities Fund ("Equity Opportunities Fund")

MassMutual Select Fundamental Growth Fund ("Fundamental Growth Fund")

MassMutual Select Blue Chip Growth Fund ("Blue Chip Growth Fund")

MassMutual Select Growth Opportunities Fund ("Growth Opportunities Fund")

MassMutual Select Mid-Cap Value Fund ("Mid-Cap Value Fund")

MassMutual Select Small Cap Value Equity Fund ("Small Cap Value Equity Fund")

MassMutual Select Small Company Value Fund ("Small Company Value Fund")

MM S&P  $^{\circledR}$  Mid Cap Index Fund ("S&P Mid Cap Index Fund")

MM Russell 2000<sup>®</sup> Small Cap Index Fund ("Russell 2000 Small Cap Index Fund")

MassMutual Select Mid Cap Growth Fund ("Mid Cap Growth Fund")

MassMutual Select Small Cap Growth Equity Fund ("Small Cap Growth Equity Fund")

MM MSCI EAFE® International Index Fund ("MSCI EAFE International Index Fund")

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.

#### 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

#### Notes to Financial Statements (Continued)

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. Restricted securities are generally valued at a discount to similar publicly traded securities.

Investments for which market quotations are not available or for which a pricing service or vendor does not provide a value, or for which such market quotations or values are considered by the investment adviser or subadviser to be unreliable (including, for example, certain foreign securities, thinly-traded securities, certain restricted securities, certain initial public offerings, or securities whose values may have been affected by a significant event) are stated at fair valuations determined in good faith by the Funds' Valuation Committee<sup>1</sup> 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.

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

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 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. 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

Notes to Financial Statements (Continued)

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, 2020. 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, 2020, for the remaining Funds' investments:

		Level 1		Level 2	Level 3	Total
Total Return Bond Fund						
Asset Investments						
Bank Loans	\$	_	\$	11,835,916	\$ _	\$ 11,835,916
Corporate Debt		_		217,027,779	_	217,027,779
Municipal Obligations		_		5,049,435	_	5,049,435
Non-U.S. Government Agency Obligations		_		109,731,967	_	109,731,967
Sovereign Debt Obligations		_		7,138,876	_	7,138,876
U.S. Government Agency Obligations and Instrumentalities		_		303,386,767	_	303,386,767
U.S. Treasury Obligations		_		254,057,779	_	254,057,779
Short-Term Investments		_		99,516,393	_	99,516,393
Total Investments	\$		\$	1,007,744,912	\$ 	\$ 1,007,744,912
Asset Derivatives					 	 
Futures Contracts	\$	26,107	\$		\$ 	\$ 26,107
Liability Derivatives	-		<del></del>	<u> </u>		 
Futures Contracts	\$	(47,722)	\$		\$ 	\$ (47,722)

# Notes to Financial Statements (Continued)

		Level 1		Level 2		Level 3		Total
Strategic Bond Fund								
Asset Investments								
Bank Loans (Less Unfunded Loan Commitments)	\$	_	\$	36,075,162	\$	_	\$	36,075,162
Corporate Debt		_		288,745,359		_		288,745,359
Municipal Obligations		_		503,729		_		503,729
Non-U.S. Government Agency Obligations		_		71,544,416		_		71,544,416
Sovereign Debt Obligations		_		62,051,375		_		62,051,375
U.S. Government Agency Obligations and Instrumentalities		_		161,521,464		_		161,521,464
U.S. Treasury Obligations				122,948,783		_		122,948,783
Purchased Options		78,375		22.562.625		_		78,375
Short-Term Investments		_		23,563,635		_		23,563,635
Unfunded Loan Commitments***	_		_	(1,630)	_		_	(1,630)
Total Investments	\$	78,375	\$	766,952,293	\$		\$	767,030,668
Asset Derivatives	¢.		<b>₽</b>	1 210 117	¢.		ď	1 210 117
Forward Contracts	\$	1 955 242	\$	1,319,117	\$	_	\$	1,319,117
Futures Contracts		1,855,343		2.040.677		_		1,855,343
Swap Agreements				3,840,677	_			3,840,677
Total	\$	1,855,343	\$	5,159,794	\$		\$	7,015,137
Liability Derivatives								
Forward Contracts	\$	_	\$	(1,964,911)	\$	_	\$	(1,964,911)
Futures Contracts		(2,368,864)		_		_		(2,368,864)
Swap Agreements		<u> </u>		(10,003)		_		(10,003)
Written Options		(95,000)		_		_		(95,000)
Total	\$	(2,463,864)	\$	(1,974,914)	\$		\$	(4,438,778)
Diversified Value Fund								
Asset Investments								
Common Stock	\$	313,413,519	\$	4,141,662*	\$	_	\$	317,555,181
Preferred Stock		3,665,174		_		_		3,665,174
Warrants		12,852		_		_		12,852
Mutual Funds		10,090,893		_		_		10,090,893
Short-Term Investments		104		2,408,400		_		2,408,504
Total Investments	\$	327,182,542	\$	6,550,062	\$		\$	333,732,604
S&P 500 Index Fund								
Asset Investments								
Common Stock	\$	3,174,441,676	\$	_	\$	_	\$	3,174,441,676
Mutual Funds		2,507,873		_		_		2,507,873
Short-Term Investments				24,880,310		_		24,880,310
Total Investments	\$	3,176,949,549	\$	24,880,310	\$		\$	3,201,829,859
Asset Derivatives	<u> </u>	-, , , ,	÷	, ,	÷		<u> </u>	-, - ,,
Futures Contracts	\$	75,356	\$		\$		\$	75,356
<b>Equity Opportunities Fund</b>								
Asset Investments								
Common Stock	\$	675,996,709	\$	27,458,268*	\$	_	\$	703,454,977
Preferred Stock	Ψ	5,747,467	Ψ	27,730,200	Ψ	_	Ψ	5,747,467
Warrants		18,750		_		_		18,750
Mutual Funds		6,872,020		_		_		6,872,020
Short-Term Investments		156		11,074,883		_		11,075,039
Total Investments	\$	688,635,102	\$	38,533,151	\$		\$	727,168,253
10th investments	Ψ	000,033,102	Ψ	30,333,131	Ψ		Ψ	121,100,233

Notes to Financial Statements (Continued)

		Level 1		Level 2		Level 3		Total
Blue Chip Growth Fund								
Asset Investments Common Stock	\$	4,155,840,870	\$	119,537,791*	\$	5,411,516**	\$	4,280,790,177
Mutual Funds	J	1,613,606	Ф	119,557,791	Ф	5,411,510	Ф	1,613,606
Short-Term Investments		1,075		13,263,282		_		13,264,357
Total Investments	\$	4,157,455,551	\$	132,801,073	\$	5,411,516	\$	4,295,668,140
							_	
Mid-Cap Value Fund								
Asset Investments Common Stock	\$	91,429,702	¢	7.052.297*	¢.		¢.	98,482,089
Mutual Funds	\$	2,334,801	\$	7,052,387*	Ф	_	\$	2,334,801
Short-Term Investments		2,554,601		2,629,155		_		2,629,155
Total Investments	\$	93,764,503	\$	9,681,542	\$		\$	103,446,045
Asset Derivatives	<del>-</del>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u> </u>	2,002,01	<u> </u>		<u> </u>	
Forward Contracts	\$	_	\$	2,251	\$	_	\$	2,251
Liability Derivatives	<del>-</del>		<u> </u>	_,,	<u> </u>		<u> </u>	
Forward Contracts	\$	_	\$	(43,857)	\$	_	\$	(43,857)
	<del></del>		_					
Small Cap Value Equity Fund								
Asset Investments			_				_	
Common Stock	\$	71,358,993	\$	1,599,364*	\$	<u></u> +**	\$	72,958,357
Mutual Funds Short-Term Investments		687,309		2 122 612		_		687,309 2,122,612
Total Investments	\$	72,046,302	\$	2,122,612 3,721,976	\$		\$	75,768,278
Total investments	<u> </u>	72,040,302	Þ	3,721,970	J.		<b>P</b>	73,708,278
Small Company Value Fund								
Asset Investments								
Common Stock	\$	160,150,417	\$	_	\$	+**	\$	160,150,417
Mutual Funds		856,534		_		_		856,534
Short-Term Investments	<u>e</u>	161,006,051	Φ.	2,370,278	Ф.		Φ.	2,370,278
Total Investments	\$	161,006,951	\$	2,370,278	\$		\$	163,377,229
S&P Mid Cap Index Fund								
Asset Investments								
Common Stock	\$	373,502,496	\$	_	\$	_	\$	373,502,496
Mutual Funds		1,085,921		_		_		1,085,921
Short-Term Investments			Φ.	2,726,653	Φ.	<u> </u>	Φ.	2,726,653
Total Investments	\$	374,588,417	\$	2,726,653	\$		\$	377,315,070
Asset Derivatives	e	10.274	¢		e.		\$	10.274
Futures Contracts	\$	19,274	\$		<b>3</b>		<b>3</b>	19,274
Russell 2000 Small Cap Index Fund								
Asset Investments								
Common Stock	\$	257,630,185	\$	27,175	\$	+**	\$	257,657,360
Warrants		_		_		234**		234
Rights Mutual Funds		9,561,888		_		10,471**		10,471 9,561,888
Short-Term Investments		9,501,000		1,154,613		_		1,154,613
Total Investments	\$	267,192,073	\$	1,181,788	\$	10,705	\$	268,384,566
Asset Derivatives	Ψ	201,172,013	<del>*</del>	1,101,700	<u> </u>	10,703	<u>*</u>	200,501,500
Futures Contracts	\$	7,921	\$	_	\$	_	\$	7,921
	<del>-</del>	- ,	<u> </u>		<u> </u>		<u> </u>	

Notes to Financial Statements (Continued)

	 Level 1	 Level 2	 Level 3	 Total
Mid Cap Growth Fund				
Asset Investments				
Common Stock	\$ 8,437,895,098	\$ _	\$ 6,666,127**	\$ 8,444,561,225
Preferred Stock	_	_	32,347,572**	32,347,572
Warrants	573,736	_	_	573,736
Mutual Funds	47,853,363	_	_	47,853,363
Short-Term Investments	 153,820,895	 102,123,408	 	255,944,303
Total Investments	\$ 8,640,143,092	\$ 102,123,408	\$ 39,013,699	\$ 8,781,280,199
Small Cap Growth Equity Fund				
Asset Investments				
Common Stock	\$ 576,107,094	\$ 5,132,169	\$ 20,327**	\$ 581,259,590
Preferred Stock	_	_	1,283,813**	1,283,813
Mutual Funds	9,401,842	_	_	9,401,842
Short-Term Investments	_	7,422,792	_	7,422,792
Total Investments	\$ 585,508,936	\$ 12,554,961	\$ 1,304,140	\$ 599,368,037
MSCI EAFE International Index Fund				
Asset Investments				
Common Stock*				
Australia	\$ _	\$ 12,622,817	\$ _	\$ 12,622,817
Austria	_	302,460	_	302,460
Belgium	_	1,737,278	_	1,737,278
Bermuda	_	347,732	_	347,732
Cayman Islands	216,305	942,345	_	1,158,650
Denmark	_	4,958,012	_	4,958,012
Finland	_	2,400,228	_	2,400,228
France	_	19,571,928	_	19,571,928
Germany	234,942	17,156,269	_	17,391,211
Hong Kong	_	5,002,746	_	5,002,746
Ireland	_	1,627,487	_	1,627,487
Israel	587,735	559,617	_	1,147,352
Italy	_	3,472,641	_	3,472,641
Japan	_	50,585,990	_	50,585,990
Luxembourg	_	442,742	_	442,742
Netherlands	467,736	9,914,602	_	10,382,338
New Zealand	_	601,893	_	601,893
Norway	_	1,107,191	_	1,107,191
Papua New Guinea	_	55,943	_	55,943
Portugal	_	326,929	_	326,929
Singapore	_	2,042,022	_	2,042,022
Spain	_	4,361,510	_	4,361,510
Sweden	_	6,126,879	_	6,126,879
Switzerland	_	20,278,832	_	20,278,832
United Kingdom	115,654	25,646,545	_	25,762,199
Preferred Stock*				
Germany	_	1,126,987	_	1,126,987
Italy	_	29,787	_	29,787
Mutual Funds	2,076,993	_	_	2,076,993
Short-Term Investments	_	1,320,257	_	1,320,257
Total Investments	\$ 3,699,365	\$ 194,669,669	\$ _	\$ 198,369,034

Notes to Financial Statements (Continued)

		Level 1		Level 2		Level 3		Total
MSCI EAFE International Index Fund (Continued)		_						
Asset Derivatives								
Forward Contracts	\$	_	\$	17,388	\$	_	\$	17,388
Futures Contracts		11,198				_		11,198
Total	\$	11,198	\$	17,388	\$		\$	28,586
Liability Derivatives	Ψ	11,170	Ψ	17,500			Ψ	20,500
Forward Contracts	\$		\$	(20,631)	2	_	\$	(20,631)
Futures Contracts	Ψ	(101,506)	Ψ	(20,031)	Ψ	_	Ψ	(101,506)
Total	\$	(101,506)	\$	(20,631)	\$		\$	(122,137)
lotai	Ф	(101,300)	Φ	(20,031)	Ф		Þ	(122,137)
Overseas Fund								
Asset Investments								
Common Stock*								
Australia	\$	_	\$	., -,	\$	_	\$	7,246,315
Belgium		_		6,238,889		_		6,238,889
Brazil		1,057,759		_		_		1,057,759
Canada		14,603,473		_		_		14,603,473
Cayman Islands		3,867,016		4,183,676		_		8,050,692
Denmark		_		11,212,929		_		11,212,929
Finland		_		2,730,113		_		2,730,113
France		_		95,647,292		_		95,647,292
Germany		_		75,922,428		_		75,922,428
Hong Kong		_		10,532,880		_		10,532,880
India		_		12,646,547		_		12,646,547
Indonesia				2,329,013		_		2,329,013
Ireland		8,060,310		4,698,934		_		12,759,244
Israel		5,243,093				_		5,243,093
Italy		_		13,289,259		_		13,289,259
Japan				68,987,835		_		68,987,835
Mexico		1,833,606				_		1,833,606
Netherlands		_		33,434,290		_		33,434,290
Portugal		_		2,369,403		_		2,369,403
Republic of Korea		_		4,037,977		_		4,037,977
Singapore		_		3,421,157		_		3,421,157
South Africa		_		5,132,559		_		5,132,559
Spain Sweden		_		9,453,572 15,215,162		_		9,453,572
Switzerland		_		74,403,861		_		15,215,162 74,403,861
Taiwan		7,185,477		/4,403,801		_		
United Kingdom		3,661,093		85,123,935		_		7,185,477 88,785,028
United States		3,211,894		65,125,955		_		3,211,894
Preferred Stock*		3,211,694		_		_		3,211,694
Germany				1,277,474				1,277,474
Mutual Funds		1,960,355		1,2//,4/4		_		1,960,355
Short-Term Investments		1,900,333		11,579,242		_		11,579,242
	•	50 694 076	•		•		•	
Total Investments	\$	50,684,076	\$	561,114,742	\$		\$	611,798,818
Liability Derivatives				(== ===)				(== ===)
Forward Contracts	\$		\$	(53,567)	\$		\$	(53,567)

Notes to Financial Statements (Continued)

	Level 1	Level 2	Level 3		Total
MM Select T. Rowe Price International Equity Fund		 			
Asset Investments					
Common Stock*					
Australia	\$ _	\$ 31,553,794	\$	— \$	31,553,794
Austria	_	6,077,250		_	6,077,250
Belgium	_	7,839,370		_	7,839,370
Bermuda	4,094,274	4,274,751		_	8,369,025
Brazil	8,518,358	_		_	8,518,358
British Virgin Islands	_	1,232,522		_	1,232,522
Canada	35,159,876	_		_	35,159,876
Cayman Islands	51,861,124	49,538,672		_	101,399,796
Chile	1,594,732	_		_	1,594,732
China	_	40,665,522		_	40,665,522
Czech Republic	_	581,339		_	581,339
Denmark	744,594	1,050,262		_	1,794,856
Finland	_	15,756,288		_	15,756,288
France	_	85,440,053		_	85,440,053
Germany	1,225,931	78,911,278		_	80,137,209
Hong Kong	_	27,083,983		_	27,083,983
Hungary	_	2,618,389		_	2,618,389
India	1,385,175	31,919,884		_	33,305,059
Indonesia	· · · —	9,263,515		_	9,263,515
Ireland	_	6,749,900		_	6,749,900
Italy	_	14,968,942		_	14,968,942
Japan	1,047,904	213,353,724		_	214,401,628
Luxembourg	1,846,323	756,318		_	2,602,641
Mexico	3,586,975	_		_	3,586,975
Netherlands	14,494,568	70,929,807		_	85,424,375
Norway		6,897,744		_	6,897,744
Philippines	_	5,213,991		_	5,213,991
Poland	_	2,221,498		_	2,221,498
Portugal	_	10,698,106		_	10,698,106
Republic of Korea	1,640,129	64,077,614		_	65,717,743
Russia		10,977,153		_	10,977,153
Saudi Arabia	_	1,091,234		_	1,091,234
Singapore	_	8,114,559		_	8,114,559
South Africa	_	17,759,121		_	17,759,121
Spain	_	8,468,098		_	8,468,098
Sweden	_	17,933,815		_	17,933,815
Switzerland	_	86,057,348		_	86,057,348
Taiwan	_	52,105,918		_	52,105,918
Thailand	6,433,660	229,256		_	6,662,916
Turkey		738,025		_	738,025
United Arab Emirates	_	2,852,000		_	2,852,000
United Kingdom	22,700,334	105,989,086		_	128,689,420
United States	17,416,512	1,434,257		_	18,850,769
Preferred Stock*	17,110,512	1,131,237			10,020,707
Brazil	5,622,479	_		_	5,622,479
Germany	5,022,779	3,314,684		_	3,314,684
Italy		803,026		_	803,026
Republic of Korea		2,480,383		_	2,480,383
United States		2,700,303	551	0,376**	550,376
Office States	_	_	331	0,010	330,370

Notes to Financial Statements (Continued)

	Level 1	Level 2	Level 3	Total
MM Select T. Rowe Price International Equity Fund			 	
(Continued)				
Asset Investments (Continued)				
Mutual Funds	\$ 10,157,478	\$ _	\$ _	\$ 10,157,478
Rights	_	158,326	_	158,326
Short-Term Investments	 17,663,937	1,000,000	 	18,663,937
Total Investments	\$ 207,194,363	\$ 1,111,180,805	\$ 550,376	\$ 1,318,925,544
Liability Derivatives	 		 	 
Written Options	\$ 	\$ (30,819)	\$ _	\$ (30,819)

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.

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 contracts, and collateral pledged for open swap agreements, as well as, any applicable liabilities for investments purchased on a delayed delivery basis, amounts due to custodian, 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, 2020.

The Funds had no Level 3 transfers during the year ended September 30, 2020.

## 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.

Further details regarding the derivatives and other investments held by the Fund(s) during the year ended September 30, 2020 are discussed below.

At September 30, 2020, 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			 		 	
Futures Contracts^^	\$	_	\$ _	\$ _	\$ 26,107	\$ 26,107
Liability Derivatives	<del></del>		 		 	 
Futures Contracts^^	\$	_	\$ _	\$ _	\$ (47,722)	\$ (47,722)
Realized Gain (Loss)#	·					
Forward Contracts	\$	_	\$ _	\$ 328,894	\$ _	\$ 328,894
Futures Contracts		_	_	_	5,524,862	5,524,862
Swap Agreements		_	_	_	29,678	29,678
Written Options		_	_	_	200,400	200,400
Total Realized Gain (Loss)	\$	_	\$ _	\$ 328,894	\$ 5,754,940	\$ 6,083,834

<sup>\*\*</sup> 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, 2020 in relation to net assets were not significant and accordingly, a reconciliation of Level 3 assets for the year ended September 30, 2020 is not presented.

<sup>\*\*\*</sup> Unfunded loan commitments are valued at the unrealized appreciation (depreciation) on the commitment.

<sup>+</sup> Represents a security at \$0 value as of September 30, 2020.

# Notes to Financial Statements (Continued)

		Credit Risk		Equity Risk		Foreign Exchange Risk		Interest Rate Risk		Total
Total Return Bond Fund (Continued)	-			<del></del>		_				<del>-</del>
Change in Appreciation (Depreciation)##	¢		¢.		e.		¢.	225 780	¢.	225 780
Futures Contracts Swap Agreements	\$	_	\$	_	\$	_	\$	225,789 130,016	\$	225,789 130,016
Total Change in Appreciation (Depreciation)	\$		\$	<del></del>	\$		\$	355,805	\$	355,805
Total Change in Appreciation (Depreciation)	Ψ		Ψ		Ψ		Ψ	333,663	Ψ	333,663
Strategic Bond Fund Asset Derivatives										
Purchased Options*,^^^	\$	_	\$	_	\$	_	\$	78,375	\$	78,375
Forward Contracts*		_		_		1,319,117		<del></del>		1,319,117
Futures Contracts^^		_		_		_		1,855,343		1,855,343
Swap Agreements*				_		_		89,068		89,068
Swap Agreements^^,^^		1,458,448						2,293,161		3,751,609
Total Value	\$	1,458,448	\$		\$	1,319,117	\$	4,315,947	\$	7,093,512
Liability Derivatives	•		Φ.		•	(1.064.011)	Φ.		Φ.	(1.064.011)
Forward Contracts^ Futures Contracts^^	\$	_	\$		\$	(1,964,911)	\$	(2,368,864)	\$	(1,964,911)
		_		_		_				(2,368,864)
Swap Agreements^^,^^^		_				_		(10,003)		(10,003)
Written Options^,^^^	-				_			(95,000)	_	(95,000)
Total Value	\$		\$		\$	(1,964,911)	\$	(2,473,867)	\$	(4,438,778)
Realized Gain (Loss)#						( ( )		(= 0.50 (0.5)		(0.404.0=4)
Purchased Options	\$	_	\$	_	\$	(526,179)	\$	(7,858,693)	\$	(8,384,872)
Forward Contracts Futures Contracts		_		_		(5,042,358)		24,087,451		(5,042,358) 24,087,451
Swap Agreements		360,145						(23,961,212)		(23,601,067)
Written Options				_		428,586		8,126,886		8,555,472
Total Realized Gain (Loss)	\$	360,145	\$		\$	(5,139,951)	\$	394,432	\$	(4,385,374)
Change in Appreciation (Depreciation)##	<u>-</u>		_		Ť	(0,100,000)	<u> </u>		<u> </u>	(1,000,011)
Purchased Options	\$	_	\$	_	\$	(533,989)	\$	(51,355)	\$	(585,344)
Forward Contracts		_		_		(86,878)				(86,878)
Futures Contracts		_		_		_		(1,629,385)		(1,629,385)
Swap Agreements		1,015,339		_		_		9,319,102		10,334,441
Written Options				_				(92,263)		(92,263)
Total Change in Appreciation (Depreciation)	\$	1,015,339	\$		\$	(620,867)	\$	7,546,099	\$	7,940,571
S&P 500 Index Fund										
Asset Derivatives										
Futures Contracts^^	\$		\$	75,356	\$		\$		\$	75,356
Realized Gain (Loss)#										
Futures Contracts	\$		\$	7,294,092	\$		\$		\$	7,294,092
Change in Appreciation (Depreciation)##						<u></u>		<u>_</u>		<u></u>
Futures Contracts	\$		\$	190,147	\$		\$		\$	190,147

# Notes to Financial Statements (Continued)

Mid-Cap Value Fund Asset Derivatives	
Forward Contracts*,^^^ \$ — \$ — \$ 2,251 \$ — \$	2,251
Liability Derivatives	
Forward Contracts^-^^ \$ — \$ — \$ (43,857) \$ — \$	(43,857)
Realized Gain (Loss)#	<del></del>
Forward Contracts \$ - \$ - \$ (48,709) \$ - \$	(48,709)
Change in Appreciation (Depreciation)##	
Forward Contracts <u>\$ - \$ - \$ (144,954)</u> <u>\$ - \$ (1</u>	44,954)
S&P Mid Cap Index Fund Asset Derivatives	
Futures Contracts^^ \$ \$ 19,274 \$ \$ \$	19,274
Realized Gain (Loss)#	
Futures Contracts <u>\$ - \$ 2,504,647 \$ - \$ 2,5</u>	04,647
Change in Appreciation (Depreciation)##	
Futures Contracts         \$         -         \$         75,707         \$         -         \$         -         \$	75,707
Russell 2000 Small Cap Index Fund Asset Derivatives	
Futures Contracts^^ \$ — \$ 7,921 \$ — \$	7,921
Realized Gain (Loss)#	
Futures Contracts <u>\$ - \$ 1,659,982 \$ - \$ 1,659,982</u>	59,982
Change in Appreciation (Depreciation)##	
Futures Contracts         \$         95,632         \$         —         \$         —         \$	95,632
MSCI EAFE International Index Fund	
Asset Derivatives	17 200
Forward Contracts* \$ - \$ 17,388 \$ - \$ Futures Contracts^^ - 11,198	17,388 11,198
	28,586
Liability Derivatives	20,300
	(20,631)
	01,506)
	22,137)
Realized Gain (Loss)#	
Forward Contracts \$ - \$ - \$ 94,785 \$ - \$	94,785
	61,670
	256,455
Change in Appreciation (Depreciation)## Forward Contracts \$ - \$ 7,485 \$ - \$	7,485
, , , , , , , , , , , , , , , , , , ,	37,532)
	30,047)

# Notes to Financial Statements (Continued)

		Credit Risk		Equity Risk	Foreign Exchange Risk	Interest Rate Risk	Total
Overseas Fund			-				
Liability Derivatives							
Forward Contracts^	\$		\$		\$ (53,567)	\$ 	\$ (53,567)
Realized Gain (Loss)#			-				
Forward Contracts	\$	_	\$	_	\$ (8,879)	\$ _	\$ (8,879)
Change in Appreciation (Depreciation)##							
Forward Contracts	\$		\$		\$ (83,000)	\$ 	\$ (83,000)
MM Select T. Rowe Price International Equity Fund Liability Derivatives							
Written Options^	\$	_	\$	(30,819)	\$ _	\$ _	\$ (30,819)
Realized Gain (Loss)#	-						
Forward Contracts	\$	_	\$	_	\$ (13,812)	\$ _	\$ (13,812)
Written Options				314,225			314,225
Total Realized Gain (Loss)	\$		\$	314,225	\$ (13,812)	\$	\$ 300,413
Change in Appreciation (Depreciation)##				<u> </u>			
Forward Contracts	\$	_	\$	_	\$ (8,318)	\$ _	\$ (8,318)
Written Options				8,958			8,958
Total Change in Appreciation (Depreciation)	\$		\$	8,958	\$ (8,318)	\$	\$ 640

<sup>\*</sup> Statements of Assets and Liabilities location: Investments, at value, or Receivables from: open forward contracts or open swap agreements, at value, as applicable.

<sup>^</sup> Statements of Assets and Liabilities location: Payables for: open forward contracts or written options outstanding, at value, as applicable.

<sup>^^</sup> 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.

<sup>#</sup> 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.

<sup>##</sup> 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.

## Notes to Financial Statements (Continued)

For the year ended September 30, 2020, the number of contracts, notional amounts, or shares/units for each derivative type was as follows:

		Nun	nber of Contracts	, Notional Amou	nts, or Shares/Uni	its†	
	Futures	Forward	Swap	Purchased	Purchased	Written	Written
Fund Name	Contracts	Contracts	Agreements	Options	Swaptions	Options	Swaptions
Total Return Bond Fund	729	\$ 13,023,972	\$ 95,630,714	_	\$ —	200	\$ —
Strategic Bond Fund	4,000	115,395,085	524,981,700	12,688,031	8,711,429	4,474,384	37,488,000
S&P 500 Index Fund	187	_	_	_	_	_	_
Mid-Cap Value Fund	_	8,926,111	_	_	_	_	_
S&P Mid Cap Index Fund	38	_	_	_	_	_	_
Russell 2000 Small Cap Index Fund	65	_	_	_	_	_	_
MSCI EAFE International Index Fund	87	7,766,499	_	_	_	_	_
Overseas Fund	_	2,157,239	_	_	_	_	_
MM Select T. Rowe Price International							
Equity Fund	_	1,549,651	_	_	_	282	_

<sup>†</sup> 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, 2020.

The Portfolio of Investments included in a Fund's financial statements shows the assets or liabilities of a 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, 2020. 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, 2020.

Counterparty	Derivative Assets Subject to an MNA by Counterparty†		Financial Instruments Available for Offset		Collateral Received***		Net Amount*
Strategic Bond Fund							
BNP Paribas SA	\$	507,679	\$	(507,679)	\$	_	\$ _
Citibank N.A.		361,839		(289,358)		_	72,481
Goldman Sachs & Co.		538,667		(164,977)		(135,778)	237,912
	\$	1,408,185	\$	(962,014)	\$	(135,778)	\$ 310,393
MSCI EAFE International Index Fund							 
Bank of New York Mellon	\$	3,780	\$	(3,780)	\$	_	\$ _
BNP Paribas SA		2,391				_	2,391
Citibank N.A.		362		(362)		_	_
Morgan Stanley & Co. LLC		10,855		(1,580)		_	9,275
	\$	17,388	\$	(5,722)	\$	_	\$ 11,666

## Notes to Financial Statements (Continued)

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, 2020.

Counterparty	Derivative Liabilities Subject to an MNA by Counterparty†		Financial Instruments Available for Offset		Collateral Pledged***		Net Amount**	
Strategic Bond Fund	_						_	
BNP Paribas SA	\$	(1,510,576)	\$	507,679	\$	_	\$	(1,002,897)
Citibank N.A.		(289,358)		289,358		_		_
Goldman Sachs & Co.		(164,977)		164,977				
	\$	(1,964,911)	\$	962,014	\$	_	\$	(1,002,897)
MSCI EAFE International Index Fund								
Bank of New York Mellon	\$	(14,278)	\$	3,780	\$	_	\$	(10,498)
Citibank N.A.		(4,773)		362		_		(4,411)
Morgan Stanley & Co. LLC		(1,580)		1,580		_		_
	\$	(20,631)	\$	5,722	\$		\$	(14,909)
Overseas Fund		<u> </u>	_					<u> </u>
State Street Bank and Trust Co.	\$	(53,567)	\$		\$	<u> </u>	\$	(53,567)
MM Select T. Rowe Price International Equity Fund								
JP Morgan Chase Bank N.A.	\$	(30,819)	\$	_	\$	_	\$	(30,819)

<sup>\*</sup> Represents the net amount receivable from the counterparty in the event of default.

Such agreements typically permit a single net payment in the event of default, including the bankruptcy or insolvency of the counterparty. Typically, the Fund(s) and counterparties are not permitted to sell, re-pledge, or use the collateral they receive.

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.

<sup>\*\*</sup> Represents the net amount payable to the counterparty in the event of default.

<sup>\*\*\*</sup> 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.

<sup>†</sup> 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.

## Notes to Financial Statements (Continued)

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 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.

## Notes to Financial Statements (Continued)

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 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.

## Notes to Financial Statements (Continued)

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.

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.

## Notes to Financial Statements (Continued)

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 prem

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.

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

## Notes to Financial Statements (Continued)

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 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.

## Notes to Financial Statements (Continued)

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 which it is entitled only from the loan investor, not 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.

The Strategic Bond Fund entered into certain loan agreements which are unfunded. The Strategic Bond Fund is obligated to fund these commitments at the borrower's discretion. These commitments are disclosed in the Strategic Bond Fund's Portfolio of Investments. At September 30, 2020, the Strategic 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

## Notes to Financial Statements (Continued)

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.

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 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, 2020, the Funds' collateral was equal to or greater than 100% of the market value of securities on loan.

## Notes to Financial Statements (Continued)

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, 2020, 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 gains are recorded as a reduction of cost of investments and/or as a realized gain. The Funds determine the classification of distributions received as return of capital distributions or capital gain distributions.

### 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 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

## Notes to Financial Statements (Continued)

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.

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	Metropolitan West Asset Management, LLC
	0.27% on any excess over \$2 billion	
Strategic Bond Fund	0.45% on the first \$200 million; and	Western Asset Management Company, LLC; and
	0.35% on any excess over \$200 million	Western Asset Management Company Limited
Diversified Value Fund	0.50% on the first \$400 million; and	Brandywine Global Investment Management, LLC
	0.475% on any excess over \$400 million	and T. Rowe Price Associates, Inc.
Fundamental Value Fund	0.60% on the first \$1.25 billion;	Barrow, Hanley, Mewhinney & Strauss, LLC; and
	0.575% on the next \$250 million; and	Boston Partners Global Investors, Inc.
	0.55% on any excess over \$1.5 billion	
S&P 500 Index Fund	0.10% on the first \$2.5 billion;	Northern Trust Investments, Inc.
	0.08% on the next \$2.5 billion; and	
	0.05% on any excess over \$5 billion	

Notes to Financial Statements (Continued)

Fund	Investment Advisory Fee	Investment Subadviser(s)
Equity Opportunities Fund	0.69% on the first \$1 billion; and	T. Rowe Price Associates, Inc.; and
	0.64% on any excess over \$1 billion	Wellington Management Company LLP
Fundamental Growth Fund*	0.65% on the first \$300 million; and	Wellington Management Company LLP; and
	0.60% on any excess over \$300 million	Westfield Capital Management Company, L.P.
Blue Chip Growth Fund	0.65% on the first \$750 million; and	Loomis, Sayles & Company, L.P.; and
	0.60% on any excess over \$750 million	T. Rowe Price Associates, Inc.
Growth Opportunities Fund	0.71% on the first \$500 million; and	Jackson Square Partners LLC; and
	0.68% on any excess over \$500 million	Sands Capital Management, LLC
Mid-Cap Value Fund	0.70% on the first \$300 million; and	American Century Investment Management, Inc.
	0.65% on any excess over \$300 million	
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	AllianceBernstein L.P.; and
	0.80% on any excess over \$750 million	American Century Investment Management, Inc.
S&P Mid Cap Index Fund	0.10% on the first \$500 million; and	Northern Trust Investments, Inc.
	0.08% on any excess over \$500 million	
Russell 2000 Small Cap Index Fund	0.10% on the first \$500 million; and	Northern Trust Investments, Inc.
	0.08% on any excess over \$500 million	
Mid Cap Growth Fund	0.72% on the first \$2 billion; and	Frontier Capital Management Company, LLC;
	0.67% on any excess over \$2 billion	and T. Rowe Price Associates, Inc.
Small Cap Growth Equity Fund	0.80% on the first \$1 billion; and	Invesco Advisers, Inc.; and Wellington
	0.78% on any excess over \$1 billion	Management Company LLP
MSCI EAFE International Index Fund	0.10% on the first \$1 billion; and	Northern Trust Investments, Inc.
	0.09% on any excess over \$1 billion	
Overseas Fund	0.80% on the first \$750 million;	Harris Associates L.P.; and
	0.775% on the next \$500 million; and	Massachusetts Financial Services Company
	0.75% on any excess over \$1.25 billion	
MM Select T. Rowe Price International Equity Fund**	0.00%***	T. Rowe Price Associates, Inc.

<sup>\*</sup> Effective March 2, 2020, Westfield Capital Management Company, L.P. was added as a subadviser of the Fund.

## Administration Fees

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%	0.15%	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%

<sup>\*\*</sup> T. Rowe Price International Ltd and T. Rowe Price Hong Kong Limited each serves as a sub-subadviser of the Fund.

<sup>\*\*\*</sup> Prior to August 1, 2020, the advisory fee was 0.69%.

## Notes to Financial Statements (Continued)

	Class I	Class R5	Service Class	Administrative Class	Class A	Class R4	Class R3
Mid Con Volum Frond							
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.

The Trust has 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 are intended to compensate MassMutual for its provision of shareholder services to the Funds' investors and are 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 pay these fees to other intermediaries for providing shareholder services to the Funds' investors.

## 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<sup>#</sup>, 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%

<sup>#</sup> Acquired Fund Fees and Expenses are borne indirectly by a Fund through investments in other pooled investment vehicles.

<sup>\*</sup> Expense caps in effect through January 31, 2021.

## Notes to Financial Statements (Continued)

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<sup>#</sup>, 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.

Prior to August 1, 2020, MML Advisers agreed to cap the Fees and Expenses of the Fund (other than extraordinary litigation and legal expenses, Acquired Fund Fees and Expenses<sup>#</sup>, 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
MM Select T. Rowe Price International Equity Fund	0.67%

# Acquired Fund Fees and Expenses are borne indirectly by a Fund through investments in other pooled investment vehicles.

Effective March 1, 2020, 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<sup>#</sup>, 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%

<sup>#</sup> Acquired Fund Fees and Expenses are borne indirectly by a Fund through investments in other pooled investment vehicles.

Prior to February 1, 2020, MML Advisers agreed to cap the fees and expenses of the Funds 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 Funds, as follows:

	Class I	Class R5	Service Class	Administrative Class	Class A	Class R4	Class R3
Strategic Bond Fund	0.48%	0.58%	0.68%	0.78%	1.03%	0.93%	1.18%
Russell 2000 Small Cap Index Fund	0.20%	0.30%	0.45%	0.55%	0.80%	0.70%	0.95%
MSCI EAFE International Index Fund	0.25%	0.35%	0.50%	0.60%	0.85%	0.75%	1.00%

<sup>#</sup> Acquired Fund Fees and Expenses are borne indirectly by a Fund through investments in other pooled investment vehicles.

<sup>\*</sup> Expense cap in effect through January 31, 2022.

## Notes to Financial Statements (Continued)

Effective April 1, 2020, MML Advisers has agreed to voluntarily waive 0.02% of the advisory fees of the Growth Opportunities Fund. MML Advisers may amend or discontinue this waiver at any time without advance notice.

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, 2020, brokerage commissions rebated under these agreements were as follows:

	Rebated Commissions
Diversified Value Fund	\$ 4,037
Fundamental Value Fund	211
Equity Opportunities Fund	1,707
Blue Chip Growth Fund	44,618
Growth Opportunities Fund	13,326
Small Cap Value Equity Fund	202
Mid Cap Growth Fund	113,349
Small Cap Growth Equity Fund	6,291

## 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, 2020:

	Total % Ownership
	by Related Party
Total Return Bond Fund	73.5%
Strategic Bond Fund	70.8%
Diversified Value Fund	66.4%
Fundamental Value Fund	91.9%
S&P 500 Index Fund	69.5%
Equity Opportunities Fund	70.3%
Fundamental Growth Fund	73.5%
Blue Chip Growth Fund	53.7%
Growth Opportunities Fund	56.8%
Mid-Cap Value Fund	77.7%
Small Cap Value Equity Fund	82.6%
Small Company Value Fund	60.5%

Notes to Financial Statements (Continued)

	Total % Ownership
	by Related Party
S&P Mid Cap Index Fund	65.1%
Russell 2000 Small Cap Index Fund	59.4%
Mid Cap Growth Fund	19.0%
Small Cap Growth Equity Fund	73.1%
MSCI EAFE International Index Fund	59.6%
Overseas Fund	83.3%
MM Select T. Rowe Price International Equity Fund	100.0%

## 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, 2020, were as follows:

		Purc	hase	es	Sa		
	_	Long- Term U.S. Government Securities		Other Long-Term Securities	Long- Term U.S. Government Securities		Other Long-Term Securities
Total Return Bond Fund	\$	2,550,911,424	\$	191,502,283	\$ 2,534,814,310	\$	234,177,011
Strategic Bond Fund		1,225,673,072		162,506,447	1,308,248,121		57,080,333
Diversified Value Fund		_		173,555,928	_		174,108,400
Fundamental Value Fund		_		313,725,994	_		441,159,567
S&P 500 Index Fund		_		177,776,457	_		690,061,694
Equity Opportunities Fund		_		333,044,840	_		257,248,689
Fundamental Growth Fund		_		163,247,383	_		259,670,457
Blue Chip Growth Fund		_		1,037,039,648	_		983,551,863
Growth Opportunities Fund		_		216,780,988	_		357,693,505
Mid-Cap Value Fund		_		79,353,953	_		68,365,933
Small Cap Value Equity Fund		_		62,951,234	_		59,221,381
Small Company Value Fund		_		100,658,448	_		110,549,107
S&P Mid Cap Index Fund		_		74,344,396	_		144,525,566
Russell 2000 Small Cap Index Fund		_		45,513,697	_		70,113,450
Mid Cap Growth Fund		_		2,991,470,686	_		3,866,925,126
Small Cap Growth Equity Fund		_		416,039,968	_		431,166,302
MSCI EAFE International Index Fund		_		18,791,754	_		46,305,347
Overseas Fund		_		233,791,761	_		195,966,716
MM Select T. Rowe Price International Equity Fund		_		525,250,566	_		360,522,462

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
Mid Cap Growth Fund	\$ 	\$ 438,981

# Notes to Financial Statements (Continued)

# 5. Capital Share Transactions

Changes in shares outstanding for each Fund were as follows:

	Year Ended Sep	temb		-	otember 30, 2019	
	Shares		Amount	Shares		Amount
Total Return Bond Fund Class I	26.740.429	e.	270 564 967	12 (70 (70	e.	122 127 020
Sold Issued as reinvestment of dividends	26,740,428 1,448,165	\$	278,564,867 14,496,136	13,670,678 1,368,293	\$	133,137,029
Redeemed			· · · · · · · · · · · · · · · · · · ·			12,861,958
	(17,609,306)	Φ.	(182,672,053)	(12,888,794)	Ф.	(126,526,498)
Net increase (decrease)	10,579,287	\$	110,388,950	2,150,177	\$	19,472,489
Total Return Bond Fund Class R5	4 400 505	•				
Sold	1,400,696	\$	14,841,749	589,795	\$	5,786,794
Issued as reinvestment of dividends	116,560		1,165,597	156,234		1,467,037
Redeemed	(2,351,594)		(24,136,296)	(1,758,884)	Φ.	(17,437,975)
Net increase (decrease)	(834,338)	\$	(8,128,950)	(1,012,855)	\$	(10,184,144)
<b>Total Return Bond Fund Service Class</b>						
Sold	2,687,070	\$	28,121,822	1,146,933	\$	11,383,394
Issued as reinvestment of dividends	315,558		3,168,205	349,608		3,296,801
Redeemed	(5,668,967)		(58,777,011)	(3,905,740)		(37,811,577)
Net increase (decrease)	(2,666,339)	\$	(27,486,984)	(2,409,199)	\$	(23,131,382)
<b>Total Return Bond Fund Administrative Class</b>						
Sold	710,503	\$	7,453,290	928,035	\$	8,928,665
Issued as reinvestment of dividends	54,234		542,340	146,483		1,374,011
Redeemed	(918,398)		(9,520,891)	(4,635,251)		(45,471,617)
Net increase (decrease)	(153,661)	\$	(1,525,261)	(3,560,733)	\$	(35,168,941)
Total Return Bond Fund Class A						
Sold	611,827	\$	6,472,950	469,048	\$	4,513,313
Issued as reinvestment of dividends	21,007		209,443	19,525		182,951
Redeemed	(403,194)		(4,186,745)	(113,567)		(1,096,006)
Net increase (decrease)	229,640	\$	2,495,648	375,006	\$	3,600,258
Total Return Bond Fund Class R4						
Sold	1,840,435	\$	19,264,501	1,538,264	\$	15,178,209
Issued as reinvestment of dividends	393,683		3,964,383	438,335		4,142,266
Redeemed	(8,377,218)		(87,652,172)	(4,296,874)		(41,941,983)
Net increase (decrease)	(6,143,100)	\$	(64,423,288)	(2,320,275)	\$	(22,621,508)
Total Return Bond Fund Class R3				· · · · · · · · · · · · · · · · · · ·		<u> </u>
Sold	504,550	\$	5,289,113	544,404	\$	5,281,932
Issued as reinvestment of dividends	67,450		674,501	72,442		680,228
Redeemed	(961,364)		(9,921,007)	(1,155,413)		(11,154,628)
Net increase (decrease)	(389,364)	\$	(3,957,393)	(538,567)	\$	(5,192,468)
Strategic Bond Fund Class I				`		<u> </u>
Sold	18,250,299	\$	199,276,300	15,122,892	\$	156,124,408
Issued as reinvestment of dividends	1,527,108		16,309,511	857,306		8,470,181
Redeemed	(16,471,194)		(179,216,966)	(10,143,378)		(105,829,118)
Net increase (decrease)	3,306,213	\$	36,368,845	5,836,820	\$	58,765,471
Strategic Bond Fund Class R5		÷		- , ,	<u> </u>	
Sold	3,253,588	\$	36,313,939	1,372,654	\$	14,063,551
Issued as reinvestment of dividends	259,102	4	2,772,395	218,936	4	2,165,273
Redeemed	(2,822,518)		(31,024,658)	(2,117,406)		(21,914,303)
Net increase (decrease)	690,172	\$	8,061,676	(525,816)	\$	(5,685,479)
The mercuse (decrease)	070,172	Ψ	0,001,070	(525,010)	Ψ	(5,005,175)

# Notes to Financial Statements (Continued)

	Year Ended Sep Shares	temb	er 30, 2020 Amount	Year Ended September 30, 2019 Shares Amount		
Strategic Bond Fund Service Class						
Sold	1,056,415	\$	11,786,637	935,636	\$	9,773,940
Issued as reinvestment of dividends	128,661		1,377,962	120,964		1,196,330
Redeemed	(1,128,304)		(12,364,259)	(3,005,889)		(31,453,282)
Net increase (decrease)	56,772	\$	800,340	(1,949,289)	\$	(20,483,012)
Strategic Bond Fund Administrative Class	1 107 100	Φ.	12.012.522	1 662 502	Φ.	15.154.510
Sold	1,107,480	\$	12,012,532	1,663,582	\$	17,174,712
Issued as reinvestment of dividends Redeemed	272,339 (2,061,667)		2,903,139	178,954		1,764,483
	(681,848)	\$	(22,401,357) (7,485,686)	(1,889,873) (47,337)	\$	(19,490,098) (550,903)
Net increase (decrease)	(001,040)	Þ	(7,463,060)	(47,337)	Ф	(330,903)
Strategic Bond Fund Class A Sold	3,335,460	\$	36,392,503	1,516,195	\$	15,841,245
Issued as reinvestment of dividends	174,413	Ф	1,857,498	97,113	Ф	956,568
Redeemed	(2,670,600)		(28,863,254)	(1,561,785)		(16,185,301)
Net increase (decrease)	839,273	\$	9,386,747	51,523	\$	612,512
Strategic Bond Fund Class R4	037,273	Ψ	7,500,717	31,323	Ψ	012,312
Sold	1,296,220	\$	14,105,529	1,495,702	\$	15,315,402
Issued as reinvestment of dividends	232,529	Ψ	2,464,809	159,397	Ψ	1,563,692
Redeemed	(3,174,379)		(34,483,246)	(2,314,903)		(23,526,086)
Net increase (decrease)	(1,645,630)	\$	(17,912,908)	(659,804)	\$	(6,646,992)
Strategic Bond Fund Class R3					_	
Sold	635,251	\$	6,876,869	605,558	\$	6,250,400
Issued as reinvestment of dividends	60,341		634,788	42,610		414,599
Redeemed	(998,607)		(10,594,168)	(889,108)		(9,232,946)
Net increase (decrease)	(303,015)	\$	(3,082,511)	(240,940)	\$	(2,567,947)
Diversified Value Fund Class I						
Sold	7,927,280	\$	78,863,563	3,808,671	\$	42,123,866
Issued as reinvestment of dividends	1,350,696		15,492,478	2,860,238		28,659,584
Redeemed	(7,563,444)		(79,768,346)	(3,315,480)		(37,365,553)
Net increase (decrease)	1,714,532	\$	14,587,695	3,353,429	\$	33,417,897
Diversified Value Fund Class R5						
Sold	545,903	\$	5,566,498	436,167	\$	5,156,305
Issued as reinvestment of dividends	459,049		5,283,654	2,000,197		20,081,978
Redeemed	(1,120,315)		(11,566,189)	(6,566,005)		(70,504,181)
Net increase (decrease)	(115,363)	\$	(716,037)	(4,129,641)	\$	(45,265,898)
Diversified Value Fund Service Class		_			_	
Sold	662,914	\$	6,983,178	179,187	\$	2,004,575
Issued as reinvestment of dividends	61,899		713,075	129,162		1,299,372
Redeemed	(185,388)	Φ.	(1,857,148)	(440,982)	Φ.	(5,528,683)
Net increase (decrease)	539,425	\$	5,839,105	(132,633)	\$	(2,224,736)
Diversified Value Fund Administrative Class	400.000	ø	4.212.066	(41.755	¢	7 2 42 592
Sold Issued as reinvestment of dividends	408,808	\$	4,213,066	641,755	\$	7,342,582
Redeemed	116,460 (638,612)		1,352,099 (6,778,909)	206,937 (209,911)		2,096,273 (2,337,279)
	(113,344)	\$	(1,213,744)	638,781	\$	7,101,576
Net increase (decrease)	(113,344)	φ	(1,413,744)	030,/61	Þ	7,101,370

Notes to Financial Statements (Continued)

	Year Ended Sep Shares	temb	er 30, 2020 Amount	Year Ended September 30, 2019 Shares Amount		
Diversified Value Fund Class A						
Sold	576,272	\$	5,876,381	555,732	\$	6,224,083
Issued as reinvestment of dividends	205,695		2,365,497	596,709		5,990,960
Redeemed	(1,226,460)		(13,320,526)	(1,278,614)		(14,712,843)
Net increase (decrease)	(444,493)	\$	(5,078,648)	(126,173)	\$	(2,497,800)
Diversified Value Fund Class R4						
Sold	609,100	\$	6,580,761	261,772	\$	2,953,952
Issued as reinvestment of dividends	42,879		485,396	76,842		760,735
Redeemed	(220,514)		(2,124,126)	(97,110)		(1,085,541)
Net increase (decrease)	431,465	\$	4,942,031	241,504	\$	2,629,146
Diversified Value Fund Class R3						
Sold	72,005	\$	796,458	47,374	\$	542,182
Issued as reinvestment of dividends	11,709		133,835	33,523		334,894
Redeemed	(52,853)		(543,496)	(121,907)		(1,331,990)
Net increase (decrease)	30,861	\$	386,797	(41,010)	\$	(454,914)
Fundamental Value Fund Class I						-
Sold	10,392,675	\$	78,613,563	6,322,314	\$	61,866,915
Issued as reinvestment of dividends	7,895,744		68,929,847	8,037,971		73,708,191
Redeemed	(16,784,966)		(141,029,018)	(33,222,488)		(335,419,451)
Net increase (decrease)	1,503,453	\$	6,514,392	(18,862,203)	\$	(199,844,345)
Fundamental Value Fund Class R5				<u> </u>		
Sold	1,228,390	\$	9,256,683	701,718	\$	7,064,621
Issued as reinvestment of dividends	4,571,295		40,227,396	3,531,237		32,593,317
Redeemed	(7,270,124)		(59,763,633)	(11,072,213)		(112,540,225)
Net increase (decrease)	(1,470,439)	\$	(10,279,554)	(6,839,258)	\$	(72,882,287)
Fundamental Value Fund Service Class				<u> </u>		
Sold	922,360	\$	6,513,275	310,891	\$	3,089,946
Issued as reinvestment of dividends	625,969		5,483,484	557,701		5,125,269
Redeemed	(1,585,769)		(13,609,498)	(2,110,307)		(21,717,589)
Net increase (decrease)	(37,440)	\$	(1,612,739)	(1,241,715)	\$	(13,502,374)
Fundamental Value Fund Administrative Class	()	_	(),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	( ) ) ;	_	( - ) ) ,
Sold	2,254,254	\$	16,283,135	307,371	\$	3,094,452
Issued as reinvestment of dividends	1,331,615	Ψ	11,771,480	1,006,125	Ψ	9,316,716
Redeemed	(1,764,414)		(14,563,177)	(2,807,615)		(28,488,602)
Net increase (decrease)	1,821,455	\$	13,491,438	(1,494,119)	\$	(16,077,434)
Fundamental Value Fund Class A	1,021,100	-	10, 10 1, 100	(1,12,1,112)	-	(10,077,131)
Sold	660,980	\$	4,661,173	388,142	\$	3,865,775
Issued as reinvestment of dividends	1,543,560	Ψ	13,428,969	968,469	Ψ	8,851,803
Redeemed	(4,033,924)		(29,680,710)	(2,046,669)		(20,880,122)
Net increase (decrease)	(1,829,384)	\$	(11,590,568)	(690,058)	\$	(8,162,544)
Fundamental Value Fund Class R4	(1,025,504)	Ψ	(11,570,500)	(070,030)	Ψ	(0,102,544)
Sold	141,194	\$	1,023,469	169,685	\$	1,603,882
Issued as reinvestment of dividends	216,821	Ψ	1,849,486	117,038	Ψ	1,053,343
Redeemed	(214,386)		(1,851,752)	(176,872)		(1,679,371)
Net increase (decrease)	143,629	\$	1,021,203	109,851	\$	977,854
iver increase (decrease)	173,029	Ψ	1,021,203	109,631	Ψ	711,034

Notes to Financial Statements (Continued)

	Year Ended Sep Shares	temb	er 30, 2020 Amount	Year Ended September 30, 2019 Shares Amount		
Fundamental Value Fund Class R3						
Sold	25,383	\$	183,885	34,557	\$	331,846
Issued as reinvestment of dividends	59,078		501,573	36,577		328,097
Redeemed	(183,552)		(1,403,593)	(79,587)		(777,692)
Net increase (decrease)	(99,091)	\$	(718,135)	(8,453)	\$	(117,749)
S&P 500 Index Fund Class I						
Sold	33,421,119	\$	556,933,137	25,054,216	\$	421,941,279
Issued as reinvestment of dividends	4,195,226		75,807,742	3,843,029		58,029,729
Redeemed	(35,434,447)		(626,105,886)	(8,426,764)		(146,018,018)
Net increase (decrease)	2,181,898	\$	6,634,993	20,470,481	\$	333,952,990
S&P 500 Index Fund Class R5						
Sold	2,204,399	\$	38,510,146	5,890,459	\$	106,248,343
Issued as reinvestment of dividends	1,761,200		31,948,165	4,718,293		71,529,319
Redeemed	(9,593,636)		(164,654,240)	(9,419,098)		(166,682,986)
Net increase (decrease)	(5,628,037)	\$	(94,195,929)	1,189,654	\$	11,094,676
S&P 500 Index Fund Service Class	(0,020,007)	Ψ	(> 1,1>0,12)	1,105,001	=	11,05 1,070
Sold	2,069,060	\$	36,686,768	2,897,796	\$	49,815,312
Issued as reinvestment of dividends	1,411,046	Ψ	25,666,923	3,948,989	Ψ	60,024,630
Redeemed	(5,771,824)		(105,316,228)	(8,317,098)		(148,888,548)
	(2,291,718)	\$	(42,962,537)	(1,470,313)	\$	(39,048,606)
Net increase (decrease)	(2,291,718)	Φ	(42,902,337)	(1,470,313)	Ф	(39,048,000)
S&P 500 Index Fund Administrative Class	2 200 420	e	41,000,674	2.565.650	e.	44,000,027
Sold Issued as reinvestment of dividends	2,390,439	\$	41,989,674	2,565,659	\$	44,080,037
	1,646,019		29,315,593	5,551,353		82,715,153
Redeemed	(11,527,435)	Φ.	(196,203,014)	(11,132,277)	Φ.	(188,444,766)
Net increase (decrease)	(7,490,977)	\$	(124,897,747)	(3,015,265)	\$	(61,649,576)
S&P 500 Index Fund Class A		_			_	
Sold	235,638	\$	3,904,695	412,369	\$	7,070,716
Issued as reinvestment of dividends	93,596		1,633,249	296,224		4,330,792
Redeemed	(672,357)		(11,769,939)	(818,742)		(14,034,889)
Net increase (decrease)	(343,123)	\$	(6,231,995)	(110,149)	\$	(2,633,381)
S&P 500 Index Fund Class R4						
Sold	5,133,080	\$	87,682,429	4,443,603	\$	74,660,223
Issued as reinvestment of dividends	2,145,497		37,696,386	6,212,016		91,378,752
Redeemed	(11,459,467)		(195,612,801)	(10,609,716)		(178,904,153)
Net increase (decrease)	(4,180,890)	\$	(70,233,986)	45,903	\$	(12,865,178)
S&P 500 Index Fund Class R3						
Sold	2,443,017	\$	39,040,236	2,230,813	\$	36,601,220
Issued as reinvestment of dividends	815,298		13,900,835	2,506,360		35,840,947
Redeemed	(4,555,528)		(75,564,092)	(4,464,002)		(72,204,973)
Net increase (decrease)	(1,297,213)	\$	(22,623,021)	273,171	\$	237,194
<b>Equity Opportunities Fund Class I</b>						
Sold	12,421,310	\$	206,164,899	3.035.315	\$	50,661,376
Issued as reinvestment of dividends	1,402,377	~	24,583,662	1,601,178	~	24,257,844
Redeemed	(5,458,064)		(90,794,647)	(4,206,249)		(73,449,225)
Net increase (decrease)	8,365,623	\$	139,953,914	430,244	\$	1,469,995
1.60 moreuse (decreuse)	0,303,023	Ψ	107,700,717	130,211	Ψ	1,107,773

Notes to Financial Statements (Continued)

	Year Ended Sep Shares	temb	oer 30, 2020 Amount	Year Ended September 30, 2019 Shares Amount		
<b>Equity Opportunities Fund Class R5</b>		_			_	
Sold	1,129,158	\$	18,791,000	938,398	\$	16,186,702
Issued as reinvestment of dividends	892,027		15,717,523	1,076,263		16,380,730
Redeemed	(2,771,893)	Φ.	(45,974,459)	(2,434,422)	Φ.	(40,494,157)
Net increase (decrease)	(750,708)	\$	(11,465,936)	(419,761)	\$	(7,926,725)
Equity Opportunities Fund Service Class Sold	106 610	\$	6.836.961	1 049 405	\$	19 204 402
Issued as reinvestment of dividends	406,648 266,700	2	4,589,902	1,048,495 305,302	2	18,294,492 4,548,999
Redeemed	(796,043)		(13,171,414)	(1,161,106)		(19,766,876)
Net increase (decrease)	(122,695)	\$	(1,744,551)	192,691	\$	3,076,615
Equity Opportunities Fund Administrative Class	(122,093)	φ	(1,/44,331)	192,091	φ	3,070,013
Sold	409,941	\$	6,720,228	445,737	\$	7,528,781
Issued as reinvestment of dividends	273,138	Ψ	4,621,502	434,813	Ψ	6,378,705
Redeemed	(1,083,340)		(17,695,931)	(1,974,322)		(32,819,298)
Net increase (decrease)	(400,261)	\$	(6,354,201)	(1,093,772)	\$	(18,911,812)
Equity Opportunities Fund Class A		<u> </u>	(1)-1-7	( ) ,	÷	( - )- ,- ,
Sold	661,466	\$	10,067,957	382,332	\$	6,088,708
Issued as reinvestment of dividends	356,843	•	5,705,925	486,232	•	6,773,205
Redeemed	(1,256,328)		(19,391,539)	(1,681,151)		(26,781,215)
Net increase (decrease)	(238,019)	\$	(3,617,657)	(812,587)	\$	(13,919,302)
Equity Opportunities Fund Class R4				`		<u> </u>
Sold	256,078	\$	3,736,679	196,151	\$	2,995,598
Issued as reinvestment of dividends	46,405		727,168	74,016		1,011,804
Redeemed	(154,197)		(2,272,567)	(412,404)		(6,605,916)
Net increase (decrease)	148,286	\$	2,191,280	(142,237)	\$	(2,598,514)
Equity Opportunities Fund Class R3						
Sold	91,828	\$	1,301,061	89,507	\$	1,310,598
Issued as reinvestment of dividends	24,242		352,956	20,932		268,342
Redeemed	(87,465)		(1,231,551)	(66,589)		(994,020)
Net increase (decrease)	28,605	\$	422,466	43,850	\$	584,920
Fundamental Growth Fund Class I						
Sold	1,555,962	\$	11,876,408	2,372,970	\$	18,436,450
Issued as reinvestment of dividends	1,551,887		11,328,772	1,840,112		12,107,941
Redeemed	(10,104,729)	_	(79,204,509)	(2,356,329)		(17,930,114)
Net increase (decrease)	(6,996,880)	\$	(55,999,329)	1,856,753	\$	12,614,277
Fundamental Growth Fund Class R5	(10.620	Φ.	4.501.040	452.265	Φ.	2 770 700
Sold	610,639	\$	4,501,243	472,267	\$	3,770,788
Issued as reinvestment of dividends Redeemed	708,391		5,192,507	867,849		5,727,800
	(3,695,958) (2,376,928)	\$	(28,596,118) (18,902,368)	(804,346)	\$	(6,381,253)
Net increase (decrease)	(2,3/0,928)	Ф	(18,902,308)	535,770	<b>D</b>	3,117,335
Fundamental Growth Fund Service Class Sold	124 115	\$	1 002 122	172,913	\$	1 225 460
Issued as reinvestment of dividends	134,115 236,331	Ф	1,002,132 1,680,311	280,888	Φ	1,335,468 1,806,108
Redeemed	(846,723)		(6,242,011)	(203,230)		(1,584,484)
Net increase (decrease)	(476,277)	\$	(3,559,568)	250,571	\$	1,557,092
ivet increase (decrease)	(470,277)	Ψ	(3,337,300)	230,371	Ψ	1,337,072

# Notes to Financial Statements (Continued)

	Year Ended September 30, 2020 Shares Amount			Year Ended September 30, 2019 Shares Amount		
Fundamental Growth Fund Administrative Class						
Sold	208,578	\$	1,487,047	438,322	\$	3,304,256
Issued as reinvestment of dividends	345,329		2,362,047	387,729		2,415,549
Redeemed	(712,667)		(5,130,345)	(251,462)		(1,810,175)
Net increase (decrease)	(158,760)	\$	(1,281,251)	574,589	\$	3,909,630
Fundamental Growth Fund Class A	550.054	Φ.	2.064.086	212.065	Φ.	1 400 224
Sold	570,854	\$	3,964,976	213,865	\$	1,490,234
Issued as reinvestment of dividends Redeemed	445,633		2,838,685	544,322		3,200,614
	(928,341) 88,146	\$	(6,159,118) 644,543	(768,837) (10,650)	\$	(5,654,289) (963,441)
Net increase (decrease)	88,140	Þ	044,343	(10,030)	<b>3</b>	(903,441)
Fundamental Growth Fund Class R4 Sold	75 505	\$	170 627	22 222	\$	236,631
Issued as reinvestment of dividends	75,585 35,428	Ф	478,627 222,136	33,222 93,125	Ф	540,125
Redeemed	(50,776)		(322,752)	(264,950)		(1,746,233)
Net increase (decrease)	60,237	\$	378,011	(138,603)	\$	(969,477)
Fundamental Growth Fund Class R3	00,237	Ψ	370,011	(130,003)	Ψ	(707,477)
Sold	138,133	\$	805,381	149,242	\$	902,211
Issued as reinvestment of dividends	97,413	φ	552,331	120,853	φ	647,771
Redeemed	(230,213)		(1,367,207)	(237,264)		(1,531,084)
Net increase (decrease)	5,333	\$	(9,495)	32,831	\$	18,898
Blue Chip Growth Fund Class I	3,333	Ψ	(5,155)	32,031	Ψ	10,000
Sold	24,419,832	\$	600,677,402	20,120,565	\$	437,855,749
Issued as reinvestment of dividends	5,007,432	Ψ	116,222,496	5,344,396	Ψ	102,719,292
Redeemed	(20,957,706)		(505,889,485)	(16,761,416)		(366,703,510)
Net increase (decrease)	8,469,558	\$	211,010,413	8,703,545	\$	173,871,531
Blue Chip Growth Fund Class R5		<u> </u>	, , , , , ,	- / /-	<u> </u>	, ,
Sold	7,001,349	\$	183,239,368	3,464,828	\$	75,999,367
Issued as reinvestment of dividends	1,141,637		26,463,154	1,416,732		27,201,261
Redeemed	(7,351,889)		(179,209,630)	(6,350,192)		(138,238,848)
Net increase (decrease)	791,097	\$	30,492,892	(1,468,632)	\$	(35,038,220)
Blue Chip Growth Fund Service Class						· · · · · · · · · · · · · · · · · · ·
Sold	3,083,183	\$	75,676,788	860,467	\$	19,184,637
Issued as reinvestment of dividends	248,267		5,702,690	325,475		6,197,046
Redeemed	(1,960,951)		(46,536,671)	(1,432,997)		(31,181,500)
Net increase (decrease)	1,370,499	\$	34,842,807	(247,055)	\$	(5,799,817)
Blue Chip Growth Fund Administrative Class						
Sold	2,440,560	\$	59,514,382	2,195,385	\$	47,310,357
Issued as reinvestment of dividends	791,377		17,893,032	886,207		16,625,240
Redeemed	(3,566,157)		(83,416,126)	(2,815,023)		(60,297,086)
Net increase (decrease)	(334,220)	\$	(6,008,712)	266,569	\$	3,638,511
Blue Chip Growth Fund Class A						
Sold	2,243,301	\$	52,653,546	1,653,800	\$	34,076,522
Issued as reinvestment of dividends	497,800		10,722,606	584,097		10,484,536
Redeemed	(3,760,228)		(86,943,259)	(2,735,931)		(55,700,237)
Net increase (decrease)	(1,019,127)	\$	(23,567,107)	(498,034)	\$	(11,139,179)

Notes to Financial Statements (Continued)

	Year Ended Sep Shares	Year Ended September 30, 2020 Shares Amount			Year Ended September 30, 2019 Shares Amount		
Blue Chip Growth Fund Class R4			_				
Sold	1,213,245	\$	27,972,007	1,131,356	\$	22,931,648	
Issued as reinvestment of dividends	281,633		6,055,123	356,162		6,375,294	
Redeemed	(1,990,207)		(44,370,734)	(1,388,803)		(28,328,753)	
Net increase (decrease)	(495,329)	\$	(10,343,604)	98,715	\$	978,189	
Blue Chip Growth Fund Class R3							
Sold	523,850	\$	10,911,043	961,661	\$	18,198,359	
Issued as reinvestment of dividends	184,219		3,671,493	217,503		3,632,300	
Redeemed	(1,375,384)		(28,412,564)	(1,033,239)		(19,462,628)	
Net increase (decrease)	(667,315)	\$	(13,830,028)	145,925	\$	2,368,031	
Growth Opportunities Fund Class I							
Sold	7,663,376	\$	69,462,161	4,727,649	\$	46,549,167	
Issued as reinvestment of dividends	6,611,545		50,975,012	8,972,720		76,357,844	
Redeemed	(7,264,392)		(62,333,519)	(26,787,530)		(270,109,096)	
Net increase (decrease)	7,010,529	\$	58,103,654	(13,087,161)	\$	(147,202,085)	
Growth Opportunities Fund Class R5				•			
Sold	3,711,539	\$	31,104,596	1,719,230	\$	17,847,569	
Issued as reinvestment of dividends	5,166,905		39,010,130	3,600,399		30,171,346	
Redeemed	(10,649,912)		(92,141,525)	(4,390,156)		(42,115,991)	
Net increase (decrease)	(1,771,468)	\$	(22,026,799)	929,473	\$	5,902,924	
Growth Opportunities Fund Service Class		<u> </u>			<u> </u>	- / /-	
Sold	743,737	\$	6,082,594	2,094,944	\$	17,966,463	
Issued as reinvestment of dividends	3,246,545	Ψ	23,180,329	1,678,129	Ψ	13,542,503	
Redeemed	(8,288,552)		(66,684,248)	(1,574,323)		(15,819,204)	
Net increase (decrease)	(4,298,270)	\$	(37,421,325)	2,198,750	\$	15,689,762	
Growth Opportunities Fund Administrative Class	(1,250,270)	Ψ	(37,121,323)	2,170,750	Ψ	13,000,702	
Sold	993,283	\$	7,602,818	973,514	\$	9,031,349	
Issued as reinvestment of dividends	2,305,355	Ψ	15,284,502	1,489,497	Ψ	11,409,550	
Redeemed	(2,306,044)		(17,824,564)	(1,798,663)		(17,062,311)	
Net increase (decrease)	992,594	\$	5,062,756	664,348	\$	3,378,588	
Growth Opportunities Fund Class A	772,374	Ψ	3,002,730	004,540	Ψ	3,370,300	
Sold	861,868	\$	5,599,220	282,511	\$	2,394,294	
Issued as reinvestment of dividends	2,264,835	Φ	12,818,964	1,594,182	Φ	10,999,852	
Redeemed	(2,155,853)		(13,962,433)	(1,834,271)		(15,638,953)	
	970,850	\$	4,455,751	42,422	\$	(2,244,807)	
Net increase (decrease)	970,830	Φ	4,433,731	42,422	Φ	(2,244,607)	
Growth Opportunities Fund Class R4	249.215	¢.	1 (42 071	405 721	e.	4 221 112	
Sold Issued as reinvestment of dividends	248,215	\$	1,643,971	485,721	\$	4,221,113	
	630,953		3,621,672	536,219		3,732,083	
Redeemed	(1,699,777)	Φ.	(10,287,051)	(1,334,831)	Φ.	(11,495,660)	
Net increase (decrease)	(820,609)	\$	(5,021,408)	(312,891)	\$	(3,542,464)	
Growth Opportunities Fund Class R3							
Sold	33,097	\$	171,178	52,441	\$	355,497	
Issued as reinvestment of dividends	84,467		396,148	38,203		234,569	
Redeemed	(89,953)		(462,736)	(58,142)	_	(457,602)	
Net increase (decrease)	27,611	\$	104,590	32,502	\$	132,464	

# Notes to Financial Statements (Continued)

	Year Ended Sep Shares	Year Ended September 30, 2020 Shares Amount			Year Ended September 30, 2019 Shares Amount		
Mid-Cap Value Fund Class I			_				
Sold	3,729,787	\$	40,718,223	1,945,607	\$	23,014,843	
Issued as reinvestment of dividends	133,346		1,720,169	1,090,387		11,503,586	
Redeemed	(2,715,837)		(31,467,762)	(1,991,844)		(23,399,140)	
Net increase (decrease)	1,147,296	\$	10,970,630	1,044,150	\$	11,119,289	
Mid-Cap Value Fund Class R5							
Sold	49,016	\$	581,867	45,600	\$	583,696	
Issued as reinvestment of dividends	1,837		23,976	14,885		158,819	
Redeemed	(82,766)	Φ.	(838,987)	(21,440)	Φ.	(259,078)	
Net increase (decrease)	(31,913)	\$	(233,144)	39,045	\$	483,437	
Mid-Cap Value Fund Service Class							
Sold	621	\$	7,141	1,014	\$	11,944	
Issued as reinvestment of dividends	146		1,889	2,935		31,115	
Redeemed	(66)	Φ.	(700)	(4,756)	Φ.	(58,726)	
Net increase (decrease)	701	\$	8,330	(807)	\$	(15,667)	
Mid-Cap Value Fund Administrative Class	17.100	Φ.	200 245		Φ.	66.015	
Sold	17,103 914	\$	208,245 12,087	5,515	\$	66,815	
Issued as reinvestment of dividends				9,647		104,376	
Redeemed	(12,127)	Φ.	(134,157)	(7,203)	Φ.	(89,945)	
Net increase (decrease)	5,890	\$	86,175	7,959	\$	81,246	
Mid-Cap Value Fund Class A	170 106	en en	2 100 502	101 575	er.	1 210 221	
Sold Issued as reinvestment of dividends	179,196 3,227	\$	2,100,583 41,913	101,575 23,871	\$	1,218,321 253,992	
Redeemed	(133,660)			(76,895)		(949,066)	
	48,763	\$	(1,468,907)	48,551	\$		
Net increase (decrease)	48,703	Þ	673,589	46,331	<b>D</b>	523,247	
Mid-Cap Value Fund Class R4 Sold	11,801	\$	128,182	62,837	\$	818,137	
Issued as reinvestment of dividends	909	Ф	11,666	9,964	Ф	104,519	
Redeemed	(14,163)		(163,651)	(9,445)		(110,959)	
	(1,453)	\$	(23,803)	63,356	\$	811,697	
Net increase (decrease)	(1,433)	φ	(23,803)	03,330	φ	611,097	
Mid-Cap Value Fund Class R3 Sold	11,345	\$	122,111	11,335	\$	135,286	
Issued as reinvestment of dividends	502	Ф	6,426	4,619	Ф	48,457	
Redeemed	(18,526)		(193,355)	(2,480)		(30,141)	
Net increase (decrease)	(6,679)	\$	(64,818)	13,474	\$	153,602	
Small Cap Value Equity Fund Class I	(0,079)	Ψ	(04,010)	13,171	Ψ	133,002	
Sold	6,100,337	\$	58,694,533	2,378,615	\$	27,063,398	
Issued as reinvestment of dividends	472,443	Ψ	5,187,429	1,308,313	Ψ	12,834,546	
Redeemed	(4,955,518)		(44,930,468)	(2,233,910)		(26,110,628)	
Net increase (decrease)	1,617,262	\$	18,951,494	1,453,018	\$	13,787,316	
Small Cap Value Equity Fund Class R5	1,017,202	Ψ	10,751,171	1,133,010	Ψ	13,707,310	
Sold	522,939	\$	4,348,445	467,994	\$	5,342,829	
Issued as reinvestment of dividends	141,385	Ψ	1,558,062	1,153,330	Ψ	11,337,239	
Redeemed	(989,032)		(9,578,383)	(2,470,021)		(25,867,486)	
Net increase (decrease)	(324,708)	\$	(3,671,876)	(848,697)	\$	(9,187,418)	
1.55 moreupe (decrease)	(321,700)	*	(5,5,1,0,0)	(010,071)	*	(>,107,110)	

Notes to Financial Statements (Continued)

	Year Ended September 30, 2020 Shares Amount		Year Ended September 30, 2019 Shares Amount			
Small Cap Value Equity Fund Service Class		-				
Sold	65,149	\$	604,616	51,953	\$	616,718
Issued as reinvestment of dividends	33,271		368,640	133,804		1,323,324
Redeemed	(226,453)		(2,133,826)	(83,070)		(1,166,130)
Net increase (decrease)	(128,033)	\$	(1,160,570)	102,687	\$	773,912
Small Cap Value Equity Fund Administrative Class						
Sold	82,457	\$	639,173	36,730	\$	413,940
Issued as reinvestment of dividends	27,711		304,272	137,435		1,349,611
Redeemed	(41,458)		(394,338)	(169,471)		(1,876,188)
Net increase (decrease)	68,710	\$	549,107	4,694	\$	(112,637)
Small Cap Value Equity Fund Class A						
Sold	64,916	\$	553,978	187,524	\$	2,414,070
Issued as reinvestment of dividends	55,772		603,450	332,515		3,228,716
Redeemed	(295,422)		(3,025,340)	(442,523)		(4,925,205)
Net increase (decrease)	(174,734)	\$	(1,867,912)	77,516	\$	717,581
Small Cap Value Equity Fund Class R4						
Sold	87,810	\$	768,637	229,789	\$	2,518,800
Issued as reinvestment of dividends	38,696		415,594	87,434		841,985
Redeemed	(245,637)		(2,122,364)	(111,623)		(1,275,286)
Net increase (decrease)	(119,131)	\$	(938,133)	205,600	\$	2,085,499
Small Cap Value Equity Fund Class R3						
Sold	19,140	\$	160,962	21,902	\$	245,409
Issued as reinvestment of dividends	7,660		81,577	41,761		400,490
Redeemed	(16,749)		(154,103)	(71,603)		(794,665)
Net increase (decrease)	10,051	\$	88,436	(7,940)	\$	(148,766)
Small Company Value Fund Class I						
Sold	2,963,245	\$	22,052,782	1,398,393	\$	12,943,322
Issued as reinvestment of dividends	534,168		4,994,472	1,652,823		13,734,961
Redeemed	(2,146,728)		(16,745,237)	(1,285,919)		(12,178,157)
Net increase (decrease)	1,350,685	\$	10,302,017	1,765,297	\$	14,500,126
Small Company Value Fund Class R5						
Sold	1,429,633	\$	9,999,491	1,884,740	\$	17,378,409
Issued as reinvestment of dividends	363,511		3,427,906	1,160,945		9,717,110
Redeemed	(3,737,145)		(30,871,036)	(762,859)		(7,270,219)
Net increase (decrease)	(1,944,001)	\$	(17,443,639)	2,282,826	\$	19,825,300
Small Company Value Fund Service Class						
Sold	160,829	\$	1,294,652	96,178	\$	900,268
Issued as reinvestment of dividends	36,710	•	343,971	125,400	•	1,044,582
Redeemed	(358,367)		(3,098,015)	(199,547)		(1,948,132)
Net increase (decrease)	(160,828)	\$	(1,459,392)	22,031	\$	(3,282)
Small Company Value Fund Administrative Class	( 11)1 1,	<u> </u>	( ) ) ,	,	<u> </u>	(-, -,
Sold	802,999	\$	5,171,896	125,580	\$	1,148,139
Issued as reinvestment of dividends	63,414	4	580,242	232,190	4	1,890,022
Redeemed	(322,795)		(2,591,497)	(318,316)		(2,878,806)
Net increase (decrease)	543,618	\$	3,160,641	39,454	\$	159,355
The mercuse (decrease)	2.13,010	Ψ	3,100,011	37,131	<del>*</del>	137,333

# Notes to Financial Statements (Continued)

	Year Ended September 30, 2020 Shares Amount			Year Ended September 30, 2019 Shares Amount		
Small Company Value Fund Class A						
Sold	507,837	\$	3,448,739	202,547	\$	1,774,108
Issued as reinvestment of dividends Redeemed	100,963		884,436	353,245		2,762,377
	(988,003) (379,203)	\$	(6,687,000)	(466,722) 89,070	\$	(4,213,426)
Net increase (decrease)	(3/9,203)	<b>3</b>	(2,353,825)	89,070	<b>3</b>	323,039
Small Company Value Fund Class R4 Sold	85,162	\$	594,070	3,894	\$	33,662
Issued as reinvestment of dividends	2,960	φ	25,544	10,400	φ	80,185
Redeemed	(21,474)		(138,709)	(9,695)		(86,455)
Net increase (decrease)	66,648	\$	480,905	4,599	\$	27,392
Small Company Value Fund Class R3		<del></del>				
Sold	5,796	\$	35,382	23,453	\$	194,684
Issued as reinvestment of dividends	2,223		17,675	10,406		74,193
Redeemed	(37,484)		(269,956)	(19,683)		(154,506)
Net increase (decrease)	(29,465)	\$	(216,899)	14,176	\$	114,371
S&P Mid Cap Index Fund Class I						
Sold	2,665,722	\$	33,865,976	2,474,940	\$	32,652,821
Issued as reinvestment of dividends	247,478		3,459,749	361,061		4,293,020
Redeemed	(2,355,283)	Φ.	(28,850,404)	(1,114,159)	Φ.	(15,035,481)
Net increase (decrease)	557,917	\$	8,475,321	1,721,842	\$	21,910,360
S&P Mid Cap Index Fund Class R5	(74.660	e.	0.000.076	1 405 200	e	10 (01 730
Sold Issued as reinvestment of dividends	674,660 94,075	\$	8,099,876 1,311,412	1,495,280 112,801	\$	19,691,738 1,337,826
Redeemed	(1,344,225)		(17,041,206)	(706,857)		(9,044,335)
Net increase (decrease)	(575,490)	\$	(7,629,918)	901,224	\$	11,985,229
S&P Mid Cap Index Fund Service Class	(373,170)	Ψ	(7,025,510)	701,221	Ψ	11,703,227
Sold	311,713	\$	3,815,970	315,675	\$	4,111,233
Issued as reinvestment of dividends	58,293	-	809,111	139,718	*	1,650,071
Redeemed	(405,314)		(5,175,952)	(684,608)		(9,129,359)
Net increase (decrease)	(35,308)	\$	(550,871)	(229,215)	\$	(3,368,055)
S&P Mid Cap Index Fund Administrative Class		-			-	
Sold	637,480	\$	7,678,855	768,706	\$	10,364,039
Issued as reinvestment of dividends	146,126		2,028,235	339,249		4,009,925
Redeemed	(1,459,621)		(18,176,333)	(1,507,027)		(19,901,787)
Net increase (decrease)	(676,015)	\$	(8,469,243)	(399,072)	\$	(5,527,823)
S&P Mid Cap Index Fund Class A			0.40====	=00.04	•	
Sold Issued as reinvestment of dividends	662,924	\$	8,185,717	783,216	\$	10,436,417
Redeemed	85,646 (1,042,536)		1,187,910	171,271 (751,098)		2,022,709
	(293,966)	\$	(13,281,747) (3,908,120)	203,389	\$	(10,003,486) 2,455,640
Net increase (decrease)	(293,900)	Φ	(3,908,120)	203,369	Φ	2,433,040
S&P Mid Cap Index Fund Class R4 Sold	1,491,172	\$	17,581,946	1,042,070	\$	13,729,082
Issued as reinvestment of dividends	261,265	Ψ	3,602,840	676,847	Ψ	7,946,180
Redeemed	(3,771,508)		(48,294,536)	(2,743,741)		(36,368,468)
Net increase (decrease)	(2,019,071)	\$	(27,109,750)	(1,024,824)	\$	(14,693,206)
				( )-		( ,,,

Notes to Financial Statements (Continued)

	Year Ended Sep Shares	temb	oer 30, 2020 Amount	Year Ended Sep Shares	temb	er 30, 2019 Amount
S&P Mid Cap Index Fund Class R3						
Sold	1,303,189	\$	14,656,532	1,206,282	\$	15,693,928
Issued as reinvestment of dividends	300,992		4,138,636	725,807		8,491,936
Redeemed	(3,356,801)	_	(42,544,400)	(2,726,508)	_	(35,712,446)
Net increase (decrease)	(1,752,620)	\$	(23,749,232)	(794,419)	\$	(11,526,582)
Russell 2000 Small Cap Index Fund Class I		_				
Sold	2,311,259	\$	25,844,570	2,071,938	\$	25,558,462
Issued as reinvestment of dividends	399,529		5,018,091	440,962		4,859,403
Redeemed	(2,212,222)	Φ.	(24,428,978)	(1,102,532)	Φ.	(13,545,427)
Net increase (decrease)	498,566	\$	6,433,683	1,410,368	\$	16,872,438
Russell 2000 Small Cap Index Fund Class R5	451.010	Φ.	5 400 F0 6	452 (21	Φ.	5.50.500
Sold	471,010	\$	5,439,736	473,631	\$	5,760,788
Issued as reinvestment of dividends Redeemed	77,446 (601,900)		972,716	111,344		1,227,006
		Φ.	(6,880,319)	(839,484)	Ф.	(10,461,374)
Net increase (decrease)	(53,444)	\$	(467,867)	(254,509)	\$	(3,473,580)
Russell 2000 Small Cap Index Fund Service Class	207.240	e.	2.252.620	222 112	e	2.025.612
Sold Issued as reinvestment of dividends	296,348 50,097	\$	3,352,630 624,710	333,113 93,930	\$	3,925,612 1,027,598
Redeemed	(313,216)		(3,613,707)	· · · · · · · · · · · · · · · · · · ·		(12,562,753)
	33,229	\$	<del></del>	(1,011,383) (584,340)	\$	(7,609,543)
Net increase (decrease)	33,229	Ф	363,633	(384,340)	Ф	(7,009,343)
Russell 2000 Small Cap Index Fund Administrative Class Sold	988,531	\$	10,534,632	1,372,351	\$	16,841,132
Issued as reinvestment of dividends	257,217	Ф	3,215,208	315,607	Ф	3,462,205
Redeemed	(1,506,216)		(16,617,282)	(1,262,009)		(15,306,734)
Net increase (decrease)	(260,468)	\$	(2,867,442)	425,949	\$	4,996,603
	(200,400)	Ф	(2,007,442)	423,949	φ	4,990,003
Russell 2000 Small Cap Index Fund Class A Sold	619,381	\$	6,966,379	492,327	\$	6,014,638
Issued as reinvestment of dividends	118,060	Ф	1,467,484	161,024	Φ	1,758,380
Redeemed	(941,792)		(10,419,501)	(739,494)		(9,099,099)
Net increase (decrease)	(204,351)	\$	(1,985,638)	(86,143)	\$	(1,326,081)
Russell 2000 Small Cap Index Fund Class R4	(201,331)	Ψ	(1,703,030)	(00,113)	Ψ	(1,520,001)
Sold	1,135,599	\$	11,901,409	1,189,568	\$	14,159,392
Issued as reinvestment of dividends	289,492	Ψ	3,581,019	428,619	Ψ	4,654,800
Redeemed	(2,003,882)		(22,474,326)	(1,809,012)		(21,953,896)
Net increase (decrease)	(578,791)	\$	(6,991,898)	(190,825)	\$	(3,139,704)
Russell 2000 Small Cap Index Fund Class R3		<u> </u>			_	
Sold	788,203	\$	7,900,655	810,412	\$	9,735,585
Issued as reinvestment of dividends	260,598		3,210,572	384,302		4,158,146
Redeemed	(1,582,707)		(18,083,791)	(1,455,406)		(17,722,915)
Net increase (decrease)	(533,906)	\$	(6,972,564)	(260,692)	\$	(3,829,184)
Mid Cap Growth Fund Class I				`		<u> </u>
Sold	34,540,216	\$	783,148,497	48,309,809	\$	1,057,593,667
Issued as reinvestment of dividends	13,522,755		316,432,464	22,611,204		430,517,322
Redeemed	(59,395,439)		(1,344,658,137)	(42,622,650)		(942,411,286)
Net increase (decrease)	(11,332,468)	\$	(245,077,176)	28,298,363	\$	545,699,703

Notes to Financial Statements (Continued)

	Year Ended Sep Shares	tembo	er 30, 2020 Amount	Year Ended Sep Shares	temb	er 30, 2019 Amount
Mid Cap Growth Fund Class R5						
Sold	8,605,542	\$	193,613,482	11,799,308	\$	259,087,615
Issued as reinvestment of dividends	3,539,260		81,863,075	6,342,925		119,564,131
Redeemed	(20,191,300)	_	(455,968,937)	(15,282,524)		(334,060,635)
Net increase (decrease)	(8,046,498)	\$	(180,492,380)	2,859,709	\$	44,591,111
Mid Cap Growth Fund Service Class	2.156.520	Φ.	16.552.405	2.504.056	Φ.	50.012.050
Sold Issued as reinvestment of dividends	2,176,739	\$	46,753,495	2,704,076	\$	58,013,252
Redeemed	889,733		20,001,203	1,781,398		32,706,464
-	(5,968,123) (2,901,651)	\$	(131,535,127) (64,780,429)	(5,264,743) (779,269)	\$	(113,466,899) (22,747,183)
Net increase (decrease)	(2,901,031)	Þ	(04, /80, 429)	(779,269)	<b>3</b>	(22,/4/,183)
Mid Cap Growth Fund Administrative Class Sold	846,728	\$	17,188,547	1 207 201	\$	26 752 541
Issued as reinvestment of dividends	779,260	Ф	16,621,612	1,297,301 1,593,776	Ф	26,753,541 27,875,145
Redeemed	(3,931,168)		(82,229,772)	(4,441,398)		(91,601,576)
Net increase (decrease)	(2,305,180)	\$	(48,419,613)	(1,550,321)	\$	(36,972,890)
Mid Cap Growth Fund Class A	(2,303,100)	Ψ	(40,417,013)	(1,550,521)	Ψ	(30,772,070)
Sold	1,463,243	\$	27,546,264	1,272,860	\$	24,177,566
Issued as reinvestment of dividends	719,593	Ψ	13,974,495	1,467,530	Ψ	23,553,860
Redeemed	(4,426,059)		(83,799,975)	(4,358,596)		(81,640,233)
Net increase (decrease)	(2,243,223)	\$	(42,279,216)	(1,618,206)	\$	(33,908,807)
Mid Cap Growth Fund Class R4	(2,213,223)	Ψ	(12,277,210)	(1,010,200)	Ψ	(55,700,007)
Sold	1,506,667	\$	28,364,925	2,749,878	\$	52,170,375
Issued as reinvestment of dividends	682,445	Ψ	13,362,278	1,271,897	Ψ	20,553,850
Redeemed	(5,153,659)		(98,729,578)	(3,797,243)		(71,740,786)
Net increase (decrease)	(2,964,547)	\$	(57,002,375)	224,532	\$	983,439
Mid Cap Growth Fund Class R3						
Sold	321,265	\$	5,403,623	428,551	\$	7,314,380
Issued as reinvestment of dividends	123,807		2,187,663	236,934		3,485,296
Redeemed	(650,993)		(11,252,276)	(691,174)		(11,782,894)
Net increase (decrease)	(205,921)	\$	(3,660,990)	(25,689)	\$	(983,218)
Small Cap Growth Equity Fund Class I						
Sold	6,872,775	\$	98,397,814	2,812,583	\$	42,624,811
Issued as reinvestment of dividends	2,199,888		32,558,345	4,305,827		53,822,840
Redeemed	(5,793,620)		(82,117,353)	(9,706,385)		(146,870,762)
Net increase (decrease)	3,279,043	\$	48,838,806	(2,587,975)	\$	(50,423,111)
Small Cap Growth Equity Fund Class R5						
Sold	1,038,242	\$	14,834,041	1,093,405	\$	16,831,930
Issued as reinvestment of dividends	1,050,157		15,279,790	1,666,669		20,516,696
Redeemed	(2,290,152)		(32,313,542)	(1,791,360)		(27,109,343)
Net increase (decrease)	(201,753)	\$	(2,199,711)	968,714	\$	10,239,283
Small Cap Growth Equity Fund Service Class						
Sold	272,369	\$	3,712,366	728,699	\$	10,098,422
Issued as reinvestment of dividends	320,655		4,338,467	408,687		4,720,329
Redeemed	(896,739)	•	(11,683,675)	(598,963)	Φ.	(8,609,337)
Net increase (decrease)	(303,715)	\$	(3,632,842)	538,423	\$	6,209,414

Notes to Financial Statements (Continued)

	Year Ended Sep Shares	eptember 30, 2020 Amount		Year Ended Sep Shares	ptember 30, 2019 Amount	
Small Cap Growth Equity Fund Administrative Class	420.050	Ф	5 175 707	452 200	Ф	5.020.526
Sold	439,059	\$	5,175,707	453,290	\$	5,939,526
Issued as reinvestment of dividends	297,920 (791,903)		3,706,126	509,687		5,468,942
Redeemed	(54,924)	\$	(9,846,781) (964,948)	(910,471) 52,506	\$	(11,565,422) (156,954)
Net increase (decrease)	(34,924)	<b>3</b>	(904,948)	32,300	<b>3</b>	(130,934)
Small Cap Growth Equity Fund Class A Sold	882,445	\$	9,151,636	905,145	\$	10,671,629
Issued as reinvestment of dividends	492,000	Φ	5,215,203	836,159	φ	7,809,728
Redeemed	(1,396,998)		(14,154,454)	(1,640,833)		(18,583,430)
Net increase (decrease)	(22,553)	\$	212,385	100,471	\$	(102,073)
Small Cap Growth Equity Fund Class R4	(22,333)	Ψ	212,303	100,171	Ψ	(102,073)
Sold	587,299	\$	6,160,730	239,275	\$	2,797,544
Issued as reinvestment of dividends	183,400	Ψ	1,960,542	267,596	Ψ	2,518,076
Redeemed	(576,403)		(6,027,491)	(306,010)		(3,430,817)
Net increase (decrease)	194,296	\$	2,093,781	200,861	\$	1,884,803
Small Cap Growth Equity Fund Class R3		<u> </u>				
Sold	237,932	\$	2,024,807	102,157	\$	1,049,741
Issued as reinvestment of dividends	54,222		480,410	70,771		568,996
Redeemed	(169,009)		(1,526,194)	(88,254)		(884,972)
Net increase (decrease)	123,145	\$	979,023	84,674	\$	733,765
MSCI EAFE International Index Fund Class I						-
Sold	2,258,244	\$	26,056,327	1,858,350	\$	21,930,444
Issued as reinvestment of dividends	165,376		2,128,393	179,709		1,978,597
Redeemed	(1,709,286)		(19,680,451)	(1,008,871)		(12,129,111)
Net increase (decrease)	714,334	\$	8,504,269	1,029,188	\$	11,779,930
MSCI EAFE International Index Fund Class R5				_		
Sold	762,542	\$	8,732,562	1,246,275	\$	14,886,208
Issued as reinvestment of dividends	63,202		812,776	51,435		566,304
Redeemed	(1,368,557)		(16,323,781)	(469,118)		(5,280,547)
Net increase (decrease)	(542,813)	\$	(6,778,443)	828,592	\$	10,171,965
MSCI EAFE International Index Fund Service Class	155.010	Φ.	1.065.066	224.420	Φ.	2.566.151
Sold	155,010	\$	1,865,866	234,420	\$	2,766,171
Issued as reinvestment of dividends Redeemed	7,418 (128,119)		95,838 (1,483,609)	99,609		1,092,714 (25,573,583)
	34,309	\$	478,095	(2,147,939) (1,813,910)	\$	
Net increase (decrease)	34,309	<b>D</b>	478,093	(1,813,910)	Þ	(21,714,698)
MSCI EAFE International Index Fund Administrative Class Sold	498,299	\$	5,624,966	926,255	\$	11,150,706
Issued as reinvestment of dividends	106,075	Φ	1,358,826	137,635	φ	1,509,852
Redeemed	(1,172,306)		(13,802,028)	(715,819)		(8,428,749)
Net increase (decrease)	(567,932)	\$	(6,818,236)	348,071	\$	4,231,809
MSCI EAFE International Index Fund Class A	(301,332)	Ψ	(0,010,230)	3 10,071	Ψ	1,231,009
Sold	424,152	\$	4,977,939	533,883	\$	6,317,776
Issued as reinvestment of dividends	56,235	Ψ	719,248	75,914	Ψ	831,254
Redeemed	(821,055)		(9,769,038)	(370,733)		(4,397,854)
Net increase (decrease)	(340,668)	\$	(4,071,851)	239,064	\$	2,751,176
MSCI EAFE International Index Fund Class R4		<u> </u>				
Sold	719,665	\$	8,177,543	923,407	\$	10,969,746
Issued as reinvestment of dividends	97,405		1,238,985	177,254		1,930,293
Redeemed	(1,340,057)		(15,763,261)	(1,429,114)		(17,017,857)
Net increase (decrease)	(522,987)	\$	(6,346,733)	(328,453)	\$	(4,117,818)

Notes to Financial Statements (Continued)

	Year Ended Sep Shares	tembo	er 30, 2020 Amount	Year Ended Sep Shares	tembe	er 30, 2019 Amount
MSCI EAFE International Index Fund Class R3	545,020	Φ.	5.040.000	501 405	Φ.	6.015.624
Sold Issued as reinvestment of dividends	545,939 89,849	\$	5,840,980 1,140,187	591,425 152,169	\$	6,917,634 1,654,082
Redeemed	(1,259,855)		(14,972,463)	(910,821)		(10,764,134)
	(624,067)	\$	(7,991,296)	(167,227)	\$	(2,192,418)
Net increase (decrease)  Overseas Fund Class I	(024,007)	φ	(7,991,290)	(107,227)	φ	(2,192,410)
Sold	27,008,575	\$	210,743,283	14,609,132	\$	120,038,774
Issued as reinvestment of dividends	1,669,715	Ψ	14,676,789	4,898,796	Ψ	35,516,273
Redeemed	(24,059,555)		(190,739,606)	(16,203,816)		(130,239,124)
Net increase (decrease)	4,618,735	\$	34,680,466	3,304,112	\$	25,315,923
Overseas Fund Class R5		_	<u> </u>			
Sold	6,459,621	\$	53,061,465	1,459,284	\$	12,060,545
Issued as reinvestment of dividends	656,010		5,799,133	1,669,379		12,169,771
Redeemed	(5,135,391)		(41,247,357)	(2,820,212)		(23,406,690)
Net increase (decrease)	1,980,240	\$	17,613,241	308,451	\$	823,626
Overseas Fund Service Class						
Sold	920,427	\$	7,317,041	649,470	\$	5,243,843
Issued as reinvestment of dividends	163,231		1,434,801	516,809		3,746,863
Redeemed	(698,674)		(5,440,313)	(952,999)		(7,822,046)
Net increase (decrease)	384,984	\$	3,311,529	213,280	\$	1,168,660
Overseas Fund Administrative Class		_			_	
Sold	359,566	\$	2,617,115	427,042	\$	3,527,754
Issued as reinvestment of dividends	90,273		801,623	378,883		2,773,420
Redeemed	(650,714)	Φ.	(5,362,476)	(1,537,146)	\$	(12,558,385)
Net increase (decrease)	(200,875)	\$	(1,943,738)	(731,221)	<b>3</b>	(6,257,211)
Overseas Fund Class A Sold	1,038,714	\$	8,080,953	251 246	\$	2 010 127
Issued as reinvestment of dividends	1,038,714	Ф	1,012,143	351,246 480,193	Ф	2,818,127 3,438,187
Redeemed	(843,012)		(6,508,670)	(1,682,419)		(13,735,511)
Net increase (decrease)	312,308	\$	2,584,426	(850,980)	\$	(7,479,197)
Overseas Fund Class R4	312,300	Ψ	2,501,120	(030,700)	Ψ	(1,110,101)
Sold	794,469	\$	5,910,224	650,327	\$	5,086,326
Issued as reinvestment of dividends	68,356	-	579,655	189,387	-	1,327,602
Redeemed	(367,130)		(2,834,172)	(405,833)		(3,180,421)
Net increase (decrease)	495,695	\$	3,655,707	433,881	\$	3,233,507
Overseas Fund Class R3						
Sold	486,025	\$	3,763,094	127,320	\$	987,475
Issued as reinvestment of dividends	14,385		123,568	53,631		380,242
Redeemed	(132,373)		(991,231)	(194,368)		(1,565,065)
Net increase (decrease)	368,037	\$	2,895,431	(13,417)	\$	(197,348)
MM Select T. Rowe Price International Equity Fund Class I						
Sold	35,195,102	\$	323,703,207	46,463,148	\$	421,225,038
Issued as reinvestment of dividends	2,784,253		28,120,959	_*		3
Redeemed	(20,190,886)	Φ.	(185,289,354)	(9,486,051)	Φ.	(86,806,694)
Net increase (decrease)	17,788,469	\$	166,534,812	36,977,097	\$	334,418,347

<sup>\*</sup> Less than 0.5 shares

## Notes to Financial Statements (Continued)

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, 2020:

		Front-End lles Charges
	R	Retained by
	I	Distributor
Blue Chip Growth Fund	\$	5,322
Russell 2000 Small Cap Index Fund		1

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, 2020, were waived for any redemptions subject to such a charge.

### 6. Federal Income Tax Information

At September 30, 2020, 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:

	Fe	ederal Income Tax Cost	Tax Basis Unrealized Appreciation	Tax Basis Unrealized (Depreciation)	$\mathbf{A}_{\mathbf{I}}$	t Unrealized ppreciation epreciation)
Total Return Bond Fund	\$	981,411,632	\$ 31,896,131	\$ (5,584,466)	\$	26,311,665
Strategic Bond Fund		739,455,022	44,215,380	(14,577,686)		29,637,694
Diversified Value Fund		341,155,389	31,172,459	(38,595,244)		(7,422,785)
Fundamental Value Fund		518,917,828	51,706,567	(47,260,794)		4,445,773
S&P 500 Index Fund		1,876,833,931	1,477,595,333	(152,524,049)		1,325,071,284
Equity Opportunities Fund		658,697,028	96,731,427	(28,260,284)		68,471,143
Fundamental Growth Fund		58,287,391	8,667,107	(1,452,371)		7,214,736
Blue Chip Growth Fund		2,442,439,679	1,890,420,227	(37,191,766)		1,853,228,461
Growth Opportunities Fund		305,908,731	194,958,922	(557,795)		194,401,127
Mid-Cap Value Fund		105,361,238	3,710,915	(5,667,714)		(1,956,799)
Small Cap Value Equity Fund		86,521,454	4,263,565	(15,016,741)		(10,753,176)
Small Company Value Fund		184,756,442	11,979,980	(33,359,193)		(21,379,213)
S&P Mid Cap Index Fund		370,884,960	67,992,387	(61,543,003)		6,449,384
Russell 2000 Small Cap Index Fund		274,931,419	54,789,155	(61,328,120)		(6,538,965)
Mid Cap Growth Fund		6,730,728,496	2,291,983,081	(241,431,378)		2,050,551,703
Small Cap Growth Equity Fund		492,113,994	133,455,450	(26,201,407)		107,254,043
MSCI EAFE International Index Fund		197,989,103	31,537,501	(31,248,242)		289,259
Overseas Fund		629,867,403	56,082,867	(74,205,743)		(18,122,876)
MM Select T. Rowe Price International Equity Fund		1,335,234,782	143,576,065	(159,919,213)		(16,343,148)

Net capital loss carryforwards may be applied against any net realized taxable gains in succeeding years, subject to the carryforward period limitations, where applicable. 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. Under pre-enactment law, capital losses

## Notes to Financial Statements (Continued)

could be carried forward for up to eight tax years as short-term capital losses. The provisions affecting the utilization of capital loss carryforwards under the Modernization Act also require the utilization of post-enactment losses prior to the utilization of pre-enactment losses.

At September 30, 2020, for federal income tax purposes, there were no unused capital losses.

At September 30, 2020, the following Fund(s) had post-enactment accumulated capital loss carryforwards:

	C	hort Term apital Loss arryforward	Long Term Capital Loss Carryforward		
Fundamental Value Fund	\$	14,029,134	\$	598,654	
Mid-Cap Value Fund		1,081,844		1,175,780	
Small Company Value Fund		6,367,925		1,258,276	
MM Select T. Rowe Price International Equity Fund		11,064,270		27,921,927	

Net capital loss carryforwards for the Fund(s) shown in the above table are from post-enactment years and are, therefore, not subject to the eight-year carryforward period and possible expiration.

The following Fund(s) elected to defer to the fiscal year beginning October 1, 2020, post-October capital losses:

	Po	st-October	Post-Octo	ber
		Loss	Currency	Loss
Diversified Value Fund	\$	5,161,466	\$	

The following Fund(s) elected to defer to the fiscal year beginning October 1, 2020, late year ordinary losses:

	Amount
Blue Chip Growth Fund	\$ 2,086,493
Mid Cap Growth Fund	613,903
Small Cap Growth Equity Fund	840,956

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.

## 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 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, 2019, was as follows:

	Ordinary Income		Long Term Capital Gain
Total Return Bond Fund	\$ 24,005,252	\$	
Strategic Bond Fund	16,531,126		_
Diversified Value Fund	8,107,115		51,132,228
Fundamental Value Fund	38,539,562		92,443,331
S&P 500 Index Fund	53,817,372		416,450,380
Equity Opportunities Fund	21,454,090		38,166,084
Fundamental Growth Fund	728,938		25,716,971
Blue Chip Growth Fund	6,807,061		166,446,913
Growth Opportunities Fund	_		146,448,375
Mid-Cap Value Fund	4,989,486		7,239,678
Small Cap Value Equity Fund	1,437,014		29,878,899
Small Company Value Fund	7,448,487		21,866,406
S&P Mid Cap Index Fund	8,683,329		21,068,338
Russell 2000 Small Cap Index Fund	5,201,838		15,945,702
Mid Cap Growth Fund	72,958,205		597,430,565
Small Cap Growth Equity Fund	13,279,054		82,148,016
MSCI EAFE International Index Fund	5,501,001		4,062,095
Overseas Fund	13,288,318		46,064,137
MM Select T. Rowe Price International Equity Fund	14,075,026		

## Notes to Financial Statements (Continued)

The following Fund(s) have elected to pass through the foreign tax credit for the year ended September 30, 2020:

	Amount
MSCI EAFE International Index Fund	\$ 371,186
Overseas Fund	930,996
MM Select T. Rowe Price International Equity Fund	2,365,700

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, 2020, temporary book and tax accounting differences were primarily attributable to the deferral of wash sale losses, deferred Trustee compensation, and other temporary basis adjustments.

At September 30, 2020, 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 Return Bond Fund	\$ 47,511,798	\$ —	\$ (167,209)	\$ 26,311,591
Strategic Bond Fund	16,736,567	18,264,739	(51,195)	29,612,382
Diversified Value Fund	5,910,761	_	(5,315,981)	(7,421,544)
Fundamental Value Fund	4,855,098	(14,627,788)	(204,202)	4,452,492
S&P 500 Index Fund	46,325,082	376,052,259	(473,523)	1,325,071,284
Equity Opportunities Fund	6,802,341	35,630,351	(125,864)	68,472,440
Fundamental Growth Fund	13,916,479	17,566,808	(17,205)	7,214,736
Blue Chip Growth Fund	_	165,652,195	(2,326,284)	1,853,228,496
Growth Opportunities Fund	936,526	86,567,640	(109,210)	194,401,127
Mid-Cap Value Fund	547,712	(2,257,624)	(21,279)	(1,956,766)
Small Cap Value Equity Fund	_	2,596,959	(22,597)	(10,753,175)
Small Company Value Fund	992,043	(7,626,201)	(72,416)	(21,379,213)
S&P Mid Cap Index Fund	4,741,927	18,867,141	(37,485)	6,449,384
Russell 2000 Small Cap Index Fund	2,938,497	8,988,726	(27,278)	(6,538,932)
Mid Cap Growth Fund	13	515,407,313	(1,106,723)	2,050,551,703
Small Cap Growth Equity Fund	_	37,836,663	(955,780)	107,254,043
MSCI EAFE International Index Fund	3,725,653	2,092,110	(31,455)	365,869
Overseas Fund	5,243,333	9,860,015	(112,232)	(18,326,699)
MM Select T. Rowe Price International Equity Fund	18,368,308	(38,986,197)	(29,267)	(16,240,014)

Notes to Financial Statements (Continued)

During the year ended September 30, 2020, 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	\$ 	\$ (3,722,694)	\$ 3,722,694
Strategic Bond Fund	1	1,314,203	(1,314,204)
Diversified Value Fund	(27,156)	70,075	(42,919)
Fundamental Value Fund	_	3,021,145	(3,021,145)
S&P 500 Index Fund	_	(7,498,087)	7,498,087
Equity Opportunities Fund	_	645,026	(645,026)
Fundamental Growth Fund	_	(487,991)	487,991
Blue Chip Growth Fund	_	(9,469,165)	9,469,165
Growth Opportunities Fund	_	(3,658,999)	3,658,999
Mid-Cap Value Fund	_	85,294	(85,294)
Small Cap Value Equity Fund	_	86,646	(86,646)
Small Company Value Fund	1	(6,347)	6,346
S&P Mid Cap Index Fund	_	167	(167)
Russell 2000 Small Cap Index Fund	(2)	96,425	(96,423)
Mid Cap Growth Fund		31,106	(31,106)
Small Cap Growth Equity Fund	_	(6,001,725)	6,001,725
MSCI EAFE International Index Fund	_	(419,885)	419,885
Overseas Fund	11,374	(78,449)	67,075
MM Select T. Rowe Price International Equity Fund		145,531	(145,531)

The Funds did not have any unrecognized tax benefits at September 30, 2020, 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, 2020, 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, or the returns filed to date for Funds in existence less than three 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 March 2017, FASB issued Accounting Standards Update 2017-08, Receivables — Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities ("ASU 2017-08"). For entities that hold callable debt securities at a premium, ASU 2017-08 requires that the premium be amortized to the earliest call date. ASU 2017-08 is effective for the fiscal year ending September 30, 2020. Management has implemented the applicable changes, and they did not have a material impact on the Funds' financial statements. In October 2020, 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

### Notes to Financial Statements (Continued)

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. Early adoption of ASU 2020-08 is not permitted. Management is currently evaluating the impact, if any, of applying ASU 2020-08.

In March 2020, FASB issued Accounting Standards Update 2020-04 — Reference Rate Reform (Topic 848) — Facilitation of the Effects of Reference Rate Reform on Financial Reporting ("ASU 2020-04"). ASU 2020-04 provides 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 as of the end of 2021. ASU 2020-04 is effective for certain reference rate-related contract modifications that occur during the period March 12, 2020 through December 31, 2022. Management is currently evaluating the impact, if any, of applying ASU 2020-04.

#### 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 New York for consolidated pretrial proceedings. The action is now being prosecuted by the litigation trustee ("Trustee") for the Tribune Litigation Trust.

The potential amounts sought to be recovered from the Diversified Value Fund and S&P 500 Index Fund, are approximately \$1,621,800 and \$1,186,430, respectively, plus interest and the Official Committee's court costs.

In addition, on June 2, 2011, the Diversified Value Fund and S&P 500 Index Fund, were named as defendants in a closely related, parallel adversary proceeding brought in connection with the Tribune Company's LBO by Deutsche Bank Trust Company Americas, in its capacity as successor indenture trustee for a certain series of Senior Notes, Law Debenture Trust Company of New York, in its capacity as successor indenture trustee for a certain series of Senior Notes, and Wilmington Trust Company, in its capacity as successor indenture trustee for the PHONES Notes (together, the "Plaintiffs"), in the United States District Court for the District of Massachusetts. The Plaintiffs also seek to recover payments of the Proceeds. On December 20, 2011, this action was transferred to the Southern District of New York for consolidated pretrial proceedings.

The Funds cannot predict the outcome of these proceedings. 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 has produced, and will likely continue to produce, substantial market volatility, severe market dislocations and liquidity constraints in many markets, and global business disruption, and it may result in future significant adverse effects, such as exchange trading suspensions and closures, declines in global financial markets, higher default rates, and a substantial economic downturn or recession throughout the world. Such factors may have a significant adverse effect on a Fund's performance and have the potential to impair the ability of a Fund's investment adviser, subadvisers, or other service providers to serve the Fund and could lead to disruptions that negatively impact the Fund.

Notes to Financial Statements (Continued)

### 11. Subsequent Events

In preparation of these financial statements, management has evaluated the events and transactions subsequent to September 30, 2020, 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.

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.

Report of Independent Registered Public Accounting Firm

To the Board of Trustees of MassMutual Select Funds and Shareholders of MassMutual Select Total Return Bond Fund, MassMutual Select Strategic Bond Fund, MassMutual Select Diversified Value Fund, MassMutual Select Fundamental Value Fund, MM S&P 500® Index Fund, MassMutual Select Equity Opportunities Fund, MassMutual Select Fundamental Growth Fund, MassMutual Select Blue Chip Growth Fund, MassMutual Select Growth Opportunities Fund, MassMutual Select Mid-Cap Value Fund, MassMutual Select Small Cap Value Equity Fund, MassMutual Select Small Company Value Fund, MM S&P® Mid Cap Index Fund, MM Russell 2000® Small Cap Index Fund, MassMutual Select Mid Cap Growth Fund, MassMutual Select Small Cap Growth Equity Fund, MM MSCI EAFE® International Index Fund, MassMutual Select Overseas Fund, 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, 2020, 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, 2020 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 two 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, 2020, 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, 2020, 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 two 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, 2020, by correspondence with the custodian and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP

Boston, Massachusetts November 24, 2020

We have served as the auditor of one or more MassMutual investment companies since 1995.

## 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, 100 Bright Meadow Blvd., Enfield, Connecticut 06082-1981, Attention: MassMutual U.S. Product and Marketing.

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.	109	Trustee (since 2003), MML Series Investment Fund (open-end investment company); Trustee (since 2012), MML Series Investment Fund II (open-end investment company); Trustee (since 2012), MassMutual Premier Funds (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); Chairman (2011-2016), Academy of Executive Education, LLC (a Massachusetts LLC).	109	Director (2011-2015), Argo Group International Holdings, Ltd. (underwriter of specialty insurance and reinsurance products); 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); Trustee (since 2003), Chairman (2006-2012), MassMutual Premier Funds (open-end investment company).
Maria D. Furman Year of birth: 1954	Trustee	Since 2012	Retired.	109	Trustee (since 2011), GMO Series Trust (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); Trustee (since 2004), MassMutual Premier Funds (open-end investment company).
R. Alan Hunter, Jr. Year of birth: 1946	Chairperson	Since 2016	Retired.	109	Director (2007-2018), Actuant Corporation (diversified industrial company); Chairperson (since 2016), Trustee (since
	Trustee	Since 2003			2003), MML Series Investment Fund (openend investment company); Chairperson (since 2016), Trustee (since 2012), MML Series Investment Fund II (open-end investment company); Chairperson (since 2016), Trustee (since 2012), MassMutual Premier Funds (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.	109	Director (2015-2018), Juniper Pharmaceuticals Inc. (specialty pharmaceutical company); Director (since 2014), Flexion Therapeutics (specialty pharmaceutical company); Chairperson (2017-2018), Director (since 2014), InVivo Therapeutics (research and clinical-stage biomaterials and biotechnology company); Trustee (since 2012), MML Series Investment Fund (open-end investment company); Trustee (since 2005), MML Series Investment Fund II (open-end investment company); Trustee (since 2004), MassMutual Premier Funds (open-end investment company).
Susan B. Sweeney Year of birth: 1952	Trustee	Since 2009	Retired.	111^	Trustee (since 2012), Barings Corporate Investors (closed-end investment company); Trustee (since 2012), Barings Participation Investors (closed-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 2012), MassMutual Premier Funds (open-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
Teresa A. Hassara^^ Year of birth: 1962	Trustee	Since 2017	Director (since 2017), MML Advisers; Head of Workplace Solutions (since 2017), MassMutual; President of Institutional Retirement (2009-2016), TIAA-CREF.	109	Trustee (since 2017), MML Series Investment Fund (open-end investment company); Trustee (since 2017), MML Series Investment Fund II (open-end investment company); Trustee (since 2017), MassMutual Premier Funds (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
Robert E. Joyal^^^ Year of birth: 1945	Trustee	Since 2003	Retired.	111^	Director (since 2018), Jefferies Financial Group Inc. (holding company); Director (2013-2018), Leucadia National Corporation (holding company); Director (2012-2017), Ormat Technologies, Inc. (provider of alternative energy technology); Director (2006-2014), Jefferies Group LLC (investment bank); Trustee (since 2003), Barings Corporate Investors (closed-end investment company); Trustee (since 2003), Barings Participation Investors (closed-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); Trustee (since 2012), MassMutual Premier Funds (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  Assistant Vice	Since 2017 2015-	Investment Director (since 2014), MML Advisers; Head of Investment Consulting & Strategy (since 2017), Investment Director (2006-2017), MassMutual; Vice President (since 2017), Assistant Vice President (2015-2017), MML Series Investment Fund (open-end investment company); Vice President (since 2017),	109
	President	2017	Assistant Vice President (2015-2017), MML Series Investment Fund II (open-end investment company); Vice President (since 2017), Assistant Vice President (2015-2017), MassMutual Premier Funds (open-end investment company).	
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, and Chief Legal Officer (since 2008), Assistant Secretary (2001-2008), MML Series Investment Fund (open-end investment company); Vice President, Secretary (formerly known	109
	Assistant Secretary	2001- 2008	as "Clerk"), and Chief Legal Officer (since 2008), Assistant Clerk (2005-2008), MML Series Investment Fund II (open-end investment company); Vice President, Secretary (formerly known as "Clerk"), and Chief Legal Officer (since 2008), Assistant Clerk (2004-2008), MassMutual Premier Funds (open-end investment company).	
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), Director (2007-2015), MassMutual; 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	109
	Assistant Treasurer	2007- 2016	2016), Assistant Treasurer (2007-2016), MML Series Investment Fund II (open-end investment company); Chief Financial Officer and Treasurer (since 2016), Assistant Treasurer (2007-2016), MassMutual Premier Funds (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 Officer
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 (2008-2017), MML Series Investment Fund (open-end investment	109
	Assistant Secretary	2008- 2017	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 2017), Assistant Secretary (formerly known as "Assistant Clerk") (2008-2017), MassMutual Premier Funds (open-end investment company).	
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 Investment Management (since 2017), Assistant Vice President (2013-2017), MassMutual; 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); Vice President (since 2016), MassMutual Premier Funds (open-end investment company).	109
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), Vice President, Associate General Counsel, and Chief Compliance Officer (Mutual Funds and Investment Advisory) (2008-2014), MassMutual; 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 2007), MassMutual Premier Funds (open-end investment company).	109
Eric H. Wietsma Year of birth: 1966	President	Since 2008	President (2013-2018, since 2019), Vice President (2018-2019), Director (since 2013), MML Advisers; Head of Workplace Operations (since 2018), Senior Vice President (2010-2018), MassMutual; President (since 2019), Vice President (2006-	109
	Vice President	2006- 2008	2019), MML Series Investment Fund (open-end investment company); President (since 2019), Vice President (2006-2019), MML Series Investment Fund II (open-end investment company); President (since 2008), Vice President (2006-2008), MassMutual Premier Funds (open-end investment company).	

<sup>\*</sup> The address of each Trustee and Principal Officer is the same as that for the Trust; 100 Bright Meadow Blvd., Enfield, Connecticut 06082-1981.

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.
- ^^ Ms. Hassara is an "Interested Person," as that term is defined in the 1940 Act, as an employee of MassMutual.
- Mr. Joyal is an Interested Person through his position as a director of Jefferies Financial Group Inc., which controls Jefferies Group LLC, a broker-dealer that may execute portfolio transactions and/or engage in principal transactions with the Funds, other investment companies advised by MML Advisers or holding themselves out to investors as related companies for purposes of investment or investor services, or any other advisory accounts over which MML Advisers has brokerage placement discretion.
- # 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.

<sup>\*\*</sup> 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, with the exception of Mr. Robert E. Joyal, 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.

## Federal Tax Information (Unaudited)

For corporate shareholders, a portion of the ordinary dividends paid during the Fund(s)' year ended September 30, 2020, qualified for the dividends received deduction, as follows:

	Dividends Received Deductions
Diversified Value Fund	100.00%
Fundamental Value Fund	100.00%
S&P 500 Index Fund	99.93%
Equity Opportunities Fund	100.00%
Fundamental Growth Fund	4.93%
Blue Chip Growth Fund	100.00%
Growth Opportunities Fund	80.67%
Mid-Cap Value Fund	91.87%
Small Cap Value Equity Fund	100.00%
Small Company Value Fund	100.00%
S&P Mid Cap Index Fund	91.91%
Russell 2000 Small Cap Index Fund	60.33%
Mid Cap Growth Fund	100.00%
Small Cap Growth Equity Fund	24.64%
Overseas Fund	0.37%
MM Select T. Rowe Price International Equity Fund	1.31%

For the year ended September 30, 2020, the following Fund(s) earned the following foreign sources of income:

	Amount
MSCI EAFE International Index Fund	\$ 4,493,657
Overseas Fund	4,613,622
MM Select T. Rowe Price International Equity Fund	22,033,812

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, 2020.

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 Securities and Exchange Commission's ("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.

Trustees' Approval of Investment Advisory Contracts

At their meetings in May and June 2020, 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 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 each Fund's expenses and performance and a recommendation as to the action to be taken by the Committee. 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

### Other Information (Unaudited) (Continued)

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. 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, 2019. 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 Cap Value Equity 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 fifty percent of their peer groups, and in most cases in the top forty percent. Of those Funds, all had net advisory fees at or below the medians of their peers, or in the top sixty percent of their peer groups, except the Small Cap Growth Equity Fund, Overseas Fund, Growth Opportunities Fund, Fundamental Growth 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 long-term relative performance records.

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, the Fund's total net expense ratio, at the 57th comparative percentile, was only four basis points above the peer group median. The Committee also considered that the Fund had achieved favorable three-year investment performance.

As to the Russell 2000 Small Cap Index Fund, the Committee considered MML Advisers' statement that, although the Fund's total net expense ratio was at the 67th comparative percentile, the Fund's net advisory fee was at the 60th comparative percentile, only three basis points above the peer group median. The Committee also considered MML Advisers' statement that the Fund's total net expense ratio was within nine basis points of the peer group median and that the Fund's peer group included much larger competitor index funds that had been able to achieve significantly greater economies of scale, as well as the fact that the Fund had experienced favorable three-year investment performance compared to its performance category.

The Committee determined on the basis of these factors that the Funds' advisory fees, and the expenses of the Funds generally, were consistent with the continuation of their advisory agreements.

The Committee considered that the Strategic Bond Fund, Diversified 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, 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 MSCI EAFE International Index Fund and Total Return Bond Fund experienced three-year investment performance outside the top sixty percent of their performance categories, but experienced improved performance for the one-year period to a level above the median of its performance category in the case of the MSCI EAFE International Index Fund and to the 59th comparative percentile in the case of the Total Return Bond Fund.

As to the Fundamental Value Fund, the Committee noted that the Fund had experienced three-year performance in the 84th comparative percentile, which had improved to the 72nd comparative percentile for the one-year period. The Committee considered MML Advisers' statement that one of the Fund's subadvisers was replaced in the past year, and that MML Advisers believes that the replacement will lead to improving performance.

### Other Information (Unaudited) (Continued)

As to the MM Select T. Rowe Price International Equity Fund, the Committee noted that the Fund had achieved one-year performance in the first quartile of its performance category (the Fund had not yet achieved a three-year performance record). The Committee considered that it was too soon to draw any conclusions regarding the Fund on the basis of its one-year performance record.

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 May 2020, the Trustees, including the Independent Trustees, reviewed and approved a proposal to make changes to (i) the existing advisory agreement for the MM Select T. Rowe Price International Equity Fund, and (ii) the existing subadvisory agreement between MML Advisers and T. Rowe Price Associates, Inc. ("T. Rowe Price") for the MM Select T. Rowe Price International Equity Fund, in order to eliminate the fees under each agreement to allow for the implementation of an all-inclusive advisory fee structure for each of the MassMutual Select T. Rowe Price Retirement Funds.

In arriving at their decision, the Trustees discussed the fees payable to T. Rowe Price under the new all-inclusive advisory fee structure for each of the MassMutual Select T. Rowe Price Retirement Funds 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 expense restructuring was not excessive and the expense restructuring was appropriate and in the best interests of the MM Select T. Rowe Price International Equity Fund's and each MassMutual Select T. Rowe Price Retirement Fund's shareholders. In their deliberations, the Trustees were advised by independent counsel.

In addition, the Trustees also approved a new sub-subadvisory agreement between T. Rowe Price and T. Rowe Price Hong Kong Limited for the MM Select T. Rowe Price International Equity Fund (the "New Sub-Subadvisory Agreement"). The Trustees considered, among other things, that the New Sub-Subadvisory Agreement would not result in any changes in the fees payable by the MM Select T. Rowe Price International Equity Fund or MML Advisers and that the services provided would continue to be subject to the supervision of T. Rowe Price. The Trustees concluded that the New Sub-Subadvisory Agreement is in the best interests of the MM Select T. Rowe Price International Equity Fund and its shareholders.

### Other Information (Unaudited) (Continued)

Prior to the votes being taken to approve the amended advisory and subadvisory agreements discussed above and the New Sub-Subadvisory Agreement, the Independent Trustees met separately in executive session to discuss the appropriateness of such contracts. 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 New Sub-Subadvisory Agreement became effective on May 22, 2020. The amended advisory and subadvisory agreements became effective on August 1, 2020.

Also at their meeting in June 2020, the Trustees, including the Independent Trustees, approved new subadvisory agreements with Brandywine Global Investment Management, LLC ("Brandywine Global") for the Diversified Value Fund and with Western Asset Management Company, LLC ("Western Asset") and Western Asset Management Company Limited ("Western Asset Limited") for the Strategic Bond Fund (the "Funds" and the "June Subadvisory Agreements") due to a change in control of Legg Mason, Inc. ("Legg Mason"), the parent company of Brandywine Global, Western Asset, and Western Asset Limited. The acquisition of Legg Mason by Franklin Resources, Inc. ("Franklin") would trigger the automatic assignment of the current subadvisory agreements, necessitating the need for the June Subadvisory Agreements, each of which is substantially identical to the current subadvisory agreements. 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 teams of the Funds, or in the fees or expenses of the Funds. In addition, the Trustees considered the statements of Franklin that the change in control was not expected to have any material impact on Brandywine Global, Western Asset, or Western Asset Limited or the services they provide to the Funds, including the personnel providing services to the Funds.

Prior to the votes being taken to approve the June Subadvisory Agreements discussed above, the Independent Trustees met separately in executive session to discuss the appropriateness of such contracts. 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 Subadvisory Agreements became effective on July 31, 2020.

At their meeting in September 2020, the Trustees, including the Independent Trustees, reviewed and approved a proposal to make changes to the existing subadvisory agreement between MML Advisers and Wellington Management Company LLP ("Wellington Management") for the Small Cap Growth Equity Fund in order to lower the subadvisory fee paid on behalf of the Fund. In arriving at their decision, the Trustees discussed the fees payable to Wellington Management 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, 2020.

Also at their meeting in September 2020, the Trustees, including the Independent Trustees, approved new subadvisory agreements with Barrow, Hanley, Mewhinney & Strauss, LLC ("Barrow Hanley") for the Fundamental Value Fund and Small Cap Value Equity Fund (the "Funds" and the "September Subadvisory Agreements") due to an expected change in control, whereby Perpetual U.S. Holding Company, Inc. ("Perpetual") will acquire BrightSphere Investment Group Inc.'s ("BrightSphere") equity

## Other Information (Unaudited) (Continued)

interest in Barrow Hanley. The acquisition by Perpetual of BrightSphere's equity interest in Barrow Hanley will trigger the automatic assignment of the current subadvisory agreements, necessitating the need for the September Subadvisory Agreements, each of which is substantially identical to the current subadvisory agreements. 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 teams of the Funds, or in the fees or expenses of the Funds. In addition, the Trustees considered the statements of Perpetual and Barrow Hanley that the change in control was not expected to have any material impact on Barrow Hanley or the services it provides to the Funds, including the personnel providing services to the Funds.

Prior to the votes being taken to approve the September Subadvisory Agreements discussed above, the Independent Trustees met separately in executive session to discuss the appropriateness of such contracts. 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 September Subadvisory Agreements will become effective upon the close of the transaction.

Other Information (Unaudited) (Continued)

### Fund Expenses September 30, 2020

### Expense Examples:

The following information is in regards to expenses for the six months ended September 30, 2020:

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, 2020.

### 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	0.36%	\$1,053.70	\$1.85	\$1,023.20	\$1.82
Class R5	1,000	0.46%	1,053.70	2.36	1,022.70	2.33
Service Class	1,000	0.56%	1,052.50	2.87	1,022.20	2.83
Administrative Class	1,000	0.66%	1,052.80	3.39	1,021.70	3.34
Class A	1,000	0.91%	1,051.00	4.67	1,020.50	4.60
Class R4	1,000	0.81%	1,051.50	4.15	1,021.00	4.09
Class R3	1,000	1.06%	1,049.90	5.43	1,019.70	5.35

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	0.47%	\$1,091.80	\$2.46	\$1,022.70	\$2.38
Class R5	1,000	0.58%	1,091.70	3.03	1,022.10	2.93
Service Class	1,000	0.67%	1,091.70	3.50	1,021.70	3.39
Administrative Class	1,000	0.77%	1,090.10	4.02	1,021.20	3.89
Class A	1,000	1.03%	1,089.30	5.38	1,019.90	5.20
Class R4	1,000	0.92%	1,089.70	4.81	1,020.40	4.65
Class R3	1,000	1.17%	1,088.50	6.11	1,019.20	5.91
Diversified Value Fund						
Class I	1,000	0.58%	1,176.40	3.16	1,022.10	2.93
Class R5	1,000	0.68%	1,176.00	3.70	1,021.60	3.44
Service Class	1,000	0.78%	1,174.60	4.24	1,021.10	3.94
Administrative Class	1,000	0.88%	1,174.50	4.78	1,020.60	4.45
Class A	1,000	1.13%	1,172.60	6.14	1,019.40	5.70
Class R4	1,000	1.03%	1,172.90	5.60	1,019.90	5.20
Class R3	1,000	1.28%	1,171.50	6.95	1,018.60	6.46
Fundamental Value Fund	,		,		,	
Class I	1,000	0.65%	1,218.80	3.61	1,021.80	3.29
Class R5	1,000	0.75%	1,217.00	4.16	1,021.30	3.79
Service Class	1,000	0.86%	1,216.50	4.77	1,020.70	4.34
Administrative Class	1,000	0.95%	1,216.00	5.26	1,020.30	4.80
Class A	1,000	1.20%	1,215.00	6.65	1,019.00	6.06
Class R4	1,000	1.11%	1,215.90	6.15	1,019.50	5.60
Class R3	1,000	1.35%	1,213.70	7.47	1,018.30	6.81
S&P 500 Index Fund	1,000	1.5576	1,2101,0	,,	1,010.00	0.01
Class I	1,000	0.13%	1,310.90	0.75	1,024.40	0.66
Class R5	1,000	0.23%	1,310.30	1.33	1,023.90	1.16
Service Class	1,000	0.38%	1,309.70	2.19	1,023.10	1.92
Administrative Class	1,000	0.48%	1,308.80	2.77	1,022.60	2.43
Class A	1,000	0.73%	1,306.80	4.21	1,021.40	3.69
Class R4	1,000	0.63%	1,307.50	3.63	1,021.90	3.18
Class R3	1,000	0.88%	1,306.40	5.07	1,020.60	4.45
Equity Opportunities Fund	1,000	0.0070	1,500.40	3.07	1,020.00	1.15
Class I	1,000	0.74%	1,210.10	4.09	1,021.30	3.74
Class R5	1,000	0.84%	1,209.80	4.64	1,020.80	4.24
Service Class	1,000	0.94%	1,209.20	5.19	1,020.30	4.75
Administrative Class	1,000	1.04%	1,208.30	5.74	1,019.80	5.25
Class A	1,000	1.29%	1,206.80	7.12	1,018.60	6.51
Class R4	1,000	1.19%	1,207.90	6.57	1,019.10	6.01
Class R3	1,000	1.44%	1,206.10	7.94	1,017.80	7.26
Fundamental Growth Fund	1,000	1.44/0	1,200.10	7.94	1,017.00	7.20
Class I	1,000	1.21%	1,393.00	7.24	1,019.00	6.11
Class I Class R5	1,000	1.21%	1,393.00	6.40	1,019.00	5.40
Service Class	1,000	1.07%	1,392.70	7.06	1,019.70	5.40 5.96
Administrative Class	1,000	1.18%	1,393.30	7.06	1,019.10	6.31
	*					
Class A	1,000	1.49%	1,391.60	8.91 8.25	1,017.60	7.52
Class R4	1,000	1.38%	1,391.80	8.25	1,018.10	6.96
Class R3	1,000	1.65%	1,390.10	9.86	1,016.80	8.32

# 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	0.64%	\$1,404.80	\$3.85	\$1,021.80	\$3.23
Class R5	1,000	0.74%	1,404.40	4.45	1,021.30	3.74
Service Class	1,000	0.84%	1,403.20	5.05	1,020.80	4.24
Administrative Class	1,000	0.94%	1,403.40	5.65	1,020.30	4.75
Class A	1,000	1.19%	1,401.20	7.14	1,019.10	6.01
Class R4	1,000	1.09%	1,401.80	6.54	1,019.60	5.50
Class R3	1,000	1.34%	1,400.50	8.04	1,018.30	6.76
Growth Opportunities Fund						
Class I	1,000	0.75%	1,514.30	4.71	1,021.30	3.79
Class R5	1,000	0.85%	1,512.40	5.34	1,020.80	4.29
Service Class	1,000	0.94%	1,512.40	5.90	1,020.30	4.75
Administrative Class	1,000	1.05%	1,512.50	6.60	1,019.80	5.30
Class A	1,000	1.30%	1,510.80	8.16	1,018.50	6.56
Class R4	1,000	1.17%	1,510.60	7.34	1,019.20	5.91
Class R3	1,000	1.45%	1,509.40	9.10	1,017.80	7.31
Mid-Cap Value Fund						
Class I	1,000	0.80%	1,197.00	4.39	1,021.00	4.04
Class R5	1,000	0.90%	1,197.00	4.94	1,020.50	4.55
Service Class	1,000	1.00%	1,196.20	5.49	1,020.00	5.05
Administrative Class	1,000	1.10%	1,195.40	6.04	1,019.50	5.55
Class A	1,000	1.35%	1,193.90	7.40	1,018.30	6.81
Class R4	1,000	1.25%	1,195.30	6.86	1,018.80	6.31
Class R3	1,000	1.50%	1,193.50	8.23	1,017.50	7.57
Small Cap Value Equity Fund						
Class I	1,000	1.09%	1,211.10	6.03	1,019.60	5.50
Class R5	1,000	1.19%	1,210.50	6.58	1,019.10	6.01
Service Class	1,000	1.30%	1,210.70	7.18	1,018.50	6.56
Administrative Class	1,000	1.38%	1,210.00	7.62	1,018.10	6.96
Class A	1,000	1.64%	1,209.00	9.06	1,016.80	8.27
Class R4	1,000	1.54%	1,209.10	8.51	1,017.30	7.77
Class R3	1,000	1.78%	1,206.60	9.82	1,016.10	8.97
Small Company Value Fund						
Class I	1,000	1.02%	1,239.10	5.71	1,019.90	5.15
Class R5	1,000	1.12%	1,238.70	6.27	1,019.40	5.65
Service Class	1,000	1.23%	1,238.70	6.88	1,018.90	6.21
Administrative Class	1,000	1.32%	1,237.50	7.38	1,018.40	6.66
Class A	1,000	1.57%	1,235.60	8.77	1,017.20	7.92
Class R4	1,000	1.46%	1,237.20	8.17	1,017.70	7.36
Class R3	1,000	1.72%	1,236.10	9.62	1,016.40	8.67
S&P Mid Cap Index Fund						
Class I	1,000	0.20%	1,298.50	1.15	1,024.00	1.01
Class R5	1,000	0.30%	1,298.40	1.72	1,023.50	1.52
Service Class	1,000	0.45%	1,297.90	2.59	1,022.80	2.28
Administrative Class	1,000	0.55%	1,296.90	3.16	1,022.30	2.78
Class A	1,000	0.80%	1,295.10	4.59	1,021.00	4.04
Class R4	1,000	0.70%	1,294.60	4.02	1,021.50	3.54
Class R3	1,000	0.95%	1,294.10	5.45	1,020.30	4.80

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	-		<u>*</u>		•	
Class I	\$1,000	0.23%	\$1,315.20	\$1.33	\$1,023.90	\$1.16
Class R5	1,000	0.33%	1,315.60	1.91	1,023.40	1.67
Service Class	1,000	0.48%	1,313.10	2.78	1,022.60	2.43
Administrative Class	1,000	0.58%	1,312.80	3.35	1,022.10	2.93
Class A	1,000	0.83%	1,311.10	4.80	1,020.90	4.19
Class R4	1,000	0.73%	1,312.60	4.22	1,021.40	3.69
Class R3	1,000	0.98%	1,310.50	5.66	1,020.10	4.95
Mid Cap Growth Fund						
Class I	1,000	0.71%	1,398.60	4.26	1,021.50	3.59
Class R5	1,000	0.81%	1,397.70	4.86	1,021.00	4.09
Service Class	1,000	0.91%	1,397.50	5.45	1,020.50	4.60
Administrative Class	1,000	1.01%	1,396.70	6.05	1,020.00	5.10
Class A	1,000	1.26%	1,395.10	7.54	1,018.70	6.36
Class R4	1,000	1.16%	1,395.40	6.95	1,019.20	5.86
Class R3	1,000	1.41%	1,394.50	8.44	1,018.00	7.11
Small Cap Growth Equity Fund	,		,		,,	
Class I	1,000	0.87%	1,445.40	5.32	1,020.70	4.40
Class R5	1,000	0.97%	1,444.00	5.93	1,020.20	4.90
Service Class	1,000	1.07%	1,444.10	6.54	1,019.70	5.40
Administrative Class	1,000	1.17%	1,443.40	7.15	1,019.20	5.91
Class A	1,000	1.42%	1,442.10	8.67	1,017.90	7.16
Class R4	1,000	1.32%	1,441.50	8.06	1,018.40	6.66
Class R3	1,000	1.57%	1,440.40	9.58	1,017.20	7.92
MSCI EAFE International Index Fund	,		Ź		,	
Class I	1,000	0.26%	1,202.00	1.43	1,023.70	1.32
Class R5	1,000	0.36%	1,202.20	1.98	1,023.20	1.82
Service Class	1,000	0.51%	1,200.40	2.81	1,022.50	2.58
Administrative Class	1,000	0.62%	1,200.20	3.41	1,021.90	3.13
Class A	1,000	0.87%	1,198.60	4.78	1,020.70	4.40
Class R4	1,000	0.76%	1,199.60	4.18	1,021.20	3.84
Class R3	1,000	1.01%	1,198.20	5.55	1,020.00	5.10
Overseas Fund	,		Ź		Ź	
Class I	1,000	0.79%	1,234.90	4.41	1,021.10	3.99
Class R5	1,000	0.90%	1,233.80	5.03	1,020.50	4.55
Service Class	1,000	1.00%	1,233.70	5.58	1,020.00	5.05
Administrative Class	1,000	1.10%	1,234.70	6.15	1,019.50	5.55
Class A	1,000	1.33%	1,230.40	7.42	1,018.40	6.71
Class R4	1,000	1.25%	1,232.70	6.98	1,018.80	6.31
Class R3	1,000	1.50%	1,231.70	8.37	1,017.50	7.57
MM Select T. Rowe Price International Equity Fund	,		,		,	
Class I	1,000	0.43%	1,235.10	2.40	1,022.90	2.17

<sup>\*</sup> Expenses are calculated using the annualized expense ratio for the six months ended September 30, 2020, multiplied by the average account value over the period, multiplied by 183 days in the period, divided by 366 days in the year, unless stated otherwise.

## **Underwriter:**

MML Distributors, LLC 100 Bright Meadow Blvd. Enfield, Connecticut 06082-1981



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