

Supplement to Summary Prospectus dated 03/22/2021

MASSMUTUAL SELECT FUNDS
MassMutual Select Fundamental Growth Fund
Supplement dated March 22, 2021 to the
Summary Prospectus dated February 1, 2021

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

Effective May 1, 2021, MassMutual Select Fundamental Growth Fund will change its name to MassMutual Fundamental Growth Fund.

PLEASE RETAIN THIS SUPPLEMENT FOR FUTURE REFERENCE

FG-21-01



Summary Prospectus February 1, 2021

MassMutual Select Funds

MassMutual Select Fundamental Growth Fund

Ticker: Class I–MOTZX, Class R5–MOTCX, Service Class–MOTYX, Administrative Class–MOTLX, Class A–MOTAX, Class R4–MFGFX, Class R3–MOTNX

Before you invest, you may want to review the Fund's prospectus, which contains more information about the Fund and its risks. You can find the Fund's prospectus and other information about the Fund online at www.massmutual.com/funds. You can also get this information at no cost by calling 1-888-309-3539 or by sending an email request to fundinfo@massmutual.com.

INVESTMENT OBJECTIVE

The Fund seeks long-term growth of capital.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy, hold, and sell shares of the Fund. You may pay brokerage commissions and other fees to financial intermediaries which are not reflected in the tables and examples below. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 149 of the Fund's Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

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

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

	Class I	Class R5	Service Class	Administrative Class	Class A	Class R4	Class R3
Management Fees	.65%	.65%	.65%	.65%	.65%	.65%	.65%
Distribution and Service (Rule 12b-1) Fees	None	None	None	None	.25%	.25%	.50%
Other Expenses	.24%	.34%	.44%	.54%	.54%	.44%	.44%
Total Annual Fund Operating Expenses	.89%	.99%	1.09%	1.19%	1.44%	1.34%	1.59%

Example

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

	1 Year	3 Years	5 Years	10 Years
Class I	\$ 91	\$284	\$ 493	\$1,096
Class R5	\$101	\$315	\$ 547	\$1,213
Service Class	\$111	\$347	\$ 601	\$1,329
Administrative Class	\$121	\$378	\$ 654	\$1,443
Class A	\$689	\$980	\$1,294	\$2,179
Class R4	\$136	\$425	\$ 734	\$1,613
Class R3	\$162	\$502	\$ 866	\$1,889

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or

“turns over” its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund’s performance. During the most recent fiscal year, the Fund’s portfolio turnover rate was 164% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

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

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

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

investment candidates are identified; or market capitalization exceeds guidelines.

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

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

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

Principal Risks

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

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

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

economic and trade sanctions or embargoes, security suspensions, entering or exiting trade or other intergovernmental agreements, or the expropriation or nationalization of assets in a particular country, can cause dramatic declines in certain or all securities with exposure to that country and other countries. In the event of nationalization, expropriation, or other confiscation, the Fund could lose its entire foreign investment in a particular country. There may be quotas or other limits on the ability of the Fund (or clients of the Fund's investment adviser or subadviser) to invest or maintain investments in securities of issuers in certain countries. Enforcing legal rights can be more difficult, costly, and limited in certain foreign countries, and can be particularly difficult against foreign governments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by changes in currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, less stringent investor protection and disclosure standards, 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, and are more susceptible to environmental problems. Many emerging market countries are highly reliant on international trade and exports, including the export of commodities. Their economies may be significantly impacted by fluctuations in commodity prices and the global demand for certain commodities. In addition, many emerging market countries with less established health care systems have experienced outbreaks of pandemics or contagious diseases from time to time. Frontier markets, a subset of emerging markets, generally

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

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

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

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

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

Convertible Securities Risk Convertible securities are subject to the risks of both debt instruments and equity securities. The price of a convertible security may change in response to changes in price of the underlying equity security, the credit quality

of the issuer, and interest rates. In general, the values of convertible securities tend to decline as interest rates rise and to rise when interest rates fall. A convertible security generally has less potential for gain or loss than the underlying equity security.

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

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

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

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

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

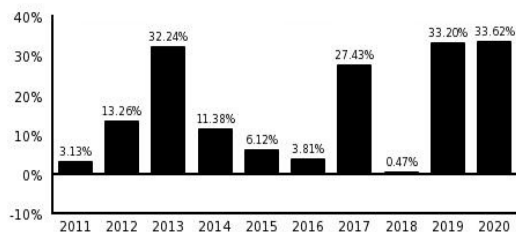
Sector Risk The Fund may allocate more of its assets to particular industries or to particular economic, market, or industry sectors than to others. This could increase the volatility of the Fund's portfolio, and the Fund's performance may be more susceptible to developments affecting issuers in those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

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

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund's performance from year to year for Class R5 shares. The table shows how the Fund's average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Performance for Class I and Class R4 shares of the Fund for periods prior to their inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class R4 shares to reflect Class R4 expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. The Fund's name, investment objective, and investment strategy changed on February 22, 2012 to permit the Fund to become "actively" managed. The Fund was previously "passively" managed. The Fund's investment strategy further changed on March 2, 2020 to focus more on mid-capitalization companies whereas it had previously focused on large-capitalization companies. The performance results shown below would not necessarily have been achieved had the Fund's current investment strategy been in effect for the entire period for which performance results are presented. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance Class R5 Shares



Highest Quarter: 2Q '20, 29.78% Lowest Quarter: 1Q '20, -18.78%

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

Average Annual Total Returns (for the periods ended December 31, 2020)

		One Year	Five Years	Ten Years
Class R5	Return Before Taxes	33.62%	18.79%	15.75%
	Return After Taxes on Distributions	15.86%	12.30%	11.78%
	Return After Taxes on Distributions and Sales of Fund Shares	24.79%	13.36%	12.01%
Class I	Return Before Taxes	33.63%	18.86%	15.82%
Service Class	Return Before Taxes	33.43%	18.66%	15.62%
Administrative Class	Return Before Taxes	33.38%	18.58%	15.51%
Class A	Return Before Taxes	25.78%	16.90%	14.56%
Class R4	Return Before Taxes	33.36%	18.39%	15.36%
Class R3	Return Before Taxes	32.70%	18.06%	14.97%
Russell Midcap Growth Index (reflects no deduction for fees, expenses, or taxes) ⁽¹⁾				
		35.59%	18.66%	15.04%
Russell 1000 [®] Growth Index (reflects no deduction for fees, expenses, or taxes)				
		38.49%	21.00%	17.21%

(1) Going forward, the Fund's performance benchmark index

will be the Russell Midcap Growth Index rather than the Russell 1000 Growth Index because the Russell Midcap Growth Index more closely represents the Fund's investment strategy.

MANAGEMENT

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

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

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

Portfolio Manager(s):

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

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

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

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

PURCHASE AND SALE OF FUND SHARES

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

TAX INFORMATION

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

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

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

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

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