

MassMutual Premier Funds

MassMutual Premier U.S. Government Money Market Fund

Ticker: Class R5–MKSXX

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

This Fund seeks current income consistent with preservation of capital and liquidity.

	1 Year	3 Years	5 Years	10 Years
Class R5	\$52	\$164	\$285	\$640

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund.

Shareholder Fees (fees paid directly from your investment)

	Class R5
Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price)	None
Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds)	None

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

	Class R5
Management Fees	.35%
Distribution and Service (Rule 12b-1) Fees	None
Other Expenses	.16%
Total Annual Fund Operating Expenses	.51%

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 Class R5 shares of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. The example also assumes that your investment earns a 5% return each year and that the Fund’s operating expenses are exactly as described in the preceding table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

The Fund normally invests at least 99.5% of its total assets in cash, U.S. Government securities, and/or repurchase agreements fully collateralized by cash or U.S. Government securities.

In managing the Fund, the Fund’s subadviser, *Barings LLC* (“Barings”), intends to comply with Rule 2a-7 under the Investment Company Act of 1940, as amended (the “1940 Act”), which sets forth the requirements for money market funds regarding credit quality, diversification, liquidity, and maturity. The Fund seeks to maintain, but does not guarantee, a stable \$1.00 share price.

Under normal circumstances, the Fund invests at least 80% of its net assets in U.S. Government securities and repurchase agreements that are fully collateralized by U.S. Government securities. U.S. Government securities are high-quality securities issued or guaranteed by the U.S. Treasury or by an agency or instrumentality of the U.S. Government. U.S. Government securities may be backed by the full faith and credit of the U.S. Treasury, the right to borrow from the U.S. Treasury, or the agency or instrumentality issuing or guaranteeing the security. Certain issuers of U.S. Government securities, including Fannie Mae, Freddie Mac, and the Federal Home Loan Banks, are sponsored or chartered by Congress but their securities are neither issued nor guaranteed by the U.S. Treasury.

Principal Risks

You could lose money by investing in the Fund. Although the Fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the Fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The Fund's sponsor has no legal obligation to provide financial support to the Fund, and you should not expect that the sponsor will provide financial support to the Fund at any time.

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

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

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

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no

assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

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

Money Market Instruments Risk The value of a money market instrument typically will decline during periods of rising interest rates, and can also decline in response to changes in the financial condition of the issuer, borrower, counterparty, or underlying collateral assets, or changes in market, economic, industry, political, and regulatory conditions affecting a particular type of security or issuer or fixed income securities generally. Certain events, such as changes in the financial condition of the issuer or borrower, specific market or economic developments, regulatory or government actions, natural disasters, terrorist attacks, war, and other geopolitical events can have a dramatic adverse effect on the debt market and the overall liquidity of the market for money market instruments.

Prepayment Risk Prepayment risk is the risk that principal of a debt obligation will be repaid at a faster rate than anticipated. In such a case, a Fund may lose the benefit of a favorable interest rate for the remainder of the term of the security in question, and may only be able to reinvest the amount of the prepayment at a less favorable rate.

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

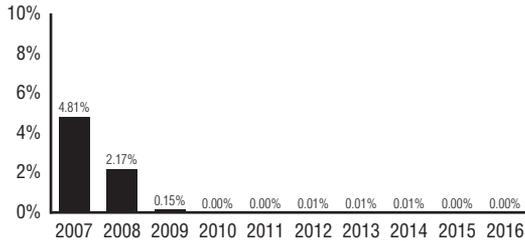
U.S. Government Securities Risk Obligations of certain U.S. Government agencies and instrumentalities are not backed by the full faith and credit of the U.S. Government, and there can be no assurance that the U.S. Government would provide financial support to such agencies and instrumentalities.

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

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund’s performance from year to year for Class R5 shares. The table shows how the Fund’s average annual returns for 1, 5, and 10 years compare with those of a broad measure of market performance. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. The Fund’s name, investment objective, and investment strategy changed on May 1, 2016 when the Fund changed from a money market fund to a government money market fund. Performance results shown were achieved when the Fund could invest in types of securities that it is no longer able to hold. Future performance of the Fund may be lower as a result. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance
Class R5 Shares



Highest Quarter: 3Q '07, 1.22% Lowest 3Q '09 thru 3Q '12; 1Q '13 thru 3Q '14; 1Q '15 thru 4Q '16, 0.00%

Average Annual Total Returns
(for the periods ended December 31, 2016)

Return Before Taxes	One Year	Five Years	Ten Years
Class R5	0.00%	0.01%	0.71%
Citigroup 3-Month Treasury Bill Index (reflects no deduction for fees, expenses, or taxes)	0.27%	0.09%	0.73%

MANAGEMENT

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

Subadviser: Barings LLC (“Barings”)

Portfolio Managers:

Scott Riecke is a Director and member of the Global Fixed Income Team at Barings. He has managed the Fund since July 2009.

Scott Simler is a Director and member of the Global Fixed Income Team at Barings. He has managed the Fund since July 2009.

PURCHASE AND SALE OF FUND SHARES

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

TAX INFORMATION

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

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

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