

Quarterly Review As of 12/31/2018 MassMutual Select Mid-Cap Value Fund

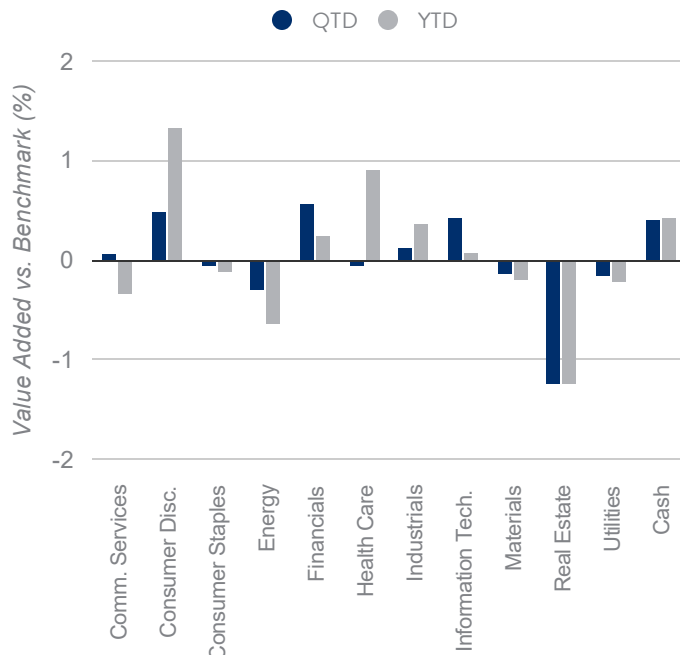
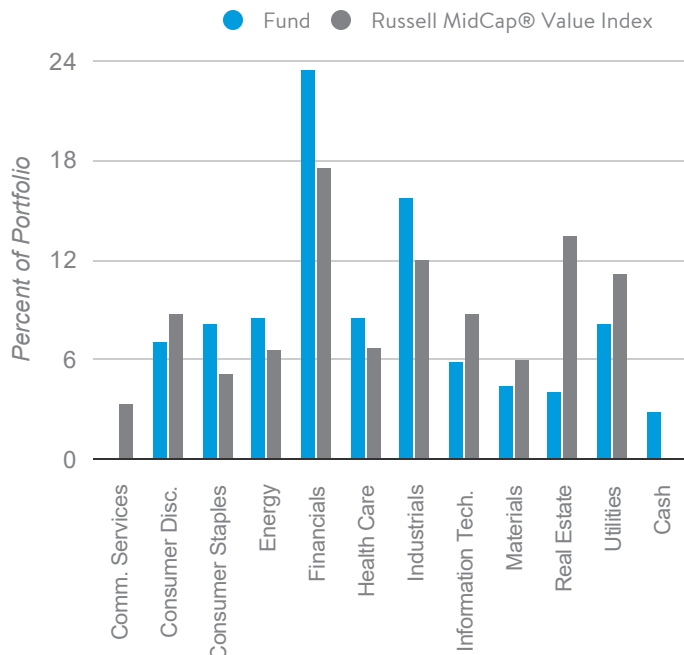
American Century Investment Management, Inc.

R5 SHARE CLASS • TICKER: MLUSX

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

Sector Weightings: Defines what % of each sector this fund holds compared to its benchmark listed here.

Sector Attribution: Describes how sector weighting decisions affected returns by sector.



Sector Attribution Details:

Sector	Fund Weight	QTD	YTD
Comm. Services	0.00	0.07	-0.35
Consumer Disc.	7.16	0.50	1.33
Consumer Staples	8.26	-0.06	-0.13
Energy	8.60	-0.32	-0.66
Financials	23.50	0.57	0.26
Health Care	8.56	-0.06	0.91
Industrials	15.80	0.14	0.37
Information Tech.	5.94	0.44	0.08
Materials	4.43	-0.16	-0.22
Real Estate	4.06	-1.25	-1.26
Utilities	8.16	-0.18	-0.23
Cash	2.85	0.41	0.43
Total	97.32	0.10	0.53

Quarterly Portfolio Commentary:



Laurie Goodreau, CFA Investment Director
Investment Experience: **28 Years**

HIGHLIGHTS

- U.S. large capitalization stocks fared better than did their mid-cap and small-cap peers. However, all three asset classes posted negative results for the quarter.
- In the mid-cap value asset class, the utilities, real estate, and consumer staples sectors posted negative absolute results, but held up better than the other eight sectors. The energy, consumer discretionary, and industrials sectors performed worst for the quarter.
- The Fund outperformed its benchmark, though gains from stock selection decisions were offset by negative sector allocation.

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MassMutual Select Mid-Cap Value Fund

Quarterly Portfolio Commentary

The Russell Midcap® Value Index outperformed the Russell Midcap® Growth Index, as value stocks outperformed growth stocks breaking seven consecutive quarters in which growth stocks outperformed. All of the major economic sectors delivered negative results. Fear and uncertainty in the global markets drove investors to the more defensive sectors. The utilities, real estate, and consumer staples sectors outperformed the index and other sectors. These sectors include companies with defensive features which pay dividends as part of their stock return. The more cyclical sectors reversed course during the quarter due to negative sentiment among investors. The energy, consumer discretionary, and industrials sectors performed worst in the index.

Stock selection benefitted Fund performance for the quarter, particularly in the financials, consumer discretionary, and information technology sectors. The outperformance resulted more from avoidance than investment in stocks. In the financial sector, despite an overweight to banks, Fund management avoided many of the conglomerate banks that weakened on the decline in interest rates. In the consumer discretionary sector, the Fund held fewer names in household durables and specialty retail. In the information technology sector, avoiding hardware and semiconductors stocks proved beneficial. Overall, stock selection was positive for the year. However, absolute performance struggled as the change in sentiment late in the year reversed favorable contributions from most of the winners.

Sector allocation decisions hurt Fund performance. An underweight exposure (relative to the benchmark) to the top-performing real estate and utilities sectors along with an overweight exposure (relative to the benchmark) to the worst performing energy sector dragged on returns. Overweight sector allocations to the underperforming financials and industrials sectors also detracted from Fund performance as did an overweight to the healthcare sector. This sector has defensive characteristics in many of its industries. Fund managers focus on these defensive businesses, but they fared poorly along with the whole sector. For most of the year, defensive sectors struggled and, in most cases, detracted from performance.

Fund managers decreased the number of Fund holdings seeking to take profits and redeploy assets in better opportunities. They sold positions in Life Point Health, Bemis, Norfolk Southern, US Foods, and General Mills. They redeployed the proceeds for new positions in Carnival, Equitrans Midstream, First Hawaiian and Hologic. The Fund ended the quarter underweight in the real estate, communication services, utilities, information technology, materials, and consumer discretionary sectors in favor of the financials, industrials, consumer staples, healthcare, and energy sectors.

TICKER: MLUSX • Inception: 5/31/2000
Morningstar Category: Mid-Cap Value

Average Annual Total Return

	QTD	YTD	1 Year	3 Year	5 Year	10 year
MassMutual Select Mid-Cap Value R5	-14.93%	-12.96%	-12.96%	5.72%	3.75%	11.30%
Russell MidCap® Value Index	-14.95%	-12.29%	-12.29%	6.06%	5.44%	13.03%
Category Average Return	--	--	-12.86%	5.42%	3.88%	11.66%
Category Rank	--	--	50	43	54	63
# of Funds in Category	--	--	417	363	306	218

Performance shown is for class R5 shares. Gross expenses = 1.03%, Net expense = 0.91%. Max Sales charge for R5 is 0%

Performance shown is past performance. Past performance does not guarantee future results. You can lose money, including loss of principal, by investing in this fund. Investors should carefully consider investment objectives, risks, charges and expenses. This and other important information is contained in the fund prospectuses and summary prospectuses, which can be obtained from www.massmutualfunds.com and should be read carefully before investing. A list of the Fund's holdings can also be obtained from www.massmutualfunds.com. Current performance may be lower or higher than return data quoted herein. For more current information, including month-end performance, please call 1-866-444-2601.

Investment Risks - The Fund's **Principal Risks** include- Cash Position Risk, Convertible Securities Risk, Credit Risk, Derivatives Risk, Equity Risk, Fixed Income Securities Risk, Foreign Investment Risk; Emerging Markets Risk; Currency Risk, Frequent Rading/Portfolio Turnover Risk, Liquidity Risk, Management Risk, Market Risk, Preferred Stock Risk, REIT Risk, Sovereign Debt Obligations Risk, Smaller and Mid-Cap Company Risk, Valuation Risk, Value Company Risk. Please refer to the summary prospectus (a copy can be obtained by sending an email to fundinfo@massmutual.com) for more information on the specific risks.

You cannot invest directly in an index. **The Morningstar percentile ranking is based on the fund's total-return percentile rank relative to all funds that have the same category for the same time period.** The highest (or most favorable) percentile rank is 1%, and the lowest (or least favorable) percentile rank is 100%. Morningstar total return includes both income and capital gains or losses and is not adjusted for sales charges. © 2019 Morningstar, Inc. All Rights Reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information.

MassMutual Select Mid-Cap Value Fund

Portfolio Holdings:

Quarter to Date:

Top 5 Contributors	Fund Weight	Absolute Return*	Portfolio Contribution
Pinnacle West Capital Corp	1.17	8.57	0.08
Xcel Energy Inc	1.76	5.16	0.08
PulteGroup Inc	1.11	5.38	0.06
Capitol Federal Financial Inc	0.97	3.99	0.04
Ameren Corp	1.01	3.88	0.03
Top 5 Detractors	Fund Weight	Absolute Return*	Portfolio Contribution
Zimmer Biomet Holdings Inc	3.26	-20.92	-0.71
Hubbell Inc	2.25	-25.04	-0.58
Weyerhaeuser Co	1.68	-31.40	-0.57
Devon Energy Corp	1.08	-43.40	-0.57
Noble Energy Inc	1.22	-39.60	-0.54

Year to Date:

Top 5 Contributors	Fund Weight	Absolute Return*	Portfolio Contribution
Advance Auto Parts Inc	0.99	58.22	0.47
Keysight Technologies Inc	0.69	43.29	0.37
LifePoint Health Inc	0.61	29.34	0.36
HCA Healthcare Inc	0.37	51.14	0.23
Express Scripts Holding Co	0.54	26.47	0.22
Top 5 Detractors	Fund Weight	Absolute Return*	Portfolio Contribution
Invesco Ltd	1.70	-52.04	-1.23
WRKCo Inc A	1.72	-38.36	-0.80
Weyerhaeuser Co	1.65	-35.47	-0.71
Conagra Brands Inc	1.49	-41.98	-0.65
EQT Corp	1.19	-37.84	-0.65

Fund Weightings are shown as an average for the time period.

*Absolute Return is the return that an asset achieves over a certain period of time. This measure looks at the appreciation or depreciation (expressed as a percentage) that a holding achieves over a given period of time.

For a complete listing of fund holdings, visit massmutualfunds.com or please call 1-866-444-2601. The mention of individual stocks and other securities in this document does not constitute investment advice.



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