

BlackRock MML Long Horizon 80/20 Model

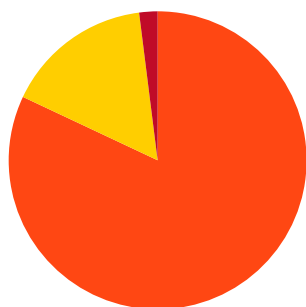
The Long-Horizon Multi-Manager Model strategies are a suite of investment options with varying allocations to equities and fixed income.

These strategies seek to deliver long-term results by combining a low-turnover approach with a limited number of equity and fixed income mutual funds.

The strategies are managed by Michael Gates, CFA Head of U.S. Model Portfolio Solutions.

Each strategy can be implemented within a separate account managed by your advisor to help achieve a range of personal goals.

Current Allocation



Allocations	%
Equity	82%
Fixed Income	16%
Cash	2%

Holdings	Portfolio Weight (%)
Equity	
MassMutual Select Blue Chip Growth I	23.0%
BlackRock Advantage Large Cap Value Fund K	15.0%
MassMutual Select Overseas I	14.0%
BlackRock Sustainable Advantage Large Cap Core Fund	13.0%
BlackRock Emerging Markets Fund K	9.0%
BlackRock Technology Opportunities Fund K	4.0%
BlackRock Health Sciences Opportunities Fund K	2.0%
Fixed Income	
BlackRock Core Bond Fund K	7.0%
MassMutual Select Strategic Bond I	5.0%
BlackRock Strategic Income Opportunities Fund K	3.0%
BlackRock U.S. Government Bond Fund K	1.0%
Cash	
Cash	2.0%

Investment Strategy

The BLK Long Horizon Multi-Manager Models are all-in-one, core portfolios that span a broad risk spectrum, represented by 5 risk-profiles (ranging from Conservative to Aggressive). These models seek to achieve optimal risk-adjusted returns over the long-term with annual rebalancing. The models are constructed in a scalable and cost-efficient way using both proprietary and non-proprietary mutual funds. These funds may pay fees and expenses to BlackRock or third party provider. The principal risks of the strategy are equity risk, fixed income risk, foreign/international market risk and derivative risk general. More detailed information on this strategy is available upon request.

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*Prior to 5/1/21, the fund was the MassMutual Select Blue Chip Growth Fund

**Prior to 5/1/21, the fund was the MassMutual Select Overseas Fund

***Prior to 5/1/21, the fund was the MassMutual Select Strategic Bond Fund

Quarterly Composite Performance (% Returns)			
	Composite (Net)	Composite (Gross)	Benchmark*
YTD	6.91	7.73	6.97
3/31/2024	6.91	7.73	6.97
12/31/2023	10.34	11.18	10.28
9/30/2023	-4.37	-3.64	-3.14
6/30/2023	5.87	6.67	5.43

Gross Weighted Average Expense Ratio

0.65%

Net Weighted Average Expense Ratio

0.59%

Average Annual Total Composite Returns (%)			
	Composite (Net)	Composite (Gross)	Benchmark*
1 Year	19.43	23.12	20.45
3 Year	2.97	6.15	6.13
5 Year			
10 Year	-		
Since Inception¹	6.03	9.31	8.48

The difference between gross and net expense ratios are due to contractual and/or voluntary waivers on underlying funds, if applicable. Any applicable waiver will be terminable based upon each fund's respective prospectus notice period. BlackRock may agree to voluntarily waive certain fees and expenses, which the adviser may discontinue at any time without notice. Please see the respective prospectus's for contractual waiver end dates.

Important Notes

¹The inception of this strategy is 9/1/2020.

***Benchmark Description:** The benchmark index shown is 56% MSCI ACWI Index, 24% MSCI USA Index, 18% Bloomberg Barclays U.S. Universal Index, 2% ICE BofAML US T-Bill 0-3 Month and is rebalanced monthly. Prior to 06/30/2021 the benchmark was 20% BBG Barclays US Universal Index, 56% MSCI All Country World (Net Total Return), 24% MSCI Developed - US Net TR Index

The performance results from inception to the end of the most recent calendar year represents the performance of one fully discretionary, unconstrained, proprietary separate account managed in this style for one month that did not pay any fees. Indices are unmanaged and used for illustrative purposes only and are not intended to be indicative of any fund or the managed portfolio strategy's performance. It is not possible to invest directly in an index.

Investing involves risk, including possible loss of principal.

The two main risks related to fixed-income investing are interest rate risk and credit risk. Typically, when interest rates rise, there is a corresponding decline in bond values. Credit risk refers to the possibility that the bond issuer will not be able to make principal and interest payments. Non investment-grade debt securities (high-yield/junk bonds) may be subject to greater market fluctuations, risk of default or loss of income and principal than higher-rated securities. International investing involves risks, including risks related to foreign currency, limited liquidity, less government regulation and the possibility of substantial volatility due to adverse political, economic or other developments. These risks often are heightened for investments in emerging/ developing markets or in concentrations of single countries. Small-capitalization companies may be less stable and more susceptible to adverse developments, and their securities may be more volatile and less liquid than larger capitalization companies. Investments that are concentrated in specific industries, sectors, markets or asset classes may underperform or be more volatile than other industries, sectors, markets or asset classes and the general securities market. Derivatives entail risks relating to liquidity, leverage and credit that may reduce returns and increase volatility.

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