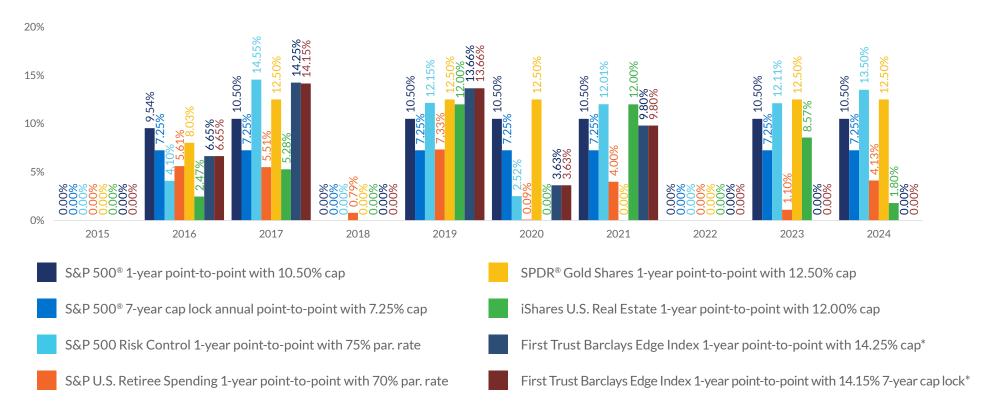


Choose Your Strategy

Fixed-indexed annuities offer indexed strategies that earn interest based, in part, on positive performance of an external index or ETF. The following chart uses historical market returns to illustrate the hypothetical performance of indexed strategies that are available with the American Legend[®] 7 from MassMutual Ascend Life Insurance Company.

American Legend 7

Hypothetical Strategy Comparison 2015-2024



*See important disclosures on the next page.

Rates are as of 07/21/25 and are for purchase payments of \$100,000 and over.

About the indexes and ETFs

S&P 500® INDEX Ticker: SPX

Reflects the large-cap sector of the U.S. equity market. Includes 500 leading companies and captures approximately 80% coverage of available market capitalization.

S&P 500 RISK CONTROL 10% INDEX Ticker: SPXAV10P

Seeks to limit the volatility of the S&P 500 to a target level of 10% by allocating to cash.

S&P U.S. RETIREE SPENDING INDEX Ticker: SPRETIRE

Measures the performance of equities in economic sectors that are expected to be impacted by retiree spending, while reducing equity risk and overall portfolio volatility through fixed income exposure.

SPDR® GOLD SHARES ETF Ticker: GLD

Reflects the performance of the price of gold bullion.

ISHARES U.S. REAL ESTATE ETF Ticker: IYR

Reflects the performance of the real estate sector in the U.S. equity market.

FIRST TRUST BARCLAYS EDGE INDEX Ticker: FTEDGE7

The First Trust Barclays Edge Index is a multi-asset index seeking to provide equity and fixed income exposure through a combination of indexes, while aiming to control risk by maintaining a volatility target at or below 7%. The Index is on an excess return basis, which means it returns the index performance in excess of risk-free rates.



*IMPORTANT DISCLOSURE RELATING TO BACK TESTED INDEX WEIGHTINGS.

This material is provided for information purposes only and to provide general information about the historical exposures of the index's equity and fixed income components as a result of the application of the index methodology and has inherent limitations. It is not intended as a recommendation or an offer or solicitation for the purchase or sale of any security or financial instrument, or to enter into a transaction involving any financial instrument. Nothing in this material should be construed as investment, tax, legal, accounting, regulatory or other advice.

The back tested performance included has many inherent limitations, some of which are described below:

- Hypothetical exposures are achieved by implementing the index's methodology.
- The creation of historical index exposures involves assumptions and the benefit of hindsight and do not reflect the impact that material market or economic events might have had on the underlying indexes or volatility control weightings.
- No representation is being made that the Index will maintain to similar exposures in the future.

Actual results will materially vary from the hypothetical performance levels presented herein.

Strategies may vary. Please talk to your financial professional about availability.

At the end of the seven-year term, the cap lock strategy will be reallocated or merge into the S&P 500 1-year point-to-point indexed strategy. The values on this piece are calculated using current caps for the 7-year cap lock strategy, even in years 8-10. The current caps for the 7-year cap lock strategy are lower than the current caps for the S&P 500 1-year point-to-point indexed strategy.

Indexed interest rates for the strategy are based on changes in the index over term years, which are not based on calendar years but begin on the 6^{th} and 20^{th} of a month. The information presented above reflects caps and participation rates that are current for the American Legend 7 as of the date shown. The actual caps and participation rates that we might have applied during the time period shown would have been different and might have been significantly lower. Past performance does not guarantee future results. Hypothetical performance shown in the chart is not indicative of the interest that would have been credited to a fixed-indexed annuity during the time period shown.

The S&P 500 $^{\circ}$ Index does not include dividends declared by any of the companies in the index. For more information, visit www.US. SPIndices.com and search keyword SPX. The S&P 500 Risk Control 10% Index refers to the S&P 500 Average Daily Risk Control 10% USD Price Return Index. The launch date of this index was April 4, 2013. For more information, visit www.US. SPIndices.com and search keyword SPXAV10P. The Gold Shares trade on the NYSE Arca under the symbol GLD. The launch date of the SPDR $^{\circ}$ Gold Shares ETF was November 2004. For more information, visit www.spdrgoldshares.com. The launch date of the S&P U.S. Retiree Index was September 26, 2016. For more information, visit US. SPindices.com and search keyword SPRETIRE. The launch date of the iShares U.S. Real Estate ETF was June 12, 2000. For more information, visit iShares.com and search ticker symbol IYR.

Returns for an index prior to its launch date are back-tested. Back-tested performance is not actual performance, but is hypothetical. Back-tested returns were calculated using the same methodology that was in effect when the index was officially launched. Back-tested performance is subject to inherent limitations because it reflects application of an index methodology and selection of index constituents in hindsight. No theoretical approach can take into account all of the factors in the markets in general and the impact of decisions that might have been made during the actual operation of an index.

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When you buy a fixed-index annuity, you own an insurance contract. You are not buying shares of any stock or index.

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