Index Protector

Fee-based fixed-indexed annuity rates for MassMutual Ascend

	No MVA Rates				
Index Protector 4 Rates effective 12/21/22	Purchase payments \$250,000 and over	Purchase payments less than \$250,000			
Declared rate	4.10%	3.95%			
S&P 500 1-year point-to-point with cap	9.50%	9.25%			
iShares U.S. Real Estate 1-year point-to-point with cap	11.50%	11.00%			
S&P 500 Risk Control 1-year point-to-point with par. rate	75%	70%			
S&P U.S. Retiree Spending 1-year point-to-point with par. rate	85%	80%			
iShares MSCI EAFE ETF 1-year point-to-point with cap	9.50%	9.25%			

	MVA	Rates		
Index Protector 5 MVA Rates effective 12/21/22	Purchase payments \$250,000 and over	Purchase payments less than \$250,000		
1-year declared rate	4.55%	4.30%		
5-year declared rate	4.55%	4.30%		
S&P 500 1-year point-to-point with cap	10.75%	10.50%		
iShares U.S. Real Estate 1-year point-to-point with cap	13.00%	12.00%		
S&P 500 Risk Control 1-year point-to-point with par. rate	85%	80%		
S&P U.S. Retiree Spending 1-year point-to-point with par. rate	90%	85%		
iShares MSCI EAFE ETF 1-year point-to-point with cap	10.75%	10.50%		

	MVA	Rates	No MVA Rates Available in: CA, IN, MN, MO, OH, PA, TX and UT		
Index Protector 7 Rates effective 12/21/2022	Purchase payments \$250,000 and over	Purchase payments less than \$250,000	Purchase payments \$250,000 and over	Purchase payments less than \$250,000	
Declared rate	5.10%	5.00%	5.00%	4.90%	
S&P 500 1-year point-to-point with cap	10.50%	10.00%	9.75%	9.50%	
S&P 500 7-year cap lock annual point-to-point	9.00%	8.75%	7.50%	7.25%	
iShares U.S. Real Estate 1-year point-to-point with cap	13.00%	12.50%	12.25%	12.00%	
S&P 500 Risk Control 1-year point-to-point with par. rate	80%	75%	75%	70%	
S&P U.S. Retiree Spending 1-year point-to-point with par. rate	85%	80%	75%	70%	
iShares MSCI EAFE ETF 1-year point-to-point with cap	10.00%	9.50%	9.50%	9.25%	

Easily track the performance of our strategies' underlying indices using their ticker symbols: S&P 500: SPX, S&P 500 Risk Control 10% Index: SPXAV10P and iShares U.S. Real Estate ETF: IYR, S&P U.S. Retiree Spending Index: SPRETIRE, iShares U.S. MSCI EAFE ETF: EFA.

Additional purchase payments: Accepts additional purchase payments during the first two months of the contract. Purchase payments will be credited interest while in the holding account (purchase payment account) until terms begin on the 6th or 20th of the month. After that time, amounts will be credited interest according to the selected strategy(ies). Holding account rate is equal to the declared rate. Rate lock does not apply beyond the original rate window specified in the contract.

Minimum Guarantees: The guaranteed minimum declared rate is 2.85%. 1-year point-to-point strategies with a cap have a minimum cap guarantee of 2.85% for contract duration. 1-year point-to-point strategies with a participation rate have a guaranteed minimum participation rate of 5% for contract duration. Future indexed strategies could offer alternate options and rates. The guaranteed minimum surrender value is 87.5% at 2.85%, less withdrawals and applicable charges and adjustments.

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Advantage 5 Advisory Fixed annuity rates for

MassMutual Ascend

Advantage 5 Advisory Rates effective 2/21/23	Interest rate for initial 5-year term
Purchase payments \$250,000 and over	5.25%
Purchase payments under \$250,000	5.00%

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American Landmark

Fixed-indexed annuity rates for

MassMutual Ascend

	MVA	Rates	No-MVA Rates Available in: AK, PA and UT		
American Landmark 3 Rates effective 2/21/2023	Purchase payments \$150,000 and over	Purchase payments less than \$150,000	Purchase payments \$150,000 and over	Purchase payments less than \$150,000	
Declared rate	3.65%	3.55%	3.50%	3.40%	
S&P 500 1-year point-to-point with cap	8.50%	8.25%	7.95%	7.70%	
iShares U.S. Real Estate 1-year point-to-point with cap	8.90%	8.40%	8.40%	8.15%	
iShares MSCI EAFE ETF 1-year point-to-point with cap	8.25%	8.00%	8.00%	7.75%	

	MVA	Rates	No-MVA Rates Available in: AK, PA and UT		
American Landmark 5 Rates effective 2/21/2023	Purchase payments \$100,000 and over	Purchase payments less than \$100,000	Purchase payments \$100,000 and over	Purchase payments less than \$100,000	
Declared rate	3.75%	3.60%	3.60%	3.50%	
S&P 500 1-year point-to-point with cap	9.00%	8.75%	8.00%	7.75%	
S&P 500 5-year cap lock annual point-to-point with cap	7.65%	7.40%	6.75%	6.50%	
iShares U.S. Real Estate 1-year point-to-point with cap	9.00%	8.75%	8.75%	8.25%	
S&P 500 Risk Control 1-year point-to-point with par. rate	70%	65%	65%	60%	
S&P U.S. Retiree Spending 1-year point-to-point with par. rate	70%	65%	60%	55%	

CA: Contracts receive MVA rates but remain non-MVA.

Easily track the performance of our strategies' underlying indices using their ticker symbols: S&P 500: SPX, S&P 500 Risk Control 10% Index: SPXAV10P, iShares U.S. Real Estate ETF: IYR, and S&P U.S. Retiree Spending Index: SPRETIRE, MSCI EAFE ETF: EFA.

Minimum Guarantees: The guaranteed minimum declared rate is 2.85%. 1-year point-to-point strategies with cap have a minimum cap guarantee of 2.85% for contract duration. 1-year point-to-point strategies with participation rate have a guaranteed minimum participation rate of 5% for contract duration. Future indexed strategies could offer alternate options and rates. The guaranteed minimum surrender value is 87.5% at 2.85%, less withdrawals and applicable charges and adjustments.

Additional Purchase Payments: American Landmark 3 accepts additional premium during the first two months of the contract. The American Landmark 5 accepts additional premium during the first year of the contract. Purchase payments will be credited interest while in the holding account (purchase payment account) until terms begin on the 6th or the 20th of the month. After that time, amounts will be credited interest according to the selected strategy(ies). Holding account rate is equal to the declared rate. Rate lock does not apply to additional purchase payments received after the rate lock period at issue.

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American Legend 7 and Safe Return Fixed-indexed annuity rates for

MassMutual Ascend

	MVA	Rates	No-MVA Rates Available in: AK, PA and UT		
American Legend 7 Rates effective 12/21/2022	Purchase payments \$100,000 and over	Purchase payments less than \$100,000	Purchase payments \$100,000 and over	Purchase payments less than \$100,000	
Declared rate	4.10%	4.00%	3.95%	3.85%	
S&P 500 1-year point-to-point with cap	10.00%	9.75%	9.25%	9.00%	
S&P 500 7-year cap lock annual point-to-point with cap	7.75%	7.50%	6.80%	6.55%	
iShares U.S. Real Estate 1-year point-to-point with cap	10.00%	9.50%	9.00%	8.50%	
SPDR GLD 1-year point-to-point with cap	12.00%	11.50%	10.75%	10.50%	
S&P 500 Risk Control 1-year point-to-point with par. rate	75%	70%	70%	65%	
S&P U.S. Retiree Spending 1-year point-to-point with par. rate	75%	70%	65%	60%	

CA: Contracts receive MVA rates but remain non-MVA.

Safe Return Rates effective 12/21/2022	Rates for all purchase payments				
Declared rate	3.00%				
S&P 500 1-year point-to-point with cap	5.50% cap	(3.00% bailout cap)			
iShares U.S. Real Estate 1-year point-to-point with cap	6.50% cap	(3.00% bailout cap)			
S&P 500 Risk Control 1-year point-to-point with par. rate	45%	(25% bailout rate)			

Easily track the performance of our strategies' underlying indices using their ticker symbols: S&P 500: SPX, S&P 500 Risk Control 10% Index: SPXAV10P, iShares U.S. Real Estate ETF: IYR, S&P U.S. Retiree Spending Index: SPRETIRE, and SPDR Gold Shares ETF: GLD.

Minimum Guarantees: The guaranteed minimum declared rate is 2.85%. 1-year point-to-point strategies with cap have a minimum cap guarantee of 2.85% for contract duration. 1-year point-to-point strategies with participation rate have a guaranteed minimum participation rate of 5% for contract duration. Future indexed strategies could offer alternate options and rates. For Safe Return the guaranteed minimum surrender value is 100% at 2.85% less any withdrawals including early withdrawal charges and less an amount equal to the applicable early withdrawal charge rate multiplied by the account value. For American Legend 7 the guaranteed minimum surrender value is 87.5% at 2.85%, less withdrawals and applicable charges and adjustments.

Additional Purchase Payments: American Legend 7 accepts additional purchase payments for the life of the contract. Safe Return accepts additional purchase payments during the first two months of the contract. Purchase payments will be credited interest while in the holding account (purchase payment account) until terms begin on the 6th or the 20th of the month. After that time, amounts will be credited interest according to the selected strategy(ies). Holding account rate is equal to the declared rate. Rate lock does not apply beyond the original rate window specified in the contract.

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Premier Income Bonus

Fixed-indexed annuity rates for

MassMutual Ascend

	MVA	Rates	No-MVA Rates Available in: AK, CA, PA and UT		
Premier Income Bonus Rates effective 9/21/2022	Purchase payments \$150,000 and over	Purchase payments less than \$150,000	Purchase payments \$150,000 and over	Purchase payments less than \$150,000	
Declared rate	3.60%	3.50%	3.45%	3.35%	
S&P 500 1-year point-to-point with cap	9.50%	9.25%	9.25%	9.00%	
iShares U.S. Real Estate 1-year point-to-point with cap	10.25%	10.00%	10.00%	9.50%	
S&P 500 Risk Control 1-year point-to-point with par. rate	70%	65%	65%	60%	
S&P U.S. Retiree Spending 1-year point-to-point with par. rate	70%	65%	65%	60%	

Bonus: Built-in income rider offers 6% rider bonus, 6% rollup credits and 10-year rollup period.

Easily track the performance of our strategies' underlying indices using their ticker symbols: S&P 500: SPX, S&P 500 Risk Control 10% Index: SPXAV10P, iShares U.S. Real Estate ETF: IYR, S&P U.S. Retiree Spending Index: SPRETIRE.

Minimum Guarantees: The guaranteed minimum declared rate is 2.85%. 1-year point-to-point strategies with cap have a minimum cap guarantee of 2.85% for contract duration. 1-year point-to-point strategies with participation rate have a guaranteed minimum participation rate of 5% for contract duration. Future indexed strategies could offer alternate options and rates. For Premier Bonus and Premier Income Bonus, the guaranteed minimum surrender value is 87.5% at 2.85%, less withdrawals and applicable charges and adjustments.

Additional Purchase Payments: Premier Bonus and Premier Income Bonus accept additional premium during the first two months of the contract. Purchase payments will be credited interest while in the holding account (purchase payment account) until terms begin on the 6th or the 20th of the month. After that time, amounts will be credited interest according to the selected strategy(ies). Holding account rate is equal to the declared rate. Rate lock does not apply beyond the original rate window specified in the contract.

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SecureGain

Fixed annuity rates for

MassMutual Ascend

<u>Massimoroal / iscoria</u>		
SecureGain 3 Rates effective 2/21/23	Interest rate for initial 3-year term	Guar. min.
Purchase payments \$100,000 and over	4.25%	2.85%
Purchase payments under \$100,000	4.10%	2.85%
No MVA available in: AK and UT		
Purchase payments \$100,000 and over	4.00%	2.85%
Purchase payments under \$100,000	3.85%	2.85%

SecureGain 5	Base	FY	FY Eff.						
Rates effective 2/21/23	rate	bonus	rate	yield	Yr. 2	Yr. 3	Yr. 4	Yr. 5	min.
Purchase payments \$100,000 and over	4.25%	0.25%	4.50%	4.50%	4.35%	4.45%	4.55%	4.65%	2.85%
Purchase payments under \$100,000	4.10%	0.25%	4.35%	4.35%	4.20%	4.30%	4.40%	4.50%	2.85%
No MVA available in: CT	, IN, MN,	MO and	ОН						
Purchase payments \$100,000 and over	4.05%	0.25%	4.30%	4.30%	4.15%	4.25%	4.35%	4.45%	2.85%
Purchase payments under \$100,000	3.95%	0.25%	4.20%	4.20%	4.05%	4.15%	4.25%	4.35%	2.85%

SecureGain 7	Base	FY	FY Eff.									Guar.
Rates effective 2/21/23	rate	bonus	rate	yield	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	min.	
Purchase payments \$100,000 and over	3.65%	1.00%	4.65%	4.54%	3.90%	4.15%	4.40%	4.65%	4.90%	5.15%	2.85%	
Purchase payments under \$100,000	3.45%	1.00%	4.45%	4.34%	3.70%	3.95%	4.20%	4.45%	4.70%	4.95%	2.85%	
No MVA available in: CT	, IN, MN,	MO and	OH									
Purchase payments \$100,000 and over	3.45%	1.00%	4.45%	4.34%	3.70%	3.95%	4.20%	4.45%	4.70%	4.95%	2.85%	
Purchase payments under \$100,000	3.35%	1.00%	4.35%	4.24%	3.60%	3.85%	4.10%	4.35%	4.60%	4.85%	2.85%	

Yield based on current interest rate with a first-year bonus and increasing base rate for the initial term. Escalating interest rates guaranteed for initial term.

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