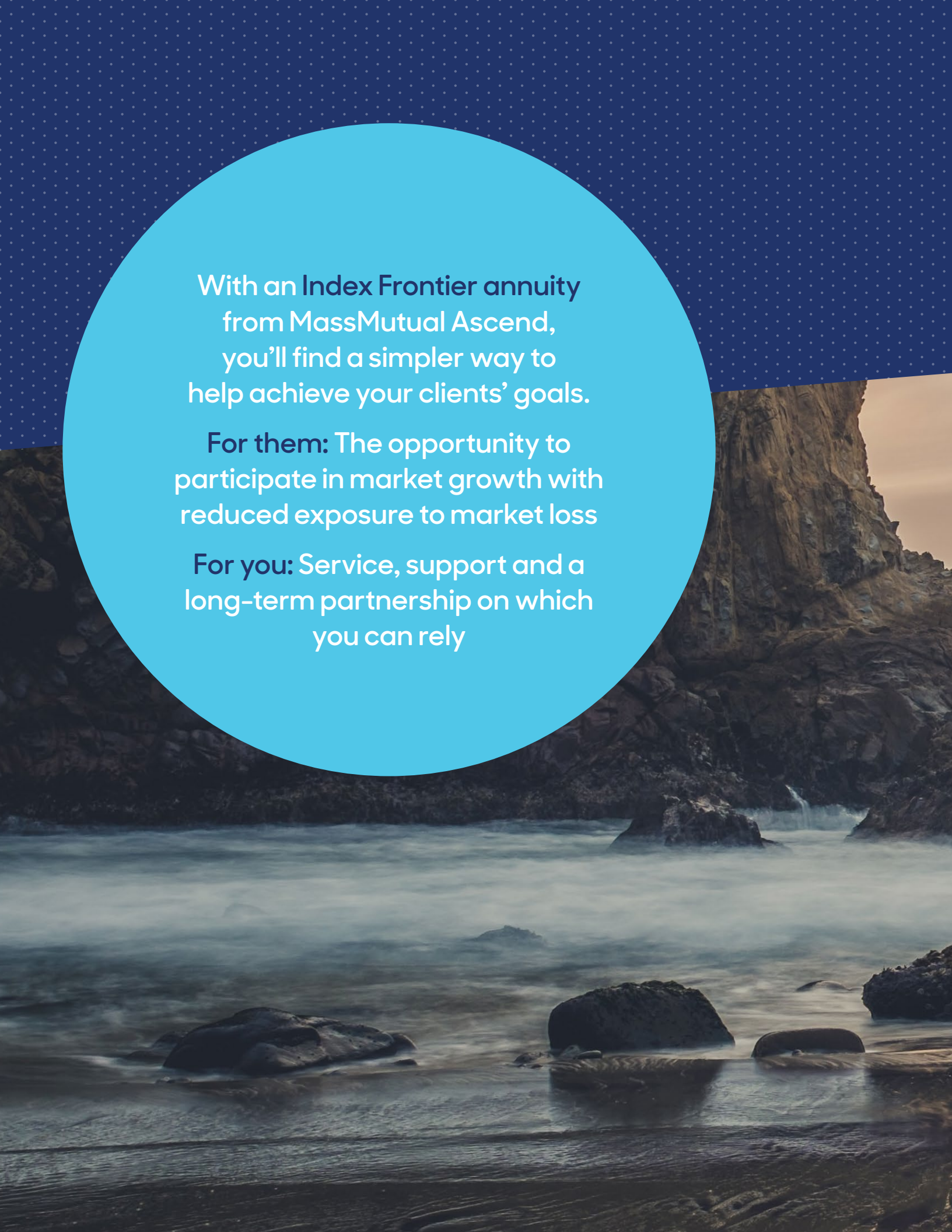




Why sell the Index Frontier?

A registered index-linked annuity



With an Index Frontier annuity
from MassMutual Ascend,
you'll find a simpler way to
help achieve your clients' goals.

For them: The opportunity to
participate in market growth with
reduced exposure to market loss

For you: Service, support and a
long-term partnership on which
you can rely



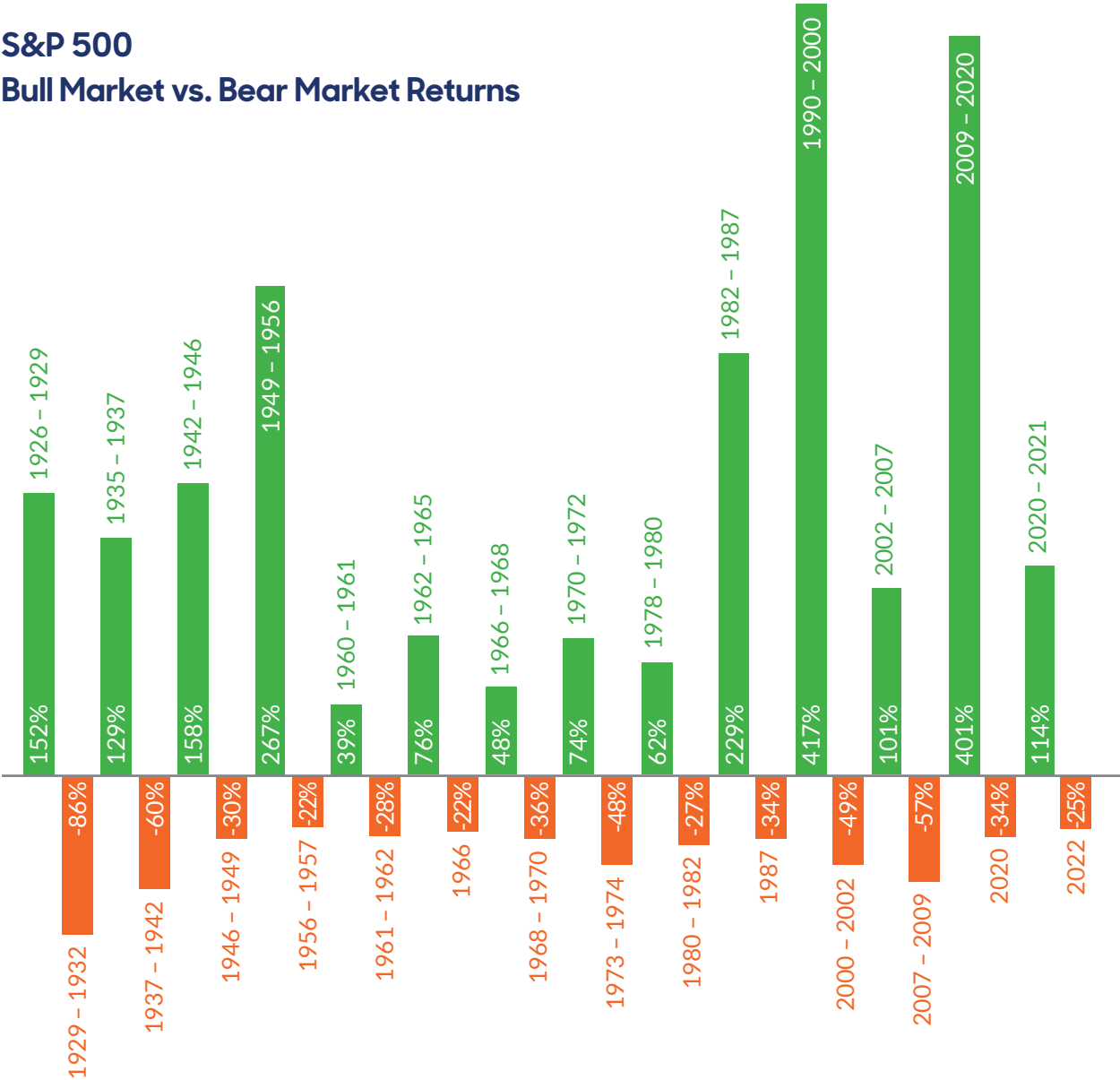
For producer use only. Not for use in sales solicitation.

Equities offer no protection

Investing directly in the market can be a lucrative way to grow a financial portfolio. However, with no protection against loss, market downturns can wreak havoc on the savings your clients have worked hard to build.

As history shows, when long-run bull markets end, the decline can be dramatic. Is it time to help your clients find a less risky option?

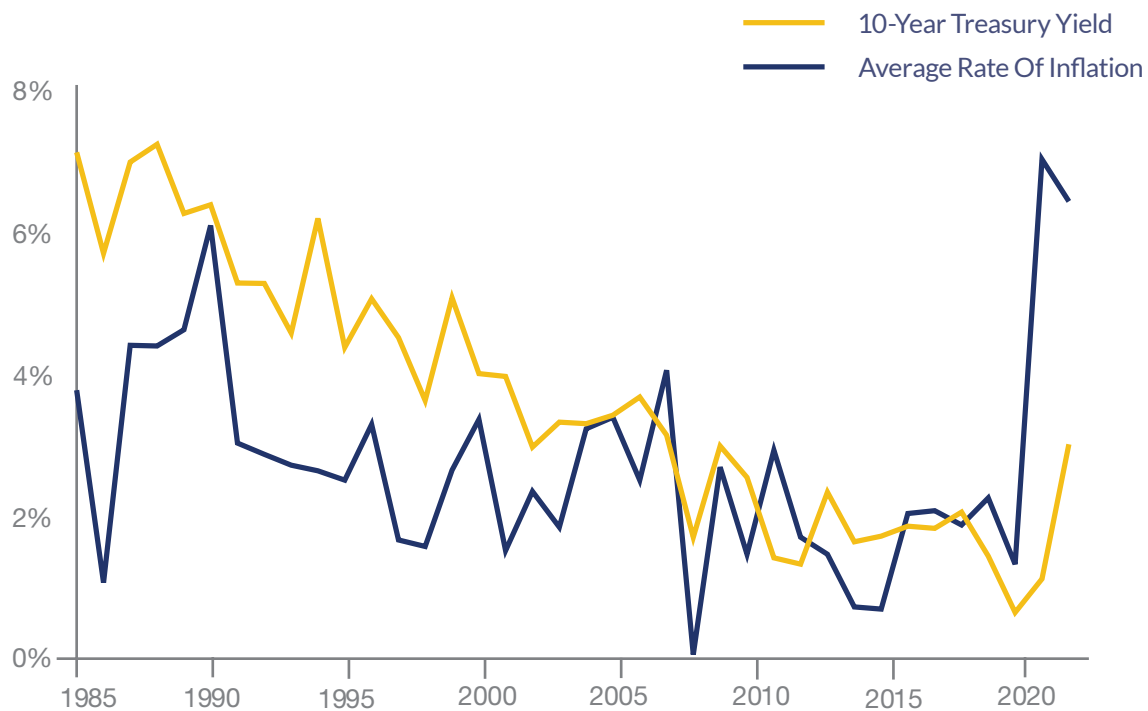
S&P 500 Bull Market vs. Bear Market Returns



The average S&P 500 Index bear market decline is -41%.

Fixed income investments offer little growth

Fixed income investments are commonly used to bring safety and stability to a portfolio. However, mitigating risk could mean getting little in return. Interest rates and yields have generally trended down over the last 35 years – putting bond yields at risk, and jeopardizing clients' ability to keep up with inflation.



As of March 2023, Americans cite inflation as the top economic problem in our country.

Source: Gallup, March 31, 2023

Finding the right balance

As your clients plan for a secure future, they may be looking for a tool to help balance their need for growth and protection. An Index Frontier® registered index-linked annuity could be a good solution. It's designed to help your clients grow their assets by taking advantage of some market growth, while reducing exposure to market loss.

AN INDEX FRONTIER REGISTERED INDEX-LINKED ANNUITY OFFERS:



Growth opportunity

Your clients have the opportunity to grow their money without investing directly in the market. Growth is limited by a cap.



Tax treatment that allows faster growth

Clients' money may grow at a faster rate since taxes are deferred until they take a withdrawal or annuitize their contract.



Partial protection from loss

Your clients receive a level of protection from market loss. The more risk they are willing to take on, the higher their earning potential will be. Downside risk is limited by either a buffer or a floor.



No fees

There are no upfront or recurring charges, so your clients won't pay fees unless they take a withdrawal during the early-withdrawal charge period.



Leave a legacy for loved ones

If your clients pass away before the annuity benefit payout begins, their beneficiaries are guaranteed to receive the greater of the account value or the return of premium amount.

The Index Frontier 5 and 7 have 5-year and 7-year early withdrawal charge schedules, respectively.

The Index Frontier 5 and 7 are securities that can only be sold through a Broker/Dealer that is contracted with MassMutual Ascend. This material must be preceded or accompanied by a prospectus. To obtain a copy of the prospectus, visit [MassMutualAscend.com/RIARates](https://www.massmutual.com/RIARates).

The earning potential of annuities

EARNING POTENTIAL					
		Less	More		
		Fixed annuity	Fixed-indexed annuity	Index Frontier annuity	Variable annuity
Loss potential		No	No	Yes, limited by a buffer or floor.	Yes, losses are unlimited.
Fees		No	No	No	Yes

INDEX FRONTIER COULD BE A GOOD FIT FOR CLIENTS WHO ARE:



Nearing retirement and need to boost their savings



Looking for more protection than offered by a variable annuity



Seeking higher earning potential than a fixed or fixed-indexed annuity

Market-linked growth with reduced risk

The Index Frontier offers indexed strategies to help your clients accumulate additional savings for their future. When index performance is positive during a term, strategies earn a return, up to a cap. When index performance is negative during a term, strategies may lose money, limited by either a buffer or a floor.

Clients can choose from the following three indexed strategies, which provide varying levels of protection:

10% Buffer Indexed Strategy

Provides growth potential up to a cap and protects against the first 10% of index losses.

May be a good fit for clients seeking protection against minor market downturns.

-10% Floor Indexed Strategy

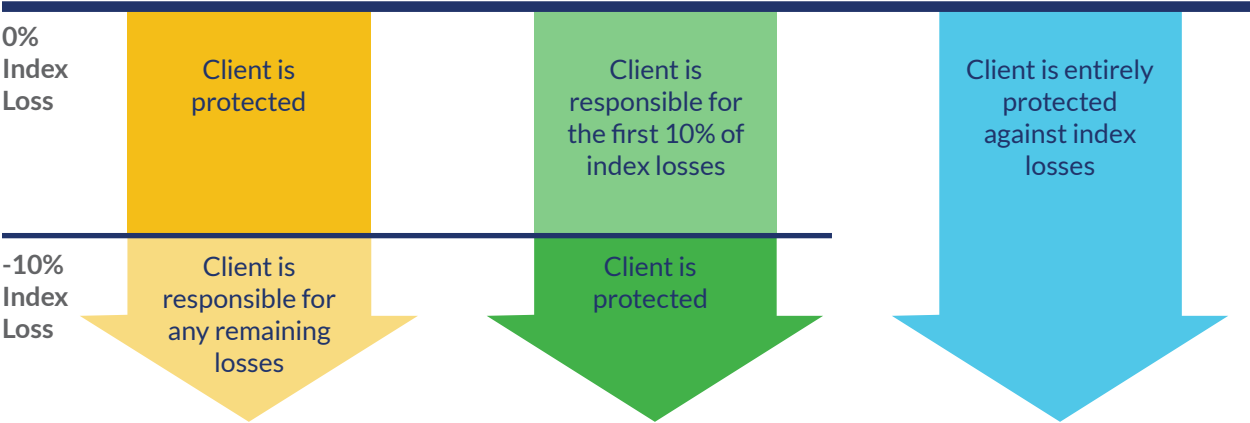
Provides growth potential up to a cap and protects against index losses in excess of -10%.

May be a good fit for clients seeking protection against significant market downturns.

0% Floor Indexed Strategy

Provides growth potential up to a cap and complete protection against index losses.

May be a good fit for clients who want to keep their money protected.



Before the end of a term, the buffer is calculated daily as a prorated share of the annual 10% buffer and provides less protection against index losses.

Managing risk and reward with indexed strategies

Like most investments, with greater risk comes greater opportunity for reward.



Diversify with multiple indexed strategy options

For clients seeking diversification opportunity, an Index Frontier can help. Indexed strategies are linked to the performance of the following index and ETFs:

- S&P 500® Index
- iShares MSCI EAFE ETF
- iShares U.S. Real Estate ETF
- SPDR Gold Shares ETF

Each indexed strategy offers a different combination of earning potential and partial protection, so your clients can customize their strategy selection to fit their needs. Plus, they can reallocate between strategies each year, giving them flexibility to adjust their exposure in alignment with different market cycles.

The 10% buffer strategy is only available with the S&P 500 index.

Index and ETF returns using rolling periods

The following analysis uses one-year rolling returns from December 31, 2004 through December 31, 2022 of the following indexes and ETFs:

- S&P 500 Price Return Index (SPX)
- iShares MSCI EAFE ETF (EFA)
- iShares U.S. Real Estate ETF (IYR)
- SPDR Gold Shares ETF

The total number of observations for each index and ETF is 4,437¹.

Photo submitted by
Cheryl from **Indiana**,
valued annuity customer
since **2018**.



S&P 500 Price Return Index						
Average Performance			Positive Performance		Negative Performance	
Average Return	Average Gain	Average Loss	Maximum Return ²	Num of Gains	Minimum Return ³	Num of Losses
8.83%	15.14%	-14.84%	74.77%	3,504	-48.82%	932

iShares MSCI EAFE ETF						
Average Performance			Positive Performance		Negative Performance	
Average Return	Average Gain	Average Loss	Maximum Return ²	Num of Gains	Minimum Return ³	Num of Losses
3.07%	16.36%	-13.57%	73.02%	2,466	-55.85%	1,967

iShares U.S. Real Estate ETF						
Average Performance			Positive Performance		Negative Performance	
Average Return	Average Gain	Average Loss	Maximum Return ²	Num of Gains	Minimum Return ³	Num of Losses
5.28%	17.60%	-15.73%	116.25%	2,798	-64.09%	1,638

SPDR Gold Shares ETF						
Average Performance			Positive Performance		Negative Performance	
Average Return	Average Gain	Average Loss	Maximum Return ²	Num of Gains	Minimum Return ³	Num of Losses
9.53%	19.62%	-8.11%	68.69%	2,822	-29.28%	1,612

¹Flat years, in which the index or ETF return was 0%, are included in the number of total observations as follows: S&P 500: 1, iShares MSCI EAFE: 4, iShares U.S. Real Estate: 1, SPDR Gold Shares: 3

²Maximum returns are as follows: S&P 500: 3/23/2021, iShares MSCI EAFE: 3/9/2010, iShares U.S. Real Estate: 3/8/2010, SPDR Gold Shares: 5/12/2006

³Minimum returns are as follows: S&P 500: 3/5/2009, iShares MSCI EAFE: 11/20/2008, iShares U.S. Real Estate: 3/5/2009, SPDR Gold Shares: 11/26/2013

Historical values of the S&P 500 are based on the S&P 500 Price Return Index (SPX). This index does not include dividends paid on any of the stocks included in the index. You cannot invest directly in an index.

Historical values of the iShares US Real Estate ETF and iShares MSCI EAFE ETF strategies are based on ETF closing prices and do not include dividends earned on the ETFs. To learn more about the iShares U.S. Real Estate ETF, visit [iShares.com](https://www.ishares.com) and search ticker symbol IYR. To learn more about the iShares MSCI EAFE ETF, visit [iShares.com](https://www.ishares.com) and search ticker symbol EFA.

Frequently asked questions

What are the contracting requirements to sell an Index Frontier annuity?

In order to sell an Index Frontier annuity, you must hold insurance and securities licenses. Index Frontier annuities can only be sold through a Broker/Dealer that is contracted with MassMutual Ascend.

Is there a mortality and expense charge?

No, your clients will not pay a mortality and expense charge. All their money goes to work for them.

Are there any other administrative fees?

No. Your clients will pay an early withdrawal charge if they take a withdrawal during the early withdrawal charge period in excess of the 10% free withdrawal allowance, but there are no other fees associated with this product.

Does this product offer subaccounts like traditional variable annuities?

No, your clients' money is not invested in subaccounts. Instead, an Index Frontier annuity offers indexed strategies to help your clients accumulate money for retirement, while giving them the ability to manage downside risk.

Are there any optional riders available?

Index Frontier annuities include extended care and terminal illness waiver riders. These waiver riders allow clients to withdraw their money without incurring an early withdrawal charge when certain criteria are met. There are no charges for these riders. Availability may vary by state.

Where can I find the prospectus for this product?

The prospectus can be found at [MassMutualAscend.com/RILArates](https://www.massmutual.com/Ascend/RILArates). Please keep in mind the prospectus must accompany any marketing materials you present to a client.



Index Frontier product details

ISSUE AGES	<p>Qualified: 0–80 Inherited IRA: 0–75 Non-qualified: 0–80 Inherited non-qualified: 0–75</p>																																
PURCHASE PAYMENTS	<p>Issued with a single purchase payment. Subsequent purchase payments accepted in the first two contract months.</p> <ul style="list-style-type: none"> • Minimum: \$25,000 initial; \$10,000 subsequent • Maximum: \$1 million issue ages 0-80 																																
PENALTY-FREE WITHDRAWALS	<p>During the first contract year, 10% of the purchase payments may be withdrawn without an early withdrawal charge. After the first contract year, 10% of the account value on the most recent contract anniversary may be withdrawn without an early withdrawal charge.</p>																																
EARLY WITHDRAWAL CHARGES	<p>Five- or seven-year declining early withdrawal charges:</p> <p>Index Frontier 5</p> <table border="1"> <thead> <tr> <th>Contract year</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6+</th> </tr> </thead> <tbody> <tr> <td>Early withdrawal charge</td> <td>8%</td> <td>7%</td> <td>6%</td> <td>5%</td> <td>4%</td> <td>0%</td> </tr> </tbody> </table> <p>Index Frontier 7</p> <table border="1"> <thead> <tr> <th>Contract year</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8+</th> </tr> </thead> <tbody> <tr> <td>Early withdrawal charge</td> <td>8%</td> <td>7%</td> <td>6%</td> <td>5%</td> <td>4%</td> <td>3%</td> <td>2%</td> <td>0%</td> </tr> </tbody> </table> <p><i>Please check with your Broker/Dealer or Financial Institution for product availability.</i></p>	Contract year	1	2	3	4	5	6+	Early withdrawal charge	8%	7%	6%	5%	4%	0%	Contract year	1	2	3	4	5	6	7	8+	Early withdrawal charge	8%	7%	6%	5%	4%	3%	2%	0%
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VESTED GAINS OR LOSSES	<p>Each day of a term, the value of an indexed strategy is adjusted for the vested gain or loss since the start of that term. The vested gain is any positive index change for the term (but not exceeding the cap set for that term), multiplied by the applicable vesting factor for that day, and then multiplied by the remaining investment base for the current term.</p> <p>Vesting factor</p> <table border="1"> <tbody> <tr> <td>Within first six months of term</td> <td>25%</td> </tr> <tr> <td>Within final six months of term, but before final market day of term</td> <td>50%</td> </tr> <tr> <td>On or after reaching final market day of term</td> <td>100%</td> </tr> </tbody> </table> <p>The vested loss is equal to any negative index change for the term (after taking into account the buffer or floor), multiplied by the remaining investment base for the current term.</p>	Within first six months of term	25%	Within final six months of term, but before final market day of term	50%	On or after reaching final market day of term	100%																										
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RETURN OF PREMIUM DEATH BENEFIT	<p>If the contract owner passes away before annuity benefit payouts begin, beneficiaries are guaranteed to receive the greater of the account value or the return of premium amount, which is equal to the purchase payments, reduced proportionally for all withdrawals (but not including early withdrawal charges).</p>																																

Please see the Index Frontier 5 or 7 overview for additional details.

MassMutual Ascend

Taking financial futures above and beyond

At MassMutual Ascend, we are committed to going above and beyond – so when it comes to your clients' financial futures, the impossible feels possible.

As a leading provider of annuities, we see our products as more than just contracts. Our annuities are transparent and easier to understand, so they are simple to explain and your clients always know what to expect.

We have a long history of financial strength and stability. We've received an "A" or higher rating by AM Best for more than 40 years, so you and your clients can have confidence knowing we'll be here when you need us. We are a wholly owned subsidiary of MassMutual, one of the largest life insurance companies in the U.S., founded in 1851.

And finally, everything we do is rooted in a culture of service. From our people to our technology, we strive to always provide you and your clients with what you need, when you need it.



The Index Frontier 5 and Index Frontier 7 can only be sold through a Broker/Dealer that is contracted with MassMutual Ascend. Any sales solicitation must be accompanied or preceded by a prospectus. In the prospectus a cap is referred to as a maximum gain, and a floor is referred to as a maximum loss. To obtain a copy of the prospectus, please visit MassMutualAscend.com/RILArates.

Annuities are intended to be long-term products and may not be suitable for all investors. Withdrawals from an annuity contract may have tax consequences.

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∴ MassMutual Ascend