

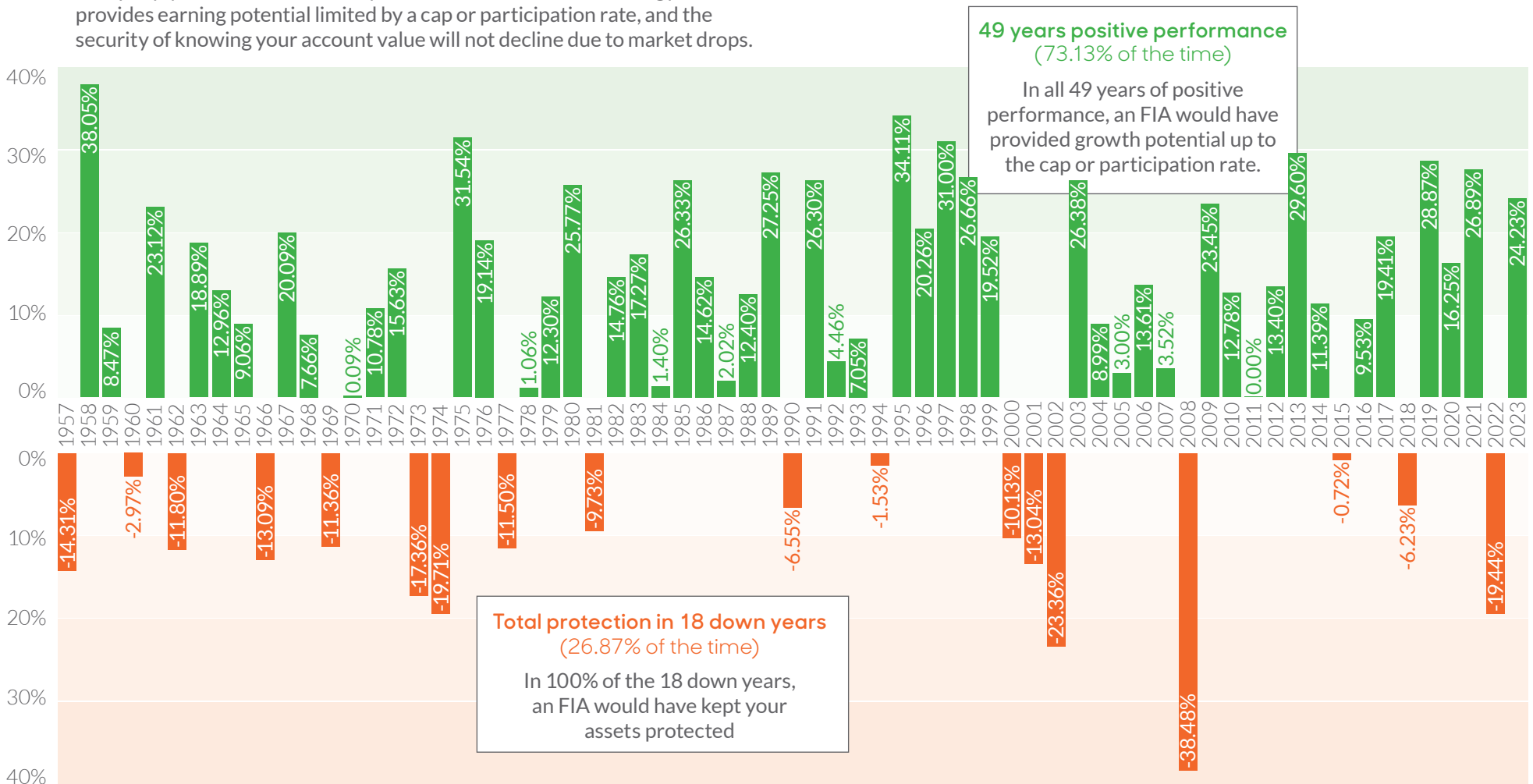
# S&P 500: Comparing positive and negative return frequency over time

As you're planning for your financial future, market volatility is probably top of mind – a major downturn could eliminate years of accumulated assets and derail your future plans. There's a solution that offers growth potential and principal protection, mitigating market volatility.

With a fixed-indexed annuity (FIA) from MassMutual Ascend Life Insurance Company, you can allocate money to an S&P 500® indexed strategy which provides earning potential limited by a cap or participation rate, and the security of knowing your account value will not decline due to market drops.

## Frequency Of S&P 500 Returns Since 1957

The S&P 500 Index, which is a common benchmark of the U.S. stock market, has experienced a wide range of positive and negative returns in the **67 years since its inception in 1957**. Let's take a closer look at how a fixed-indexed annuity would have fared when applied to calendar years of varying performance.



You can't predict market performance, but you can count on an FIA to protect your assets from the next market decline.

**Talk with your financial professional about how an FIA could fit into your overall retirement plan and help you reach your long-term financial goals.**

MassMutual Ascend is not an investment adviser and the information provided in this document is not investment advice. You should consult your investment professional for advice based on your personal circumstances and financial situation.

While past performance does not guarantee future results, with a fixed-indexed annuity, you can be certain that your money will be protected against loss if you hold your annuity through the early withdrawal charge period.

With a fixed-indexed annuity, money can be allocated to an indexed strategy for a specified period of time (term). Indexed interest is credited only on the last day of the term. The portion of a positive index change credited to the account value is limited by the cap or the participation rate we set for the term. The indexed interest rate for a term will never be lower than 0%, but we do not guarantee that amounts allocated to an indexed strategy will earn interest.

When you buy a fixed-indexed annuity, you own an insurance contract. You are not buying shares of any stock or investing in an index. All guarantees are backed by the claims-paying ability of the issuing insurance company.

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