Managed volatility: a disciplined approach to smoother returns

Key takeaways

- Increased market volatility presents new challenges for investors, as traditional asset allocation hasn’t provided adequate protection against losses during extreme market declines.
- A managed volatility approach, designed to maintain portfolio volatility within a target range, may help provide better risk-adjusted returns over a full market cycle.
- Incorporating a managed volatility approach within a diversified portfolio may also help preserve capital during critical phases of retirement and legacy planning.
- Managed volatility programs may hinder portfolio performance relative to the broader market during certain economic environments.

Executive summary

A well-constructed asset allocation strategy has historically helped reduce portfolio volatility and mitigate the risk of significant losses. However, the market volatility experienced since 2000 has shown that a sophisticated portfolio design investing across many asset classes doesn’t always provide the expected diversification benefits. In fact, the global financial crisis of 2008–2009 generated surprising levels of volatility and investment declines that exceeded the risk tolerances of many investors; investor concern has persisted throughout the market’s subsequent recovery. Dealing with this reality is challenging for many investors, who are often motivated by volatility to switch in and out of their investments, and their portfolios can underperform the broad markets as a result. One approach to address this challenge is to employ a managed volatility strategy that seeks to maintain portfolio volatility within a target range. Such a strategy seeks to reduce risk during extreme equity market declines but allows for some upside participation when markets rise, thereby increasing the potential for higher risk-adjusted returns.
The challenge of market volatility

Investors’ risk tolerances were severely tested during the global financial crisis of 2008–2009, a period characterized by a worsening of the global economic outlook, partly offset by government and central bank intervention to limit the risk of economic depression, and by initial signs that conditions would eventually improve. Extreme uncertainty over the global outlook pushed market volatility higher, as steep equity market losses over relatively brief periods were punctuated by partial and halting recoveries.

The global financial crisis also prompted many investors to question age-old assumptions about diversification. Traditional asset allocation wasn’t enough to prevent material losses in account values; a wide range of equity, alternative, and fixed-income asset classes posted steep losses.

Is volatility the new norm?

While such event-driven episodes of market volatility will come and go, many experts believe that heightened economic uncertainty and accompanying market volatility will be a recurring trend. Individuals, companies, and governments around the world are in a multi-year process of reducing debt built up over the past decade. This deleveraging process, while good for the long-term health of the markets, has made short-term economic activity and market returns less predictable. Low interest rates and high public debt levels give policymakers fewer tools to combat volatility. Indeed, as the U.S. Federal Reserve (Fed) looks to extract itself from the financial markets, volatility may actually rise with future Fed policy decisions. Meanwhile, the growing connections between global financial markets enable a market shock in one part of the world to easily ripple across the entire financial system. If these predictions are proved to be accurate, investors may have to contend with

Nowhere to hide

Total returns by asset class (2008)

Source: Morningstar Direct, 2018. It is not possible to invest directly in an index. Past performance does not guarantee future results.

A year of extreme volatility

Over the last 20 years, there were 6 days in which the difference between the intraday high and low of the S&P 500 Index exceeded 10%. All 6 days occurred in 2008.

Volatility regimes have varied in recent years


Source: Morningstar Direct, 2018. The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States. It is not possible to invest directly in an index. Standard deviation measures performance fluctuation—generally, the higher the standard deviation, the greater the expected volatility of returns. Past performance does not guarantee future results.

heightened volatility, either by accepting the steeper ups and downs in their portfolios or by considering strategies designed to improve risk-adjusted returns by reducing volatility without fully sacrificing upside potential.

The evidence of heightened volatility is abundant. There have been several periods of higher volatility during the past two decades—the most pronounced in 2008—using standard deviation of the S&P 500 Index to measure the magnitude of fluctuations in returns versus the index’s historical average standard deviation.

Day-to-day volatility has also become more pronounced. Looking over the past 40 years at the number of trading days when the returns of the S&P 500 Index fluctuated by 2% or more, it’s clear that wide swings in equity market volatility have increased over time.

High volatility trading days have also increased

Number of trading days in which the S&P 500 Index advanced or declined by more than 2%

Source: BlackRock Inc., Bloomberg, daily data from 1/1/1977 to 12/31/2017 for the S&P 500 Index. The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States. It is not possible to invest directly in an index.
Recovering from losses isn’t easy

Percentage gain needed to recover from a portfolio loss

The percentage gains required to recover from losses underscore the importance of moderating extreme downturns.

How volatility affects your investment account

A full understanding of the impact of market volatility requires grasping the realities of recovery math—a 50% decline in the value of an asset requires a subsequent 100% gain to recover to its former value. As a result, losses have a larger impact on long-term results than comparably sized gains. This effect became painfully clear to many investors as they tried to recover from the 57% price decline in the S&P 500 Index from its prefinancial crisis peak in October 2007 to its subsequent low in March 2009. Despite its strong gains during the recovery, the index didn’t return to its October 2007 level until March 2013, or four years after the market hit bottom, and more than five years after its prior peak. The market didn’t fully recover until after posting a 131% gain.

How volatility affects investor behavior

Many long-term investors respond to market volatility by switching among their investments. Behavioral economists have recorded this tendency for years and noted that many investors are inclined to sell investments after they have fallen—thereby locking in losses—and return to buy only after the markets have rallied, which may be too late to participate in gains. Fund researcher DALBAR, Inc. publishes an annual study that puts the average holding period for stock and bond mutual funds at little more than three years. Retention rates for asset allocation funds are more than a full year longer because the pattern of returns by those funds is less jarring. The result of all this buying and selling is that investors, on average, underperform broad market indexes, primarily because of behavioral considerations.

Switching in and out of funds has been harmful to investors

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<th>Average holding periods and returns, 1998–2017</th>
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A managed volatility approach

One way of controlling portfolio volatility while still participating in the market’s growth potential is to employ a managed volatility strategy, designed to maintain portfolio volatility within a target range. By keeping standard deviation within a target range, portfolio risk is reduced during extreme equity market declines and is increased during periods of lower market volatility.

Managed volatility strategies typically maintain a target range of risk by dynamically shifting the allocation of the portfolio between the underlying investments. For example, if portfolio volatility increases above the target range, the managed volatility strategy responds by reducing exposure to equity investments and increasing exposure to cash and cash equivalents. Alternatively, if the portfolio volatility decreases below the target range, exposure to equity investments will increase and exposure to cash will decrease.

This approach works well during periods when the market trends in either direction. However, managed volatility strategies tend to lag in choppy, sideways markets. A managed volatility overlay may also weigh down a portfolio’s relative performance during periods punctuated by bursts of erratic market gains or losses—that is, when the level of market volatility is itself unstable.

Reducing the extremes

Distribution of yearly S&P 500 Index returns (1928–2017)

Source: S&P Dow Jones Indices, 2018. It is not possible to invest directly in an index. Past performance does not guarantee future results.
**The benefits of a controlled volatility approach**

There are a number of potential benefits to the kind of lower volatility approach offered by a managed volatility strategy. The first is the comfort of potentially more consistent risk and returns: Providing a more predictable outcome should allow investors to remain invested during extreme market downturns. When investors choose not to participate in the markets as a result of market volatility, they’re arguably doing more damage to their long-term wealth creation than the market ever could.

The second potential benefit is that a smoother set of returns can significantly limit losses during extreme market downturns. The performance of the S&P 500 Index differs from a risk-controlled index, the S&P Daily Risk Control 15% Index, which limits its standard deviation of returns to 15% per annum. The managed volatility strategy strongly protected in the down market of 2008, and while the strategy lagged in the subsequent market rallies, it provided investors with comparable returns and much less risk over all the periods shown combined.

**Losing less matters more**

S&P Daily Risk Control 15% Index (limited to 15% volatility) versus S&P 500 Index (2000–2017)

Source: Standard & Poor’s, 2018. It is not possible to invest directly in an index. Performance figures assume reinvestment of dividends and capital gains. This chart is for illustrative purposes only and does not represent the performance of any John Hancock product. Past performance does not guarantee future results.
Achieving more consistent risk-adjusted returns is especially important for retirees who are withdrawing money from their accounts on a regular basis. By withdrawing from invested savings when the market is falling, retirees can accelerate the rate of depleting savings, which increases the risk of running out of money in retirement. A managed volatility strategy with downside protection can help moderate the damaging effects of making regular account withdrawals during declining markets.

**Managed volatility narrows expected return dispersion**

Long-term history suggests that a managed volatility approach can be a useful tool within an investor’s portfolio. The ability to reduce exposure to riskier assets, such as equities, and increase exposure to cash and cash equivalents during periods of high equity market volatility provides the opportunity to reduce volatility and limit portfolio losses. Conversely, the ability to increase exposure to riskier assets during periods of low volatility may continue to provide the opportunity for upside appreciation.

Managed volatility strategies aren’t without risk, and there’s no guarantee that managed volatility strategies will be successfully executed or that the desired results will be achieved. As we’ve seen, in a rising equity market, a portfolio using such an approach would likely underperform a similar portfolio not using it, particularly when the market gains are accompanied by high volatility.

However, compared with conventional diversified portfolios, managed volatility strategies have the potential to deliver strong relative risk-adjusted returns in periods of declining markets with high volatility. Limiting the volatility that investors experience can also help offset the natural inclination of investors to flee market volatility and park their assets in conservative investment vehicles that offer little chance for growth. With a managed volatility approach, the magnitude of account peaks and dips is diminished, potentially reducing the temptation to make poorly timed moves that can lock in losses or prevent future wealth creation.

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**As portfolios replace paychecks to meet living expenses, managed volatility may help preserve more capital in retirement**

Risk-controlled S&P Daily Risk Control 15% Index (limited to 15% volatility) versus S&P 500 Index (2000–2017)—factoring in $50,000 annual account withdrawals

Source: Standard & Poor’s, 2018. It is not possible to invest directly in an index. Performance figures assume reinvestment of dividends and capital gains. This chart is for illustrative purposes only and does not represent the performance of any John Hancock product. Withdrawals are deducted on a monthly basis to total $50,000 annually. Past performance does not guarantee future results.
The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States. It is not possible to invest directly in an index. Diversification does not guarantee a profit or eliminate the risk of a loss.

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