Strategy

FIDELITY INSIGHTS

Prudent Growth with Low-Volatility Equity Investing

Examining Some Underappreciated Benefits

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Prudent Growth with Low-Volatility Equity Investing

Examining Some Underappreciated Benefits

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KEY TAKEAWAYS

- In order to fund liabilities, achieve retirement goals, or meet other investment objectives, many investors need the capital appreciation that equities can provide, but are concerned about downside risk.
- Despite the empirical history of low-volatility equity investing, many investors mistakenly equate low downside risk with low returns.
- By providing exposure to the potentially higher returns of the equity market, and at the same time mitigating downside risk, low-volatility investing addresses a significant obstacle to equity allocations.
- Low-volatility equity portfolios are typically constructed using historical data and can lack forward-looking estimates of risk and return, which fundamental research can provide.

Investors obligated to meet certain liabilities and investment objectives face a conundrum. While equities can provide the potential for capital appreciation that these investors need to help them meet their obligations, equities can also introduce volatility and downside risks. This combination is prompting investors to consider adding equities through an allocation to low-volatility (low-vol) equity investing—a strategy whose benefits some investors may not fully appreciate.

For many decades, investor unease with equity risk has not been addressed by investing strategies that have been more focused on following market benchmarks than managing return volatility. More recently, heightened global economic uncertainty—along with very low yields in the fixed income markets—has increased investor attention to capital preservation. This, in turn, has highlighted the need for equity strategies that offer capital appreciation but also downside protection, to help manage equity risk via portfolio construction versus allocating to asset classes such as low-yielding bonds and/or cash equivalents.

In this paper, we demonstrate how managing portfolios that have lower volatility may enhance investment return potential, not diminish it. Moreover, its emphasis on capital preservation sets low-vol investing apart from other "smart beta" or "strategic beta" strategies that do not target downside protection.

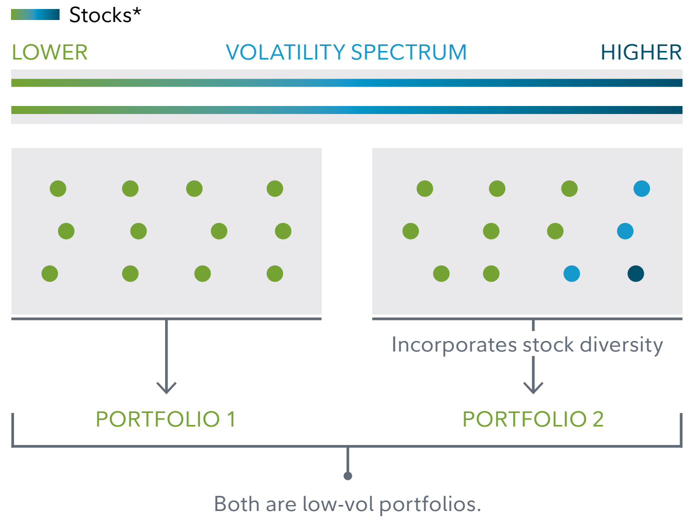
What are low-volatility equity strategies?

Simply stated, low-vol equity strategies represent fully invested stock portfolios that are managed to experience lower risk than common capitalization-weighted equity indexes such as the S&P 500® index or the MSCI World Index. Typically, these portfolios are constructed in one of two ways: (1) a portfolio with stocks that individually exhibit low volatility (e.g., the S&P 500 Low Volatility Index) or (2) a portfolio that exhibits low volatility in aggregate (e.g., the MSCI World Minimum Volatility Index). The second approach takes into account correlations among stocks to build a portfolio that exhibits lower volatility, not limiting the portfolio exclusively to low-vol stocks, which can lead to a more diverse and thus lower-risk portfolio (Exhibit 1).

Both approaches require a method of determining whether a stock or portfolio will exhibit low volatility on a forward basis—usually 60% to 80% of the capitalization-weighted market. Typical approaches use historical data and past performance and assume that the future will be similar to the past.

While historical information is valuable, the market's constantly changing dynamics warn that assuming the future will mirror the past is not always wise.

EXHIBIT 1: Approaches to low-vol portfolio construction.



* Stocks from the investment universe across the volatility spectrum. For illustrative purposes only.

Incorporating fundamental research may provide additional insights that enhance security selection and portfolio construction (see "Incorporating fundamental research in low-vol strategies" section, page 3).

Don't confuse low-volatility equity investing with high-dividend or value investing

Low-volatility equity investing is sometimes confused with other strategies in the marketplace. For example, some investors see low-vol investing as simply investing in the most defensive sectors—including utilities, communication services, and consumer staples. However, those sectors currently make up less than 40% of the S&P 500 Low Volatility Index and MSCI World Minimum Volatility Index. The benefits of low-vol investing extend beyond observed sector biases (see Fidelity article "Is low-vol equity investing just a sector play?").

Another common misconception is that low-vol investing equates to high-dividend investing, where the income from dividends contributes to stable total returns through time. However, a performance comparison between the MSCI World Minimum Volatility Index and the MSCI World High Dividend Yield Index since July 1994 shows that this is not the case (Exhibit 2).

While some high-yield strategies have offered slightly lower-than-market volatility and downside capture, the effects do not compare with the reductions in volatility and downside capture offered by low-volatility strategies (Exhibit 2). Worse, value strategies historically have offered almost no defensive benefits versus the broader market index.

EXHIBIT 2: High-dividend or value investing does not achieve materially lower volatility.

Comparison of minimum volatility and other investment indexes.

	MSCI World High Dividend Yield	MSCI World Value	MSCI World Minimum Volatility	MSCI World
Return (Annualized)	8.82%	6.65%	8.59%	7.44%
Volatility	14.40%	15.21%	10.79%	14.91%
Downside Capture	84.54%	99.25%	58.20%	100%

Returns from 7/1/94 through 6/30/20. Downside capture is calculated as the percentage of the geometric average return of the index above the MSCI World geometric average return when the benchmark has negative returns. For illustrative purposes only. Indexes are unmanaged. It is not possible to invest directly in an index. Past performance is no guarantee of future results. Source: Bloomberg Financial L.P., Fidelity Investments, as of 7/31/20.

Incorporating fundamental research in low-vol equity strategies

Typical low-volatility equity strategies base their risk assessment on historical data (i.e., investing in companies simply because they have been low risk in the past) or historically estimated risk models. Both of these approaches, given their focus on broad and backward-looking risk assessments, can struggle to identify the impact of stock-specific risks or adapt to novel risks.

Fundamental research adds the potential for in-depth forward-looking views, particularly on risk-return catalysts, which are most fluid in times of market stress. Low-vol strategies that incorporate both backward-looking and forward-looking (active fundamental) elements may yield better results than either approach on its own. Coupling a quantitative risk management framework with the depth and breadth of analysts' fundamental industry knowledge may lend diverse insights that enhance both the risk and the return characteristics of low-vol investing.

	Typical Approach	Fundamental Research Analysts' Approach
Stock Selection	• Style-based broad universe selection • Single overarching model	• Deep industry knowledge • Diverse investment themes from analysts
Risk Management	• Focused on standard deviation • The possibility of model errors in rare yet impactful events that elude historical testing	• Focused on downside risk • Adaptive responses to rare yet impactful events with custom analysis

Source: Fidelity Investments.

Additional analysis for the same period shows that the frequency of high-dividend-yield investors losing more than 15% in total returns was 36% higher than for minimum-volatility investors, on a rolling 12-month basis.

Moreover, low-vol equity investing is not value investing. Value investing is predicated on buying stocks that are "cheap" versus some fundamental metric (e.g., earnings). Because these stocks are cheap, some may assume they have limited downside. Because of these assumptions, it may be easy to confuse low-vol investing with value investing. In reality, stocks are sometimes cheap for a reason, such as increased competition or deteriorating fundamentals. As a result, value strategies tend not to provide desired defensive characteristics.

For example, during 2008, amid the global financial crisis, the MSCI World Value Index lost 40% while the MSCI World Minimum Volatility Index lost 29%. In the most recent market selloff related to the COVID-19 pandemic the returns in first quarter of 2020 were -21% and -15%, respectively. In fact, since June 1994, the MSCI World Minimum Volatility Index has had a downside capture much lower than that of either the MSCI World Value Index or the MSCI World High Dividend Yield Index, as we saw in Exhibit 2.

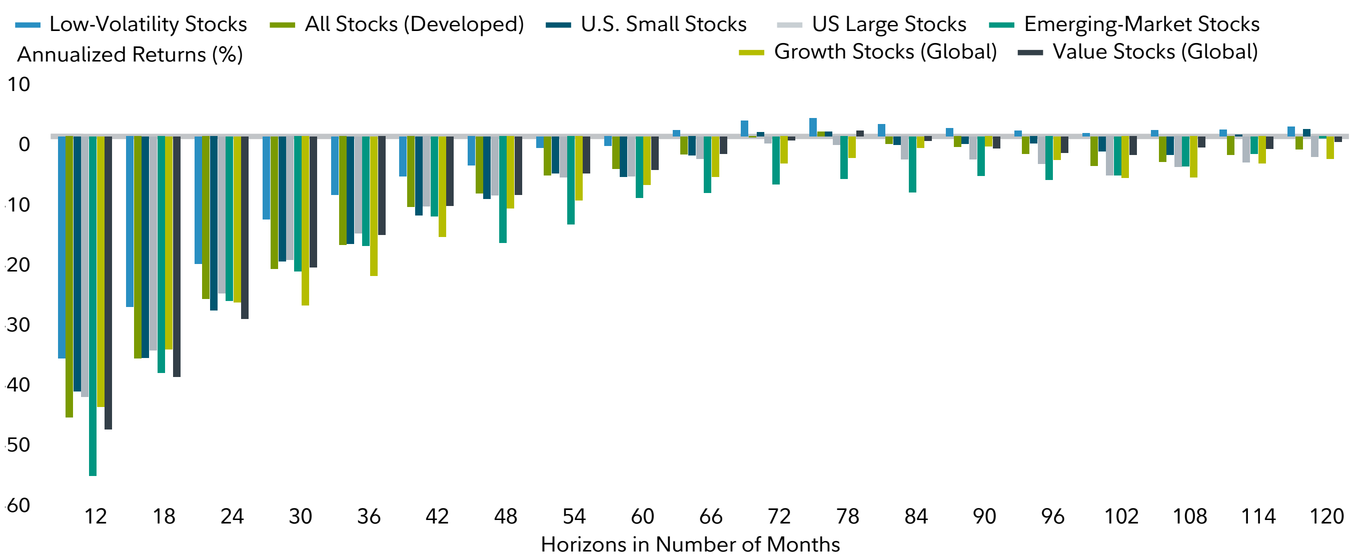
But while these are interesting examples, markets do not decline only during times of crisis: Markets broadly—and equity styles within them—can fall in and out of favor and experience negative returns over varying horizons. When we compared the worst periods of performance across various time periods—from 12 months to 120 months—for the global equity markets and equity styles (Exhibit 3), we can see that low-volatility equities (represented by the MSCI World Minimum Volatility Index) held up better than all of them. Interestingly, when looking at periods of 66 months or longer, low-volatility equities have not experienced a single stretch with a negative return.

Why invest in low-volatility equity strategies?

Many investors desire the capital-growth potential associated with equities. However, investors can be deterred by the possibility of significant capital losses and subsequent mathematical headwinds.

EXHIBIT 3: Historically, low-volatility stocks have held up better than traditional equity size and style segments.

Worst Absolute Performance Across Various Time Horizons



Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against loss. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Data from June 1988 through June 2020. Equity segments represented by: Low Volatility—MSCI World Minimum Volatility Index; All Stocks—MSCI World; U.S. Small Cap—Russell 2000 Index; U.S. Large Cap—S&P 500; Emerging Market—MSCI Emerging Markets Index; Growth (Global)—MSCI World Growth Index; Value (Global)—MSCI World Value Index. Source: Bloomberg L.P., MSCI, Fidelity Investments, as of 8/30/20.

For example, a 25% investment loss requires a follow-on gain of 33%—not just 25%—to get back to the original position. In fact, as the magnitude of loss increases, the return needed to recover increases even faster: A 50% loss demands a subsequent 100% gain for an investor to break even.

This highlights the key value proposition of low-volatility investing. For investors with future liabilities—such as those associated with pension funds or retirement income—less participation in down markets translates to more stable funding or solvency ratios. Many investors place a high value on investment strategies that help preserve and recover their funding status in the face of market downturns (Exhibit 4). This is because those periods tend to coincide with times of economic stress, when investors' ability to meet their obligations deteriorates.

EXHIBIT 4: Periods of market stress and subsequent recoveries.

	MSCI World Index	MSCI World Minimum Volatility Index
Internet Bubble Burst: March 31, 2000, to September 30, 2002 (Cumulative Returns)		
Total Return	–46.8%	–20.9%
# of Months to Recover Losses	40	15
Global Financial Crisis: October 31, 2007, to February 27, 2009 (Cumulative Returns)		
Total Return	–54.0%	–43.5%
# of Months to Recover Losses	55	41

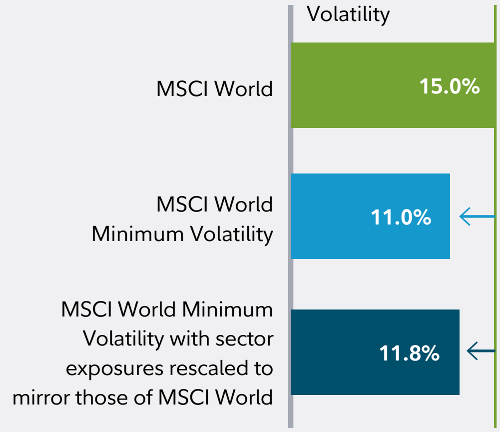
Source: Bloomberg, Fidelity Investments. For illustrative purposes only. Indexes are unmanaged. It is not possible to invest directly in an index. Past performance is no guarantee of future results. Source: Bloomberg Financial L.P., Fidelity Investments, as of 8/30/20.

Is low-volatility equity investing just a sector play?

A common misconception of low-vol equity strategies is that they amount to a sector play. By building portfolios that consider volatility instead of market capitalization, low-vol equity indexes tend to overweight defensive sectors relative to the parent index. However, our research suggests that low-vol investing can include meaningful stock selection contributions distinct from observed sector tilts.

We compared the annualized volatility of the MSCI World Index with that of the MSCI World Minimum Volatility Index, using data from 12/31/03 to 12/31/16.[1] The MSCI World Minimum Volatility Index is constrained relative to the parent index (MSCI World Index) along several factors, including minimum and maximum relative sector exposure weights. However, we went one step further and created a hypothetical, sector-neutral version of the MSCI World Minimum Volatility Index, with sector weights rescaled to mirror the sector weights of the parent index. As the results show, the sector-neutral, low-vol strategy showed substantial risk reduction, reducing volatility by approximately 3.2 percentage points, or 21% of the volatility of the market capitalization-weighted index. Because benefits appear to persist despite sector neutrality, low-vol investing may be more than a simple sector play.

A hypothetical low-volatility strategy, with index-weighted sector exposures, displayed meaningful risk-reduction benefits.



Returns analyzed: 12/31/03 through 12/31/16. Indexes are unmanaged. It is not possible to invest directly in an index. Past performance is no guarantee of future results. Source: MSCI, FactSet, Fidelity Investments, as of 12/31/16. For illustrative purposes only. Hypothetical data has inherent limitations due to the retroactive application of a model designed with the benefit of hindsight and may not reflect the effect that any material market or economic factors may have had on Fidelity's use of the model during the time periods shown. Hypothetical performance of the model is no guarantee of future results.

A capital preservation focus does not have to compromise return potential

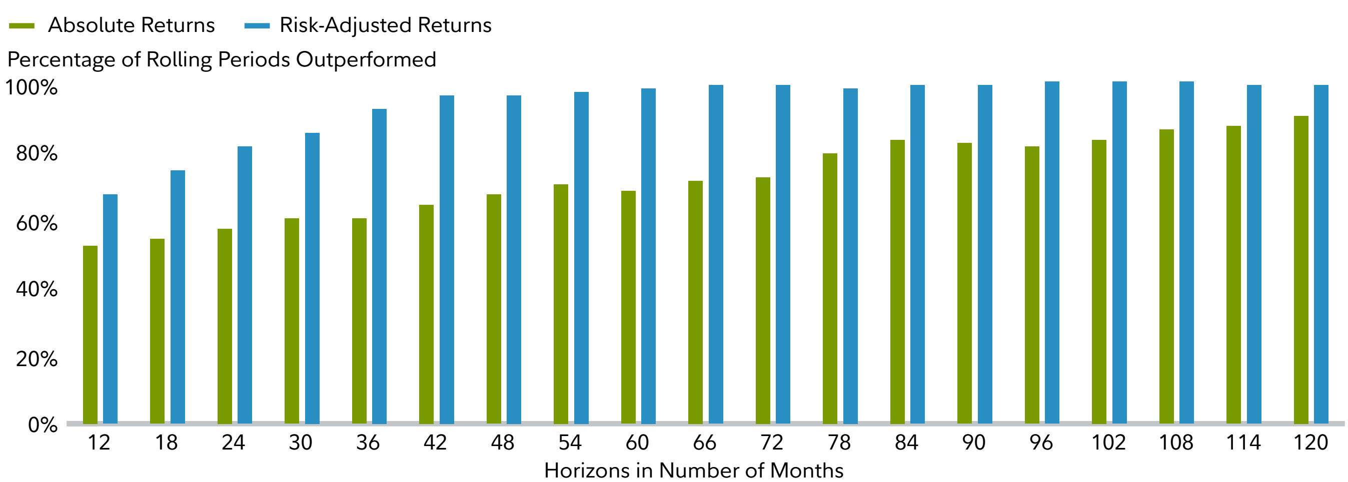
Investors often assume that low downside risk equates to lower returns, but this assumption is inconsistent with how low-volatility equities have performed versus the broader market over time. Our internal research suggests that over more than 80 years of U.S. financial history using "beta" as a simple measure of exposure to equity market volatility, lower-beta stocks have long been associated with dampened downside returns. Surprisingly, though, the lowest-beta decile of stocks has been associated with higher returns (roughly 16%, annualized, over the past 80 years or so) than the highest-beta decile of stocks (roughly 13%, annualized). The same empirical history also suggests that the lowest-beta stocks have generated the highest return per unit of risk.

As mentioned earlier, the importance of downside protection for a portfolio is often underappreciated, especially when combined with modest upside participation when markets rise. The MSCI World Minimum Volatility Index has realized about 70% upside participation when the MSCI World Index has risen, but low-vol has in the past been very effective in protecting capital when the market has fallen, realizing just 60% of the downside. This effective downside protection allows for the power of compounding to benefit long-term performance. In fact, since data became available for the MSCI World Minimum Volatility Index in 1988, the global equity market (measured by MSCI World) has risen by a decent 7.5% per year (annualized), notching gains 62% of the time on an average monthly basis. Meanwhile, the MSCI Minimum Volatility Index delivered an 8.6% annualized return, illustrating the power of downside protection.

This protection is not effective solely over very long time frames, it has proven effective across short- and medium-term investment horizons as well. Exhibit 5 shows the percentage of time the MSCI Minimum Volatility Index outperformed the MSCI World Index across various time horizons from 12 months to 120 months. As you can see, downside protection may offer solid opportunity to outperform the market; on a risk-adjusted basis, the benefits are even more evident. Looking at the five-year holding period, for example, low-volatility investors were better off 60% of the time in terms of absolute return, and better off nearly 100% of the time on a risk-adjusted basis.

EXHIBIT 5: A low-volatility strategy has potential to add above-benchmark value, especially in risk-adjusted terms.

Percentage of Time, over Various Horizons, that the MSCI World Minimum Volatility Index Led the MSCI World Index



Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against loss. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Data from June 1988 through March 2020. Source: MSCI, FactSet, Fidelity Investments, as of 6/30/20.

Although the economic reasons behind these empirical findings are complex and beyond the scope of this paper, they may to a large extent be associated with certain behavioral biases of investors. One such behavioral driver is “overconfidence bias,” wherein investors overestimate their abilities in stockpicking. This cognitive failing leads many investors to spend more time analyzing higher-volatility stocks, because making the right call on a risky stock can appear to generate greater profits. Many behavioral biases are cognitively ingrained and hence likely to persist, so once its benefits are seen and understood, low-volatility investing may remain attractive, given its return potential per unit of risk.

Using this insight, a wide variety of investors could benefit from this more risk-efficient construction of equity returns. Pension funds can "de-risk" without substantially reducing their equity exposure. Individuals near retirement who cannot tolerate market swings could carry larger equity allocations with relatively low volatility. Low-volatility investing can help risk-focused investors increase their potential for capital growth without having to allocate a greater proportion of their portfolio to low-yielding asset classes such as government bonds or cash.

Valuation is a poor indicator of low-volatility performance in down markets

Given the strong returns that low-volatility strategies have delivered over time, some investors are questioning whether low-vol valuations are too rich today to make them an attractive investment. In other words, some believe low-volatility strategies may not be positioned to provide the potential for capital appreciation and a downside buffer investors are seeking.

To test whether this was a valid concern, we measured the monthly relative valuation of the MSCI World Minimum Volatility Index versus MSCI World Index (based on price-earnings ratios) from month to month. The figures were then put into quintiles, the first quintile being expensive (MSCI World MSCI World Minimum Volatility Index valuation being higher than that of the MSCI World Index) and the fifth quintile being cheap.

From there, we looked at the average forward 12-month performance of the MSCI World Minimum Volatility Index versus the forward 12-month return of the MSCI World Index for each quintile. As expected, when the Minimum Volatility Index was cheap (fourth and fifth quintiles), it outperformed. The Min Vol Index also outperformed, however, when it ranked in the second and third quintiles—when valuations, on average, were higher—although it tended to underperform when valuations were the most stretched.

Even higher-valuation low-volatility stocks outperformed in down markets from June 1994 to June 2020.

Indexes are unmanaged. It is not possible to invest directly in an index. Past performance is no guarantee of future results. Source: MSCI, Fidelity Investments, as of 8/31/20.

We also looked at down markets, periods when investors would expect low-vol strategies to minimize a portfolio’s downside risk. Using the same valuation quintiles, we measured how the MSCI World Minimum Volatility Index performed when the MSCI World Index experienced negative returns. The graph above illustrates that valuation did not impede the benefits of low-vol investing—even in down markets. In fact, the quintile reflecting the most expensive valuations had the strongest performance, even in negative periods.

Conclusion

To meet future liabilities and income commitments, investors must grow their assets at a rate high enough to meet their obligations. While equity investing can be a strong option in such circumstances, many investors can be put off by the potential downside risk that large equity allocations can introduce. In these situations, low-volatility equity investing can present a compelling alternative—reducing downside risk potential while compromising little on long-term returns.

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Fidelity Thought Leadership Director David Risgin, CFA, provided editorial direction for this article.

Important Information

Endnote

[1] Annualized portfolio risk: Standard deviation of returns for a passive portfolio based on index constituents of named indexes, assuming no fees or transaction costs, and reinvestment of dividends. Returns from 12/31/03 through 12/31/16 analyzed. Index definitions below.

Index definitions

The S&P 500® index, a market capitalization-weighted index of common stocks, is a registered service mark of The McGraw-Hill Companies, Inc., and has been licensed for use by Fidelity Distributors Company LLC and its affiliates. **The S&P 500® Low Volatility Index** measures performance of the 100 least volatile stocks in the S&P® 500 index. **The MSCI World Index** is a free float-adjusted, market capitalization-weighted index designed to measure the equity market performance of developed markets. **The MSCI World Minimum Volatility Index** is calculated by optimizing the MSCI World Index for the lowest absolute risk, within a given set of constraints.