

The Low-Volatility Equity Opportunity

The Case for a Low-Volatility Equity Allocation

Equities and low risk are rarely mentioned in the same sentence. The often regular and extreme bouts of volatility have increased the questions raised about the risk/return profile of the asset class. Yet despite these concerns, we believe institutional investors still need equity as a key building block of their asset mix. We think low-volatility equities are a solution for those who cannot tolerate the volatility in traditional asset prices, but need the long-term capital appreciation that equity offers. If successfully implemented, evidence suggests you can achieve equity-market returns with a strong risk/return trade-off through low-volatility stocks. As we will demonstrate, a fully diversified portfolio of low-volatility stocks can have profound implications on an investor's portfolio structure and asset mix.

The Emergence of the “Low-Risk” Equity Opportunity

Low-volatility equity investing has gained increasing attention within the investment community over the last few years. Investors are finding that these strategies provide a timely opportunity to address both return and risk priorities. We think one of the most important equity risk priorities is reducing the investor’s loss of capital. This is the basis for a low-volatility portfolio. Put another way, by reducing “risk” we are seeking to smooth out some of the highs and lows of the roller coaster ride that can be equity investing. For low-volatility investors, absolute return measures of risk have supplanted benchmark-aware risk measures, such as tracking error or information ratio (see Exhibit 1 for definitions of these and other risk terms), which, as we will demonstrate later, contain inherent risks that we are seeking to minimize.

The Lazard Advantage team was an early advocate of a low-volatility equity approach and has been actively managing low-volatility assets for nearly a decade. The benefits of such an approach are just beginning to gain traction in the wider investment community, evidenced by an emerging group of “low risk” managers and the introduction of benchmark indices from several providers. Relative to traditional market capitalization benchmarks, these strategies seek to provide the benefit of reduced capital loss in declining markets and participation in rising markets. Total returns may be similar over the longer term, but with a potentially steadier and more predictable return pattern.

With the advent of low-volatility indices, it is now easier to observe the ability of a low-volatility strategy to meet its objectives. Low-volatility strategies have performed in both favorable and unfavorable market environments, including those characterized by both increasing and decreasing volatility. Returns have matched those of market capitalization indices with a significant discount in overall volatility.

Exhibit 1 Defining Risk

Equity Risk	The chance of losing capital from your equity investments
Risk Premium	Anticipated reward for risk
Equity Volatility	The rate at which equity prices move up or down; measured as the standard deviation of equity returns
Sharpe Ratio	Ratio of returns to volatility (i.e., risk-adjusted return)
Tracking Error	Variability of returns versus a benchmark
Information Ratio	Excess returns versus tracking error

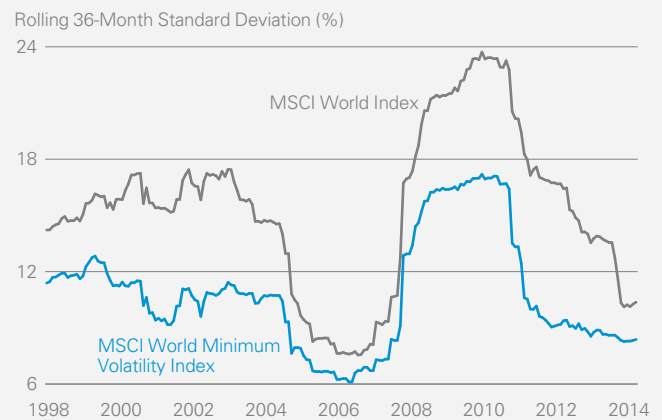
We believe that the implications for investors are only just now being fully realized. From the corporate treasurer seeking to de-risk their pension plan, to the individual investor looking to attain the best risk-adjusted equity return, to a non-profit seeking to diversify their equity portfolio, low-volatility investing can offer a possible solution. By focusing on the tradeoff between absolute return and risk, low-volatility investing allows for better and more efficient risk budgeting and a potentially significant improved tradeoff in terms of risk/return to the overall portfolio.

More importantly, we believe low-volatility equity investing may be a solution because of the attractive characteristics it can provide. Focusing on an investor’s ultimate return objective, as opposed to a market cap equity benchmark, can remove inefficiencies and offers a potentially significant risk/return benefit to an investor’s overall portfolio.

Facts, Not Perceptions, about Equity Returns and Risk

Our research on global equity markets clearly shows that investment in low-volatility equities can provide a persistent discount in risk (Exhibit 2). In addition, equity investors may not have to sacrifice return to employ a lower volatility strategy. The benchmark MSCI World Index, for example, offers a similar return for higher risk than the MSCI World Minimum Volatility Index (Exhibit 3). Employing global value and global growth managers to diversify may not always be effective. These managers may have similar risk profiles, and while style matters in terms of generating a diversified pattern of returns, it does not change the long-term risk profile.

Exhibit 2 Consistent Risk Reduction



As of 31 December 2014

The indices listed above are unmanaged and have no fees. It is not possible to invest directly in an index. This data is for illustrative purposes only and does not represent past performance of any strategy managed by Lazard. Past performance is not a reliable indicator of future results.

Source: MSCI, Lazard

Exhibit 3 Low Volatility Can Deliver Return While Reducing Risk

Annualized Risk and Return for 10 Years Ended December 2014



As of 31 December 2014

The indices listed above are unmanaged and have no fees. It is not possible to invest directly in an index. Reporting currency: US dollars. Monthly data. Past performance is not a reliable indicator of future performance.

Source: Lazard, MSCI

Diversify Away from Market Capitalization Benchmarks

Market capitalization-weighted benchmarks (such as the MSCI World Index or FTSE All Share Index) remain useful benchmarks for investors. Equity investors using market capitalization benchmarks as default exposures benefit from the low trading costs and excellent liquidity that this approach typically offers. We, however, believe that it should not be an investor's sole equity building block in today's environment.

The cost to investors of market capitalization benchmarks is often greater exposure to what can be the riskiest components of the market. Capitalization weights are simply an aggregation of the consensus views in the market. A quick survey of major recent market

declines illustrates how the greatest concentration of exposure has the potential to occur at exactly the wrong time. Exhibit 4 demonstrates the dramatic changes that occurred in market cap-weighted indices following four major events, Japan's Lost Decade (1989–2001), the TMT (technology, media, telecommunications) Bubble (2000–2002), the Global Financial Crisis (2006–2009), and the commodity bubble (2010–2013).

These bubbles occur as investors overreact to the perceived new area of opportunity. Such overreaction adds to volatility as the opportunity set is bid up well beyond a reasonable level. Inevitably a catalyst will trigger a sudden and painful correction which is fully borne by the capitalization-weighted investor.

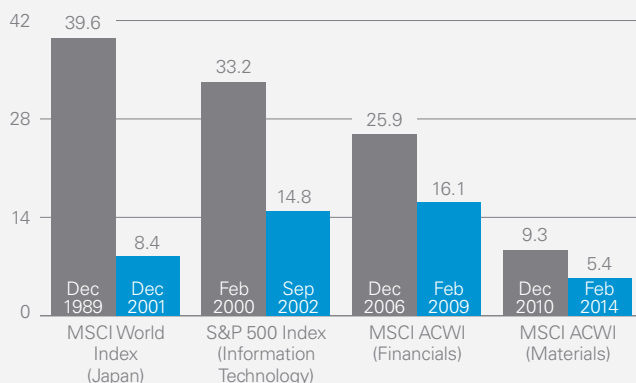
The investment industry has reacted with a series of new products, including smart beta indices which are intended to help investors mitigate some of the risks implicit with a market capitalization approach. Over the past ten years, low volatility investments are the lead source of consistent, meaningful risk reduction (Exhibit 3). While alternative weighting methodologies measured by the indices can diversify the return pattern from traditional market capitalization indices, a low-volatility strategy may provide further diversification as well as risk reduction beyond other weighting approaches.

Improving Asset Allocation Flexibility

Research by Lazard and others shows that including low-volatility equity as an asset class creates a significant opportunity for investors to better position themselves with a risk/return profile that supports the investor's return objectives. Low volatility's fit for an investor can be assessed by examining the potential impact within strategic asset allocation reviews and by focusing on asset/liability risk. Considering low volatility as an independent asset class allows return and risk preferences to be incorporated and supports asset mix decisions that reflect the investor's specific needs.

Exhibit 4 Market Cap Bubbles

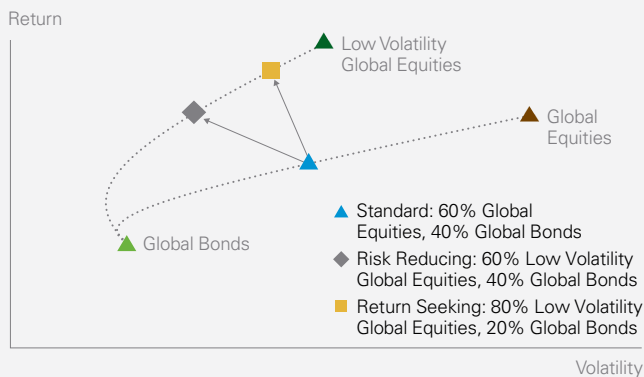
(Noted country's/sector's weight in index shown; %)



Source: MSCI, Standard & Poor's

To focus on a comparison of low-volatility equity to market-capitalization equity, we assessed the two equity alternatives versus an allocation to fixed income (Exhibit 5). An allocation of 40% global fixed income (Barclays Capital Global Aggregate Bond Index) and 60% market cap-weighted global equities (MSCI ACWI Standard Large+Mid Cap) earned a long-term return of 5.5% annualized over the 10-year period through 31 March 2015, with volatility of 10.2% for a return/risk ratio of 0.54. An investor who maintained equity exposure at 60% and used low-volatility equities (MSCI ACWI Minimum Volatility Index) to decrease risk would have increased the return/risk ratio to 0.94. If the portfolio's risk level was already appropriate for the investor, then replacing market cap-weighted equities with low-volatility equities would have resulted in an increase of 1.1% in average annualized return.

Exhibit 5
Flexibility for Asset Allocators and Portfolio Constructors



For the period April 2005 to April 2015

Not intended to represent any product or strategy managed or offered by Lazard. "Standard," "Risk Reducing," and "Return Seeking" are synthetic, hypothetical portfolios, used for illustrative purposes only. The indices listed herein are unmanaged and have no fees. It is not possible to invest directly in an index.

All data in USD. Low Volatility Global Equities = MSCI ACWI Minimum Volatility Index Net; Global Equities = MSCI ACWI Net; Global Bonds = Barclays Capital Global Aggregate Bond Index

Source: MSCI, Barclays, Bloomberg

Reducing Risk in an Asset Allocation Framework

Equity risk can be defined at several levels depending on perspective and responsibility. For most investors de-risking will focus on asset/liability risk, equity structure risk, and implementation risk. Some investors may also include complexity risk in this analysis. We define liabilities as not only future pension payments, but the responsibility to support an institution/mission or the personal lifestyle of families and individuals.

Asset/liability risk can be measured by the degree and certainty by which today's assets are projected to meet tomorrow's liabilities. Managing this risk typically requires returns above inflation, as well as a preference for contribution consistency. From the perspective of equities, the most straight-forward approach to managing asset/liability risk is capturing the equity risk premium that stocks have historically earned while minimizing the total volatility of these returns. Essentially you are seeking to minimize "funding ratio volatility" while also seeking to maximize the total return and reduce concerns about the overall "funding level" of your plan.

Within the context of equities these risks are impacted by the allocation to each asset class, the equity program structure, and its implementation. The classic trade-off is between increasing equity exposure to boost returns versus increasing the allocation to diversifying asset classes to increase the predictability of the total return. More recently investors have considered decreasing implementation risk by shifting from active to passive management. Equity structure and implementation risk will vary as allocations to active management and strategy types change. Examples of historical shifts include an increase in global equities, as well as the addition of small cap and emerging markets.

De-risking conversations typically start with a debate over active or passive and then proceed to asset allocation and implementation considerations. Low-volatility equity is a relatively recent addition to the de-risking "toolkit," but we believe it offers an attractive alternative. Exhibit 6 summarizes a potential set of alternatives considered when de-risking equities.

Exhibit 6
Comparison of Equity De-risking Alternatives

Strategy Change	Funding Ratio Volatility ^a	Funding Level Uncertainty ^b	Implementation Risk ^c	Complexity Risk ^d
Convert from active to passive	No change	Uncertain	▼ Decreases	▼ Decreases
Increase non-equity allocations	▼ Decreases	▲ Increases	No change	No change
Increase exposure to alternative equity asset classes	▼ Decreases	▼ Decreases	▲ Increases	▲ Increases
Add low volatility equity	▼ Decreases	No change	No change	No change

For illustrative purposes only.

a Funding ratio volatility represents the fluctuations in a pension or annuity's assets versus its liabilities.

b Funding level uncertainty refers to whether a plan—such as a pension—will have enough funds or generate enough returns to meet its liabilities.

c Implementation risk is the potential that a chosen approach won't be executed in full or properly.

d Complexity risk occurs when unknown, dangerous vulnerabilities are concealed within products, process, technology, organizational structure, legal contracts, etc.

One of the goals of hedge funds, private equity, and other alternative asset classes is to generate returns that are higher than equities with risk (as defined by standard deviation) that is lower, resulting in decreases in funding ratio volatility and funding level uncertainty. These unique return streams achieve their risk/return objectives primarily through individual active managers and this is one of the reasons why it is substantially more challenging to realize consistent return objectives in alternative assets when compared to other asset classes. Higher implementation risk (i.e., the likelihood of choosing the wrong manager) is evidenced by the wide range of returns reported by investors. For example, annualized 10-year private equity returns varied between 3.9% and 16.1% for a group of 19 state pension systems.¹

Another consideration is that complexity risk increases sharply as a function of the range and nature of strategies, liquidity, capital calls, and transparency in the strategy's holdings and pricing. By comparison, low-volatility equity portfolios hold only stocks, are fully invested, and provide the same transparency and liquidity as other public equity portfolios. Allocations to low-volatility equity have the potential to decrease funding ratio volatility but are not expected to noticeably impact funding level uncertainty, implementation risk, or complexity risk.

How Should Low-Volatility Equity Investing Work in Practice?

Creating low-volatility portfolios is not as simple as just allocating to low-risk stocks. We believe investors stand to benefit from focusing on strategies that seek to diversify risks along different risk dimensions, neutralize currency volatility, minimize trading costs, and seek to improve returns through stock selection. Successful long-term low-risk equity managers seek to deliver low-risk benefits without taking on additional sources of style, sector, or market-cap risk within their portfolios.

It is our view that a systematic approach is the best starting point to construct a low-volatility equity portfolio. A systematic approach can have an explicit focus on risk reduction and deliberately target “low-risk” stocks.

We also find that stocks should be chosen for a low-volatility portfolio based upon a combination of fundamental attractiveness and perceived risk-reducing properties. A singular focus on volatility will provide risk-reducing properties but may not deliver the long-term return pattern expected from the asset class.

The Future of Low-Volatility Equity Investing

What started as an academic curiosity 40 years ago has evolved over the last decade into a recognized opportunity as investors, managers, and index providers have worked together to better understand and illustrate this asset class's potential. A natural question is what impact this increased investor interest will have on the asset class. At some point a substantial portion of investor assets might migrate from current investor practices to a disciplined preference for low-volatility equities. A conceivable result is that risk differences within the total market will decline, thus reducing the opportunity for low-volatility approaches to capture risk discounts relative to the market.

Yet we don't believe this opportunity is likely to be reduced by a substantive degree in the foreseeable future. Given that the benefit of low-volatility investing is mainly a risk-driven one, it does not lend itself to the type of investors that typically arbitrage return opportunities. The natural investor in low-volatility equities is a long-term investor who is managing risk relative to a liability or predicted payment stream. These investors typically benefit by avoiding inefficiencies created by market-cap indices and by aligning equity investment strategies with strategic objectives. In doing so they invest in portfolios with the transparency and liquidity offered by equities, resulting in a reduction in the requirement for risk management resources and increased confidence regarding the availability of funds.

We think the low-volatility opportunity is here to stay and will only rise further in prominence. The current uncertain global macroeconomic environment is only adding urgency to the opportunity. As we have demonstrated, the risk/return payoff is compelling and offers crucial volatility discounts. We believe strategies that seek to diversify risks along different risk dimensions, neutralize currency volatility, minimize trading costs, and seek to improve returns through stock selection should prove successful.

The Lazard Advantage team manages a range of low-risk global equity strategies that seek to capture market returns while benefiting from substantially lower overall total risk.

About the Authors

The Lazard Advantage Equity team is a long-standing team with deep investment experience. Our strategies utilize a team-driven investment approach. The team joined Lazard in 2007 and manages a successful range of benchmark-aware global and regional quantitative equity products and low-risk global equity strategies. Prior to joining Lazard, the team developed a global, low-volatility equity strategy in 2006, and managed assets in the strategy beginning in 2007. In order to meet investor demand, we introduced the concept of a multi-strategy platform that could be tailored to the needs and specific preferences of investors. The Global Managed Volatility strategy was launched in January 2009 and the Global Passive and Global Controlled Volatility strategies were developed and launched in the middle of 2009 to supplement the offerings of the Managed Equity Risk platform.

Notes

1 Source: Local government pensions in England, Audit Commission 2010, Lazard.

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Published on 12 June 2015.

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