Investment Spotlight is designed to help trustees of mid-sized pension schemes understand key investment areas that impact their scheme. This issue focuses on low volatility equities. This is a portfolio of equities that targets a return comparable to a standard market capitalisation weighted index, but with lower volatility.

What are low volatility equities?
Low volatility equities refers to a strategy whereby a portfolio of stocks is determined with the specific aim of delivering returns comparable to a standard market capitalisation weighted index, but with lower volatility of investment returns (as measured by standard deviation and also referred to simply as “risk”).

Why invest in low volatility equities?
The pressure to meet funding objectives is becoming increasingly challenging. Without tools to manage volatility this objective can be extremely difficult to achieve. Consequently, due to the increased level of market volatility in recent times, many institutional investors, including pension schemes, have been considering risk reducing strategies that have the potential of delivering lower volatility and protecting capital to some extent. The financial crisis of 2008, in particular, has driven the recent surge of interest in low volatility equity strategies as investors look for more efficient means of implementing their equity allocations.
**Apparent Anomaly**

Conventional wisdom suggests that by taking on more risk you have the potential to obtain greater rewards in the long run. However, historical data does not appear to provide any evidence demonstrating that this phenomenon has been borne out in the broad equity market.

Over the last 40 years, numerous academic studies have documented the fact that low volatility portfolios appear to have outperformed high volatility portfolios over the long term across most geographic regions.

Figure 1 shows stocks split by geographical region (and all over the world). Stocks with the highest volatility (labelled 9 and 10) have underperformed the broad market. However, there is little to differentiate between the return achieved on those stocks with lower volatility (such as those labelled 1 and 2). Investors, therefore, effectively appear to ‘overpay’ when purchasing higher volatile stocks. The discovery that volatility is not directly proportional to returns is termed the ‘low volatility equity anomaly’.

The investment manager universe includes managers who explicitly target such an approach by investing in ‘high quality’ stocks. As a result, one of the by-products of their approach is lower volatility.

**Why does the low volatility anomaly exist?**

Many academic studies have proposed that the excess return generated by low volatility portfolios may be primarily driven by persistent behavioural effects, causing market inefficiency. One of the key arguments for low volatility equities is set out below.

Investors underestimate the reduction in the compounded return due to volatility. A low volatility portfolio will typically lose less during falling markets, i.e., preserving capital to some extent. Such a portfolio is then better positioned for rising markets – as it has to recoup less than a more volatile portfolio that has lost more value in a falling market. The compounding effect of this volatility drag over several market cycles may then lead the low volatility portfolio to outperform the market capitalised weighted portfolio.

The volatility drag effect is demonstrated in Figure 2 using hypothetical data. The low volatility stock ‘A’ returns 5% on even days and -5% on odd days; the high volatility stock B returns 10% on even days and -10% on odd days. The effect is such that the negative days outweigh the positive days with the compound effect being greater for the high volatility stock.
Portfolio Characteristics

Some of the main features associated with a low volatility portfolio can be summarised as:

- Lower absolute volatility (but potentially significant deviation or “tracking-error” compared with a standard market capitalisation weighted index)

- Portfolios are ‘long-only’, i.e., the investor owns the stock and will profit if its price goes up (and therefore lose if its price goes down). Some funds will have absolute return or volatility targets as their primary focus

- A mix of stocks that tends to be focused on consumer staples - utilities and health care, i.e., stocks that typically have a more predictable earnings stream and are, therefore, considered “defensive” because they tend to fall less in difficult markets

Advantages

Returns

Figure 3 illustrates the total returns achieved by three leading low volatility managers (A, B, and C) compared to the index known as the Morgan Stanley Capital International World Minimum Volatility (MSCI World MV - grey line) and the MSCI World (sky blue line) index over the period from 31 December 2006 to 31 December 2012.

Low volatility funds tend to capture significantly more of the broad market upside and less of the downside over the long-term, with lower absolute “drawdowns”. In other words, when market conditions are difficult and prices are falling, the “peak to trough” amount lost by such funds tends to be less than their more volatile counterparts – exploiting the compounding effect of lower volatility return streams as shown above.

Disproportionate Returns

On average, the magnitude of outperformance of low volatility funds in falling markets is expected to be greater than the magnitude of underperformance in rising markets. This disproportionate return profile has helped low volatility funds outperform over multiple market cycles. This can clearly be seen in Figure 3 during periods of severe market stress, such as late 2008/early 2009 and August/September 2011 (as highlighted by the blue circles).

Reduced Volatility

Consistently lower absolute volatility and, therefore, improved returns (as represented by the grey line MSCI World MV) after allowing for the level of risk undertaken, can be achieved when compared to a standard index (as represented by the sky blue MSCI World line). The magnitude of this difference will, however, vary over time, as shown in Figure 4.

Favourable Relationship Profile

Low volatility portfolios appear to exhibit a closer relationship with gilts than traditional equity market indices. As such, they can provide some protection against a decrease in a pension scheme’s funding level from gilt yields falling (and, therefore, the value placed on the liabilities rising).
Disadvantages
Underperformance In Rising Markets
An inherent characteristic of low volatility stocks is that the magnitude of performance (both negative and positive) will tend to be smaller than higher volatility stocks and so a low volatility portfolio will be expected to lag a rising market. For this reason it is important to take a long-term view when making an allocation to low volatility equities.

Past Performance Is Not a Guide to Future Return Potential
The relatively poor performance of equity markets generally, together with several periods of significant market volatility over the last decade, has been conducive to a low volatility approach outperforming traditional equities. Caution should be taken as to the weight attributed to the recent past as a guide to the future.

Increasing Appetite Runs the Risk of Overcrowding
A conceivable result of significant cash inflows into low volatility equity strategies is that the benefits of the approach will reduce as the low volatility equity anomaly is diluted through the re-pricing of low volatility stocks.

Implementation Considerations
Low volatility equity strategies can be used to either: reduce the overall risk of an equity portfolio with no corresponding decrease in expected returns; increase expected returns for the same level of risk when used in conjunction with higher return generating strategies; or a combination thereof.

Due to the expected lower level of risk, a low volatility equity strategy has the potential for use in de-risking programmes.

Given that outperformance is realised through compounding returns over several market cycles, it is essential that a long-term perspective be taken when making an allocation to a low volatility equity strategy.

About Us
Buck Consultants at Xerox is a leading advisor to mid-sized pension schemes across Europe and North America. We have been providing impartial, trusted advice free from conflicts of interest since 1975 and have a wealth of experience. Our innovative approach to asset allocation is supported by extensive manager research undertaken on a global platform.

Contact Us
For further information and advice please contact your investment consultant or a member of Buck Consultants at Xerox investment team:

160 Queen Victoria Street
London
EC4V 4AN
Tel: +44 (0)20 7429 1000
hrcconsultinguk@xerox.com
www.xerox.co.uk/HRConsulting

Advisory note
Past investment performance is no indicator of future performance. The sterling value of overseas assets in a fund may rise and fall as a result of exchange rate fluctuations. The value of investments and the income from them may fall as well as rise and will be affected by changes in financial conditions. The views expressed in this document are general and not specific to your circumstances.

Authorised and regulated by the Financial Conduct Authority.
Registered in England no. 1034719
Registered office: 160 Queen Victoria Street, London EC4V 4AN.

©2014 Xerox Corporation and Buck Consultants, LLC. All rights reserved. Xerox® and Xerox and Design® are registered trademarks of Xerox Corporation in the United States and/or other countries. Buck Consultants® is a registered trademark of Buck Consultants, LLC. in the United States and/or other countries. BR10464