Risk is not rewarded with higher returns in the equity markets

By Brian Kirk, Portfolio Manager – Jyske Capital

Factor investment - investment in equities with specific characteristics proven to produce long-term excess return - has since the global financial crisis in 2007 attracted increasing interest among investors. At the same time, significant growth has occurred in new more or less exotic factors driven by big data and increased computing power. However, academic literature has found only a handful of factors that are reliable and applicable. One of these is low volatility.

Boring shares with low growth expectations and high dividends

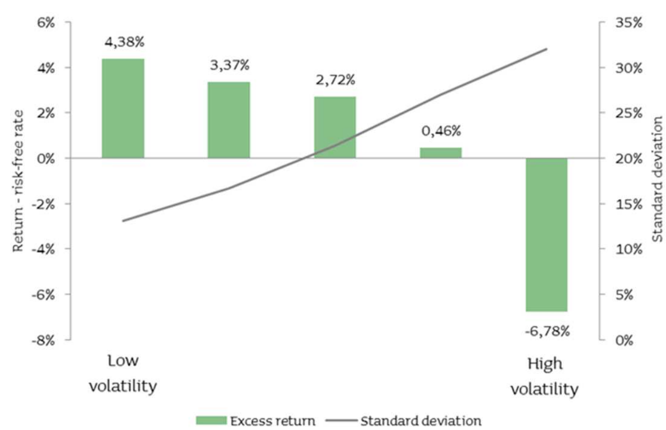
Low volatility investment is about investing in equities that have low volatility - small fluctuations in equity prices measured by e.g. the historical standard deviation over a given period. This type of equities has a number of common characteristics. They are typically regarded as a bit boring with low growth expectations, high dividends and high returns on equity. At the same time, they often have limited analyst and investor focus compared to equities with high volatility. Examples of equities which have historically experienced small fluctuations in equity prices are the Swiss food company Nestlé and the American healthcare giant Johnson & Johnson.

Low risk does not equal low returns

According to classical portfolio theory, there should be a positive correlation between risk and return - the higher the risk, the higher the expected return. This has been shown to apply across asset classes, i.e. equities involve a higher risk than bonds, and in the long run investors are rewarded with a higher return by investing in equities. However, within equities, this intuitive correlation between risk and return has not been proven by historical returns. Already in the early 1970s, when the recognized Capital Asset Pricing Model (CAPM) was first tested on the US equity market, it became apparent that the risk-adjusted return on low-risk equities was higher than the predictions of the theory.

In recent decades, several studies have proven that investors have not been rewarded for risk with higher long-term returns. The graph below shows a study of US equities from 1968 to 2008 with the equities divided into five different groups based on historical volatility. By investing in equities with the lowest volatility, the investor has in this period achieved an annual excess return of 4.38% above the risk-free rate. If the investor had instead bought the equities with the highest volatility, an excess return of -6.78% had been achieved. It is also interesting that the risk - measured by the standard deviation - has been lowest for the least volatile equities. In other words, there exists a low volatility anomaly - a deviation from the norm - where equities with low volatility have realized a higher risk-adjusted return than can be explained by classical theories.

Excess returns for US equities for the period 1968-2008 based on volatility groups



Note: Calculated as geometric returns based on historical volatility over the last 60 months and for an equally weighed volatility quintile with monthly rebalancing.

Source: Based on data from "Benchmarks as Limits to Arbitrage: Understanding the Low Volatility Anomaly" by Malcolm Baker, Brendan Bradley and Jeffrey Wurgler, Financial Analysts Journal, Vol. 67, No.1, January / February 2011

Investors are attracted to equities with lottery-like characteristics

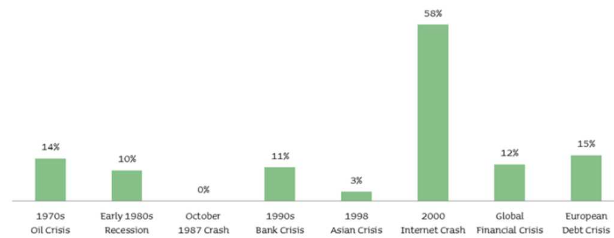
The explanation that this anomaly or phenomenon exists is found in the study of human psychology and behaviour. The CAPM model is a theoretical construction that does not take into account the illogical and irrational behaviour of humans. In the CAPM world - where there is a linear correlation between risk and return - no one will buy a lottery ticket, as the average expected return on investment is negative. But buying a lottery ticket and going to the casino are activities that people are not only very comfortable with, but in many situations actively seek. This human behaviour is driven by the fact that a limited downside loss can be tolerated - especially if it is linked to the possibility of a huge gain.

This human behavior is also applicable in the equity market with investors seeking big gains. We want to get rich quickly in the same way as we buy a lottery ticket and play at the casino. We are looking for equities whose value can increase tenfold - the next Amazon or Facebook. Investors therefore tend to favor equities with a lottery-like profile and large price fluctuations, while companies with a more stable cash flow and low share price volatility do not have the same attractiveness. The consequence is that investors are willing to pay more for risky equities, just as many people play the lottery even though they know that the odds are against them. When equities with such a profile are in high demand by investors, their prices are bid up, and they consequently underperform. The fact that the low volatility anomaly are founded on a variety of behavioral reasons strengthens our belief that it will also exist in the future.

Better protection of wealth in down markets

Major corrections in the equity market do occur from time to time - and more often than many investors believe. Since 1950 there have been 10 cases with a 20% decrease or more in the US equity market measured by the S&P500. It is therefore interesting that the investor typically gets a better protection of wealth in down markets by investing in a portfolio of equities with low volatility compared to investing in the general equity market. Low volatility equities have performed better than the global equity market in virtually all major crises over the last decades - from the oil crisis in the 1970s to the global financial crisis in 2008. During the global financial crisis the global equity market fell by 46% while equities with the lowest volatility "only" decreased by 33%.

Excess returns for the 20% least volatile global equities in selected periods of crisis



MSCI World:	-40%	-17%	-20%	-24%	-12%	-46%	-46%	-4%
Low Volatility:	-26%	-6%	-20%	-13%	-9%	11%	-33%	11%

Note: Return is for a market-weighted MSCI World Index, hedged in USD, and for the lowest quintile based on two-year historical volatility. Numbers may not sum due to rounding. The crisis periods are March 1973-September 1974, April 1981-July 1982, September 1987-November 1987, January 1990-September 1990, July 1998-September 1998, April 2000-September 2002, July 2008-February 2009 and May 2010-September 2011.
Source: Jyske Capital

Important component in a well-diversified portfolio

Since low volatility equities act differently than other asset classes in terms of return, risk and, not least, diversification, a portfolio of low volatility equities has attractive features in relation to the investor's total portfolio. Viewed from this perspective, most investors who seek a well-diversified portfolio of assets should have long-term exposure to low volatility equities. In addition, we have had one of the longest upturns in equity markets in recent times. Measured by S&P500, the recovery since March 2009 has had a duration of 107 months and yielded more than 300% in return while the average recovery has lasted 60 months and yielded a return of 176%. Investors who are nervous about the equity market as a whole and do not want to increase exposure to bonds with the prospect of rising interest rates should therefore consider investing in low volatility equities due to better protection of wealth in down markets.

Crowded place?

The search for yields and the historically low interest rates have led to a sharp increase in the allocation to low volatility equities in recent years - both actively managed strategies and ETFs. Two of the largest EFTs - iShares MSCI Min Vol USA and Powershares S&P500 Low Volatility - have assets under management (AUM) of more than USD 21 billion. This has meant that equities with low volatility have become more expensive. Currently, a minimum volatility index (MSCI AC World Minimum Volatility) is trading at a P/E of 17.6 versus 14.9 for a global equity index (MSCI AC World).

There is therefore a risk that the investor will overpay for low volatility equities, which may, in the worst case, affect the expected return negatively.

Some strategies, including the so-called minimum volatility strategies, are pure mathematical solutions where the portfolio's volatility is reduced to a minimum based on the correlations of the different equities. The risk of such strategies is that the historical correlations can suddenly change. This is, among other things, the reason why Jyske Capital combines quantitative and fundamental analysis. In addition to the requirement of a certain degree of share price stability, we attach great emphasis to the companies having a high fundamental quality – i.e. a high return on invested capital, limited debt and stability in revenue, earnings and cash flow. At the same time, we pay a lot of attention to the valuation of the companies in order to avoid overpaying in a situation where the universe of low volatility equities has become more expensive.

None of the information in this document should be regarded as investment advice. Investors are advised to contact a personal advisor with respect to investment, tax issues, etc. before buying and selling. Past performance is not a reliable indicator of future performance and price development. Performance and/or price development may be negative.

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