## It is better to lag a bull market than a bear market

Unless it is a market capitalisation tracker fund that perfectly matches the major indices, any portfolio will lead or lag the returns of the index it relates to. One way to quantify this difference is a measure called beta which is an expression that quantifies the volatility of the portfolio relative to a benchmark. A figure of one means it has the same volatility as the index, less than one it has lower volatility and a figure greater than one shows that it is more volatile. In other words, a portfolio that has a beta higher than one can be expected to rise more in bull markets and fall more than its index in bear markets while a portfolio rated less than one should give a smoother ride.

In practice, beta is rather a crude measure and does not really equate to an assessment of the bias a portfolio might have to growth or value. In theory, a portfolio with more growth stocks would have a beta higher than one while one with more value stocks would be expected to have a beta lower than one. Bear in mind too that traditional indices have an in-built bias toward growth stocks because they are weighted by market capitalisation which is more an assessment of popularity than of a direct financial measure of a company.

Academic theory tells us that there should be a good correlation between risk and reward, and at a basic level there is; if held long enough equities give higher returns than bonds which in turn give higher returns than cash. Many commentators extrapolate this to differences within asset classes and postulate that higher risk securities give better returns than lower risk ones. Indeed much academic work has gone into bolstering this theory and it has become widely accepted. If this is correct, any bias away from the index should be towards higher beta, i.e. higher risk stocks, to get better long-term returns. Indeed, many active funds tend to overweight small and mid-cap stocks to increase their risk profile in the hope of higher returns.

## Except that it is not true.

An excellent paper in 2012 by Baker and Haugen demonstrated very powerfully that in fact lower risk securities, in both bonds and equities in 21 developed and 12 emerging markets, gave better returns than higher risk ones over the period from 1990 to 2011. They put forward a number of reasons why they think this is the case and one of the strongest is that growth companies get more press attention than duller stocks and this feeds the appeal of investors and managers to own something that everyone is talking about. The idea that a portfolio is a kind of a collection of trophies, or perhaps a stamp collection, that must be owned no doubt leads to newsworthy companies being bid-up by investors keen to associate themselves with them and the products or services it provides. They may be good, profitable companies but if the price of ownership is too high then they will not be good investments.

If that is the case then it makes sense, contrary to expectations, to tilt a portfolio towards low risk, low beta stocks to get better returns than the market. While this may seem counter-intuitive, it effectively means that the portfolio loses less relative to the market capitalisation index in the downturns than it lags in the upturns. That gives a secondary beneficial effect of making the portfolio less volatile than the market.

More importantly the maths works in favour of low volatility portfolios. A value portfolio that lags the index by 5% in a bull market only has to tread water to hold its value if the index subsequently corrects by 5% in the following year. But in a weaker market a growth portfolio that underperforms the index by 5% then has to gain 10% relative to the index, if the index gains 5% the next year, to recover its starting value. That is not impossible, but it is harder to do. And if the value portfolio is giving a yield of 3% or 4% more than a growth portfolio it already has a head start.

While both portfolios could conceivably deliver the same result the growth portfolio would undoubtedly give a bumpier ride. However, the harsh truth is that growth portfolios usually fail to recover what they lost in the downturns. On the other hand, value portfolios might look pedestrian when everything else is flying but they generally manage to hang on to their gains when markets slide.