Joseph Mariathasan studies the alternatives to traditional market weighted approaches to global equity investing.

he huge volatility seen in global equity markets post crash and the "risk-on, risk-off" behaviour seen in asset markets during the subsequent financial crises have certainly raised awareness of the risks institutional investors are facing in their global equity portfolios. Whilst there are good reasons to be optimistic about the US corporate sector with future growth driven more by rising domestic employment stimulating demand, Europe still faces many challenges as the Eurozone countries struggle with finding alternative approaches to never ending austerity, leaving investors in global equities facing more volatility in the future. Global equities are a core component of any asset allocation strategy, but adopting the typical global equity benchmarks in an asset allocation process may obscure the real opportunities that should be available to an investor with specific requirements, whether to match liabilities, produce income or reduce

Adopting a market weighted index as the benchmark is the standard approach to investment in global equities. Yet the volatility and characteristics of a market weighted global equity portfolio may be very different from what an investor may actually desire from an equity portfolio and also from what can be constructed. Moreover, there is evidence that a market weighted portfolio does not deliver the highest reward-to-risk ratio possible. Fama and French (1992) in a well publicised study showed that size and value were two additional factors that investors could exploit with small companies outperforming large companies over very long periods of time and companies with lower market values relative to their accounting values subsequently outperforming showing that value stocks outperforming growth. Practitioners have also found trending effects in stock returns with stocks having high (low) past returns over the last six to 12 months continuing to have high (low) returns for at least another several months showing that momentum can also be a source

Of course, there are reasons why global equities are benchmarked using market weighted indices. As Garrett Quigley, co-CIO of Global Systematic Investors (GSI) explains: The index delivers the market-weighted return. It has very low cost and low turnover. It is highly scalable and therefore can absorb significant assets.

Matching the market return removes the risk of



Eurozone countries still struggling to find solutions to crisis

underperforming the benchmark index (before costs). In an efficient market it is very difficult to improve on the market return and performance studies show that few managers consistently outperform. Finally, the Capital Asset Pricing Model (CAPM) states that the market weighted portfolio is the most efficient portfolio and will deliver the highest Sharpe Ratio. But Quigley goes on to point out the drawbacks: The market weighted portfolio is often concentrated at the sector or stock level or, in other words, can be insufficiently diversified. For example, Vodafone had a weight of 12.0% in the FTSE All-Share index at the end of March 2000. In July of 2002 its weight was only 4.7%. The market weighted portfolio on average overweights overvalued stocks and underweights undervalued stocks. It is also not optimal in that it does not lie on the efficient frontier of a mean variance optimisation. The CAPM does not price assets well. Moreover, there is strong evidence that systematic strategies improve upon pure market portfolio: e.g. fundamental indexing, minimum variance, maximum diversification, value, size, and momentum. These strategies are often labelled "alternative indexing strategies".

GSI have found that there are more than 20 alternative indexing strategies that have been proposed as benchmarks for global equities. These strategies are also referred to as Smart Beta, Strategy Indices, Systematic Alpha, Alternative Beta, and Factor Indices. They can be broadly divided into risk-based strategies and return-based strategies. Risk-based strategies

ignore return forecasts and solely focus on risk reduction/diversification. Return-based strategies such as fundamental indexing ignore risk and weight stocks according to some characteristic. Fundamental indexing has been shown to outperform market portfolios over most historical time periods. Proponents of that approach prefer fundamentally weighted portfolios as an attempt to overcome the bias of the market portfolio which, by construction, overweights the most overvalued stocks and underweights the most undervalued ones. It is an open question whether the market therefore has a growth bias or whether fundamental indexing portfolios have a value bias.

GSI point out that existing alternative indexing strategies generally focus on only a subset of the three key dimensions of investors' investment objectives - return, risk and capacity/transaction costs and this tends to result in concentrated portfolios. Moreover, according to Quigley, academic evidence1 shows that the performance of alternative indexing strategies can be attributed to a small number of systematic factors: the Fama-French factors, momentum, low beta and specific volatility: "Each of the alternative indexing strategies has high loadings on at least a subset of these well-known return drivers. For example, more than 80% of the returns of minimum risk portfolios can be attributed to common factors. No strategy delivers a meaningful alpha above and beyond that attributable to its factor loadings. Alternative indexing returns tend to originate from a small set of well-known return drivers" says Quigley.

GSI themselves are developing global equity strategies that are designed to explicitly capture the key return drivers of alternative indexing strategies: value, momentum, size, low beta and specific volatility. Their approach is based on a straightforward linear factor model. As Quigley explains: "Our global equity strategy maintains consistent exposure to a balanced and diversified set of factors. A linear structure of explicit factors allows more straightforward and intuitive performance attribution than capturing factors implicitly, such as by minimising a portfolio's risk or maximising its diversification." GSI's approach extends existing "alternative indexing" approaches in a way that they claim is superior on a conceptual level but retains their attractive features.

For institutional investors, what is clear is that there are numerous alternatives to the traditional market weighted indices. Investing in global equities does not just mean a choice between a high alpha but volatile concentrated portfolio or else a variant of the market weighted portfolio, whether a passive index fund, or an active fund benchmarked to it. It is possible to define what is required from a global equity portfolio in terms of exposures to value, momentum, size, low beta and specific volatility, and then either construct tailor-made passive portfolios to exploit this, or else active portfolios that use this as the benchmark.