portfolio institutional

An unhappy comparison?

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Humans have an irresistible urge to compare their performance against their peers. As English dramatist and poet laureate, Thomas Shadwell, famously said: “No man is happy but by comparison.” Shadwell died in 1692, nearly 100 years before the birth of stock exchanges in 1773.

And still the urge lives on. In investment terms, comparison often means looking at the gap between how an investment has performed and a commonly accepted measure of that particular universe, or benchmark.

And, with passive investment on the rise since the financial crisis, the dominance of broad market benchmarks in investors’ psyche is on the increase. Today, the S&P 500 has become one of the most commonly used benchmarks by which to compare equity market performance. It is widely considered to be one of the best representations of the US stock market, and a bellwether for the US economy. In 2013, S&P Dow Jones Indices estimated more than $7trn of assets globally were explicitly benchmarked to the S&P 500 through index- tracking mutual funds, institutional funds, separately managed accounts, indexed insurance products and ETFs.

This doesn’t include the unofficial benchmarking many investors do by comparing the performance of a range of assets against this widely held barometer or investment performance. It is not uncommon, for example, to see comparisons of hedge funds’ performance reported against the S&P 500 even though those hedge funds are generally not designed to produce performance in line with this benchmark.

ONE RULE TO RULE THEM ALL?

At the holistic portfolio level, investors are increasingly adopting an outcome-oriented approach to investment, particularly as many pension funds, for example, close or move to liability-matching strategies. As such, more and more are taking a more self-centric approach to performance, focusing instead on bespoke benchmarks that capture their individual liability stream.

As Andrew Kirton, EuroPac investments head at Mercer, says: “Almost universally in today’s market, institutional investors will have their own unique investment strategy. For defined benefit pension plans, in addition, the investment strategy will evolve dynamically given the objective for many is to de-risk the portfolio over time.

“The advent of scheme-specific investment strategies is not a new development, but arguably dates from the turn of the current century when mark-to-market valuation techniques were introduced by the actuaries in response to changing accounting standards.

At the total portfolio level benchmarks are often expressed as a 'journey', over a specified time period to a desired level of solvency and set of risk parameters."

However, outcome-oriented or self-centric measurement of performance often disappears at the asset level, where broad market benchmarks are still commonly used as reference points. As Aon Hewitt senior partner John Belgrove puts it: "To know if a manager is doing a good job, you need a benchmark that is representative of their opportunity set to judge them against. Undeniably cap-weighted benchmarks are the dominant form of investment measurement in the market. They are a fair and full representation of the opportunity set of a market and still the purest form of beta."

In this context, benchmarks and indices serve a number of purposes to investors. As well as being representative of the performance across a given universe of securities (i.e. the money-weighted current opinion of value), they do not require rebalancing or transaction costs to maintain.

"They are one of the very best capital market innovations of the last 40 years," according to Bob Maynard, chief investment officer of the $15bn Public Employee Retirement System of Idaho (PERSI). "Kudos to Bill Fouse and Wells Fargo for making it happen. They are also the cheapest alternative to an active management or other investment approach, and thus are a measure of a basic value-add."

In this context, investors tend to keep a close eye on the gap between the index return and that of their investments. The gap, in this context, measures the opportunity cost of an investment versus the cheapest possible access to a given universe of securities. As long as the index in question is truly relevant to the investment made, the sense here is obvious. Why pay more unless you are going to achieve more without taking more risk?

ARE BENCHMARKS 'EFFICIENT'?

This question has driven many investors not just to use benchmarks and indexes for comparison purposes, but also to invest in. Much of the importance attached to market cap- weighted benchmarks stems from the belief they are risk efficient – they provide the maximum reward possible for a given level of risk or, in other words, it is not possible to achieve more reward for the same or less risk.

The broadly-held view that cap-weighted benchmarks are risk efficient, or on the efficiency frontier, stems from William F. Sharpe's 1964 paper, entitled Capital asset prices: A theory of market equilibrium under conditions of risk.

"Many people believe Sharpe's paper demonstrated that cap-weighted benchmarks are an efficient way to invest," says Yves Choueifaty, founder and president of TOBAM. "This is not the case. In this paper he was able to identify the assumptions under which benchmarks would be efficient."

Yet, Sharpe states himself in the paper: "Needless to say, these are highly restrictive and undoubtedly unrealistic assumptions." The dominance these benchmarks have gained since the 60s means they have become largely representative of the market's view on a given universe of stocks. They have also established themselves as the easiest, and therefore cheapest, to trade and the most liquid. Sebastian Schulze, senior vice president in Redington's investment consulting team, says: "Cap-weighted benchmarks are relevant to some extent, even if they are not theoretically the 'best' performers. They set a standard 30 years ago and, even if they are not perfect on a theoretical level, they have become so accepted it would be hard to change it."

However, whether they are efficient at delivering reward for risk is a different question and one that has come under scrutiny in recent years. "There is a fundamental confusion in markets between passive and neutral, which is the source of huge misunderstanding," according to Choueifaty.

"People often believe when they invest in a passive benchmark they are getting neutral exposure to markets, but in fact there are huge biases inherent in benchmarks. Market capitalisation weighted indices are the sum of all the speculations in a market. Passively following that benchmark means blindly abiding by the biases of all the other market participants."

Choueifaty says empirical evidence shows cap-weighted benchmarks underperform a " neutral" allocation approach by around 500 basis points per annum over a typical business cycle (usually around seven years). In other words, investors could access 5% more return per year by stripping out the effect of financial speculation on a universe of securities by maximising diversification.

Cap-weighted benchmarks destroy value because they increase the weighting of stocks that are expected to increase, effectively maximising those bets at the worst possible time – just before they fall (and vice versa).

And because the more overvalued a stock is, the harder it falls, cap-weighted benchmarks are naturally more volatile. Research by Cass Business School found that equity indices constructed randomly by monkeys would have produced higher risk- adjusted returns than an equivalent cap-weighted benchmark over the last 40 years.

Their research showed nearly every single one of 10 million “monkey managers” randomly picking and weighting stocks in a universe of 1000, beat the performance of the market cap- weighted index. If that is the case, cap-weighted benchmarks are in fact some way off the efficient frontier and investors could achieve significantly more reward for the risks they are taking by considering alternative weighting methodologies.

All of the alternative indices considered in Cass’s paper, which included equal-weighted, risk efficient, minimum variance and maximum diversification among others, would have produced a better risk-adjusted performance than could have been achieved by having a passive exposure to a cap-weighted index.

HOW SMART IS ‘SMART BETA’?

But not all alternative weighting methodologies are created equal. The Cass report also showed monkey managers would have generated superior performance to many alternative index techniques. In the debt space, alternative weighting methodologies, commonly termed “smart beta”, have gained considerable traction in recent years as investors realise the irony of being most exposed to the biggest borrowers.

Smart beta is making slower inroads in the equity space, where many of the alternative indexation approaches currently in the market focus on the well established academic “extra” return biases such as small versus large cap, value, momentum, minimum variance, carry and illiquidity strategies.

“The problem is that they are practically tough to access and, more important, can disappear for years at a time,” PERSI’s Maynard argues. “‘Smart beta’ is often ‘beta that smarts’, meaning ‘hurts’ for quite a while. The illiquidity premium has not been there for the last five years, for example. So, if you can stick with it through thick and thin for 10 years at a time, then it is worth it – we have some of them. But it certainly isn’t an approach that will give you consistently better returns.”

Ultimately, the dominance of cap-weighted benchmarks, particularly in the equity space, reinforces their usefulness for investors as benchmarks for both measurement and investment, regardless of whether they are flawed. The practicality and ease of trading cap-weighted benchmarks makes them cheaper, more liquid and more transparent, which is difficult for investors to argue with.

“Building tradeable instruments on smart beta indexes can be quite difficult,” Redington’s Schulze says. “Investors can very easily buy futures and options, for example, on widely used capital-weighted benchmarks. The costs for doing so on alternative indexes would be significantly higher, assuming that such instruments are available, and investors could quickly run into practical problems.

“I’m not sure many investors would therefore come down on the side of a theoretically more sensible index,” he argues. Maynard, for one, remains a big believer in market capitalisation-weighted indexes regardless of whether or not they truly are on the efficiency frontier.

“In a world of complex, adaptive systems, they represent the safest long-term and market approach,” he concludes. “Whether they give you the ‘best’ return is actually secondary.”