

Indices that beat the market

A new generation of index products
aims to outperform older models

Watson Wyatt's Thinking Ahead Group¹ explains

The growth of passive investment management has been one of the great success stories of the past two decades.

Many pension funds now have a layer of passively managed equities designed to track the index and produce market returns. Many are also familiar with 'second generation' enhanced index products, which tweak the index constituents in various ways to add extra return.





However, to many investment experts there is a drawback to these approaches. They are based on indices that rank the largest companies by their market capitalisations – the value that the market places on their shares. Such values are prone to produce weighting bias, overweighting stocks that are overvalued, underweighting stocks that are undervalued.

In recent years, academics and other industry thinkers have come up with new ways of constructing indices that are designed to reduce such problems of cap-weighting.

These 'third generation' products do not use market values to determine how to weight the companies in their indices. Instead, they use entirely different sets of rules to choose and weight the companies they include.

Some of these indices are already in use around the world.

The ultimate aim is to construct a portfolio that is optimal in terms of delivering the most return for the least risk. The theory is that such a portfolio should outperform a traditional cap-weighted index, and so 'beat the market'.

These third generation indices fall into four main groups, which Watson Wyatt calls 'beta prime' approaches.

Equal weights

This is the most naïve way to weight the components of the index, with each one getting exactly the same allocation. This builds a portfolio of maximum diversity.

But there are drawbacks to this approach, such as high turnover and costs. Poor liquidity and capacity are also problems because of the relatively larger weights inevitably given to smaller stocks.

This can be overcome to some extent by using 'tiered' equal weights, where each company is allocated to a tier, and the tiers are then weighted.

Factor tilts

Both cap-weights and equal-weights introduce unintended biases into a portfolio. But some indices are deliberately tilted towards 'factors' such as small cap, value or momentum, which their creators expect will outperform. Academic studies over the years have identified return anomalies, where groups of stocks such as these have performed relatively better than others. More important is the question of whether they will outperform in future. Experience shows that the return advantage can disappear for years when chased by too much money.

Fundamental weights

This approach uses objective accounting measures of company size such as book value and earnings to set weightings.

The aim is to avoid the biases and the return drag caused by cap-weighting and so gain a return advantage.

These portfolios tend to have some small cap and value tilts, but are otherwise not very different from cap-weighted portfolios, so they are less constrained by liquidity and capacity than equal-weight indices.

Risk weights

A risk-weighting approach is more complex than the other beta prime families and is a step closer to active management. It is a highly mathematical process that identifies stocks with low correlation to each other, and then assigns a weight to each one based on volatility and correlation. The result is a portfolio of stocks that are risk-weighted, with each one limited in its contribution to the total portfolio.

The drawbacks are the method's potential lack of transparency and the obvious risk that historical correlations will not hold up in the future.

Do they work?

Are these third generation index approaches better than traditional cap-weighted indices?



Comparing their different characteristics shows that cap-weights win in terms of low costs and turnover, and high liquidity and capacity, while fundamental and risk-weighted indices are best able to capture mean reversion. They are also more efficient portfolios in terms of risk-adjusted returns.

From a governance perspective, they are more demanding than traditional passive investing, but less demanding than active management.

To sum up, we believe that adding 'third generation' index products to our clients' equity portfolios should help to diversify an area that has traditionally been dominated by cap-weighted portfolios. In times of market stress, these new approaches might also help to protect portfolio values.

¹ The Thinking Ahead Group is part of the investment practice at Watson Wyatt. Their role is to identify and develop new investment thinking and opportunities not normally covered in mainstream research.