

SigTech Whitepaper Series

How custom equity portfolios are disrupting pension funds' ESG and index investing



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How custom equity portfolios are disrupting pension funds' ESG and index investing

The investment management industry is undergoing tremendous change. Indexing and ESG (Environmental, Social, Governance) are reshaping investor portfolios, whereas digitisation is impacting the industry's entire value chain. These developments represent a golden opportunity for asset owners to empower their investment processes and enhance long-term investment results.

This white paper outlines the evolution, opportunities and challenges of indexing and ESG, how investors can capitalise from the ongoing digitisation trend, and examines the role custom equity portfolios play in enabling investors to tailor their investment strategies.

Origin of indexing

The theoretical foundation of indexing was laid more than half a century ago. In 1952 Nobel laureate Harry Markowitz published his seminal work Modern Portfolio Theory (MPT) and in 1970, Eugene Fama presented his Nobel Prize-winning research around the Efficient Market Hypothesis (EMH).

In broad terms, MPT stipulates that the distribution of asset returns are fully described by its first two moments, i.e., return and risk. If an investor wants to increase the return expectation, it must increase the level of risk, and vice versa. A common rule that lies at the heart of most investment philosophies. Furthermore, MPT introduced the market portfolio as an investor's optimal choice. This portfolio is made up of all investable securities and the portfolio weights are determined by their respective market value.

The EMH asserts that the market price of a security reflects all available information and that therefore, securities always trade at fair value. Combining these theories results in the - albeit hotly contested - conclusion that no investor should consistently be able to beat the market by taking active investment decisions. Investors should rather invest in the market portfolio, which in practical terms is better known as the market capitalisation-weighted (MCAP) index, with examples such as the S&P 500 and the STOXX Europe 600.

'When the first index funds launched in the 70s in the US, ad campaigns even stated that "Index funds are un-American!"'

Despite gaining wide acceptance in academic circles, neither the investment management industry, nor investors in general, were initially warm to the idea of index products. They were still firm believers in the superiority of active stock picking. When the first index funds launched in the 70s in the US, ad campaigns even stated that "Index funds are un-American!". Today's index behemoth Vanguard currently manages a whopping USD 7tn, but launched its first index fund in 1975 with a mere USD 11m and gained no real interest from investors for many years.

'In 2008, assets under management in index funds and ETFs amounted to ca. USD 1.5tn - today this number is 10 times higher.'

During the 80s and 90s indexing had a low profile in investment circles. It only started to attract a wider audience after the burst of the telecoms, media and technology (TMT) bubble in 2000, during which the procyclicality of MCAP indices became apparent. But it was the Great Financial Crisis of 2008 that kicked off the meteoric rise of indexing. In 2008, assets under management in index funds and ETFs amounted to ca. USD 1.5tn - today this number is 10 times higher.

Evolution of indexing

For a long time, the MCAP index was considered to be the only viable index. However, as indexing in general grew in popularity, investors and academics alike started to question its omnipotent position. Research has shown that an MCAP index also comes with significant drawbacks. The main point of critique is its high concentration to only two specific risk factors; large cap and growth. This systematic tilt results in a procyclical investment behaviour as it tends to overweight overvalued and underweight undervalued securities over time.

'The basic idea behind smart beta is - analogous to MCAP indexing - to apply a fully transparent, intuitive and easy to understand methodology.'

As a constructive response, a plethora of alternative indexing methods have been introduced over the last 15 years. These alternatives are often bracketed under the label "smart beta". The basic idea behind smart beta is - analogous to MCAP indexing - to apply a fully transparent, intuitive and easy to understand methodology. The index constituents' weights will differ in the various indices, but they should all keep the main general characteristics of an index by applying a fully transparent methodology, offering broad market exposure and a high level of liquidity.

Examples of alternative indexing methods are price-agnostic such as equal- and GDP-weighted indices, those that are risk-focused such as minimum variance and risk-parity indices, and those that are return-focused such as momentum, quality and value indices.

From a technical point of view, the various indices differentiate themselves by exhibiting exposure to various risk factors. As an example, an equal-weighted index has large exposure to the risk factor small cap, whereas an MCAP index is mainly driven by large cap and growth risk factors.

The MCAP index - analogous to all alternative indexing methods thus exhibits clear factor tilts and consequently works better and worse in various market environments. As an example, the MCAP index tends to do well when large caps are outperforming, whereas an equal-weighted index performs strong (on a relative basis) when small- and mid caps are outperforming. Despite its inherent tilt, the MCAP index is still almost always considered to be the universal reference point, both in terms of selecting an index investment and what benchmark to apply. Instead of letting this market convention determine investors' decisions, both the index and benchmark should be selected according to what is optimal for the investor's specific situation.

The solution

Investors are a heterogeneous group and all face unique situations. Therefore, they have different needs when constructing their optimal portfolio. In particular large institutional investors that have the necessary expertise and internal resources, can tailor their investment strategies. However, for index investments, often the focus is on minimising costs instead.

Accordingly, many investors are content with investing in an "off-the-shelf" index product. The world's largest investors often invest in the same index product as the smallest retail investor. There is of course some beauty to it from a democratic point of view, but as large institutional investors have the ability to customise their investments, why aren't they doing it?

'By customising their index strategy, institutional investors can better align their investments with their specific situation.'

As an example, depending on a pension fund's funding ratio or liability structure, it might need to increase its downside protection for its equity portfolio, whereas another pension fund wants to add to its existing allocation and tilt its existing exposure towards other risk factors. By customising their index strategy, institutional investors can better align their investments with their specific situation.

Origin of ESG

ESG topics have impacted the investment decision process for as long as investments have been made. However, until 15 years ago, ESG remained a niche concept in the investment landscape and was mostly associated with avoiding so-called "sin" investments. This way of thinking has now fundamentally changed.

'Today, integrating an ESG-framework into their portfolios is on top of most institutional investors' agendas.'

Today, integrating an ESG-framework into their portfolios is on top of most institutional investors' agendas. The change has been driven both from within, but, as in the case of many pension funds, also from mounting pressure from beneficiaries who want their retirement savings invested in a sustainable way.

There are multiple ways that ESG impacts investors' investment behaviour. Most are focusing on their allocations. Examples are divesting from companies in certain sectors (e.g. fossil fuel, tobacco, and weapons), or actively allocating to companies believed to positively impact certain ESG aspects (e.g., clean tech and diversity). However, in order to be a truly responsible investor, they also have to proactively promote change in corporate behaviour. This is possible by being an active owner, directly engaging with companies as well as voting at general meetings.

Evolution of ESG

To promote sustainable investing, various organisations such as the United Nations' sponsored Principles for Responsible Investment (PRI) were created. As of today, more than 7,000 corporations and 135 countries are signatories to the PRI. These entities have pledged to work towards implementing its six aspirational principles, with most emphasis on (i) incorporating ESG issues into investment analysis and decision-making processes, (ii) becoming active owners of companies, and (iii) seeking more complete ESG disclosure from portfolio companies.

'To enable investors to profit not only from efficiency gains, but also from customisation, scalable turnkey solutions are now offered by innovative service providers.'

Other parts of the investment management industry's value chain have historically been slow to embrace a technological shift. Now, new innovators and fintechs are disrupting the industry, forcing established firms to adapt. In the quest for digitisation, much focus has been put on operational aspects such as streamlining back office operations, enabling cheap electronic trading, and automating various compliance functions. There has been less focus on digitising the process of creating and implementing investment strategies. Creating and distributing investment products have traditionally been a lucrative business for banks and asset managers with a vested interest not to disrupt this part of the process. This is now changing.

The commoditisation of investment strategies (e.g. through rules-based products such as index and smart beta products) is driven by technological advancements and has resulted in fee pressure for asset management products. Gradually it is also impacting the distribution process. Instead of offering pre-packaged products, fully transparent customised solutions are created in direct alignment with client's requirements. To enable investors to profit not only from efficiency gains, but also from customisation, scalable turnkey solutions are now offered by innovative service providers.

Custom equity portfolios

So what is the solution? The combination of digitising the value chain of the investment management industry, ESG taking centre stage in the investment process and investors' need to customise their index strategies serve as the perfect storm for investors. Five years ago, the idea to combine these topics in a client-centric way would have been purely theoretical. Today it is achievable.

With custom equity portfolios, the asset owner can define the investable universe, tailor its index strategy, to incorporate the ESG policy, by directly holding individual securities.

By applying the concept of (alternative) indexing methods investors can gain an optimal exposure to various risk factors. One investor might want a global equity exposure with larger downside risk, another a larger bias to small caps, whereas a third investor wants stable income from dividend payments. The same goes for ESG. No two ESG policies are alike. By owning the securities directly, the investor can now actively decide to what degree it wants to be an active owner through voting and engagement.

Investing does not have to be just about searching for an existing product that offers the best possible fit to the investor's needs. It is about creating a product that 100% corresponds to the investor's requirements.

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About SigTech

SigTech offers a future-proof quant investment platform to global investment managers and asset owners. Cloud-hosted and Python-based, the platform integrates a next-gen backtest engine and analytics with curated datasets covering equity, rates, FX, commodity and volatility. SigTech eliminates the expensive upfront costs of infrastructure build-out, giving clients an edge in tailoring investment strategies from day one.

The SigTech platform was originally built over seven years ago to manage systematic investments at Brevan Howard which remains a SigTech client today. After the spinoff into an independent company in early 2019, the team has grown substantially and established SigTech as the leading provider of quant technologies

To start a discussion about how SigTech can help empower your investment process, please contact hello@sigtech.com



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