ROBECO
The Investment Engineers

For professional investors

Enhanced Indexing

A PROVEN ALTERNATIVE TO PASSIVE INVESTING

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Foreword

In the current context of a massive shift away from traditional active management into seemingly cheap passive strategies, a growing number of investors have been looking for more appealing options.

Passive strategies certainly have their merits. In particular, they offer attractive fees with portfolio return-risk characteristics that are close to the market portfolio, and don't hold any surprises. But in a world where sustainability has become a major issue for investors, this is increasingly perceived as insufficient.

Passive investment strategies, solely based on market capitalization-weighted indices, typically do not take sustainability aspects into account. Moreover, passive strategies inevitably lag the benchmark, due to management fees and transaction costs. They are also prone to arbitrage, which ends up weighing significantly on long-term performance.

For investors prepared to deviate slightly from the benchmark and to take on limited relative risk, the Robeco Enhanced Indexing approach represents a compelling alternative. It addresses all the drawbacks of passive strategies, while ensuring that the characteristics of the resulting portfolio remain close to those of the market index.

Our extensive research in this field, as well as more than 15 years of experience running Enhanced Indexing portfolios for developed and emerging markets, demonstrate our ability to deliver a better option than passive investing to investors. In this document, we explain why and how Enhanced Indexing works.

Wilma de Groot, PhD, CFA
Executive Director, Head of Core Quant Equities

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The concept

One of the major shifts seen in the financial industry over the past couple of decades has been the tremendous rise of passive investment strategies at the expense of traditional active management. But, despite its undisputable merits, passive investing also raises serious concerns.

Passive has grown massively

Passive investment products, meaning products based on traditional market capitalization-weighted indices, are not new.

As early as the 1970s, US investor John Bogle was already advocating broad exposure to the stock market. In 1975, he launched the world's first index mutual fund. However, these instruments have only come into widespread use over the past couple of decades, particularly over the last few years.

Flows into passive have reached all-time highs. They grew by almost 20% over the 2016-2017 two-year period, according to a 2018 report jointly published by Morgan Stanley and Oliver Wyman. Meanwhile, flows into active strategies remained virtually unchanged over the same period. This move from active to passive has been especially strong in the equity segment.

Several forces have fueled this trend, including a relatively unimpressive performance – net of fees – of many fundamental active managers in recent years, increased cost awareness on the part of clients and a push from financial regulators towards simple and transparent products. Successive waves of product innovation, in particular the rapid expansion of ETFs, have also played a crucial role, making it easier for investors to trade a growing number of indices at lower costs.

For traditional active investors faced with these challenges, passive investing offers a simple and straightforward way to access the market premium at relatively low cost. It also gives them a transparent, diversified and predictable portfolio, with daily liquidity.

Concerns with passive

Despite their undisputable merits, passive strategies remain far from ideal. In fact, investing solely based on a market capitalization-weighted index can lead to serious pitfalls.

At Robeco, we identify five major concerns that have been extensively documented in academic literature:

i. Passive investing inevitably lags the market index, due to management fees and transaction costs. Even when a very liquid index such as the S&P 500 is tracked, a so-called 'performance drag' can be evidenced. For instance, Edwin Elton, Martin Gruber and Jeffrey Busse demonstrated in a 2004 paper[1] that tracking this index results in an average performance lag of four basis points per year.

ii. Passive investment strategies are prone to arbitrage. The transparency offered by passive investing comes at a price, as other market participants can actively arbitrage index additions and deletions. This was evidenced in a 2011 paper by Antti Petajisto[2] studying the impact of index changes on the returns from equities added to or removed from the S&P 500 over the period 1990-2005. These stocks show abnormal return patterns. In the run-up to their addition (deletion) these stocks tend to advance (decline) in price, while after the rebalancing date these new additions (deletions) tend to lose (gain) in price.

iii. Passive investing ignores decades of academic insights on asset pricing. When passive strategies were introduced in the 1970s, the main idea was to capture the market premium, the compensation for owning equites instead of a risk-free asset. Over the past forty years, however, academics have documented the existence of factor premiums, which yield better risk-return ratios for portfolios. Factor premiums can be harvested by systematically allocating to stocks that exhibit certain factor characteristics, such as value, momentum or quality, for example. Passive investors ignore these premiums, as they only allocate to the market premium. In doing so, they invest in stocks that exhibit negative factor characteristics and therefore negative expected returns.

iv. Passive investment strategies do not integrate sustainability. Because they are based on broad market indices that usually only take into account variables such as market capitalization or free float, passive strategies do not integrate sustainability considerations into the investment process. Meanwhile, replicating an ESG or sustainable index, cannot be considered passive investing, as these indices necessarily imply active investment decisions. Also, the sector or country composition of these sustainability indices may deviate substantially from market capitalization-weighted index, resulting in high tracking errors.

v. Passive investors can engage with companies, but these can easily decide to ignore their efforts. Since passive strategies invest based on third-party indices based on variables such as market capitalization and liquidity, passive investors are unable to influence the management of the companies they own, even if they invest based on a sustainable index.

1. E. Elton, M. Gruber, and J. Busse, 'Are Investors Rational? Choices Among Index Funds', Journal of Finance, Vol. 59, No. 1, February 2004.

2. A. Petajisto, 'The index premium and its hidden cost for index funds', Journal of Empirical Finance, 2011

An alternative to passive

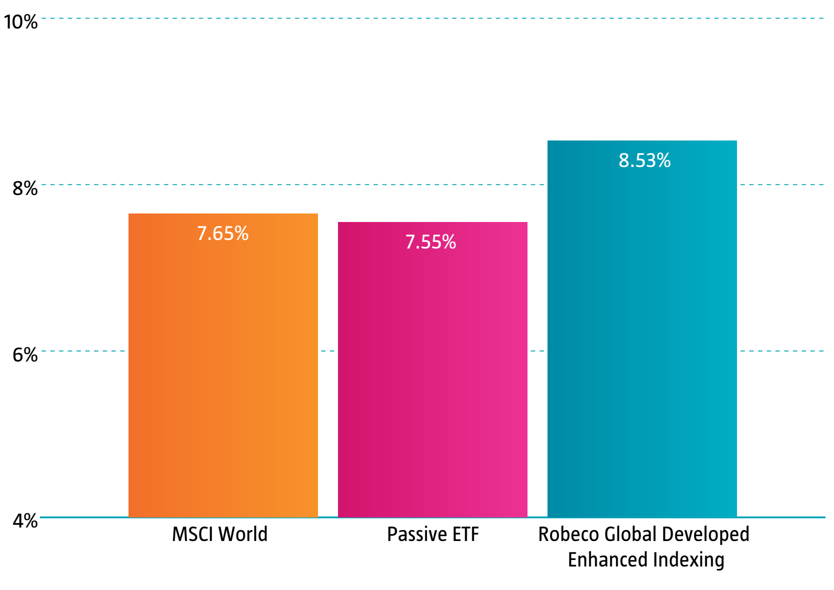
Enhanced Indexing strategies are designed to address these concerns raised by passive investment strategies and provide an attractive alternative.

The concept of Enhanced Indexing is a means to systematically capture the market return and, in addition, benefit from well-rewarded factor premiums. Enhanced Indexing portfolios take the selected capitalization-weighted market index as a starting point. Then a slightly higher weight is given to stocks with attractive stock characteristics, and slightly lower weight is given to those with unattractive characteristics. This enables an investor to potentially harvest stable outperformance after costs, with a low tracking error, as only very small deviations are allowed.

Ultimately, Enhanced Indexing provides the same benefits to those offered by passive investing, with diversified, transparent and predictable portfolios, as well as daily liquidity and low fees. In addition, Enhanced Indexing also ensures the following:

i. The ability to harvest a higher market premium after cost;
ii. Avoiding arbitrage risk;
iii. Integrate 50 years of research in factor investing;
iv. Smart sustainability integration

Figure 1: Return after cost: November 2004-October 2018



Source: Robeco Performance Measurement. Passive ETF return measured by the return of the MSCI World index including management fees of 10 bp. Robeco QI Global Developed Enhanced Index Fund return measured by the return of Composite Quant Developed Markets Equities, net of management fees (30 bp.), based on Net Asset Value, All figures in EUR, Inception date November 2004, Tracking error limit 2.0%. The value of your investments may fluctuate. Resultsobtained in the past are no guarantee for the future.

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Building portfolios

Enhanced Indexing strategies aim to deliver stable outperformance after costs compared to the capitalization weighted market index, the benchmark, with a low tracking error. To achieve that, they apply a rules-based disciplined investment process designed to benefit from over four decades of academic insights on asset pricing and portfolio construction.

Investable universe

The starting point is the definition of an investment universe. Our investment universes are based on the MSCI, S&P or FTSE indices.

For example, the global developed investment universe consists of approximately 2000 stocks; 1600 constituents of the MSCI World Index and 400 off-benchmark stocks. The off-benchmark stocks are liquid large cap stocks and are constituents of the FTSE Developed Markets Index. Permitting investment in these stocks increases the breadth of the investable universe. An off-benchmark limit is set at 5% of the portfolio to limit the tracking error level. Moreover, Enhanced Indexing strategies may experience some tailwinds if these off-benchmark stocks are included in the benchmark.

Dual listings and stocks with data issues are excluded and a liquidity screen, based on a minimum average trading volume and minimum market capitalization, is applied. This results in a total investable universe of 2000, 1000, 700 and 600 stocks for Global Developed, Emerging, US and European Enhanced Index Equities respectively.

> ‘Passive investment strategies inevitability underperform the market once trading costs are taken into account.’

Scoring and ranking constituents

In the following step, we determine the relative attractiveness of stocks based on value, quality, momentum and analyst revision factors.

For each factor, we take into account multiple variables that are defined, selected and refined by Robeco’s Quantitative Equities Research team. These factors and variables have been thoroughly tested over time. Some of them have been used in our stock selection models since the 1990s and most were already included when we launched our strategy in 2004. By enhancing factor definitions, we are able to avoid non-rewarded risks.

We apply a quantitative approach to assess the characteristics of thousands of stocks in our investment universes on a daily basis. The stock selection model produces a total score for each stock by combining the outcomes on the different factors. Then all stocks are ranked from high (attractive) to low (unattractive). The rankings are done relative to the stocks within the same region and sector.

We then overweight slightly the most attractive stocks in each sector and country. Conversely, stocks with less attractive profiles are given a slightly lower weight in the portfolio than their weight in the index. Portfolios are rebalanced monthly to ensure optimal exposure to the best-scoring stocks over time.

Fully integrated sustainability investing

While passive vehicles generally either ignore sustainability aspects or limit their approach to a negative screening and exclusions, our Enhanced Indexing strategies use positive screening.

Within Enhanced Indexing portfolios, we incorporate ESG factors in the investment and decision-making process in every step of the investment process. First, sustainability scores are taken into account when determining the quality characteristics of companies in developed markets. Second, when building the Enhanced Indexing portfolio, we make sure that the weighted RobecoSAM sustainability score of the portfolio is always better than the index score. With this enhanced form of ESG integration we avoid the risk of overexposure to less sustainable companies.

For investors looking for even more ambitious sustainability standards, our Sustainable Enhanced Indexing strategy enables them to have an additional impact on several environmental aspects. This strategy makes sure that the portfolio has a 20% better environmental footprint on four dimensions: CO2, waste generation, water usage and energy consumption.

Finally, a direct link between the enhanced engagement program and the portfolio is applied. For companies that are placed under enhanced engagement, no overweight positions are allowed. Should the enhanced engagement be closed unsuccessfully, the company may be excluded from the investable universe and any remaining positions in the portfolio will be sold.

Building a customized portfolio

We are able to deliver customized core portfolio solutions to clients by tailoring the investable universe and incorporating special sustainability criteria while adhering to a pre-defined active risk budget.

Defining a precise pool of investable stocks is certainly the most obvious way to adjust a portfolio to a specific need. Enhanced Indexing can be applied to a variety of indices as long as these remain broad, stable (no high turnover) and liquid enough. This can be passive market capitalization-weighted indices for different regions, but also factor-based or sustainable indices. As a result, portfolios can easily be geared to a particular geographical region or a certain group of business sectors, for example.

But the customization can go well beyond the definition of a restricted investment pool. By allowing a long-only portfolio to deviate more or less from its benchmark, its expected tracking error can also be adjusted by between 0.5% and 5%. Customized beta overlay management is also offered for those investors that would like to mitigate market risk within this enhanced core portfolio.

Another area of customization is sustainability. For all portfolios, we ensure that ESG scores are at least higher than the benchmark's own score. But this is just a starting point. Depending on their individual preferences, investors can request stricter criteria. This can be done, for example, through the use of client-specific exclusion lists. Targeting precise objectives, such as reducing carbon footprints, or specific sustainable development goals (SDGs) is also possible.

Tighter investment rules and smaller stock pools obviously have an impact on a portfolio's exposure to factors premiums. However, this relationship is not linear because our approach to sustainability ensures that we prioritize the selection of sustainable stocks with the best possible momentum and valuation characteristics.

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Proven track record

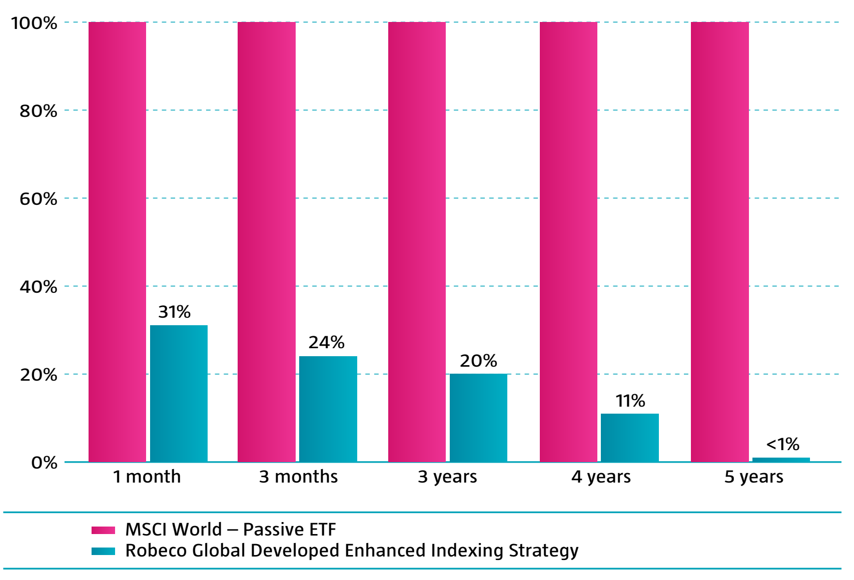
For over 15 years, Robeco has been running a range of Enhanced Indexing equity strategies. Over time, our approach has proven its ability to deliver the targeted consistent outperformance after costs, with a low tracking error. Our approach has proved to be efficient both in the global developed and emerging market investment universes.

Delivering stable outperformance

In global developed markets, where Robeco has been applying Enhanced Indexing since September 2004, our approach outperformed the MSCI World Index in 11 out of 13 full calendar years.

For an investor, the probability of delivering at least market-like returns depends on the investment horizon. Figure 2 shows the probability of underperformance after costs over different investment horizons. As illustrated by the blue bars, the relative risk of lagging the benchmark after costs has remained consistently low for an optimal investment horizon of at least three years.

Figure 2: Probability of underperformance after cost



‘We believe we are able to deliver superior relative risk-adjusted returns for our clients by enhancing market cap-weighted indices.’

Source: Robeco. Probabilities are based on the results of the Composite Quant Developed Markets Equities, Gross of fees, based on Net Asset Value, All figures in EUR, Inception date November 2004. Results obtained in the past are no guarantee for the future. Figures until December 2017.

But while this track record demonstrates that Enhanced Indexing adds value when applied to a broad investment universe in developed markets, this kind of approach also proves effective when applied to emerging markets, or narrower regional markets. In fact, Robeco has also been successfully running an emerging markets Enhanced Indexing strategy since 2007. Moreover, carveouts based on the realized performance of our existing Global Developed Equities strategy indicate that the strategy delivered stable outperformance after costs, in the US and European regions.

Ensuring country and sector diversification

One merit of passive investing is that it leads to predictable portfolios, with diversified and transparent allocation to different regions and sectors. Enhanced indexing also offers similar characteristics.

This is because deviations from the benchmark are limited to a maximum of 0.5%. This way we ensure that we maintain a portfolio's exposures in terms of individual countries, sectors or individual stocks close to those of the broad market index. Therefore, Enhanced Indexing portfolios aim to be broadly neutral in terms of sectors, industry groups, regions, countries and beta, relative to the benchmark. In these respects, an Enhanced Indexing portfolio will exhibit exposures very close to those of the benchmark.

In practice, we have established strict concentration rules that only allow small deviations from benchmark weights. For example, we impose an 0.5% maximum deviation limit compared to the benchmark for country and individual sector exposure when rebalancing the portfolio. This leads to a varied selection of stocks while avoiding excessive sector and country tilts.

Improved portfolio characteristics

The Enhanced Indexing methodology results in portfolios featuring characteristics close to those of the broader market, with a few notable exceptions, primarily lower valuation multiples and better sustainability scores.

While we ensure that portfolio exposures in terms of geographic regions, industries or beta remain close to the market index, our stock selection process also leads to a number of differences. In particular, Enhanced Indexing portfolios tend to exhibit lower valuation multiples, as well as better quality, momentum and earnings revisions.

The positive ESG screening applied systematically to all Enhanced Indexing strategies also leads to better outcomes in terms of sustainability.

Conclusion

Passive investment strategies have their merits, but they also raise serious concerns. Passive investors aiming to overcome these pitfalls should consider Enhanced Indexing as it addresses these shortcomings while still offering the same benefits as passive investing: low-cost, transparent and well-diversified portfolios.

Since 2004 Robeco has offered investors an attractive alternative to passive investing by delivering stable outperformance after costs, with a low tracking error. This approach also offers scope to incorporate a wide variety of individual client-specific requirements. For investors still weighing the benefits of factors, but reluctant to endure potential underperformance compared to the broader market in the short run, it can also be a perfect first step into the factor investing world.

Important Information

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