



ERI Scientific Beta Comments on the Mercer Report “Factor Investing: From Theory to Practice”

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About the Authors



Noël Amenc is Professor of Finance and Associate Dean for Business Development at EDHEC Business School and CEO of ERI Scientific Beta. He has conducted active research in the fields of quantitative equity management, portfolio performance analysis, and active asset allocation, resulting in numerous academic and practitioner articles and books. He is on the editorial board of the *Journal of Portfolio Management* and serves as associate editor of the *Journal of Alternative Investments* and the *Journal of Index Investing*. He is a member of the Monetary Authority of Singapore Finance Research Council. He holds graduate degrees in economics, finance and management and a PhD in finance from the University of Nice Sophia-Antipolis.



Frédéric Ducoulombier is Associate Professor of Finance at EDHEC-Risk Institute and Corporate Director at ERI Scientific Beta. He has most recently co-authored EDHEC-Risk Institute's contributions to international regulatory consultations on ETFs, indices and benchmarks as well as publications on the purported risks of ETFs, non-financial risks in fund management, index transparency and governance and factor investing. Prior to joining ERI Scientific Beta, he established the executive education arm and Asian operations of EDHEC-Risk Institute and EDHEC Business School's PhD in Finance. He serves on the Consultative Working Group of the Financial Innovation Standing Committee established by the European Securities and Markets Authority.

Introduction

Introduction

The present document constitutes a response to the report published by Mercer in November 2017 entitled “**Factor Investing: From Theory to Practice**”. In ERI Scientific Beta’s view, the Mercer report is representative of undocumented opinions on factor investing and as such is liable to misinform investors. While extensive serious academic research supports factor investing, and also points out its limitations, it is a shame for experts such as Mercer to take opinions that have rarely been documented and to establish conclusions that will have a considerable impact on investors, given Mercer’s status as a consultant. There is ultimately no empirical evidence supporting Mercer’s allegations against factor investing, hence they are just unfounded assertions.

In the end, by trying to sell active investment management in multi-factor investing to the detriment of passive investment management, Mercer misses out on the real question, which is that of the robustness of multi-factor investing offerings, whether active or passive.

The present document has been structured in order to respond specifically to Mercer’s report, but if the reader wishes to explore our criticism of factor investing misconceptions further, our publication “Ten Misconceptions about Smart Beta: Analysing Common Claims on Performance Drivers, Investability Issues and Strategy Design Choices” which is accessible **here**.



Comments

Comments

Mercer:

The topic of **factor investing** has been hard to ignore in the last few years. Many new products (often termed smart beta) have been launched, seemingly offering a “silver bullet” for investors, claiming sustainable excess returns with high levels of transparency and very low fees.

ERI Scientific Beta:

It should be underlined that, at the instigation of EDHEC-Risk Institute and others, there has been significant discussion in the industry on smart beta products’ sources of performance, i.e. exposure to rewarded risk factors and/or diversification of unrewarded idiosyncratic risk, both of which are supported by decades of academic research, and an exploration of the time- and state-dependencies of factor risk premia and of their impact on product conditionality. Suggesting that smart beta products are routinely presented as “silver bullets” may be useful rhetorical artifice in the context of this note but mischaracterises the significant efforts that responsible providers have made to improve understanding of the field, including through publications in scientific journals.

Mercer:

Mercer has been advising on factor exposures in equity portfolios for well over a decade, including recommending a dedicated low volatility exposure since 2010 and a five factor framework for building robust equity portfolios since 2014. In this paper, we re-examine factor focused “smart beta” strategies in the context of long-only equity investing and consider the practical benefits and challenges they bring.

ERI Scientific Beta:

EDHEC-Risk Institute has covered smart beta for a decade, critically analysing alternatively-weighted indices (2008), proposing a practical implementation of modern portfolio theory’s tangency portfolio (2008) and extending it to the consideration of ESG policies (2009), introducing the Smart Beta 2.0 framework (2013) to analyse and control the risks of smart beta investing and applying it to the design of smart factor indices as practical answers to the two main limitations of capitalisation-weighted indices, pioneering static and risk-based dynamic multi-smart factor investing (2014), reconciling the consideration of factor interactions with top-down multi-factor portfolio construction (2017). EDHEC-Risk Institute has also campaigned for better investor protection and greater transparency in the indexing industry and contributed to regulatory advances.

Comments

Mercer:

Factor investing strategies are not clearly defined and cover a broad range of capabilities and approaches. Equally, factor investing is not a new concept; academics and practitioners have been considering the relationships between the characteristics of stocks and their expected returns for decades, and some single factor products have been around since the mid-2000s. However, since 2014 a new range of strategies have been developed that use systematic techniques to gain exposure to a range of well-known risk or style premia in a low cost and transparent way. These are offered as both indices and active (factor) strategies. A summary of our views on these strategies, in the context of the broader universe of approaches to equity investing, is set out as follows:

ERI Scientific Beta:

Factor investing has been practised (consciously or not) by active managers at least since the 1930s; renewed interest in the field has been prompted by widely publicised research underscoring that the bulk of global portfolio performance could typically be explained by exposure to well-documented factors and that exposure to these factors could be established in a transparent, systematic and low cost manner. The clarity of this proposal has deteriorated due to the use of proprietary adjustments to time-tested consensual factor definitions in factor indices and the offering of factor timing strategies, both of which are attempts at reintroducing alpha into factor-based smart beta investing.

Mercer:

Factor investing is not a passive approach. Factor strategies and factor indices are active approaches, since all such strategies involve material deviations from the market cap index (that only truly passive approach). In addition factor strategies can be complex, require active decisions and (like all active approaches) do not guarantee success.

ERI Scientific Beta:

Market-cap indices are highly exclusive and dynamic in respect of their constituents as underlined by Rinaldo and Häberle (2008), so it is incorrect to describe them as truly passive. In addition, very unrealistic assumptions are required to make the market portfolio efficient to justify it being held by all investors and capitalisation-weighted indices are poor proxies of the market portfolio anyway (Goltz and Le Sourd, 2011). By definition, systematic factor strategies (e.g. packaged as factor indices) are systematic and do not require discretionary decisions (beyond those made to maintain the universe of their parent cap-weighted indices). Neither systematic nor discretionary strategy management guarantees success but the performance of the former can be more readily analysed and understood. Factor strategies exist in systematic and discretionary forms and it is inappropriate to blame systematic factor indices for the limitations associated with discretionary active factor strategies.

Comments

Mercer:

For investors facing few governance or fee constraints, **we believe that truly unconstrained active strategies offer the potential to capture factor returns in an intelligent way**, while also benefiting from market awareness and idiosyncratic alpha, potentially improving returns, controlling risk and enhancing diversification.

ERI Scientific Beta:

Everyone is entitled to their beliefs, but investors would benefit if such beliefs were solidly grounded in scientific research, i.e. evidence-based as opposed to faith-based. Contrary to what is assumed here, it is perfectly possible to design market-aware dynamic factor strategies that remain fully systematic and highly diversified; these strategies even exist in the long/short space with some offering zero exposure to broad equity market risk. Free-lunch diversification is about cancelling idiosyncratic risk, so it is surprising to see concentration (codename idiosyncratic alpha) cited as a way to enhance diversification. The inability of active managers to produce alpha from stock picking and market timing in a robust manner is solidly established and casts grave doubts on the value added by manager selection (beyond that of organisational due diligence) in theory. The extant scientific evidence does not allow discretionary (a.k.a. active) management (or systematic strategies that embed significant market timing for that matter) to be recommended.

Mercer:

Active multi-factor strategies are an appealing option when there is the need for a single low-cost solution, diversity by factor and transparency. However, approaches vary hugely and each factor strategy needs to be considered on its own merits.

ERI Scientific Beta:

It is unclear why active, low cost and transparency are used in the same sentence; we suspect a typo. We agree, however, that each factor strategy needs to be considered on its own merits, including systematic ones.

Comments

Mercer:

Factor indices can be dangerous. They tend to be naïve in their approach and static in their design. In the case of public indices, rebalancing may be gamed by other investors and they may be prone to crowding (especially where such strategies are offered in exchange traded fund format). Although we are generally cautious of index approaches, those that are better able to deal with these issues can offer an alternative to simple market cap index replication with higher return potential and only a marginal fee increase.

ERI Scientific Beta:

Assessing crowding risk requires research, not just anecdotes and there is little reason to be concerned about crowding if factor returns reward the taking of systematic risk (Ten Misconceptions about Smart Beta, ERI, 2016). The risks of crowding and front-running are more significant with the “truly passive” approaches mentioned above than with properly designed factor indices. One major mitigation mechanism against these purported risks is diversification and it is also documented to increase factor and multi-factor index performance (Amenc et al., 2016 and Amenc et al., 2017, respectively); it can also be observed that turnover control mechanisms embedded in smart beta indices make predicting rebalancing decisions more involved and that investability filters and controls applied to smart beta strategies mitigate concentration in and trading of less liquid stocks, which could be more susceptible to price pressure around rebalancing. It should also be underlined that institutional investors generally allow tracking error relative to their smart beta benchmarks so as to improve replication. Hence they need not execute all of their rebalancing trades on the rebalancing date and have leeway to engage in optimal execution strategies to improve the risk/return profile of replication. In this regard, research has documented that mechanically spreading rebalancing trades does not materially impact the tracking performance of well-diversified factor indices (Esakia et al., 2017). Flexibility of replication implementation further reduces opportunities third parties have to game the rebalancing of public smart beta indices. Research (see Esakia et al., 2017) and live track records have indeed documented that well-designed factor indices can add statistically and economically significant value over traditional benchmarks net of their slightly higher licensing costs and larger turnover costs.

Comments

Mercer:

In summary, factor strategies vary hugely and should be considered a form of active management. Even when offered in index format, some factor strategies can play a useful role in building robust equity structures, bringing cost and transparency benefits. However, as with all active approaches, investors need to ensure that they have a full understanding of each strategy’s characteristics, pitfalls and expectations before investing.

ERI Scientific Beta:

Indeed not all factor and smart beta strategies are created equal and it has been a mainstay of EDHEC-Risk Institute research and outreach efforts to draw investors’ attention to the need to perform quantitative due diligence on these. It is disingenuous to describe all smart beta and factor strategies as active. Although they entail risks relative to capitalisation-weighted indices, the latter are not efficient investment vehicles and not necessarily relevant benchmarks for asset management or asset-liability management. Furthermore, the distinction between systematic and discretionary strategies is extremely important as only fully transparent systematic strategies can provide investors with the data required for in-depth quantitative diligence to measure the risks, costs and potential benefits of strategies and assess their suitability in the context of their risk and investment management needs and constraints (Ducoulombier, 2014).

Mercer:

The attractions of factor strategies will vary depending on investor circumstances and beliefs. However, we highlight the following potential actions for consideration: Investors with a (traditional) actively managed equity portfolio should ensure that the portfolio is well-diversified by style factor. To the extent that such portfolios are over/underexposed to certain factors, actively managed (as opposed to index) factor strategies may play a useful role in plugging any gaps (that is, as a “completion portfolio”).

ERI Scientific Beta:

There is no disclosed basis that would make the case for the superiority of actively managed factor strategies in the context of completion portfolios; on the face of it, the systematic nature of factor indices make their factor characteristics more predictable, which is a material benefit for risk management/completion applications.

Comments

Mercer:

Investors who are able to develop a higher degree of conviction in the investment case for factor exposures than they can for traditional active management may wish to hold a core of their equity exposure in active (non-index) multi-factor strategies. This reflects the fact that an investor's conviction level will play an important role in determining the likelihood that an investor holds on to a manager during periods of underperformance versus market cap.

ERI Scientific Beta:

Convictions about investment strategies should be based on the scientific evidence supporting their purported sources of performance and product due diligence confirming that the investment process efficiently uses these sources of performance to produce the risk/return profile sought by the investor. Investors requiring extra support during periods of underperformance – which provide a risk-based justification for the higher returns associated with factor exposures – should award mandates to index providers that have demonstrated their research credentials and can commit to ongoing risk and performance reporting and dialogue. The extant empirical evidence clearly favours the use of systematic strategies in the core of the equity portfolio and the relegation of active management to satellites; this organisation not only improves performance and its robustness, but also reduces fees. Static blending of factors has been documented to reduce the risk of underperformance relative to capitalisation-weighted benchmarks (Amenc et al., 2014) and risk-based dynamic allocation can be used to further reduce this risk, assuming it makes sense from an asset-liability management point of view; this does not require discretionary management.

Mercer:

Investors who already make use of traditional quant strategies may wish to review such holdings against comparable (but typically lower cost) actively managed multi-factor strategies. In some cases, investors may find that a well-constructed active multi-factor strategy offers very similar factor biases and portfolio oversight to a traditional quant strategy, but at a lower fee level.

ERI Scientific Beta:

Here again, there is no basis for preferring actively managed to systematic multi-factor strategies for quantitative strategy substitution applications. Where dynamic risk management is required, it can be provided in a systematic manner.

Comments

Mercer:

Investors making use of factor indices may wish to compare such approaches against active multi-factor strategies. For a relatively small increase in fee level, active multi-factor approaches offer superior risk management and portfolio evolution over time.

ERI Scientific Beta:

Risk-based dynamic multi-factor allocation that is provided in a systematic manner offers superior risk management to static approaches without introducing the risks associated with discretionary decision processes and is offered at a lower cost than the active multi-factor approaches advertised by Mercer.

Mercer:

Investors with largely passively managed (market cap) equity holdings may wish to consider introducing some exposure to actively managed or index-based multi-factor strategies. Although we would not advocate replacing a large passive equity portfolio in its entirety with a single multi-factor approach (due to a desire to control the risk allocated to a single active strategy), investing a portion of the portfolio in a multi-factor approach offers the potential for an improvement in risk-adjusted returns.

ERI Scientific Beta:

The case for low-cost systematic strategies in the core portfolio, rather than higher cost discretionary strategies, remains just as strong today as it was when these investors defined their portfolio organisation. At the same time, there is growing acceptance that systematic strategies addressing the main issues associated with capitalisation-weighted benchmarks – notably their detrimental and unmanaged exposures to rewarded risk factors and lack of diversification of idiosyncratic risk – can be used in the core in complement to traditional benchmarks or, where governance so allows, as a replacement for these inefficient investment portfolios.

Conclusion

Conclusion

The Mercer report is an all-out attack against evidence-based investment. As such, it cannot but be grounded on beliefs. It turns out that Mercer’s investment beliefs align nicely with their bottom line but not so much with the bottom lines of end-investors. Mercer correctly underlines the added-value potential of smart beta and factor strategies and the need for proper due diligence on smart beta and factor investing strategies, but then recommends discretionary solutions by argument of authority or by peddling (debunked) clichés on systematic strategies. It also appears Mercer is not aware, or prefers to ignore, that dynamic risk management can be woven into systematic factor strategies. If Mercer has evidence that, contrary to scientific research, it can reliably identify discretionary strategies that outperform on a risk-adjusted basis, it should be presented. While not surprising, it is particularly distressing to see an advisor that also sells active investment management dismiss systematic strategies and reintroduce alpha into smart beta. Only fully-transparent systematic strategies can provide investors with the data required for in-depth quantitative diligence to measure the risks, costs and potential benefits of strategies and assess their suitability in the context of their risk and investment management needs and constraints. In addition, one should always keep in mind that it is the lack of persistent success in stock picking and market timing that has led an increasing number of institutional investors to shift towards passive strategies and that it is the realisation that the performance of active management programmes comes from exposure to well-documented systematic factors that has reignited the interest in factor-based investing.

Finally, Mercer has communicated widely on the dangers of the naivety and static design of factor indices. Here too, it would be relevant to refer to the basic principles of asset pricing and statistics generally. What makes any investment strategy dangerous is its lack of robustness. In factor investing, the danger is to hold portfolios concentrated in a small number of stocks: the factor champions that represent a high factor intensity strategy. These portfolios are exposed to a very high level of both idiosyncratic and model mining risk because the definition of highly-sophisticated multivariate factor proxies provides room for in-sample optimisation to the detriment of out-of-sample robustness. Here again, even though the question arises of the out-of-sample representativity of strategies whose track records are essentially backtested, it is a shame that Mercer did not refer to the limitations of these backtested track records in order to shed serious light on the dangers of factor investing and the means of limiting these dangers. In the end, by trying to sell active investment management in multi-factor investing to the detriment of passive investment management, Mercer misses out on the real question, which is that of the robustness of multi-factor investing offerings, whether active or passive. We refer readers to two white papers that we published recently on the “Robustness of Smart Beta Strategies” (Amenc et al., July 2016, accessible [here](#)) and the limitations of bottom-up approaches that prefer to look for factor champions (Amenc et al., “Why we do not Believe that Maximising Factor Intensity at Stock Level is a Robust Approach to Multi-Factor Investing,” July 2017, accessible [here](#)).

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About ERI Scientific Beta

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EDHEC-Risk Institute set up ERI Scientific Beta in December 2012 as part of its policy of transferring know-how to the industry. ERI Scientific Beta is an original initiative which aims to favour the adoption of the latest advances in “smart beta” design and implementation by the whole investment industry. Its academic origin provides the foundation for its strategy: offer, in the best economic conditions possible, the smart beta solutions that are most proven scientifically with full transparency of both the methods and the associated risks. Smart beta is an approach that deviates from the default solution for indexing or benchmarking of using market capitalisation as the sole criterion for weighting and constituent selection.

EDHEC-Risk Institute considers that new forms of indices represent a major opportunity to put into practice the results of the considerable research efforts conducted over the last 30 years on portfolio construction. Although these new benchmarks may constitute better investment references than poorly-diversified cap-weighted indices, they nevertheless expose investors to new systematic and specific risk factors related to the portfolio construction model selected.

Consistent with a full control of the risks of investment in smart beta benchmarks, ERI Scientific Beta not only provides exhaustive information on the construction methods of these new benchmarks but also enables investors to conduct the most advanced analyses of the risks of the indices in the best possible economic conditions.

Lastly, within the context of a Smart Beta 2.0 approach, ERI Scientific Beta provides the opportunity for investors not only to measure the risks of smart beta indices, but also to choose and manage them. This new aspect in the construction of smart beta indices has led ERI Scientific Beta to build the most extensive smart beta benchmarks platform available which currently provides access to a wide range of smart beta indices.

ERI Scientific Beta Publications

ERI Scientific Beta Publications

2017 Publications

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For more information, please contact:
Laure Barralis on: +33 493 187 863 or by e-mail to: laure.barralis@scientificbeta.com

ERI Scientific Beta HQ & Asia
1 George Street
#15-02
Singapore 049145
Tel: +65 6438 0030

ERI Scientific Beta R&D
393 promenade des Anglais
BP 3116 - 06202 Nice Cedex 3
France
Tel: +33 493 187 863

ERI Scientific Beta—Europe
10 Fleet Place, Ludgate
London EC4M 7RB
United Kingdom
Tel: +44 207 332 5600

ERI Scientific Beta—North America
One Boston Place, 201 Washington Street
Suite 2608/2640, Boston, MA 02108
United States of America
Tel: +1 857 239 8891

ERI Scientific Beta—Japan
East Tower 4th Floor, Otemachi First Square,
1-5-1 Otemachi, Chiyoda-ku, Tokyo 100-0004
Japan
Tel: +81 352 191 418

www.scientificbeta.com