Scientific Beta defends the Size factor’s role in multi-factor portfolios following AQR note

Scientific Beta focuses on the question of practical relevance: does the size factor add value to an investor’s portfolio?


AQR stress their previous view that the size factor does not exist, with their results showing that size does not have a premium when accounting for the market factor. In particular, they estimate the intercept in a time-series regression of size factor returns onto the market factor return. They find that augmenting the set of independent variables with the lagged market return in addition to the contemporaneous market return leads to an insignificant size premium.

Scientific Beta questions whether this result has any practical relevance for investors. Instead, Scientific Beta focuses on the question of practical relevance: does the size factor add value to an investor’s portfolio?

When taking into account other potential factor exposures in a portfolio, apart from the market factor, adding the size factor improves the risk/return characteristics of the portfolio. Size is a strong diversifier of other traditional factors and consequently adds value to a multi-factor portfolio. Analysis that fails to take exposures to factors such as momentum or profitability into account is of little practical relevance to investors.

Furthermore, claiming that there is no size effect is contrary to the various academic asset pricing models that conclude that the size factor adds explanatory power in the cross-section of returns. These models, by including factors other than the market, provide meaningful conclusions for investors.

The Scientific Beta note and the related paper published in the Journal of Index Investing in winter 2019 can be accessed through the links below:

- [The Size Factor Still Has Its Place in Multi-Factor Portfolios, Scientific Beta, October 2020](#)
- [Size Factor in Multifactor Portfolios: Does the Size Factor Still Have Its Place in Multifactor Portfolios? Winter 2019, Journal of Index Investing](#)

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About Scientific Beta

Scientific Beta aims to be the first provider of a smart beta indices platform to help investors understand and invest in advanced beta equity strategies. Established by EDHEC-Risk Institute, one of the top academic institutions in the field of fundamental and applied research for the investment industry, Scientific Beta shares the same concern for scientific rigour and veracity, which it applies to all the services that it offers investors and asset managers. On January 31, 2020, Singapore Exchange (SGX) acquired a majority stake in Scientific Beta. SGX will maintain the strong collaboration with EDHEC Business School, and principles of independent, empirical-based academic research, that have benefited Scientific Beta’s development to date.

The Scientific Beta offering covers three major services:

- **Scientific Beta Indices**
  Scientific Beta Indices are smart beta indices that aim to be the reference for the investment and analysis of alternative beta strategies. Scientific Beta Indices reflect the state-of-the-art in the construction of different alternative beta strategies and allow for a flexible choice among a wide range of options at each stage of their construction process. This choice enables users of the platform to construct their own benchmark, thus controlling the risks of investing in this new type of beta (Smart Beta 2.0).

  Within the framework of Smart Beta 2.0 offerings, Scientific Beta provides access to smart factor indices, which give exposure to risk factors that are well rewarded over the long term while at the same time diversifying away unrewarded specific risks. By combining these smart factor indices, one can design very high performance passive investment solutions.

- **Scientific Beta Analytics**
  Scientific Beta Analytics are detailed analytics and exhaustive information on its smart beta indices to allow investors to evaluate the advanced beta strategies in terms of risk and performance. The analytics capabilities include risk and performance assessments, factor and sector attribution, and relative risk assessment. Scientific Beta Analytics also allow the liquidity, turnover and diversification quality of the indices offered to be analysed. In the same way, analytics provide an evaluation of the probability of out-of-sample outperformance of the various strategies present on the platform.

- **Scientific Beta Fully-Customised Benchmarks and Smart Beta Solutions** is a service proposed by Scientific Beta, and its partners, in the context of an advisory relationship for the construction and implementation of benchmarks specially designed to meet the specific objectives and constraints of investors and asset managers. This service notably offers the possibility of determining specific combinations of factors, considering optimal combinations of smart beta strategies, defining a stock universe specific to the investor, and taking account of specific risk constraints during the benchmark construction process.
With a concern to provide worldwide client servicing, Scientific Beta is present in Boston, London, Nice, Singapore and Tokyo. As of December 31, 2019, the Scientific Beta indices corresponded to USD 59.2bn in assets under replication. Scientific Beta has a dedicated team of 52 people who cover not only client support from Nice, Singapore and Boston, but also the development, production and promotion of its index offering. Scientific Beta signed the United Nations-supported Principles for Responsible Investment (PRI) on September 27, 2016.

On November 27, 2018, Scientific Beta was presented with the Risk Award for Indexing Firm of the Year 2019 by the prestigious professional publication Risk Magazine. On October 31, 2019, Scientific Beta received the Professional Pensions Investment Award for “Equity Factor Index Provider of the Year 2019.”