Scientific Portfolio Market Review

October 2025

Scientific Portfolio
An EDHEC Venture

Is Smart Beta (Still) Struggling?

Introduction

Several widely recognized risk factors have failed to deliver a performance premium during recent years. Yet how have factor-based equity strategies such as rules-based 'smart beta,' 'enhanced beta' and highly systematic active funds actually performed in this climate? The sector has become increasingly diverse and complex, with the rise of multi-factor as well as single-factor strategies and promises of greater sophistication on subjects such as risk control and factor timing. In this Market Review, we look at the performance of a broad universe of 'smart beta' and 'style' funds over the past three years and ask: what has set winners apart?

- **Most 'smart beta' and 'style' funds have underperformed** market cap-weighted benchmarks (U.S. and Europe) over the three years to August 31st, 2025. U.S. strategies lag the market by more than 5% per year net of fees , while European strategies did rather better, falling behind the benchmark by just over 1% per year.
- **Long-beta positioning was the main driver of U.S. strategy outperformance**. The strongest results were generated by funds that were—on average—quite close to the benchmark in terms of average factor exposures and took less active risk. Bottom-quintile U.S. funds, on average, have a more distinct 'style' profile with tilts toward Value, Low Volatility and—of course—Size.
- **In Europe, idiosyncratic risk was the key driver of both active risk and outperformance**. Top-tercile managers typically had positive exposure to struggling factors as well as low-beta positioning but outperformed the market-cap benchmark in spite of those detractors. Idiosyncratic risk was also a notable positive contributor for the U.S. top quintile.

View performance and risk data for your equity portfolio and compare it to a wide range of equity strategies on the Scientific Portfolio platform.

The Search for Systematic Alpha

The prospect of benefiting from long-term risk premia observable in equity markets has long fascinated investors, with a well-storied academic trail from Fama-French[1] to Carhart[2] to Ang-Goetzmann-Schaefer[3] and beyond. Indeed, the development of the EDHEC-Risk Institute[4]—whose academic heritage is carried by Scientific Portfolio—is entwined with research on factor investing[5].

By the early 2000s, several prominent asset owners were taking steps to allocate substantial portions of their equity portfolios to rules-based strategies that would deliver exposure to selected factors. This practice became relatively mainstream following the 2008 financial crisis with a slew of new investment products, indices and terminology relating to quasi-passive or heavily systematic equity investing. Developments also brought new lenses through which to scrutinize and negotiate with active managers: investors were increasingly able to dissect return streams and discuss (as Ang and colleagues had done) whether returns constituted *beta dressed as alpha*. Systematic active equity fund fees trended downward in the early-to-mid 2010s[6] as the lines between 'passive' and 'active' became increasingly blurred.

1 - Fama, E., French, K. (1993), Common risk factors in the returns on stocks and bonds, *Journal of Financial Economics*.
2 - Carhart, M. (1997), On Persistence in Mutual Fund Performance, *The Journal of Finance*.
3 - Ang, A., Goetzmann, W., Schaefer, S., Evaluation of Active Management of the Norwegian Government Pension Fund Global
4 - https://climateinstitute.edhec.edu/edhec-risk-research-legacy
5 - Amenc, N., Goltz, F. (2016), Long-Term Rewarded Equity Factors: What Can Investors Learn from Academic Research?, *Journal of Index Investing*.
Investment Management Fees: New Savings, New Challenges, bfinance (2017)

Yet the subsequent years have not offered a smooth ride for academic factors. The 'Value' factor struggled as a decade of low interest rates provided a tailwind for Growth, while the 'Size' factor also languished. Multiple 'style rotations' have underscored the often-discussed difficulties of factor timing[7]. The 2020s have brought challenges into sharp focus, with soaring and increasingly concentrated equity markets often leaving active investors (and, more generally, those deviating from the cap-weighted benchmark) lagging behind[8].

Scope of Analysis

There is no straightforward delineation of what constitutes a 'smart beta' ETF or fund: the term itself already denotes in a grey area between 'active' and 'passive' spheres. A meaningful assessment should incorporate predominantly systematic strategies that deliver exposure to one or multiple equity risk factors resulting in a material deviation from the relevant market cap-weighted benchmark. Yet these can be marketed (and priced) as active, quasi-passive or something in-between, with varying levels of complexity.

For this analysis, we sought to examine ETFs and funds that fit this description, while excluding more discretionary active strategies as well as exceedingly passive instruments. This was achieved through a combination of qualitative and quantitative filters. Product labels, though not always reliable, are relevant: these often reference particular styles/factors (Value, Quality, Minimum Volatility, and others) or the use of several (such as Multi-factor, Smart Beta, Enhanced). A fee cap (50 basis points) helps to eliminate the more active style-oriented strategies, although it does retain—appropriately, in our view—a number of products that are 'active' but highly systematic in terms of process. Conversely, a minimum three-year tracking error (50 basis points) removes instruments that are essentially market trackers, irrespective of their names.

This analysis also excluded products with 'ESG,''climate' and similar branding. Where a strategy features both systematic factor/style and ESG/climate elements, the addition can add a new layer of risk and return drivers that obstruct analysis. Indeed, a prior Market Review has addressed the underperformance of climate equity indices in recent years. Meanwhile, academic studies continue to assert that 'ESG' itself should not be considered a standalone factor, distinct from others[9]. Although these parameters are necessarily imperfect, we believe that the combination produces a meaningful dataset to represent systematic, rules-based equity strategies in an appropriately broad manner. For U.S. equities, this filtering resulted in a sample of 418 funds or ETFs; for Europe, the figure was considerably smaller at 64.

High-Level Snapshots: Relative Performance, Risk, Fees

With such a diverse sample, generalizations can be problematic – particularly when looking only at a specific three-year period. Nonetheless, it may be helpful to consider a handful of high-level findings: at the very least, these provide useful overall context for more granular analysis.

In comparison with market cap-weighted benchmarks, these 'style' or 'smart beta' equity strategies have—as a group—delivered negative relative returns after fees . The underperformance was particularly marked in the U.S., where the average strategy lagged by more than 5% per year. Overall, 84% of U.S. products and 63% of European products underperformed the cap-weighted index.

7 - Hotze, S., Hachenberg, B., Schiereck, D. (2025), Factor Timing in Asset Management: A Literature Review, Credit and Capital Markets (Kredit und Kapital)
8 - A good and recent review of factor investing is provided by Aghassi et al. (2022), Fact, Fiction, and Factor Investing, *Journal of Portfolio Management*.
9 - Dobrick, J., Klein, C., Zwergel, B. (2025), ESG as a Risk Factor, Journal of Asset Management; Covachev, S., Martel, J., Brito-Ramos, S. (2025), Are ESG Factors Truly Unique? *The North American Journal of Economics and Finance*.

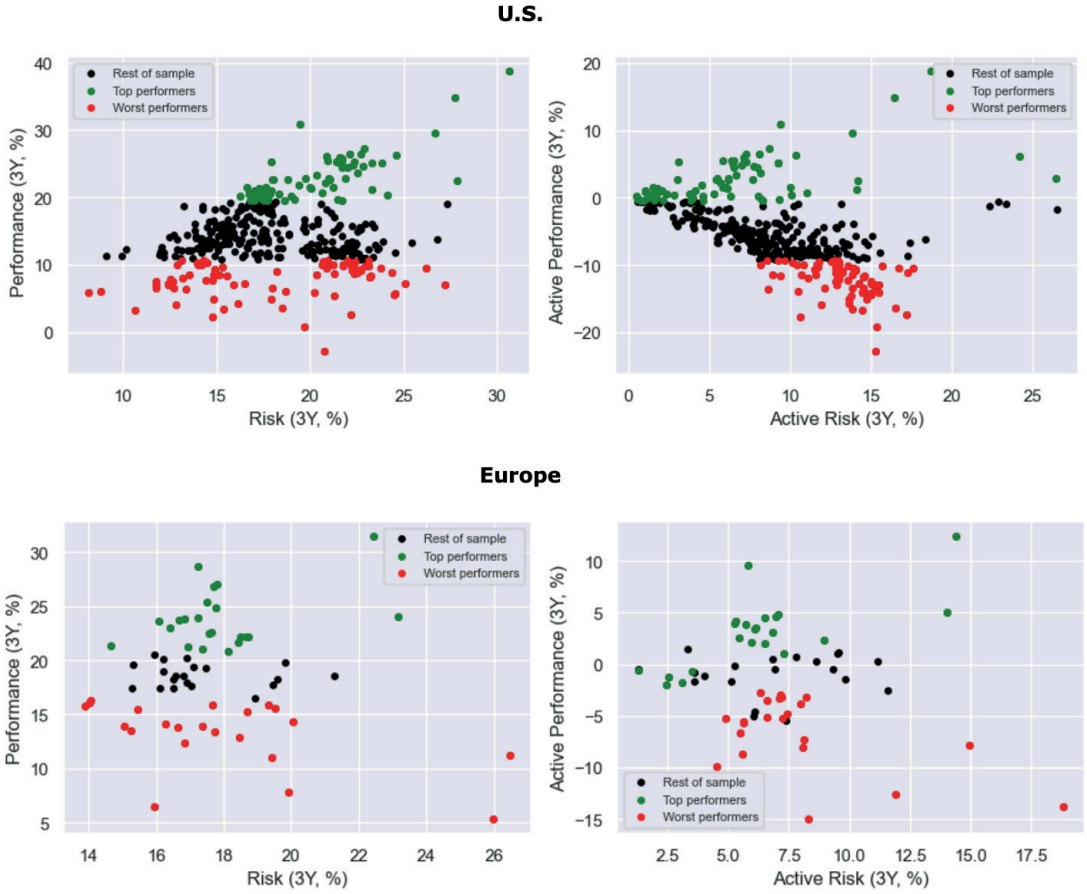
Exhibit 1: Average annualized three-year relative performance of smart beta strategies versus market cap benchmark

Europe	
All	**-1.53%**
Top tercile	3.55%
Middle tercile	-1.27%
Bottom tercile	-6.84%

United States	
All	**-5.23%**
Top quintile	2.69%
Second quintile	-2.51%
Third quintile	-5.96%
Fourth quintile	-8.22%
Bottom quintile	-12.13%

Source: Scientific Portfolio. 418 U.S. ETFs/funds, 64 Developed Europe ETFs/funds. Performance over three years to 31st August 2025, in USD terms, net of fees . Relative performance vs. Scientific Portfolio cap-weighted benchmarks (SP CW U.S. index and SP CW Developed Europe index). European strategies are shown in terciles rather than quintiles due to the smaller sample size.

Exhibit 2: Annualized three-year performance versus risk

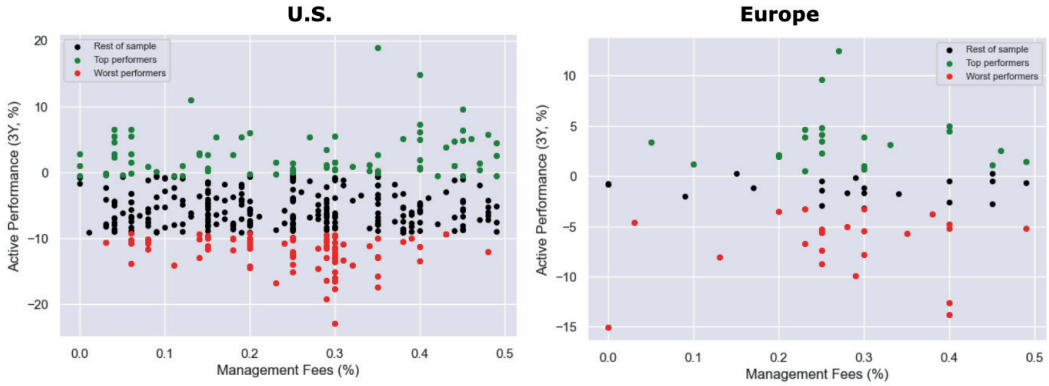


Source: Scientific Portfolio. Sample and benchmarks as in Exhibit 1.

Top performers in this period have tended to take less active risk versus the benchmark than the weakest performers (Exhibit 2), although this association is more evident in the U.S. sample. This is, to some extent, intuitive: in circumstances where the vast majority of strategies underperform a benchmark, the more benchmark-like strategies would tend to outperform peers.

In addition, there is no visible relationship between relative performance and management fees in either geography (Exhibit 3). Although management fees and product complexity do not necessarily go hand in hand, this initial finding does suggest that there was no obvious 'complexity premium' for the period under review.

Exhibit 3: Annualized 3Y performance versus management fees



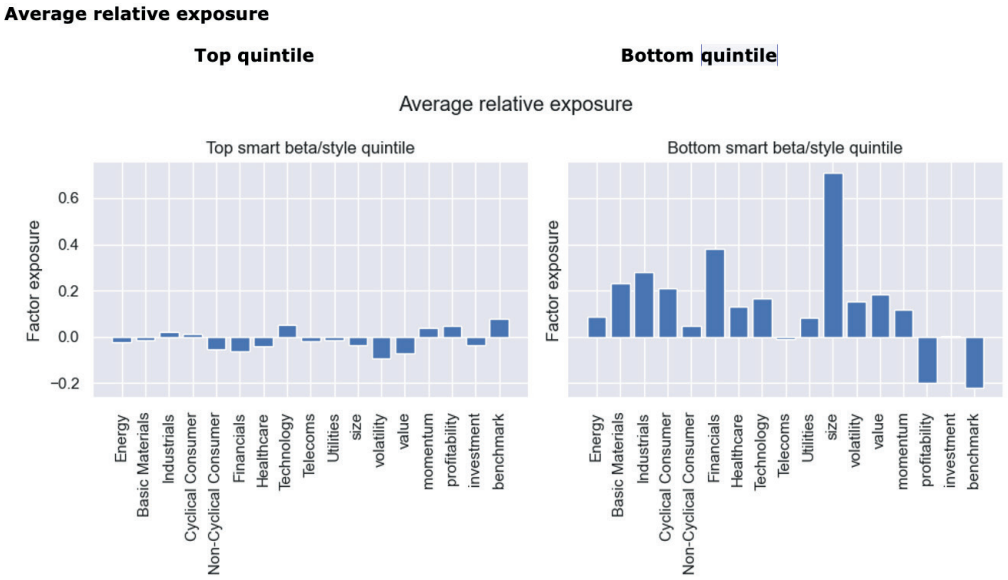
Source: Scientific Portfolio. Sample and benchmarks as in Exhibit 1.

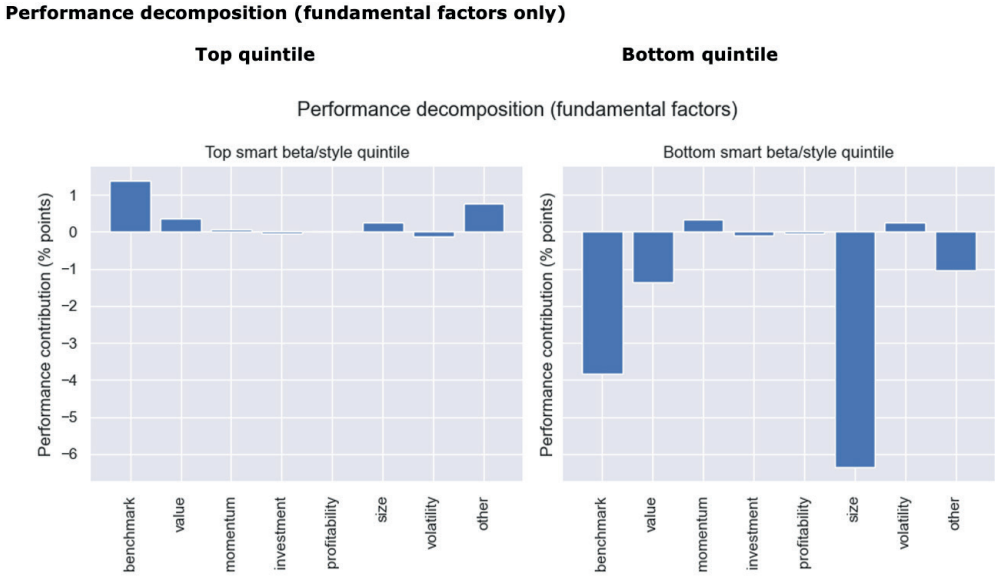
Winners and Losers: A Closer Look

In keeping with the findings on 'active risk' shown in Exhibit 2, it might not be surprising to see that the **U.S.** top quintile strategies show—on average—substantially **smaller tilts** toward sectors and fundamental factors than their bottom-quintile peers (Exhibit 4). This outperforming group also has a **high-beta profile** (in clear contrast with the bottom quintile), as well as very modest tilts away from the Low Volatility and Value factors and toward Technology.

Overall, the picture at the top seems to be one of 'enhanced beta' rather than 'style. Moreover, when looking at the performance decomposition, it is idiosyncratic risk (discussed further in the following section) that represents the strongest positive contributor to active return other than high-beta positioning. The bottom quintile U.S. products, on the other hand, have a more distinct 'style' profile, with tilts toward factors such as Value, Low Volatility and—most strongly (and of course, in light of recent market dynamics, damagingly)—Size.

Exhibit 4: U.S. top/bottom quintile: relative exposure and performance decomposition



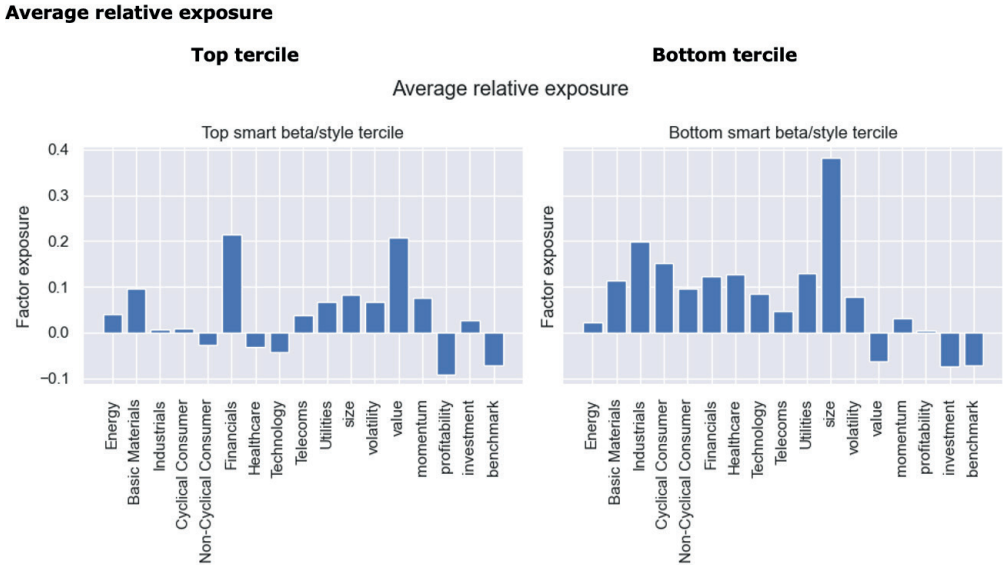


Source: Scientific Portfolio. Sample and benchmarks as in Exhibit 1.

The picture in Europe, however, is rather different. Both winners and losers provided reduced market beta exposure (detracting from active return in both cases due to an upward-trending market, though Sharpe Ratios may have benefited) and positive exposure to the Low Volatility factor. In addition, both groups have notable style tilts on average; indeed, both lean toward the Size factor, although this tilt is much stronger in the bottom tercile (and of course detracted from return in both groups in this period). Winners also have strong positive exposure to the Value factor while losers were under-exposed, though in Europe this tilt had no impact on 3Y systematic returns. Interestingly, and echoing the U.S. data, it is idiosyncratic risk that made the strongest positive contribution for the winning cohort; it also made the largest negative contribution for the 'losing' cohort, with the exception of the Size factor.

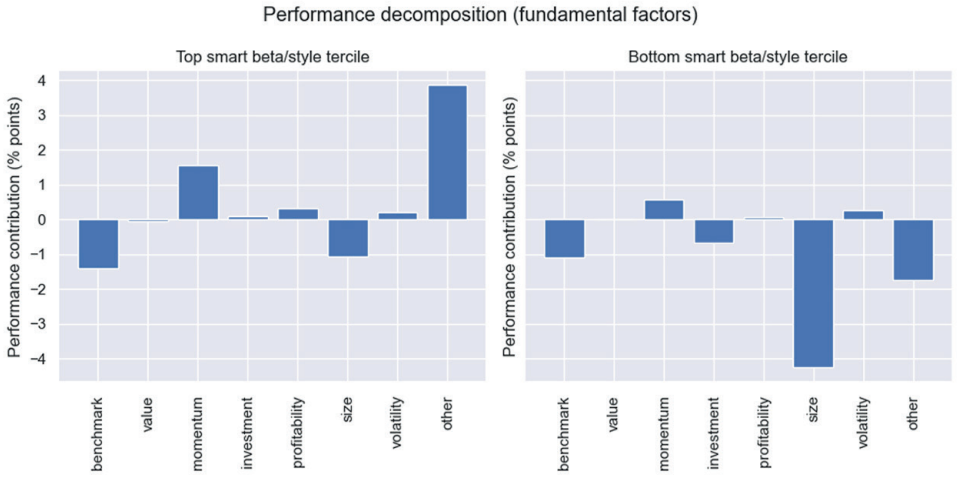
In other words, both winners and losers demonstrate a clear 'style investing' and indeed risk-reducing remit (unlike the U.S. sample), but it was idiosyncratic positioning that set the top performers apart.

Exhibit 5: Europe top/bottom tercile: relative exposure and performance decomposition



Performance decomposition (fundamental factors only)

Top tercile **Bottom tercile**



Source: Scientific Portfolio. Sample and benchmarks as in Exhibit 1.

From 'Hidden Betas' to 'Hidden Alphas'? Idiosyncratic Risk inFocus

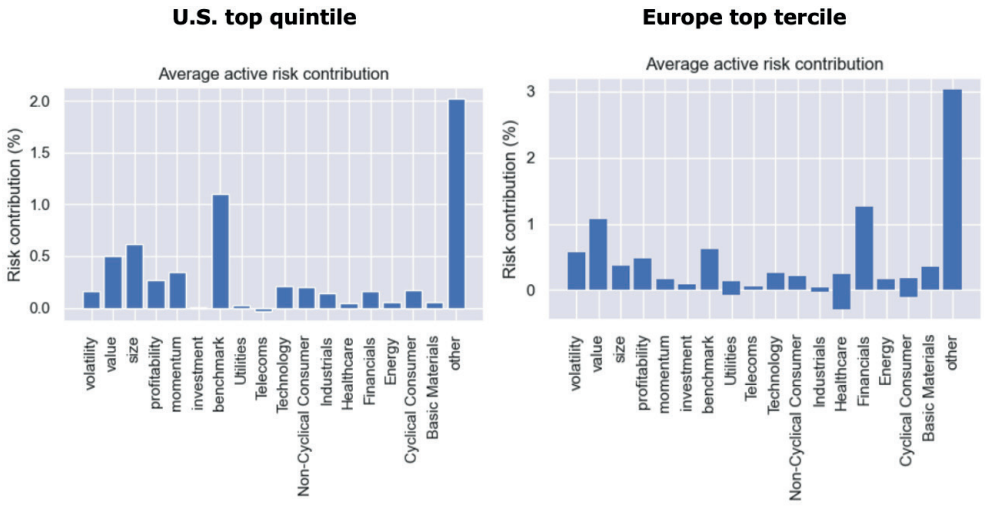
The implications are, at the very least, intriguing. European outperformers in this period did well **in spite of their style bets**, not because of them. And, unlike U.S. winners, they did not accomplish this via high-beta positioning in a rising stock market.

For years following the Global Financial Crisis, investors scrutinized actively managed strategies looking for the hidden betas in their alpha generation — premia that, some argued, should not perhaps be counted as 'true' alpha given that it could theoretically have been obtained via cheaper systematic strategies. Now, however, the boot appears to be on the other foot with *hidden alpha* in primarily systematic products. In a period when many academically established risk factors have struggled to deliver a premium, these non-style-attributable bets boosted performance

The subject of idiosyncratic risk exposure, suggested by the charts above, becomes even more clear when looking at **contribution to active risk**. Exhibit 6 showcases the average active risk contribution of the U.S. top quintile and the European top tercile: the 'Other' category dominates on both sides of the Atlantic (3% in Europe, 2% in U.S.); benchmark exposure in the U.S. and Value and Financials exposures in Europe also contribute more than 1% to active risk exposures.

The problem, however, is one of strategic decision-making. Systematic, largely-systematic or style-based equity investment products are not (typically) put in place for their ability to provide non-systematic risk exposures and generate alpha from those bets. There is also the question of 'factor timing': the more successful U.S. strategies were underexposed to academically recognized factors for this period, but not all investors are comfortable with delegating factor timing decisions to asset managers in practice (or indeed trying to time factor exposures at all).

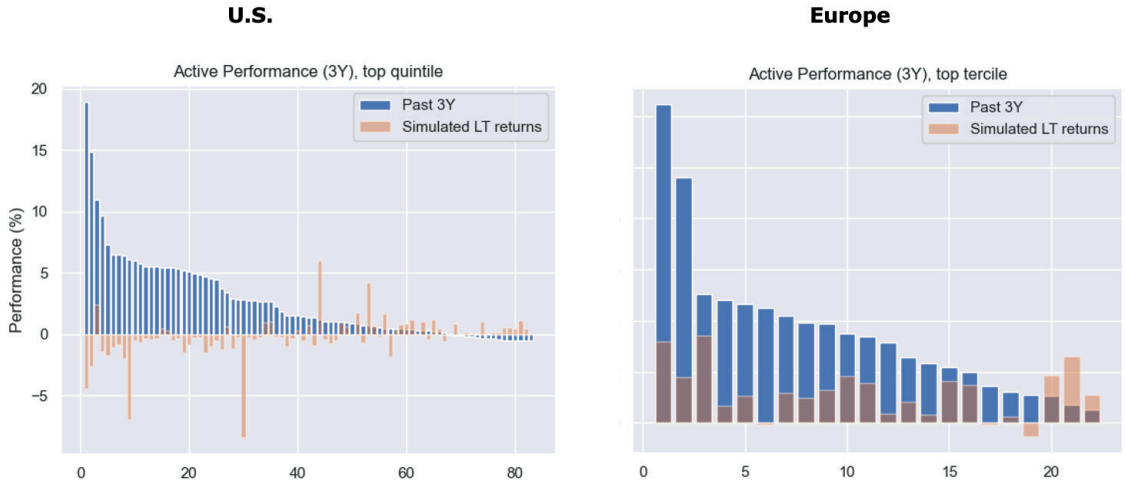
Exhibit 6: Europe and U.S. top-performing groups, active (relative) risk decomposition



Source: Scientific Portfolio. Sample and benchmarks as in Exhibit 1. For an explanation of the methodology used in active risk calculations, please refer to the Scientific Portfolio Glossary.

Indeed, when we look at the top performers and extrapolate simulated long-term returns based on their fundamental factor exposures (Exhibit 7), we find that expected returns for the highest-performing cohort in this period would have been modestly positive for European 'winners' (typically 1-2% above benchmark) but negative for many of the U.S. 'winners, illustrating the challenge.

Exhibit 7: Active performance of 'top' performers versus simulated long-term returns based on fundamental factor exposures



Source: Scientific Portfolio. Sample and benchmarks for three-year data as in Exhibit 1. 'Long-term' return data based on period 1970-2025.

Conclusion: Strategic Positioning and Implementation in Focus

Short or even medium-term performance frustrations should not necessarily encourage investors to unpick long-term strategic decisions relating to subjects such as factor exposures or the use of rules-based investment products. However, the extended under-performance of several academically established factors does call—at least—for a re-examination and re-validation of the path.

It would be a fair generalization to say that smart beta funds have, indeed, struggled in recent years. Yet the systematic equity landscape is hugely diverse, not just in terms of factor exposures but in terms of practices and processes. There is now an extremely varied universe of products offering single- and multi-factor strategies (including many that are style-neutral overall) with varying degrees of construction complexity as well as different approaches to risk control and risk management.

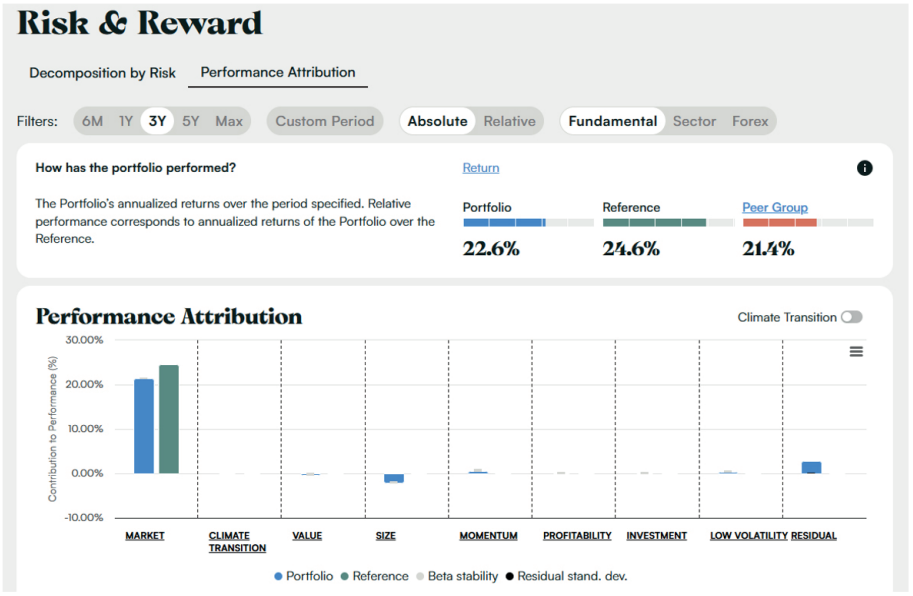
Before taking decisions, it is important to gain clear insight on what has driven performance in the existing portfolio and perhaps consider how other systematic strategies (such as those with a similar risk factor profile) have fared in comparison with incumbent providers. Indeed, the relevance of idiosyncratic risk to performance over the past three years underscores the importance of provider selection—not just strategy—to outcomes. Ongoing monitoring can support strong oversight and governance, as well as flagging potential performance issues going forward.

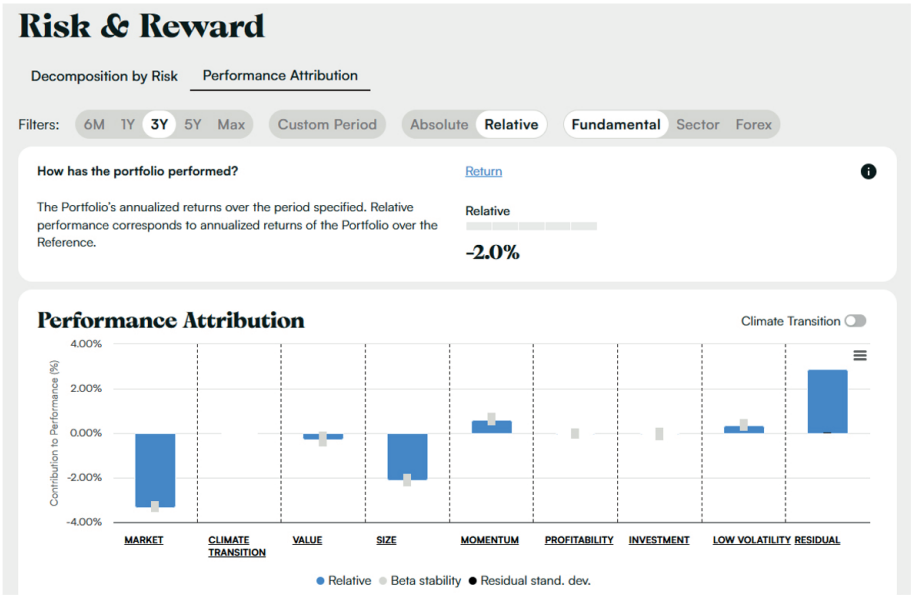
This article contains data from the Scientific Portfolio platform. Users can access analytics to conduct analyses of available funds and upload their own equity portfolios to examine performance and exposures. Entry-level access is free of charge, via self-registration.

Access the Scientific Portfolio Platform

Appendix

Screenshots from Scientific Portfolio platform showing a strategy's performance attribution to fundamental risk factors (on an absolute and relative basis)





Source: Scientific Portfolio Platform.

About Scientific Portfolio

Scientific Portfolio is the latest commercial venture incubated within the research ecosystem of EDHEC Business School (EDHEC), one of the world's leading business schools.

Scientific Portfolio has assembled a team with a broad range of expertise and backgrounds, including financial engineering, computer science, sustainable and climate finance, and institutional portfolio and risk management. It proudly carries EDHEC's impactful academic heritage and aspires to provide investors with the technology they need to independently analyse and construct equity portfolios from both a financial and extra-financial perspective.

To achieve this, it offers investors three sources of value through its portfolio analysis & construction platform:

- Helping investors to analyse their equity portfolios, identify actionable insights and enhance portfolios with allocation functionalities. Indeed, Scientific Portfolio likes to promote portfolio analysis as a means to the concrete goal of building portfolios that are both more efficient and better aligned with their investment objectives.
- Providing investors with an integrated framework where financial and extra-financial (ESG) considerations are jointly captured in analysis and portfolio construction. The ability to incorporate ESG-related insights in the portfolio allocation process is now a common requirement among many investors.
- Giving investors access to a Knowledge Centre catering to all types of learners and providing guidance through the portfolio analysis and construction process. This aligns with Scientific Portfolio's commitment to remaining connected with its academic roots and bridging the gap between investors and academia.

https://scientificportfolio.com/


Scientific Portfolio
An EDHEC Venture