

# Performance and Flow of SRI Mutual Funds and Investors Sophistication

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## Summary of the article

Sustainable and socially responsible investments are not new in financial markets, although for a long time they were perceived as a niche by portfolio managers and investment companies. It is, however, just over the recent decade when we have witnessed an increasing awareness of environmental, social and ethical issues among majority of investors, leading to a global trend of adding sustainable investments to their portfolios. According to US Social Investment Forum (USSIF) <sup>1</sup>, in 2010 around 12% of all the assets under professional management in US (\$3.1 out of \$25.2 trillion), were involved in investments that apply various environmental, social and governance (ESG) criteria in the analysis and portfolio selection process. Ten years later, in 2020 this number increased to 33% (\$17.1 out of \$51.4 trillion). In particular, the assets involved in ESG funds under the management of US registered investment companies rose from around \$320 billion in 2010 to \$3.1 trillion in 2020 and most of them were managed by mutual funds. This prevailing development of the SRI sector of investment companies was possibly facilitated by the introduction of the principles and ratings by regulatory bodies, such as United Nations Principles for responsible investments or sustainable ratings from Morningstar.<sup>2</sup>

Consequently, the interest and importance of Socially Responsible Investments (SRI) has been growing among professionals and academics for some time already. In this paper we provide a comprehensive analysis of the performance of US SRI mutual funds as well as its relation to the flow of new money that those funds experience. In particular, we consider not only the entire sample of SRI funds but also its retail and institutional shareclasses.

The empirical analysis in our paper is three-folded. First, we evaluate the performance of SRI mutual funds and its both retail and institutional shareclasses and we compare it with the performance of conventional funds. We use two different matching procedures for the identification of the conventional funds which allows us to shed a light on the control of managerial skills within the SRI investments. Second, we investigate how SRI funds characteristics and performance impact the amount of money that those funds attract or lose subsequently (flow-performance relation) and whether the investors sophistication plays a role in the flow-performance relation. Third, we study how investment decisions of the SRI mutual fund investors, which are reflected in the flows of money, are related to the profits they earn subsequently (performance-flow relation) and whether the investors sophistication matters for the performance-flow relation. In particular we are interested whether SRI mutual fund investors are able to make wise decisions in the sense that they direct their money to those funds that subsequently earn profits for them (smart money effect). The literature points that retail and institutional investors behave differently in this respect thus it seems rational to consider them separately. As a result, we are able to analyse the investment decisions of retail and institutional SRI investors in the light of their sustainability preferences.

While the performance of SRI/ESG funds has been extensively studied in academic literature, the analysis of the flow-performance and performance-flow relation for SRI funds and its retail and institutional shareclasses is what marks a novelty of our paper. Growing recent interest of investors in sustainable investments calls for a thorough analysis of the role of investors sophistication for the flow-performance and performance-flow relation. We fill in this gap in the literature.

Our results show that overall the SRI mutual funds make positive abnormal returns before fees of magnitude 0.12%-0.14%, but not statistically significantly different from zero after fees. We also find that retail SRI funds are overperforming institutional SRI funds both before and after fees by roughly 0.1% and 0.06% per month respectively. These differences in performance are mainly due to institutional SRI funds obtaining negative abnormal returns especially after accounting for expenses.

When comparing the performance of SRI funds with their conventional peers, we find no differences

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<sup>1</sup>USSIF 2020 Report on US Sustainable, Responsible and Impact Investing Trends, USSIF 2010 Report on Socially Responsible Investing Trends in the United States

<sup>2</sup>United Nations Principles for Responsible Investment was launched in 2006 to reflect the increasing relevance of ESG issues to investment practices. Morningstar published sustainability ratings in 2016 for mutual funds to show fund's involvement in ESG issues.

in performance when we consider SRI and conventional mutual funds run by the same management companies and with similar investment objectives. However, when we compare the performance and SRI and conventional funds with similar fund characteristics, yet not necessarily run by the same management companies, we observe that SRI mutual funds outperform their conventional peers by almost 0.2% per month (both before and after expenses). There are two sources of these differences: the SRI funds overperforming before fees and conventional funds underperforming after fees. These results allow us to conclude that the managerial skills might play important role in case of investments made into sustainable funds, however this issue requires a more detailed investigation which is beyond the scope of this paper.

Moreover, our study shows that there is a positive relation between past performance and future investment flow for SRI mutual funds as well as for their both, retail and institutional shareclasses. Thus the SRI funds performing well in the past, subsequently attract more investment. We confirm a positive flow-performance relation with monotonic relation test of Patton and Timmermann (2010)<sup>3</sup>. When investigating the shape of the flow-performance relation, we find evidence that this relation is convex within a sample of all and retail SRI funds, whereas linear for institutional SRI funds. Our empirical findings are invariant when we control for other factors potentially influencing the flow of new money and are also robust to alternative measures of past performance.

Given the empirical results on the flow-performance relation, we conclude that the fund performance is an important driver for investment decisions made by SRI investors. However, retail and institutional SRI investors incorporate it differently into their decision-making process. In particular, retail SRI investors disinvest their money from worst past performers and this disinvestment is disproportionately lower in comparison to the additional investment they make for equivalent best past performing funds. On the other hand, the non-convex flow-performance relation for institutional SRI investors indicates that institutional SRI investors disinvest the funds from the worst past performers to the same extent as they invest money into best past performers. They are then more demanding investors in comparison to their retail peers when faced with bad performance.

Additionally, our results reveal that there exists no smart money effect among the sample of all SRI funds as well as retail SRI funds. Interestingly, we find a dumb money effect for institutional SRI funds as funds net attracting new money subsequently underperform funds net losing new money. We show that the dumb money effect is mainly driven by bad performance of institutional SRI funds with large money inflows. We reveal as well that the dumb money effect is rather a short-lived phenomenon and disappears after 3 months. Our results are robust to a series of robustness checks. Specifically, the dumb money effect for institutional SRI funds is invariant to alternative constructions of flow portfolios and it is magnified when we take into account of the consequences of flow-induced trading and related price pressure. Given our findings on the performance-flow relation, we conclude that the decisions of the SRI investors might be driven also by non-financial factors, which confirm the findings in the recent literature.

In summary, our empirical results shed a new light on the role of investors sophistication in the flow-performance and performance-flow relation. Both, retail and institutional SRI investors seem to behave rationally, after accommodating their sustainability preferences in the sense that they direct more of their money towards best past performers. Yet, institutional SRI investors are more harsh in punishing mutual fund managers for bad performance. On the other hand, the lack of smart money effect for retail SRI funds and the dumb money effect for institutional SRI investors, may indicate that, apart from preference for sustainability and performance, there might be other factors that drive the investment of the SRI investors. With these novel results, we contribute to the empirical literature on the growing importance of sustainability in the investment industry.

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<sup>3</sup>Patton, A. J., Timmermann, A. (2010). *Monotonicity in asset returns: New tests with applications to the term structure, the CAPM, and portfolio sorts*. *Journal of Financial Economics*, 98(3), 605–625.