ON THE FINANCIAL Performance of Socially Responsible Investments



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■ I. INTRODUCTION

Socially responsible (SR) investors complement financial analysis with extra-financial research when valuing corporations or deciding on their investment strategy. Extra-financial research aims at understanding corporations' performance in terms of Environmental, Social, and Governance (ESG) issues. SR investments have recently grown fast and now represent as much as 10% of the assets under management in Europe as well as in the U.S.¹

In this context, a crucial issue for investors, both individual and institutional, is the level of financial performance they can expect from their SR investments. Extra-financial elements can be viewed as a constraint on feasible portfolio allocations, and may thus be detrimental for investment performance. On the other hand, they can also constitute an opportunity for asset managers to be more discerning and creative, and thereby may be beneficial for performance. This article discusses various conceptual frameworks that are useful to analyze the issue of the risk-adjusted performance of SR investment strategies.

SR investors implement three main types of strategies that can be expected to have different investment performances. In the *negative screening* strategy, investors refrain from investing in some industrial sectors or firms that engage in activities that are viewed as inconsistent with sustainable development or moral values (*e.g.*, production of unconventional weapons). The best-in-class strategy selects, in each industrial sector, the companies that are the most socially respon-

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sible.² Finally, engagement strategies aim at improving the SR behavior of companies by actively discussing with executives, voting at shareholder meetings, and participating in boards of directors.

The financial performance of these strategies depends on the vision of financial markets one thinks is the most relevant. One may believe that financial markets are informationally efficient, as for example in the Capital Asset Pricing Model. We develop this view in the second section. In this case, investors' common beliefs, as well as any new information, are instantaneously incorporated in asset prices. SR investment strategies thus have no reason to outperform standard ones. There even exist some reasons to expect that SR strategies may underperform, mostly because of their lack of diversification. SR investment strategies may outperform standard strategies only if markets are not fully efficient, because investors have private information or different opinions. In the third section, we show what performance can be expected in this view for the negative screening and best-in-class strategies and discuss what is required for SR investors to outperform standard ones. The fourth section deals with the financial performance of engagement strategies. A special focus is made on this type of strategy because it adds another dimension to the analysis, namely governance issues.

It is important to note that the financial performance of SR investors may be at odd with the economic performance of companies in which they invest. It might indeed be the case that SR companies are more profitable or less risky than non-SR ones (see for example, surveys on Corporate Social Responsibility by Ambec and Lanoie (2008) and Crifo and Forget (2012)). Even in this context, it is possible that, when markets are efficient, SR investors underperform standard ones because the valuation of SR companies already reflects their advantages. A more thorough analysis of the issue of SR investors' performance is thus required to evaluate the potential of strategies based on ESG considerations.

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■ II. Performance of Socially Responsible Investments in an Efficient Market

The classic theory of finance teaches that, if markets are informationally efficient, the best strategy is to perfectly diversify across all available assets. To see this, consider the following intuition. When investors receive different information regarding companies' future cash flows or valuations, they tend to buy after receiving good news and sell otherwise. Prices adjust upward or downward so that market clears. As shown by Grossman (1978), absent noise due to irrational investors or to multiple trading motives, prices incorporate all available information. As a result, speculating on information is not profitable. The optimal strategy is then to diversify across all financial assets in an attempt to smooth risk and to capture growth wherever it may appear.

In this classic set-up, there is thus no reason for the performance of SR investment funds to be any better than that of conventional investments.³ Indeed, if CSR is really more profitable, investors anticipate this, prices rise, and the expected returns for holding responsible companies is not different from those of non-responsible enterprises. If markets are efficient, best-in-class strategies cannot outperform standard ones. This is not because SR companies are not good investments but because, if they are, they trade at high prices. Moreover, as shown by Heinkel, Kraus, and Zechner (1998), the performance of negative screening strategies suffers from a lack of diversification. Because these strategies exclude certain sectors or firms of the economy, the resulting portfolios are less than optimally balanced across assets.

Another consequence of best-in-class and negative screening strategies is that they may induce a higher valuation for SR firms compared to the valuation that would result if all investors were using the strategy to optimally diversify. As in Merton (1987)'s model of segmented financial markets, investors who follow SR strategies indeed tend to concentrate on the same assets and thus bid up their valuation (Heinkel, Kraus, and Zechner (1998), and Girerd-Potin, Louvet, Jimenez-Garces and Dupré (2009)). Consequently, the expected return on SR companies may be lower than on standard companies, implying a lower performance for SR investors who overweight SR companies. It should however be noted that investors may be perfectly fine with this situation. As discussed by Benabou and Tirole (2010), some investors, driven by altruism or self-image concerns, may derive utility from knowing that SR companies enjoy a lower cost of capital or from not endorsing inappropriate activities.

Various empirical studies suggest that more responsible companies deliver a lower risk-adjusted return than others. This result has been shown to hold both in stock and bond markets, and for issues such as employee relations and environmental performance (Bauer, Derwall, and Hann (2009), Bauer and Hann (2010), Chava (2013)). Moreover, Andries (2008) suggests that this result is particularly strong after the year 2000, corresponding to a turning point at which sustainable development issues became more prevalent in financial markets. It is nevertheless worth noting that the stock market performance measured in these studies only covers a relatively short period of time.

To sum up, with informationally efficient markets, SR investors cannot outperform standard ones and may even underperform. However, SR investors, driven by altruism or self-image concerns, may be ready to accept such a lower performance. There is thus a business case for SR investments, even in this classic view.

Two important market frictions, the presence of noise in the price formation process and the existence of differences of opinion, may prevent markets from being efficient and modify the conclusions derived from the classical model discussed above. The next two sections discuss these alternative views of financial markets and their consequences for the performance of SR investments.

■ III. Performance of Socially Responsible Investments in an Inefficient Market

The result that SR strategies cannot outperform standard ones relies on the fact that, if SR companies are more profitable than others, this fact is incorporated instantaneously in asset prices. However, it might well be the case that information, and in particular private information, takes time to be reflected in market prices. SR strategies may then outperform if they enable investors to take positions before markets completely incorporates their information. In any case, the success of SR strategies thus relies heavily on anticipations and on the ability to rapidly take positions. This section discusses the various cases in which SR strategies are able to generate abnormal returns. It also discussed what are the required conditions for such SR strategies to be implemented successfully.

To analyze the role of private information in SR investments, we rely on the insights of Grossman and Stiglitz (1980) and Glosten (1989): when investors have various trading motives, markets are not fully efficient. These articles consider that investors may trade either for liquidity or informational reasons. In Grossman and Stiglitz (1980), liquidity needs are exogenously given while, in Glosten (1989), they result from the desire of investors to rebalance their portfolios for risk-sharing reasons. In addition to trade for liquidity reasons, investors may also acquire private information on the future value of the assets.

The multiplicity of trading motives introduces noise in the price formation process and reduces the informational efficiency of the market. Indeed, upon observing an investor selling an asset, it is difficult to know whether the sale is due to liquidity needs or to a bad news. As a result, market participants react less to the trade than if its motivation was clear. In particular, if the investor receives a bad news concerning the prospect of a security and sells it, the price drops less when there are multiple potential trading motives than when the trade is clearly identified as driven by information. The market thus does not fully incorporate private information and it becomes interesting to collect such information.

In this context, SR investment strategies based on ESG research insights may outperform standard strategies based on uninformed trading or indexing. ESG research may indeed provide information regarding the impact of some ESG related policy and events on the future profitability of firms. There are two potential types of information that ESG research analysts can bring to investors that may enable them to run successful strategies.

On the one hand, they may pay more attentions to or may be more able to interpret certain signals that suggest that some ESG factors might be responsible for future liabilities (e.g., extent of reliance on polluting technologies) and/or future profitability improvements (e.g., implementation of a waste reduction program). Such signals might then enable investors to better predict future returns. As shown by Grossman and Stiglitz (1980), this would be enough to surpass the performance of uninformed and indexing strategies.

On the other hand, ESG research analysts could be better at identifying upcoming issues in the sustainable development area (e.g., emergence of job satisfaction as an important driver of performance, see Edmans (2011)). Early detection of these new issues might enable them to better predict changes in institutional investors' preferences and thus anticipate on future trends in corporations' market valuations.

For example, Edmans (2011) indicates that the "100 Best Companies to Work for America" have delivered positive abnormal returns over the last twenty years, and have attracted more and more responsible investors. One can conclude that if a SR investor had anticipated this market trend, he or she would have outperformed traditional investors.

Some active investors such as hedge funds may also incorporate ESG information in their analysis if they judge it useful. To surpass the performance of these standard investors, SR investors have to have access to earlier and more precise information.

Various empirical studies have focused on the performance of SR mutual funds. These studies are summarized in Renneboog, Horst, and Zhang (2008) who also run a comprehensive analysis of SR mutual fund performance at the global level. Their results suggest that, in general, there is no difference in the performance of SR and traditional funds.

This suggests that, in the samples under study, the specific information used by the average SR manager was not of high enough precision to generate abnormal returns. The data however cover time periods up to 2003: it would be interesting to see what the results are in a more recent sample, now that SR investments methodologies are more refined, SRI managers have developed more experience and ESG analysis is becoming more mainstream.

Overall, if financial markets are informationally inefficient, SR investors' risk-adjusted performance at the portfolio level could be higher than the one of standard investors if SR managers are able to acquire informational advantages. The overall profitability of SR investing however also crucially depends on the cost of gathering ESG information.

■ IV. Performance of Engagement Strategies

Engagement strategies reflect SR investors' willingness to improve corporations' behavior. Such willingness is a sign of the existence of conflicts among shareholders for the control over firms' strategic decisions. As argued by Grossman and Stiglitz (1977), "the modern corporation is an economic institution in which there is always a potential political (*i.e.*, voting) aspect". Their analysis shows that shareholders might not be unanimous in their choice of corporate strategy due to the absence of complete markets. If markets are complete, shareholders are unanimous in desiring that the firm maximize stock price value so that they can receive as much as possible from the sale of their holdings and buy the greatest amount of goods and services.

When markets are incomplete, the situation is very different. As an extreme example, consider that some investors would like to enjoy clean air over any other consumption of goods whereas others do not care much. Assume that one company can irreversibly affect the air quality. To simplify again, consider that the company has only two possible strategies, a polluting strategy that generates a lot of cash but poor air quality, and a clean strategy that generates less cash but perfect air quality. In case, the company chooses the polluting strategy, investors who would like to enjoy clean air cannot find this service once pollution is there: markets are not complete. These investors will thus not be willing for the firm to implement the polluting strategy, even if it generates more cash. A conflict of interest emerges between shareholders. Such conflicts are likely to arise for firms that have potentially large impacts on goods, environmental or social, that are not exchanged on markets or that are not subject to Pigouvian taxes, and thus generate externalities.⁴

Another potential source of conflict between shareholders may emerge due to investors' differences of opinion regarding firms' adequate business strategies. Differences of opinions have been shown both theoretically and empirically to have a significant impact in financial markets (see Harris and Raviv (1993), Diether, Malloy, and Scherbina (2002), and Chen, Hong, and Stein (2002)). In the sustainable development area, one could think that strategies based on environmental or social factors might be controversial among shareholders due to the question of whether or not these factors will materialize into companies' future cash flows.

Conflicts among shareholders may be settled through take-over activities, votes during shareholder meetings, and more generally, governance arrangements. The idea of engagement strategies is to acquire enough influence on firms in order to induce them to choose a SR investor's preferred business strategy, the one that best balances ESG and profitability aspects. Engagement is thus best suited to complement best-in-class or indexing-like strategies. Using these strategies, SR investors may indeed acquire a stake in companies that is large enough to influence corporate executives.⁵ Absent shareholders' unanimity over firms' strategic decisions, an investor might decide to implement an engagement strategy in order to boost, according to his or her views and objectives, corporate economic performance and market valuation. Whether such engagement activity is effective depends on the influence investors can gain over corporate decisions. Whether it is profitable ultimately depends on the quality of their views. When confronted with decisions that materialize in firms' economic performance several decades after being implemented, it is clear that such engagement strategies appear best suited for long-term investors.

As argued by Gollier and Pouget (2013), there is however a possibility for engagement strategies to actually outperform standard strategies even in the short-run. This strategy can be labeled the "washing machine" strategy: SR investors can invest in a so-called "dirty" business, that does not conform to the standards of corporate social responsibility (CSR), and can transform it so that it strictly adheres to these standards. A financial advantage of this strategy appears if the company is more valued by the market when clean and included in SR portfolios than when dirty and neglected by part of the market.

Gollier and Pouget (2013) however identify three conditions for the "washing machine" strategy to be successful. First, investors implementing this strategy must be able to acquire a significant influence on target companies. Otherwise, they will not be in a position to impose the necessary changes. The "washing machine" strategy is thus well suited for investors that are ready to take large stakes in companies, such as private equity funds, hedge fund, or wealthy individuals. But it is also attainable by a group of investors, such as mutual funds or pension funds, who do not individually hold large blocks. In this case, a successful implementation of engagement relies on a sufficiently coordinated policy of engagement (e.g., voting at general meetings).

Second, only investors with a long-term outlook can implement this strategy. Indeed, they must be able to credibly commit to remain involved in the business long enough for its level of CSR to improve.

And third, the fund must be able to provide guarantees of credibility with regard to CSR. Otherwise, it will fail to convince the market of the reality of the commitments made by the company: when trying to sell back part of the company, the market will value it as a dirty rather than as a clean one.

As already mentioned, several empirical studies reveal that firms with a higher level of CSR trade at a premium on financial markets. Moreover, Krüger (2013) finds that CSR improvements, when not due to poor governance, positively affect stock prices. This suggests that the "washing machine" strategy may outperform standard ones by pocketing in the responsibility premium.

Finally, several studies that evaluated the performance of engagement funds suggest that these funds earned abnormal returns when engaging on governance issues (Barber (2007) and Becht, Franks, Mayer, and Rossi (2009)) and, to a lesser extent, on environmental and social issues (Dimson, Karakas, and Li (2012)). To sum up, absent shareholder unanimity over firms' decisions, SR investors might be willing to implement engagement strategies in an attempt to improve corporate behavior. Such engagement strategy may be profitable in the long run if SR investors views turn out to be correct but also in the short-term if SR investors sell part of their holdings before CSR has materialized into firm cash flows. Obviously, the overall attractiveness of engagement strategies reflects the abnormal performance earned in financial markets, on the one side, and the cost of identifying targets and implementing engagement, on the other.

V. CONCLUSION

This article discusses the financial performance one can expect from socially responsible investments in the various conceptual frameworks developed by financial economists. When markets are fully efficient, reflecting at each point in time the potentially positive impact of corporate social responsibility on firm's economic performance, socially responsible investors are expected not to outperform standard investors who optimally diversify. On the other hand, in inefficient markets, several active management strategies based on extra-financial information might be profitable. These strategies rely on signals regarding environmental, social, and governance issues and may enable investors to better evaluate the future profitability of firms and to anticipate on future changes in investment trends. Finally, active strategies based on engagement might generate abnormal performance by investing in non-responsible firms and turning them into responsible. Outperforming the market with a socially responsible strategy however necessitates important investments in extra-financial research and engagement capabilities.

Another important issue for socially responsible investments is to determine their social performance. In other words, do socially responsible investments actually impact companies' behavior towards more socially responsible practices. For engagement strategies, when they are successful, the answer is clearly positive. The impact of negative screening and best-in-class strategies is more indirect but the increase in the cost of capital they impose on excluded firms suggests that they may also affect these companies' behavior: these strategies reduce non-responsible firms' propensity to invest and increase their willingness to change in order to avoid being boycotted. A more complete analysis of the impact of the various socially responsible strategies on companies' behavior is however left for future research.

^{1~} The numbers displayed by the U.S. SIF and EuroSIF are 11% of the assets under management in the U.S. and as much as 17% in Europe.

² For more precisions, see Boulier and Pardo (2012).

³ The engagement strategy cannot be meaningfully analyzed in the context of frictionless markets because governance issues play a small role in this context. We will discuss the performance of engagement strategies in Section IV.

⁴ Depending on business and regulatory systems, one can think of sectors related to CO2 emissions, biodiversity, water quality, nuclear power generation, work atmosphere, work safety, employee education...

5 A specific type of negative screening strategies could also be associated with engagement. The threat of seeing SR investors vote with their feet and boycott their companies may indeed give executives incentives to take their views into account (see, the theoretical analysis of Edmans (2009), and Edmans and Manso (2011)). Such negative screening strategy is not exactly in line with the usual type used by SR investors but it could also exercise an effective disciplining force.

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