"The Economic Virtues of SRI and CSR", PhD Dissertation by Jeroen Derwall, defended successfully on March 1 2007.

BACKCOVER SUMMARY OF DISSERTATION

Financial markets and company managers are increasingly acknowledging the concepts of socially responsible investing (SRI) and corporate social responsibility (CSR), but not without reservations. These hesitations are largely attributable to ongoing debates about a potential conflict between social responsibility goals and the traditional financial objectives of investors and companies. This thesis bundles six empirical studies that deepen our understanding of the economic value of SRI and CSR. Several empirical questions underlie these studies, such as: do CSR practices improve a firm's profitability? Do financial markets value corporate social responsibility? Do SRI criteria constrain investment portfolio optimization, or do they help investors in their hunt for underpriced securities? This thesis shows that SRI and CSR can be studied in new ways to answer these questions. We examine unique SRI stock portfolios with superior return/risk profiles, and provide a fresh look at strategies for investors in SRI mutual funds. By analyzing a wide range of pathways that lead CSR to interrelated measures of corporate financial performance, we further explain whether CSR carries value-relevant information. Taken together, the six studies discuss the channels of transmission from CSR to operating performance, the cost of capital, firm value, analysts' earnings expectations, and stock return. The conclusions from this dissertation are that (i) integrating SRI criteria into portfolio construction does not negatively affect investment performance; (ii) investors can use information on firms' eco-efficiency to make investment decisions that improve the return/risk profile of their portfolios; (iii) common CSR attributes, such as corporate environmental responsibility, and human capital management, have a significant association with traditional measures of corporate performance. We recommend making CSR salient to investors in the form of extra-financial information, with an emphasis on environmental, social, and corporate governance themes.

EXTENDED ABSTRACTS OF CHAPTERS

This dissertation bundles six empirical studies about socially responsible investing and the related discipline of corporate social responsibility. By means of these studies, we aim to better understand the value of SRI and CSR policies from the perspective of both investors and companies. While there are several financially motivated arguments against, as well as arguments in favor of, adopting SRI and CSR, our empirical studies altogether offer support of the view that implementing these concepts does not necessarily come at the expense of a weaker "bottom line" performance.

Chapter 1 offers a new international study on equity-oriented SRI mutual funds. First, it shows that there are various theoretical predictions about socially responsible investment returns beyond the widely cited logic that SRI-induced constraints impose a portfolio diversification penalty. Second, this chapter evaluates SRI mutual funds in many countries around the world, using samples and performance evaluation models that are more comprehensive than those observed hitherto. Our database covers a much larger time horizon than prior studies, which improves the statistical power of our tests. Third, we extend studies that examine SRI funds at the aggregate level. Earlier studies report *ex post* risk-adjusted returns of an equally weighted portfolio that comprises all SRI funds in a given country. This method has limitations because of its implicit assumption that all investors in socially responsible mutual funds will hold the same composite of all SRI funds. Moreover, a pure focus on historic returns offers the investor limited *ex ante* information, i.e., whether past SRI fund performance persists in the future.

Therefore, we also explore performance from different investor perspectives: to begin with, an investor who concentrates on non-financial goals through a selection of funds with specific "social responsibility" track records. The second perspective represents an investor who chooses to pursue the joint goals of social responsibility and optimal financial return. This investor will chase financially best performing funds within the SRI universe. We find that, at the aggregate level, socially responsible funds around the world earn (risk-adjusted) returns similar to those of conventional funds. As for the perspective of investors who select funds based on social screens, our results suggest that SRI fund performance is reasonably insensitive to the choice of social. Finally, SRI funds identified as prior-year return "winners" outperform past losers significantly on a risk- and style-adjusted basis, which supports the idea that financially oriented investors can optimize SRI fund selection.

Remarkably, no attempts have been made to evaluate the performance of mutual funds that invest in socially responsible fixed-income securities. Chapter 2 fills that gap by measuring the performance of socially responsible bond and balanced funds relative to matched samples of conventional mutual funds. SRI fixed-income funds provide an excellent laboratory for testing the financial impact of social screens on fixed-income portfolio returns under practical conditions. Such a study is important for several reasons. Now that SRI has attracted the attention of the world's largest investors, it is important to understand whether SRI can be aligned with mainstream asset allocation problems. Although institutional investors are increasingly viewing SRI as a viable approach to meeting not only their financial objectives but also their social duties, they need a better understanding of SRI for different asset classes in order to make optimal strategic and tactical asset allocation decisions. By concentrating on SRI fixed-income portfolio performance, we add new insights that are relevant for making such allocation decisions. Moreover, the massive size of the market for corporate and government debt illustrates there is enormous potential for SRI in fixed-income markets.

Chapter 2 suggests that SRI in the fixed-income industry is a financially viable investment approach. Using several performance attribution techniques, we find that socially responsible fixed-income funds have been steady performers over the period 1987-2003. A portfolio of SRI bond funds earned a benchmark-adjusted return similar to that of its conventional counterpart. A portfolio of SRI balanced funds outperformed conventional balanced funds by 1.3 percent per year. Although SRI funds generally seem to have a higher residual risk, which is consistent with them being different from normal portfolios, controlling for residual risk does not materially affect our conclusions. Last, we note that the expenses charged by SRI funds, on average, match those charged by our matched sample of conventional funds, and evidently do not cause SRI funds to underperform.

The dissertation then extends the research scope beyond mutual funds. We draw on the view that the financial consequences of SRI and CSR as such are almost impossible to portray because these concepts are too broad and multidimensional. Because SRI and CSR are "container" concepts, any relation they show to a financial performance measure is ultimately the net effect of those displayed by its constituents. Since SRI mutual funds make investment decisions based on a mixture of different SRI and non-SRI criteria, a study of mutual funds for the purpose of testing the economic value of CSR exacerbates this aggregation problem.

In Chapter 3, we demonstrate the importance of disaggregating CSR by building and evaluating SRI equity portfolios based on unique, firm-level, rating data that measure only a subset of firms' CSR performance: eco-efficiency. Based on a unique database of corporate eco-efficiency scores, we constructed and evaluated two equity portfolios that differed in eco-efficiency. Contrary to studies on SRI mutual funds, we found that a high-ranked (i.e., environmentally responsible) portfolio not only provided substantially higher average returns than its low-ranked counterpart over the 1995–2003 period, but also earned an average return beyond that suggested by the portfolio's risk. We controlled for by differences in market sensitivity, investment style, or industry-specific factors. Moreover, the results remained significant for various levels of transaction costs, suggesting that the incremental benefits of SRI can be substantial. Our fresh portfolio approach thus points away from studying mutual funds and helps to obtain a more complete view of the risk-return characteristics associated with the social responsibility attributes of investment strategies.

Next to reporting on SRI investment strategies, we concentrated on the relation between eco-efficiency and financial performance at the corporate level from 1997 to 2004. In Chapter 4, we reported that eco-efficiency relates positively to operating performance and market value. Moreover, our results suggest that the market's valuation of environmental performance has been time variant, which may indicate that the market incorporates environmental information slowly. Although environmental leaders initially did not sell at a premium relative to laggards, the valuation differential increased significantly over time. We tried to explain this upward pattern by providing evidence consistent with investors' mispricing of environmental information: evidence on earnings surprises (measured by analysts forecast errors) suggests that a high degree of eco-efficiency is accompanied by larger positive (less negative) surprises. The results have implications for company managers, who evidently do not have to overcome a tradeoff between eco-efficiency and financial performance, and for investors, who can exploit environmental information for investment decisions.

Chapter 5 highlights another common component of the CSR concept: human capital management (HCM). Using a new database that reports on four HCM systems for many companies around the world, we studied the economic consequences of human capital management along several lines. Of the four alternative systems of human capital management that we examined, a "human capital development" system (involving a combination of skill gap management, employee appraisal and training, and quantitative assessment of HCM effectiveness) is positively associated with Tobin's q and return on assets. Our results paint a weaker picture for talent attraction and retention systems, organizational learning systems, and disclosure quality concerning socially desirable labor practices, none of which are positively related to Tobin's q and ROA. While the results altogether indicate that certain human capital management criteria could be value relevant, we proceeded by examining the extent to which markets fully understand the value created by HCM. Specifically, we investigated the ability of the HCM indexes to explain stock returns and enhance portfolio performance, and we then examined the degree to which errors in analysts' earnings expectations are attributable to HCM. The mixed results from these tests leave us with the conclusion that investors understand the value added by human capital management.

In the last empirical study outlined in this dissertation, we provided evidence that social norms in the U.S. market translate into cross-sectional differences in firms' cost of equity capital caused by differences in corporate social responsibility attributes. The implied cost of equity of laggards in environmental performance, governance, and the quality of products and services exceeds that of leaders significantly. Our findings support several (not mutually-exclusive) hypotheses: (i) the view that investors with discriminatory tastes in favor of social responsibility affect risk sharing, and (ii) the notion that "rational" investors associate better performance along these three CSR dimensions with lower non-diversifiable risk. By contrast, firms with better social performance (i.e., better records regarding diversity, employee relations, community involvement and human rights issues) have a higher cost of equity capital. One potential explanation for the latter observed cost-of-capital effect is that rational investors do not welcome undertakings to improve corporate social performance because the associated costs do not outweigh the financial benefits. On the whole, chapter 6 contrasts with several SRI that theoretically argue against an association between CSR and the cost of capital.

RECOMMENDATIONS

We believe this dissertation has laid the groundwork for more in-depth analysis of the CSR-financial performance link at disaggregated levels. At the very least, future research is recommended to follow the "environmental-social-governance" framework, which is now being embraced by a set of important institutional investors. With ESG, important players in the financial industry are now following the view that (at least) three primary areas related to CSR should be made salient to investors in the form of so-called extra-financial factors. Several initiatives these days encourage sell-side and other research analysts to routinely incorporate such extra-financial factors into investment recommendations.

As for the (extra-)financial information content of CSR, closely related financial measures should be collectively taken into account by future empirical research. Although there is a clear attractiveness of directly examining stock returns to determine this association, our studies make apparent the need for understanding multiple channels of transmission from CSR measures to corporate financial performance and, ultimately, to a firm's stock market performance. For instance, CSR may influence operating performance and firm value, yet with no (abnormal) return effect so long as investors are not surprised by its economic gains or costs. The analytical approach we adopted in the foregoing chapters builds on that notion and provides researchers with an interesting framework for investigating the economic significance of SRI and CSR in greater detail.

To conclude, the results of this dissertation point out that at least some information related to CSR is indeed extra-financial. In light of our findings, we conclude that the economic relevance of SRI and CSR can be significant.

ABOUT THE AUTHOR

Jeroen Derwall (1978) is an Assistant Professor of Finance at RSM Erasmus University and at Maastricht University, The Netherlands. He is also co-founder and research director of the European Centre for Corporate Engagement (ECCE). His current research interest includes sustainable investment, empirical asset pricing, and mutual funds. His work on SRI has been awarded the 2005 Moskowitz Prize, and the 2005 European Finance & Sustainability Research Award.