

CORPORATE SOCIAL RESPONSIBILITY AND THE BOTTOM LINE

by

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ABSTRACT
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How publically-traded corporations – and the business sector more broadly – are adapting to expanded public and investor expectations regarding their environmental and social performance is a topic of great public policy interest and one worthy of scholarly investigation.

With the first Toxic Release Inventory (TRI) data in 1989, empirical researchers finally had quantitative information on corporate environmental performance on which to build models to investigate the linkage between corporate environmental and financial performance and to probe the causal structure that lies behind the positive correlations that pop out in the vast majority of empirical studies that have been published since 1996.¹ Of course, environmental performance is multi-dimensional and difficult to measure. While there is more consensus as to how to measure a firm's financial performance, even then more than a single measure emerges, ranging from return on investment, to stock price, Tobin's q,² and more. Coupled with the causality issue and data limitations, a proper econometric specification is far from obvious, which has prompted some authors to wonder whether the observed correlations are spurious.³

In this presentation we critically review the literature covering four primary research streams, 1) portfolio studies, 2) event studies, 3) cross-sectional analyses, and 4) theoretical approaches, all aimed at shedding light on the general question of whether a firm's environmental performance (good or bad) is associated with changes in its financial performance (and of what direction and magnitude), and if it is, whether that association in turn can be further refined to reveal causal information.

Dating back to 1997 in the academic literature, portfolio studies have generally shown a positive relationship between better environmental performance and stock returns. A small new "industry" has been created around the evaluation of firm environmental and social performance and the association of good performance with good returns. In addition, many of the leading mutual fund providers now offer one or more "socially

¹ See accompanying References, especially the compendium by Margolis and Walsh (2001), the "meta-analysis" of Orlitsky, et al. (2003), and the review paper by Koehler (2004). The particular studies that focus on disentangling the causal effects are King and Lenox (2001), Khanna and Anton (2002), Molloy, Emerson and Gorman (2002) and, in the farm sector, Aigner, Hopkins, and Johansson (2003).

² The ratio of a firm's market valuation to the replacement value of its tangible assets.

³ See, for example, Waddock and Graves (1997), McWilliams and Siegel (2000), and Koehler (2004).

responsible” (SRI) funds and these funds have grown tremendously in number and in assets under management over the course of the last decade in the US, Canada and Europe. Recent studies have shown that the most prominent of the SRI funds have performed at least as well as the S&P 500 on a risk-adjusted basis.⁴ Even Dow-Jones and FTSE have gotten into the business with the establishment of their DJ Sustainability and FTSE4Good stock indexes.

Long popular in the academic finance literature, event studies are often a useful approach to analyze the impacts on stock price of announcements or news. Dating back to a 1995 paper that looked at the impact of the Exxon Valdez accident in Alaska on Exxon’s stock price,⁵ event studies in the environmental arena have demonstrated the power of information disclosure regulations and “transparency”, especially in conjunction with TRI emissions data and environmental bad news.⁶ The most recent studies transform the raw emissions data to make it reflect public health risk prior to analysis,⁷ a definite improvement, but even in raw form it is clear that firm behavior is changed as a result of the negative impact on stock returns associated with TRI disclosures.

Cross-sectional analysis over firms and/or across industries is perhaps the most popular approach to ferreting out the empirical relationship between corporate environmental and financial performance, and dates back to 1996 with the first analysis of the impact on ROE of reductions in emissions within the early years of TRI.⁸ Subsequent work, refining the econometric approach and the measure of financial performance has reinforced the result, namely that there is a positive relationship between TRI *reductions* and financial performance, especially for firms with high initial emissions.⁹ The most recent work again focuses on translating the TRI emissions data to reflect public health risk which, among other things, results in the identification of those industries whose emissions are the most lethal.¹⁰ It is worth noting, however, that all of these studies suffer from the fact that the TRI data are the only quantitative information available on environmental performance and that “environmental performance” is inherently multi-faceted and probably best thought of as a latent variable that requires special econometric attention.

Finally, to date the academic finance profession has taken little interest in environmental issues, probably because of the long-standing view that the role of the firm is profit maximization narrowly defined. Likewise, institutional investors and mutual fund managers have historically interpreted their fiduciary duties in a similarly narrow way, so there has been no pressure from outside to change that view. This situation may be about to change, however, with the recent publication of a study commissioned by the UN Environment Programme’s Finance Initiative (UNEP FI) by a respected international law firm that concludes that not only is there no legal constraint to the integration of

⁴For example, see the recent paper by Statman (2005).

⁵White (1995).

⁶Blacconiere and Patten (1994), Hamilton (1995), Jones, et al. (1994), and Khanna, et al. (1998).

⁷E.g., Joshi, et al. (2005).

⁸Hart and Ahuja (1996).

⁹King and Lexox (2001).

¹⁰Koehler and Stone (2006). For the U.S., aluminum and cement are by far the most dangerous industries from the viewpoint of public health risk.

environmental, social, and governance considerations into the decision-making process of a fiduciary, failure to do so may itself amount to a breach of fiduciary duty.¹¹ One theoretical finance paper that follows along these lines shows that when so-called green and exclusionary investing is a significant factor (with holdings of >20% of a firm's stock), it will lead to a change in the firm's behavior toward improved environmental performance.¹² Since in the U.S., SRI funds now comprise upwards of 15% of all mutual fund assets and are growing rapidly, and with UNEP FI pushing its new "Principles of Responsible Investing" on the world's largest public pension funds, that "tipping point" may be upon us.

Among the largest U.S. and multinational firms, there seems to be considerable momentum behind the notion that improved environmental and social performance is good for business. Dubbed "Corporate Social Responsibility" (CSR) and defined as going beyond what is required by statutes or regulations in the areas of environment, worker health and safety, and community investment,¹³ more and more literature is appearing that documents the case for CSR and other things that fall under the rubric of "the business case for sustainability".¹⁴ New business organizations are popping up around sustainability themes and sets of principles, some of the most visible being the World Business Council for Sustainable Development (WBCSD), the Global Environmental Management Initiative (GEMI), the Coalition for Environmentally Responsible Economies (CERES), and the Global Reporting Initiative (GRI), which aims to establish a common accounting framework for reporting the environmental and social performance of firms. In the past several years individual firms have also adopted leadership positions on many significant environmental issues of the day, the most visible being greenhouse gas emissions reductions, which is important because it is at odds with the official position of the Bush administration.¹⁵

There are critics of the CSR "movement", of course. Primarily they rely on predictable lines of argument derived from the initial premise that the *only* job of business is profit maximization and that considerations of CSR are generally at odds with that premise.¹⁶ A variant is that in pursuing CSR firms are taking on the responsibilities of government, something that is definitely not in the corporate charter. While there is merit to this argument, its main flaw lies in its inability to embrace aspects of business like long-term reputational effects and reduced future operating risk. In the presentation we will explore these arguments in some detail. Whatever the intellectual basis may be for CSR, one cannot deny the growing number of firms pursuing its tenets and the attention being paid to environmental and social aspects of firm performance by investors and the purveyors

¹¹ See Watchman (2005).

¹² Heinkel, et al. (2002).

¹³ See Portney (2005).

¹⁴ For example, Holliday, et al. (2002) and Andersen and Zaelke (2003).

¹⁵ The Worldwatch Institute's *State of the World 2002* has a list as of a few years ago. The list is much longer today.

¹⁶ See the books by Henderson (2001, 2004) and the survey article by Crook (2005) in *The Economist* magazine. A much more balanced treatment of the subject is contained in the book by Vogel (2005).

of credit and insurance on whom the firm depends in essential ways to support its business objectives.¹⁷

¹⁷ See Sethi (2005) for an elegant argument for why pension funds should pursue a socially responsible investment strategy.