

Corporate Eco-Efficiency and Financial Performance

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Abstract

Corporate social responsibility ("CSR" for short) is a form of corporate self-regulation integrated into a business model. CSR policy functions as a mechanism whereby business monitors and ensures its active compliance with the respect of the law, ethical standards, and international norms. The goal of CSR is to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere. In this paper the environmental aspect of CSR for the highest relevance in corporate governance and policy will be put in focus, and it can be synthesized in the "environmental social governance" concept. Particularly, a very interesting approach, analysed in this work, is concerning the link between CSR in environmental governance and corporate success, which could result in financial returns, in fair stock pricing, in a higher asset value, in efficient portfolio investment, in pricing firm equity, and so on – roughly speaking - in capital investment and in all financial and economic activity of the companies for satisfying shareholders. In order to establish the internal drivers of environmental performance, are usually selected a number of indicators that better reflect the characteristics of the enterprises and their environmental and financial performances, such as profitability, costs, size, energy consumption, efficiency, potential pollution and risk.

Keywords: Corporate Social Responsibility, Business Model, Eco-efficiency, Investments, Environmental governance

1. Introduction

Investments based on social, ethical and environmental criteria have significantly increased in the last decades in Europe and in United States; the development of socially responsible investing has also attracted the interest of academic finance. Socially Responsible Investing (SRI) can be defined as a process of integrating personal values and societal concerns into investment decision making. The European Sustainable and Responsible Investment Forum describe socially responsible investing as a generic term covering ethical investments, responsible investments, sustainable investment and any other investment process that combines investors' financial objectives with their concerns about environmental, social and governance issues. So, not only the investment decision making process is important, but also the ownership practices after investment is considered. Ownership practices best known as stakeholder activism, advocacy or engagement, describe the rights of an owner to positively influence the companies where they have invested in environmental and governance issues. The Socially Responsible Investing could so be defined as the

integration of personal values and societal considerations into the process of investment decision making and ownership practise, while at the same time maintaining investors' financial needs and objectives; it combines two basic goals: corporate financial performance and social goal, because social investors believe in incorporating personal values and societal considerations into the business care. Therefore social investors reject the conventional conceptualization of financial industry as unethical, driven only by economic rationality (Richardson, B. J., 2007). Moreover, social investors believe that they have the ability as stakeholders to encourage corporate conduct towards a stronger impression of social responsibility, thus doing good. Thus, financial performance and social good is the main feature of socially responsible investing.

In recent years, corporate social responsibility (CSR) has become a focal point of policy maker and investors, who demand that corporations assume some responsibility towards society, the environment or the stakeholders; in fact, SRI investors avoid companies producing goods that may cause health hazard or exploiting employees both in developed and developing countries (negative screening), and select companies with sound social and environmental records and with good corporate governance (positive screening).

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In order to corporate social responsibility become a workable concept is necessary that the social responsibility and corporate performance must be measurable in some way; maximizing long-run firm value is in line with maximizing social welfare; even if one adopts the shareholder value criterion, it is important to consider the welfare of all stakeholders as firm behaviour concerning important externalities; economic theory predicts that company will be more willing to sacrifice profit in order to be socially responsible.

Corporate governance addresses the conflict of interests between an agent (manager) and a principal (investor); this conflict of interest is induced by the separation of ownership and control in the modern corporation. Managers may exert insufficient effort in enhancing shareholders' value (moral hazard), enjoy building corporate empires and extract private benefits of control or sometimes enrich themselves by anti-takeover provisions, such that shareholders are not able to exercise control. There is in general a positive relation between corporate governance and firm' value; but a too stringent environmental standard can increase the production costs and thus hurt the profitability.

The aim of this paper is analyse the environmental aspect of CSR for the highest relevance in corporate governance. So we define corporate social responsibility as the sum of good corporate governance (protecting financial shareholders' interests), environmental efficiency (protecting environmental stakeholders' interest) and good stakeholder relations (protecting the interest of other stakeholders, including those of the employees, the local community and future generations). In particular, we study the effect of environmental performance on the firm value and investigate if higher environmental standards are associated with a higher market value.

The concept of Corporate social responsibility

Corporate social responsibility ("CSR" for short) is a form of corporate self-regulation integrated into a business model. CSR policy functions as a mechanism whereby business monitors and ensures its active compliance with the spirit of the law, ethical standards, and international norms. The goal of CSR is to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere. In this work it will be put in focus the environmental aspect of CSR for the highest relevance in corporate governance and policy, it can be synthesized in "environmental social governance" concept, which will be widely resumed later. Furthermore, CSR focused businesses would proactively promote the public interest by encouraging community growth and development, and voluntarily eliminating practices that harm the public sphere, regardless of legality.

The term "corporate social responsibility" came in to common use in the early 1970s, after many multinational corporations formed. Proponents argue that corporations make more long term profits by operating with a

perspective, while critics argue that CSR distracts from the economic role of businesses. Others argue CSR is merely window-dressing, or an attempt to pre-empt the role of governments as a "watchdog" over powerful multinational corporations.

CSR is titled to aid an organization's mission as well as a guide to what the company stands for and will uphold to its consumers. Develop men business ethics is one of the forms of applied ethics that examines ethical principles and moral or ethical problems that can arise in a business environment. Different approaches exist about CRS. It could have relevance in philanthropy, or in business strategy of organizations. Therefore, a very interesting approach, analysed in this work, is regarding the link between CRS in environmental governance and corporate success. The corporate success could find explanation in financial returns, in fair stock pricing, in higher asset value, in efficient portfolio investment, in pricing firm equity, and so on in what companies could invest their money for satisfying shareholders. Unfortunately, CSR acknowledges trade-offs between short-term profitability and social or environmental goals, but in a new financial crisis mentality after, it's important to focus more on the long term opportunities for competitive advantage from building a social value proposition into corporate strategy. Corporate environmental performance is considered an important component of the CSR construct, and its potential usefulness as a forward-looking measure of firm financial performance has gained acceptance, both in the literature and in practice. Although the assessment of the CSR-financial performance relationship relies heavily on qualitative data and subjective interpretation, the financial impact of environmental governance is easier to assess a priori, particularly now that the law punishes negative environmental performance with concrete financial penalties more than ever before. However, several scholars have stressed that the financial information content of environmental performance is not evident by itself. Among others, Hart and Ahuja (Hart, S. et al., 1996), King and Lenox (King, A. et al., 2002) and Russo and Fouts (Russo, M. et al. 1997) emphasize that companies can display environmental awareness through "end-of-pipe" pollution control, where companies clean up emissions subsequent to the production process, but that proactive pollution prevention techniques embedded in the firm's production processes are more likely to increase operating efficiency and profitability.

Building on these assertions, we continue to focus on the concept of corporate eco-efficiency, a concept that reflects the environmental governance of the firm beyond that is indicated by elementary environmental compliance and pollution control policies. Broadly, we can define eco-efficiency as creating more value or fewer environmental use of resources or less environmental impact (for example, less pollution or natural resource exhaustion), i.e. the improvement of at least one of these features, without deteriorating the others.

The intangible nature of the benefits of eco-efficiency makes the task of valuing environmental governance more complicated. Other recent study offers evidence that eco-

efficiency is value –relevant but is incorporated slowly into a company's stock price. This evidence seems to contradict the widely held view that assets are priced efficiently. The abnormal returns could be explained by a period of adjustment, where stocks of eco-efficient companies are initially undervalued and undergo a positive price correction subsequently. Accordingly, the upward trend in firm valuation generates anomalously high returns. The results have interesting research implications, suggesting that the relation between environmental governance and firm valuation should be studied in a multi-period cross-sectional framework. If stock prices did not accurately incorporate environmental information, then studies on the market valuation of corporate environmental management, that implicitly assume market efficiency, may have been time specific and difficult to generalize. This study investigates whether the market's valuation of environmental performance has strengthened over time by using a unique sample of corporate eco-efficiency scores. Moreover, we study the expectations of financial analysts to offer an explanation for both the abnormal return on stocks of environmental leaders reported in an earlier study and the prediction of a time-varying relation between eco-efficiency and firm value.

The theory of eco-efficiency

Investors increasingly require that companies pursue eco-efficient strategies that reduce damage caused to the environment, compatibly with increasing or at least not decreasing profit.

The concept of eco-efficiency was suggested by sustainable development idea at a company level. The definition of eco-efficiency at this level appears to be not so easy. Eco-efficiency, in fact, does not include the third ethical dimension sustainable development, but only economy and ecology.

World Business Council for Sustainable Development (WBCSD) defines eco-efficiency as "the delivery of competitively priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impact and resource intensity throughout the life cycle, to a level at least in line with the earth's estimated carrying capacity". As said before, we can define eco-efficiency as creating more value or fewer environmental resources using or less environmental impact (for example, less pollution or natural resource exhaustion) (Freeman, R, 1984). In other words eco-efficiency means producing more and/or less pollution.

Investors need indicators that measure eco-efficiency by decreasing environmental impacts while increasing the added value of the enterprise. Whereas most proxies for environmental performance represent absolute pollution levels, the concept of eco-efficiency is frequently used to measure the environmental performance of a company in a relative sense. Eco-efficiency can be defined as the ratio of the value a company adds (by producing products) to the waste the company generates by creating that value (see, for instance, Schaltegger, S et al, 2005).

Environmental performance of a company is defined as the impact of the company caused by its activities, during a specific period, measured in physical or synthetic units; economic performance of a company is defined as the financial value produced by the same activities, during a specific period, measured in monetary units. In order to enable users of environmental reports to evaluate an enterprise's eco-efficiency, it is then essential to have comparable and reliable eco-efficiency indicators and this can be achieved by the standardization of relevant environmental and financial variables. Eco-efficiency indicators measure the enterprise's efficiency in the consumption of resource with reference to the ability to produce economic value. Therefore eco-efficiency indicators, that give an indication on a company's eco-financial performance consist of a combination of at least two independent variables: an environmental variable measuring the environmental performance and another financial variable measuring the economic performance.

There is increasing interest in linking environmental performance with financial performance or with the stakeholder value; such eco-efficiency indicators linking the environmental and finance performance can be used to forecast the impact of environmental issues on future financial results and to support management in its strategic decisions. Sometime the ratio between an environmental and a financial variable is used as very simple eco-efficiency indicator; but recently some most appropriated approaches have been proposed in order to aggregate in a most methodologically suitable way ecological variables and financial performance indices, either within the same industry or across industries. In this framework, the specific Multiple Criteria Decision Aid literature gives a number of methods very useful to model the specific situations, taking into account the peculiar kind of data (qualitative, quantitative), the particular decision problem at hand (choice, ranking, classification), the information about the preference of decision maker and so on (Figuera, J et al, 2005).

In particular, environmental inputs and outputs associated with food products have often been estimated by aggregating by means of weighted average inputs and outputs (O_i) from all production processes (p_i) in the food products' product chains: $O_i = \sum Q_i \times p_i$.

Total inventories of inputs and outputs associated with food products can be comprehensive and emissions to air and water have been recalculated to environmental impact potentials to limit the reporting in the present context.

Environmental impacts potentials (EP(j)i) associated with specific substances (i) emitted in the food products' product chains have been determined by multiplying total emissions of substances (Q_i) with specific equivalency factors (EF(j)i) for specific categories of impacts (j):

$$EP(j)i = Q_i \times EF(j)i.$$

Environmental impact potentials EP(j) associated with food products have been determined by adding contributions to environmental impacts from all emitted substances in the product's product chain: $EP(j) = \sum EP(j)i = \sum (Q_i \times EF(j)i)$. (Wenzel, H, et al, 1997)

Another example of eco-efficiency analysis (Saling, P et al., 2002) takes into consideration for the determination of Environmental impacts five main factors over the entire life cycle: the consumption of raw materials, the consumption of energy, resulting emissions, the toxicity potential, and the abuse and risk potential. Similarly, total costs are likewise totaled over the life cycle, using normalization and appropriate weighting factors.

A Literature Syntesis

To address contemporary issues eco-efficiency indicators is important to expand its empirical relevance by introducing more realistic assumptions, so it is showed by the relationships between enterprises' eco-efficiency and social choices

The empirical literature relating the environmental component of CSR to financial performance separates into three subsets: 1) event studies, that explore the immediate effects of social or environmental performance proxies on short-term stock price variability; 2) cross sectional regression analyses, that attempt to establish a longer-term relationship between CSR and financial returns; 3) portfolio studies, that investigate the benefits of embedding CSR into investment decisions. To date, event studies provide the best evidence of a link between environmental and financial performance. This body of research, which includes studies by Klassen and McLaughlin (Klassen, R et al,1996), and Shane and Spicer (Shane, P.B et.al, 1983) suggests that, although environmental pollution figures generally tend to have an influence on stock market performance, there is also an asymmetrical stock return sensitivity to environmental news. For example, Klassen and McLaughlin (Klassen, R et al,1996) find evidence suggesting that a stock price increase following positive environmental information about the firm is less strong than a price decline in response to negative news. This result is in line with the thesis of the well known Prospect Theory, concerning the behaviour of an investor in risk situation (Guenster, N et al., 2001)

A second group of studies uses regression or correlation analysis to explore long term relationships between corporate environmental responsibility and stock returns. These studies provide mixed support for the notion of a relationship between environmental performance and shareholder value. Spicer (Spicer, B.H, 1978) reports that those companies in the U.S. pulp and paper industry that have better pollution control records have higher profitability figures and lower stock betas, that means a lower correlation between the returns of these companies and the market return, i.e. low market risk. On the contrary, both Chen and Metcalf (Chen, K.H et al, 1980) and Mahapatra (Mahapatra, S, 1984) fail to confirm the idea that pollution control initiatives are rewarded with improved stock performance. More consistent evidence pertains to markets outside the United States, for which document moderate evidence of a positive relationship between environmental performance and stock returns.

Portfolio research involves a comparison of average risk-adjusted returns between two or more mutually exclusive portfolios. These portfolios are constructed using a company characteristic as a discriminating factor. Portfolios are usually evaluated by using a performance multifactor model, that describes how common intervening factors can influence portfolio performance and that confirms the incremental explanatory power of a multivariate framework.. Despite the popularity of this approach in the mainstream asset pricing literature (e.g., Fama, E.F et al., 2002), remarkably little research has applied environmental firm characteristics as a discerning variable. Among the few exceptions, research by Cohen, Fenn and Naimon (Cohen, M.A et al., 1995) suggests that there is neither a premium nor a penalty for investing in environmental leader companies. On the other hand, White (White, M, 1996) finds that his "green" portfolio provides a significantly positive market-risk adjusted return, while "brown" and "oatmeal" portfolios do not. Recent research in Derwall (Derwall, J, 2005), which uses comprehensive performance evaluation techniques, suggests that eco-efficient companies jointly provide anomalously positive equity returns relative to their less-eco efficient peers over the period 1995-2003.

Another massive body of research relies on operating performance measures, predominantly using accounting data. Not surprisingly, the results from this research are somewhat dependent on the choice of operating performance measure. A few empirical studies are of particular concern to our work. Considerable interest has been shown in the company's return on assets (ROA) as a dependent variable, primary because ROA is one of the broadest measures of firm operating performance. For example, Freedman and Jaggi (Freedman, M et al, 1988) investigate the relation between environmental pollution disclosure and several accounting-based performance indicators, but find little evidence to support the conjecture that there is a clear-cut and significant association. However, McGuire, Sundgren and Schneeweis (McGuire, J.B et al, 1988,) show that, contrary to alternative measures in their study, ROA does correlate with their corporate social performance index. Russo and Fouts (Russo, M.V et al, 1997) complement previous work, suggesting that environmental performance is positively connected with ROA, but also that this association is more pronounced for high-growth industries. Hart and Ahuja (Hart, S et al,1996) and Waddock and Graves (Waddock, S. A et al.,1997) also report that several financial measures, including ROA, relate significantly to environmental performance indicators, but express some doubts regarding the direction of causality. In a more recent study, King and Lennox (King, A et al, 2002) suggest that pollution prevention, but not pollution treatment, causes higher return on assets. A lot of studies agree that ROA indices over time do not display a large discrepancy, being similar in value and time invariant. Corporate social (environmental) responsibility is a broad construct that can only be assessed with multidimensional indicators, as said before. As also suggested by Waddock and Graves (Waddock, S. A et al,1997), the majority of

related literature relies on measures that either lack sufficient depth and detail or, alternatively, are too noisy to be fully capable of measuring corporate social or environmental performance. In addition, as underscored by Konar and Cohen (Konar, S et al, 2001), most previous research analyzes data that only point towards historical performance. In contrast, our study tries to build on the concept of eco-efficiency, which could be a more strictly defined as “constructive” and can be quantified by using Innovest’s eco-efficiency rating methodology. Based on Innovest Strategic Value Advisors’ corporate eco-efficiency scores, the study constructed and evaluated two equity portfolios that differed in eco-efficiency. The high-ranked portfolio provided substantially higher average returns than its low-ranked counterpart over the 1995–2003 period. This performance difference could not be explained by differences in market sensitivity, investment style, or industry-specific factors. These basic statistics suggest that the portfolio consisting of highly eco-efficient companies performed better than the eco-inefficient portfolio, even after adjusting for volatility. The low-ranked portfolio also has a substantially lower Sharpe ratio than the market proxy (Fama, E.F et al, 1993).

The rating is a multiple criteria procedure that assigns each object from a selected set to one particular preference ordered class, built up taking into consideration some predefined thresholds of each feature. Therefore, the rating is not only intended to reflect historical relationships between environmental and financial performances, but also to identify future environmental risks and opportunities.

The Social Multi-Criteria Evaluation Approach

One of the most interesting research directions in composite indicators is the attempt to account for political constraints, interest groups and collusion effects explicitly and in this context transparency becomes an essential feature of Corporate social responsibility. Social multi-criteria evaluation (SMCE) has been purposely designed to enhance transparency, the main idea being that the results of an evaluation exercise depends on the way a given environmental problem is represented and thus the assumptions used, the interests and values considered have to be declared (Munda, G, 2004). In fact the results obtained depend on quality of the information available, indicators chosen, direction of each indicator, relative importance of these indicators and ranking method used. All these uncertainties have to be taken into account when we claim that any given solution is better than another; it also seem that is really important the “Decision process” and not the final solution. The multi-criteria decision making has the main aim to elicit clear subjective preferences from a decision-maker (DM) and then try to solve a well-structured mathematical decision problem by means of a more or less sophisticated algorithm. In this way a multi-criteria problem can still be presented in the form of a classical optimization problem. In Multiple-Criteria Decision Aid (MCDA), the principal aim is not discover a solution but to construct or create something

which is viewed as liable to help an actor taking part in a decision process either to shape and to argue and to transform his preference or to make a decision in conformity with his goals with a constructive approach (Roy, B 1990).

The need for public participation has been increasingly recognized in a multi-criteria decision-aid framework with a recent proposal of social-multi-criteria evaluation (Munda, G, 2004). This approach accords with the need to extend MCDA by incorporating the notion of the stakeholder and must be as participative and as transparent as possible; although, it is further argued that participation is a necessary but not a sufficient condition. This is the main reason why the concept of “Social Multi-Criteria Evaluation” (SMCE) is proposed in place of “Participative Multi-Criteria Evaluation” or “Stakeholder Multi-Criteria Decision Aid”.

The awareness of actual and potential conflicts between economic growth and the environment led to the concept of sustainable development with a carried ideal concept: a harmonization or simultaneous realization of economic growth and environmental concerns. This idea correctly points out that sustainable development is a multidimensional concept, but it is impossible to maximize different objectives at the same time, therefore as formalized by multi-criteria decision theory, compromise solutions must be found. Sustainable management and planning is essentially a question of conflict analysis and multi-criteria evaluation has demonstrated its usefulness in many environmental policy and management problems. As a consequence the use of multi-criteria decision theory seems the very relevant for tackling sustainable conflicts.

A multi-criteria framework is a very efficiency means of implementing a multi-interdisciplinary approach, in particularly engineering, economics, mathematics and the issues of this field is find agreement on the set of criteria to be used and compute an appropriate criterion score. Transparency is an essential feature to guarantee the quality of any study based on science for policy and multi-criteria methods are a powerful framework for policy analysis since this type of evaluation process can be very effective since the accomplishes the goals of being inter-multi-disciplinary, participatory and transparent. Understanding evaluation as the combination of representation, assessment and quality check connected to a given policy problem in relation to a given objective (Munda, G, 2004), any multi-criteria model has to be considered as a helpful tool in the representation and assessment steps, and not as the tool to reach the optimal solution.

The way the problem is structured is therefore very important, because it will determine the final results. In this analysis, both scenarios and evaluation criteria are built upon the identified needs and expectations of the involved social actors. The avoidance of a technocratic approach is one of the aims of this procedure, as well as trying to respond to the citizens' necessities.

This exercise may involve several subjectivities, but it has to be reminded that one of the main aims of the SMCE is

to promote discussion, negotiation and social learning, considering several viewpoints. Thus, transparency in presenting the underlying assumptions in the scenarios and criteria definition and valuation is an essential requisite, and the problem structuring must be open to be modified. As a conclusion, social multi-criteria evaluation can be considered an optimal approach because: it is a multi-inter-disciplinary, to respect the plurality of scientific points of view; it is participative to obtain as much input as possible from the general public; it is transparent to make the assumptions adopted in the study clear; it is consistent to assure that the results really proceed from the assumptions adopted.

Conclusions

This linkage between environmental management and financial performance can be used by both researchers and practitioners as one measure of the benefits experienced by industry leaders, and as one criterion to measure the attractiveness of investment alternatives. The development and use of eco-efficiency analysis is intended as a quantifiable contribution to comparing the sustainability of various products, systems and corporate governance. Eco-efficiency analysis usually provides only relative comparisons. But, as above recalled, the use of appropriated multiple criteria approaches can actually improve the results of this kind of analysis, from both the point of view of results quality and of operational tool. In our opinion, eco-efficiency analysis can be suitably used in a large number of real life applications, giving us understandable conclusions very useful to support the company management to show which process is more favorable with respect another alternative.

We show that usually a firm's environmental performance relative to its industry is associated with relatively higher financial performance. However, recalling the results of the quoted studies, we neither can conclusively say that a firm's choice of operating in cleaner industries is associated with better financial performance, nor we can prove the direction of the observed relationships. Thus, our research provides support for a connection between some means of pollution reduction and financial performance, but it also suggests that the connection should be viewed with caution. We can say that usually the investors preference (and consequently the financial performance) is more oriented to the prevention of pollution, rather than "end-of-pipe" pollution control.

Another way to account for unobserved firm differences is to use standard regression techniques to evaluate the effect of changes in pollution on changes in financial performance. According to this logic, greener industries may have higher returns than dirtier ones, because of lower compliance and regulatory costs. In contrast, the resource-based view of strategic management suggests that individual firm capabilities may lead to excess returns when they are difficult to be imitated, not substitutable, rare, and valuable. We analyze whether it really "pays to be green" using a methodology that allows

us to explore if non quantifiable firm and industry characteristics may explain the observed link between environmental and financial performance. We also have taking into consideration a measure of environmental performance that links the effect of a firm's relative performance within its industries and the average performance of the industries in which it chooses to be. Unfortunately, the meaning of this variable is ambiguous, because it confounds pollution that results from industry positioning with pollution that results from poor environmental management. We can say that it is difficult to reconcile the observed performance differences with conventional asset pricing theory, and particularly the well established return-risk paradigm. The fact that common risk factors fail to account fully for the observed results raises the possibility of a mispricing story.

Better understanding of these differences might provide a richer understanding of profitable environmental improvement. It may be that it pays to reduce pollution by certain means and not by others. Alternatively, it may be that only firms with particular features can profitably reduce their pollution. Additional research is needed to explore how and when underlying firm characteristics affect the relationships between relative environmental performance and financial performance. The relationship between underlying capabilities and environmental management is likely to be complex and contingent. Environmental management and other capabilities may prove to be complementary. But, in our opinion, the eco-efficiency analysis can effectively be used to identify the main factors actually influencing the overall production system.

There are different views of the role of a firm in a society and disagreement about the thesis that wealth maximization should be the sole goal of a firm. Most people identify certain benefits for a business being socially responsible, but most of these benefits are still hard to quantify and measure. This study attempts to address the question whether corporate social performance is linked to financial performance. Some recent study offers evidence that eco-efficiency is value-relevant but is incorporated slowly into a company's stock price. Using empirical methods, it is possible to test the sign of the relationship between corporate social responsibility and financial performance. Different explanations for this result depend on the direction of the causality between CSR and profitability.

Arguments exist that support the view that firms which have solid financial performance have more resources available to invest in social performance domains, such as employee relations, environmental concerns, or community relations. Financially strong companies are able to afford to invest in ways that have a more long-term strategic impact, such as providing services for the community and their employees. Those allocations may be strategically linked to a better public image and improved relationships with the community, in addition to an improved ability to attract more skilled employees. On the other hand, companies with financial problems usually allocate their resources in projects with a shorter horizon.

Socially responsible companies have an enhanced brand image and a positive reputation among consumers; they have also the ability to attract more accomplished employees and business partners. Socially responsible companies have also less risk of negative rare events. Companies that adopt the CSR principles are more transparent and then have less probability of bribery and corruption. In addition, they run less risk of having to recall defective product lines and pay heavy fines for excessive polluting. They also have less risk of negative social events, which could damage their reputation and costs millions in information and advertising campaigns or legal claims. The two different explanations of this relationship depend on its causality. This study did not explore the direction of these causal connections. Nevertheless, the findings indicate that CSR is positively related to better financial performance and this relationship is statistically significant, supporting, therefore, the view that socially responsible corporate performance can be associated with a series of bottom-line benefits.

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