

INSEAD

The Business School
for the World

INSEAD Business in
Society Centre

Faculty & Research Working Paper

Corporate Responsibility Activities
And Economic Performance:
Why and How They are Connected

CORPORATE RESPONSIBILITY ACTIVITIES AND ECONOMIC PERFORMANCE:
WHY AND HOW THEY ARE CONNECTED

LEENA LANKOSKI*

September 2006

Funding from the Academy of Finland, grant # 104495, and the Foundation for Economic Education is gratefully acknowledged. This paper was partly developed while at Helsinki School of Economics.

* Visiting Professor, IBiS, INSEAD, Boulevard de Constance, 77305 Fontainebleau Cedex, France, E-mail: leena.lankoski@insead.edu

A working paper in the INSEAD Working Paper Series is intended as a means whereby a faculty researcher's thoughts and findings may be communicated to interested readers. The paper should be considered preliminary in nature and may require revision.

Printed at INSEAD, Fontainebleau, France. Kindly do not reproduce or circulate without permission.

CORPORATE RESPONSIBILITY ACTIVITIES AND ECONOMIC PERFORMANCE: WHY AND HOW THEY ARE CONNECTED

In this paper, I will distinguish between firms' corporate responsibility activities on the basis of whether they produce learning, reputation, or corporate responsibility outcomes. I will show that this distinction matters not only for the ultimate environmental and social sustainability, but also for the "why" and "how" corporate responsibility and economic performance are connected.

In 1985, Arieh Ullmann characterized the situation concerning the relationship between firms' social and economic performance as "empirical data in search of an adequate theory". He identified lack of theory and inappropriate definition of key terms as core problems, and suggested that instead of "accumulating studies and trying to control for an increasing number of variables", researchers should look for "the missing element" that would help to explain the mixed findings obtained about this relationship.

The debate on the relationship between corporate responsibility and economic performance has evolved much since those times. More than one hundred empirical studies have been published and new ones are constantly being conducted. Yet, Ullmann's original contention still seems to hold two decades later. The lack of a solid theoretical foundation is repeatedly quoted as the reason why the empirical studies have not resulted in the convergence of knowledge (Aragón-Correa & Sharma, 2003; McWilliams & Siegel, 2001; Rowley & Berman, 2000; Schaltegger & Synnestvedt, 2002). Studies have been accumulated but many fail to provide a theoretical contribution in terms of the underlying causal relationships and are thus "stuck in a repetitive mode" (de Bakker, Groenewegen & den Hond, 2005). All in all, the nature of the relationship has remained controversial – but the interpretation of whether the results obtained so far are in fact inconclusive or not is itself also controversial (see Orlitzky, Schmidt & Rynes, 2003).

In this paper, I will propose that when studying the link between corporate responsibility and economic performance, one way to address Ullmann's "inappropriate definition of key terms" is to focus explicitly on corporate responsibility activities instead of some broader, more abstract definition of corporate responsibility. Corporate responsibility activities are both the source of the economic impacts and the target of management decision-making, and as such at the core of this relationship. Moreover, I will propose that one "missing element" sought by Ullmann is the recognition that different corporate responsibility

activities produce different outputs, which matters not only from the environmental or social perspective, but also for the relationship of these activities with economic performance. Building on these notions, I will outline the relationship between corporate responsibility and economic performance in a manner that is both theoretically sound and consistent with 35 years' worth of empirical data.

The paper is structured as follows. First, I will define the key concepts of the paper. Second, I will describe outputs of corporate responsibility activities. Third, I will discuss the causal chain connecting corporate responsibility activities and economic performance (the “why”). Fourth, I will describe the nature of the relationship between corporate responsibility and economic performance (the “how”). To conclude, I will discuss the contribution and implications.

DEFINITION OF KEY CONCEPTS

In this paper, corporate responsibility (CR) activities denote any firm activities that relate to, or affect, one or more CR issues. CR issues, in turn, include environmental issues that deal with the impacts of the firm on living and non-living natural systems (including ecosystems, land, air, and water), as well as social issues that deal with the impacts of the firm on human beings and their societies (including labor practices, human rights, and broader issues affecting consumers, community, and other stakeholders in society) (GRI Sustainability Reporting Guidelines, 2002). In addition to these environmental and social dimensions, the third dimension of economic responsibility may be identified as well. Economic responsibility is a much richer concept than mere economic performance and refers to the impacts of the firm on the economic circumstances of its stakeholders and on local, national, and global

economic systems (GRI Sustainability Reporting Guidelines, 2002). However, this paper covers only the environmental and social dimensions of CR. This is because the paper represents an attempt to restructure and integrate earlier knowledge from a new perspective, and the dimension of economic responsibility is practically absent from previous literature. In the future, more research attention should be given also to the dimension of economic responsibility to complement the picture on CR.

The connection of CR activities with economic performance is examined through their incremental economic impact: the net stream of all CR-related cost increases, cost reductions, revenue increases, and revenue losses over time, discounted to the present. In essence, we are examining the risk-adjusted net present value of a CR activity. Importantly, one needs to be very careful in determining this incremental impact, since in addition to direct and immediate money outlays and inflows there are also less obvious impacts. CR issues may be affected as a by-product of other decisions (e.g. when a production process is upgraded to a more efficient one which also happens to be more environmentally friendly or when changes in one CR issue have repercussions for another CR issue), or CR decisions may have cost and revenue implications elsewhere (e.g. in productivity or product quality). Firm image with customers, goodwill with regulators, workers' health and motivation, or the attitude of local populations are items whose monetary value is difficult to establish. Uncertainty is created by the long-term nature of some impacts, as well as by the fact that some CR-related economic impacts arise from risk reduction (e.g. avoiding a spill or a boycott) whose benefits may be calculated only in terms of probabilities. Before-after comparisons do not reveal all impacts (e.g. being able to retain current customers) that become evident only in with-without comparisons. For all these reasons, many relevant impacts easily remain unquantified or even completely overlooked. Yet, even if indirect, uncertain, intangible, joint, or distant, these impacts are real and need to be taken into account when considering the connection of CR

activities with economic performance. Hence, throughout this paper, we are talking about the impacts in economic terms, not in accounting terms.

OUTPUTS OF CORPORATE RESPONSIBILITY ACTIVITIES

In the literature on CR and economic performance, one classic and influential (Orlitzky et al., 2003) definition is provided by Wood (1991: 693), according to whom corporate social performance is “a business organization’s configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm’s societal relationships”. This definition reflects a typical feature in how CR is approached in the literature examining its economic impacts, namely that CR activities are not separated from the outputs of these activities. This may, however, be problematic from the point of view of understanding the causal relationship between CR and economic performance, since sometimes it is the fact of undertaking the CR activity per se that creates the economic impacts, whereas at other times it is the output of this activity (Rowley & Berman, 2000; Lankoski, 2006). In this paper, I will make an explicit distinction between CR activities and their outputs. Moreover, I will argue that all CR activities produce, or are aimed to produce, one or more of the following: learning, reputation, and CR outcomes.

Learning

Organizational learning occurs when the range of potential behaviors by the organization is changed through the acquisition, distribution, or interpretation of information

(Huber, 1991). In many ways, CR issues present a uniquely complex management challenge that requires significant learning from the organization. CR issues tend to be subjective and value-laden, which results in disagreement, turbulence and uncertainty both in politics and with customers and other stakeholders. Many CR issues are holistic: they relate to the whole life-cycle of the product of the firm, involve all functions of the firm, and thus touch upon a number of different stakeholders and groups both within and outside the firm. They may also be cross-disciplinary in nature, draw from many different scientific fields, and involve the balancing of several objectives, but typically deal with items that are difficult to measure and quantify. Moreover, especially with environmental issues, the often-encountered long time lag, long and complex causal chain, and long geographic distance between actions and impacts produce scientific uncertainty about causes and consequences.

CR activities may contribute to learning in a number of ways. They may improve the quality and flow of information that the firm has on stakeholder expectations and alternative solutions to CR issues, as well as improve capabilities for coordinating, integrating, and interpreting CR-related information. Thus, undertaking CR activities may result in the development of increased expertise, awareness, resources, and capabilities for the firm (Aragón-Correa & Sharma, 2003; Hillman & Keim, 2001; Orlitzky et al., 2003). Some of this is intentional, when the very objective of the CR activity is to obtain and analyze information, like when conducting a stakeholder analysis or organizing training. Some of it occurs unintentionally because the CR activity may force the firm to re-examine its current practices (Esty & Porter, 1998), for example, when ceasing to use certain harmful materials in production.

For the purposes of this paper, learning through CR activities may be usefully divided in two categories. Regular learning occurs when a firm obtains knowledge or capabilities that are available elsewhere but not yet within the organization; for example, learns of an existing

technological solution. Innovative learning, in turn, occurs when the firm develops something completely new.

Reputation

Reputation refers to the image that stakeholders have of the firm and its CR outcomes. It is important to note that reputation and actual CR outcomes are separate concepts: one may exist without the other. Reputation is built in the eyes of stakeholders based on the information - correct or incorrect - that the stakeholders obtain about the CR outcomes of a firm either from external sources (e.g. competitors, word-of-mouth, authorities, non-governmental organizations, the media), or from the firm itself. Thus, some CR activities by the firm, such as reporting, advertising, open house days, and the like, produce reputation because their very aim is to communicate information on the CR outcomes of the firm to stakeholders (Orlitzky et al., 2003). Other CR activities may contribute to reputation-building indirectly by prompting some external source to publicize information on the CR outcomes of the firm to stakeholders. In this paper, reputation produced by CR activities is again divided in two. Valid reputation is justified by actual CR outcomes, but false reputation does not correspond to the level of CR outcomes.

CR Outcomes

CR outcomes refer to improvements in the social or environmental impacts of the firm. Obviously, CR activities may produce CR outcomes. Installing energy-efficient equipment reduces energy use, implementing a minimum age requirement for workers hinders the use of child labor, redesigning the product for disassembly alleviates the solid waste

problem, and so on. It is more newsworthy that there may indeed be successful CR activities that do not affect CR outcomes at all. Activities that do produce CR outcomes may be defined as effective.

Two categories of CR outcomes may be distinguished based on how information on them is transmitted. Observable CR outcomes are directly experienced by the stakeholders or information about the CR outcome is otherwise directly transferred to the stakeholders in their interaction with the firm. Unobservable CR outcomes, by contrast, are not directly experienced by the stakeholders in any way. They may, however, still be important to the stakeholders if only the stakeholders somehow receive information about them. This distinction varies between different stakeholders for the same CR outcome: for example, the working conditions in a production facility represent an observable CR outcome for the employees but an unobservable CR outcome for customers in a distant country.

Examples of Different CR Activities

CR activities may thus produce one or more of these three outputs: learning, reputation, and CR outcomes. Accordingly, eight classes of CR activities may be identified based on what outputs the activity produces (see Figure 1).

Insert Figure 1 about here.

Some CR activities produce only one type of output. Activities in class 1 (e.g. installing end-of-pipe environmental equipment or committing to the payment of living wages) produce CR outcomes. Activities in class 5 (e.g. environmental and social accounting) produce learning, and activities in class 7 (e.g. CR-related advertising) produce reputation.

Some CR activities may produce two types of outputs: CR outcomes and learning (class 2, e.g. a major change in the production process), learning and reputation (class 6, e.g. implementing a certified environmental or social management system), or reputation and CR outcomes (class 4, e.g. obtaining an environmental or social label with specific performance criteria). And, certain CR activities may produce all three outputs at the same time (class 3, e.g. a radically new and attention-catching way of need fulfillment), while others may fail to produce any outputs at all (class 8, failed CR activities).

From the perspective of achieving environmental and social sustainability, only activities in classes 1 to 4 are relevant. Activities in classes 5 to 7 may have indirect relevance from an environmental and social sustainability perspective if they lead to the implementation of activities in classes 1 to 4 in the future. However, distinguishing between different CR activities is not important only because of their different contribution to environmental and social sustainability. In the following two chapters, I will show how the outputs produced by CR activities also affect the relationship of CR activities with economic performance.

WHY CORPORATE RESPONSIBILITY ACTIVITIES AND ECONOMIC PERFORMANCE ARE CONNECTED

Despite the number of studies dedicated to the relationship between CR and economic performance, the complex causal chain has been left relatively unexplored (Schaltegger & Wagner, 2006). Previous literature has, however, identified several individual reasons why CR activities should affect economic performance. According to one view (see e.g. Jaffe, Peterson, Portney & Stavins, 1995), CR activities increase production costs. Management time is required to identify and analyze alternative courses of action, and capital investments

and operating costs may be required to implement a CR activity. Switching costs and production disruptions may arise, scarce capital is diverted away from more productive investments, and productivity may also be reduced. But, according to an alternative view (see e.g. Lovins, Lovins & Hawken, 1999; Porter & van der Linde, 1995; Shrivastava, 1995a), CR activities may in fact lead to costs savings in production. They may encourage a more efficient use of materials and energy and the reduction of waste, as well as lead to the identification and elimination of risky and expensive production steps, materials, or design features.

Stakeholder theory (Donaldson & Preston, 1995; Freeman, 1984) has identified further linkages between CR activities and economic performance (see e.g. Berman, Wicks, Kotha & Jones, 1999; Hillman & Keim, 2001; Orlitzky et al., 2003; Rowley & Berman, 2000; Wood & Jones, 1995). Generally speaking, cultivating relationships with stakeholders may lead to the development of valuable intangible resources (Hillman & Keim, 2001; Orlitzky et al., 2003) which may be sources of competitive advantage. Specifically, CR activities may improve firm image, open up opportunities with environmentally or socially conscious market segments, and increase customer value through better product quality, improved product safety, and lower operating and disposal costs for customers. All this may result in increased customer loyalty and an ability to charge a price premium or to increase market share. Cost savings may be obtained with regulators through reduced environmental taxes and charges, reduced liability costs, and ensured continuous compliance with regulations. In addition, proactive CR behavior may result in reduced regulatory pressure and increased flexibility, postponement of some regulatory costs, longer-term planning horizons, and the possibility to influence regulatory development in accordance with own strategy. Benefits have also been identified from capital and insurance markets in the form of less expensive and easier borrowing and reduced insurance premia which are due to reduced risk, protecting collateral and balance

sheet values, favorable stock price impact, and attractiveness to non-speculative ethical investors. In the labor markets, CR activities may lead to the ability to hire and retain high quality staff as well as to improved worker health and morale. Good community relationships, in turn, may facilitate operations, for example siting or expansion.

A great number of possible individual causal links between CR activities and economic performance have thus already been identified in literature. Yet, an integrative synthesis that can systematize and structure all these individual links while retaining the complexity of the whole system would be required. Here the distinction between CR activities and their outputs as well as between the different types of these outputs can help. Figure 2 shows how CR activities and their outputs are causally related to economic performance in different ways. There are various paths from CR activities to economic performance; depending on which combination of outputs is produced by the CR activity, different ones of those paths materialize. Note that Figure 2 only examines unidirectional causality from CR activities to economic performance.

Insert Figure 2 about here.

First, all CR activities may entail direct costs as listed above (link a in Figure 2). These costs arise directly from the activity itself regardless of what outputs, if any, are produced. The remaining causal links, however, arise only through the outputs of the CR activity. As we have seen, CR activities may result in one or more of these outputs: learning, reputation, and CR outcomes. Of these outputs, both regular and innovative learning may reduce costs as proposed by the alternative view described above (links b and c). Reputation, in turn, may result in stakeholder actions of the many kinds identified above (links d and e). While false reputation may exist independently of actual CR outcomes, valid reputation

always bears a link to CR outcomes. In fact, unobservable CR outcomes do not result in stakeholder actions independently but only through reputation (link f), because reputation is the only way for stakeholders to receive information of such CR outcomes. By contrast, observable CR outcomes may result in stakeholder actions directly, without reputation (link g), because the stakeholders receive information on such CR outcomes directly from their interaction with the firm. Stakeholder actions result in both cost and revenue impacts: actions by customers affect revenues and actions by all other stakeholders affect costs. Finally, cost and revenue impacts combine to produce the ultimate economic impacts.

HOW CORPORATE RESPONSIBILITY ACTIVITIES AND ECONOMIC PERFORMANCE ARE CONNECTED

The traditional view on CR and economic performance was that they are connected in a negative fashion (see e.g. Palmer, Oates & Portney, 1995). One milestone in the debate was the “win-win” hypothesis forwarded by Porter and van der Linde (1995), which identified a variety of positive causal linkages between CR and economic performance and started a fierce argumentation between the negative and positive views on the relationship. A further breakthrough was the “it depends” hypothesis by Reinhardt (1998), recognizing that the relationship is not likely to be universally either negative or positive, but that its nature depends on the specifics of each situation. Accordingly, the debate has currently moved onwards to asking not “whether” but “when” such situations are possible where improved CR and economic performance go hand in hand (Hillman & Keim, 2001; King & Lenox, 2001; Lankoski, 2000; Orsato, 2006; Reinhardt, 1998; Salzmann, Ionescu-Somers & Steger, 2005; Wagner, Schaltegger & Wehrmeyer, 2001).

To continue to develop the “it depends” perspective further, the above classification of CR activities and the ensuing description of the causal linkages can again be utilized. I will found my following discussion on CR outcomes, because they are what ultimately matters from the perspective of understanding the potential trade-offs involved in improving the ecological and social sustainability of business. Thus, I will first discuss how CR activities that do produce CR outcomes are related to economic performance. Thereafter, I will show how CR activities that do not produce CR outcomes complement this picture.

Activities that Produce CR Outcomes

The inverted U. The fundamental relationship between CR outcomes and economic performance follows an inverted U-shaped form (see Figure 3). Such a relationship was originally proposed by Bowman and Haire in 1975, but remained practically ignored for more than two decades, to resurface again in recent literature (Lankoski, 2000; Nehrt, 1998; Schaltegger & Figge, 2000; Schaltegger & Synnestvedt, 2002; Stanwick & Stanwick, 2000; Steger, 2006; Wagner et al., 2001; Wagner, Van Phu, Azomahou & Wehrmeyer, 2002; and indirectly also McWilliams & Siegel, 2001; Husted & de Jesus Salazar, 2006). In fact, the inverted U-shape follows quite simply from basic neoclassical economic analysis. If the marginal costs of producing CR outcomes are increasing and the marginal revenues are decreasing, the overall relationship is necessarily concave. The assumption of increasing marginal costs holds by definition, because the marginal cost curve is constructed by organizing CR activities in the order of increasing costs. Thus, the inverted U rests on the common assumption of decreasing marginal revenues, in other words, that producing CR outcomes is always valued by customers, but that each additional unit produced brings smaller and smaller additional benefits.

Why the inverted U which, after all, is intuitively quite obvious has been so neglected may at least partly be due to the fact that while a theoretical relationship needs to be considered over the whole range of possible CR outcomes, in practice, both extremes of the inverted U easily remain unrecognized. The very leftmost portion of the inverted U tends to go ignored because the first CR improvements, such as avoiding an excessive waste of resources, are so evidently part of sensible business that they may not even be recognized as CR activities until trade-offs begin to enter the picture. The very rightmost portion of the inverted U, on the other hand, often remains outside the data range available for empirical studies and may remain in the shade for this reason. For example, based on a meta-analysis of 52 empirical studies, Orlitzky et al. (2003) conclude that the relationship between CR and lagged financial performance is not negative. However, we may safely say that a full internalization of environmental and social externalities has not taken place, wherefore its economic impacts cannot be reflected in currently available empirical data either. CR activities that managers anticipate to hurt economic performance will not be voluntarily undertaken, so we should indeed expect those negative instances to be, if not absent from, at least underrepresented in the empirical data.

Case-specificity of the inverted U. It has been argued in literature that the relationship between CR and economic performance is affected by firm-specific characteristics such as location, size, technology in terms of historical investments, and age (Colby, Kingsley & Whitehead, 1995); abatement costs, type of final product, closeness of final consumers, and litigiousness of the region (Stoeckl, 2004); consumer income, price of substitute goods, government sales, and diversification (McWilliams & Siegel, 2001); the market position of the firm and the basic structure of the industry (Reinhardt, 1999); customer willingness to pay for environmental differentiation, information about the environmental and private benefits conferred by the product, and inability of competitors to replicate the environmental

differentiation (Reinhardt, 1998); visibility of the firm, benchmarks provided by competitors, and the discount rate employed (Lankoski, 2000); the past behavior of the firm towards stakeholders, past stakeholder mobilization, and the institutional structure in which the social actors are embedded (Rowley & Berman, 2000); and uncertainty, complexity, and munificence of the business environment (Aragón-Correa & Sharma, 2003).

Furthermore, the relationship has been argued to vary according to issue-specific characteristics such as the type of available solutions, form and strictness of regulation, visibility of the issue and customer willingness to pay for the issue (Lankoski, 2000); whether the issue is related to primary stakeholders (Hillman & Keim, 2001); whether the issue represents reducing a negative externality or promoting a positive externality and whether it benefits market or nonmarket stakeholders (Lankoski, 2006); which stakeholders are involved in the issue (Husted, 2000; Wood & Jones, 1995); whether the issue can be resolved through product-driven or process-driven initiatives (Gilley, Worrell, Davidson & El-Jelly, 2000); as well as the perceived magnitude of the consequences of the issue, proximity of harm, concentration of effect, and ease of identifying source of the concern (Rowley & Berman, 2000).

Indeed, such firm- and issue-specific characteristics that are exogenous for the purposes of this paper do have an effect on the key elements of the causal chain: the direct costs of the CR activity, the learning potential involved with the activity, and the stakeholder actions that may be expected as a result of the activity. Consequently, they affect the cost and revenue impacts of CR activities, as well as the inverted U which results from those cost and revenue impacts. Thus, such characteristics influence the exact shape of the inverted U (for example, its steepness and symmetry and the presence of thresholds) as well as the horizontal and vertical location of the peak of the U. The inverted U is therefore always case-specific, where a case is a firm-issue combination.

Dynamics of the inverted U. Some of the exogenous factors that determine the shape and location of the inverted U are relatively stable over time, but others may change with time. For example, the definition of what is acceptable for stakeholders evolves (Rowley & Berman, 2000), technological breakthroughs may dramatically reduce the costs of CR activities (Lovins et al., 1999), and the implementation of an emissions trading system alters the cost and revenue scheme of CR improvements. Hence, the inverted U is a dynamic, living curve whose exact shape and location may be in constant movement for each firm-issue combination.

Activities that do not Produce CR Outcomes

Increasing efficiency. The picture of the relationship between CR activities and economic performance is richer than the inverted U alone leads us to believe. The inverted U assumes that firms are efficient: that they have perfect information with which they always calculate and implement the most cost-effective activity to produce CR outcomes. In practice, however, firms may not implement CR activities in the order prescribed by the marginal cost curve. Therefore, at a certain level of CR outcomes, the related costs may be higher than what would be theoretically necessary. Similarly, real-life stakeholders may not have perfect information about the unobservable CR outcomes of firms. Therefore, the cost savings and revenue increases in principle achievable from stakeholders with a certain unobservable CR outcome may remain unrealized.

Models on the CR – economic performance relationship that rely on the efficiency assumption are necessarily underspecified (Goldstein, 2002; Prakash, 2001). In fact, the inverted U represents an efficiency frontier that depicts the highest possible economic impact associated with each level of CR outcomes. Efficient firms lie on the inverted U, but

inefficient firms lie below it. The vertical distance of the firm from the inverted U reflects the efficiency of CR management.

Activities that produce regular learning can increase efficiency and reduce the vertical distance of the firm from the inverted U frontier. Regular learning can positively affect a great number of endogenous factors that have been argued to affect the CR - economic performance link: the availability of information and its flow within the organization (Esty & Porter, 1998; Prakash, 2001; Reinhardt, 1999; Shrivastava, 1995b); capabilities and skills for stakeholder integration, innovation, implementation of CR activities, and their integration into the strategic planning process (Christmann, 2000; Hart, 1995; Judge & Douglas, 1998; Karagozoglu & Lindell, 2000; Sharma & Vredenburg, 1998); favorable organizational structures and incentive systems (Esty & Porter, 1998; Lovins et al., 1999; Panayotou & Zinnes, 1994) – in general, the awareness and expertise (Goldstein, 2002) that shape the ability of the firm to identify the circumstances under which it is operating, identify corresponding opportunities and threats, define objectives and goals, develop plans, and take concrete actions (Schaltegger & Synnestvedt, 2002). If the costs of undertaking CR activities have been unnecessarily high, improvements in these factors reduce those costs.

Producing valid reputation can also increase efficiency. It is a prerequisite for obtaining customer or other stakeholder benefits from CR improvements that these improvements are made visible to the stakeholders (Lankoski, 2000) with credible information (Reinhardt, 1998). If stakeholder benefits have remained unnecessarily low because this precondition has not been satisfied, producing valid reputation helps to overcome this problem and again reduces the vertical distance of the firm from its inverted U frontier.

Shifting the entire inverted U. Whereas regular learning brings the firm closer to the inverted U frontier, innovative learning may have even more dramatic impacts as it can change the shape and position of the entire inverted U, for example, through developing a

new technological solution to a CR issue. In other words, whereas efficiency helps to obtain the best possible economic impact determined by current limits, innovation helps to stretch those limits.

False reputation: An anomaly. A theoretical anomaly in this framework needs to be discussed. Since the inverted U represents an efficiency frontier, it should not be possible for any firm to lie above it. Yet, such instances can be identified. The explanation for this is that, as noted, reputation and actual CR outcomes are two separate concepts. Thus, it is possible that through activities that produce false reputation, a firm is enjoying reputation that is higher than warranted by its actual CR outcomes. In these instances, the firm obtains the stakeholder benefits of a better CR outcome level but incurs only the direct costs of a worse CR outcome level (plus the costs of the reputation-building activities), which may result in a position above the inverted U. Thus, while reputation that diverges negatively from the actual CR outcome level results in a vertical position below the inverted U for the firm, reputation that diverges positively from the actual CR outcome level results in a vertical position above the inverted U unless there are some important learning-related inefficiencies that offset this effect.

Summary of the Relationship between CR Activities and Economic Performance

Figure 3 summarizes the relationship of different CR activities with economic performance. The inverted U forms the basis for this relationship by depicting the frontier of the best possible economic impact obtainable from various levels of CR outcomes for a certain firm-issue combination at a certain time. With regard to this basis, different situations may be identified. To illustrate, let us imagine that a firm is situated at point A in Figure 3 and undertakes a CR activity.

CR activities of class 1 (see Figure 1 for the classification of CR activities) are effective and produce CR outcomes. They move the position of the firm to the right in an inverted U-shaped fashion (assuming that the relative management efficiency remains the same). Whether this represents an improvement or a worsening in economic performance depends on the original horizontal position of the firm vis-à-vis its inverted U curve.

CR activities of classes 5 to 7 improve efficiency by producing learning or reputation. The horizontal position of the firm remains unchanged, but vertically the firm moves upwards towards the inverted U frontier. These activities improve economic performance up to the limit set by the inverted U frontier (assuming that the costs of producing learning or reputation are not larger than the benefits). In two different situations, however, the firm can go above its original inverted U frontier: while false reputation may exceed this frontier, innovative learning shifts it.

CR activities of classes 2 to 4 are both effective and efficiency-improving. As a result, the horizontal and vertical position of the firm are both changed, and the economic impact is a combination of the economic impacts obtained from improving the level of CR outputs and improving efficiency. By contrast, CR activities of class 8 are neither effective nor efficiency-improving. They move the firm downwards and weaken economic performance. From Figure 3 we can see that for best CR results, effective activities are needed, but for best economic results, both effective and efficient activities are needed.

Insert Figure 3 about here.

DISCUSSION

Theoretical Contribution

Firms' concern for CR may be strategic and based on the perceived ability of CR to affect economic performance, or altruistic and based on a moral obligation that firms feel towards their stakeholders (Baron, 2001; Berman et al., 1999). No matter which perspective is adopted, it is important to understand the implications that the CR activities of a firm may have on its economic performance, so that managers can consider and manage the eventual tradeoffs (Margolish & Walsh, 2003). In this paper, I distinguished between firms' CR activities on the basis of what outputs are produced and, taking advantage of this distinction, outlined the relationship between CR activities and economic performance.

The paper departs from previous literature and contributes to theoretical development in a number of ways. It focuses on CR activities instead of some broad definition of CR, explicitly separates CR activities from the outputs of those activities, identifies three distinct types of outputs for CR activities (learning, reputation, and CR outcomes) as well as two subtypes for each of these, and develops a classification of CR activities based on the outputs of those activities. Furthermore, it details alternative paths in the causal chain between CR activities and economic performance, separates effective and efficient CR activities, and presents the relationship between CR activities and economic performance in terms of a dynamic, case-specific, inverted U-shaped efficiency frontier and the vertical distance from this frontier.

By doing this, the paper provides one possible response to the criticism raised by Ullmann (1985) and several others, according to which an insufficient theoretical basis on the CR – economic performance link leads to studies being accumulated without real cumulation of knowledge. In particular, it can be argued that the identification of the three different types of outputs from CR activities was necessary to advance theoretically. This is because in terms

of the causal link, CR outcomes and reputation behave differently from learning, but with regard to the nature of the relationship, learning and reputation behave differently from CR outcomes. Thus, systematizing the theoretical complexity was not possible without the identification and separation of all three.

Looking back at previous literature through this framework, it becomes clear how many of the competing explanations about the relationship are, in fact, complementary explanations. Each of them pinpoints a valid aspect of the relationship but is alone insufficient to explain the whole picture. Also, the framework renders understandable the variability in the empirical evidence of the profitability of CR improvements. As there is a turning point in the fundamental, inverted U-shaped relationship between CR outcomes and economic performance, positive cases can in principle be found in firms that are in the rising portion of their case-specific curve, and negative cases in firms that are in the falling portion of their curve. However, since this fundamental relationship varies with time and the efficiency of firms' CR management varies as well, we can in practice observe all kinds of impacts.

Also, with the help of this framework, many confusing phenomena get their explanation. Why do some profit-maximizing firms continually produce new CR outcomes if there is a turning point in the relationship? Because the turning point may shift with time or be shifted through innovation and it is thus possible for the optimal path of CR outcome level over time of a firm to be one of constant improvement, even if at any one time the relationship does exhibit the inverted U-shape. Moreover, if the firm has remained below its inverted U curve due to inefficient CR management, a CR activity that produces CR outcomes may increase profits even after the turning point of the inverted U if it also reduces the vertical distance of the firm from its U curve at the same time. Why is it that many firms have radically increased their environmental activities but a corresponding improvement in environmental quality is not always observable? Because some CR activities do not produce

CR outcomes. Why can we observe some firms to have exceeded their profit-maximizing level of CR outcomes? Because firms may make mistakes as the exact assessment of the cost and revenue impacts of producing CR outcomes is very difficult and the profit-maximizing level is a moving target, because our own observation may be erroneous for the same reasons, or because the firms may have other objectives besides profit maximization.

Practical Discussion of the Results

The result that the relationship between CR outcomes and economic performance follows an inverted U-shaped form means in practice that producing CR outcomes is profitable for a firm up to the turning point of the inverted U. Any further investments in producing CR outcomes would decrease profit, but any fewer investments would leave profitable opportunities unused. The area up to the turning point represents a win-win area where producing CR outcomes also improves economic performance. Thus, win-win situations do exist, but not all situations are win-win situations.

That the inverted U curve is case-specific means that the size of the win-win area and the location of the peak of the U may be different for different firm-issue combinations. In other words, what is profitable for one firm may not be profitable for another, and a firm that reaps economic benefits from improving one CR issue may not reap such benefits from improving another CR issue. In some cases the curve may be asymmetric, in which case it is better to err in one direction than the other. In some cases the turning point of the inverted U is vertically high, while in others the peak obtains a negative value and thus even the best possible case represents a loss of money for the firm. Hence, determining the optimal level of CR outcomes for a profit-maximizing firm is an issue for competitive strategy as no universal solution fits all situations.

The dynamic nature of the inverted U curve means that the optimal level of CR outcomes for a profit-maximizing firm is a moving target that requires constant monitoring of stakeholder preferences, technological solutions, and regulatory developments. However, the result that the firm itself can bring about shifts in its inverted U curve means that the relationship is not merely deterministic and the firm does not have to remain a powerless victim of its circumstances. CR management is needed both to gather information about the changing conditions and to adjust accordingly, but also to act as an active force in altering those conditions when relevant.

The result that the inverted U represents an efficiency frontier means that obtaining the best possible economic impact from the production of CR outcomes depends on the quality of management. No matter what the level of CR outcomes, each firm should therefore strive toward efficient CR management to secure the desirable cost and revenue impacts to their fullest potential and to reduce the difference between achieved and best possible economic impacts.

In addition, the result that false reputation can create excessive economic benefits means that it may be more attractive for a firm to undertake CR activities that produce false reputation than activities that produce CR outcomes. If stakeholders are concerned about truly improving the environmental and social sustainability of business, ways to reduce the independence between reputation and actual performance ought to be found.

Management Implications

Managers' strategic decisions are influenced by their own values and preferences (Starik & Rands, 1995). Thus, management implications can be given from two perspectives:

how to manage in order to increase profits, and how to manage in order to increase environmental and social sustainability.

To increase sustainability, the firm has to move to the right along its inverted U curve. Managers thus need to pay attention to conducting CR activities that indeed do produce CR outcomes. However, the adaptation to more sustainable practices may require new employee skills and changes in organizational systems and competencies (Buysse & Verbeke, 2003; Jennings & Zandbergen, 1995; Shrivastava, 1995b). Therefore, conducting activities that do not produce CR outcomes may sometimes also be required as an intermediate step towards producing CR outcomes, for example acquiring information or implementing training.

To increase profits, management has several alternatives that may also be implemented simultaneously. One way to increase profits is to ensure that the CR outcomes of the firm reflect the profit-maximizing level. However, it must be kept in mind that as the inverted U curve is a dynamic one and its turning point thus a moving target, all activities should be designed and timed so that when they take effect they correspond to the profit-maximizing level at that point of time, not to the profit-maximizing level at the time of planning those activities. Another way to increase profits is to improve the efficiency of CR management so that the best possible economic impact is obtained at each level of CR outcomes. A third way to increase profits is to innovate in ways that shift the inverted U curve upwards, and then to ensure that the firm is situated on the new curve and preferably at its peak. According to the framework, a fourth way to increase profits is in principle to attempt to build false reputation, which cannot, however, be recommended neither for ethical reasons nor because the discovery of such a strategy could produce very harmful stakeholder reactions.

Research Implications

The results have implications for empirical research on the relationship between CR and economic performance. There are many reasons why it is very difficult, if not impossible, to accurately empirically measure the overall theoretical relationship: the net stream of any and all CR-related cost and revenue changes over time can hardly be credibly isolated and calculated; the management efficiency of the firms is also difficult to establish; the relationship is dynamic; and the relationship is case-specific. If, however, empirical designs are attempted, other than linear specifications need to be allowed, studies should indicate the time period and range of CR outcomes for which the results are valid, and sufficient disaggregation is required in order not to mask the firm- and issue-specific differences.

The empirical study of the outputs and economic impacts of specific CR activities, on the other hand, should be more straightforward. Individual parts of the causal chain may be tested by examining what activities produce what outputs and how these outputs contribute to the economic performance of the firm.

The findings of this paper also suggest new topics for future research. More information would be useful on the firm- and issue-specific conditions that make the U curve vary between cases, and on how the firms themselves, policy makers, or other stakeholders could affect these conditions over time so that trade-offs between CR outcomes and economic performance are further reduced. Similarly, more detailed understanding would be required on what kind of CR management is efficient and how firms can improve their efficiency in this respect. This paper offers an integrative structure to situate such new research in.

On the practical side, managers need to identify the distance of their firm from the moving target of the peak of the inverted U, both in terms of CR outcomes and in terms of management efficiency. Such an analysis is more likely to be qualitative in nature than a

number-crunching exercise, and the development of practical decision-support tools for this purpose would be welcome.

As a final point, these theoretical results imply that there may be situations where there is a trade-off between economic and CR objectives. The empirical result by Orlitzky et al. (2003) that the relationship between CR and economic performance is not negative suggests that so far, either such trade-offs have not materialized on a large scale because the peak of the inverted U has in general not yet been exceeded or, if trade-offs have arisen, they have been managed so as to safeguard primarily the economic objectives. For the future, more discussion and research would be required on the role of business in society and on how managers can choose between the environmental, social, and economic dimensions of corporate sustainability in different situations where trade-offs are present. Thus, after asking “whether” and “when” there are trade-offs, the next question to ask is: “When there is a trade-off, what should we do?”

REFERENCES

- Aragón-Correa, J. & Sharma, S. 2003. A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*, 28: 71-88.
- de Bakker, F. G. A., Groenewegen, P. & den Hond, F. 2005. A bibliometric analysis of 30 years of research and theory on corporate social responsibility and corporate social performance. *Business & Society*, 44(3): 283-317.
- Baron, D. 2001. Private politics, corporate social responsibility and integrated strategy. *Journal of Economics and Management Strategy*, 10: 7-45.
- Berman, S. L., Wicks, A. C., Kotha, S. & Jones, T. M. 1999. Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance. *Academy of Management Journal*, 42: 488-506.
- Bowman, E. & Haire, M. 1975. A strategic posture toward corporate social responsibility. *California Management Review*, 18(2): 49-58.
- Buyssse, K. & Verbeke, A. 2003. Proactive environmental strategies: A stakeholder management perspective. *Strategic Management Journal*, 24: 453-470.
- Christmann, P. 2000. Effects of “best practices” of environmental management on cost advantage: The role of complementary assets. *Academy of Management Journal*, 43: 663-680.

Colby, S. J., Kingsley, T. & Whitehead, B. W. 1995. The real green issue: Debunking the myths of environmental management. *McKinsey Quarterly*, 2: 132-143.

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20, 65-91.

Esty, D. & Porter, M. 1998. Industrial ecology and competitiveness: Strategic implications for the firm. *Journal of Industrial Ecology*, 2: 35-43.

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman/Ballinger.

Gilley, K. M., Worrell, D. L., Davidson, W. N., & El-Jelly, A. (2000). Corporate environmental initiatives and anticipated firm performance: The differential effects of process-driven versus product-driven greening initiatives. *Journal of Management*, 26(6), 1199-1216.

Goldstein, D. 2002. Theoretical perspectives on strategic environmental management. *Journal of Evolutionary Economics*, 12: 495-524.

GRI Sustainability Reporting Guidelines. 2002. Global Reporting Initiative. Available at: <http://www.globalreporting.org/guidelines/2002.asp> (Accessed 9.6.2006)

Hart, S. 1995. A natural-resource-based view of the firm. *Academy of Management Journal*, 20: 986-1014.

Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal*, 22, 125-139.

Huber, G. P. 1991. Organizational learning: The contributing processes and the literatures. *Organization Science*, 2(1): 88-15.

Husted, B. 2000. A contingency theory of corporate social performance. *Business and Society*, 39: 24-48.

Husted, B. W. & de Jesus Salazar, J. 2006. Taking Friedman seriously: Maximizing profits and social performance. *Journal of Management Studies* 43(1): 75-91.

Jaffe, A., Peterson, S., Portney, P. & Stavins, R. 1995. Environmental regulation and the competitiveness of U.S. manufacturing: What does the evidence tell us? *Journal of Economic Literature*, 33: 132-163.

Jennings, P. D. & Zandbergen, P. A. 1995. Ecologically sustainable organizations: An institutional approach. *Academy of Management Review*, 20: 1015-1052.

Judge, W. & Douglas, T. 1998. Performance implications of incorporating natural environmental issues into the strategic planning process: An empirical assessment. *Journal of Management Studies*, 35: 241-262.

Karagozoglu, N. & Lindell, M. 2000. Environmental management: Testing the win-win model. *Journal of Environmental Planning and Management*, 43: 817-830.

King, A. & Lenox, M. 2001. Does it *really* pay to be green? An empirical study of firm environmental and financial performance. *Journal of Industrial Ecology*, 5: 105-116.

Lankoski, L. (2000). *Determinants of environmental profit: An analysis of the firm-level relationship between environmental performance and economic performance*. Helsinki University of Technology, Institute of Strategy and International Business, Doctoral Dissertations 2000/1.

Lankoski, L. 2006. *Differential economic impacts of corporate responsibility issues*. INSEAD Working Paper 2006/44/IBiS.

Lovins, A. B., Lovins, L. H. & Hawken, P. 1999. A road map for natural capitalism. *Harvard Business Review*, May-June: 145-158.

Margolish, J. D. & Walsh, J. P. 2003. Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48: 268-305.

McWilliams, A. & Siegel, D. 2001. Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26:117-127.

Nehrt, C. 1998. Maintainability of first mover advantages when environmental regulations differ between countries. *Academy of Management Review*, 23: 77-97.

Orlitzky, M., Schmidt, F. & Rynes, S. 2003. Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24:403-441.

Orsato, R. J. 2006. Competitive environmental strategies: When does it pay to be green? *California Management Review*, 48(2): 127-143.

Palmer, K., Oates, W. & Portney, P. 1995. Tightening environmental standards: The benefit-cost or the no-cost paradigm? *Journal of Economic Perspectives*, 9(4): 119-132.

Panayotou, T. & Zinnes, C. 1994. Free-lunch economics for industrial ecologists. In R. Socolow, C. Andrews, F. Berkhout, & V. Thomas (Eds.), *Industrial ecology and global change*: 383-397. Cambridge, MA: Cambridge University Press.

Porter, M. & van der Linde, C. 1995. Toward a new conception of the environment - competitiveness relationship. *Journal of Economic Perspectives*, 9(4): 97-118.

Prakash, A. 2001. Why do firms adopt “beyond-compliance” environmental policies? *Business Strategy and the Environment*, 10: 286-299.

Reinhardt, F. 1998. Environmental product differentiation: Implications for corporate strategy. *California Management Review*, 40(4): 43-73.

Reinhardt, F. 1999. Market failure and the environmental policies of firms: Economic rationales for “Beyond compliance” behavior. *Journal of Industrial Ecology*, 3: 9-21.

Rowley, T. & Berman, S. 2000. A brand new brand of corporate social performance. *Business and Society*, 39: 397-418.

Salzmann, O., Ionescu-Somers, A. & Steger, U. 2005. The business case for corporate sustainability: Literature review and research options. *European Management Journal*, 23(1): 27-36.

Schaltegger, S. & Figge, F. 2000. Environmental shareholder value: Economic success with corporate environmental management. *Eco-Management and Auditing*, 7: 29-42.

Schaltegger, S. & Synnestvedt, T. 2002. The link between “green” and economic success: Environmental management as the crucial trigger between environmental and economic performance. *Journal of Environmental Management*, 65: 339-346.

Schaltegger, S. & Wagner, M. 2006. Managing and measuring the business case for sustainability. In: Schaltegger, S. & Wagner, M. (eds.). *Managing the business case for sustainability*. Aizlewood Mill: Greenleaf Publishing.

Sharma, S. & Vredenburg, H. 1998. Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic Management Journal*, 19: 729-753.

Shrivastava, P. 1995a. Environmental technologies and competitive advantage. *Strategic Management Journal*, 16: 183-200.

Shrivastava, P. 1995b. The role of corporations in achieving ecological sustainability. *Academy of Management Review*, 20: 936-960.

Stanwick, S. & Stanwick, P. 2000. The relationship between environmental disclosures and financial performance: An empirical study of U.S. firms. *Eco-Management and Auditing*, 7: 155-164.

Starik, M. & Rands, G. P. 1995. Weaving an integrated web: Multilevel and multisystem perspectives of ecologically sustainable organizations. *Academy of Management Review*, 20: 908-935.

Steger, U. 2006. Building a business case for corporate sustainability. In: Schaltegger, S. & Wagner, M. (eds.). *Managing the business case for sustainability*. Aizlewood Mill: Greenleaf Publishing.

Stoeckl, N. 2004. The private costs and benefits of environmental self-regulation: Which firms have most to gain? *Business Strategy and the Environment*, 13: 135-153.

Ullmann, A. 1985. Data in search of a theory: A critical examination of the relationships among social performance, social disclosure, and economic performance of U.S. firms. *Academy of Management Review*, 10: 540-557.

Wagner, M., Schaltegger, S. & Wehrmeyer, W. 2001. The relationship between the environmental and economic performance of firms: What does theory propose and what does empirical evidence tell us? *Greener Management International*, 34: 95-108.

Wagner, M., Van Phu, N., Azomahou, T. & Wehrmeyer, W. 2002. The relationship between the environmental and economic performance of firms: An empirical analysis of the European paper industry. *Corporate Social Responsibility and Environmental Management*, 9: 133-146.

Wood, D. J. 1991. Corporate social performance revisited. *Academy of Management Review*, 16: 691-718.

Wood, D. J. & Jones, R. E. 1995. Stakeholder mismatching: A theoretical problem in empirical research on corporate social performance. *The International Journal of Organizational Analysis*, 3: 229-267.

FIGURE 1

Classification of corporate responsibility activities on the basis of their outputs

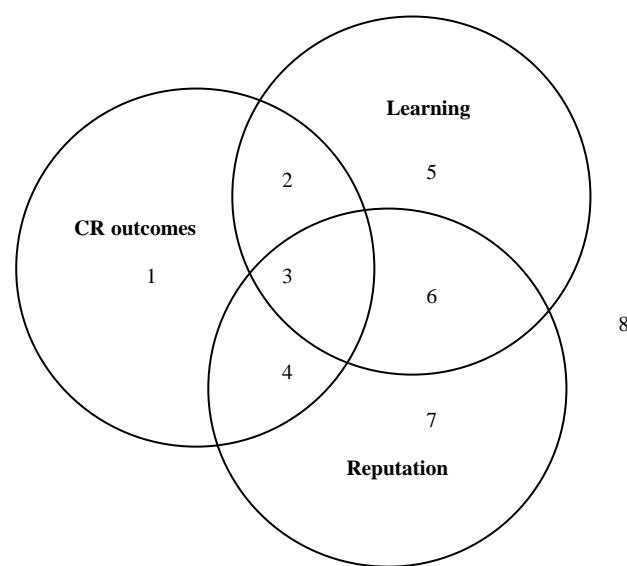


FIGURE 2

The causal chain from corporate responsibility activities to economic performance

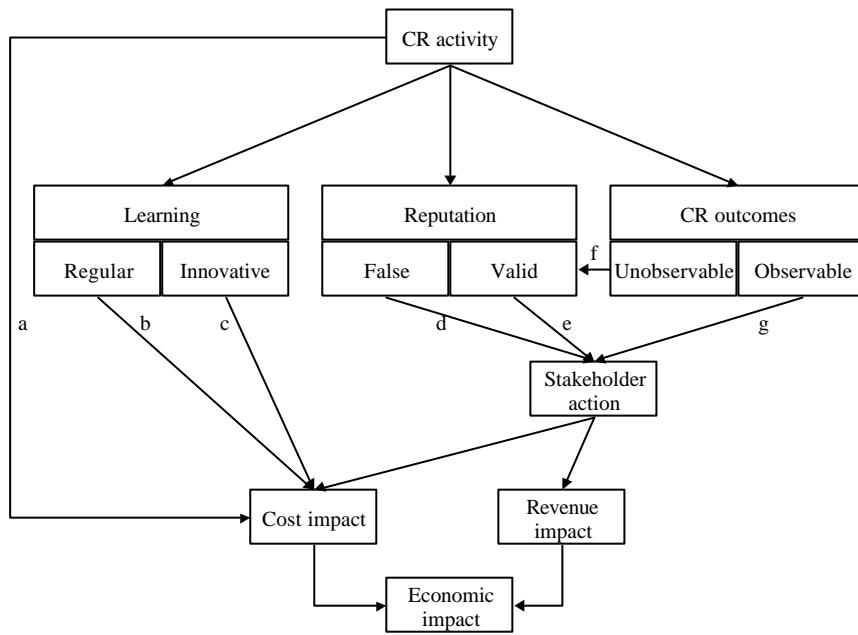
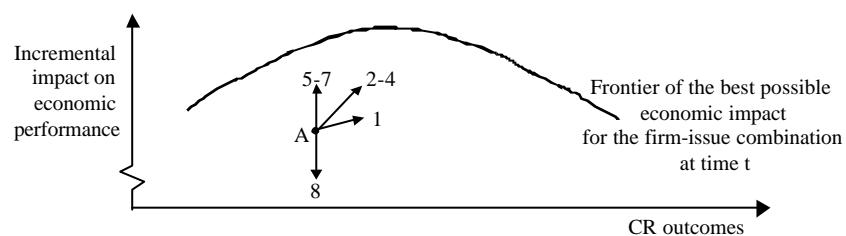


FIGURE 3

The relationship between corporate responsibility activities and economic performance. The numbered arrows illustrate how undertaking different classes of CR activities would affect the economic performance of firm A



Europe Campus
Boulevard de Constance,
77305 Fontainebleau Cedex, France
Tel: +33 (0)1 6072 40 00
Fax: +33 (0)1 60 74 00/01

Asia Campus
1 Ayer Rajah Avenue, Singapore 138676
Tel: +65 67 99 53 88
Fax: +65 67 99 53 99

www.insead.edu