



Fondazione Eni Enrico Mattei

Corporate Social Responsibility Through an Economic Lens

Forest L. Reinhardt, Robert N. Stavins,
and Richard H. K. Vietor

NOTA DI LAVORO 84.2008

OCTOBER 2008

CSR – Corporate Social Responsibility and Sustainable Management

Forest L. Reinhardt, *Harvard Business School*
Robert N. Stavins, *John F. Kennedy School of Government, Harvard University,*
Resources for the Future, National Bureau of Economic Research
Richard H. K. Vietor, *Harvard Business School*

This paper can be downloaded without charge at:

The Fondazione Eni Enrico Mattei Note di Lavoro Series Index:
<http://www.feem.it/Feem/Pub/Publications/WPapers/default.htm>

Social Science Research Network Electronic Paper Collection:
<http://ssrn.com/abstract=1281544>

The opinions expressed in this paper do not necessarily reflect the position of
Fondazione Eni Enrico Mattei
Corso Magenta, 63, 20123 Milano (I), web site: www.feem.it, e-mail: working.papers@feem.it

Corporate Social Responsibility Through an Economic Lens

Summary

Business leaders, government officials, and academics are focusing considerable attention on the concept of "corporate social responsibility" (CSR), particularly in the realm of environmental protection. Beyond complete compliance with environmental regulations, do firms have additional moral or social responsibilities to commit resources to environmental protection? How should we think about the notion of firms sacrificing profits in the social interest? May they do so within the scope of their fiduciary responsibilities to their shareholders? Can they do so on a sustainable basis, or will the forces of a competitive marketplace render such efforts and their impacts transient at best? Do firms, in fact, frequently or at least sometimes behave this way, reducing their earnings by voluntarily engaging in environmental stewardship? And finally, should firms carry out such profit-sacrificing activities (i.e., is this an efficient use of social resources)? We address these questions through the lens of economics, including insights from legal analysis and business scholarship.

Keywords: Corporate Social Responsibility, Voluntary Environmental Performance

JEL Classification: M140, L510, Q500

Address for correspondence:

Robert N. Stavins
John F. Kennedy School of Government
Harvard University
79 John F. Kennedy Street
Cambridge, Massachusetts 02138
Phone: 6174951820
Fax: 6174963783
E-mail: robert_stavins@harvard.edu

Corporate Social Responsibility Through an Economic Lens

Forest L. Reinhardt*, Robert N. Stavins**, and
Richard H. K. Vietor***

Introduction

Business leaders, government officials, and academics are focusing more and more attention on the concept of “corporate social responsibility” (CSR). The central issue is the appropriate role of business. Everyone agrees that firms should obey the law. But beyond the law—beyond full compliance with environmental regulations—do firms have additional moral or social responsibilities to (voluntarily) commit resources to environmental protection?

One of the challenges of examining the concept of CSR is simply identifying a consistent and sensible definition from among a bewildering range of concepts and definitions that have been proposed in the literature.¹ We adopt a simple definition originally offered by Elhauge (2005): sacrificing profits in the social interest. This definition has the merit of being consistent with some of the most useful prior perspectives (Graff Ziven and Small 2005; Portney 2005; Reinhardt 2005), while focusing the discussion on the most interesting normative and positive questions.

Of course, questions regarding sacrificing profits in the social interest apply beyond the environmental sphere. The academic debate over the legality of sacrificing profits in the public interest appears to have begun in 1932 with opposing articles (Dodd 1932; Berle 1932) in a *Harvard Law Review* symposium on “For Whom Are Corporate Managers Trustees?” The debate in economics began more recently, with Milton Friedman’s 1970 article, “The Social Responsibility of Business Is to Increase Its Profits,” in the *New York Times Magazine*. Since then, the debate has continued, and CSR has received considerable attention from both scholars and the public, especially in the environmental protection area.

*Harvard Business School

**John F. Kennedy School of Government, Harvard University, Resources for the Future, National Bureau of Economic Research; E-mail: robert_stavins@harvard.edu

***Harvard Business School

Exceptionally valuable research assistance was provided by Matthew Ranson, and our research benefited greatly from conversations with William Alford, Max Bazerman, Robert Clark, Joshua Margolis, and Mark Roe. The authors are grateful to Suzanne Leonard, Charlie Kolstad, and an anonymous referee for valuable comments on a previous version of the manuscript, but all remaining errors are our own.

¹See reviews by Wood and Jones (1996) and Mohr, Webb, and Harris (2001).

The purpose of this article, which is part of a three-article symposium on Corporate Social Responsibility and the Environment,² is to introduce and provide an overview of the major issues related to CSR, synthesize what is known about CSR in the environmental arena, and thereby identify where the greatest uncertainties remain. To this end, we address four key questions about the issue of firms sacrificing profits in the social interest.³ *May* they do so within the scope of their fiduciary responsibilities to their shareholders? *Can* they do so on a sustainable basis, or will the forces of a competitive marketplace render such efforts and their impacts transient at best? *Do* firms, in fact, frequently or at least sometimes behave this way, reducing their earnings by voluntarily engaging in environmental stewardship? And finally, *should* firms carry out such profit-sacrificing activities? In other words, is this an efficient use of social resources?

This article is organized as follows. We begin by examining legal thinking about whether firms *may* sacrifice profits to benefit individuals other than their shareholders, and then look at the legality of CSR in the United States and other countries. Next, we draw on theories of industrial organization and management to identify circumstances under which firms *can* sacrifice profits without being punished by market forces. We then turn to positive questions about whether firms actually *do* engage in CSR. Here we review and synthesize empirical evidence to assess whether some firms truly exceed full compliance with the law, and if so, whether their “socially responsible” actions actually sacrifice profits. To address our fourth question, *should* firms—from a societal perspective—be carrying out such activities, we examine CSR in a normative light and consider economic arguments on both sides of the issue. The final section summarizes our findings and offers some conclusions.

May Firms Sacrifice Profits in the Social Interest?

The prevailing view among most economists and business scholars is that corporate directors have a fiduciary duty to maximize profits for shareholders. While this view underlies many economic models of firm behavior, its legal basis is actually not very strong. The judicial record, although supportive of a duty to maximize profits for shareholders, also leaves room for the possibility that firms may sacrifice profits in the public interest. The courts’ deference towards the judgment of businesspeople—the “business judgment rule”—prevents many public-minded managerial actions from being legally challenged.

The Legal Purpose of the Corporation

The most widely accepted position on the legal purpose of the corporation—known as shareholder primacy (Springer 1999; Fisch 2006; Ehrlich 2005)—was articulated by Milton Friedman in 1970:

In a free-enterprise, private-property system, a corporate executive is an employee of the owners of the business. He has direct responsibility to his employers. That responsibility is to conduct the business in accordance with their desires, which

²The other two articles in the symposium, by Lyon and Maxwell (forthcoming) and Portney (forthcoming), discuss CSR from the theoretical and empirical perspectives, respectively.

³These four questions were originally identified by Hay, Stavins, and Vietor (2005).

generally will be to make as much money as possible while conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom (Friedman 1970).

A more subtle version of the shareholder primacy argument is the “nexus of contracts” approach (Jensen and Meckling 1976; Easterbrook and Fischel 1991), which views the corporation as a nexus of legal contracts between the suppliers of various factors of production, who agree to cooperate in order to generate monetary returns. These agreements specify that in exchange for their contributions, the owners of most factors of production—labor, land, intellectual property rights, etc.—will receive set payments with little risk. Shareholders—the suppliers of capital—accept the residual financial risk of doing business, and in return receive the residual profits. Since shareholders have no contractual guarantee of a fixed payment from the firm’s activities, any profits that are diverted towards other activities, such as pursuit of “the social good,” come directly out of their pockets (Butler and McChesney 1999). Thus, from this perspective, CSR is close to theft.

A second view of the role of the corporation is found in the team-production model (Blair and Stout 1999), which views the corporation as the solution to the moral hazard problem that arises when the owners of factors of production must make firm-specific investments but fear they will not be rewarded *ex post*. To solve this problem, the board of directors of the corporation functions as a neutral “mediating hierarch” that allocates residual profits to all of the factors of production (team members) according to their relative contributions.⁴ Under the team-production model, sacrificing profits in the social interest is legal, as long as the profits are allocated to a deserving factor of production.

A third view of the purpose of the corporation is the “operational discretion” model, which holds that the law grants corporate managers discretion to comply with social and moral norms, even if doing so reduces shareholder profits (Elhauge 2005). The judiciary’s unwillingness to second-guess matters of business judgment has the practical effect of shielding managers who choose to sacrifice profits in the public interest.

A fourth and final position is the “progressive view” that the corporation is organized for the benefit of society at large, or at the very least, corporate directors have fiduciary responsibilities that extend to a wide variety of stakeholders (Sheehy 2005; Gabaldon 2006). Under this view, sacrificing profits in the public interest is entirely legal. The progressive view, however, is not well rooted in either statutes or case law (Clark 1986).

The Legality of CSR in the United States

In the United States, a variety of legal requirements define the responsibilities of the corporation (and its board of directors) to shareholders and other stakeholders. However, as discussed below, these requirements are limited in practice.

⁴For example, many US states have enacted statutes that permit corporate directors to consider the interests of stakeholders other than shareholders.

Corporate Responsibilities to Shareholders and Other Stakeholders

Although corporations in the United States are granted the “legal fiction of separate corporate personality,” a corporation’s decisions are made by its board of directors, or by executives who have been delegated decision-making authority (Clark 1986). To ensure that directors and managers do not act negligently or subvert corporate resources for their own benefit, the legal system imposes fiduciary duties of care and loyalty.

The duty of loyalty requires directors to act “in good faith and in the best interests of the corporation” (Scalise 2005), and places limitations on the motives, purposes, and goals that can legitimately influence directors’ decisions (Cox and Hazen 2003). The duty of care complements the duty of loyalty by requiring managers to “exercise that degree of skill, diligence, and care that a reasonably prudent person would exercise in similar circumstances” (Clark 1986, p. 123). Violation of fiduciary duties can result in personal liability for directors (Scalise 2005). Legal formulations of fiduciary duties typically refer to the “best interests of the corporation,” but whether the corporation’s “best interests” include only its shareholders or a wider set of constituents is not immediately clear (Cox and Hazen 2003). The prevailing opinion is that fiduciary duties are owed to shareholders (Blomquist 2006), but a minority supports the view that corporations can be managed in part for the benefit of other stakeholders (Lee 2005).

Every US state recognizes the right of businesses to make charitable contributions. Seven states allow charitable donations regardless of corporate benefit, and nineteen other states allow donations that benefit the business or advance the public welfare (Choper, Coffee, and Gilson 2004). Statutes in the remaining 24 states (including Delaware) include similar language, but without legal clarification about whether donations are permitted when they do not benefit the firm (Donohue 2005).⁵

State corporate statutes grant corporations legal powers similar to those of people, and allow corporations to participate in lawful activities (Clark 1986). As a result, corporations presumably have the power (but not necessarily the *right*) to undertake CSR activities (Donohue 2005). Corporations can write their own corporate charters to explicitly authorize themselves to participate in CSR. For example, the *New York Times* is incorporated to pursue objectives other than profit maximization (Donohue 2005).

These statutory requirements and judicial precedents place limits on the actions of corporations and their boards. But an important judicial construct—the business judgment rule—creates substantial deference to firms’ managerial decisions.

The Business Judgment Rule

The business judgment rule “acts as a presumption in favor of corporate managers’ actions” (Branson 2002). It requires courts to defer to the judgment of corporate managers, as long as their decisions satisfy certain basic requirements related to negligence and conflict of interest. The basic premise is that since corporate managers are far more skilled at making business judgments than courts, allowing courts to second-guess managers’ decisions would create potentially large transactions costs (Elhauge 2005).

⁵In addition, twenty-nine states have statutes that allow managers to consider the interests of non-shareholders such as employees, customers, suppliers, creditors, and society at large (Springer 1999).

The business judgment rule makes fiduciary duties difficult to enforce, and it effectively grants managers discretion to “temper business decision making with their perceptions of social values” (Clark 1986; Fisch 2006; Scalise 2005; Blair and Stout 1999).⁶ As a practical matter, as long as managers can plausibly claim that their actions are in the long run interests of the firm, it is almost impossible for shareholders to challenge the actions of managers who act in the public interest.

The business judgment rule also offers managers protection from accusations of conflict of interest, primarily because it does not recognize most nonfinancial incentives as conflicts (Elhauge 2005; Branson 2002). Corporate managers’ decisions can be regarded as irrational—and thus not protected by the business judgment rule—only if they “go so far beyond the bounds of reasonable business judgment that their only explanation is bad faith” (Blomquist 2006, p. 699). Donohue (2005) cites the extreme example of a Delaware court that ruled that the business judgment rule protected the 1989 decision by Occidental Petroleum to spend \$120 million, slightly less than half of the company’s yearly net profit, on an art museum named after its 91-year-old CEO, Armand Hammer.

So, are firms in the United States prohibited from sacrificing profits in the public interest? And if so, is the prohibition enforceable? The answers to these two questions appear to be “maybe” and “no,” respectively. “While case law falls short of unequivocally mandating shareholder wealth maximization, it also falls short of unambiguously authorizing the pursuit of non-shareholder interests other than instrumentally for the benefit of the shareholders” (Lee 2006, p. 557). And as long as managers claim some plausible connection to future profitability, the business judgment rule grants them substantial leeway to commit corporate resources to projects that benefit the public.

The Legality of CSR in Other Countries

With their cultural traditions of social democracy or firm loyalty to employees, most European countries and Japan have legal systems that differ from the system in the United States. The legal systems in these other countries place a greater emphasis on stakeholder participation, and sometimes codify this by legalizing various forms of profit-sacrificing behavior. Europeans have sought to incorporate CSR into their investment climate, both at the institutional and individual level (Sutton 2004), and in strong social democracies, such as Germany and France, stakeholders (particularly employees) have much stronger legal positions than in the United States (Roe 2000). Corporations in Europe and Asia are also more likely to have a few large shareholders, who may take social responsibilities seriously, particularly those towards employees (Roe 2000). This contrasts with the pattern of highly dispersed share ownership in the United States.

Industrialized Countries

Common law industrialized countries, primarily former British possessions, share many legal features with the United States. Corporations in these countries have similar board

⁶For example, Clark cites the 1968 case of *Shlensky v. Wrigley*, in which the Illinois Court of Appeals allowed William Wrigley, Jr., the president and majority shareholder of the Chicago Cubs, to refuse to install lights at Wrigley Field because of his belief that night games would be bad for the surrounding neighborhood (1986).

structures, face similar legal requirements, and even share some legal precedents. In such countries, CSR is discouraged, but permitted. Under Australian corporate law, for example, corporate managers are required to make decisions in the best interest of the corporation, while a statutory business judgment rule grants managers considerable discretion (Corfield 1998). Likewise, Canadian law requires that directors and officers of corporations act in the best interests of the corporation, but the director is not permitted to ignore the collective interests of shareholders (Borok 2003). The United Kingdom's legal system permits corporate managers to engage in socially beneficial activities, as long as there is a plausible rationale that the activities are in shareholders' interests (Lynch-Fannon 2007).

In contrast with common law jurisdictions, countries with civil law systems tend to place a greater emphasis on stakeholder participation in corporate governance. Corporate boards often include employee representatives, and cultural traditions emphasize loyalty to employees. In these countries, more forms of CSR are permissible. In France, corporate directors have both a duty of care and a duty of loyalty (Fanto 1998). Although there has been a shift towards more investor friendly laws, the French legal code explicitly allows directors to make decisions based on the interests of all constituencies. German law does not even give management an explicit obligation to maximize shareholder value (Marinov and Heiman 1998), and large German corporations have a two-tiered board structure that encourages the board to consider the interests of parties other than shareholders (Corfield 1998).

Japanese corporate law is similar to corporate law in the United States, in that directors have duties of care and loyalty, which, if violated, can be grounds for shareholder lawsuit. But Japanese corporations have a strong tradition of CSR oriented towards their employees. In years with high profits, large corporations usually retain their earnings and reinvest them for the benefit of employees (Miwa 1999). The shares of many firms are owned by banks who handle firms' credit or by important business partners (Corfield 1998). These shareholder-creditors have financial goals that are similar to those of long-term employees, particularly in terms of corporate stability and minimizing risk (Roe 2000).

Developing Countries and Multinational Enterprises

Corporate law in developing countries has a number of special characteristics. First, the corporate legal system is often new. As a result, businesses have little experience complying with the law, and there are fewer judicial precedents mapping out the law's boundaries. Second, legal institutions in developing countries are often weak. Regulations can go unenforced; agency problems can be a serious issue; and members of the judiciary may be corrupt. Third, the operations of multinational corporations in these countries can lead to conflicts between the interests of home and host states.

Thus, both the laws governing CSR and the degree to which those laws are enforced may vary substantially across developing countries. Assuming that the laws in most developing countries allow some scope for managerial activity that may sacrifice profits, the question remains whether firms can do so in view of competitive pressures in the markets for their outputs and inputs. It is to this question that we now turn.

Can Firms Sacrifice Profits in the Social Interest?

Just because the legal system may allow firms to sacrifice profits in the social interest does not mean that firms *can* do so on a sustainable basis in the face of competitive pressures. Under what conditions is it economically feasible for firms to sacrifice profits in the social interest? Before turning to this question, we address a somewhat broader question: under what conditions might it be sustainable for firms to produce goods and services, such as public goods, that benefit individuals other than their customers (Lyon and Maxwell 2004; Vogel 2006)?

We identify six conditions that would facilitate the production of such goods and services. All six of these conditions involve government intervention, imperfect competition, or both. First is the imposition of regulatory constraints that require a firm as well as its competitors to carry out some socially beneficial actions. Second is the possibility that such production is not costly to the firm. For example, restaurants frequently donate leftover food to homeless shelters. The third condition is that the socially beneficial actions may reduce a firm's business expenses by an amount greater than the cost of the actions themselves. For example, installation of energy-saving (climate friendly) technologies may generate long-term cost savings that outweigh upfront costs. Fourth, in some cases socially beneficial actions may yield an increase in revenue. It is easy to think of goods and services that are differentiated along environmental lines, such as clothing made of organic cotton, or wood from forests managed in accordance with some principles of sustainability. Socially beneficial actions could also generate goodwill, improving a firm's reputation and sales. Fifth, firms may choose to go beyond full compliance with environment, health, or safety laws in order to improve their position in current or future regulatory negotiations. By doing so, they may be able to deflect or influence future regulation or deflect enforcement of existing regulation. Sixth, some firms may use overcompliance to spur future regulation, which would provide a competitive advantage over less adaptable firms.

We now turn to our more restrictive definition of CSR and address the question raised above: under what conditions is it economically feasible for firms to sacrifice profits in the social interest?

When Is It Feasible for Firms to Engage in Profit-Sacrificing CSR?

In some cases firms undertake CSR actions voluntarily, while in others they engage in CSR only under pressure from market participants or other social forces. In practice, it is difficult to discern voluntary from "reluctant" CSR. Whether CSR initiatives are voluntary or reluctant, their economic sustainability depends on the market pressures and social expectations confronted by the firm (Borck, Coglianese, and Nash 2006).

Voluntary CSR

The first possibility—that stakeholders voluntarily sacrifice profits—is what some observers would think of as the "purest form" of CSR. The primary economic agents who could fund such activities are shareholders and employees.

Some shareholders may be willing to subsidize firms' profit sacrificing behavior. Stock issued by socially responsible firms is a composite commodity, which combines a financial

investment product with a charitable giving vehicle (Graff Zivin and Small 2005). When investors purchase the stock, they may be motivated by self-interest or by altruistic motives. As long as investors are willing to fund CSR activities, firms can participate in them. But whether investors are willing to accept lower returns may depend on whether the firm already enjoys an economic position that allows it to obtain rents, such as through natural monopolies, niche markets, imperfect information, regulatory distortions, anti-takeover laws, and other market imperfections.⁷ In this case, investors sacrificing profit may still earn returns above the market norm.

Willingness to accept below market returns may depend on whether investors hold stakes in publicly—or privately—held companies. Investors with large private holdings are more likely to take an interest in their companies' activities and be able to influence the companies' actions. Whether this additional interest and influence would have a positive or negative influence on CSR is an open question.

Evidence suggests that some individuals are willing to pay more for socially responsible goods (Jensen et al. 2002). The existence of such "ethical investors" could—in principle—have consequences for firms that do not participate in CSR activities (Heinkel, Kraus, and Zechner 2001). For example, if ethical investors' choices increase the cost of capital for "irresponsible" firms, some of these firms might be forced to adopt more socially responsible practices. If the share price differential becomes sufficiently large, these firms may decide to participate in CSR activities to increase their own stock price (Heinkel, Kraus, and Zechner 2001; Graff Zivin, and Small 2005). But the effect of green investors on the cost of capital may be small. Because irresponsible firms will generate higher returns (relative to their stock price), investors in these firms will accumulate capital more quickly than socially responsible investors, and over time may dominate the capital market. This would lead to a decrease in the cost of capital for irresponsible businesses (Heinkel, Kraus, and Zechner 2001).

Employees may sacrifice part of the returns to labor to further the social good. This could occur explicitly if employees are given the opportunity to use their own salary and benefits to fund CSR projects. For example, some executives may be able to channel part of their compensation towards the cost of CSR activities, or lawyers may be able to donate their time to pro bono work. Employees may also fund CSR implicitly, such as when a firm works in a field that employees perceive as socially responsible (e.g., providing services to the elderly, remediating oil spills). Employees may be willing to accept less than the fair market value of their labor (as determined by the wage they would receive for working in a less socially responsible industry), because they are compensated in other ways through the knowledge that their work benefits society at large (Frank 1996).

Unfortunately, empirical evidence on CSR and wages is inconclusive. Most revealed preference studies show that wages are lower at non-profit firms than at for-profit firms, but this non-profit wage penalty disappears in econometric analyses that control for worker and firm-specific characteristics (Francois 2004). If non-profit status is a proxy for social

⁷Firms have strong economic incentives to take advantage of any market power available to them. If a firm maintains market power, it can—in principle—pass on the costs of CSR to its suppliers and/or customers. For example, regulated public utilities, which are granted geographic monopolies on specific conditions such as provision of universal service, may decide to engage in CSR activities and use the firm's monopoly power to pass resulting costs on to consumers.

responsibility, then socially responsible firms may not enjoy a significant discount on labor prices. This conclusion is supported by findings that CEO compensation at firms listed in the Domini Social Index (DS 400) is not significantly different from CEO compensation at other firms in similar industries (Frye, Nelling, and Webb 2006).

Reluctant CSR

Corporate decisions are actually made by individual managers and directors, not by the “firm” *per se*. Those decisions often further the interests of profit-minded shareholders, but not always. Investors may have little choice but to accept some degree of CSR profit-sacrificing activities. It may be less costly to accept a degree of principal-agent “slack” than to eliminate it completely, because managers who are excessively constrained may be ineffectual.

Investors may also be forced to accept profit-sacrificing activities that are the result of external constraints. This may be particularly relevant in the developing world, where environmental regulatory standards lag behind those of industrialized countries. For example, equipment purchased from industrialized countries may incorporate pollution control technology that meets standards considerably stricter than those in effect in a developing country (Jaffe et al. 1995).

The magnitude of the profits that managers can sacrifice against investors’ wishes depends on the structure of managers’ compensation and the strength of shareholder oversight. Principal/agent problems can be costly. Managers have been observed to “satisfice” profits, that is, they seek to achieve an adequate rate of return for shareholders and then divert the firms’ resources to their personal ends (Choper, Coffee, and Gilson 2004; Clotfelter 1985).

Unsustainable CSR

Under many conditions, firms that participate in costly CSR activities will have to raise prices, reduce wages and other costs, accept smaller profits, or pay smaller dividends—and accept the economic consequences. For example, a firm’s stock price may decline until it is proportional to returns, and attracting new capital may be difficult because returns are below market averages. Other short-term economic consequences may include loss of market share, increased insurance costs, increased borrowing costs, and loss of reputation. In the long term, the firm may face shareholder litigation, corporate takeover, or closure. Such consequences simply illustrate the general proposition and observation that (financially) inefficient firms tend to disappear (Alchian 1950; Altman 1999).

This process of economic survival of the fittest suggests that firms that engage in unsustainable CSR may find themselves being pushed out of business. The forces of globalization only increase this pressure. Given the seemingly inevitable outcome of this process, why would any firm choose to participate in unsustainable CSR activities? First, principal/agent problems may lead managers to make decisions that commit the firm to short-term CSR actions, even if those activities will not be continued in the long run. Second, managers may misjudge the potential profitability of certain actions, leading them to invest in actions that benefit society but harm the firm’s bottom line. Neither the managers’ probability assessments nor their motivations are transparent to outside observers, making it very difficult to distinguish between them (Baron 2006).

Economic, Structural, and Organizational Constraints

A variety of factors influence the economic actors who make decisions about engaging in CSR activities. These factors include managerial incentive and monitoring constraints, and organizational structure and culture.

Whether or not firms are able and likely to engage in CSR depends on managers' incentives and constraints, which in turn are determined by managers' preferences, ethical beliefs, contracts, and goals. The most direct incentives managers face are their employment agreements. For managers whose compensation is designed to align their incentives with those of shareholders, sacrificing profits means reducing their own compensation. In the United States, chief executive officers (CEOs) are usually paid in a mixture of stocks, stock options, and salary, with their compensation linked to explicit measures of the firm's performance (Prendergast 1999). But the relationship between compensation and firm performance may be close to flat at some levels of firm performance, which means CEOs may be able to trade off compensation against CSR activities at a rate they judge acceptable.

Organizational culture may also be significant (Howard-Grenville, Nash, and Coglianese 2006). Organizational identity influences how individuals within the firm view the purpose of the firm, what it stands for, and its future goals. Organizational self-monitoring affects how an organization interacts with outside stakeholders. Firms that are more self-conscious about their image may expend greater effort to communicate and interact in "socially appropriate" ways than other firms, even if their core values related to socially beneficial behavior are similar.

Other factors may also affect whether firms can sacrifice profits in the social interest. For example, firm size appears to matter, with evidence that larger firms can sacrifice proportionately more profits (Adams and Hardwick 1998). Further, public visibility may increase pressure on firms to participate in CSR activities: firms in notoriously "dirty" industries may find themselves under heavy pressure from public advocacy groups to reduce their emissions or to participate in offsetting activities (Brown, Helland, and Kiholm Smith 2006). Finally, firms cannot participate in CSR if their work provides no scope for it. CSR activities are simply much more plausible for firms in certain industries (Porter and Kramer 2006).

Do Firms Sacrifice Profits in the Social Interest?

As described above, there are specific circumstances in which firms can sacrifice profits in the social interest without suffering serious adverse economic consequences. Whether they actually do so is another matter. This section discusses empirical evidence about the existence of such profit-sacrificing behavior.

Before interpreting the evidence, it is important to be aware of several challenges to making inferences about CSR. First, it is difficult to test whether firms' actions actually go beyond ordinary compliance with environmental regulations. Data on environmental performance are typically very limited, and because of the difficulty of observing appropriate counterfactuals, it is difficult to demonstrate that firms sacrifice profits. Whole industries often engage in CSR together, leaving behind no comparison group. Even when firms act individually, it is difficult to know whether unobservable characteristics explain differences in both socially responsible activity and profitability. Studies that link profitability to CSR

practices are particularly vulnerable to this problem. For example, because many high-technology companies have low pollutant emissions (in contrast with firms engaged in electricity generation, heavy manufacturing, or resource extraction), the high-tech boom in the 1990s created a perceived but spurious correlation between market measures of “socially responsible business practices” and stock returns. Furthermore, as discussed above, there are a variety of ways in which firms can profit from investments in socially beneficial projects. Finally, the effects of many actions differ in the short versus the long term, with a short-term decrease in profits followed by a more-than-compensatory increase in the long-term profits. Thus, demonstrating that an action has truly sacrificed profits in the social interest is exceptionally difficult.

Of course, distinguishing between motivations and outcomes is even more difficult. Although most firms are likely motivated by a combination of social and financial concerns, managers may cite social responsibility as the motive for actions that were actually driven by profitability. Or managers may use profitability to justify socially responsible business choices, even when those choices result in smaller profits (Baron 2006).

Do Firms Overcomply?

A first step in evaluating whether firms participate in CSR is to determine whether they overcomply with regulations or participate in other costly activities that benefit society. We consider five sources of evidence: voluntary government programs, voluntary industry initiatives, voluntary action by individual firms, corporate charitable donations, and shareholder resolutions.

Voluntary Government Programs

In principle, the willingness of a firm to participate in a voluntary government program could be evidence of CSR activity. A variety of studies have evaluated the determinants of participation in voluntary government programs (e.g., Borck, Coglianesi, and Nash 2006). Several patterns emerge. First, larger firms are more likely to participate in voluntary programs. Second, participation is more likely for firms that either produce final goods or experience more pressure from NGOs and consumers. Third, firms with higher emissions or poor compliance records are more likely to participate in voluntary programs. And fourth, participation may be positively influenced by factors such as industry association membership, R&D expenditures, organizational culture, and managerial discretion. However, there is no consensus that voluntary government programs have generated environmental benefits net of the opportunity cost of the resources required to implement them.

Voluntary Industry Initiatives

In addition to voluntary programs administered by governments, industry associations have created voluntary initiatives. For example, the Responsible Care program, established in 1989 by the US Chemical Manufacturers Association, requires participating facilities to adopt ten guiding principles and six codes of management practices related to the environmental and social dimensions of community interactions, facility management, and customer and supplier interactions. By and large, the program was ineffective because it did not

provide strong incentives for compliance (King and Lenox 2000). Similarly, the Institute of Nuclear Power Operations (INPO) was created in the wake of the 1979 reactor meltdown at Three Mile Island, a nuclear power plant in Pennsylvania. A third example is Sustainable Slopes, a voluntary program for reporting and encouraging improved environmental performance at ski resorts. The evidence indicates that firms took advantage of positive publicity, although the actual environmental benefits are debatable (Rivera and de Leon 2004).

In general, industry-sponsored programs exhibit the same kinds of participation patterns as government-administered voluntary programs. That is, larger firms, more prominent firms, and firms with poorer environmental records are more likely to participate. Again, there is no systematic evidence of positive environmental impacts net of social costs.

Voluntary Action by Individual Firms

An indicator of firm participation in independently developed CSR activities is whether firms adopt CSR plans, environmental management systems, or other plans that seek to encourage socially beneficial decision making within the firm. These plans often have the nominal goal of taking a holistic management approach towards compliance with environmental and safety laws, contractual and voluntary environmental obligations, management of environmental and social impacts and risk, and other issues (Clark 2005). These systems may benefit firms by allowing them to manage the business aspects of environmental and social issues, but they may also serve as a mechanism for firms to improve environmental quality or otherwise benefit society.

One such mechanism is ISO 14001, an international standard that provides guidelines for monitoring environmental outputs, controlling environmental processes, and improving environmental performance (US Environmental Protection Agency 2006). To demonstrate that its environmental management system complies with the standard, a business (or any other organization) must receive a third-party audit. Capital intensity, intensity of competition, and dependence on overseas markets are all positively associated with voluntary compliance with the standard (Chapple et al. 2001).

The best source of evidence about whether firms participate in CSR activities on their own initiative is independent studies of socially responsible actions. Perhaps surprisingly, many studies of individual beyond-compliance behavior analyze firms in developing countries (e.g., Hartman, Huq, and Wheeler 1995; Hettige et al. 1996; Pargal and Wheeler 1996; Blackman and Bannister 1998; Dasgupta, Hettige, and Wheeler 2000). One possible reason for this focus is that firms in industrialized countries are subject to a wide range of environmental regulations that make it difficult to judge whether their actions are legally required, risk-averting, or voluntarily beyond compliance. In contrast, in the developing world, pollution regulations may be poorly enforced or even nonexistent, making it easier to identify individual beyond-compliance behavior.

Corporate Charitable Contributions

Evidence of corporations making financial contributions to charity supports the general hypothesis that corporations can and do commit corporate resources to CSR. Average contributions as a percent of net income before taxes increased, from less than 0.5 percent in the

1930s to 1.1 percent in the 1960s and 1970s (Harris and Klepper 1976). In general, CEOs and other high-level corporate officers have a high degree of control over the amount and destination of corporate charitable contributions, even if their company has established a separate charitable foundation (Kahn 1997). But charitable giving can be curtailed by debtholders (Brown, Helland, and Kiholm Smith 2006; Adams and Hardwick 1998). Overall, the evidence shows that charitable giving is more likely when financial and monitoring constraints are weak. Corporate charitable giving is also sensitive to firm income and marginal tax rates (Clotfelter 1985).

Shareholder Resolutions

Shareholders sometimes request that corporations comply with ethical or other requirements. In 2005, the shareholders of public US corporations proposed 348 resolutions on social and environmental issues, of which 177 reached a proxy vote (Social Investment Forum 2006). On average, these resolutions have received support from 10–12 percent of all votes cast. Of the 25 social policy resolutions in the United States that gained the highest percentage of votes during the years 2003–2005, only six gained a majority of all votes cast. But winning even a modest share of votes in a shareholder resolution can influence management policies.

Is There Evidence of Profit-Sacrificing Behavior?

According to our strict definition of CSR, beyond-compliance behavior is a necessary but not sufficient condition for CSR because, under some conditions, such behavior can be profitable. One way to measure the profit sacrificed by socially responsible companies would be to calculate the difference in profitability between firms that do and do not participate in socially responsible activities. In fact, a large literature, consisting of at least seventeen review articles, has explored this relationship.⁸

The most recent and comprehensive review is by Margolis, Elfenbein, and Walsh (2007). In a meta-analysis of the results from 167 studies of the relationship between financial performance and socially responsible business practices (ignoring the mechanism and direction of causality), they find that 27 percent of the analyses show a positive relationship, 58 percent show a non-significant relationship, and 2 percent show a negative relationship.⁹ Margolis, Elfenbein, and Walsh argue that the evidence indicates that CSR, in general, has little effect on profitability. However, they note that there is stronger evidence to suggest some causality in the opposite direction: companies that are profitable are more likely to engage in more CSR activities.

The finding that there is little relationship between CSR and profitability is consistent with a market equilibrium in which firms invest in socially responsible projects until the marginal returns decline to the overall market rate of return. In this situation, investing in CSR is not profitable (in the sense that it does not generate economic rents), but neither is it a losing proposition. Instead it means that for most firms, CSR “pays for itself.”

⁸See, for example, Aupperle, Carroll, and Hatfield 1985; Wood and Jones 1996; Griffin and Mahon 1997; Orlitzky, Schmidt, and Rynes 2003.

⁹Thirteen percent did not report a sample size that could be used to test significance.

These conclusions require a number of caveats. First, when evaluating studies of the relationship between social responsibility and profitability, it is important to keep in mind that not all companies that are classified as socially responsible actually sacrifice profits. Many operate in industries, such as software development, that by their very nature have little environmental or social impact. Second, many of the measures of CSR used in such studies are not consistent with CSR as we define it in this article. Thus, measured effects on profitability may have more to do with advertising, charitable contributions, or other tangentially relevant factors than with CSR.

In summary, evidence on sacrificing profits in the social interest is lacking. The bulk of the available evidence suggests that most firms view socially responsible actions in the same way that they view more traditional business activities, such as advertising and R&D. Instead of altruistically sacrificing profits, they engage in a more limited—but more profitable—set of socially beneficial activities that contributes to their financial goals. Hence, although proponents of sustainable business practices may argue that being environmentally responsible will inevitably lead to higher profits in the long term, the relationship between socially responsible activities and profitability may be best characterized as *some* firms will generate long-term profits from *some* socially responsible activities *some* of the time (Reinhardt 2000).

Should Firms Sacrifice Profits in the Social Interest?

Even if firms may, can, and do sacrifice profits in the social interest, an important normative question remains, namely, *should* they? In other words, is it really in the broadly defined social interest for firms to carry out such activity? There are two main approaches to answering this question. First, we can compare firms' actual CSR choices with the CSR alternatives available to them. For any firm, such alternatives include a broad range of projects addressing various private and public issues, costing different amounts, and resulting in varying degrees of environmental protection and profitability. For example, a power plant could reduce its emissions of carbon dioxide, sulfur dioxide, or particulate matter; switch to a renewable source of fuel; implement a job training program to benefit local community members; make a donation to a charitable organization; or take any number of other "socially responsible" actions. The question of interest here is whether firms' actual CSR choices are likely to be optimal relative to available alternatives.

A second approach takes a public policy perspective, where a comparison is made between allowing CSR (i.e., permitting firms to sacrifice profits in the social interest) and prohibiting CSR (i.e., requiring firms exclusively to maximize profits for shareholders). To evaluate these two approaches, we employ a variety of criteria, including social welfare and legal, political, and social considerations.

Social Welfare

In the context of CSR, the social welfare criterion suggests that: (1) firms should invest in projects that produce the highest level of social welfare; and (2) it is preferable to allow CSR if aggregate welfare is likely to be higher when CSR is allowed than when it is prohibited.

The benefits of CSR include direct welfare gains to individuals, such as asthmatics living near a power plant that voluntarily reduces its emissions. More broadly, if firms voluntarily

internalize externalities, a more efficient allocation of resources may result. Of course, there is no reason, *ex ante*, to anticipate that firms will reduce externality-producing activities to efficient levels.

The direct costs of CSR are the loss of consumer surplus resulting from firms producing less output at higher cost and hence at higher prices. In addition, shareholders receive reduced financial returns. On the other hand, some shareholders may gain utility from the knowledge that their profits have been invested in socially responsible projects.

There are a number of reasons to believe that firms do not make socially optimal CSR investments, in the sense of choosing activities that generate the greatest net social benefits, subject to budgetary constraints. This is because firms' CSR decisions are influenced by a number of factors that are unrelated to social benefits and costs.

First, firms' CSR investment choices are influenced by managers' personal preferences and firm characteristics. For example, some managers may favor building art museums, while others favor the provision of affordable housing. This idiosyncratic element of personal preference is particularly likely if principal/agent issues drive CSR (Butler and McChesney 1999). Similarly, firms' choices about CSR activities are affected by the nature of their industry, firm size, technical capabilities, and relevant expertise, geographic location, and existing regulatory limits. To the extent that these factors are unrelated to the social benefits and costs of CSR, their influence on firm decisions about CSR may result in social inefficiency.

Second, although firms may be well informed about the private costs of CSR, they may have little experience evaluating its social benefits, leading them to choose inefficient levels of environmental protection effort. Third, firms may fail to consider alternative mechanisms to achieve their social goals. For example, firms may be able to achieve higher social returns by donating profits to charities, which are dedicated exclusively to the task of improving social welfare and thus presumably are well suited to the task. If this is the case, then firms that fund CSR activities effectively "crowd out" their own donations to more efficient charities (Graff Zivin and Small 2005). Finally, choice of CSR activity is affected by the firm's ability to sacrifice profits. Firms that are the most profitable are also the most able to sacrifice profits in the public interest. However, the opportunity cost of sacrificing profits may also be greatest for these firms, assuming they could otherwise invest the resources in their businesses and earn similarly high returns.

Although there are reasons to doubt the optimality of firms' decisions about CSR, there are also reasons to believe that firms' CSR investment decisions may increase welfare. First, firms have access to private information about their current and future pollution activities, including control costs. Such information can lead firms to identify better policies than less well-informed government agencies. Second, firms have relevant expertise and operational capacity. Third, government policies are driven by a variety of objectives, only one of which may be maximizing social welfare. Hence, compared with the counterfactual of prohibiting CSR but leaving government policy otherwise unchanged, allowing CSR may generate higher net social benefits.

Many types of potential CSR activities—from reducing particulate emissions to preserving open space—are mandated to some degree by federal, state, or local laws and regulations. To the extent that such regulations require a level of environmental protection that is below the socially optimal level, additional corporate investment in these activities can increase social welfare (if incremental social benefits exceed incremental social costs). In addition, there may

be socially responsible activities that address environmental issues that are unregulated but of significant scientific or political concern (e.g., global climate change). In such cases (i.e., in the absence of government policies), CSR activities may lead to positive net social benefits. However, given that it appears to be relatively rare for firms to actually sacrifice profits in the social interest, the overall net welfare flow from CSR, whether positive or negative, is unlikely to be large.

Legal, Political, and Social Considerations

Although legality is not synonymous with social desirability (as evidenced by the legality of many socially undesirable activities), some observers would surely identify legality as a normative criterion by which to judge many actions. In the second section, we argued that in the United States and other common law countries, sacrificing profits in the social interest is not strictly legal, although in practice CSR is not prohibited because of the business judgment rule and problems of enforcement.

One argument that can be made against CSR is that it is not a democratic process. There is no particular reason to believe that society should prefer firms' choices and priorities to the choices and priorities of a democratic government. Some observers might also argue that corporations already dominate too many aspects of modern life, and that it would be undesirable for them to control the supply of public goods as well.

Under a broader interpretation of the idea of social responsibility, however, it can be argued that businesses have a moral commitment to hold themselves to higher ethical standards and to engage in activities that benefit society. In fact, in a poll of citizens' attitudes towards the responsibility of businesses in 23 developed and developing countries, public opinion seems to support the notion that corporations in the West should "set higher ethical standards and help build a better society." In countries such as China and Kazakhstan, however, the notion that corporations should "make profits, pay taxes, create jobs, and obey all laws" dominates (Enviro-nics International Ltd. 1999).

The Special Case of Developing Countries

Given that economic, social, and environmental conditions in developing countries are so different from those in industrialized countries, one would expect the answers to normative questions about CSR to also be different. For example, environmental regulations in the developing world are often not well enforced. Hence, many relatively cost-effective interventions that have already been implemented in industrialized countries may still be available to businesses that operate in the developing world. This suggests that CSR could lead to significant gains in net social welfare.

Other concerns about CSR arise in the developing country context. Precisely because legal and contractual systems often operate poorly in developing countries, it is important to prevent activities that could erode the basis for future economic growth. Thus, strong investor protections may be particularly desirable in developing economies (Marinov and Heiman 1998) to help buttress the political viability of privatization and market-based systems. Allowing managers to divert profits to socially responsible projects means giving managers substantial discretion. However, there is also the risk that this discretion could tempt managers to use corporate resources for personal gain.

Summary and Conclusions

This article has examined the concept of firms sacrificing profits in the social interest in the environmental realm. In this section, we summarize our answers to the four questions posed at the outset: *May* they do so within the scope of their fiduciary responsibilities to their shareholders? *Can* they do so on a sustainable basis? *Do* firms behave this way? And, finally, *should* firms carry out such profit-sacrificing activities?

Our starting point for examining the first question—*may* they—was the prevailing view among economists and business scholars that corporate directors have a fiduciary duty to maximize profits for shareholders. Surprisingly, the legal basis for this view is not very strong. Although the judicial record is supportive of a duty to maximize profits for shareholders, it leaves room for firms to sacrifice profits in the public interest. Moreover, the “business judgment rule” effectively protects many public-minded managerial actions from successful legal challenge.

Are firms in the United States prohibited from sacrificing profits in the public interest? And if so, is the prohibition enforceable? The answers to these two sub-questions appear to be “maybe” and “no,” respectively. US corporate law is consistent with the shareholder primacy model, but as long as managers claim some plausible connection to future profitability, the business judgment rule grants them leeway to commit corporate resources to projects that benefit the public.

Just because the legal system may allow firms to sacrifice profits in the social interest does not mean that firms *can* do so on a sustainable basis in the face of competitive pressures. Under many conditions, firms that participate in costly CSR activities will have to raise prices, reduce wages and other costs, accept smaller profits, or pay smaller dividends—and accept the economic consequences. After taking such measures, a firm’s stock price may decline until proportional to returns, and attracting new capital may be difficult because returns are below market averages. Other short-term economic consequences may include loss of market share, increased insurance costs, increased borrowing costs, and loss of reputation. In the long term, the firm may face shareholder litigation, corporate takeover, or closure.

This process of economic survival of the fittest suggests that firms that engage in unsustainable CSR may find themselves being pushed out of business. Given the seemingly inevitable outcome of this process, why would any firms choose to participate in unsustainable CSR activities? First, the firms that engage (or say they engage) in CSR are often active in markets that are imperfect or distorted by government intervention, so that they are protected from Friedman’s evolutionary imperatives. Second, principal/agent problems may lead managers to make decisions that commit the firm to short-term CSR actions, even if those activities will not be continued in the long run.

Despite a large and growing literature on CSR, evidence of firms actually sacrificing profits in the social interest is lacking. The bulk of the available evidence suggests that most firms view socially responsible actions in the same way that they view more traditional business activities. Instead of altruistically sacrificing profits, they engage in a more limited—but more profitable—set of socially beneficial activities that contributes to their financial goals.

Although proponents of sustainable business practices may argue that being environmentally responsible will inevitably lead to higher profits in the long-term, the relationship between socially responsible activities and profitability may be best characterized as *some*

firms will generate long-term profits from *some* socially responsible activities *some* of the time.

Is it in the social interest for firms to engage in CSR? More to the point, should governments allow such activity? To the extent that existing regulations require a level of environmental protection that is below the socially optimal level, additional corporate investment in CSR activities may increase social welfare. In this context, CSR should be viewed as a complement to, rather than a substitute for, increasingly effective government regulation.

References

- Adams, Mike, and Phillip Hardwick. 1998. An analysis of corporate donations: United Kingdom evidence. *Journal of Management Studies* 35(5): 641–54.
- Alchian, A. A. 1950. Uncertainty, evolution, and economic theory. *Journal of Political Economy* LVIII: 211–21.
- Altman, Morris. 1999. The methodology of economics and the survivor principle revisited and revised: Some welfare and public policy implications of modeling the economic agent. *Review of Social Economy* 57(4): 427–49.
- Aupperle, Kenneth, Archie Carroll, and John Hatfield. 1985. An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal* 28(2): 446–63.
- Baron, David P. 2006. *Business and Its Environment*, Fifth Edition. New York: Pearson Prentice-Hall.
- Berle, A. A. Jr. 1932. For whom corporate managers are trustees: A note. *Harvard Law Review* 45(8): 1365–72.
- Blackman, Allen, and Geoffrey Bannister. 1998. (A community pressure and clean technology in the informal sector: An econometric analysis of the adoption of propane by traditional Mexican brickmakers. *Journal of Environmental Economics and Management* 35(1): 1–21.
- Blair, Margaret M., and Lynn A. Stout. 1999. A team production theory of corporate law. *Virginia Law Review* 85(March): 247.
- Blomquist, Robert. 2006. Six thinking hats for the lorax: Corporate responsibility and the environment. *Georgetown International Environmental Law Review* 18(4): 691–705.
- Borck, Jonathan, Cary Coglianese, and Jennifer Nash. 2006. Why do they join? An exploration of business participation in voluntary environmental programs. In *Beyond Compliance: Business Decision Making and the US EPA's Performance Track Program.* Regulatory Policy Program Report RPP-10. Cambridge, MA: John F. Kennedy School of Government, Harvard University.
- Borok, Tuvia. 2003. A modern approach to redefining in the best interests of the corporation. *Windsor Review of Legal and Social Issues* 15(March): 113.
- Branson, Douglas M. 2002. The rule that isn't a rule—The business judgment rule. *Valparaiso University Law Review* 36(Summer): 631.
- Brown, William, Eric Helland, and Janet Kiholm Smith. 2006. Corporate philanthropic practices. *Journal of Corporate Finance* 12(5): 855–77.
- Butler, Henry N., and Fred S. McChesney. 1999. Why they give at the office: Shareholder welfare and corporate philanthropy in the contractual theory of the corporation. *Cornell Law Review* 84(July): 1195.
- Chapple, Wendy, Andrew Cooke, Vaughn Galt, and David Paton. 2001. The determinants of voluntary investment decisions. *Managerial and Decision Economics* 22(8): 453–63.
- Choper, Coffee, and Gilson. 2004. Cases and materials on corporations, 6th ed. London: Little, Brown & Co.
- Clark, Matthew. 2005. Corporate environmental behavior research: Informing environmental policy. *Structural Change and Economic Dynamics* 16(3): 422–31.
- Clark, Robert. 1986. *Corporate Law*. Boston, MA: Little, Brown & Co.
- Clotfelter, Charles. 1985. *Federal Tax Policy and Charitable Giving*. Chicago, IL: University of Chicago Press.
- Corfield, Andrea. 1998. The stakeholder theory and its future in Australian corporate governance: A preliminary analysis. *Bond Law Review* 10(2): 213.

- Cox, James, and Thomas Hazen. 2003. *Corporations*. New York: Aspen Publishers.
- Dasgupta, Susmita, Hemamala Hettige, and David Wheeler. 2000. What improves environmental compliance? Evidence from Mexican industry. (*A Journal of Environment Economics and Management* 39(1): 39–66.
- Dodd, E. Merrick Jr. 1932. For whom are corporate managers trustees? *Harvard Law Review* 45(7):1145–63.
- Donohue, John. 2005. Does greater managerial freedom to sacrifice profits lead to higher social welfare? In *Environmental Protection and the Social Responsibility of Firms*, eds. Bruce Hay, Robert Stavins, and Richard Vietor. Washington, DC: Resources for the Future.
- Easterbrook, Frank, and Fischel Daniel. 1991. The economic structure of corporate law.
- Ehrlich, Craig. 2005. Is Business ethics necessary? *DePaul Business & Commercial Law Journal* 4(Fall): 55.
- Elhauge, Einer. 2005. Corporate managers' operational discretion to sacrifice corporate profits in the public interest. In *Environmental Protection and the Social Responsibility of Firms*, eds. Hay Bruce, Robert Stavins, and Richard Vietor. Washington, DC: Resources for the Future.
- Environics International Ltd. 1999. The millennium poll on corporate social responsibility: Executive briefing. http://www.globescan.com/news_archives/MPExec Brief.pdf (accessed September 16, 2007).
- Fanto, James A. 1998. The role of corporate law in French corporate governance. *Cornell International Law Journal* 31: 31.
- Fisch, Jill E. 2006. Measuring efficiency in corporate law: The role of shareholder primacy. *Iowa Journal of Corporation Law* 31(Spring): 637.
- Francois, Patrick. 2004. Making a difference: Labor donations in the production of public goods. CMPO, University of Bristol, Working Paper Series No. 04/093.
- Frank, Robert. 1996. Can socially responsible firms survive in a competitive market? In *Codes of Conduct: Behavioral Research into Business Ethics*, eds. David Messick and Ann Tenbrunsel, 214–27. New York, NY: Russell Sage Foundation.
- Friedman, Milton. 1970. The social responsibility of business is to increase its profits. *New York Times Magazine*. September 13.
- Frye, Melissa B., Edward Nelling, and Elizabeth Webb. 2006. Executive compensation in socially responsible firms. *Corporate Governance: An International Review* 14(5): 446–55.
- Gabaldon, Theresa A. 2006. Like a fish needs a bicycle: Public corporations and their shareholders. *Maryland Law Review* 65: 538.
- Graff Zivin, Joshua, and Arthur Small. 2005. A Modigliani–Miller theory of altruistic corporate social responsibility. *B. E. Journals in Economic Analysis and Policy: Topics in Economic Analysis and Policy* 5(1): 1–19.
- Griffin, Jennifer, and John Mahon. 1997. The corporate social performance and corporate financial performance debate: Twenty-five years of incomparable research. *Business and Society* 36(1): 5–31.
- Harris, James, and Anne Klepper. 1976. *Corporate philanthropic public service activities*. New York: The Conference Board.
- Hartman, Raymond, Mainul Huq, and David Wheeler. 1995. Why paper mills clean up: Determinants of pollution abatement in four Asian countries. World Bank Policy Research Department Working Paper 1710.
- Hay, Bruce L., Robert N. Stavins, and Richard H. K. Vietor. 2005. The four questions of corporate social responsibility: May they, can they, do they, should they? In *Environmental Protection and the Social Responsibility of Firms*, eds. Bruce Hay, Robert Stavins, and Richard Vietor. Washington, DC: Resources for the Future.
- Heinkel, Robert, Alan Kraus, and Josef Zechner. 2001. The effect of green investment on corporate behavior. *Journal of Financial and Quantitative Analysis* 36(4): 431–49.
- Hettige, Hemamala, Mainul Huq, Sheoli Pargal, and David Wheeler. 1996. Determinants of pollution abatement in developing countries: Evidence from South and Southeast Asia. *World Development* 24(12): 1891–1904.
- Howard-Grenville, Jennifer, Jennifer Nash, and Cary Coglianese. 2006. Constructing the license to operate: Internal factors and their influence on corporate environmental decisions. In *Beyond Compliance: Business Decision Making and the US EPA's Performance Track Program*. Regulatory

- Policy Program Report RPP-10. Cambridge, MA: John F. Kennedy School of Government, Harvard University.
- Jaffe, Adam B., Steven R. Peterson, Paul R. Portney, and Robert N. Stavins. 1995. Environmental regulation and the competitiveness of US manufacturing: What does the evidence tells us? *Journal of Economic Literature* 33(1995):132–63.
- Jensen, Kim, Paul Jakus, Burt English, and Jamey Menard. 2002. Willingness to pay for environmentally certified hardwood products by Tennessee consumers. University of Tennessee, Department of Agricultural Economics, Study Series No. 01–02.
- Jensen, Michael, and William Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3(4): 305–60.
- Kahn, Faith Stevelman. 1997. Pandora's box: Managerial discretion and the problem of corporate philanthropy. *UCLA Law Review* 44(February): 579.
- King, Andrew, and Michael Lenox. 2000. Industry self-Regulation without sanctions: The chemical industry's responsible care program. *Academy of Management Journal* 43(4): 698–716.
- Lee, Ian B. 2006. Efficiency and ethics in the debate about shareholder primacy. *Delaware Journal of Corporate Law* 31: 533.
- Lee, Ian B. 2005. Corporate law, profit maximization, and the responsible shareholder. *Stanford Journal of Law, Business, and Finance* 10(Spring): 31.
- Lynch-Fannon, Irene. 2007. The corporate social responsibility movement and law's empire: Is there a conflict? *Northern Ireland Legal Quarterly* 58(1).
- Lyon, Thomas, and John Maxwell. 2004. *Corporate Environmentalism and Public Policy*. Cambridge, UK: Cambridge University Press.
- Lyon, Thomas, and John Maxwell. Corporate Social Responsibility and the Environment: A Theoretical Perspective. *Review of Environmental Economics and Policy* doi:10.1093/reep/ren004.
- Margolis, Joshua, Hillary Elfenbein, and James Walsh. 2007. Does it pay to be good? A meta-analysis and redirection of research on the relationship between corporate social and financial performance. Working Paper, Harvard Business School.
- Marinov, Boris, and Bruce Heiman. 1998. Company law and corporate governance renewal in transition economies: The Bulgarian dilemma. *European Journal of Law and Economics* 6: 231–61.
- Miwa, Yoshiro. 1999. CSR: Dangerous and harmful, though maybe not irrelevant. *Cornell Law Review* 84(July): 1227–54.
- Mohr, Lois, Deborah Webb, and Katherine Harris. 2001. Do consumers expect companies to be socially responsible? The impact of corporate social responsibility on buying behavior. *Journal of Consumer Affairs* 35(1): 45–72.
- Orlitzky, Marc, Frank Schmidt, and Sara Rynes. 2003. Corporate social and financial performance: A meta-analysis. *Organization Studies* 24(3): 403–41.
- Pargal, Sheoli, and David Wheeler. 1996. Informal regulation of industrial pollution in developing countries: Evidence from Indonesia. *Journal of Political Economy* 104(6): 1314–27.
- Porter, Michael, and Mark Kramer. 2006. The link between competitive advantage and corporate social responsibility. *Harvard Business Review* 84(12): 78–92.
- Portney, Paul. 2005. Corporate social responsibility: An economic and public policy perspective. In *Environmental Protection and the Social Responsibility of Firms*, eds. Bruce Hay, Robert Stavins, and Richard Vietor. Washington, DC: Resources for the Future.
- Portney, Paul R. The (Not So) New Corporate Social Responsibility: An Empirical Perspective. *Review of Environmental Economics and Policy* doi:10.1093/reep/ren003.
- Prendergast, Candice. 1999. The provision of incentives in firms. *Journal of Economic Literature* 37(March): 7.
- Reinhardt, Forest. 2005. Environmental protection and the social responsibility of firms: Perspectives from the business literature. In *Environmental Protection and the Social Responsibility of Firms*, eds. Bruce Hay, Robert Stavins, and Richard Vietor. Washington, DC: Resources for the Future.
- Reinhardt, Forest. 2000. *Down to earth*. Boston: Harvard Business School Press.
- Rivera, Jorge, and Peter deLeon. 2004. Is Greener Whiter? Voluntary environmental performance of western ski areas. *Policy Studies Journal* 32(3): 417–37.

- Roe, Mark. 2000. Political preconditions to separating ownership from corporate control. *Stanford Law Review* 53(December): 539.
- Scalise, Elisa. 2005. The code for corporate citizenship: States should amend statutes governing corporations and enable corporations to be good citizens. I 29(Fall): 275.
- Sheehy, Benedict. 2005. Scrooge the reluctant stakeholder: Theoretical problems in the shareholder–stakeholder debate. *University of Miami Business Law Review* 14(Fall/Winter):193.
- Social Investment Forum. 2006. 2005 Report on socially responsible investing Trends in the United States: Ten year review. Washington, DC: Social Investment Forum.
- Springer, Jonathan. 1999. Corporate law, corporate constituency statues: Hollow hopes and false fears. In *New York University School of Law Annual Survey of American Law* 1999: 85.
- Sutton, Michele. 2004. Between a rock and a judicial hard place: Corporate social responsibility reporting and potential legal liability under *kasky v. nike*. *University of Missouri-Kansas City School of Law Review* 72(Summer): 1159.
- US Environmental Protection Agency. 2006. Environmental management systems/ISO 14001—Frequently Asked Questions. <http://www.epa.gov/owm/iso14001/isofaq.htm> (accessed August 14, 2007).
- Vogel, David. 2006. *The Market for Virtue*. Washington, DC: Brookings Institution Press.
- Wood, Donna, and Raymond Jones. 1996. Research in corporate social performance: What have we learned. In *Corporate Philanthropy at the Crossroads*, eds. Dwight Burlingame and Dennis Young. Bloomington: Indiana University Press.

NOTE DI LAVORO DELLA FONDAZIONE ENI ENRICO MATTEI

Fondazione Eni Enrico Mattei Working Paper Series

Our Note di Lavoro are available on the Internet at the following addresses:

<http://www.feem.it/Feem/Pub/Publications/WPapers/default.htm>

<http://www.ssrn.com/link/feem.html>

<http://www.repec.org>

<http://agecon.lib.umn.edu>

<http://www.bepress.com/feem/>

NOTE DI LAVORO PUBLISHED IN 2008

CCMP	1.2008	<i>Valentina Bosetti, Carlo Carraro and Emanuele Massetti</i> : <u>Banking Permits: Economic Efficiency and Distributional Effects</u>
CCMP	2.2008	<i>Ruslana Palatnik and Mordechai Shechter</i> : <u>Can Climate Change Mitigation Policy Benefit the Israeli Economy? A Computable General Equilibrium Analysis</u>
KTHC	3.2008	<i>Lorenzo Casaburi, Valeria Gattai and G. Alfredo Minerva</i> : <u>Firms' International Status and Heterogeneity in Performance: Evidence From Italy</u>
KTHC	4.2008	<i>Fabio Sabatini</i> : <u>Does Social Capital Mitigate Precariousness?</u>
SIEV	5.2008	<i>Wisdom Akpalu</i> : <u>On the Economics of Rational Self-Medication</u>
CCMP	6.2008	<i>Carlo Carraro and Alessandra Sgobbi</i> : <u>Climate Change Impacts and Adaptation Strategies In Italy. An Economic Assessment</u>
ETA	7.2008	<i>Elodie Rouvière and Raphaël Soubeyran</i> : <u>Collective Reputation, Entry and Minimum Quality Standard</u>
IEM	8.2008	<i>Cristina Cattaneo, Matteo Manera and Elisa Scarpa</i> : <u>Industrial Coal Demand in China: A Provincial Analysis</u>
IEM	9.2008	<i>Massimiliano Serati, Matteo Manera and Michele Plotegher</i> : <u>Econometric Models for Electricity Prices: A Critical Survey</u>
CCMP	10.2008	<i>Bob van der Zwaan and Reyer Gerlagh</i> : <u>The Economics of Geological CO₂ Storage and Leakage</u>
KTHC	11.2008	<i>Maria Francesca Cracolici and Teodora Erika Uberti</i> : <u>Geographical Distribution of Crime in Italian Provinces: A Spatial Econometric Analysis</u>
KTHC	12.2008	<i>Victor Ginsburgh, Shlomo Weber and Sheila Weyers</i> : <u>Economics of Literary Translation. A Simple Theory and Evidence</u>
NRM	13.2008	<i>Carlo Giupponi, Jaroslav Mysiak and Alessandra Sgobbi</i> : <u>Participatory Modelling and Decision Support for Natural Resources Management in Climate Change Research</u>
NRM	14.2008	<i>Yaella Depietri and Carlo Giupponi</i> : <u>Science-Policy Communication for Improved Water Resources Management: Contributions of the Nostrum-DSS Project</u>
CCMP	15.2008	<i>Valentina Bosetti, Alexander Golub, Anil Markandya, Emanuele Massetti and Massimo Tavoni</i> : <u>Abatement Cost Uncertainty and Policy Instrument Selection under a Stringent Climate Policy. A Dynamic Analysis</u>
KTHC	16.2008	<i>Francesco D'Amuri, Gianmarco I.P. Ottaviano and Giovanni Peri</i> : <u>The Labor Market Impact of Immigration in Western Germany in the 1990's</u>
KTHC	17.2008	<i>Jean Gabszewicz, Victor Ginsburgh and Shlomo Weber</i> : <u>Bilingualism and Communicative Benefits</u>
CCMP	18.2008	<i>Benno Torgler, María A.GarcíaValiñas and Alison Macintyre</i> : <u>Differences in Preferences Towards the Environment: The Impact of a Gender, Age and Parental Effect</u>
PRCG	19.2008	<i>Gian Luigi Albano and Berardino Cesi</i> : <u>Past Performance Evaluation in Repeated Procurement: A Simple Model of Handicapping</u>
CTN	20.2008	<i>Pedro Pintassilgo, Michael Finus, Marko Lindroos and Gordon Munro (lxxxiv)</i> : <u>Stability and Success of Regional Fisheries Management Organizations</u>
CTN	21.2008	<i>Hubert Kempf and Leopold von Thadden (lxxxiv)</i> : <u>On Policy Interactions Among Nations: When Do Cooperation and Commitment Matter?</u>
CTN	22.2008	<i>Markus Kinaterer (lxxxiv)</i> : <u>Repeated Games Played in a Network</u>
CTN	23.2008	<i>Taiji Furusawa and Hideo Konishi (lxxxiv)</i> : <u>Contributing or Free-Riding? A Theory of Endogenous Lobby Formation</u>
CTN	24.2008	<i>Paolo Pin, Silvio Franz and Matteo Marsili (lxxxiv)</i> : <u>Opportunity and Choice in Social Networks</u>
CTN	25.2008	<i>Vasileios Zikos (lxxxiv)</i> : <u>R&D Collaboration Networks in Mixed Oligopoly</u>
CTN	26.2008	<i>Hans-Peter Weikard and Rob Dellink (lxxxiv)</i> : <u>Sticks and Carrots for the Design of International Climate Agreements with Renegotiations</u>
CTN	27.2008	<i>Jingang Zhao (lxxxiv)</i> : <u>The Maximal Payoff and Coalition Formation in Coalitional Games</u>
CTN	28.2008	<i>Giacomo Pasini, Paolo Pin and Simon Weidenholzer (lxxxiv)</i> : <u>A Network Model of Price Dispersion</u>
CTN	29.2008	<i>Ana Mauleon, Vincent Vannetelbosch and Wouter Vergote (lxxxiv)</i> : <u>Von Neumann-Morgenstern Farsightedly Stable Sets in Two-Sided Matching</u>
CTN	30.2008	<i>Rahmi İlkiliç (lxxxiv)</i> : <u>Network of Commons</u>
CTN	31.2008	<i>Marco J. van der Leij and I. Sebastian Buhai (lxxxiv)</i> : <u>A Social Network Analysis of Occupational Segregation</u>
CTN	32.2008	<i>Billand Pascal, Frachisse David and Massard Nadine (lxxxiv)</i> : <u>The Sixth Framework Program as an Affiliation Network: Representation and Analysis</u>
CTN	33.2008	<i>Michèle Breton, Lucia Sbragia and Georges Zaccour (lxxxiv)</i> : <u>Dynamic Models for International Environmental Agreements</u>

PRCG	34.2008	<i>Carmine Guerriero</i> : <u>The Political Economy of Incentive Regulation: Theory and Evidence from US States</u>
IEM	35.2008	<i>Irene Valsecchi</i> : <u>Learning from Experts</u>
PRCG	36.2008	<i>P. A. Ferrari and S. Salini</i> : <u>Measuring Service Quality: The Opinion of Europeans about Utilities</u>
ETA	37.2008	<i>Michele Moretto and Gianpaolo Rossini</i> : <u>Vertical Integration and Operational Flexibility</u>
CCMP	38.2008	<i>William K. Jaeger and Van Kolpin</i> : <u>The Environmental Kuznets Curve from Multiple Perspectives</u>
PRCG	39.2008	<i>Benno Torgler and Bin Dong</i> : <u>Corruption and Political Interest: Empirical Evidence at the Micro Level</u>
KTHC	40.2008	<i>Laura Onofri, Paulo A.L.D. Nunes, Jasone Cenoz and Durk Gorter</i> : <u>Language Diversity in Urban Landscapes: An econometric study</u>
CTN	41.2008	<i>Michel Le Breton, Valery Makarov, Alexei Savvateev and Shlomo Weber</i> (lxxxiv): <u>Multiple Membership and Federal Structures</u>
NRM	42.2008	<i>Gideon Kruseman and Lorenzo Pellegrini</i> : <u>Institutions and Forest Management: A Case Study from Swat, Pakistan</u>
SIEV	43.2008	<i>Pietro Caratti and Ludovico Ferraguto</i> : <u>Analysing Regional Sustainability Through a Systemic Approach: The Lombardy Case Study</u>
KTHC	44.2008	<i>Barbara Del Corpo, Ugo Gasparino, Elena Bellini and William Malizia</i> : <u>Effects of Tourism Upon the Economy of Small and Medium-Sized European Cities. Cultural Tourists and “The Others”</u>
CTN	45.2008	<i>Dinko Dimitrov and Emiliya Lazarova</i> : <u>Coalitional Matchings</u>
ETA	46.2008	<i>Joan Canton, Maia David and Bernard Sinclair-Desgagné</i> : <u>Environmental Regulation and Horizontal Mergers in the Eco-industry</u>
ETA	47.2008	<i>Stéphane Hallegatte</i> : <u>A Proposal for a New Prescriptive Discounting Scheme: The Intergenerational Discount Rate</u>
KTHC	48.2008	<i>Angelo Antoci, Paolo Russu and Elisa Ticci</i> : <u>Structural Change, Environment and Well-being: Interactions Between Production and Consumption Choices of the Rich and the Poor in Developing Countries</u>
PRCG	49.2008	<i>Gian Luigi Albano, Federico Dini Roberto Zampino and Marta Fana</i> : <u>The Determinants of Suppliers’ Performance in E-Procurement: Evidence from the Italian Government’s E-Procurement Platform</u>
CCMP	50.2008	<i>Inmaculada Martínez-Zarzoso</i> : <u>The Impact of Urbanization on CO2 Emissions: Evidence from Developing Countries</u>
KTHC	51.2008	<i>Michele Moretto and Sergio Vergalli</i> : <u>Managing Migration through Quotas: an Option-theory Perspective</u>
KTHC	52.2008	<i>Ugo Gasparino, Elena Bellini, Barbara Del Corpo and William Malizia</i> : <u>Measuring the Impact of Tourism Upon Urban Economies: A Review of Literature</u>
ETA	53.2008	<i>Reyer Gerlagh, Snorre Kverndokk and Knut Einar Rosendahl</i> : <u>Linking Environmental and Innovation Policy</u>
KTHC	54.2008	<i>Oguzhan C. Dincer and Burak Gunalp</i> : <u>Corruption, Income Inequality, and Poverty in the United States</u>
PRCG	55.2008	<i>Carmine Guerriero</i> : <u>Accountability in Government and Regulatory Policies: Theory and Evidence</u>
KTHC	56.2008	<i>Tanmoyee Banerjee (Chatterjee) and Nilanjana Mitra</i> : <u>Export, Assembly-line FDI or FDI with the Possibility of Technology Diffusion: Optimal Entry Mode for Multinationals</u>
ETA	57.2008	<i>Xavier Pautrel</i> : <u>Environmental Policy, Education and Growth: A Reappraisal when Lifetime Is Finite</u>
CCMP	58.2008	<i>Natalia Zugravu, Katrin Millock and Gérard Duchene</i> : <u>The Factors Behind CO2 Emission Reduction in Transition Economies</u>
NRM	59.2008	<i>Benno Torgler, María A.García-Valiñas and Alison Macintyre</i> : <u>Justifiability of Littering: An Empirical Investigation</u>
SIEV	60.2008	<i>Paolo Rosato, Anna Alberini, Valentina Zanatta and Margaretha Breil</i> : <u>Redeveloping Derelict and Underused Historic City Areas: Evidence from a Survey of Real Estate Developers</u>
CTN	61.2008	<i>Ricardo Nieva</i> : <u>Networks with Group Counterproposals</u>
CTN	62.2008	<i>Michael Finus and Dirk T.G. Rübhelke</i> : <u>Coalition Formation and the Ancillary Benefits of Climate Policy</u>
SIEV	63.2008	<i>Elisabetta Strazzera, Elisabetta Cerchi and Silvia Ferrini</i> : <u>A Choice Modelling Approach for Assessment of Use and Quasi-Option Values in Urban Planning for Areas of Environmental Interest</u>
SIEV	64.2008	<i>Paolo Rosato, Lucia Rotaris, Margaretha Breil and Valentina Zanatta</i> : <u>Do We Care about Built Cultural Heritage? The Empirical Evidence Based on the Veneto House Market</u>
KTHC	65.2008	<i>Luca Petruzzellis and Antonia Rosa Guerrieri</i> : <u>Does Network Matter in International Expansion? Evidence from Italian SMEs</u>
NRM	66.2008	<i>Sheila M. Olmstead and Robert N. Stavins</i> : <u>Comparing Price and Non-price Approaches to Urban Water Conservation</u>
CCMP	67.2008	<i>Robert N. Stavins</i> : <u>Addressing Climate Change with a Comprehensive U.S. Cap-and-Trade System</u>
CCMP	68.2008	<i>Geoffrey J. Blanford, Richard G. Richels and Thomas F. Rutherford</i> : <u>Impact of Revised CO₂ Growth Projections for China on Global Stabilization Goals</u>
CCMP	69.2008	<i>Valentina Bosetti, Carlo Carraro, Alessandra Sgobbi and Massimo Tavoni</i> : <u>Delayed Action and Uncertain Targets. How Much Will Climate Policy Cost?</u>
CCMP	70.2008	<i>Valentina Bosetti, Carlo Carraro and Massimo Tavoni</i> : <u>Delayed Participation of Developing Countries to Climate Agreements: Should Action in the EU and US be Postponed?</u>
SIEV	71.2008	<i>Massimiliano Mazzanti, Anna Montini and Francesco Nicoli</i> : <u>Embedding Landfill Diversion in Economic, Geographical and Policy Settings Panel based evidence from Italy</u>
ETA	72.2008	<i>Reyer Gerlagh and Matti Liski</i> : <u>Strategic Resource Dependence</u>
CCMP	73.2008	<i>Sonia Ben Kheder and Natalia Zugravu</i> : <u>The Pollution Haven Hypothesis: A Geographic Economy Model in a Comparative Study</u>
SIEV	74.2008	<i>Jérôme Massiani and Paolo Rosato</i> : <u>The Preferences of Trieste Inhabitants for the Re-use of the Old Port: A Conjoint Choice Experiment</u>
SIEV	75.2008	<i>Martin F. Quaas and Sjak Smulders</i> : <u>Pollution and the Efficiency of Urban Growth</u>
CCMP	76.2008	<i>Anil Markandya and Dirk T.G. Rübhelke</i> : <u>Impure Public Technologies and Environmental Policy</u>

KTHC	77.2008	<i>Gianmarco I P Ottaviano and Giovanni Peri: <u>Immigration and National Wages: Clarifying the Theory and the Empirics</u></i>
CCMP	78.2008	<i>Vivekananda Mukherjee, Dirk T.G. Rübbelke and Tilak Sanyal: <u>Technology Transfer in the Non-traded Sector as a Means to Combat Global Warming</u></i>
SIEV	79.2008	<i>A. Ghermandi, J.C.J.M. van den Bergh, L.M. Brander, H.L.F. de Groot, and P.A.L.D. Nunes: <u>The Economic Value of Wetland Conservation and Creation: A Meta-Analysis</u></i>
CCMP	80.2008	<i>Snorre Kverndokk and Adam Rose: <u>Equity and Justice in Global Warming Policy</u></i>
ETA	81.2008	<i>Sonia Oreffice: <u>Sexual Orientation and Household Decision Making. Same-Sex Couples' Balance of Power and Labor Supply Choices</u></i>
CCMP	82.2008	<i>Robert N. Stavins: <u>A Meaningful U.S. Cap-and-Trade System to Address Climate Change</u></i>
NRM	83.2008	<i>Ruben N. Lubowski, Andrew J. Plantinga and Robert N. Stavins: <u>What Drives Land-Use Change in the United States? A National Analysis of Landowner Decisions</u></i>
CSRM	84.2008	<i>Forest L. Reinhardt, Robert N. Stavins, and Richard H. K. Vietor: <u>Corporate Social Responsibility Through an Economic Lens</u></i>

(lxxxiv) This paper was presented at the 13th Coalition Theory Network Workshop organised by the Fondazione Eni Enrico Mattei (FEEM), held in Venice, Italy on 24-25 January 2008.

2008 SERIES

CCMP	<i>Climate Change Modelling and Policy</i> (Editor: Carlo Carraro)
SIEV	<i>Sustainability Indicators and Environmental Valuation</i> (Editor: Anil Markandya)
NRM	<i>Natural Resources Management</i> (Editor: Carlo Giupponi)
KTHC	<i>Knowledge, Technology, Human Capital</i> (Editor: Gianmarco Ottaviano)
IEM	<i>International Energy Markets</i> (Editor: Matteo Manera)
CSRM	<i>Corporate Social Responsibility and Sustainable Management</i> (Editor: Giulio Sapelli)
PRCG	<i>Privatisation Regulation Corporate Governance</i> (Editor: Bernardo Bortolotti)
ETA	<i>Economic Theory and Applications</i> (Editor: Carlo Carraro)
CTN	<i>Coalition Theory Network</i>