

# Corporate social responsibility, business strategy, and the environment

Forest L. Reinhardt\* and Robert N. Stavins\*\*

**Abstract** We examine the concept of firms sacrificing profits in the social interest within the environmental realm, with particular focus on the case of the United States by addressing four key questions. 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? 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 and business scholarship.

**Key words:** corporate social responsibility, voluntary environmental performance

**JEL classification:** M140, L510, Q5

## I. Introduction

Business leaders, government officials, and academics continue to focus 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,

\*Harvard Business School, e-mail: freinhardt@hbs.edu

\*\*John F. Kennedy School of Government, Harvard University, Resources for the Future, and National Bureau of Economic Research, e-mail: robert\_stavins@harvard.edu

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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<sup>1</sup> through the lens of economics, including insights from legal and business scholarship, and focusing our empirical analysis on the case of the United States.

One of the challenges of examining the concept of CSR is simply identifying a consistent and sensible definition from among the wide range of definitions that have been proposed.<sup>2</sup> We adopt a simple definition originally offered by Elhauge (2005)—sacrificing profits in the social interest. This definition is consistent with useful prior perspectives (Graff Zivin and Small, 2005; Portney, 2005; Reinhardt, 2005), and enables us to focus the discussion on some key normative and positive questions.<sup>3</sup>

Questions regarding sacrificing profits in the social interest apply beyond the environmental sphere, and 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 continues to receive much attention from both scholars and the public, especially in the environmental protection area.

We begin by examining 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 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, asking 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. The final section summarizes our findings and offers some conclusions.

## II. May they?

Despite the view held by many economists and business scholars that corporations have a simple and strict fiduciary duty to maximize profits for shareholders, the legal basis of this view is surprisingly weak. Although the judicial record supports a duty to maximize profits for shareholders, it leaves room for the possibility that firms may sacrifice profits in the public interest. This is principally because courts give considerable deference to the judgement of business people under the so-called, ‘business judgement rule’.

<sup>1</sup> These four questions were originally identified by Hay *et al.* (2005).

<sup>2</sup> More broadly, see reviews by Wood and Jones (1996) and Mohr *et al.* (2001). Lyon and Maxwell (2008) and Portney (2008) discuss CSR from theoretical and empirical perspectives, respectively.

<sup>3</sup> Although we adopt our CSR definition of ‘sacrificing profits in the social interest’ for the reasons indicated above, we also acknowledge that a wide range of alternative definitions have been used by others. See, for example, Barnett (2007).

### (i) The corporation

The most widely accepted position on the legal purpose of the corporation—known as shareholder primacy (Springer, 1999; Ehrlich, 2005; Fisch, 2006)—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 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—the ‘nexus of contracts’ approach (Jensen and Meckling, 1976; Easterbrook and Fischel, 1991)—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—labour, 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 (Holmström, 1982; Tirole, 1988; 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. Under this 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 judgement 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).

## (ii) The legality of CSR

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.

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). 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).

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 explicitly to authorize themselves to participate in CSR.

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

The business judgement rule ‘acts as a presumption in favor of corporate managers’ actions’ (Branson, 2002). It requires courts to defer to the judgement 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 judgements than courts, allowing courts to second-guess managers’ decisions would create potentially large transactions costs (Elhauge, 2005).

The business judgement 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; Blair and Stout, 1999; Scalise, 2005; Fisch, 2006).<sup>4</sup> 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.

Corporate managers’ decisions can be regarded as irrational—and thus not protected by the business judgement 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). In an extreme example, a Delaware court ruled that the business judgement rule protected the

<sup>4</sup> For 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 Major League Baseball team, to refuse to install lights at Wrigley Field because of his belief that night games would be bad for the surrounding neighbourhood (1986).

1989 decision by Occidental Petroleum to spend \$120m, slightly less than half of the company's yearly net profit, on an art museum named after its 91-year-old CEO, Armand Hammer (Donohue, 2005).

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 judgement rule grants them substantial leeway to commit corporate resources to projects that benefit the public. Assuming that the law allows 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.

### III. Can they?

Just because the legal system may allow firms to sacrifice profits in the public interest does not mean that firms *can* do so on a sustainable basis in the face of competitive pressures. In a world of perfect competition, with no scale economies and no opportunities to differentiate products, firms could not voluntarily engage in CSR on a sustainable basis, even if the legal system permitted them to do so. A firm that voluntarily increased its costs, for example by reducing its emissions beyond what was required or by paying above-market prices for its inputs, would see its margins fall or its customers defect.

In the real world of asymmetric information and oligopoly, however, the evolutionary mechanisms that might be thought to preclude firms from engaging in profit-sacrificing behaviour are not always effective. If their managers want to sacrifice profits to promote what they see as the public interest (or for some other reason), they may be able to do so as long as one or more of their input or output markets is imperfectly competitive.

Not coincidentally, it is these same market imperfections that enable executives to assert, as they commonly do, that it makes business sense to engage in CSR. Firms competing in imperfect markets may be able to increase their costs in the short run for any number of motives without losing customers or reducing their margins.

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 *et al.*, 2006).

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 behaviour. 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.<sup>5</sup> In this case, investors sacrificing profit may still earn returns above the market norm.

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 *et al.*, 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 *et al.*, 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 *et al.*, 2001).

Employees may sacrifice part of the returns to labour 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, or remediating oil spills). Employees may be willing to accept less than the fair market value of their labour (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). But, empirical evidence on CSR and wages is inconclusive (Francois, 2004; Frye *et al.*, 2006).

A second possibility is ‘reluctant CSR’. Investors may have little choice but to accept some degree of CSR profit-sacrificing activities by corporate management, because it may be less costly to accept a degree of principal–agent ‘slack’ than to eliminate it completely, due to the fact that managers who are excessively constrained may be ineffectual.

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. 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 (Clotfelter, 1985; Choper *et al.*, 2004).

Third and finally, there is the possibility of 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,

<sup>5</sup> Firms 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.

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. 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, 2001, 2006).

#### IV. Do they?

As we noted 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. Here we examine empirical evidence about the existence of such profit-sacrificing behaviour.

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 is 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 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, 2008).



### (i) Do firms over-comply?

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

#### *Voluntary government programmes*

In principle, the willingness of a firm to participate in a voluntary government programme could be evidence of CSR activity. A variety of studies have evaluated the determinants of participation in voluntary government programmes (e.g. Borck *et al.*, 2006). Several patterns emerge. First, larger firms are more likely to participate in voluntary programmes. Second, participation is more likely for firms that either produce final goods or experience more pressure from non-governmental organizations (NGOs) and consumers. Third, firms with higher emissions or poor compliance records are more likely to participate in voluntary programmes. 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 programmes have generated environmental benefits net of the opportunity cost of the resources required to implement them.

#### *Voluntary industry initiatives*

In addition to voluntary programmes administered by governments, industry associations have created voluntary initiatives. For example, the Responsible Care programme, 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 programme 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 Harrisburg, Pennsylvania. A third example is Sustainable Slopes, a voluntary programme 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 programmes exhibit the same kinds of participation patterns as government-administered voluntary programmes. 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 behaviour analyse firms in developing countries (e.g. Hartman *et al.*, 1995; Hettige *et al.*, 1996; Pargal and Wheeler, 1996; Blackman and Bannister, 1998; Dasgupta *et al.*, 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 non-existent, making it easier to identify individual beyond-compliance behaviour.

The same market imperfections that could enable firms to engage in CSR—voluntarily or reluctantly, but in a sustainable way—may also result in conditions that make it strategically advantageous for firms unilaterally to provide public goods beyond what is required by law. That is, firms competing in imperfect markets can, and do, over-comply with existing laws. Whether they do so with the idea of sacrificing profits or because their managers think that the strategy will increase profits is very difficult to discern from outside the firm, even after the fact.

As discussed above, some individuals appear to be willing to pay more for socially responsible goods. If a firm can identify customers willing to pay such premiums, and if it can defend the resultant niche against imitators, then beyond-compliance provision of public goods can increase shareholder value. Some products impose lower environmental costs in their production (examples include dolphin-safe tuna and organic cotton sportswear); and some products create smaller environmental burdens while the customer is using them (for example, low-flow shower heads). Sometimes the customer pays a price premium for environmental characteristics (again, tuna and sportswear provide examples); and sometimes the customer's payment for environmental characteristics involves trading off other private amenities (for example, many people find low-flow showers less satisfying). In either case, business strategy in this context is like any other form of product differentiation, with the same basic economics: the opportunity arises because of asymmetric information, economies of scale, and intellectual-property protection.

Agency problems within the firm also give rise to the possibility that firms might engage in CSR in a sustainable way. If the presence of monitoring and enforcement costs means that employment contracts are incomplete, then traditional economic and command-and-control incentives within the firm may lead to suboptimal outcomes. In such a situation, CSR could be an additional tool by which executives can attempt to reduce slack. On the other hand, as noted above, these same agency problems can allow managers to divert shareholder value into public-good provision, even if this is unsustainable.

Of course, not all environmental product differentiation strategies deliver shareholder value. Although tuna canners' market research indicated substantial incremental willingness to pay for dolphin-safe tuna, consumers' subsequent market behaviour belied the research. When a strategy of voluntary public-good provision fails to deliver shareholder value, it is difficult to know whether the cause is deliberate profit sacrificing, or a managerial misestimate of demand elasticity or of ease of competitive imitation (Reinhardt, 1998; Casadesus-Masanell *et al.*, 2009).

Likewise, if a firm's input suppliers (other than the suppliers of capital and labour, discussed above) prefer for some reason to provide inputs to customers whose environmental behaviour satisfies a beyond-compliance criterion, the firm may be able to differentiate itself in the input markets in a way that enhances profits. For example, managers of oil or mining firms may believe that by demonstrating a commitment to environmental quality or to social well-being in the communities affected by their extraction operations, they obtain preferential access to resources controlled by host-country governments. This strategy, again, is only plausible in imperfect markets (Reinhardt and Hyman, 2007).

A third reason that a profit-maximizing firm might over-comply with environmental rules is to develop an opportunity to shape future government regulation. When DuPont unilaterally decided to phase out its chlorofluorocarbon (CFC) production in light of new scientific evidence of the deleterious effects of CFCs on stratospheric ozone in the late 1980s, it appears to have emboldened US and international regulators to impose similar restrictions on DuPont's competitors. DuPont was advantageously positioned (because of scope economies and previous investments in intellectual capital) to compete in the markets for substitutes for the CFCs, although its advantage was not as great as it may have appeared *ex ante*. More broadly, if a firm's over-compliance shapes broader social expectations about the behaviour of firms in its industry, and if the firm is well positioned for the competitive environment that will result from such changed expectations, we should expect to see strategic over-compliance (Reinhardt, 2000).

A final reason that firms may choose voluntarily to over-comply with regulations is associated with risk management. Here the boundary between voluntary and reluctant CSR is especially difficult to draw. The risk against which the firm is insuring itself, by providing public goods beyond what the law requires, may be government regulation, a consumer boycott, or business interruption arising from the behaviour of activists. Firms actively manage risk in this way, even if the risk management policies reduce the expected value of the firm's future cash flows: since people could reasonably disagree about the probabilities and magnitudes of the contingent costs against which the company is insuring itself, and because the costs of the insurance are typically small, investments of this sort are consistent with the business judgement rule and can survive indefinitely in slightly imperfect markets (Reinhardt, 2000).

### *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 percentage of net income before taxes increased from less than 0.5 per cent in the 1930s to 1.1 per cent 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 debt-holders (Adams and Hardwick, 1998; Brown *et al.*, 2006). 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 per cent of all votes cast. Of the 25 social policy resolutions in the USA that gained the highest percentage of votes during the years 2003–5, 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.

## **(ii) Is there evidence of profit-sacrificing behaviour?**

According to our strict definition of CSR, beyond-compliance behaviour is a necessary but not sufficient condition for CSR because, under some conditions, such behaviour 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 17 review articles, has explored this relationship.<sup>6</sup>

A recent, comprehensive review is by Margolis *et al.* (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 per cent of the analyses show a positive relationship, 58 per cent show a non-significant relationship, and 2 per cent show a negative relationship.<sup>7</sup> Margolis *et al.* 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’.

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 profitabil-

<sup>6</sup> See, for example, Aupperle *et al.*, 1985; Wood and Jones, 1996; Griffin and Mahon, 1997; Orlitzky *et al.*, 2003.

<sup>7</sup> Thirteen per cent did not report a sample size that could be used to test significance.

ity 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).

## V. Should they?

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?

We take two main approaches to answering this question. First, we 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, sulphur dioxide, or particulate matter; switch to a renewable source of fuel; implement a job-training programme 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.

The second approach we take employs a public-policy perspective, where we compare 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.

### (i) Social welfare

In the context of CSR, the social welfare criterion suggests that: (i) firms should invest in projects that produce the highest level of social welfare; and (ii) 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 favour building art museums, while others favour 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 high-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 (for example, global climate change). In such cases (that is, in the absence of government policies), CSR activ-

ities may lead to positive net social benefits. However, given that it appears to be relatively rare for firms actually to sacrifice profits in the social interest, the direct overall net welfare flow from CSR, whether positive or negative, is unlikely to be large.

Given the interdependence of CSR and regulatory activities, it is possible that unilateral beyond-compliance behaviour can provide credible information to government regulators about the costs of environmental quality, and hence enable them (if this is what they desire) to choose more nearly optimal levels of regulatory-induced public-good provision. Here the example of DuPont, cited above, is instructive. Whether DuPont's leaders were motivated by profit enhancement, by altruism, or by some other factor or factors, their unilateral CFC phase-out made it easier for regulators to move refrigerant and solvent markets away from CFCs and towards other, more environmentally benign substitutes. Similarly, unilateral reductions in carbon-dioxide emissions by BP and other energy companies provide evidence that modest reductions in emissions are available at low cost.

## (ii) 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 judgement 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 over 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.

## VI. Conclusions

In this article, we have examined the concept of firms sacrificing profits in the social interest within the environmental realm, with particular focus on the case of the United States. Here we summarize our answers to the four questions we posed. *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 judgement 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 judgement 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 (or encourage) such activity? One answer to this question is that governments cannot effectively disallow CSR without imposing disproportionate costs on firms, their shareholders, and their customers by inappropriately curtailing managers’ business judgement. More broadly, 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. It can do so directly, by increasing the amount of public goods produced, and indirectly, by providing better information to regulators so they can design more effective regulations. In any event, CSR should be viewed as a complement to, rather than a substitute for, increasingly effective government interventions.



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