Sustainable Business Practices—An Environmental Economics Perspective

Tommy Lundgren, Lammertjan Dam
and Bert Scholtens

Introduction

According to conventional economic theory, society is organized on two pillars:

- The market and the "invisible hand" (Adam Smith in "The Theory of Moral Sentiments," 1759) ensures that the interests of consumers and businesses are controlled so that the outcome is effective;

T. Lundgren (✉)
Department of Economics, Centre for Environmental and
Resources Economics (CERE), Umeå University,
Umeå, Sweden
e-mail: tommy.lundgren@umu.se

L. Dam · B. Scholtens
Faculty of Economics and Business, University of Groningen,
Groningen, The Netherlands
e-mail: l.dam@rug.nl

B. Scholtens
e-mail: l.j.r.scholtens@rug.nl

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- The government correct market failures[1] through market interventions as well as through distribution policies to redistribute income and wealth, as the distributions generated by the market are not always in line with those preferred by society.

Companies are governed by profit-maximizing shareholders and are influenced by other stakeholders, such as employees and customers and citizens in the surrounding community, which in turn are protected by various types of contracts[2] and government regulations. Most industrialized countries follow this basic recipe, although there are differences in the perception of when and to what extent the state should intervene. Based on this approach, it is primarily the state, and not individuals or companies, whose task is to correct market failures and equalize inequalities in income and wealth. Nevertheless, we see an increasing demand from society at large, and from regulatory authorities, that individuals and companies in particular should increase their social responsibility in addition to traditional utility and profit maximization (Bénabou and Tirole 2010).

As to the responsibility, we may differentiate between a legal, economic, and moral perspective. With the legal perspective of the firm's responsibility, one focuses on the situation that a firm has legally binding contracts with investors, suppliers, employees, and customers and is subject to a dense network of laws and regulation enforced by society. With the economic perspective, the focus is on the external effects on production and there are agency problems between investors, employees, customers, regulators, suppliers, and firm management. Then, there is a moral perspective. This holds that by its actions; the firm morally involves its stakeholders and makes them complicit in its behavior.

Since the Brundtland Report (The World Commission on Environment and Development 1987) was published in 1987, the concept of sustainable development has been discussed vigorously in the social and scientific debate, not least in terms of climate and whether human activities heat the earth. Part of this discussion has been devoted to what companies *voluntarily* can do—and actually do—to contribute to sustainable development that includes economic, environmental, and social development. Common to these companies is that they

are in some way *socially responsible*. The phenomenon is commonly called *Corporate Social Responsibility* or simply CSR. Here, an issue is to demarcate to whom the corporations actually are responsible. Is it to their owners, their regulators, their stakeholders, or to society at large? The answer pertains in part to whether the firm has a legal, economic, or moral responsibility.

One of the challenges of discussing the concept of sustainable development and socially responsible companies is the definition of CSR itself. There are a variety of definitions that circulate in research and in the public debate, and most are ambiguous and perplexing.[3] We will use a definition that is simple and reasonable. According to conventional neoclassical economic theory, companies maximize profits under restrictions, and without regulations, there is a risk that companies, for example, release more carbon dioxide or have poorer working environment conditions than is socially optimal. Today, we see many companies that do more on the environment than they are required to do in accordance with laws and regulations. Even within other dimensions, such as working environment or human rights, some companies are doing more than they are legally required to do.[4] It is this type of voluntary self-regulation by companies that we define as CSR (see similar definition in, e.g., Hay et al. 2005). An advantage of explaining CSR as efforts beyond legal frameworks is that CSR becomes conceptually well-defined and unambiguous.[5] However, this does not mean that you get rid of the problem of measuring and quantifying CSR, more about this later.

The academic discussion about CSR seems to have begun in 1932 at a *Harvard Law Symposium* with the title of *Who are corporate managers' trustees?* (Dodd 1932). At this symposium, the discussion focused on whether it was even legal to use a company's earned profits and resources in the interests of society. Within economics, the debate took off in 1970 following Milton Friedman's article *The social responsibility of business is to increase its profits* in the *New York Times Magazine* (Friedman 1970). Friedman considered that charity should be managed by the individual while the company should concentrate on maximizing profits to its shareholders. But as we will see, profit maximization does not have to be in contrast to CSR, and in some cases, they go hand in hand.

Ever since Friedman's article 1970, the debate has continued and CSR has attracted considerable attention from researchers and society as well.

What is the role of companies in terms of increased social/environmental responsibility? Most agree that the companies should reasonably comply with acknowledged laws. But in addition to that, do companies have a further responsibility to transfer resources intended for profit generation to, for example, improve the environment? Much of what has been written in the area is confusing as it usually does not provide a well-structured basis for how to relate to CSR. In this chapter, we will discuss CSR from an *environmental economics perspective*. The discussion is based on the research available—mainly from economics—and aims to clarify some concepts and create an explanatory framework for understanding the corporate behavior economists refer to as CSR.

An adequate theory about CSR, we argue, would have to balance between personal taste and values, social norms, and market imperfections. To advance academic research about CSR, it is crucial to improve environmental accounting, especially at the firm level, as suggested already by Atkinson (2000). Thus, the system of double bookkeeping and national accounting needs to be accompanied by environmental, social, and material flows accounts in a more detailed manner than what we see today. Otherwise, any theory about CSR would run the risk of remaining sterile as it would be impossible to put it to the test.

The rest of the chapter is structured as follows. First, we describe possible reasons why companies engage in CSR. Then, we discuss the following relevant questions regarding CSR: *May firms sacrifice profits in the social interest*? *Is it economically sustainable that firms practice CSR*? *Should firms engage in CSR from a welfare point of view*? *Do we actually see that CSR is being practiced*? Thereafter, a selective inventory of empirical research on CSR is presented. We end with concluding remarks.

The Firm's Motivation for CSR

We rely on an economic definition of CSR and argue that CSR manifests itself in some observable and measurable behavior or output. The behavior of the firm in this respect exceeds norms and regulations

or levels set by mandatory regulation or standards that are legally enforceable (Kitzmueller and Shimshack 2012). One can basically divide CSR into two different main types; *altruistic*[6] CSR and *strategic*[7] CSR. With altruistic CSR, we mean that the company "sacrifices" profits in community service, while strategic CSR means that the company basically profit maximize in traditional terms, but focuses on increased corporate social responsibility.[8] One can also imagine a difference where the motive for CSR is not strategic, but where the cost of CSR is offset by some of the revenue that is not foreseen. Or vice versa, the motive is strategic, but the cost of CSR is not offset by revenue. Our review below also covers these cases.

Even though altruistic CSR is not rewarded by the market, one can still imagine situations when it occurs; for example, when shareholders' preferences are characterized by environmental responsibility. If shareholders care about the environment beyond the law's domains, they may be willing to renounce a portion of the profit for CSR, or even a loss by using their influence as a way of rendering a kind of charity. Another motivation for altruistic CSR can be attributed to special preferences in terms of profit distribution, for example, that the shareholders prefer to spend more money on CSR than to increase bonuses (to new top levels) to their managers. This is particularly relevant now when bonuses and problems in the banking sector (the crisis that started in 2008), with state intervention as a consequence, are under the lap of society (Kitzmueller and Shimshack 2012).

A particular case discussed in the literature is CSR and the relationship between management (CEO, environmental manager, and others) and the owners. If we embrace Friedman's tight business paradigm—companies should maximize profits and not partake in charity—all types of altruistic CSR can be seen as a manifestation of principal-agent issues. This issue arises if there are conflicts of interests between company leaders and owners. CEOs or individuals in other senior positions (agents) in the company can use CSR to increase their own popularity and promote a personal agenda to other interest groups without the consent of the owners (principals). For a more detailed discussion of the principal-agent problem in relation to CSR, see, e.g., Kitzmueller and Shimshack (2012), or McWilliams and Siegel (2001).

Thus, the *agency cost view* implies that socially responsible behavior comes at the expense of shareholder value and might be exploited by managers to gain private benefits (e.g., improved reputation). Next to this agency perspective, the risk mitigation view is that CSR can be value-relevant by helping mitigate several stakeholder risks. As such, it may help reduce the probability and intensity of reputational damages, litigation, and costly regulatory requirements. For a discussion of the risk mitigation approach in relation to CSR, see Ferrell et al. (2016), or Fernando et al. (2017).

Market-driven CSR or CSR as a protection against future regulations or activism from interest groups is commonly called strategic CSR (more on this below). The term goes back to McWilliams and Siegel (2001) and Baron (2001). This behavior is basically profit-maximizing and driven by pressure on the company's demand side (customers) and from other interest groups such as employees, activists (NGOs such as the Nature Conservation Association and Greenpeace), and regulatory authorities.

To illustrate strategic CSR, we look at an example of a model of a profit-maximizing company with certain market power, i.e., the company has a certain influence over its product price. The model is described in detail in Lundgren (2011). A basic driving force for CSR in this model is goodwill or reputation. By investing in CSR measures, the company can build up a goodwill capital, as well as building up a capital stock with investments. The goodwill capital affects the company's profitability in different ways. A prerequisite for goodwill to be generated and beneficial to the company is that all CSR investments are adequately communicated to the market, which entails a cost beyond the investment itself (marketing, review of CSR actions in the annual report, and more). If the company signals CSR without actually doing something, it is called *greenwashing*,[9] which is likely to occur to some extent. However, it is excluded from the model.

Three main *positive effects of CSR* (benefit or income) can be identified:

- *The price effect*. Consumers/Customers reward CSR by being willing to pay a higher price or buy more at the same price. This is what economics theory calls price differentiation; by giving the product

certain attributes that make it stand out from the competitors' products, the firm can enjoy a price premium.

- *Wage effect*. Employees are willing to accept lower wages to work in a CSR company or to work more productively at given market pay. This is based on the fact that the company can attract employees who sense a certain *warm glow*[10] feeling of working for a CSR firm.
- *Capital cost effect*. Capital costs can be reduced as the financial sector—banks, portfolio managers, private and public investors, etc.—attributes a lower risk to the CSR firm. The reason is that the likelihood of future conflicts with different interest groups is decreasing. For example, CSR can occur and prevent costly future regulations and/or improve the relationship with activist groups, and thus CSR becomes a kind of risk management.

The cost of CSR can also be divided into three main groups:

- *Investment cost*. There is always a direct investment cost of engaging in CSR.
- *Signaling cost*. If no one knows that the company has increased social responsibility, goodwill cannot be created, so companies must actively signal CSR to the market and interest groups, and this costs money in the form of marketing and/or other types of information campaigns.
- *Crowding out effects/costs*. Costs arise because resources are put on CSR that could have been used for potentially more productive investment alternatives (opportunity cost).

These costs and benefits are then built into a model of the firm. Note that this simple model refrains from including positioning and anticipation of firms here. A part of the theoretical literature on CSR looks specifically at strategic behavior and games, see, e.g., Arora and Gangopadhyay (1995) and Wirl et al. (2013). Continuing with our simple model, there can be different transmission mechanisms such as markets, policy, and norms. With markets, it is taste and incentives that drive the preferences of consumers and production costs. Both in factor and in product markets, accounting for responsibility can have an impact. Policy is an alternative pass-through to reveal preferences. Here, usually some policy threat

is involved, be it a fine or public mentioning or increased monitoring. With social norms, there is an institutional environment with accepted norms/views/values that might discipline agents.

The main message here is that the firm that is in optimum will balance the marginal costs and benefits of investing in CSR. In other words, CSR is treated as an investment, costs are charged to income/benefits. The different results of the model can then be linked to many of the empirical observations and hypotheses contained in the CSR literature, such as whether CSR has a positive impact (or not) on the company's product price (*ceteris paribus*). The motive for developing such a model is that existing empirical research lacks a simple formal model to lean against in order to provide relevant hypotheses about CSR. See also McWilliams and Siegel (2001) for a similar but non-technical model. Also, an early—and somewhat overlooked—model of the "green firm" is found in Bergman (1995), in which CSR is also described in strategic terms as one of the firm's many investment decisions.

Now, we turn back to behavioral aspects of CSR. Altruistic and strategic CSR, and the preferences governing these behaviors, can be summarized in Fig. 1. The company's stakeholders are divided into shareholders and the market and other stakeholders (e.g., NGOs). Their preferences are then divided into social preferences and neoclassical preferences. Social preferences mean, for example, that customers value an eco-friendly product higher, or that the owners value the company's environmental work and may therefore refrain from yielding. What we can see is that if the owners have "classic" preferences and customers and other interest groups, then we end up in a situation with no CSR (Box 4). On the other hand, if the owners have social preferences and the market/stakeholders have classic preferences, we end up in Box 3, i.e., altruistic CSR with reduced profits. And if the owners have classic preferences and the market has social, we end up in Box 2, i.e., strategic CSR. Box 1 is altruistic CSR, but the effects on profit are either positive or negative depending on costs and revenues.

In this context, Dam and Scholtens (2015) show in a theoretical model that besides social preferences of shareholders potentially having a mixed effect on profits, higher average stock market returns may also no longer be associated with higher average profits. This result

	Shareholders		
The market and other stakeholders		*Social preferences (SP)*	*Neoclassical Preferences (NP)*
	SP	(1) Altruistic CSR Mixed effect on profit	(2) Strategic CSR Profit maximization
	NP	(3) Altruistic CSR Reduced profit	(4) No CSR Profit maximization

Fig. 1 Corporate CSR and the effects of different preferences at owners and market/stakeholders (*Source* Adaptation of Fig. 2 in Kitzmueller and Shimshack (2012))

highlights that confusion about the relation between CSR and financial performance can arise in empirical work.

In summary, preferences of the company's owners, the market, or other interest groups generate a certain behavior of the company that can be linked to profitability, thus qualifying CSR as part of the company's business model. This business model may mean that the company carries out altruistic CSR or strategic CSR, which depends on what motivates these commitments by the owners. This is the theoretical and conceptual framework we bring in the rest of the article.

In the next section, we specifically point to the four key issues that should be addressed in CSR, both altruistic and strategic.

CSR: Four Relevant Issues

There are four main issues that should be addressed when it comes to CSR and companies: *May firms sacrifice profits in the social interest? Is it economically sustainable that firms practice CSR? Should firms engage in CSR from a welfare point of view? Do we actually see that CSR is being practiced?* (Hay et al. 2005; Reinhardt et al. 2008). We will try to answer these questions separately to dispel some of ambiguities and confusion about the concept of CSR.

May Firms Sacrifice Profits in the Social Interest?

Is it allowed for management to use the company's resources, for example, environmental work that goes beyond what laws and regulations prescribe? The answer to that question can first seem apparent: Yes, why not? In the case when voluntary environmental effort has a positive impact on profit (or is profit neutral), for example, by investing in goodwill that attracts customers or increases customer loyalty, it is of course no problem; the company maximizes profit (strategic CSR). However, in the case of management failure, the answer is not as obvious (altruistic CSR).This means that those who own the company (shareholders) do not fully receive their eligible compensation as risk-takers. In the USA, there are examples of shareholders who have withdrawn management as they violate their powers, but it has not yet led to any convictions. It has been difficult to prove that specific voluntary environmental measures have been directly profitable. The USA can and should lead the business enterprise under the "commercial considerations" (the so-called *business judgment rule*), which gives them a relatively wide leeway in the use of company resources. This means that only in extreme cases CSR can be considered illegal (Elhauge 2005).

Is It Economically Sustainable That Firms Practice CSR?

Is it a sustainable strategy for a company to give up profits and engage in CSR, or will competition lead to the disappearance of such companies in the long term? Companies that have some degree of market power, including those who produce products for well-defined niche markets, may be able to transfer costs induced by CSR to their customers. But for the majority of companies operating in competitive markets with similar products, it is difficult to do so. Such companies must then somehow bear these costs, either in the form of lower profits and/or dividends, lower compensation to management, or lower wages for their employees. This implies that in competitive markets, CSR is not necessarily economically sustainable in the long run from the company's perspective, unless its shareholders or employees are willing to bear

the costs. In light of this, one can also imagine a market in which the company is required to behave socially responsible, because all or most of the peer companies do so—driven by the demand for CSR from the market participants. In this case, CSR becomes a way of surviving in a market characterized by customers, shareholders, or employees, who value the social conduct of the firm and its products.

As mentioned earlier, CSR can also be motivated by the fact that companies anticipate stricter regulation in the future. By showing "good conduct," potentially expensive regulations and conflicts with different interest groups can then be avoided. If the risk of government intervention in any area or sector is high, companies in this area or sector are more likely to engage in CSR to prevent such interventions that may lead to increased costs in the future. Such behavior is therefore consistent with a "forward-looking" profit maximization under uncertainty. One can also think of situations when financially strong companies adopt CSR in order to push regulatory authorities to raise regulatory levels across the sector, which may result in financially weaker companies being forced out of the market. Both examples are situated in a gray zone between altruistic and strategic CSR. Both examples reflect a kind of game between the company and the regulator, implying that CSR is a profitable strategy in the long term, by either saving future costs or crowding out competitors. But in the short term, it might very well lead to additional costs without significant increases in revenues, which can be seen as altruistic CSR. However, in both cases, companies seemingly engage in altruistic and profit-impairing CSR, with the potential of this behavior to change into a profitable strategy in the future, depending on how the regulatory authority responds.

Should Firms Engage in CSR from a Welfare Point of View?

Even though companies may have certain incentives or motivations to engage in CSR, *should* they do so? Does such behavior lead to a more efficient use of society's common resources? To be more specific, under which conditions does CSR increase total welfare overall? According to

Paul Portney, this is only the case when companies engage in strategic CSR, that is, when it is economically profitable and when *green business* is *good business* (Portney 2005). The alternative, altruistic CSR is considered more costly and inefficient, since by definition it does not generate any value to, e.g., the consumers. In the case of altruistic CSR, consumers are not willing to pay a premium for green products.[11] From a welfare perspective, companies should invest in projects that generate the highest possible social welfare. This means that CSR is desirable if overall welfare is higher with CSR than without. For example, one can imagine that self-regulation by engaging in CSR might resolve environmental externalities or other undesirable market frictions.

Then, the question is whether companies should voluntarily regulate themselves, or whether the government is better at setting optimal regulation. It is unlikely that companies are always doing investments that maximize societal welfare. First, this is because CSR decisions are determined by a number of factors, many of which are not directly related to maximizing overall social welfare. Second, there is an obvious coordination problem between various firms to maximize overall welfare, in that it is not a priori clear to an individual firm how much it should contribute to achieve the collective goal. Individual companies probably have good knowledge of the individual economic impact of CSR, but the overall social welfare impact is much more difficult to estimate. This asymmetry can, for example, lead to an inefficient level of environmental protection (either too much or too little). In this case, centralized regulation by a government is more desirable.

But one can also think of situations where the company is better informed than a regulator. This applies, for example, to information about the company's current and future pollution, as well as costs for controlling these. With this type private or inside information, companies can make more informed and therefore better decisions regarding emission-enhancing business changes, compared to an authority that usually lacks this type of detailed knowledge about the company's technology. In such cases, CSR may defy regulation and lead to increased welfare when companies have more flexibility than under strict regulation. This applies of course to several types of environmental and social regulation.

CSR investments and commitments can be welfare-enhancing when the level of a centrally determined environmental regulation is set to "too low," that is, when the government fails to produce optimal regulation/policy (Reinhardt et al. 2008). For example, there may be welfare-increasing CSR aimed at mitigating environmental problems that are totally or partially unregulated; policies to tackle climate change suffer from failure of reaching international environmental agreements, for example. Another example is CSR that targets at improving working conditions in countries where regulations are non-existent or authorities do not enforce them.

Do We Actually See That CSR Is Being Practiced?

Do companies voluntarily go beyond the law and invest in CSR? There are a number of examples of voluntary commitments. In Sweden, for example, there is a furniture company in Malmö, which has a number of "climate-smart" products, waste sorting systems, biogas production (from food residues), environmental car parks with (free) electric power outlets, and own energy production (wind power and solar cells) where the surplus is sold in the energy market. These activities reflect of course largely voluntary commitments and can therefore be seen as CSR. More general examples of CSR are different types of environmental agreements between companies and governments, industry organizations or other community groups, or product certifications (such as forest products), and other environmental labeling of consumer goods such as the Swan or Good Environmental Choice (Svanen och Bra Miljöval). Entering these agreements is entirely voluntary and can reasonably be explained by the fact that companies believe that this type of behavior is in their self-interest, that is, the cost of changing the way of production is less than (or at least equal to) the revenue generated by the change.

A large number of environmental studies find that it is *generally* not possible to convincingly show that it is commercially profitable to be voluntarily "greener" than determined by law and regulations. However, in cases where the company can increase consumers' willingness to pay,

reduce its costs, reduce risks, or preempt costly future regulation, it can be commercially viable to engage in CSR (Hay et al. 2005). There are companies that have successfully used CSR in their business model (e.g., Patagonia apparel company), but overall, it is difficult to find empirical support because strategic CSR generally means exploiting promising business opportunities and/or increased profitability. As such, the discussion about "true" CSR is sometimes clouded by semantics.

Empirical Research on CSR

As suggested in the previous section, empirical support for the claim that environmental CSR is profitable is not particularly convincing. What do we know about the profitability of CSR in general? We provide an overview of our current knowledge based on empirical studies in various areas related to CSR. The theoretical research on CSR is limited relative to the empirically oriented research. However, there are attempts to theoretically explain CSR in a strict model framework, such as McWilliams and Siegel (2001) and Lundgren (2011). For a compact review of theoretical modeling of CSR, see Lundgren (2011). This empirical review is based on a reasonably recent literature review in Kitzmueller and Shimshack (2012), with some additions from the Swedish perspective. We do not claim to be exhaustive in terms of referencing all relevant studies. Instead, we give some well-chosen examples within each sub-area of CSR research.

In early studies in the field of economics, CSR focused on the link between corporate social responsibility and financial performance, while recent research has focused on the mechanisms behind CSR. Understanding why companies engage in CSR and which stakeholders bear the cost of CSR are fundamental. Much of the empirical research on CSR in the field of economics is not explicitly presented under the label corporate social responsibility. Instead, scholars often adopt terminology such as *over-compliance*, *voluntary compliance*, *corporate philanthropy*, and *eco-labeling*.

CSR, Financial Performance, and Competitiveness

In the early and mid-1990s when Michael Porter at Harvard Business School launched his "Porter Hypothesis," a wave of empirical studies followed that examined the link between environmental regulation and competitiveness (Porter 1991; Porter and van der Linde 1995). Porter's hypothesis is based on a number of case studies that suggested that environmental regulation could create benefits/revenues from innovation and efficiency increases that neutralize or even outperform the cost of the regulation itself, i.e., the net profitability increases in the end. These empirical studies focus on mandatory regulation, such as taxes and fees, and not on voluntary self-regulation (CSR). It was a legal mandate that was the driving force of Porter's original argument. However, since Porter's logic can be applied to voluntary commitment as well, empirical studies related to the Porter hypothesis can shed some light on whether CSR has the potential to reduce costs and increase efficiency within the company. A number of review articles on the Porter hypothesis and its validity based on an empirical perspective have been published, and they show that there is no *systematic* evidence that changes in environmental performance due to stricter regulation urge innovation and lead to efficiency gains (see, e.g., Brännlund and Lundgren 2009).

However, it might be that voluntary self-regulation such as CSR implies that companies have more freedom in choosing appropriate measures themselves, such that these improve both environmental performance and economic performance. In this case, compulsory government regulation differs from CSR; regulations force the company to adjust, whether this is desirable or not, while voluntary CSR can be a deliberate strategic decision that is also profitable. Lundgren and Marklund (2014) investigate Swedish industrial data where environmental performance is divided into performance due to regulation (carbon dioxide tax) and voluntary or market-related causes. They show that environmental performance that can be linked to regulation has a neutral or negative impact on profitability. In other words, the Porter hypothesis can largely be rejected for most Swedish industrial sectors. However, voluntary improvements in environmental performance

(CSR) are positively correlated with profitability in most sectors, which would indicate that there is a degree of asymmetry in the impact on the profitability of regulation and self-regulation in Swedish industry; good environmental performance is good for profitability, unless it stems from regulation—in this case a carbon tax.

Within business economics and empirical financial economics, there are a large number of studies that analyze the general relationship between CSR and financial performance. Margolis et al. (2009) provide a review that extensively evaluates the research on this topic; they investigate 251 relationships from 214 studies between 1972 and 2009. One way of interpreting these studies is that they are an attempt to test the presence of altruistic CSR, that is, if CSR is costly without any measurable benefit. If this is the case, then the effect on financial performance is ultimately negative. In line with the previous discussion, we can identify two cases: (1) altruistic CSR resulting from management's preferences and/or private agenda (a principal-agent situation); (2) altruistic CSR that results from the owners' (shareholders') preferences who are willing to sacrifice profits in the interest of society as a whole. It turns out that there is no support for either type of altruistic CSR. Margolis et al. (2009) find a modest positive effect between CSR and financial performance for the entire time period and a very weak but positive effect over the last ten years. This result, that is, a small or, in many cases, no effect of CSR, could be interpreted as a manifestation of strategic CSR; companies invest in CSR up to a level where costs and revenue on the margin are equal. In this case, profitability is unaffected and CSR should not have a significant effect on financial performance.

However, a major problem with these studies is that is not clear how to appropriately measure CSR (this also applies to some extent to measures of financial performance). Most commonly, the empirical studies use performance indicators of various types created by consultancy companies (KLD, ASSET4, etc.). These measures will always contain a certain degree of subjectivity. Paul and Siegel (2006) note that most empirical studies that analyze CSR and financial performance are not particularly relevant from an economic perspective. They argue that the interesting relationship is between economic performance and CSR, where economic performance is based on company technology[12] and specifically

taking into account the alternative cost for CSR. They also emphasize the importance of using objective and observable variables in studies on CSR, such as actual emissions to air/water/land, and not ratings by consulting firms that are difficult to translate into quantitative performance targets. Two studies that follow the advice of Paul and Siegel (2006) is Lundgren and Marklund (2014) and Lundgren and Wenchao (2017). These studies look specifically at changes in actual emissions, energy use and environmental management, and the effects on economic performance as measured by profit efficiency or productivity.

Another problem with studies looking at the relationship between CSR and financial performance is the causal relationship. As Margolis et al. (2009) suggest that the weak positive correlation (median correlation 0.09) can be explained either by causality from CSR to financial performance or vice versa. Attempts are made in the literature to adequately figure out the causal relationship, but at this stage there is no conclusive evidence. However, there are a large number of so-called event studies that examine both good and bad news (events) and how investors respond to them. In this case, causality is apparent; an oil spill is taking place today and the stock price moves tomorrow; or a company turns out to have a larger reduction in carbon dioxide emissions than expected, and as a result, the stock price increases. In this case, the causal relationship is clear. However, it is not easy to connect the response of financial markets to altruistic or strategic CSR as defined above. The seminal event study concerning CSR is Hamilton (1995). An example of an international study on more recent data is Lundgren and Olsson (2010).

Empirical Research and Strategic CSR

Contrary to empirical support for altruistic CSR and the Porter hypothesis (*win-win* regulations), the evidence on strategic CSR is somewhat more convincing. As discussed previously, the modest or no effect of CSR on financial performance can be interpreted as support for strategic CSR, i.e., costs and revenues of CSR are balanced. Who pays the cost associated with CSR? There are some answers in the literature, and we discuss a few studies in this context.

We first consider the labor market in the context of CSR. One of the cost-benefit considerations of CSR is that employees may be willing to work for lower wages or work more productively when a company engages in CSR. Empirical support for employees bearing the cost (or part of it) of CSR behavior through lower wages is relatively weak and more studies are needed (Kitzmueller and Shimshack 2012). However, there are few studies that demonstrate this effect—in particular the economic literature on compensating wage differentials[13]—for companies engaged in CSR (e.g., Bolvig 2005; Edmans 2011; Nyborg and Zhang 2013). Nonetheless, despite a few examples in the literature, there is currently no convincing evidence that workers generally accept lower wages or work more productively when employed socially responsible companies. The labor market does therefore not systematically provide incentives for companies to engage in CSR.

Responsible consumers (both end-users and consumers of intermediaries) and their demand for products with CSR attributes provide another explanation for the observed CSR behavior of companies. Indeed, a number of empirical studies suggest that this consumer demand-driven motive for CSR is at play. A study by Blend and Ravenswaay (1999) shows that consumers in USA are willing to pay a premium for certain kinds of organic apples. Kriström and Lundgren (2003) find that pulp mills' investment in environmentally friendly technologies can create goodwill, which has a positive effect on the price of pulp in the Swedish forest industry. A considerable amount of valuation studies shows that consumers are willing to pay more for food products from companies that adhere to local and/or organic production, or products with a *fair trade*-marking. In an econometric study, Eichholtz, Kok, and Quigley (2010) use data on commercial buildings in the USA and conclude that there is a price premium for "green" buildings. Mandell and Wilhemsson (2011) found similar results for Swedish households; they are prepared to pay a premium for "sustainable" housing. Many other examples of similar empirical results can be found in the literature. We can thus safely conclude that product markets in relation to different types of consumers/customers can potentially create incentives for strategic CSR, because some consumers are willing to take on all (or part of the) costs related to CSR.

Other interest groups than customers and employees may also to some extent drive CSR. Pressure from, and attitudes of activist groups,

local community groups and regulatory agencies can influence CSR behavior. Arora and Cason (1999) show that the effect of social values and local attitudes toward a company's environmental behavior can be essential with respect to the level of contribution to CSR. A company operating in a local community where a large proportion of the population is politically and environmentally involved tends to have relatively better environmental performance compared to a similar company that faces less engaged residents. There is also empirical evidence that boycotts can have a significant effect on a company's share price. In sum, there is also evidence that other interest groups than customers and employees affect CSR, although the magnitude of such effects is not easy to quantify.

Khanna and Anton (2002) have asked a large number of American companies what affects their CSR behavior. They conclude that the decision to hire professionals with an environmental focus and internal environmental policy is greatly influenced by factors governed by regulation, while quality assurance and product development depend on market factors. Innes and Sam (2008) show that companies voluntarily reduce emissions in order to improve the relationship with the regulatory authorities and to avoid stricter future regulations. Companies subject to greater transparency from the regulator are more willing to engage in voluntary emissions reduction programmes. Empirical findings thus show that both private initiatives from various interest groups and public authority in terms of regulation or the threat of regulation may create incentives for CSR as we actually observe it.

Figure 1 above summarizes the interaction between the company's owners and various interest groups (*stakeholders*), such as customers, activists, regulators, and others, which in turn results in altruistic CSR, strategic CSR, or no CSR. We have discussed (a part of) the empirical research on CSR and its driving forces. There is little support for so-called altruistic CSR, i.e., the situation where the company voluntarily refrains from profits to benefit society as a whole. Even the so-called Porter hypothesis is difficult to maintain empirically. There is, however, support in the empirical literature for what we labeled strategic CSR, a kind of responsible *business as usual* where markets, stakeholders, and regulatory authorities play a crucial role in establishing corporate social responsibility.

In addition, Dam and Scholtens (2015) use a theoretical model to suggest a taxonomy of the empirical literature that links CSR to

financial performance. The main takeaway of their research is that it matters how financial performance is measured in empirical work. The underlying reason is that in the valuation or measurement of the financial performance of firms, both (expected) cash flows and the cost of capital play a role. Since CSR can affect cash flows (through, for example, profits and/or costs), but also the cost of capital (through the discount rate induced by altruistic investor preferences), the net effect of these two mechanisms is not a priori clear and depends on the financial performance measure that is adopted. Their model predicts that accounting profits or market-to-book values of equity should show a positive association with CSR performance, whereas stock market returns should have an ambiguous relation with CSR performance. It turns out that the empirical findings in the literature are in line with these predictions.

Concluding Remarks

How should we think about companies with a social responsibility? Is CSR both economically and socially sustainable? If the company operates in a monopoly or a special niche market where they can overturn the costs of CSR in the market, this is more likely to be the case. Should companies engage in practices beyond statutory targets? Should companies sacrifice profits for the environment when the alternative is a more effective environmental policy designed and applied by a central regulator?

As indicated before, there are situations when it is feasible that CSR is welfare-enhancing. This applies primarily to strategic CSR directed against such environmental problems that are partly or entirely unregulated. An example of an environmental problem that in many parts of the world lacks adequate regulations is the increasing emissions of carbon dioxide and other greenhouse gases.

Another issue raised here is how to define and measure CSR. How to do this will be crucial for an evaluation or interpretation of a company's CSR. We have defined CSR as actions that go beyond and beyond laws and regulations, voluntary self-regulation. In that sense, our definition is clear and obvious. But it does not solve the problem

of how to measure these measures quantitatively when we try observing CSR in the real world. It is often difficult to evaluate what the companies themselves call CSR. Much of what we see companies advertise as CSR will probably end up, according to our definition, in a "gray area". Thus, it is not straightforward to distinguish what is beyond the law and what is simply business as usual.

We argue that a theory about CSR would have to balance between personal taste and values, social norms, and market imperfections. An essential ingredient and the main challenge in advancing academic research about CSR would be improving environmental accounting frameworks—on both the firm and national levels—and insights in the interaction between the economy and the environment. Thus, the system of double bookkeeping (as suggested already by Atkinson 2000) and national accounting needs to be accompanied by environmental, social, and material flows accounts in a more detailed manner than what we see today. Otherwise, any theory about CSR would run the risk of remaining sterile as it would be impossible to test it appropriately.

It is tempting to attribute the growing interest in CSR as a new ethical thinking and a growing commitment to sustainable development of enterprises, and that they are willing to forego profits for this. But CSR is consistent with another explanation too, businesses and individuals to adjust their behavior in order to adapt to changes in their environment, such as changes in preferences, prices, and incomes. To a large extent, we can explain the observed CSR as a conventional economic adjustment to new market conditions. Thus, CSR is largely well-integrated with a strategy that characterizes most of the company's business model, profit maximization in the traditional sense.

Notes

1. Pollution is an example of a market failure and negative externality. An externality means that a company's production or a person's consumption affects other production and consumption without being reflected in current prices.
2. Examples are employment contracts and insurance.

3. There is no space in this paper to go into detail on all the different definitions that abound in various research and the media.
4. In this paper, I will mainly use examples related to the environment.
5. It should be emphasized that even companies that operate in the traditional sense, and comply with laws and regulations, provide a variety of useful and appreciated services by providing markets with products, paying salaries to employees and dividends to shareholders, and generating tax revenue to the state and municipalities. This is also an important "responsibility," but not the extended, voluntary social responsibility we associate to CSR in this chapter.
6. Altruism, compassion, selflessness (as opposed to egoism), is to help others without wanting anything in return.
7. Strategy is used here to illustrate the company's specific "tactics" (in this case CSR) that apply to their business model in order to maximize profits.
8. What determine whether CSR is altruistic or strategic are the owners' reasons for commitments.
9. Greenwashing means that a firm is trying to create an image of being environmentally friendly through misleading advertising.
10. Warm glow means that you feel good doing a voluntary responsible act.
11. If the green products also create a cleaner environment, then, from a societal point of view, you should take into account in the welfare assessment the net loss in consumer surplus *and* the value of improving the environment.
12. How inputs such as capital, labor, and energy are used within the firm to generate output.
13. One example is the miner that gets compensated for increased job risk (compared to a similar job above ground). In case of CSR, the interpretation is the reverse; the warm glow an employee experiences from working at a CSR firm could mean that he/she accepts a compensation reduction, thus a negative compensating wage differential.

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