

# A R T I C L E S

## CORPORATE SOCIAL RESPONSIBILITY, NOISE, AND STOCK MARKET VOLATILITY

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**Organizational signals about corporate social responsibility may have a harmful impact on equity markets for two main reasons. First, corporate social responsibility is not systematically correlated with companies' economic fundamentals. Second, opportunistic managers are incentivized to distort information provided to market participants about their firms' corporate social responsibility. Either causal force, by itself, makes it difficult for market participants to interpret information about corporate social responsibility accurately. This greater noise in financial markets typically invites more noise trading, which in turn leads to excess market volatility (among all publicly traded firms) and, in a particular context of social-institutional processes and structures, to excess market valuations of firms that are widely perceived as socially responsible.**

Many corporations face increasing pressure from various constituencies to become more “socially responsible.” Consistent with its growing importance in managerial practice, corporate social responsibility (CSR), commonly defined as voluntary firm actions to improve social or ecologic conditions (McWilliams & Siegel, 2001), has received increasing attention from researchers. Despite a significant amount of management research on the topic (see, e.g., Aguinis & Glavas, 2012; Orlitzky, 2011), many observers still regard CSR as an organizational activity that largely benefits firms, markets, and societies. Thus, the long-term negative consequences of CSR often remain unacknowledged. Yet, whenever social scientists “forget the long-run consequences of short-run policies” (Wible, 1982, p. 358), serious analytic errors tend to occur (Hazlitt, 1952).<sup>1</sup>

<sup>1</sup> The focus of this paper is in line with many social scientists' emphasis on the study of unintended consequences as vital to a deeper understanding of social phenomena (e.g., Giddens, 1984; Merton, 1936). For example, game theory presents the idea that (short-term) rational, self-interested action from an individual actor's perspective often leads to undesirable long-term outcomes for the collective (Hardin, 1968). More generally, investigating negative externalities and the unintended

Presenting a positive rather than normative theory (Friedman, 1953), this article advances a theoretical, forward-looking argument that the CSR movement may, in the long run, lead to excess market volatility and stock price bubbles. My paper extends prior theory that explained the effect of the supply of and demand for CSR on stock prices. More specifically, Mackey, Mackey, and Barney (2007) argued that, even if CSR did not maximize the present value of a firm's future cash flows, it might still maximize the market value of the socially responsible firm. However, this optimistic conclusion about the economic consequences of CSR is ultimately premised on (a) the legitimacy and meaningfulness of CSR signals and (b) the validity of the semi-strong version of the efficient

negative consequences of regulations (e.g., Acemoglu & Angrist, 2001; Besley & Burgess, 2004; Friedman, 1962; Gray, 1987; Hoskisson, Castleton, & Withers, 2009; McClintock, Ekins, & Calabria, 2012; Shleifer & Vishny, 1998), economists have made great strides in shedding light on the unintended consequences of organizational activities and government interventions. (Of course, in addition to negative externalities, economics also explains and illustrates desirable unintended consequences, or positive externalities, such as the concept of the invisible hand.)

market hypothesis (Mackey et al., 2007, pp. 819–820), which assumes that publicly available information “is immediately incorporated into prices” (Shleifer, 2000, p. 6). Deviating from these assumptions of market efficiency, I explain how a particular set of social forces and dynamics may create (a particular, systematic type of) noise in inefficient equity markets because of CSR. Hence, my model of CSR in financial markets challenges the conventional wisdom about the net benefits of CSR.

The thought experiment herein proceeds as follows. In the first section, I outline my two central assumptions about CSR and market inefficiency; in the second section, I explain the two sources of noise potentially inherent in market signals of CSR. In the third section, I propose a plausible effect of this noise on investment decisions. Then, in the fourth section, I point out the potential impact on stock price volatility of all firms and, given particular institutional processes and structures (in the contemporary context), on the stock prices of firms that are widely seen as “socially responsible.” Finally, I conclude with two main implications of this novel market model of CSR.

## TWO CENTRAL ASSUMPTIONS

### Definitions of CSR Are Highly Variable and Malleable

The aforementioned broad definition of CSR implies that CSR consists of a diverse set of discretionary social and environmental initiatives (Carroll, 2008; Dahlsrud, 2008; Griffin & Mahon, 1997; Sprinkle & Maines, 2010; Ullmann, 1985; Vogel, 2005). CSR can include, for example, assistance (in the form of human, financial, and other resources) to suppliers that embark on ecologic and social sustainability, as illustrated by Starbucks and Walmart (Austin & Reavis, 2004; Denend & Plambeck, 2007). It can include activities focused on a firm’s impact on local communities. For example, companies such as Shell, Chiquita, Citibank, and Timberland regularly assess and monitor the impact of organizational decisions on their local communities (Austin, 2001; Vogel, 2005). It can also manifest in initiatives aimed at enhancing employee welfare (Blanchard & Barrett, 2010; Heskett, 2003; O’Reilly & Pfeffer, 2006; Sprinkle & Maines, 2010).

While most CSR action is self-imposed, some governments have begun to look to legislation to encourage CSR. For example, the Companies Act of

2006, a comprehensive code of company law for the United Kingdom, has to some extent institutionalized CSR in the UK by prescribing that company directors consider the “impact of the company’s operations on the community and the environment” (Thornton, 2008, p. 413). Hence, CSR is not only targeted at a wide range of internal or external stakeholders, including future generations, but also coevolves with the vagaries of the different salient issues for society and particular interest groups (Carroll, 2008; Frederick, 2006; Hoffman, 1999).

### Financial Markets Are Inefficient

Orthodox finance theory assumes that stock prices fully reflect all available information (Fama, 1970, 1991), thus resulting in market efficiency. In efficient markets, stock prices are right in the sense that they reflect market participants’ rational assessments of business fundamentals (Fama, 1970; Summers, 1986). Under those assumptions, a stock’s actual price equals its fundamental value, which is defined as the discounted sum of expected future cash flows. This efficient market hypothesis suggests that rational utility-maximizing investors consider all publicly available information<sup>2</sup> about a firm’s actions (including CSR and its impact on cash flows) when buying or selling a firm’s shares, while market forces eliminate less rational investors (Fama, 1965; Friedman, 1953).

The history of financial markets, however, suggests that equity markets are subject to a wide variety of social dynamics unrelated to business fundamentals and investors’ utility calculations (Cassidy, 2009; Fox, 2009). *Behavioral finance* is now the commonly used term for this new cross-disciplinary perspective (synthesizing insights from economics, finance, sociology, and psychology), which generally studies the impact of deviations from orthodox assumptions of market efficiency (Thaler, 1993, 2005). The central premise of behavioral finance is that, for a variety of reasons, investors trade not only on accurate information about business fundamentals but also on unsubstantiated beliefs, which are typically called *invest-*

<sup>2</sup> Strictly speaking, this is the semi-strong formulation of the efficient market hypothesis (EMH). Regardless of which version of the EMH (strong, semi-strong, or weak) is examined more closely, all three types of the EMH have been challenged theoretically and empirically by behavioral finance (Shleifer, 2000, pp. 10–22).

tor sentiments (e.g., Shefrin, 2000; Shiller, 2005; Shleifer, 2000). Investor sentiments are beliefs about future cash flows and investment risks that are not justified by the economic facts at hand (see, e.g., Baker & Wurgler, 2007). Thus, the behavioral finance view of equity markets holds that a wide range of (endogenous) psychological dynamics (e.g., Barberis, Shleifer, & Vishny, 1998; Daniel, Hirshleifer, & Subrahmanyam, 1998; Edmans, Garcia, & Norli, 2007) may affect investor decisions.

This perspective conceptualizes investors as decision makers who are influenced by psychological biases, institutional forces, and a wide variety of other social-psychological dynamics (Shiller, 1984). Thus, according to behavioral finance, investors are not economic automatons whose decisions are determined only by rational utility calculations (Thaler, 2000). In other words, this article is based on the premise that the two core assumptions of traditional finance are at least suspect, if not invalid: First, financial markets operate efficiently; second, prices in financial markets are based on the rational or “cold” analysis of economic facts. Drawing on the insights of behavioral finance, this paper presents a novel mental experiment about the consequences of CSR for stock market volatility, if the two aforementioned core assumptions of orthodox finance and economics are violated.<sup>3</sup>

Market signals of CSR to investors will be the focus of the analysis herein because my concern is with the long-term unintended impact of CSR on equity markets. In Spence’s (1974) seminal work, *market signals* are defined as activities or attributes of social actors that by design or accident alter the beliefs of, or convey information to, other market participants. However, not all market information about corporate activities is equal in informational

<sup>3</sup> At this point, it should be noted that this paper will not try to specify, explain, or predict stock price levels in response to the supply of and demand for CSR. In a context of market inefficiency, stock prices are, for the most part, unpredictable (Barberis & Thaler, 2003; Shiller, 1984; Summers, 1986). Of course, random walk models of stock prices are equally true in a world of rationally formed stock prices—that is, under assumptions of market efficiency (Fama, 1970, 1991, 1998). In other words, both orthodox and heterodox theories of finance actually regard the prediction of stock prices as a futile exercise. Instead of trying to predict the unpredictable, this paper explains how and why aggregate stock price volatility increases because of firms’ social initiatives that appeal to investor sentiments.

value—some of it is noise. As a technical term in the finance literature, *noise* refers to information unconnected to a company’s economic prospects (Black, 1986). Those investors who trade on noise, so-called *noise traders*, generally confuse noise with information that contains valid explanatory or predictive power about business fundamentals (Shleifer, 2000). Because of their “irrational misperceptions” (De Long, Shleifer, Summers, & Waldmann, 1990, p. 707), “noise traders” could also be considered “irrational traders.”<sup>4</sup> The descriptive socio-psychological theory of capital markets proposed in this paper considers market signals about CSR to be full of, and in fact generating new, noise because of (a) the ambivalent impact of CSR on an organization’s economic performance and (b) information asymmetry in financial markets, resulting in large part from managerial opportunism.

## THE NOISE-GENERATING CHARACTERISTICS OF CSR

### The Ambivalent Economic Impact of CSR

Prior theory and empirical studies indicate that the net economic outcomes of CSR are highly variable. A long history of empirical research has shown positive, nonsignificant, and negative relationships between CSR and firm financial performance (e.g., Griffin & Mahon, 1997; McWilliams & Siegel, 2001; Porter & Kramer, 2006; Ullmann, 1985). Some research suggests that CSR may enhance corporate reputation (Orlitzky, 2008) and/or decrease a corporation’s business risk (Bansal & Clelland, 2004; Godfrey, Merrill, & Hansen, 2009; Orlitzky & Benjamin, 2001). These benefits may materialize because activities typically categorized as CSR can, for example, help increase trust between the firm and its stakeholders (Hosmer, 1995; Jones, 1995) or employee motivation, retention, or organizational selectivity toward job applicants (Edmans, 2011; Turban & Greening, 1996).

Yet, because of its inherent costliness (Devinney, 2009; Windsor, 2001), CSR may also reduce current and future firm cash flows (Mackey et al., 2007; Siegel, 2009), particularly when CSR goes beyond mere rhetoric and window dressing. For example, child labor and sweatshops—typically considered

<sup>4</sup> Consistent with the behavioral finance literature, this paper will consistently refer to *noise traders* rather than the arguably less precise and more pejorative term *irrational traders*.

contradictory to CSR—can reduce organizational costs (Shleifer, 2004). Thus, consistent with a view of CSR as a firm's commitment to internalizing its externalities (Crouch, 2006), socially responsible firms can be expected to increase their organizational costs relative to their so-called “irresponsible” competitors because firm actions that cut short-term operational costs, such as outsourcing, are often seen as antithetical to CSR. Evidence from specific business cases suggests that the costs associated with CSR can sometimes be so high that they put an entire organization at risk (Munk, 1999; Nohria, Piper, & Gurtler, 2006). In short, because time and other resources spent on CSR cannot be spent on other core, value-creating business activities, such as new product development, the stakeholder orientation inherent in CSR may undermine the legitimate business objective of maximizing long-run economic value or profitability (Friedman, 1970; Jensen, 1994, 2002; Levitt, 1958; Siegel, 2009). Sometimes, CSR may increase organizational costs more than its counterbalancing and largely uncertain economic payoffs (Mackey et al., 2007; McWilliams & Siegel, 2001).

This view has been bolstered by several integrative research reviews that have called into question the proposition that CSR causes greater economic performance. First, an influential award-winning meta-analysis (Orlitzky, Schmidt, & Rynes, 2003) found observed variances (around moderately positive average meta-analytic correlations) to be extremely large, with the coefficient of variation (i.e., the standard deviation divided by the mean) often in excess of 1.5. Thus, contrary to several interpretations (which focused only on effect size means rather than effect size variability) of this meta-analysis (see also Orlitzky, 2008), the meta-analytic range is likely to include zero. Numerous contingency variables have been proposed to explain this large variability in the underlying CSR–economic performance relationships (e.g., Barnett, 2007; Hillman & Keim, 2001; Kurucz, Colbert, & Wheeler, 2008; Mackey et al., 2007; McWilliams & Siegel, 2001; Schuler & Cording, 2006). Second, several studies have demonstrated considerable causal ambiguity because of reverse causality—that is, the observation that high financial performance may actually cause increased CSR (e.g., McGuire, Sundgren, & Schneeweis, 1988; Orlitzky et al., 2003). Third, there is evidence that findings about CSR may have been influenced by researcher ideology or values (Orlitzky, 2011) and problematic research designs (Devinney, 2009; McWilliams & Siegel,

2000; McWilliams, Siegel, & Teoh, 1999), inevitably lowering confidence in the veracity of these findings. In short, the aggregate empirical evidence seems to show that the research stream on the financial correlates of CSR remains largely unsettled (see also Orlitzky, Siegel, & Waldman, 2011).

To summarize, it would be an oversimplification of the cumulative evidence to expect CSR to produce systematic positive—or negative—economic outcomes everywhere and at all times. Rather, the relationships between CSR and economic efficiency are nonlinear, variable, and highly complex (Barnett, 2007; Barnett & Salomon, 2006; Hillman & Keim, 2001; Orlitzky & Swanson, 2008; Porter & Kramer, 2006; Vogel, 2005). Also, the perceived benefits of CSR in terms of its risk-reducing characteristics depend, to a large extent, on the operational definition of CSR and the definition of risk used (Kurtz, 2005), which in turn supports Orlitzky's (2011) claim that, in this field, truth is made rather than found. Because the association between the variable definitions of CSR and economic performance is so ambivalent, CSR creates noise in the technical sense of the term in the finance literature (Black, 1986). That is, objective observers cannot infer that CSR will, in any *systematic* way, change a firm's underlying economic fundamentals, the ultimate long-term drivers of cash flows and dividends (Connors, 2010; Graham & Dodd, 2009).<sup>5</sup>

<sup>5</sup> This assumption does not imply that CSR *never* increases financial performance or *never* reduces risk. It is important to emphasize here that the impact of CSR on an *individual* corporation could very well be strategically or financially beneficial. As shown in several studies, CSR may benefit individual firms, for example, by decreasing business risk (Orlitzky, 2008). The important point is that the same corporate actions that may reduce risk at the corporate level of analysis may, in aggregate, also destabilize capital markets, relative to the assumption of no noise trading in hypothetical efficient markets. Similar to the tragedy of the commons, strategic corporate behavior may undermine the efficient functioning of entire capital markets, if there are no corrective mechanisms filtering out noise from equity markets. In addition, there is evidence that many researchers socially construct these associations based on prevalent institutional logics; many social scientists seem to find exactly what they have been looking for (Kepes & McDaniel, in press; Orlitzky, 2011, 2012).



## Information Asymmetry

In addition to the ambivalent economic impact of CSR, there is another reason socially responsible activities may generate noise. CSR signals are subject to *information asymmetry*, which refers to a situation in which one party to an economic transaction, usually the seller, has more information than another, usually the buyer (Akerlof, 1970; Brunnermeier, 2001; Leland & Pyle, 1977). Obviously, external stakeholders, including potential and actual investors (buyers of shares of socially responsible and irresponsible companies), have less information about firm processes and outcomes related to CSR than business executives. Because of this disparity in insiders' and outsiders' access to trustworthy information, firms may send false market signals about their strategic commitment to CSR.

The highly variable and heterogeneous definitions of CSR in international environments (see also Crane, McWilliams, Matten, Moon, & Siegel, 2008; Dahlsrud, 2008; Matten & Moon, 2008; McWilliams, Siegel, & Wright, 2006; Rodriguez, Siegel, Hillman, & Eden, 2006) only exacerbate the problem of information asymmetry. In most countries, CSR disclosures remain largely voluntary and, thus, are often not subject to the same level of government oversight and—in case of misreporting—government sanction as manipulations of financial accounting data (Banerjee, 2007; Devinney, 2009). Without enforceable public accountability, though, information asymmetry about (typically intangible) CSR, whose definitions and implications are social constructions (Dahlsrud, 2008; Orlitzky, 2011), can readily be exploited by opportunistic managers (Edwards, 2008; Hawken, 2004; Laufer, 2003; Owen & O'Dwyer, 2008). The contingent and unregulated nature of nearly all CSR actions arguably makes CSR more manipulation-prone than records of tangible dividend payments, debt levels, or stock price returns, for example (Kanodia, Sapiro, & Venugopalan, 2004; Jones, 2011). Although some firms are also known to manipulate their reported earnings and other financial performance measures (see, e.g., Dechow, Sloan, & Sweeney, 1996), in most countries regulatory sanctions tend to penalize misreporting. When reporting is voluntary and sanctions are missing (Devinney, 2009) there is also a lack of effective monitoring and oversight. In fact, the available evidence suggests that false market signaling is particularly likely if organizational phenomena are intangible and relatively difficult to

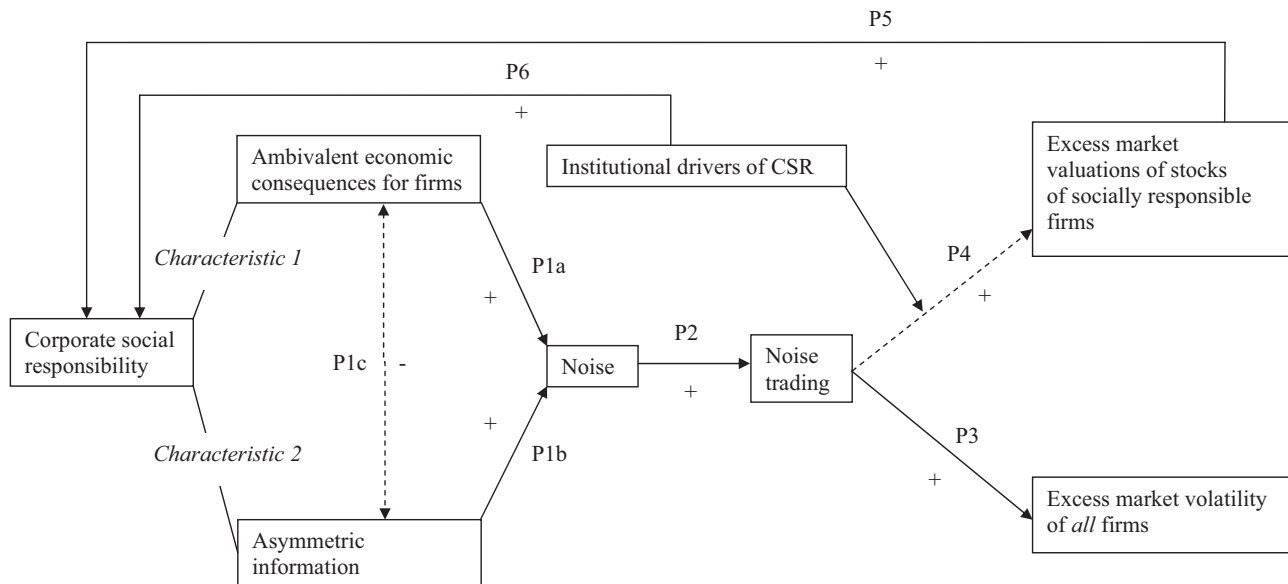
measure or sanction (Chatterji & Levine, 2006; Laufer, 2003).

In particular, three empirical observations indicate the low reliability of CSR signals. First, rating agencies appear to disagree on the meaning and scope of CSR (Chatterji, Levine, & Toffel, 2009; Entine, 2003; Orlitzky & Swanson, 2012; Porter & Kramer, 2006). Second, CSR assessments have been found to be influenced more by organizational rhetoric than by concrete action (Cho, Guidry, Hageman, & Patten, 2012). Third, firms have been found to be socially responsible and irresponsible at the same time (Strike, Gao, & Bansal, 2006), making overall assessments of an entire firm's CSR (especially in large international corporations) problematic. Yet these overall judgments about whole firms are necessary for "socially responsible" investors to make sound, rational investment decisions about firm stocks.

When information about CSR is distorted and/or difficult to interpret objectively and rationally, market signals of CSR may raise the level of noise in capital markets. Informational distortions can take many forms. For instance, firms' public relations departments or external social rating agencies may exaggerate the scope and scale of CSR (Potter, 2010). Also, company representatives may portray CSR as "good" or "enlightened" management, which in the long run can be expected to boost the firm's economic value, as the shareholders are continuously reassured (see, e.g., Baron, 2003, pp. 785–791). Although, as argued above, no such direct linear links between CSR and economic value generation exist, business executives may try to create the impression that such relationships invariably result in "win-win" scenarios.

The arguments laid out thus far can be seen in causal paths P1a and P1b on the left-hand side of Figure 1. The suggestion of stock market noise produced by CSR has been validated by reference to the generally ambivalent impact of CSR on a firm's business fundamentals, or economic efficiency outcomes. In addition, it has been validated by reference to the potential of information asymmetry to lead to sometimes inadvertent, at other times deliberate and opportunistic, distortions of various characteristics of CSR, including its scope, internal consistency, and economic consequences. In this context, it is important to stress that my perspective does not presume that CSR exhibits *only* these two characteristics or that, in financial markets, false CSR signals predominate. Instead, my central premise is that, in line with Spence (1974), *most*

**FIGURE 1**  
**The Unintended Market Consequences of Corporate Social Responsibility**



investors are unable to distinguish between true and (possibly a small number of) false market signals of CSR. This lack of differentiability between, for lack of a better term, “genuine” and “disingenuous” organizational commitments to CSR creates market noise. In other words, CSR signals are only partially informative as, strictly speaking, there is no clear-cut dichotomy between noise and information. The problem with market signals about intangible information is that the actual presence of the signal in the observed object can only be inferred.

I also suggest that there may be an inverse mutual-dependence relationship between the economic ambivalence of CSR and information asymmetry, as shown by arrow P1c in Figure 1. Specifically, in industries or firms in which there is wide consensus about the strategic benefits of CSR, opportunistic managers are presented with considerable incentives to distort CSR signals (upward). In other words, the *less* ambivalent the perceived economic payoffs from CSR (P1a), the *higher* the likelihood of information asymmetry and the *stronger* the incentive to increase CSR noise (P1b).

## THE STOCK MARKET EFFECTS OF CSR

### Noise and Noise Trading (P2)

A central suggestion of this paper is that more noise in equity markets causes many investors to

rely on noise at a greater rate in their investment decisions. That is, more noise leads to more noise trading because market participants are either unable or unwilling to filter out noise in their investment decisions (Black, 1986). If investors lack the ability to reliably distinguish noise from information, noise will accumulate in markets, similar to stochastic models of other social or epidemiological processes (Shiller, 2005). The same is true if investors deliberately consider noise in their decisions because they may, for example, enjoy speculative trading (Laffont, 1985)—or, in this case, trading in stock of “socially responsible” companies (e.g., by selling shares of companies that are widely perceived as “irresponsible” and buying shares of companies that are perceived as “responsible”). To socially conscious investors, company and third-party disclosures of CSR, whether trustworthy or not, are salient company attributes (Mackey et al., 2007). In general, informational distortions may easily become entrenched and institutionalized among the investing public (Hirshleifer & Teoh, 2003). Thus, the general implication is that noise, whatever its source, might accumulate—rather than decrease—in equity markets over time.

More specifically, an important causal force in the institutionalization of CSR market signals can be attributed to the increasing influence of socially responsible investing (SRI), which promotes reli-

ance—at least among a certain segment of investors—on signals of CSR in investment decisions. SRI is an investment strategy that seeks to align investors' prosocial values with particular manifestations of CSR (Kurtz, 2008). In SRI, individual and institutional investors are encouraged to use their own ethical commitments (e.g., their opposition to the use of forced prison labor or child labor) as a basis of their investment decisions (Drucker, 1976). For example, some SRI funds, such as the Women's Equity Fund, invest primarily in companies that have a track record of "advancement of women in the workplace" (Kurtz, 2008, p. 252)—that is, companies that exhibit a "responsible" attitude toward a particular demographic group of employees. Or, as another concrete example of SRI, some SRI funds refuse to buy shares in (i.e., screen out) companies that derive more than half of their revenues from tobacco, gambling, or alcohol sales (Entine, 2003).<sup>6</sup> The confluence of SRI and several other pro-CSR institutional forces has led to greater reluctance among some investors to filter out noise about CSR from their investment decisions (Campbell, 2007). These broader institutional forces will be discussed in greater detail later, when causal link P4 is explained.

At the psychological micro level, it is easy to understand why P2 is expected to hold—that is, why noise (about CSR or any other organizational actions unrelated to business fundamentals) is not filtered out by investors. Market participants, like all human decision makers, tend to eschew rational utility calculations in favor of decision-making shortcuts (Kahneman, 2003; Kahneman, Slovic, & Tversky, 1982; Shiller, 2005) because, typically, it is costlier to acquire valid information about specific company characteristics than to rely on rules of thumb. Investors' decision making becomes even more onerous with regard to a concept that is as intangible and socially desirable as CSR. A lot of cognitive effort, time, and other resources are usually required to reduce the information asymmetry. Because of the two aforementioned characteristics of CSR (P1a and P1b in Figure 1), it is extremely difficult (for investors) to distinguish between true and false signals of CSR. Thus, the more noise

corporations (as well as other market participants) produce about such a difficult-to-measure activity as CSR (see also Norman & MacDonald, 2004), the more noise trading will occur.

An alternative perspective holds that market participants are able to discount false information and noise. In earlier models (predating the full scientific impact of behavioral finance), arbitrage by rational traders was argued to have noise-dampening effects (Friedman, 1953; Kyle, 1985). However, later theory and empirical observations (see, e.g., Barberis & Thaler, 2003; Shleifer & Vishny, 1997) have generally contradicted these earlier claims. The reason noise and noise traders do not vanish is part of De Long et al.'s (1990) analytic model, whose formal theory, however, goes beyond this paper. Furthermore, even if earlier arguments about the noise-reducing effect of trading were true, my argument about the noise-generating attributes of CSR would remain applicable—with the only difference that, over time, trading would dampen rather than amplify this noise.

### Noise Trading and Stock Price Volatility (P3)

In general, if noise—including noise about CSR—proliferates in equity markets, security prices partially reflect social dynamics unrelated to fundamental economic values (Shiller, 1984, 2005). In other words, equity prices are expected to deviate from fundamental economic values because they reflect noise (Summers, 1986). Briefly, the intuition behind causal path P3 is that, in the same way sampling error and measurement error generate excess noise and variability in any empirical study, market noise also augments the variance of stock prices.

Generally, noise traders have been shown to trade stocks more frequently than is justified by rational economic models that are based on investors' utility calculations (Roll, 1984; Shiller, 1981). In turn, higher trading volumes, caused by increased noise trading (De Long et al., 1990), are expected to add excess volatility to stock markets compared to a hypothetical condition in which only information about business fundamentals is used in investors' decisions (Foucault, Sraer, & Thiesmar, 2011; Shiller, 1981; Tetlock, 2007). In the present model of the unintended consequences of CSR, this expectation follows from disagreement among investors about the nature, extent, or implications of a *specific* organization's CSR.

<sup>6</sup> Such so-called "sin" screening criteria also hint at the idiosyncratic, politically motivated, religiously motivated, and/or arbitrary aspects of institutional categorization of "responsible" or "irresponsible" corporate action (Entine, 2003; Vogel, 2005).

On one hand, some investors are likely to believe in (neoclassical) economists' paradigmatic view (Orlitzky, 2011), postulating an inverse causal relationship between CSR (as the antecedent) and corporate financial performance (as the outcome), and, thus, are likely to short stocks of firms that have just announced an expansion of their CSR efforts. By contrast, another group of investors may buy stocks of socially responsible firms because the investors are socially conscious and want to encourage CSR (Mackey et al., 2007). And yet another group of investors may believe that, as discussed before, CSR-related organizational activities will increase trust between the organization and its stockholders (Hosmer, 1995), enhance corporate reputation (Mahon, 2002), decrease business risk (Godfrey, 2005; Orlitzky & Benjamin, 2001), and reduce agency and transaction costs (Barnett, 2007; Jones, 1995). Like the second group of socially conscious investors, this third group of investors, who can be considered believers in instrumental stakeholder theory (Jones, 1995; Orlitzky, 2011), are likely to buy shares of companies that are perceived to be high in CSR. Furthermore, as already argued before, for some firms high scores in CSR may reflect organizational actions accurately, whereas for others there may be a large gap between their pro-CSR rhetoric and their actions. Conversely, some organizations that are actually making important contributions to society may be misperceived as irresponsible (Ghemawat, 2006).

The end result of both sources of noise (P1a and P1b) is that different market participants are likely to have differing views of particular organizations' CSR initiatives as well as their consequences for business. Because of these investor disagreements about CSR (Statman, 2005), trading volumes will increase and stock prices will vary more than would be true in the absence of CSR signals (French & Roll, 1986; Brown, 1999). In fact, the greater the proportion of traders responding to CSR signals, the more volatile share prices are expected to be in terms of their deviation from their fundamental value (De Long et al., 1990). This excess stock price volatility (of *all* publicly traded companies—not only “socially responsible” ones) resulting from zealous trading in CSR signals is the main unintended consequence of CSR (shown as path P3 in Figure 1).

Note that the comparison is not between the volatility (standard deviations, variances, or risk) of firms with low CSR and firms with high CSR. Instead, the expectation behind P3 applies to a theo-

retical model of financial markets in which no CSR noise trading occurs versus a model *with* noise trading. In addition, because the effect of CSR noise is diffuse rather than firm-specific, P3 applies to *all* stocks—that is, entire financial markets. Of course, the extent to which equity markets are distorted by CSR signals depends on the relative prevalence of CSR noise traders: Generally, the more noise traders the greater the market volatility. At this point, there may be so few CSR noise traders that their impact on overall market volatility is negligible. However, this could change in the future, depending on the institutional forces influencing P4, the causal path discussed next.

### **Excess Market Valuations in Environments that Promote Social Responsibility (P4)**

Noise trading in CSR may lead not only to excess stock market volatility but also, under particular market and institutional conditions, to unjustifiably high stock prices of firms that are widely regarded as socially responsible. When the demand for CSR goes up, stock prices of companies demonstrating high CSR can be expected to increase (Mackey et al., 2007; McWilliams & Siegel, 2001). In other words, when individual and institutional investors believe that investing in “socially responsible” companies is “the right thing to do” the stock prices of these high-CSR firms will go up (Campbell, 2007; Orlitzky et al., 2003; Orlitzky & Benjamin, 2001). Under conditions of institutional pressure on companies to engage in CSR, socially conscious investors may buy shares of a specific company not because of a change in the firm's economic fundamentals, but because it has announced a new social initiative (Mackey et al., 2007). Conversely, when a stock drops out of an SRI index, many investors can be expected to sell shares in the company (Doh, Howton, Howton, & Siegel, 2010), even though the company's economic future may, in fact, be solid or even improve (Jensen, 2002).

Generally, the institutional forces driving demand for CSR include government regulations, nongovernmental organizations, social movements, educational environments, and trade associations encouraging CSR (Campbell, 2007). As cases in point, legislative and regulatory efforts in some countries, such as France, Germany, and the United Kingdom, have been driving the institutionalization of CSR market signals by passing legislation supportive of SRI. For example, as of 2002 all pub-



lic companies in France are required to report social and environmental data (Kolk, 2008). Even more pertinent to SRI, French regulations require national pension funds to adopt social and environmental investment criteria (Richardson, 2009). Similar pension fund regulations now exist in Sweden, Norway, and New Zealand.

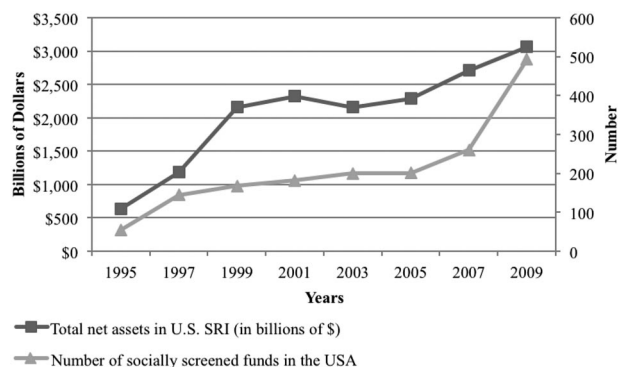
As another example, Germany has fostered SRI by giving tax advantages for investments in wind energy, for example (Renneboog, Horst, & Zhang, 2008). In the United Kingdom, where SRI is commonly referred to as *ethical investing*, pension funds are required to disclose “the extent (if at all) to which social, environmental and ethical considerations are taken into account in the selection, retention and realization of investments” (Renneboog et al., 2008, pp. 1726–1727). This regulation is credited by some as the main cause of the growth of SRI in the United Kingdom (Renneboog et al., 2008).

SRI is undeniably exerting a growing influence on investor sentiments (Arjalies, 2010).<sup>7</sup> Since the mid-1990s, SRI has grown considerably, in terms of both the number of U.S. socially screened funds and assets under SRI management. Figure 2 shows that, according to the Social Investment Forum Foundation (2007, 2010), growth in U.S. SRI assets exceeded the growth of all investment assets under professional management by 120 percentage points between 1995 and 2009—the growth rates were 380% and 260%, respectively.

Some empirical evidence indicates that socially responsible investors may already wield considerable market power. For example, SRI rating agencies have been shown to affect stock prices under some circumstances. For example, when firms were deleted from the Calvert Social Index (CSI), their stock prices dropped, on average, by 0.2% on the day of the announcement of the deletion and 1.1% on the following day (Doh et al., 2010). This seemingly small price effect is deceptive, though. Translated into concrete impact on firm value,

<sup>7</sup> At the same time, it should be acknowledged that SRI still represents only a relatively small proportion of all economic activity in most countries. Estimates of SRI as a percentage of gross domestic product range from 0.0002% (in Japan) to 22% (in the U.K.) (Waring & Edwards, 2008). Because of the lack of enforceable standards, transparency, and accountability (Hawken, 2004; Owen & O'Dwyer, 2008), SRI is as heterogeneous as CSR in its diverse manifestations and meanings (Sandberg, Juravle, Hedesstrom, & Hamilton, 2009).

**FIGURE 2**  
**Trends in Socially Responsible Investing (SRI)**



Data source: *Trends Report* of the Social Investment Forum. Available at <http://www.ussif.org/>.

these stock price drops implied that when a firm was deleted from the CSI it lost, on average, \$4 million in market capitalization on the day of and the day following the deletion announcement. At the same time, this event study also showed that, in contrast to the statistically significant effect of deletion announcements, stock additions to the CSI were only insignificantly positive. However, findings in the finance literature support the idea that rising demand for stocks of socially responsible firms leads to price increases (Statman & Glushkov, 2009). If the assumption is made that social index inclusions or deletions do not reflect any change in the firm’s underlying economic fundamentals, such investor reactions (because they are based on investor sentiments) result in stock mispricing.

In sum, causal path P4 suggests that CSR may drive up the stock prices of firms widely perceived to be high in CSR. Because the relationship between trading in CSR signals and stock price values is contingent on the strength of broader institutional forces (such as SRI and other social movements), it is shown as a dashed line in Figure 1. In inefficient capital markets, high stock prices are not necessarily economically justified. When stock price increases are unjustified they lead to *excess market valuations*, or *stock price bubbles*, defined as dramatic stock price increases that defy rational market explanations (Baker & Wurgler, 2007).

Sometimes, investor sentiments may exhibit irrational exuberance regarding pro-CSR norms, even though the economic conditions of the firm or industry do not permit high discretionary spending on CSR. Corporations may be pressured by their

institutional environments or protest movements (see, e.g., King & Soule, 2007) to spend more and more on charitable donations, long-term infrastructure investments, or protracted stakeholder dialogues (P6 in Figure 1) when, in fact, a more economically prudent course of action may be to develop new products or minimize expenditures (e.g., through outsourcing) to raise the chances of firm survival in uncertain or dire economic conditions (Siegel, 2009).

However these social and institutional dynamics play out, the stock prices of companies perceived as socially responsible may move up (or stay high relative to allegedly “irresponsible” companies in the same industry) even if those price levels are not justified by the company’s economic fundamentals (such as future cash flows or dividends, as highlighted by Mackey et al.’s 2007 model). As shown in Figure 1, this overvaluation of “responsible” companies is moderated by the spread of institutionalized perceptions of the social value and desirability of CSR (i.e., the stronger the institutional drivers of CSR, the stronger the link between noise trading and excess market valuations). In addition, these institutional drivers are expected to increase firms’ CSR expenditures directly (shown as P6 in Figure 1).

### Closing the Self-Reinforcing Cycle (P5)

Of course, the aforementioned institutional drivers of CSR are not the only social structures and processes driving up the demand for shares in companies that are widely perceived as “socially responsible.” There may also be amplifying feedback effects emanating from the upward price trends expressed in P4 (Shiller, 1990). Past price increases of stocks often give rise to word of mouth and media enthusiasm, which will attract new investors, who expect further price increases (Shiller, 2003). To apply this theory to CSR, many socially conscious investors may interpret the *past* evidence of stock price increases of high-CSR companies as (a) causal evidence of a CSR–price level effect and (b) predictive of *future* price increases. Though both types of perceptions are likely to be cognitive heuristics and misattributions consistent with behavioral finance (Daniel et al., 1998; Shiller, 2003), they lead to the expectation that price bubbles of socially responsible firms will emerge—until an ultimate trend reversal corrects these misperceptions. In the short run, when CSR-promoting social and market forces lead to price increases of

high-CSR stocks, sophisticated investors and noise traders may jump on the CSR bandwagon in short-horizon trading and thus drive up the share prices of socially responsible firms even further.

In turn, organizational incentive schemes may motivate firms’ increased spending on CSR. Business executives, rewarded with stock and stock options, can be expected to pursue firm actions that are expected to drive up stock prices (Benmelech, Kandel, & Veronesi, 2010; Stein, 1989). So, if executives believe that CSR is one such mechanism that can boost their company’s stock price in the short run, or at least prevent a downward slide, they will continue to engage in CSR. These strategic-instrumental decisions, which close the feedback loop of the model, will further reinforce rather than diminish the unanticipated consequences of CSR as described before (P2 through P4).

### THE IMPLICATIONS OF THESE UNINTENDED CONSEQUENCES OF CSR

When the assumptions of behavioral finance (e.g., Akerlof & Shiller, 2009; Shefrin, 2000; Shiller, 2005; Shleifer, 2000; Thaler, 1993, 2005) are applied to the growing literature on CSR, the theoretical and practical implications are profound. CSR, an ostensibly benign and socially beneficial activity at one level of analysis, might have unintended consequences in the long run and at a higher (market) level of analysis. According to the thought experiment presented herein, more CSR is expected to increase stock market volatility when, under the assumption of inefficient capital markets, stock prices no longer reflect fundamental economic values.

In this context, it is important to emphasize that this paper merely introduced a thought experiment based on an increasingly influential perspective, namely behavioral finance and economics. If, contrary to the model depicted in Figure 1, markets are really populated by rational utility maximizers, and market prices are assumed to reflect the best rational judgment based on all available information at all times (Fama, 1970, 1991), there is really no need to raise critical questions about CSR or any other noise-generating action by corporations or other market participants. Under assumptions of market efficiency and rationality, stock markets are exact and impersonal “weighing machines” reflecting the utility calculations of rational investors (Graham & Dodd, 2009, p. 70). If market prices were assumed to reflect rational expectations and, thus,

fundamental values at almost all times, it would be absurd to invoke such notions as excess volatility, excess market valuations, or mispricing (Flood & Hodrick, 1990). In contrast to market efficiency assumptions (still prevalent in many organization and management theories), this paper presumed that “the market is a *voting machine*, whereon countless individuals register choices which are the product partly of reason and partly of emotion” (Graham & Dodd, 2009, p. 70).

If the conditions described in this paper do in fact apply, public policy in general ought to aim at reducing at least some of the noise generated by CSR market signals. The model introduced in this paper suggests that there are two main pathways for reducing noise in CSR: first by strengthening the connection between CSR and financial performance (P1a), and second by reducing the amount of asymmetrical information about CSR (P1b). Let’s address these solutions and implications in turn.

One way of correcting the problem discussed herein is for companies and other market participants to strive toward ever tighter linkages between CSR and a firm’s economic performance. However, several researchers in this area insist that many issues that fall under CSR matter regardless of their economic implications (e.g., Marcus & Fremeth, 2009). Some even assert that the quest to detect the economic linkages or implications of CSR is intellectually misguided (e.g., Gond & Crane, 2010; Margolis & Walsh, 2001). In contrast, my argument supports Siegel’s (2009) emphasis on the practical importance of always assessing the economic and strategic consequences of CSR. When managers are unable to estimate, or do not care about, the economic impact of any particular CSR initiative on their own firm, they will, according to my model, only increase market noise by increasing CSR. This increase in noise will happen because, as argued before, there is nothing inherent in CSR that either reduces firm costs or increases firm revenues.

The second pathway for reducing some of the market noise created by CSR is through the growing reliance on independent CSR measures that are constructed by third parties. For example, each year *Fortune* magazine compiles a list of “Best Companies to Work For,” based on employee surveys and the Great Place to Work<sup>®</sup> Institute’s own independent evaluations. Methodological concerns about the construct validity and reliability of the *Fortune* database notwithstanding (see, e.g., Brown & Perry, 1994; Orlitzky & Swanson, 2012; Wood, 1995), this particular example of a dataset has the

advantage of giving a relatively unbiased assessment of a company’s CSR and, thus, being less prone to manipulation. Given the rigor and quality of particular study designs and analytic approaches, these independent data can provide important evidence on the benefits of CSR (Edmans, 2011, 2012). The current literature already mentions independent rating agencies as a mechanism that reduces information asymmetry (e.g., Chatterji & Toffel, 2010; Doh et al., 2010). Yet, if the independence of rating agencies itself is in doubt (see also Déjean, Gond, & Leca, 2004; Entine, 2003; Hill, 2004; Partnoy, 1999), the importance and difficulty of monitoring the monitors of market information also come into sharper relief. In short, “independent” verification may not be a fail-safe mechanism to counteract the noise-generating characteristics of CSR.<sup>8</sup>

## CONCLUSIONS

In the wake of the global financial crisis, many social entrepreneurs have been calling for a shift in emphasis from economic value to social value (see, e.g., Battilana, Leca, & Boxenbaum, 2009; Dacin, Dacin, & Matear, 2010). At the same time, the old caveats about CSR (e.g., Davis, 1973; Friedman, 1970; Levitt, 1958) have largely been forgotten. Yet this paper implies that the envisioned social and institutional shift toward ever-increasing levels of CSR may (be one among, of course, many other forces to) destabilize financial markets. Rather than serving as an effective private governance mechanism, CSR may in fact make capital markets more volatile because it amplifies noise in stock markets. Insofar as excess market volatility and excess market valuations are undesirable, any source of market noise warrants closer scrutiny—particularly if the source looks as benign as CSR. Unfortunately, as an old proverb suggests, the road to ruin is often paved with good intentions.

## REFERENCES

- Acemoglu, D., & Angrist, J. D. (2001). Consequences of employment protection? The case of the Americans with Disabilities Act. *Journal of Political Economy*, 109(5), 915–957.

<sup>8</sup> Reducing the market noise generated by CSR will be especially difficult because of the inverse relationship (P1c) described before: When one noise-generating characteristic of CSR decreases the other tends to go up.

- Aguinis, H., & Glavas, A. (2012). What we know and don't know about corporate social responsibility: A review and research agenda. *Journal of Management*, 38(4), 932–968.
- Akerlof, G. A. (1970). The market for lemons: Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84, 488–500.
- Akerlof, G. A., & Shiller, R. J. (2009). *Animal spirits: How human psychology drives the economy, and why it matters for global capitalism*. Princeton, NJ: Princeton University Press.
- Araljies, D.-L. (2010). A social movement perspective on finance: How socially responsible investment mattered. *Journal of Business Ethics*, 92, 57–78.
- Austin, J. E. (2001). *Timberland and community involvement* (Case 9-796-156). Cambridge, MA: Harvard Business School.
- Austin, J. E., & Reavis, C. (2004). *Starbucks and Conservation International* (Case 9-303-055). Cambridge, MA: Harvard Business School.
- Baker, M., & Wurgler, J. (2007). Investor sentiment in the stock market. *Journal of Economic Perspectives*, 21(2), 129–151.
- Banerjee, S. (2007). *Corporate social responsibility: The good, the bad, and the ugly*. Northampton, MA: Edward Elgar.
- Bansal, P., & Clelland, I. (2004). Talking trash: Legitimacy, impression management, and unsystematic risk in the context of the natural environment. *Academy of Management Journal*, 47(1), 93–103.
- Barberis, N., Shleifer, A., & Vishny, R. W. (1998). A model of investor sentiment. *Journal of Financial Economics*, 49, 307–343.
- Barberis, N., & Thaler, R. H. (2003). A survey of behavioral finance. In R. H. Thaler (Ed.), *Advances in behavioral finance*, II (pp. 1–78). New York: Russell Sage Foundation.
- Barnett, M. L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of Management Review*, 32(3), 794–816.
- Barnett, M. L., & Salomon, R. M. (2006). Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal*, 27, 1101–1122.
- Baron, D. P. (2003). *Business and its environment* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Battilana, J., Leca, B., & Boxenbaum, E. (2009). How actors change institutions: Towards a theory of institutional entrepreneurship. *Academy of Management Annals*, 3, 65–107.
- Benmelech, E., Kandel, E., & Veronesi, P. (2010). Stock-based compensation and CEO (dis)incentives. *Quarterly Journal of Economics*, 125(4), 1769–1820.
- Besley, T., & Burgess, R. (2004). Can labor regulation hinder economic performance? Evidence from India. *Quarterly Journal of Economics*, 119(1), 91–134.
- Black, F. (1986). Noise. *Journal of Finance*, 41, 529–543.
- Blanchard, K. H., & Barrett, C. (2010). *Lead with LUV: A different way to create real success*. Upper Saddle River, NJ: FTPress.
- Brown, B., & Perry, S. (1994). Removing the financial performance halo from Fortune's "Most Admired Companies." *Academy of Management Journal*, 37(5), 1346–1359.
- Brown, G. W. (1999). Volatility, sentiment, and noise traders. *Financial Analysts' Journal*, 55(2), 82–90.
- Brunnermeier, M. K. (2001). *Asset pricing under asymmetric information: Bubbles, crashes, technical analysis, and herding*. New York: Oxford University Press.
- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3), 946–967.
- Carroll, A. B. (2008). A history of corporate social responsibility: Concepts and practices. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. S. Siegel (Eds.), *The Oxford handbook of corporate social responsibility* (pp. 19–46). Oxford, UK: Oxford University Press.
- Cassidy, J. (2009). *How markets fail: The logic of economic calamities*. New York: Farrar, Straus and Giroux.
- Chatterji, A. K., & Levine, D. (2006). Breaking down the wall of codes: Evaluating non-financial performance measurement. *California Management Review*, 48(2), 29–51.
- Chatterji, A. K., Levine, D., & Toffel, M. W. (2009). How well do social ratings actually measure corporate social responsibility? *Journal of Economics and Management Strategy*, 18(1), 125–169.
- Chatterji, A. K., & Toffel, M. W. (2010). How firms respond to being rated. *Strategic Management Journal*, 31, 917–945.
- Cho, C. H., Guidry, R. P., Hageman, A. M., & Patten, D. M. (2012). Do actions speak louder than words? An empirical investigation of corporate environmental reputation. *Accounting, Organizations and Society*, 37, 14–25.
- Connors, R. J. (Ed.). (2010). *Warren Buffett on business: Principles from the sage of Omaha*. Hoboken, NJ: Wiley.
- Crane, A., McWilliams, A., Matten, D., Moon, J., & Siegel,



- D. (2008). The corporate social responsibility agenda. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of corporate social responsibility* (pp. 3–15). Oxford, UK: Oxford University Press.
- Crouch, C. (2006). Modeling the firm in its market and organizational environment: Methodologies for studying corporate social responsibility. *Organization Studies*, 27, 1533–1551.
- Dacin, P. A., Dacin, M. T., & Matear, M. (2010). Social entrepreneurship: Why we don't need a new theory and how we move forward from here. *Academy of Management Perspectives*, 24(3), 37–57.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15, 1–13.
- Daniel, K. D., Hirshleifer, D., & Subrahmanyam, A. (1998). Investor psychology and security market under- and overreaction. *Journal of Finance*, 53(6), 1839–1885.
- Davis, K. (1973). The case for and against business assumptions of social responsibilities. *Academy of Management Journal*, 16(2), 312–317.
- De Long, J. B., Shleifer, A., Summers, L. H., & Waldmann, R. J. (1990). Noise trader risk in financial markets. *Journal of Political Economy*, 98(4), 703–738.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13(1), 1–36.
- Déjean, F., Gond, J.-P., & Leca, B. (2004). Measuring the unmeasured: An institutional entrepreneur strategy in an emerging industry. *Human Relations*, 57(6), 741–764.
- Denend, L., & Plambeck, E. (2007). *Wal-Mart's sustainability strategy (Case OIT-71)*. Stanford, CA: Stanford Graduate School of Business.
- Devinney, T. M. (2009). Is the socially responsible corporation a myth? The good, bad and ugly of corporate social responsibility. *Academy of Management Perspectives*, 23(2), 44–56.
- Doh, J. P., Howton, S. D., Howton, S. W., & Siegel, D. S. (2010). Does the market respond to an endorsement of social responsibility? The role of institutions, information, and legitimacy. *Journal of Management*, 36(6), 1461–1485.
- Drucker, P. F. (1976). *The unseen revolution: How pension fund socialism came to America*. New York: Harper & Row.
- Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics*, 101(3), 621–640.
- Edmans, A. (2012). The link between job satisfaction and firm value, with implications for corporate social responsibility. *Academy of Management Perspectives*, 26(4), 1–19.
- Edmans, A., Garcia, D., & Norli, O. (2007). Sports sentiment and stock returns. *Journal of Finance*, 62(4), 1967–1998.
- Edwards, M. (2008). *Small change: Why business won't save the world*. San Francisco: Berrett-Koehler.
- Entine, J. (2003). The myth of social investing: A critique of its practices and consequences for corporate social performance research. *Organization and Environment*, 16(3), 352–368.
- Fama, E. F. (1965). The behavior of stock market prices. *Journal of Business*, 38, 34–106.
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, 25(2), 383–417.
- Fama, E. F. (1991). Efficient capital markets: II. *Journal of Finance*, 46(5), 1575–1617.
- Fama, E. F. (1998). Market efficiency, long-term returns, and behavioral finance. *Journal of Financial Economics*, 49, 283–306.
- Flood, R., & Hodrick, R. (1990). On testing for speculative bubbles. *Journal of Economic Perspectives*, 4(2), 85–101.
- Foucault, T., Sraer, D., & Thiesmar, D. J. (2011). Individual investors and volatility. *Journal of Finance*, 66(4), 1369–1406.
- Fox, J. (2009). *The myth of the rational market: A history of risk, reward, and delusion on Wall Street*. New York: HarperBusiness.
- Frederick, W. C. (2006). Corporation, be good! The story of corporate social responsibility. Indianapolis, IN: Dog Ear Publishing.
- French, K. R., & Roll, R. (1986). Stock return variances: The arrival of information and the reaction of traders. *Journal of Financial Economics*, 17, 5–26.
- Friedman, M. (1953). *Essays in positive economics*. Chicago: University of Chicago Press.
- Friedman, M. (1962). *Capitalism and freedom*. Chicago: University of Chicago Press.
- Friedman, M. (1970, September 13). The social responsibility of business is to increase its profits. *New York Times Magazine*, 33.
- Ghemawat, P. (2006). Business, society, and the “Wal-Mart effect”. *Academy of Management Perspectives*, 20(3), 41–43.


- Giddens, A. (1984). *The constitution of society*. Berkeley, CA: University of Berkeley Publishing Group.
- Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. *Academy of Management Review*, 30(4), 777–798.
- Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. *Strategic Management Journal*, 30, 425–445.
- Gond, J.-P., & Crane, A. (2010). Corporate social performance disoriented: Saving the lost paradigm? *Business and Society*, 49(4), 677–703.
- Graham, B., & Dodd, D. L. (2009). *Security analysis: Principles and technique* (6th ed.). New York: McGraw-Hill.
- Gray, W. B. (1987). The cost of regulation: OSHA, EPA and the productivity slowdown. *American Economic Review*, 77(5), 998–1006.
- Griffin, J. J., & Mahon, J. F. (1997). The corporate social performance and corporate financial performance debate: Twenty-five years of incomparable research. *Business and Society*, 36(1), 5–31.
- Hardin, G. (1968). The tragedy of the commons. *Science*, 162, 1243–1248.
- Hawken, P. (2004). *Socially responsible investing: How the SRI industry has failed to respond to people who want to invest with conscience and what can be done about it*. Sausalito, CA: Natural Capital Institute.
- Hazlitt, H. (1952). *Economics in one lesson*. Irvington-on-Hudson, New York: Foundation for Economic Education.
- Heskett, J. L. (2003). *Southwest Airlines (2002): An industry under siege* (Case 9-803-133). Cambridge, MA: Harvard Business School.
- Hill, C. A. (2004). Regulating the rating agencies. *Wash.U.L.Q.*, 82(1), 43–94.
- Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal*, 22, 125–139.
- Hirshleifer, D., & Teoh, S. H. (2003). Herd behavior and cascading in capital markets: A review and synthesis. *European Financial Management*, 9(1), 25–66.
- Hoffman, A. J. (1999). Institutional evolution and change: Environmentalism and the U.S. chemical industry. *Academy of Management Journal*, 42, 351–371.
- Hoskisson, R. E., Castleton, M. W., & Withers, M. C. (2009). Complementarity in monitoring and bonding: More intense monitoring leads to higher executive compensation. *Academy of Management Perspectives*, 23(2), 57–74.
- Hosmer, L. T. (1995). Trust: The connecting link between organizational theory and philosophical ethics. *Academy of Management Review*, 20, 379–403.
- Jensen, M. C. (1994). Self-interest, altruism, incentives, and agency theory. *Journal of Applied Corporate Finance*, 7, 40–45.
- Jensen, M. C. (2002). Value maximization, stakeholder theory, and the corporate objective function. *Business Ethics Quarterly*, 12(2), 235–256.
- Jones, S. (2011). Does the capitalization of intangible assets increase the predictability of corporate failure? *Accounting Horizons*, 25(1), 41–70.
- Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review*, 20(2), 404–437.
- Kahneman, D. (2003). A psychological perspective on economics. *American Economic Review*, 93(2), 162–168.
- Kahneman, D., Slovic, P., & Tversky, A. (1982). *Judgment under uncertainty: Heuristics and biases*. New York: Cambridge University Press.
- Kanodia, C., Sapra, H., & Venugopalan, R. (2004). Should intangibles be measured: What are the economic trade-offs? *Journal of Accounting Research*, 42(1), 89–120.
- Kepes, S., & McDaniel, M. A. (in press). How trustworthy is the scientific literature in I–O psychology? *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 6(3).
- King, B. G., & Soule, S. A. (2007). Social movements as extra-institutional entrepreneurs: The effect of protests on stock price returns. *Administrative Science Quarterly*, 52, 413–442.
- Kolk, A. (2008). Sustainability, accountability and corporate governance: Exploring multinationals' reporting practices. *Business Strategy and the Environment*, 18, 1–15.
- Kurtz, L. (2005). Answers to four questions. *Journal of Investing*, 14(3), 125–139.
- Kurtz, L. (2008). Socially responsible investment and shareholder activism. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. S. Siegel (Eds.), *The Oxford handbook of corporate social responsibility* (pp. 249–280). Oxford, UK: Oxford University Press.
- Kurucz, E. C., Colbert, B. A., & Wheeler, D. (2008). The business case for corporate social responsibility. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of corporate social responsibility* (pp. 83–112). Oxford, UK: Oxford University Press.

- Kyle, A. S. (1985). Continuous auctions and insider trading. *Econometrica*, *53*, 1315–1335.
- Laffont, J.-J. (1985). On the welfare analysis of rational expectations equilibria with asymmetric information. *Econometrica*, *53*, 1–29.
- Laufer, W. S. (2003). Social accountability and corporate greenwashing. *Journal of Business Ethics*, *43*(3), 253–261.
- Leland, H. E., & Pyle, D. H. (1977). Informational asymmetries, financial structure, and financial intermediation. *Journal of Finance*, *32*(2), 371–387.
- Levitt, T. (1958). The dangers of social responsibility. *Harvard Business Review*, *36*(5), 38–44.
- Mackey, A., Mackey, T. B., & Barney, J. B. (2007). Corporate social responsibility and firm performance: Investor preferences and corporate strategies. *Academy of Management Review*, *32*(3), 817–835.
- Mahon, J. F. (2002). Corporate reputation: A research agenda using strategy and stakeholder literature. *Business and Society*, *41*(4), 415–445.
- Marcus, A. A., & Fremeth, A. R. (2009). Green management matters regardless. *Academy of Management Perspectives*, *23*(3), 17–26.
- Margolis, J. D., & Walsh, J. P. (2001). *People and profits? The search for a link between a company's social and financial performance*. Mahwah, NJ: Erlbaum.
- Matten, D., & Moon, J. (2008). Implicit and explicit CSR: A conceptual framework for understanding CSR in Europe. *Academy of Management Review*, *33*(2), 404–424.
- McClintock Ekins, E., & Calabria, M. A. (2012). *Regulation, market structure, and role of the credit rating agencies* (Policy Analysis No. 704). Washington, DC: Cato Institute.
- McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988). Corporate social responsibility and firm financial performance. *Academy of Management Journal*, *31*, 854–872.
- McWilliams, A., & Siegel, D. (2000). Corporate social responsibility and financial performance: Correlation or misspecification? *Strategic Management Journal*, *21*, 603–609.
- McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, *26*(1), 117–127.
- McWilliams, A., Siegel, D., & Teoh, S. H. (1999). Issues in the use of event study methodology: A critical analysis of corporate social responsibility studies. *Organizational Research Methods*, *2*(4), 340–365.
- McWilliams, A., Siegel, D. S., & Wright, P. M. (2006). Corporate social responsibility: Strategic implications. *Journal of Management Studies*, *43*, 1–18.
- Merton, R. K. (1936). The unanticipated consequences of purposive social action. *American Sociological Review*, *1*(6), 894–904.
- Munk, N. (1999, April 12). How Levi's trashed a great American brand. *Fortune*, *139*, 82–89.
- Nohria, N., Piper, T., & Gurtler, B. (2006). *Malden Mills (A) and (B)*. Cambridge, MA: Harvard Business School.
- Norman, W., & MacDonald, C. (2004). Getting to the bottom of "triple bottom line." *Business Ethics Quarterly*, *14*(2), 243–262.
- O'Reilly, C. A., & Pfeffer, J. (2006). *Southwest Airlines (A)*. Cambridge, MA: Stanford Graduate School of Business, Case HR-1A.
- Orlitzky, M. (2008). Corporate social performance and financial performance: A research synthesis. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of CSR* (pp. 113–134). Oxford, UK: Oxford University Press.
- Orlitzky, M. (2011). Institutional logics in the study of organizations: The social construction of the relationship between corporate social and financial performance. *Business Ethics Quarterly*, *21*(3), 409–444.
- Orlitzky, M. (2012). How can significance tests be deinstitutionalized? *Organizational Research Methods*, *15*(2), 199–228.
- Orlitzky, M., & Benjamin, J. D. (2001). Corporate social performance and firm risk: A meta-analytic review. *Business and Society*, *40*(4), 369–396.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, *24*(3), 403–441.
- Orlitzky, M., Siegel, D. S., & Waldman, D. A. (2011). Strategic corporate social responsibility and environmental sustainability. *Business and Society*, *50*(1), 6–27.
- Orlitzky, M., & Swanson, D. L. (2008). *Toward integrative corporate citizenship: Research advances in corporate social performance*. London: Palgrave Macmillan.
- Orlitzky, M., & Swanson, D. L. (2012). Assessing stakeholder satisfaction: Toward a supplemental measure of corporate social performance as reputation. *Corporate Reputation Review*, *15*(2), 119–137.
- Owen, D. L., & O'Dwyer, B. (2008). Corporate social responsibility: The reporting and assurance dimension. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of corporate social responsibility* (pp. 384–409). Oxford, UK: Oxford University Press.



- Partnoy, F. (1999). The Siskel and Ebert of financial markets: Two thumbs down for the credit rating agencies. *Wash.U.L.Q.*, 77, 619–712.
- Porter, M. E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78–92.
- Potter, A. (2010). *The authenticity hoax: How we got lost finding ourselves*. New York: HarperCollins.
- Renneboog, L., Horst, J. T., & Zhang, C. (2008). Socially responsible investments: Institutional aspects, performance, and investor behavior. *Journal of Banking and Finance*, 28, 1723–1742.
- Richardson, B. J. (2009). Keeping ethical investment ethical: Regulatory issues for investing for sustainability. *Journal of Business Ethics*, 87, 555–572.
- Rodriguez, P., Siegel, D. S., Hillman, A. J., & Eden, L. (2006). Three lenses on the multinational enterprise: Politics, corruption, and corporate social responsibility. *Journal of International Business Studies*, 37, 733–746.
- Roll, R. (1984). Orange juice and weather. *American Economic Review*, 74, 861–880.
- Sandberg, J., Juravle, C., Hedesstrom, T. M., & Hamilton, I. (2009). The heterogeneity of socially responsible investment. *Journal of Business Ethics*, 87, 519–533.
- Schuler, D. A., & Cording, M. (2006). A corporate social performance–corporate financial performance behavioral model for consumers. *Academy of Management Review*, 31(3), 540–558.
- Shefrin, H. (2000). *Beyond greed and fear: Understanding behavioral finance and the psychology of investing*. Boston: Harvard Business School Press.
- Shiller, R. J. (1981). Do stock prices move too much to be justified by subsequent changes in dividends? *American Economic Review*, 71(3), 421–436.
- Shiller, R. J. (1984). Stock prices and social dynamics. *Brookings Papers on Economic Activity*, 2, 457–510.
- Shiller, R. J. (1990). Market volatility and investor behavior. *American Economic Review*, 80(2), 58–62.
- Shiller, R. J. (2003). From efficient markets theory to behavioral finance. *Journal of Economic Perspectives*, 17(1), 83–104.
- Shiller, R. J. (2005). *Irrational exuberance* (2nd ed.). Princeton, NJ: Princeton University Press.
- Shleifer, A. (2000). *Inefficient markets: An introduction to behavioral finance*. Oxford, UK: Oxford University Press.
- Shleifer, A. (2004). Does competition destroy ethical behavior? *American Economic Review*, 94(2), 414–418.
- Shleifer, A., & Vishny, R. W. (1997). The limits of arbitrage. *Journal of Finance*, 52(1), 35–55.
- Shleifer, A., & Vishny, R. W. (1998). *The grabbing hand: Government pathologies and their cures*. Cambridge, MA: Harvard University Press.
- Siegel, D. S. (2009). Green management matters only if it yields more green: An economic/strategic perspective. *Academy of Management Perspectives*, 23(3), 5–16.
- Social Investment Forum. (2007). *2007 report on socially responsible investing trends in the United States*. Washington, DC: Social Investment Forum.
- Social Investment Forum. (2010). *2010 report on socially responsible investing trends in the United States*. Washington, DC: Social Investment Forum.
- Spence, M. (1974). *Market signaling: Informational transfer in hiring and screening processes*. Cambridge, MA: Harvard University Press.
- Sprinkle, G. B., & Maines, L. A. (2010). The benefits and costs of corporate social responsibility. *Business Horizons*, 53, 445–453.
- Statman, M. (2005). The religions of social responsibility. *Journal of Investing*, 14(3), 14–22.
- Statman, M., & Glushkov, D. (2009). The wages of social responsibility. *Financial Analysts' Journal*, 65(4), 33–46.
- Stein, J. C. (1989). Efficient capital markets, inefficient firms: A model of myopic corporate behavior. *Quarterly Journal of Economics*, 104(4), 655–669.
- Strike, V. M., Gao, J., & Bansal, P. (2006). Being good while being bad: Social responsibility and the international diversification of US firms. *Journal of International Business Studies*, 37, 850–862.
- Summers, L. H. (1986). Does the stock market rationally reflect fundamental values? *Journal of Finance*, 41(3), 591–601.
- Tetlock, P. C. (2007). Giving content to investor sentiment: The role of media in the stock market. *Journal of Finance*, 62(3), 1139–1168.
- Thaler, R. H. (Ed.). (1993). *Advances in behavioral finance*. New York: Russell Sage Foundation.
- Thaler, R. H. (2000). From homo economicus to homo sapiens. *Journal of Economic Perspectives*, 14(1), 133–141.
- Thaler, R. H. (Ed.). (2005). *Advances in behavioral finance*, II. Princeton, NJ: Princeton University Press/Russell Sage Foundation.
- Thornton, R. (2008). Ethical investments: A case of disjointed thinking. *Cambridge Law Journal*, 67(2), 396–422.
- Turban, D. B., & Greening, D. W. (1996). Corporate social



- performance and organizational attractiveness to prospective employees. *Academy of Management Journal*, 40(3), 658–672.
- Ullmann, A. (1985). Data in search of a theory: A critical examination of the relationship among social performance, social disclosure, and economic performance. *Academy of Management Review*, 10, 540–577.
- Vogel, D. (2005). *The market for virtue: The potential and limits of corporate social responsibility*. Washington, DC: Brookings Institution Press.
- Waring, P., & Edwards, T. (2008). Socially responsible investment: Explaining its uneven development and human resource management consequences. *Corporate Governance*, 16(3), 135–145.
- Wible, J. R. (1982). Friedman's positive economics and philosophy of science. *Southern Economic Journal*, 49(2), 350–360.
- Windsor, D. (2001). "Corporate social responsibility: A theory of the firm perspective"—Some comments. *Academy of Management Review*, 26(4), 502–504.
- Wood, D. J. (1995). The *Fortune* database as a CSP measure. *Business and Society*, 34(2), 197–198.
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