

**Unpacking the Drivers of Corporate Social Performance:  
A Multilevel, Multistakeholder, and Multimethod Analysis**

**Abstract**

The question of what drives corporate social performance (CSP) has become a vital concern for many managers and researchers of large corporations. This study addresses this question by adopting a multilevel, multistakeholder, and multimethod approach to theorize and estimate the relative influence of macro (national business system and country), meso (industry), and micro (firm-level) factors on CSP. Applying three different methods of variance decomposition analysis to an international sample of 2,060 large public companies over a time span of 5 years, our results show that firm-level factors explain the largest proportion of variance in aggregate CSP as well as CSP oriented toward communities, the natural environment, and employees. These results support our hypotheses according to which CSP is *not* primarily driven by macrolevel or mesolevel factors, except for shareholder-oriented CSP, which is relatively more influenced by country-level factors. As a whole, our findings also point to the value of subdividing CSP into its stakeholder-specific components as this disaggregation allows for a more careful examination of distinct drivers of distinct aspects of CSP.

**Keywords:** Corporate social performance; corporate social responsibility; decomposition of variance; hierarchical linear modeling; stakeholders; variance components analysis.

**Abbreviations:** ANOVA = analysis of variance; CSP = corporate social performance; HLM = hierarchical linear modeling; MLE = maximum likelihood estimation; NBS = national business system; REMLE = restricted maximum likelihood estimation; VCA = variance components analysis.

## **Unpacking the Drivers of Corporate Social Performance: A Multilevel, Multistakeholder, and Multimethod Analysis**

As researchers have established the managerial relevance of corporate social responsibility (e.g., Aguinis & Glavas, 2012; Porter & Kramer, 2011), the study of the factors that drive corporate social performance has become a key concern in business ethics (Brower & Mahajan, 2013; Crilly, 2011; Ioannou & Serafeim, 2012).<sup>1</sup> Corporate social performance (CSP) can be defined as the measurement of organizational outcomes in the environmental, social, and governance (ESG) domains with respect to multiple stakeholders, such as employees, local communities, or shareholders (Chen & Delmas, 2011; Clarkson, 1995; Orlitzky, Schmidt, & Rynes, 2003). Scholars have theorized multiple drivers of CSP at industry, country, and national business system levels (Aguilera, Rupp, Williams, & Ganapathi, 2007; Campbell, 2007; Matten & Moon, 2008), and prior empirical research attempted to clarify whether and how these macro-level drivers may interact with specific firm-level drivers of CSP (Brower & Mahajan, 2013; Crilly, 2011; Udayasankar, 2008).

Missing from this research stream are two important considerations. First, although prior research has established that CSP drivers operate at the firm, industry, country, or national business systems (NBS) levels of analysis, surprisingly little is known about the *relative* influence of these factors (Aguilera et al., 2007) as well as the influence of time as a potential driver of CSP. These omissions are detrimental to knowledge about how CSP can become more strategic and, thus, more conducive to higher corporate financial performance (Orlitzky, Siegel, & Waldman, 2011; Porter & Kramer, 2006) as well as other important organizational outcomes across multiple levels and over time (Aguinis & Glavas, 2012). At the same time, these knowledge gaps limit managers' understanding of CSP priorities (Smith, 2003), especially in corporations that operate across multiple industries, countries, or national

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<sup>1</sup> Strictly speaking, *corporate social responsibility* differs from *corporate social performance* (CSP). However, following previous arguments by Barnett (2007) and Baird and his colleagues (2012), we prefer CSP for expositional purposes in this empirical study.

business systems.

Second, despite the centrality of a stakeholder perspective in the theoretical analysis of CSP (Carroll, 1991; Clarkson, 1995; Freeman, Harrison, & Wicks, 2007), prior empirical examinations of CSP drivers rarely made distinctions between the different stakeholder groups. Rather, empirical investigations focused on CSP breadth (Brower & Mahajan, 2013), examined only aggregate proxies of CSP (e.g., Surroca, Tribo, & Waddock, 2010), or did not separately study the different stakeholder foci in CSP (e.g., Ioannou & Serafeim, 2012). As a result, our current knowledge of the relative influence of the factors that drive CSP across different stakeholder dimensions remains rather limited.

This study starts addressing these two important limitations. In regard to the first limitation, our analysis can be considered exploratory as there is at present no theory that would explain or specify the *extent* to which the different drivers affect CSP (let alone its stakeholder dimensions). This means that, like seminal studies taking a similar analytic approach in strategic management—with a different outcome variable (e.g., Rumelt, 1991), our study focuses on the magnitude of effect sizes.<sup>2</sup> In general, such a descriptive focus on the magnitude of effect sizes has been recommended as methodological best practice (e.g., Cumming, 2012; Hunter, 1997; Kline, 2004; Orlitzky, 2012; Schmidt, 1992). However, most researchers currently eschew such an emphasis on effect size magnitude in favor of the binary outcomes of null-hypothesis significance tests (Schmidt, 1996; Ziliak & McCloskey, 2008).

In regard to the second limitation, we rely in this study on disaggregated, stakeholder-focused measures of CSP not only to be consistent with prior theorizing (e.g., Clarkson, 1995; Hillman & Keim, 2001), but also to make the findings more operationally meaningful for managerial practice, as prior studies have shown that managers and employees perceive CSP mainly through a stakeholder lens (El-Akreimi, Gond, Swaen, De Roeck, & Igalens, in press;

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<sup>2</sup> The outcome variable of choice is profitability in strategic management where largely descriptive studies such as ours have, for 20 years, been aimed at explaining variance in firm profitability.

Lucea, 2010; Turker, 2009). More specifically, the present study presents analyses for these six stakeholder groups separately: customers, local communities, shareholders, suppliers, the natural environment, and employees.

In shedding light on the relative importance of CSP drivers across multiple levels of analysis and for multiple stakeholder groups through the application of various methods, this study contributes to the literature in three major ways. First, this study advances stakeholder theory by showing that the relative influence of CSP determinants varies according to the stakeholder group considered. Our findings show that the firm level accounts for a lot of variability in CSP focused on local communities, the natural environment, and employees, whereas macro-level drivers seem more important for shareholder-focused CSP. Second, we address recurrent calls for multilevel analyses (e.g., Aguilera et al., 2007; Aguinis & Glavas, 2012) in comparing and contrasting the relative importance of three levels of possible sources of organizations' variance in CSP: (a) national business systems (country); (b) industry; (c) firm. We also add to this perspective by considering time (year) as a fourth level, a dimension that has often been neglected in prior CSP analyses (Griffin & Mahon, 1997). Overall, our findings point to the primacy of firm-level CSP drivers, but also demonstrate the importance of higher levels of analysis by showing that national and supranational factors may, to some extent, affect *specific stakeholder* components of CSP. Finally, we compare and contrast the findings of three analytic techniques (analysis of variance, variance components analysis, and hierarchical linear modeling). As far as we know, this is the first multilevel analysis of CSP to compare the effect sizes calculated by each of these techniques across levels of analysis. So, similar to Hough's (2006) study design for return on assets, this study adopts a multimethod perspective.

In the following section, we describe the theoretical background of this study and present three hypotheses regarding the importance of levels of analysis for CSP. To develop these

hypotheses, we draw on insights from economics, management, and comparative sociology as well as the empirical and theoretical CSP literature. We then test our hypotheses using the SiRi dataset, which allows for the disaggregation of CSP by stakeholder domain. The third section introduces our methods as well as our sample, measures, and sources of data. The fourth section of the paper presents our analyses and results. Finally, we discuss the implications of our findings for theory and practice as well as the limitations of the study and potential future research directions.

### **A Multilevel Perspective on Corporate Social Performance**

#### **Macrolevel: Country and National Business Systems Factors**

Variations in organizational adoption and implementation of CSP can be explained by a wide range of factors operating at different levels of analysis. First, social macrostructures have often been emphasized as key determinants of CSP (e.g., Aguilera et al., 2007; Matten & Moon, 2008). These macrolevel institutions, or national business systems (NBS), capture institutional nation-state differences in firms' macroenvironments (Morgan, 2007), which in turn have been found to affect firm decisions, for example in the automobile industry (Biggart & Guillén, 1999). Applied to CSP, distinct national policy frameworks that encourage social and/or environmental initiatives may affect organizations' decisions (Spence, 2007; Tantalo & Willi, 2012). Accordingly, the country level and the NBS level have both been theorized as likely to explain part of the CSP variation across firms.

#### **Mesolevel: Industry Factors**

Industry forces have also been proposed as constraints on, or enablers of, CSP (Baird et al., 2012; Hull & Rothenberg, 2008; Orlitzky & Shen, 2013). For example, in industries that experience economic downturns, discretionary CSP expenditures may be one of the first corporate spending cuts (Campbell, 2007). Conversely, in highly unionized industry environments, labor unions may put a lot of pressure on companies to increase the level of

CSP exhibited toward workers and insist on the enforcement of “fair trade” standards, which may create trade barriers in a quest to protect blue-collar workers’ jobs from possibly less expensive imports (Ederington & Minier, 2003; McWilliams, Van Fleet, & Cory, 2002).

Hence, mesolevel industry factors are also expected to influence CSP variance across firms.

### **Microlevel: Firm-level Factors**

Several authors also theorized that CSP may primarily be determined by firm-level actions and variables (e.g., McWilliams & Siegel, 2001; Udayasankar, 2008). Often, organization-level factors constrain firms’ spending on CSP. For example, organizational efforts to increase CSP may increase transaction and other costs (King, 2007), such as organizational expenditures associated with identifying partners or stakeholders to be targeted by CSP, negotiating with these partners or stakeholders, and monitoring and enforcing compliance (e.g., monitoring of suppliers’ compliance with sustainability programs or workplace safety). So, because of the inherent costliness of genuine CSP (Friedman, 1970; Orlitzky, 2013; Windsor, 2001), an important precondition for high CSP is the availability of slack resources (McGuire, Sundgren, & Schneeweis, 1988; Orlitzky et al., 2003; Waddock & Graves, 1997). In addition, CSP may be constrained by customers’ reluctance to pay a premium for a firm’s socially responsible products (Bhattacharya & Sen, 2004; Frazier, 2007) or investors’ unwillingness to punish irresponsible companies or reward responsible ones (Rivoli, 2003).

### **The Relative Influence of Factors across Levels**

Although prior theory clearly suggests that each of these three levels of analysis (NBS/country, industry, and firm) matters, no empirical evidence has provided numerical estimates of these factors’ *relative* weights and *simultaneous* impact. In addition, the time dimension has often been neglected in prior studies of CSP (Griffin & Mahon, 1997). Rather than constituting a time-invariant outcome of deterministic firm-, industry-, or country-level

influences, CSP may instead represent a highly time-contingent or transient decision process (e.g., Wang & Choi, 2013). For example, recessions may severely limit the level of funding available for discretionary social and environmental initiatives as well as determine the strategic benefits of CSP (Campbell, 2007; Lee, Singal, & Kang, 2013; McWilliams & Siegel, 2001). Coding for year captures this time dimension in the same way as coding for firms captures all the different firm-level variables that may affect CSP across all years of our time period (Rumelt, 1991, p. 173). Hence, our overarching research question is aimed at addressing these multilevel issues. Our overall analytic approach, which is summarized in Figure 1, can be stated as follows:

*Research Question: To what extent do (1) country-level, (2) industry-level, (3) corporate-level factors, and (4) time account for the variability of different types of corporate social performance?*

(Insert Figure 1 about here.)

Hence, the focus of the present study is on the *relative* empirical importance of factors at different levels of analysis—a question that cannot be answered from the conventionally sizeless and binary hypothesis-testing perspective in the social sciences (Kline, 2004; Orlitzky, 2012; Schmidt, 1996; Ziliak & McCloskey, 2008). The research question implies that our perspective is not only descriptive, but also exploratory because so far no theory has emerged that would specify the magnitude of effect sizes with respect to the different sources of variability in CSP. Nonetheless, with theoretical guidance from the extant literature, our study also goes beyond this descriptive perspective by testing three more specific hypotheses as well as a methodological proposition.

### **Hypothesis Development**

Macrolevel forces undoubtedly influence CSP (Aguilera et al., 2007; Ioannou & Serafeim, 2012) by shaping the regulations and legal standards that exist in each domain of

CSP and hence homogenizing the playing field within which firms compete through CSP. However, these macroforces are not necessarily homogeneous across CSP stakeholder domains because the institutional norms regulating what is regarded as appropriate behavior vis-à-vis each stakeholder group vary nationally and globally (Hall & Soskice, 2001; Jackson & Deeg, 2008). We argue here that the effects from these higher levels of analysis will pale in comparison to the interfirm variance in CSP that can be attributed to the firm level, except in the domain of corporate governance where national legal factors tend to have a prominent influence (Jensen & Meckling, 1976; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000). Accordingly, we propose that the firm level is the main determinant of almost all stakeholder dimensions of CSP, except for shareholders (i.e., corporate governance practices). We now theorize further the reasons behind these differences.

### **The Predominance of Firm-Level Factors**

Several arguments suggest that firm-level factors may explain a greater proportion of interfirm variance in CSP relative to other levels. First, CSP is increasingly used strategically (McWilliams, Siegel, & Wright, 2006; Orlitzky et al., 2011) to differentiate the firm from its competitors. In such a strategic approach, firm-specific cost-benefit analyses can be assumed to take center stage (A. Mackey, Mackey, & Barney, 2007; McWilliams & Siegel, 2001). Let's first consider the cost side. Implementing CSP is costly because, from an economic perspective, high CSP reflects a firm voluntarily internalizing its externalities (Lyon & Maxwell, 2008). Externalities, defined as the results of market transactions that are not themselves embodied in such transactions (Coase, 1960; Crouch, 2006), are typically not fully reflected in prices and so lead to a divergence of private and social costs (Dahlman, 1979; Pigou, 1962). In other words, CSP refers to nonmarket actions by which firms take "ownership of the externalities they generate" (Crouch, 2006, p. 1534). In addition to the direct costs associated with CSP (see also Orlitzky, 2013), companies that are committed to

CSP also incur transaction costs (Macher & Richman, 2008), which apply not only to social/environmental partnerships, but also to the adoption of any CSP initiative more broadly (King, 2007). These additional costs incurred by organizations high in CSP explain why there is often no *short-term* strategic incentive for individual companies to increase CSP (Campbell, 2006), especially if intense market competition prevents such an organizational focus on social and environmental concerns (Doane, 2005; Reich, 2008; Shleifer, 2004; Vogel, 2005).

At the same time, economic rents are often appropriable<sup>3</sup> from CSP because, in the long run, transaction costs and uncertainty can sometimes be reduced by increasing CSP (Hosmer, 1995; Jones, 1995). When rents are appropriable by particular organizations with particular attributes, firm-level factors are expected to account for most CSP variability. This study is based on the assumption that profit-seeking economic actors will only make costly decisions if economic rents are anticipated as a result of those expenditures (Alvarez & Barney, 2004; Coase, 1937; A. Mackey et al., 2007; Schoemaker, 1990).

Second, arguably even more important in explaining variance of CSP at the firm level is the fact that, in order to be effective, CSP must be embedded in particular organizational cultures (Swanson, 2014). In creating the proper firm-specific conditions for meaningful, value-attuned CSP, the business executive's mindset becomes highly important: a mindset of value discovery transcends legal, economic, or social pressures and is able to "engage employees in the quest for social responsibility" (Swanson, 2014, p. 123). In turn, an organization's culture and climate, emphasizing either compliance or values (Collier & Esteban, 2007; Duarte, 2010), exerts a powerful influence over commitment and engagement of the entire workforce (Slack, Corlett, & Morris, in press). Other research suggests organizational culture is causally ambiguous, socially complex (Dierickx & Cool, 1989), path-dependent (Barney, 1991), and often difficult for rivals to imitate, particularly if it forms part

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<sup>3</sup> The key point here is that managers *anticipate* appropriate economic rents from increasing CSP—not that these economic rents are necessarily forthcoming. Hence, we refer to *appropriable* rents in this context.

of an organization's unique identity orientation in defining its relationships with stakeholders (Brickson, 2007). Therefore, only if social and environmental initiatives converge around a set of highly standardized, institutionalized, and therefore relatively homogeneous practices (Orlitzky, 2013) can we expect higher-level institutional drivers to outweigh the influence of idiosyncratic firm-level influences of CSP. Based on this theoretical reasoning, our overall expectation is that, for most aspects of CSP, firm-level factors account for most CSP variability because they either constitute firm-level economic constraints, predetermine the strategic/economic opportunities that can be anticipated from CSP, or are deeply, holistically, and intangibly embedded in each individual firm's unique DNA.

*H1: Most of the interfirm variability in CSP overall as well as its disaggregated stakeholder-oriented components is attributable to the micro (firm) level.*

### **The Prevalence of Macrolevel Factors for Shareholder-Oriented CSP**

Nonetheless, for the specific case of shareholder-oriented CSP, we expect variations in CSP to be explained more by macrolevel factors than firm-level factors. Three lines of argument back this hypothesis. First, in essence, good corporate governance involves organizations satisfying shareholders' informational, ownership, and other interests that have not been sanctioned by regulations or the law yet (Macey, 2008). For example, business executives and directors may decide to forgo pay in favor of organizational reinvestment of earnings, stock buybacks, or large dividend payments to shareholders. Often, prioritizing shareholders over other stakeholders (i.e., a strong focus on shareholder-oriented CSP, or corporate governance reforms) is triggered not so much by firm-specific events, but by higher-level motivations of stock market revitalization or the withdrawal of the state from economic activity (i.e., by a countrywide move away from corporatism) (R. E. Meyer & Höllerer, 2010). This is unsurprising as an enhanced focus on shareholders—or firm owners—is not necessarily in the best interest of entrenched managers, who make the

operational decisions about shareholder-oriented CSP. In contrast, improvements of many other aspects of CSP often have a direct influence on the attitudes and perceptions of customers or employees (Bhattacharya, Korschun, & Sen, 2009; El-Akremit et al., in press), which can be expected to enhance corporate reputations and thus performance (Fombrun, 2005). That is, when executives of large corporations can be assumed to be firmly entrenched, only macrolevel forces can be expected to affect differences in shareholder-oriented CSP. National governments and NBS may not only regulate or constrain, but also enable corporate actions that prioritize the firm owners' property rights (see also Campbell & Lindberg, 1990; Davis, 2005).

Second, financial theory strongly suggests that differences across countries largely account for differences in corporate actions in relation to shareholder management (Jensen & Meckling, 1976; La Porta et al., 2000). This literature stresses the importance for shareholder management of macrolevel factors, such as laws protecting shareholders from expropriation, as well as the effectiveness of the enforcement of these laws across countries (for an overview, see La Porta et al., 2000). For instance, Doidge, Karolyi, and Stulz (2007) found that country characteristics accounted for much more variance in firm-level governance ratings (ranging from 39% to 73%) than observable firm characteristics (ranging from 4% to 22%). If this logic of macrolevel dominance extends not only to core governance practices, but also more broadly to firms' management of their relationships with shareholders in the extrafinancial domain, we should expect macrolevel factors, and in particular country-level factors, to explain relatively more variation in shareholder-related CSP than in other CSP dimensions.

Third and finally, this expectation is also in line with managers' instrumental considerations. Although effective governance may ultimately lead to more satisfied shareholders, it is costly. For example, the organizational experience with the Sarbanes-Oxley

Act (2002) has shown that (a) governmental regulations may become necessary because opportunistic managers are exceedingly reluctant to implement voluntary governance reforms that benefit shareholders and (b) the costs of good corporate governance can be very high (Chhaochharia & Grinstein, 2007; Zhang, 2007). Other evidence indicates that these costs are unlikely to be counterbalanced by improved organizational performance. More specifically, meta-analytic evidence indicates that shareholder-oriented initiatives that are generally considered good corporate governance are unlikely to increase stock prices or internal efficiency (Dalton, Daily, Ellstrand, & Johnson, 1998). In this context we can assume that if large net economic benefits existed for shareholder-oriented CSP (which is focused on practices of good governance), market signals rather than government regulation would already have led to more substantial governance reforms. However, the lack of financial impact of many well-known attributes of “good” corporate governance (Dalton, Daily, Certo, & Roengpitya, 2003; Dalton et al., 1998), combined with the anticipation of high managerial costs associated with good governance (e.g., transfer of organizational funds and power from managers to owners), leads to the expectation of macrolevel (i.e., NBS or country-level) forces being the primary driver of this type of CSP.

*H2: For shareholder initiatives, most of the variance in CSP is attributable to the macro level (i.e., country and/or NBS factors).*

### **A Multistakeholder Perspective: Accounting for the Stakeholder-Centric Logic of CSP**

A key theoretical and empirical motivator of this study is a comparison of variance decomposition models of CSP centered on a generic and broad responsibility toward society (see, e.g., Höllerer, 2013) to other models that reflect a stakeholder-centric logic embedded in theorizing by Freeman (e.g., Freeman, 1984; Freeman et al., 2007), Aguinis and Glavas (2013), Barnett (2007), Jones (1995), Mitchell, Agle and Wood (1997), and many other

scholars. Clarkson (1995) may have captured our reasoning regarding CSP best when he suggested:

Performance is what counts. Performance can be measured and evaluated. Whether a corporation and its management are motivated by enlightened self-interest, common sense, or high standards of ethical behavior cannot be determined by the empirical methodologies available today. (Clarkson, 1995, p. 105)

Furthermore, evaluations of CSP may be based on proxies of stakeholder satisfaction because direct, valid measures are very difficult and expensive to obtain (Orlitzky & Swanson, 2012). Practically, such a focus on primary stakeholders is necessary because each firm faces its own unique set of nonmarket challenges (Clarkson, 1995). Empirically, this focus is necessary because overall ratings of CSP often do not seem to pass the most basic measurement hurdle of forming a coherent or robust construct (Orlitzky, 2013), not even within the same organization (Strike, Gao, & Bansal, 2006). Although the construct validity of aggregate measures of CSP seems questionable (e.g., Chatterji & Levine, 2006; Entine, 2003; Porter & Kramer, 2006), researchers have continued to use them (e.g., Ioannou & Serafeim, 2012; Surroca et al., 2010). A more charitable interpretation of the lack of a coherent CSP aggregate is the observation that there is no equivalent aggregate of corporate financial performance, either. In fact, the evidence suggests that different dimensions of financial performance are in tension with each other (M. W. Meyer & Gupta, 1994), which is one of the reasons why, for example, return on assets, return on equity, market share, or Tobin's  $q$  are not aggregated to capture a corporation's financial performance in *one* overall number. Based on this reasoning and previous empirical research (Mattingly & Berman, 2006), we expect large differences between variance decompositions for the stakeholder dimensions and those for the aggregate scores of CSP.

*H3: The proportions of variance accounted for in decomposition models that examine*

*specific stakeholder dimensions of CSP are expected to differ significantly from those shown in models of aggregate CSP.*

### **A Multimethod Perspective: Three Different Approaches to Variance Decomposition**

Three different analytic techniques of variance decomposition have vigorously been debated in the field of strategic management (see, e.g., Brush & Bromiley, 1997; Crossland & Hambrick, 2007; Hough, 2006; McGahan & Porter, 2005; Misangyi, Elms, Greckhamer, & LePine, 2006; Ruefli & Wiggins, 2003): analysis of variance (ANOVA), variance components analysis (VCA), and hierarchical linear modeling (HLM). To estimate the sources of the interfirm variability in CSP, we will compare the results of all three methods, which are depicted in Figure 1 as horizontal arrows crossing the different levels of analysis. Because the analytic approaches of ANOVA, VCA, and HLM rely on very different statistical assumptions and estimation techniques, we do not expect the findings, regarding estimates of interfirm CSP variance explained, to converge across the three different methods. As this assumption is based on not so much organization theory or a theory of business ethics but statistical theory instead, we frame it as the following methodological proposition: *Estimates of the variability in CSP accounted for by the different levels and the different stakeholders are significantly different across the three different methodological approaches of ANOVA, VCA, and HLM.*

## **Method**

### **Sample**

Our sample of 2,060 corporations (with an average firm size of 91,716 full-time employees) was drawn from the database compiled by Sustainable Investment Research International, or SiRi (now known as Sustainalytics), which is one of the world's largest

firms specializing in research on CSP.<sup>4</sup> At the time of the study, the SiRi dataset was compiled by a network of social rating agencies comprising ten independent research institutions such as KLD, coordinated from the SiRi headquarters in the Netherlands and Canada. SiRi aimed to assess the CSP of *all* the largest stock listed companies worldwide, aggregating information from various sources, such as company documents and interviews, media reports, trade unions, NGOs, and other contacts with stakeholders and managers. Similar samples drawn from the SiRi database have also been used in research published in other prestigious academic journals (e.g., Ioannou & Serafeim, 2012; Surroca et al., 2010).

Our study covered the 5-year period of 2003 to 2007. In other words, we obtained 10,300 year-observations in total from large public companies headquartered in 21 different countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Netherlands, Norway, Portugal, South Korea, Spain, Sweden, Switzerland, United Kingdom, and USA. Appendix A presents descriptive statistics about the number of firms and their size (in terms of full-time employees) within each country as well as NBS cluster of countries. Our sample is highly representative of the population to which we aim to generalize our findings—to the set of very large, public multinational companies attracting media attention for their financial, social, and environmental performance.

### **Dependent Variables**

We relied on the SiRi database to measure CSP, our dependent variable. SiRi assigns a rating between 0 and 100, which represents the extent of each firm's overall, aggregate CSP with respect to customers, local communities, shareholders (i.e., extent of responsible corporate governance), suppliers, the natural environment, and employees, respectively. For the empirical comparisons necessitated by our research question, we also used the overall CSP

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<sup>4</sup> On its website, Sustainalytics defines itself as “an award-winning global responsible investment research firm specialized in environmental, social and governance (ESG) research and analysis. The firm offers global perspectives and solutions that are underpinned by local expertise, serving both values-based and mainstream investors that integrate ESG information and assessments into their investment decisions” (source: Sustainalytics website, consulted on the 28/01/2015).

score for each firm (see also Surroca et al., 2010 for more details and the suitability of this dataset more generally). Table 1 presents the means and standard deviations for each stakeholder dimension of CSP. SiRi offers a truly international cross-industry dataset capturing companies' CSP with satisfactory measurement properties. Appendix B provides the main measurement components for each of the six stakeholder dimensions.

### **Sources of Variation**

**National business systems (NBS).** To code the NBS where our sample companies are headquartered, we relied on the five institutional country clusters of NBS identified by Amable (2003). Amable's varieties of capitalism framework is grounded in institutional economics and political science and supported by considerable empirical evidence (Jackson & Deeg, 2008; Morgan, 2007; Tempel & Walgenbach, 2007). Amable's (2003) extensive and detailed statistical analysis of a large set of macroeconomic indicators supported the following five clusters of NBS: Market-Based Capitalism, Coordinated Market Economies, Social-Democratic Economies, Mixed Market Economies (i.e., Amable's "Mediterranean Varieties of Capitalism"), and Asian Collectivist Economies. This clustering of countries has been shown to be robust for Organization for Economic Cooperation and Development (OECD) countries (Amable, 2003, pp. 171-181). Amable's varieties of capitalism were particularly suitable for this study for three main reasons. First, all companies in our sample were headquartered in OECD countries and could therefore be categorized according to Amable's framework without any need for additional assumptions about institutional classification. Second, Amable's model is the most applicable macroinstitutional typology of NBS because it most closely corresponds to the timeframe of this study: Amable's (2003) data analyses ended in 2002, and our CSP dataset covers the years 2003 to 2007. Finally, Amable (2003, pp. 181-213) established the predictive validity of his NBS framework by examining the empirical impact of his NBS clusters on other theoretically related variables, such as partisan

politics and specialization of scientific, technological, and industrial activity (Amable, 2003, pp. 181-209). After a thorough review of the NBS literature, we concluded that Amable's varieties of capitalism model represented a rigorous and empirically validated typology of NBS clusters (see also Jackson & Deeg, 2008; Morgan, 2007).

**Industry sectors.** The ten broad sectors of the Global Industry Classification Standard (GICS) were used in our coding of industry: energy, materials, industrials, consumer discretionary, consumer staples, health care, financials, information technology, telecommunication services, and utilities. Statistically significant chi-square statistics summarizing the cross-tabulation of companies by industry and NBS suggested the importance of including industry sectors in our analytic models.

### **Analytic Models**

In general, our analytic model can be formally expressed as:

$$\eta_{ijkt} = \mu + \alpha_i + \beta_j + \gamma_k + \delta_t + \varepsilon_{ijkt} ;$$

where  $\eta_{ijkt}$  is CSP in NBS  $i$ , in industry  $j$ , in firm  $k$ , during year  $t$ . The dependent variable  $\eta_{ijkt}$  is a linear combination of the grand mean  $\mu$ , a NBS effect ( $\alpha$ ), an industry effect ( $\beta$ ), a firm effect ( $\gamma$ ), a year effect ( $\delta$ ), and an error term ( $\varepsilon_{ijkt}$ ). To estimate the sources of variance in CSP, three different analytic techniques were used: analysis of variance (ANOVA), variance components analysis (VCA), and hierarchical linear modeling (HLM). Each of these data analysis tools comes with its own set of advantages and disadvantages, as briefly discussed below.

**ANOVA.** The first analytic technique used in our study was simultaneous ANOVA, which relies on an ordinary least squares (OLS) algorithm. Several strategy researchers consider this technique to be superior to sequential ANOVA in the context of components-of-variance analysis (e.g., Crossland & Hambrick, 2007; McGahan & Porter, 2002). Our OLS

calculation of variance components in the unbalanced<sup>5</sup> dataset (see also Searle, Casella, & McCulloch, 1992) followed Marchenko's (2006) specific methodological advice for Stata™ software analyses. In our analyses, firms were conceptualized as nested within NBS. Effects were entered in the following sequence: year, industry, NBS, and firm.

**VCA.** This technique addresses the major weakness of ANOVA; in ANOVA the results are affected by entry order of categories (Bowman & Helfat, 2001; Brush, Bromiley, & Hendrickx, 1999)—a weakness that even applies to simultaneous ANOVA (Crossland & Hambrick, 2007, p. 780). The statistical assumptions behind random-effects VCA are described in further detail in Searle et al. (1992) and Rabe-Hesketh and Skrondal (2012). In all random-effects VCA, an important precondition for computability is that the underlying probability distribution of the data is assumed to be normal. The two methods of VCA estimation are maximum likelihood estimation (MLE) and restricted maximum likelihood estimation (REMLE). The difference is that MLE provides estimates of fixed effects, whereas REMLE does not. In other words, REMLE overcomes the weakness of ML estimation of disregarding the degrees of freedom used for estimating fixed effects, that is, of neither being minimum variance nor unbiased (in contrast to ANOVA estimates). For unbalanced data (like ours), statistical experts consider both MLE and REMLE VCA to be superior to the ANOVA method (Searle et al., 1992, p. 254). However, because of the tendency of VCA to produce unstable results (Brush & Bromiley, 1997), many strategy researchers still prefer ANOVA to VCA (Misangyi et al., 2006, p. 573). In line with our methodological proposition, we decided to report both.

**HLM.** Most recently, strategy researchers argued that hierarchical linear modeling (HLM), also known as multilevel modeling, was the best method for examining multilevel effects (Hough, 2006; Misangyi et al., 2006). Specifically, HLM is generally considered

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<sup>5</sup> The dataset was unbalanced because the number of firms in each NBS varied (see Appendix A).

superior to VCA and ANOVA because HLM (a) permits complex error structures and can thus model dependence between levels of analysis, (b) has greater statistical power than the other two methods, and (c) addresses the problem of collinearity between corporations and industries (Hough, 2006).<sup>6</sup> In other words, HLM specifies within-unit factors most accurately in longitudinal datasets (Rabe-Hesketh & Skrondal, 2012). HLM, however, is not the only method we reported because, first, ANOVA and VCA have a much longer methodological tradition than HLM in the business literature and, second and most important, our methodological proposition aims to compare the results of our multimethod calculations. This helps us determine whether the findings across the three different techniques are commensurate. In sum, we believe that a descriptive study like ours, focused on estimating the proportion of CSP variance accounted for by the various levels of influence, can benefit from this methodological pluralism.

To test our hypotheses, we adapted Crossland and Hambrick's (2007) conservative significance testing procedure (see also Bobko, 2001). First, the partial  $R^2$ s were converted into partial  $r$  correlation coefficients (by taking the square root). Then, the  $r$ s were compared via Steiger's (1980)  $Z$ , which is a simplified version of Dunn and Clark's (1969, 1971) test proposed for overlapping samples (Kleinbaum, Kupper, & Muller, 1988). We concluded that  $H1$  or  $H2$  was supported if the relevant difference between the hypothesized dominant (or highest) and second-highest category in each variance decomposition model was statistically significant at an alpha probability ( $p$ ) level of .01 or lower.  $H3$  and the methodological proposition involved multiple comparisons between parts of our correlation matrices or entire matrices and, thus, were assessed via overall  $\chi^2$  tests of difference or fit. For the assessment of  $H3$  and the methodological proposition, we followed the statistical procedures described by Steiger (1980).

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<sup>6</sup> For follow-up studies, HLM would also have the advantage of allowing for the inclusion of continuous—rather than only dummy/categorical—variables (Misangyi et al., 2006).

## Results

Table 1 reports means, standard deviations, and bivariate correlations for the year 2005 (unless stated otherwise), the midpoint of our study timeframe. We estimated the reliability of the dependent variables by calculating the internal consistency (i.e., Cronbach's alpha) of the SiRi measurement items used for each CSP stakeholder dimension. The items per dimension ranged from 16 (for customer initiatives) to 37 items (for employee CSP). The calculated alpha reliability estimates of .77, .81, .83, .85, .76, and .86 for customer, community, shareholder, employee, supplier, and environmental CSP, respectively, were satisfactory. In addition, the statistically significant positive correlations between the six stakeholder dimensions can, at a minimum, be interpreted as generally satisfactory coefficients of generalizability (Orlitzky & Benjamin, 2001; Traub, 1994). Consistent with other studies (Chatterji, Levine, & Toffel, 2009; Sharfman, 1996), the significantly positive correlations in the lower right-hand corner of Table 1 can be interpreted as indicative of the concurrent validity of the CSP proxies.

(Insert Table 1 about here.)

In the reporting of results, we will first discuss the descriptive findings with respect to our overarching research question, which focused on effect size magnitudes (i.e., proportion of variance explained by multiple levels of influence). Then, we will summarize the results of our hypothesis tests.

### **Analysis of Variance (ANOVA) and Variance Components Analysis (VCA)**

Table 2, which presents the ANOVA and VCA results, indicates that the firm level explained between 36% and 75% of the variance in our SiRi dataset. Particularly for overall CSP, the firm level tended to explain a very large proportion of variance, if not the largest variance, of all dependent variables considered in this study. In general, NBS and industry membership explained a much smaller proportion of variance in the dependent variables—

with only one exception to this general rule: NBS were clearly the second-most important determinant of CSP protecting shareholder interests (i.e., good corporate governance), explaining between 21% and 27% of variance, depending on the specific statistical method used. In contrast, for socially responsible supply-chain initiatives, year-to-year changes appeared to be the second-most important antecedent, explaining between 22% and 30% of variance of supplier-focused CSP. Other than that, annual changes (between 2003 and 2007) accounted for only a negligible fraction of CSP variance.

(Insert Table 2 about here.)

To check the robustness of these conclusions about the predominant attribution of CSP variation to between-firm differences, we repeated our calculations for each firm headquarters' country location (instead of NBS), leaving all other data points unchanged. Table 3 shows that overall the firm level remained the predominant factor—with one exception: when either MLE VCA or REMLE VCA was applied, country became the most important antecedent of shareholder-focused CSP (i.e., scores reflecting good corporate governance), explaining 41% to 43% of its variance. The comparison of Tables 2 and 3 indicates that country generally explained more variance than NBS. Country location of firm headquarters also seems to have been quite important for employee-focused CSP, explaining about 22% of its variance in the context of MLE or REMLE VCA. Industry membership and temporal change were found to be relatively unimportant—with supplier-oriented CSP the only exception again (for year-to-year changes).

(Insert Table 3 about here.)

### **Hierarchical Linear Modeling (HLM)**

In our HLM specification, we explicitly modeled the interaction, or covariance, between firms and industries. That is, this covariance across two different levels of analysis was not assumed to be zero as in VCA. Many researchers regard REMLE as superior to MLE

because, for balanced data, REMLE produces solutions identical to ANOVA, which has optimal minimum variance properties (Searle et al., 1992, p. 255). Therefore, Table 4 only presents the REMLE results.<sup>7</sup> Our REMLE HLM findings suggest that, again, most variance in CSP (across the six stakeholder dimensions) is mostly attributable to between-firm differences rather than NBS or industry variation. In general, the firm effects exceeded NBS effects and industry effects by factors of 2:1 to 67:1, and 3:1 to 47:1, respectively. Even larger than these differences in the six stakeholder dimensions were the differences between firm-level effects and NBS effects, and between firm-level effects and industry effects, for overall CSP. Substituting country for NBS effects reduced the proportion of CSP variance explained by firm effects by 13% on average. Country effects, on the other hand, accounted for 7% to 39% of variance in the dependent variables. In fact, the latter percentage exceeded variance attributed to firm effects by 9 percentage points in the case of shareholder-focused CSP (i.e., 39% vs. 30% for variance in good corporate governance as rated by SiRi). Country effects, which also seemed to be quite important for employee-focused CSP (21%), were consistently more important than industry effects. Country-level effects also were generally more important than temporal effects (with the exception of supplier-oriented and customer-focused CSP). In the HLM, firm effects generally exceeded country effects by factors of 2:1 to 7:1—with, as already noted before in the interpretation of the VCA results, shareholder-focused CSP as the only exception.

(Insert Table 4 about here.)

### **Hypothesis Tests**

Out of 56 possible tests of *H1* (14 tests for ANOVA results plus 28 tests for VCA plus 14 tests for HLM), 53 came out statistically significant at probability level  $p < .01$ , consistently supporting the hypothesis that most of the variance in CSP overall and its stakeholder-

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<sup>7</sup> The MLE HLM results were very similar to the findings obtained from the REMLE HLM.

oriented components is attributable to the firm level. That is, whenever the firm level explained most variance, it explained significantly more variance than the second-highest component, which differed from one stakeholder group to another (see Tables 2-4). Notable exceptions were both VCAs shown in Table 3 and one of the HLMs shown in Table 4, where the country level of influence, in line with our second hypothesis, accounted for the greatest proportion in shareholder-oriented CSP (at  $p < .01$ ).

Overall, *H2*, which predicted that, for shareholder initiatives, most of the variance in CSP could be attributed to the country level (national business systems), did not receive the same level of empirical support as *H1*. Out of eight possible tests (two tests for the ANOVA tables plus four tests for VCA plus two tests for HLM), the country level explained (at  $p < .01$ ) the highest percentage of CSP variability in three models—the two country-level specifications of VCA (see Table 3) and the country-level specification of HLM (see Table 4). *H2* was not supported, however, when a NBS specification of each variance decomposition model was used. That is, in the other five specifications, the firm level remained the predominant factor explaining specific stakeholder dimensions of CSP variance (see discussion of *H1*).

*H3* proposed that the proportions of variance accounted for in decomposition models based on a stakeholder logic differed significantly from those shown in models of aggregate CSP. The critical  $\chi^2$  value ( $\alpha = .01$ ) was 13.28 for the ANOVA and VCA comparisons, and 11.34 for the HLM comparisons. All calculated  $\chi^2$  statistics used for the comparisons to test *H3* were statistically significant ( $p < .01$ ) for all stakeholder groups, except for two: the model comparison between environmental CSP and aggregate CSP in the MLE VCA (with country as highest level) had a  $\chi^2$  of only 12.33; and the model comparison between community-oriented CSP and aggregate CSP in the HLM (with NBS as the highest level) had a  $\chi^2$  of only 9.97. These findings imply that the disaggregation of CSP is important for all stakeholder groups except for the natural environment and local communities (at least sometimes). In

other words, for most stakeholder groups, capturing CSP only at the aggregate level will not allow for a proper decomposition of its variance.

Finally, the methodological comparisons of matrices implied by the final, *methodological proposition* all came out statistically significant. The smallest  $\chi^2$  was 179.78, for the comparison between the country-based REMLE VCA and the corresponding country-based HLM. However, the critical  $\chi^2$  value for this comparison was 34.81 ( $\alpha = .01$ ;  $df = 18$ ). All other calculated  $\chi^2$  for all other comparisons of matrices (after converting  $r$  into  $z$  scores) exceeded their critical thresholds as well. This means that the method used for decomposing variance of a focal variable does make a substantive difference; the methods of ANOVA versus VCA versus HLM are not interchangeable. This finding is consistent with the conclusions of the methods literature on variance decomposition in strategic management. However, to the best of our knowledge, this methodological difference has never been demonstrated empirically or presented in as much statistical detail as in this study.

### **Discussion**

To the extent that the SiRi measures reflect CSP accurately, this study suggests that firm-level drivers account for the greatest proportion of not only CSP overall, but also most of its stakeholder-specific dimensions. Our findings indicate that firm-level factors are especially important for CSP targeted at local communities, the natural environment, and employees, whereas broader institutional influences (country-level effects or NBS) sometimes seem to be more important for shareholder-oriented CSP. The three multilevel analyses show that, in support of *HI*, the firm level accounts for the largest proportion of variance in CSP across five of the six stakeholder dimensions. More specifically, in the ANOVA and VCA results, the firm level consistently seems to have the largest impact on social and environmental initiatives, explaining between 36% and 75% of variance of CSP stakeholder dimensions. These firm effects seem to be particularly large for overall CSP and for CSP targeted at local

communities, the natural environment, and employees. The relatively large influence of firm-level factors suggests that, given *particular* corporate attributes, firms are able to choose *particular* CSP initiatives proactively and strategically. Instead of higher-level environmental forces structuring corporate decisions, there seems to be considerable leeway for economic agency independent of these higher level factors (Child, 1997; Oliver, 1991); otherwise, the firm level would explain only a much smaller proportion of the CSP variance. These results are also consistent with arguments in favor of the alignment of strategy with CSP (Orlitzky et al., 2011; Porter & Kramer, 2011).

Interestingly, the one exception to this general finding about the importance of firm-level effects is shareholder-focused CSP, in which country effects predominated in the VCA and HLM analyses. Interestingly, our findings suggest good (or poor) corporate governance is systemic—much more so than the other stakeholder dimensions of CSP. The national-level drivers of shareholder-focused CSP (“good corporate governance”) clearly warrant further theorizing and empirical study. One possible interpretation of these findings is that when a country has strong institutions in place to protect a particular stakeholder group, firm-level agency (for better or worse) will become more limited.<sup>8</sup> Furthermore, our findings also underscore the appropriateness of the decision made by many researchers to exclude shareholder-oriented CSP from overall CSP deliberately (e.g., Chin, Hambrick, & Treviño, 2013; Di Giuli & Kostovetsky, 2014; Hillman & Keim, 2001; Surroca et al., 2010). From the viewpoint of stakeholder theory, this common practice of omitting analyses of shareholder concerns is puzzling (Freeman, 1984, 1994; J. Mackey, 2005); however, based on the empirical findings of this study, it seems empirically justified after all because the antecedents of shareholder-oriented CSP seem to come from very different levels than those of all other CSP dimensions.

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<sup>8</sup> We are grateful to one of the reviewers for this interpretation. In line with this reviewer's feedback, the results may simply indicate that the domain of shareholder CSP is more institutionalized in the countries studied, and therefore firm agency is more limited here than in other CSP domains for this sample of firm-year observations.

Furthermore, the findings allude to the persistence of differences in nation-states and/or business systems—despite the forces of globalization (Gond, Kang, & Moon, 2011; Matten & Moon, 2008). If there were a global convergence toward an Anglo-American model of shareholder capitalism, for instance, countries' lack of variability would be reflected in small NBS or country effects. However, because NBS or country effects explained up to 43% of the variability in CSP (in VCA and HLM), this study provides some evidence supporting the view that NBS still diverge. Only with respect to CSP targeted at suppliers, local communities, and employees did NBS seem to explain only a negligible amount of variance in CSP. As a final observation about the macro (institutional) level, the fact that country effects were generally found to be larger than NBS effects indicates that, contrary to the arguments by Amable (2003), clusters of institutional similarities may be a level of conceptual abstraction that is indeed a bit too high.

Overall, a firm's main industry sector seems to have only a minor effect on CSP across the six stakeholder dimensions. Industry effects were largest for environmental CSP (varying between 5% and 13%, depending on the analytic technique used) and CSP shown toward local communities (varying between 5% and 10%). In contrast, industry differences seem to matter the least for shareholder-focused CSP and customer-focused CSP. This suggests that industry self-regulation is not observed to be a driver of changes in governance- or customer-related aspects of CSP (see also King & Lenox, 2000, on the (in)effectiveness of industry self-regulation in the environmental arena). Generally, industry differences do not seem a major explanation of the variability in CSP and most of its stakeholder dimensions.

The fact that, for different aspects of CSP, we find at least some variation in the relative importance of NBS, country, industry, and firm effects indicates the usefulness of disaggregating CSP into its various stakeholder group dimensions. The findings summarized in Tables 2-4 consistently show that differences in sources of CSP would be overlooked if

CSP were only calculated at an aggregate level, rather than for each stakeholder dimension separately. In support of theorizing by Clarkson (1995) and our introduction of *H3*, CSP may best be discussed as corporate *stakeholder* performance. In other words, different corporate *stakeholder* responsibilities seem to require different explanations at different levels of analysis and should therefore be theorized as distinct outcomes. In this context, it should also be noted that the reliability of overall CSP (.73) was lower than the reliability coefficients of the stakeholder components of CSP. Lower reliability coefficients are synonymous with larger measurement errors and more noise (Orlitzky, 2013; Orlitzky & Swanson, 2012). Thus, the breakdown of CSP into its stakeholder components may also be beneficial for the interpretation of empirical results. This result is aligned with psychometric findings about employees' perceptions of CSR, showing the relevance of a multistakeholder perspective to CSR assessment (El-Akremiti et al., in press; Turker, 2009). Our study suggests the construct of *corporate stakeholder performance* may be a helpful complement to CSP.

### **Practical Implications for Managers and Policy-Makers**

For effective organizational and public policy decisions about CSP, managers need to know the *main* sources of interfirm differences in CSP. The results of this study imply that by far the most important source of corporate differences in CSP is due to firm-specific assets, resources, and mindsets rather than headquarters location, membership in an industry, or year-to-year adjustments to external pressures. Put differently, firms within a given industry differ from one another a great deal more than industries or countries do in terms of CSP. So, in some ways, our findings challenge the importance of institutional and industry-level drivers of CSP that has been highlighted in previous theory and empirical research (e.g., Campbell, 2006, 2007; Ioannou & Serafeim, 2012). Viewed from an empirical decomposition-of-variance perspective, firm-level microfactors should be emphasized more in managerial decision-making than these meso- and macrolevel influences.

In a practical context, estimating the *relative* importance can provide guidance on the levels of analysis that may be most instrumental for making effective (including strategic) decisions about CSP. Because generally industry-level effects are small, managers making decisions about CSP initiatives, such as CSR or sustainability directors, may spend their time more productively on creating highly integrated, firm-specific configurations of CSP activities rather than mimicking broad industry standards or trends in CSP (see also Orlitzky, 2013). The same caveat applies to emulating countrywide trends in CSP because our findings suggest (with the caveats mentioned in the next section) that these nation-state forces, in general, do not seem to be the main levers for improving CSP. The one exception that public policy-makers ought to keep in mind is the greater importance of country effects for corporate governance than any other dimension of CSP. Thus, our findings allude to the possibility that government may ultimately be the most appropriate regulator of shareholder-related CSP, prioritizing the firm owners' interests over managerial self-interest and entrenchment.

### **Limitations and Future Research**

Like all studies, this one has several weaknesses, which could be addressed in future research. First, the findings are limited to our particular dataset (SiRi), whose usefulness and measurement advantages, however, have also been highlighted in a study by Surroca, Tribó, and Waddock (2010). In future, researchers could analyze other CSP datasets to validate our findings. For example, cross-validation is required with a sample of smaller, privately held firms because, as Table 1 shows, the average organizational size in our SiRi was large—approximately 92,000 employees per firm. More important, though, may be the possibility that the type of CSP measure used in this study—even when decomposed into its stakeholder components—is affected by significant biases, conflicts of interest, or validity concerns (e.g., Carroll, 2000; Chelli & Gendron, 2013; Graafland, Eijffinger, & SmidJohan, 2004; Igalens & Gond, 2005; Liston-Heyes & Ceton, 2009; Orlitzky, 2013), so that alternatives (see, e.g.,

Chen & Delmas, 2011; Orlitzky & Swanson, 2012; Turker, 2009) should be explored in future.<sup>9</sup>

Furthermore, it is important to remember that, in general, studies like this one are unable to answer questions about the *ultimate drivers* of CSP. Future studies could, for example, measure specific CEO or top management team characteristics and use several different lagged designs (with greater attention to intertemporal effects, i.e., year-to-year variation  $\delta$  in the analytic model) to clarify causal effects. Although HLM is able to examine causal relationships (Hough, 2006), ANOVA and VCA are purely descriptive (McGahan & Porter, 2005; Rumelt, 1991). In terms of causality, many higher-level effects are very likely to be driven by managerial actions (McGahan & Porter, 2005, pp. 875-876; Ruefli & Wiggins, 2003, pp. 864-865). Conversely, firm effects cannot unambiguously be attributed to managerial actions.

Finally, future HLM research could transcend the limitation of our study to categorical effects (dummy variable coding) and investigate the impact of specific continuous variables on CSP. Such a focus on continuous variables could determine, across different levels of analysis, what specific variables cause firms to increase or decrease their CSP. Other researchers (e.g., Ioannou & Serafeim, 2012) have already taken an important step in this direction—albeit not from the perspective of corporate *stakeholder* performance. As indicated by our own supplementary analyses<sup>10</sup>, the most important antecedents of CSP at the firm level may include companies' international scope, firm size, and intangible assets.

## Conclusion

This study adopted a multilevel, multistakeholder, and multimethod approach to examine and unpack the relative influence of CSP drivers at different levels of analysis. More specifically, it applied to the CSP arena three statistical modeling techniques, which have been

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<sup>9</sup> We are grateful to one of the reviewers for these points.

<sup>10</sup> These supplementary analyses are omitted from this paper, but available in another working paper available from the authors.

widely used in the strategic management literature to analyze the sources of variability in financial performance. Comparing and contrasting the empirical importance of (a) institutional/country-level (macro) effects, (b) industry (meso) effects, (c) firm-level (micro) effects, and (d) time effects by drawing on three distinct statistical techniques, we generally establish the primacy of firm-level factors. Macrolevel factors seem to exert a primary influence on only one of our investigated CSP dimensions, namely shareholder-oriented CSP—and even then only in the context of one specific technique of variance decomposition analysis. In addition, we showed that the relative impact of the determinants of CSP varied greatly depending on the stakeholder initiative considered. Specifically, firm-level drivers seemed to be the most important determinants of CSP for local communities, the natural environment, and employees as well as a firm's overall CSP. Thus, future cross-cultural research of CSP ought to examine not only aggregate CSP, but also distinct stakeholder groups. Overall, the findings of our study can be interpreted as preliminary evidence that the choice of an organization's most effective level of CSP is highly firm-specific, stakeholder-specific, and probably closely intertwined with the firm's strategy, identity, and culture.

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**TABLE 1**  
**Descriptive Statistics and Correlations**

Variables	Mean	SD	1	2	3	4	5	6	7	8
1. Average org. size 2003-2007 (log-transformed)	11.43	1.46								
2. Customer-oriented CSP	61.93	15.30	-.06	(.77)						
3. Community-oriented CSP	51.91	16.43	.23*	.20*	(.81)					
4. Shareholder-oriented CSP	66.52	11.97	.06	.03	.34*	(.83)				
5. Employee-oriented CSP	49.77	13.08	.19*	.18*	.51*	.31*	(.85)			
6. Supplier-oriented CSP	52.11	14.32	.27*	.15	.41*	.30*	.38*	(.76)		
7. Environmental CSP	44.26	13.98	.26*	.33*	.49*	.19*	.46*	.39*	(.86)	
8. Overall CSP (average)	54.38	10.61	.14*	.50*	.77*	.52*	.72*	.67*	.73*	(.73)

*Note.*  $n = 2,060$ .  $*p < .01$ .

Numbers in parentheses along the diagonal are reliability estimates (coefficient alpha). All reliability estimates are statistically significant at  $p < .01$ .

**TABLE 2**  
**ANOVA and Variance Components Analysis**

<b>DV: Disaggregated and Overall CSP</b>	<b>Simultaneous ANOVA</b>				<b>MLE VCA</b>				<b>REMLE VCA</b>			
	NBS ( $\alpha$ )	Industry ( $\beta$ )	Firm ( $\gamma$ )	Year ( $\delta$ )	NBS ( $\alpha$ )	Industry ( $\beta$ )	Firm ( $\gamma$ )	Year ( $\delta$ )	NBS ( $\alpha$ )	Industry ( $\beta$ )	Firm ( $\gamma$ )	Year ( $\delta$ )
<b>Customer-oriented CSP</b>	5%	3%	57%	5%	5%	5%	51%	7%	7%	5%	50%	8%
<b>Community-oriented CSP</b>	2%	5%	73%	4%	1%	10%	65%	1%	1%	10%	64%	1%
<b>Shareholder-oriented CSP</b>	21%	1%	48%	<.5%	22%	2%	38%	3%	27%	2%	36%	4%
<b>Supplier-oriented CSP</b>	2%	3%	47%	22%	4%	7%	47%	25%	6%	7%	46%	30%
<b>Environmental CSP</b>	5%	6%	70%	<.5%	6%	10%	61%	2%	7%	10%	60%	3%
<b>Employee-oriented CSP</b>	2%	5%	70%	2%	4%	7%	61%	1%	5%	7%	60%	2%
<b>Overall CSP</b>	<.5%	5%	75%	9%	<.5%	7%	73%	2%	<.5%	7%	74%	2%

*Note.* DV = dependent variable. CSP = corporate social performance. NBS = national business systems. ANOVA = analysis of variance. VCA = Variance components analysis. MLE = Maximum likelihood estimation. REMLE = Restricted maximum likelihood estimation.

<.5% means that percentage of variance explained is between 0.001% and 0.499%.

Percentages pertaining to residual variances are not reported because they are superfluous; the four columns of each type of analysis plus the residual add up to 100%.

**TABLE 3**  
**ANOVA and Variance Components Analysis**  
**(Robustness Check: Countries rather than National Business Systems)**

<b>DV: Disaggregated and Overall CSP</b>	<b>Simultaneous ANOVA</b>				<b>ML VCA</b>				<b>REML VCA</b>			
	Country	Industry	Firm	Year	Country	Industry	Firm	Year	Country	Industry	Firm	Year
<b>Customer-oriented CSP</b>	1%	3%	54%	5%	8%	6%	47%	7%	9%	6%	47%	8%
<b>Community-oriented CSP</b>	1%	5%	63%	4%	9%	9%	57%	1%	10%	9%	57%	1%
<b>Shareholder-oriented CSP</b>	2%	1%	37%	<.5%	41%	1%	25%	3%	43%	1%	24%	4%
<b>Supplier-oriented CSP</b>	1%	3%	42%	22%	9%	9%	40%	25%	10%	9%	40%	30%
<b>Environmental CSP</b>	1%	5%	59%	<.5%	13%	10%	53%	2%	14%	10%	52%	3%
<b>Employee-oriented CSP</b>	2%	4%	57%	2%	22%	5%	48%	1%	22%	5%	47%	2%
<b>Overall CSP</b>	2%	4%	59%	8%	17%	8%	55%	2%	18%	8%	55%	2%

*Note.* DV = dependent variable. CSP = corporate social performance. NBS = national business systems. ANOVA = analysis of variance. VCA = Variance components analysis. MLE = Maximum likelihood estimation. REMLE = Restricted maximum likelihood estimation.

<.5% means that percentage of variance explained is between 0.001% and 0.49%.

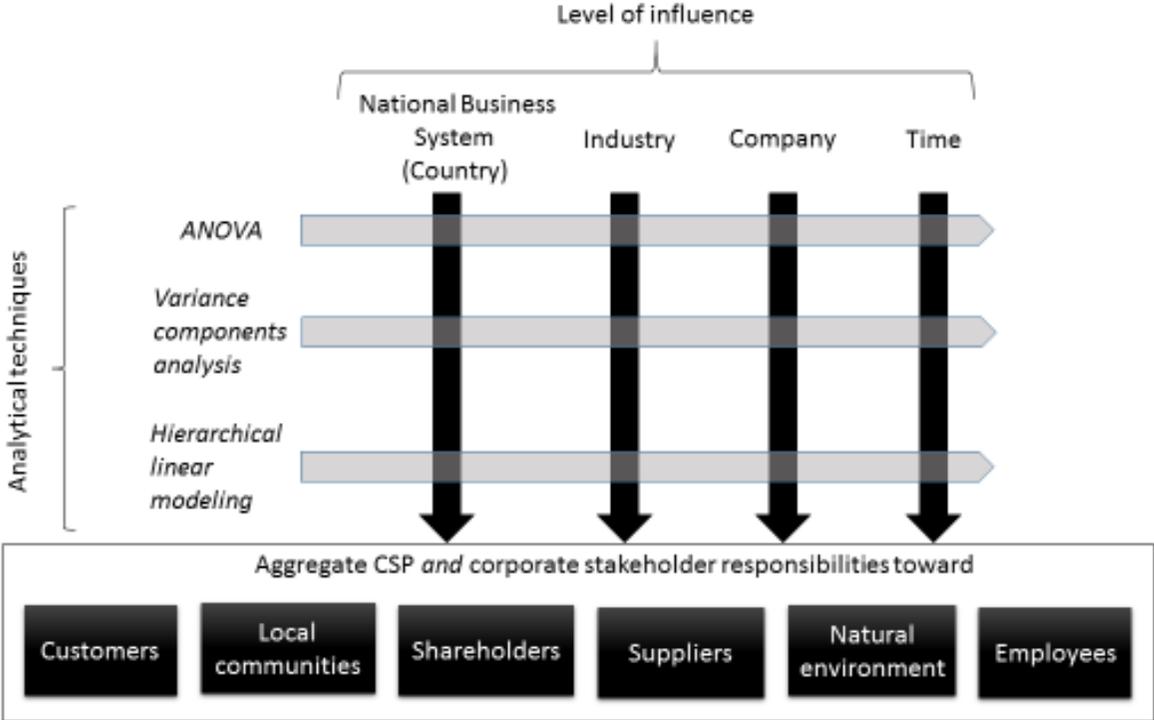
Percentages pertaining to residual variances are not reported because they are superfluous; the four columns of each type of analysis plus the residual variances add up to 100%.

**TABLE 4**  
**Hierarchical Linear Model (HLM)**  
**Using Restricted Maximum-Likelihood Estimation (REMLE)**

<b>DV: DV: Disaggregated and Overall CSP</b>	<b>With National Business Systems</b>					<b>Country instead of NBS</b>				
	NBS ( $\alpha$ )	Industry ( $\beta$ )	Firm ( $\gamma$ )	Year ( $\delta$ )	Cov(Firm*industry)	Country	Industry	Firm	Year	Cov(Firm*industry)
<b>Customer-oriented CSP</b>	6%	4%	55%	8%	-7.34	7%	5%	55%	8%	-10.36
<b>Community-oriented CSP</b>	1%	9%	67%	1%	-3.33	9%	8%	60%	1%	-2.75
<b>Shareholder-oriented CSP</b>	22%	1%	47%	4%	-7.05	39%	1%	30%	4%	-2.99
<b>Supplier-oriented CSP</b>	5%	7%	51%	30%	-3.10	8%	8%	50%	30%	-5.81
<b>Environmental CSP</b>	11%	13%	44%	3%	7.47	19%	12%	39%	3%	5.52
<b>Employee-oriented CSP</b>	5%	7%	61%	2%	-.53	21%	4%	49%	2%	-.87
<b>Overall CSP</b>	<.5%	8%	70%	2%	.99	19%	8%	54%	2%	.02

*Note.* DV = dependent variable. CSP = corporate social performance. NBS = national business systems. <.5% means that percentage of variance explained is between 0.001% and 0.49%.

**FIGURE 1**  
**Overview of Study**



**APPENDIX A**  
**Sample Size (*n*) and Firm Size Across and Within NBS Clusters**

Varieties of Capitalism Cluster	<i>n</i>	Average Corporate Size (number of employees)
<b><i>Market-Based Economies:</i></b>		
Australia	81	32,042
Canada	101	3,213
United Kingdom	177	39,551
USA	617	181,158
<i>Total:</i>	976	124,687
<b><i>Coordinated Market Economies:</i></b>		
Austria	13	13,066
Belgium	25	16,800
France	87	95,614
Germany	95	113,229
Ireland	13	21,298
Netherlands	59	38,035
Norway	22	25,244
Switzerland	175	103,366
<i>Total:</i>	489	83,498
<b><i>Social-Democratic Economies:</i></b>		
Denmark	21	14,975
Finland	19	25,796
Sweden	39	38,781
<i>Total:</i>	79	29,330
<b><i>Mixed Market Economies:</i></b>		
Greece	15	11,670
Italy	52	17,334
Portugal	12	9,110
Spain	47	46,939
<i>Total:</i>	126	26,920
<b><i>Asian Collectivist Economies:</i></b>		
Japan	387	52,865
South Korea	3	80,594
<i>Total:</i>	390	53,078
<b><i>Overall total sample size and average org. size:</i></b>	<b>2,060</b>	<b>91,716</b>

NBS = national business system.

**APPENDIX B**  
**Description and Main Components of SiRi's CSR Ratings**

Aspect of CSP	Description	Main Components
<b>Customer-focused CSP</b>	This theme provides an overview of the company's commitment towards maintaining a high quality of products and services, reaching high levels of customer satisfaction, and adhering to ethical marketing practices. It looks at elements such as quality management systems, customer relations procedures, and the nature of a firm's marketing activities. Attention is paid to controversies that are frequently identified in an area as sensitive to customer relations: fraudulent, deceptive or controversial marketing practices as well as price fixing or antitrust violations.	<ul style="list-style-type: none"> <li>• Quality of management systems</li> <li>• Customer satisfaction</li> <li>• Competitive practices</li> <li>• Marketing practices</li> </ul>
<b>Community-focused CSP</b>	Refers primarily to the residents of local communities in which a company operates. It may also refer to the larger areas, such as a region or nation, to the extent that society in such larger areas is affected by a company's operations. It examines to what extent the company takes into account the needs, interests, and rights of communities affected by its operations or planned operations. It pays specific attention to the ways the company seeks to mitigate its negative impact on communities and enhance its positive impact.	<ul style="list-style-type: none"> <li>• Stakeholder consultation processes</li> <li>• Contribution to the development of local communities</li> <li>• Philanthropic activities</li> <li>• Lobbying activities</li> <li>• Involvement in non-democratic countries</li> </ul>
<b>Shareholder-focused CSP (good corporate governance)</b>	Primarily assesses the organization of the Board of Directors and examines issues such the independency of directors and the existence and composition of Board-specific committees as well as other aspects of good corporate governance, such as transparency, stock ownership structure, voting rights, and compensation paid to senior executives.	<ul style="list-style-type: none"> <li>• Independence of directors</li> <li>• Audit committee</li> <li>• Compensation and remuneration schemes</li> <li>• Voting rights</li> <li>• Anti-takeover devices</li> </ul>
<b>Supplier-focused CSP</b>	Refers to the employees of the company's contractors. It provides an overview of the company's commitment towards worldwide fair labor standards and freedom of association. The evaluation process examines whether the company implemented a code of conduct that addresses human and labor rights issues relevant to its operations in countries with poor human rights records, and whether it implemented the mechanisms to ensure compliance with this code. Controversies include, for example, a company's complicity in human rights violations, when it is involved directly or through its major suppliers in the use of child, forced, or sweatshop labor.	<ul style="list-style-type: none"> <li>• Outsourcing policy</li> <li>• Code of conduct for contractors</li> <li>• Monitoring of subcontractors and company suppliers</li> <li>• Involvement in labor rights violations of firm contractors</li> </ul>
<b>Environment-focused CSP</b>	Evaluates the company's commitment towards the establishment of sound and appropriate environmental management systems, increasing efficiency in the use of resources and energy, and avoidance of harm to the environment. In assessing each company's environmental record, consideration is given to specific elements that can be categorized under the following headings: <ul style="list-style-type: none"> <li>• environmental management and reporting systems</li> <li>• the company's record of compliance with applicable environmental laws and regulations</li> <li>• methods of use/extraction of natural resources</li> <li>• level of emissions of hazardous or toxic substances</li> <li>• level of emissions of substances that increase the threat of climate change</li> <li>• firm's impact on natural ecosystems</li> </ul>	<ul style="list-style-type: none"> <li>• Resource consumption</li> <li>• Air emissions</li> <li>• Water and soil releases</li> <li>• Waste generation</li> <li>• Product impact</li> </ul>

	<ul style="list-style-type: none"> <li>• measures to reduce the environmental impact of operations</li> <li>• the ecological impact of the company's products</li> </ul>	
<b>Employee-focused CSP</b>	<p>Provides an overview of the company's commitment towards social issues related to the company's employees, and chiefly towards health and safety, diversity, and employee involvement. More specifically, the evaluation process examines whether the company has implemented policies and management systems to ensure the respect of core ILO conventions (forced and child labor, freedom of association, right to organize, discrimination). Issues such as health and safety of employees, training and employability employee ownership, and profit-sharing are also taken into account in the evaluation process. Particular attention is paid to the health and safety records relative to industry counterparts, the quality of relations with unionized workers, and legal actions related to discrimination in the workplace or employment equity issues.</p>	<ul style="list-style-type: none"> <li>• Working conditions</li> <li>• Terms of employment</li> <li>• Working environment</li> <li>• Industrial relations</li> <li>• Employee involvement/participation</li> </ul>

Source: *SiRi Research Framework* (2006), SiRi internal documents.