Exerting Pressure or Leveraging Power?

The Extended Chain of CSR Enforcement in B2B Supply Chains

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Abstract

In face of the increasing attention on issues of sustainability and corporate social responsibility (CSR) by the general public and policy makers, companies have put growing emphasis on ensuring CSR along their supply chains. Existent research has produced evidence that companies can increase their suppliers’ CSR engagement by exerting explicit pressure on them, e.g., through contractual clauses. Adding to this conventional chain of CSR enforcement, this paper conceptualizes and empirically validates a so far undescribed extended chain of CSR enforcement that also leads to higher levels of a supplier firm’s CSR engagement irrespective and even in absence of explicit pressure by the customer firm. In particular, a customer firm’s CSR orientation in interaction with a powerful position in the supply chain leads suppliers to perceive pressure to engage in CSR regardless of factually exerted pressure. As a result, suppliers are likely to increase their CSR engagement in order to be customer oriented or in preemptive obedience. These results entail substantial implications for policy makers as well as marketing academics and managers.

Keywords: corporate social responsibility (CSR); CSR regulation; customer–supplier relationship; power; stakeholder pressure.
Firms face various stakeholders’ expectations to ensure corporate social responsibility (CSR) engagement along their supply chain (e.g., Pedersen and Andersen 2006). More specifically, academics and policy makers have discussed and implemented multiple measures (including regulatory measures) to ensure that firms take responsibility for their value chain (e.g., Campbell 2007; EU Commission 2014). As a result, many firms (voluntarily, preemptively, or reactively to existing soft or hard regulation) promote CSR of their suppliers upstream in the supply chain. Web Appendix W1 offers exemplary quotes of different firms in this respect. Prior research observed that firms are more likely to engage in CSR as a response to pressure from various stakeholders, such as pressure from policy makers, nongovernmental organizations, or associations (e.g., Aguilera et al. 2007; Campbell 2007). In line with firms’ emphasis on CSR engagement in their supply chains, many academic papers have focused on customer firms as particular stakeholder group, analyzing the effects of a customer firm’s pressure on a supplier firm’s CSR engagement. Research has demonstrated that, ceteris paribus, customer firms exerting pressure on their suppliers to engage in CSR can trigger a series of effects, which we label the conventional chain of CSR enforcement in B2B supply chains (see Figure 1): Customer firms who are CSR-oriented are likely to exert pressure on their suppliers to engage in CSR (e.g., through contractual clauses), which in turn induces suppliers to perceive pressure to engage in CSR (e.g., Baden, Harwood, and Woodward 2009; González-Benito and González-Benito 2010). This perceived pressure increases the intention of supplier firms to engage in CSR and finally their CSR engagement (e.g., González-Benito and González-Benito 2006; Helmig, Spraul, and Ingenhoff 2013). A supplier’s CSR engagement then ultimately drives the supplier’s CSR reputation with the customer (e.g., Homburg, Stierl, and Bornemann 2013).

----- Insert Figure 1 about here -----
To apply pressure along the conventional chain has also been the dominant mode of thinking about regulatory measures to increase CSR in supply chains (e.g., OECD guidance around “supply chain due diligence”; OECD 2016). However, this approach may have practical drawbacks for public policy makers and businesses. First, a customer firm’s capacity to impose pressure on its suppliers will be costly and finite. While CSR engagement can be coerced, it is usually the outcome of complex interactions between multiple actors, including customer firm, supplier firm, supplier firm’s own suppliers, and other stakeholders (e.g., Lund-Thomsen and Lindgreen 2014). Companies like ABB, with 80,000 suppliers (ABB 2015), or Nestlé, dealing with almost 700,000 farmer suppliers (Nestlé 2015), may find engaging in such complex interactions operationally infeasible or too costly—especially when acting in multi-national contexts in which policies vary from country to country. Such an increase in cost is not only against the interest of the firms, but also needs to be limited by policy makers: (a) transaction cost increases will harm particularly those companies that willingly engage in CSR and (b) cost increases will mostly affect firms that are operating within the policy maker’s own regulatory regime, potentially leading to a competitive cost disadvantage.

Second, excessive pressure can yield undesired side-effects on the customer–supplier relationship. High levels of customer pressure on a supplier may undermine the relationship (Dwyer, Schurr, and Oh 1987) and possibly result in counter-reactions (Baden, Harwood, and Woodward 2009). In addition, higher levels of pressure may lead to customers’ attributing suppliers’ CSR engagement extrinsically, which lowers suppliers’ CSR reputation and decreases trust (Homburg, Stierl, and Bornemann 2013). These side-effects are neither in the interest of firms nor in the interest of public policy making as they may lead to slower adoption of respective regulation.
Accordingly, our research aims to evaluate which additional mechanisms can lead to an increase in a supplier’s CSR engagement without costly overt pressure from customer firms. Building on the literature on stakeholder pressure, customer orientation, and power, we expect that the exertion of explicit pressure is not a necessary condition for influencing a supplier’s CSR engagement. Instead, we propose the existence of a so far undescribed extended chain of CSR enforcement, according to which a customer’s CSR orientation is sufficient to increase a supplier’s CSR engagement in cases in which the customer has high power vis-à-vis the supplier.

We conducted two studies that verified the existence of the extended chain of CSR enforcement. First, using cross-industry data of 200 customer–supplier dyads, we examined the interactive effect of customers’ CSR orientation and power on suppliers’ CSR engagement. Second, to delve into the mechanisms driving this effect, we conducted a scenario experiment with 173 managers. With these findings, our study makes important contributions to academic literature. First, we show a so far undescribed additional antecedent of CSR engagement in B2B supply chains. Second, we show that organizations seem to extrapolate from their stakeholders’ characteristics to stakeholders’ expectations, leading to perceived pressure to conform if stakeholders are powerful. Third, we contribute to research on power in supply chains, as our study empirically confirms several factors that determine the distribution of power between customers and suppliers.

Beyond contributing to academic marketing literature, our study provides actionable implications for policy makers and managerial practice. For policy makers, our analysis demonstrates that companies’ CSR engagement can be increased not only through the exertion of explicit pressure. This points to options of more focused policies, namely—amongst others—(a) focusing on increasing CSR orientation of customer firms at the end of supply chains, (b) dominantly inviting large customer firms to make their CSR orientation public, and (c) paying attention to the role of
government and supra-national entities as (typically powerful) direct or indirect buyers from B2B supplier firms. For managerial practice, first, our results show that managers can prompt their suppliers to engage in CSR without overtly exerting pressure, especially if they demonstrate their CSR orientation to suppliers who possess relatively less power. Second, our study should raise managers’ awareness that they might tend to be influenced by their own customers’ perceived CSR orientation in combination with power. Furthermore, managers at supplier firms need to ensure that their CSR engagement does not appear to be extrinsically motivated.

**Conceptual Framework**

Our core proposition is that the conventional perspective on CSR enforcement in supply chains needs to be extended. Even if customers do not explicitly pressure their suppliers (voluntarily or as a result of soft or hard public policy interventions), we propose that powerful customer firms’ CSR orientation may cause suppliers to perceive pressure. This perceived pressure should then result in an elevated intention to engage in CSR, which in turn should increase a supplier’s actual CSR engagement. To test these propositions, we conducted the two studies illustrated in Figure 1. In what follows, we describe the conceptual framework of these studies.

**Study 1: Establishing the Extended Chain of CSR Enforcement**

In Study 1, we used dyadic field data of customer and supplier firms to examine the effects of the conventional and extended chains of CSR enforcement. Figure 2, which shows our full research model, depicts a framework linking customer CSR orientation to supplier CSR engagement (a) via the conventional chain of customer exerted CSR pressure and (b) via our proposed extended chain, i.e. the interactive effect of customer CSR orientation and customer power.
Along the conventional chain, we define *customer CSR orientation* as the degree to which a customer firm places value on ethical behavior and commitment to CSR (Banerjee, Iyer, and Kashyap 2003). *Customer exerted CSR pressure* is the degree to which a customer firm overtly enforces suppliers’ CSR engagement through its purchasing processes. *Supplier CSR engagement* refers to the extent of a supplier company’s CSR activities (Wagner, Lutz, and Weitz 2009). *Supplier CSR reputation* is a customer’s evaluation of the degree to which a supplier is socially responsible (Du, Bhattacharya, and Sen 2007).

We propose that the extended chain linking a customer’s CSR orientation to a supplier’s CSR engagement is influenced by a number of variables. In particular, we suggest that the effect of customer CSR orientation on supplier CSR engagement is moderated by three dimensions of *customer power*: *supplier competitive intensity*, defined as the degree to which customers have alternative sources of supply and are therefore less dependent on a particular supplier (Cannon and Perreault 1999; Ingenbleek and Immink 2010); *relative customer firm size*, defined as the magnitude of a customer company in comparison to a supplier company; and *supplier product commoditization*, defined as the extent to which a supplier offers standardized rather than customized products (Homburg, Müller, and Klarmann 2011).

Furthermore, we propose that the effect of supplier CSR engagement on supplier CSR reputation is moderated by *extrinsic CSR attribution*, a customer’s perception that a supplier’s CSR engagement is driven by self-interested motives (Du, Bhattacharya, and Sen 2007).

----- Insert Figure 2 about here ----- 

**Study 2: The Underlying Drivers the Extended Chain of CSR Enforcement**

In Study 2, we used a scenario experiment to further elucidate the interactive effect of customer CSR orientation and customer power on supplier CSR engagement (see Figure 2). We propose
that the interactive effect of customer CSR orientation and customer power increases the pressure a supplier perceives to engage in CSR—even in the absence of exerted pressure from the customer. We define supplier perceived CSR pressure as a supplier’s cognition of being driven to engage in CSR by a customer. We link supplier perceived CSR pressure to supplier CSR intention, defined as the extent to which a supplier plans to engage in CSR activities. As higher levels of intention lead to higher levels of engagement (Ajzen and Fishbein 1977), we confined our experiment to the study of the effects of customer CSR orientation and customer power on supplier perceived CSR pressure and supplier CSR intention.

**Hypotheses**

As noted above, our key prediction is that depending on the context, customer companies can influence their suppliers to increase their CSR activities through an extended chain of CSR enforcement, i.e. without exerting explicit pressure on their suppliers. We derive this prediction from various sources, such as the literature on the role of power in supply chains.

**The Role of a Customer’s CSR Orientation and Power as an Antecedent of a Supplier’s CSR Engagement**

Existential literature proposes that customers should (normatively) or do (empirically) care about their suppliers’ CSR engagement (e.g., Maignan and Ferrell 2004) and has thus elaborated the mechanism of the conventional chain of CSR enforcement. However, we propose that a powerful customer’s CSR orientation is sufficient to influence a supplier’s CSR engagement. This prediction is derived from literature on customer orientation that shows that suppliers care about what is important to their customers (e.g., Anderson and Onyemah 2006; Jaworski and
Kohli 1993), since such a behavior will make firms more successful in the market place (e.g., Hult and Ketchen 2001). Following the norm of customer orientation, we argue that the supplier of a company that considers CSR a high priority will be more inclined to increase its CSR engagement to fulfill this specific customer need than to invest in other elements of the customer–supplier relationship that the customer seemingly values less.

However, we propose that this effect holds only if a customer has high power relative to the supplier (e.g., Ingenbleek and Immink 2010). Power in general can be defined as one’s ability to influence someone else do something the latter would otherwise not do (Dahl 1957). Notably, power is a capacity derived from circumstantial factors, and is not limited to situations entailing the actual use of power. Power-dependence theory explains the mechanism by which subjects gain power (Blau 1964). According to this theory, “power resides implicitly in the other’s dependency” (Emerson 1962, p. 32). Put differently, “A’s power over B is directly related to the degree to which B is dependent on A” (Kim, Pinkley, and Fragale 2005, p. 801). Owing to this dependence, higher levels of customer power make suppliers more inclined to follow customer needs and values to maintain the relationship (Christensen and Bower 1996).

Prior studies have repeatedly analyzed the power distribution between customers and suppliers in B2B settings (e.g., Gaski 1984; Lusch and Brown 1982). From that research, we distilled three sources of power, which we included in our hypotheses and analysis:

(i) *Supplier competitive intensity* (e.g., Porter 1980). Following power-dependence theory (Blau 1964; Emerson 1962), customer–supplier exchanges in highly competitive supplier industries will typically move power from the supplier to the customer: High competition within the supplier industry provides customers with the opportunity to choose among multiple possible suppliers, rendering the supplier more dependent on the customer than vice versa.
(ii) *Relative customer firm size* (e.g., Porter 1980). A small supplier selling products to a large firm will—ceteris paribus—be more willing to follow customer expectations: (a) the supplier might be intimidated by the customer (Verbeke and Bagozzi 2000) and consider itself dependent on the customer; (b) the supplier might be particularly interested in winning and keeping the customer as a reference customer to display its market capabilities and build reputation (Helm and Salinen 2010); and (c) large customers promise prospects of large future business volume.

(iii) *Supplier product commoditization.* When suppliers sell commodity products instead of products customized to a customer’s specific needs, the customers will tend to be less dependent on the supplier’s specific resources and thus be likely to be more powerful in the supplier–customer exchange (Jiang, Zhan, and Rucker 2014). Therefore:

\[ H_{1a}: \text{The interactive effect of a customer’s CSR orientation and competitive intensity in the supplier’s industry on a supplier’s CSR engagement is positive.} \]

\[ H_{1b}: \text{The interactive effect of a customer’s CSR orientation and the customer’s relative size on a supplier’s CSR engagement is positive.} \]

\[ H_{1c}: \text{The interactive effect of a customer’s CSR orientation and a supplier’s product commoditization on a supplier’s CSR engagement is positive.} \]

**The Role of a Supplier’s Perceived Pressure**

In the development of \( H_{1a-c} \), we demonstrated why a customer’s CSR orientation in interaction with relative power is likely to positively influence a supplier’s CSR engagement. To further elucidate the connection between a customer’s CSR orientation and a supplier’s CSR engagement, we resorted to the literature on stakeholder pressure. This stream of research has shown that individuals within firms can *perceive* high levels of pressure from stakeholders to engage in activi-
ties that a company otherwise might not have undertaken. That is, the level of perceived stake-
holder pressure does not necessarily reflect “objective” pressure (Delmas and Toffel 2004).
Building on this notion, we propose that differences in reactions to a given level of exerted pres-
sure could be explained on the basis of differences in perceived pressure. Assuming a constant
level of exerted pressure, we suggest that a customer’s CSR orientation in interaction with the
customer’s power results in a supplier’s perception of pressure to engage in CSR in order to ful-
fill the customer’s needs. Therefore, we postulate:

\[ H_2: \text{The effect of a customer’s CSR orientation on a supplier’s perceived CSR pressure is}
\text{more pronounced for high customer power.} \]

The literature on stakeholder pressure has established that perceived pressure will lead to higher
levels of engagement in different domains, such as adherence to ISO standards (Christmann and
Taylor 2006). In line with this research we therefore also posit:

\[ H_3: \text{A supplier’s perceived pressure to engage in CSR increases the supplier’s intention}
\text{to engage in CSR.} \]

**Outcomes of a Supplier’s CSR Engagement**

Prior research has established that a supplier’s actual CSR engagement will heighten its CSR
reputation with the customer (e.g., Du, Bhattacharya, and Sen 2007; Homburg, Stierl, and Borne-
mann 2013). However, we propose that the effect of a supplier’s CSR engagement on its CSR
reputation with the customer will be negatively moderated by extrinsic attribution. According to
 attribution theory (Heider 1958; Silvera and Laufer 2005), individuals seek to explain other par-
ties’ behavior by making attributions with respect to underlying motives, intentions, and senti-
ments. Attributions may be either intrinsic or extrinsic: intrinsic attributions are inferences that
the other party behaves in a certain way because of inherent character or personality, while extrinsic attributions suggest that motives arise from external situational circumstances. In the context of CSR, the underlying precept is that customers’ appraisal of their suppliers’ CSR engagement depends on attributions they make about the motivation for these activities (Walker et al. 2010). We therefore examine customers’ extrinsic CSR attributions and their effects on the CSR reputation suppliers can develop from engaging in CSR.

We expect a customer to react negatively if the customer perceives the supplier’s CSR engagement to be merely a means of fostering the firm’s own interest or a result of external pressure. Such extrinsic attributions are likely to lead to the conclusion that the firm is not inherently socially responsible (Du, Bhattacharya, and Sen 2007) and that the supplier is only “acting to avoid retribution from stakeholders” (Vlachos et al. 2009, p. 172). Such CSR engagement is perceived as reactive, unstable, forced, and insincere (Groza, Pronschinske, and Walker 2011). In line with correspondent inference theory (Jones and Davis 1965; Jones and Harris 1967), we expect such attributions to lead to negative inferences about the actor. Hence, we anticipate that extrinsic attributions will result in negative perceptions regarding a supplier firm’s underlying motives for engaging in CSR. This perception may eventually spill over to a customer’s evaluation of a supplier’s CSR reputation.

\[ H_4: \text{The effect of a supplier’s CSR engagement on its CSR reputation is less pronounced if the customer perceives extrinsic motives for the CSR engagement.} \]

**Study 1: Establishing the Extended Chain of CSR Enforcement**
Data Collection and Sample

As our study’s unit of analysis is the supplier–customer relationship, we collected dyadic supplier–customer data from a broad range of B2B industries. We acquired contact information for purchasing managers of 2,100 companies from a market research institute. We then sent surveys to these purchasing managers and asked them to complete the survey with regard to a specific relationship with one of their suppliers. We received 372 usable responses (response rate of 17.7%). Subsequently, we contacted the corresponding supplier key informants and asked them to fill out a survey and received 200 usable supplier responses (response rate of 53.8%). Web Appendix W2 shows the sample’s composition.

Measures

Main variables. Whenever available we based all measures on established scales. We used a reflective measurement approach and seven-point rating scales for all multi-item constructs (Jarvis, MacKenzie, and Podsakoff 2003). We obtained customer CSR orientation and customer exerted CSR pressure from the respective customer key informant. Customer CSR orientation is measured using the items “Our firm has a clear policy statement urging CSR awareness in every area of operations,” “CSR is a high priority activity in our firm,” and “At our firm, we make a concerted effort to make every employee understand the importance of CSR” (Banerjee, Iyer, and Kashyap 2003). Our measure for customer exerted CSR pressure comprises the items “In our purchase decision, social and ecological aspects are an important factor,” “We draw our suppliers’ attention to our CSR expectations in our purchase policies,” and “In our contracts with companies like the focal supplier we specify the compliance with specific sustainability criteria.”

We measured supplier CSR engagement in the supplier survey using the items “Our company … is a socially responsible company,” “… is concerned to improve the well-being of society,” and
“… follows high ethical standards” (Wagner, Lutz, and Weitz 2009). Lastly, we measured supplier CSR reputation in the customer survey using the items “The supplier … is a socially responsible company,” “… is concerned to improve the well-being of society,” and “… follows high ethical standards” (Wagner, Lutz, and Weitz 2009).

**Moderators.** We measured supplier competitive intensity in the supplier survey using four items (Jaworski and Kohli 1993): “Competition in this business is severe,” “One hears of new competitive moves almost every day,” “Intensive marketing activities are a hallmark of our industry,” and “Anything that one competitor can offer, others can match readily.” To operationalize relative customer firm size, we asked both supplier and customer key informants to state the number of employees (“below 50,” “50 to <100,” “100 to <500,” “500 to <1,000,” “1,000 to <2,500,” “2,500 to <5,000,” “5,000 to <10,000,” “more than 10,000”). We then calculated the relative size by subtracting the customers’ ratings from the suppliers’ ratings. That is, if customer firms are larger (smaller) than supplier firms, the measure is positive (negative). Moreover, we measured supplier product commoditization using three items in the supplier survey (“Our products and services are individually developed for our customers,” “Our products and services are highly adapted to our customers’ needs,” “The major characteristics of our products and services are highly adjusted to our customers”; reverse-coded items) (Homburg, Müller, and Klarmann 2011). Lastly, we measured the moderator extrinsic CSR attribution in the customer survey using the items “I think company X engages in CSR because it feels … competitive pressures to engage in such activities,” “… customer pressures to engage in such activities,” “… societal pressures to engage in such activities” (Du, Bhattacharya, and Sen 2007). Before the estimation, we mean-centered all moderators (Aiken and West 1991).
**Controls.** To partial out effects that stem from the customer–supplier relationship rather than from the interaction of CSR orientation and power distribution, we controlled for the *length of relationship*. We measured length of the relationship by asking customers how many years they had been a customer of the supplier.

Table 1 shows descriptive statistics, correlations, and reliability diagnostics for all constructs. Overall, our scales exhibit desirable psychometric properties (Bagozzi and Yi 2012). In addition, all constructs exhibit discriminant validity (Fornell and Larcker 1981). This finding is particularly important with respect to our three dimensions of customer power. As each of these constructs determines to what extent a customer firm has power over a supplier firm, these constructs may theoretically overlap, which might pose problems to multivariate analyses. However, in our dataset these constructs do not turn out to be highly correlated ($r_{\text{supplier competitive intensity, relative customer firm size}} = -0.04$, $p > .05$; $r_{\text{supplier competitive intensity, supplier product commoditization}} = 0.01$, $p > .05$; $r_{\text{relative customer firm size, supplier product commoditization}} = -0.13$, $p > .05$). Furthermore, the Fornell–Larcker criterion (Fornell and Larcker 1981), which can be applied to the two multi-item constructs supplier competitive intensity and supplier product commoditization, provides strong evidence that these constructs are discriminant. Thus, including them in multivariate analyses did not unduly influence our results.

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**Model Specification and Results**

We specified a path model in line with our conceptual framework for Study 1 (see Figure 2). We then estimated the model using Mplus 7.0 (Muthén and Muthén 2012). Hereby, we estimated all relationships simultaneously using structural equation modeling. Thus, we estimated the effect of
the extended chain while controlling for the conventional chain of CSR enforcement. The “Full Model” in Table 2 shows the results, which we interpret in the following.

----- Insert Table 2 about here -----

First, we note that our results support the established, conventional chain of CSR enforcement. That is, customer CSR orientation strongly affects customer exerted CSR pressure ($\beta = .78, p < .01$), which in turn increases supplier CSR engagement ($\beta = .17, p < .05$). Furthermore, the product of the two coefficients is significantly positive ($\beta = .14, p < .05$), suggesting that customer CSR orientation has an indirect effect on supplier CSR engagement via customer exerted CSR pressure (Baron and Kenny 1986).

Turning to our hypotheses, in $H_{1a}$ through $H_{1c}$, we posit that dimensions of customer power affect the strength of the effect of customers’ CSR orientation on suppliers’ CSR engagement. $H_{1a}$ posits that competitive intensity in the supplier’s industry and a customer’s CSR orientation interactively affect the supplier’s CSR engagement. The interaction effect of supplier competitive intensity and customer CSR orientation on supplier CSR engagement is positive and significant ($\beta = .16, p < .05$). Hence, $H_{1a}$ is supported. Similarly, in $H_{1b}$, we propose that a customer’s relative size and a customers’ CSR orientation interactively affect suppliers’ CSR engagement. The interaction effect of relative customer firm size and customer CSR orientation on supplier CSR engagement is significantly positive ($\beta = .18, p < .01$). Hence, $H_{1b}$ is confirmed. Lastly, $H_{1c}$ argues that suppliers’ product commoditization and customers’ CSR orientation interactively affect suppliers’ CSR engagement. The corresponding coefficient is positive and significant ($\beta = .12, p < .05$). Hence, $H_{1c}$ receives support. In effect, all three hypothesized interaction effects of customer power and customer CSR orientation on supplier CSR engagement are supported.
Considering the effect of supplier CSR engagement on supplier CSR reputation, we proposed in 
H₄ that extrinsic CSR attribution negatively moderates the effect of a supplier’s CSR engage-
ment on the supplier’s CSR reputation. Results support this proposition (β = -.13, p < .05). Ac-
cordingly, H₄ is supported.

**Supplemental Analysis**

To verify the robustness of our results, we conducted several supplemental analyses. First, to 
check the explanatory power of our model, we repeated the model estimation without the ex-
tended chain of CSR enforcement (see “Conventional Chain Model” in Table 2). That is, we esti-
imated the indirect effect of customer CSR orientation on supplier CSR engagement via customer 
exerted CSR pressure without accounting for the conditional direct effect of customer CSR ori-
entation on supplier CSR engagement. Results reveal that the model has a lower fit than the full 
model. This suggests that the extended chain of CSR enforcement is a valuable addition to previ-
ously established models in order to achieve a more comprehensive understanding of a cus-
tomer’s CSR enforcement vis-à-vis its suppliers.

Second, to understand the relative importance of the conventional and extended chain of CSR 
enforcement, we compared the respective effect strengths. As mentioned previously, the conven-
tional chain is represented by the indirect effect of customer CSR orientation on supplier CSR 
engagement via customer exerted CSR pressure (β = .14, p < .05). Conversely, the extended 
chain is represented by the conditional (i.e., moderated) direct effect of customer CSR orienta-
tion on supplier CSR engagement. We derived the strength of this direct effect by re-estimating 
our model at different values of our moderators (Spiller et al. 2013). Results are depicted in Ta-
ble 3 and reveal that the relative effect size of the conventional and extended chain of CSR en-
forcement strongly depends on the value of our moderators. Specifically, if all moderators have
medium values or only one of the moderators has a high value, the conventional chain is stronger than the extended chain. However, as soon as two customer power moderators have high values and the remaining moderator has a medium value, the strength of the extended chain surmounts the strength of the conventional chain. This finding underlines the importance of unveiling the extended chain to understand how customers enforce CSR in B2B supply chains.

Third, to verify the robustness of our results, we estimated an additional model in which we also included the three power dimensions as moderators of the conventional chain of CSR enforcement. However, our previous results remained stable, albeit with a lower fit of the path model. Thus, we refrained from including these interactive effects in our main analyses.

Fourth and last, one alternative explanation of our findings pertaining to the extended chain of CSR enforcement may be that customer firms preemptively select supplier firms based on their CSR engagement. More specifically, it may be that it is not the supplier firm that opts to take on CSR engagement to match the interests of the customer firm, but that the customer firm may have several options of supplier firms and selects the one that best matches its CSR engagement. To test this alternative explanation, we estimated an additional model (Model 3 in Table 2) in which we controlled for additional variables: (a) We controlled for a variable that measures the extent to which a customer’s supplier selection considers reputation risks. This variable, labeled customer risk mitigating supplier selection, is measured through the item “By selecting this supplier we reduce the danger of negative reports about our company.” Controlling for this variable may isolate the extended chain of CSR enforcement from a mere selection effect. (b) We controlled for customer increasing importance of CSR in purchasing, measured through the item “Sustainability criteria are gaining more and more importance in our purchase decisions,” as well
as the interaction of this variable with the length of the relationship between the customer firm and the supplier firm. The rationale behind this step is that a customer firm that exhibits increasing importance of CSR in purchasing and has a long relationship with a supplier should have been less likely to start the relationship with this supplier based on sustainability criteria, as this aspect was initially of lower relevance. Results of Model 3 show that our hypothesized effects are robust against inclusion of these additional controls. While this reduces the likelihood of a selection effect, we acknowledge that it does not fully rule out such an effect.

**Discussion of Study 1**

Study 1 confirms our proposition of a so far undescribed, extended chain of CSR enforcement in B2B supply chains. If a customer is oriented toward CSR and has high power vis-à-vis the supplier, the supplier is more likely to engage in CSR. Our rationale for this effect is that the combination of a customer’s CSR orientation and power causes a supplier to perceive pressure to engage in CSR, independent of whether a customer exerts pressure to engage in CSR. Explaining the reason for this effect was beyond the scope of Study 1. Specifically, in H2 and H3 we proposed that a supplier’s perceived CSR pressure mediates the effect of a customer’s CSR orientation and power on CSR engagement. To test this proposition, we conducted a second study.

**Study 2: The Drivers Underlying the Extended Chain of CSR Enforcement**

**Experimental Design**

Study 2 comprises a scenario experiment with a 2 (customer CSR orientation: low vs. high) × 2 (customer power: low vs. high) design. The scenario informed participants that they were the CEO of a company that produced valves for industrial customers. Participants then read about
one of their customers, who depending on the treatment condition scored either low or high on customer CSR orientation and customer power. To manipulate customer CSR orientation, participants read about the customer’s ranking in a newspaper report on CSR. To manipulate customer power, we deployed the dimensions of power established in Study 1. That is, in the low (high) customer power condition, we informed participants that their company was operating in an industry with low (high) competitive intensity, was larger (smaller) than the customer, and offered a customized (commodity) product. We thus intended to manipulate customer power comprehensively rather than individual dimensions of power. Web Appendix W3 presents the full treatments. After reading the scenario, participants evaluated supplier perceived CSR pressure, supplier CSR intention, and further variables. To avoid demand effects, we assured participants that the survey was anonymous and had no right or wrong answers (Podsakoff et al. 2003).

Sample

To facilitate external validity, we collected a diverse sample of experienced professionals for the experiment. These included participants of several executive education programs and a smaller number of MBA students of business schools in Germany and Portugal and were randomly assigned to one of the four groups. This procedure resulted in a sample of 173 participants, ranging between 42 and 45 across experimental conditions. Web Appendix W4 shows the sample composition. To ensure that groups were comparable, we inspected the distributions of age and gender and found no significant differences across groups. Participants were on average 35 years old and 66% were male. Participants were from 29 different countries, 69% worked in B2B industries, and 67% were in a management position at the time of the survey. These managers had an average of 7 years of leadership experience and an average of 10 subordinates. Further, 76% of these managers were managers of managers with an average of 67 indirect subordinates.
Measures

Supplier perceived CSR pressure. We measured supplier perceived CSR pressure in two ways. First, following the approach of Unsworth et al. (2012), we asked participants two questions referring to the degree to which they believed the customer supported CSR enforcement (“To what extent do you believe the customer thinks you should increase your engagement in CSR?”) and the degree to which they valued the opinion of the customer (“To what extent do you value the opinion of the customer in relation to increasing your engagement in CSR?”). We then multiplied these sets of items to obtain a measure of perceived pressure (Unsworth et al. 2012), hereafter labeled “measure 1.” Second, we measured supplier perceived CSR pressure through three self-developed items on seven-point Likert scales (“As Meier GmbH, in this situation, I would … perceive pressure to engage in CSR myself,” “… feel forced to engage in CSR myself,” “… feel rushed to engage in CSR myself.”), hereafter labeled “measure 2.” In our analyses, we report the results using both measures of supplier perceived CSR pressure.

Supplier CSR intention. To measure supplier CSR intention, we used the items “In this situation I would work towards … making my company a socially responsible company,” “… making my company improve the well-being of society,” and “… making my company follow high ethical standards” (Wagner, Lutz, and Weitz 2009). The scale achieved desirable reliability (α = .81).

Controls. As participants may be influenced by their personal opinions regarding CSR as well as their real-life experiences, we collected two control variables. First, we measured participants’ personal attitude toward CSR using eight items (sample item: “Companies should act in a responsible way regarding the environment”) (Lichtenstein, Drumwright, and Braig 2004; Mohr and Webb 2005). Second, we collected employer CSR orientation, which pertains to participants’
actual employers. For this, we used three items (sample item: “Our firm has a clear policy statement urging CSR awareness in every area of operations”) (Banerjee, Iyer, and Kashyap 2003).

Results
Validity checks. Before the hypotheses testing, we conducted three checks to establish the validity of the experimental design. First, we conducted manipulation checks to verify that the treatments had the expected effects. Therefore, at the end of the survey (that is, after measuring all other variables used in this study) we asked participants to evaluate the customer’s CSR orientation using the items “The customer has a clear policy statement urging CSR awareness in every area of operations,” “CSR is a high priority activity in the customer firm,” and “The customer makes a concerted effort to make every employee understand the importance of CSR” (Banerjee, Iyer, and Kashyap 2003). Results showed that the manipulation of CSR orientation had the intended effect ($M_{\text{low CSR orientation}} = 1.97$, $M_{\text{high CSR orientation}} = 5.03$, $p < .001$). We also asked participants to evaluate the customer’s power using three seven-point semantic differentials at the end of the survey (“The customer has [low/high] power to influence my company,” “The customer is [less/more] powerful than my company,” and “My company [does not depend/strongly depends] on the customer”). Participants perceived the customer to be significantly less powerful in the low-power than in the high-power condition ($M_{\text{low power}} = 3.22$, $M_{\text{high power}} = 5.12$, $p < .001$).

Second, we asked participants to evaluate on a seven-point scale whether the scenario could happen in the real world. Results showed that participants considered the experiment to be sufficiently realistic ($M = 5.28$).

Third, to preclude demand effects (Podsakoff et al. 2003), we asked participants to guess the study’s hypotheses. Two independent coders who were not involved in the study then coded whether participants accurately guessed our key hypothesis that the effect of a customer’s CSR
orientation on a supplier’s perceived CSR pressure is more pronounced for high customer power. The coders agreed that no participant identified this hypothesis correctly, providing evidence that demand effects are not a serious concern in this study.

**Hypotheses testing.** We specified a path model in line with our conceptual framework in Figure 2. We entered treatment dummies as independent variables (Bagozzi 1977) and also included the control variables outlined above. We estimated the model using Mplus 7.0 (Muthén and Muthén 2012). Table 4 shows the results (Model 1a for measure 1 of supplier perceived CSR pressure and Model 2a for measure 2 of supplier perceived CSR pressure).

In H2 we propose that the interaction of customer CSR orientation and customer power has a positive effect on supplier perceived CSR pressure. In line with this hypothesis, the interactive effect of customer CSR orientation and customer power on supplier perceived CSR pressure is significantly positive (Model 1a: $\beta = .32, p < .01$; Model 2a: $\beta = .22, p < .05$). Thus, H2 is supported. Furthermore, in H3 we posit that supplier perceived CSR pressure increases supplier CSR intention. The corresponding coefficient is positive and significant (Model 1a: $\beta = .24, p < .01$; Model 2a: $\beta = .31, p < .01$), supporting H3.

To gain further insight into the nature of the interactive effect of customer CSR orientation and customer power on supplier perceived CSR pressure, Figure 3 depicts the mean values of supplier perceived CSR pressure across the treatment conditions. As can be seen, in line with our reasoning in H2, participants perceived highest pressure to engage in CSR in the condition with high customer CSR orientation and high customer power.

**Supplemental Analysis**

To verify the robustness of our results, we repeated our model estimation using a more rigorous sample. While as mentioned previously no participant correctly guessed our key hypothesis, the
independent observers noted that 21 participants at least guessed that our study had to do something with pressure to engage in CSR. Excluding these 21 participants from the sample (Model 1b and Model 2b) yielded results which are largely in line with the results in our full sample. This provides evidence that our results are not unduly influenced by a social desirability bias.

Discussion of Study 2

Results of Study 2 explain why a customer’s CSR orientation in combination with customer power increases suppliers’ CSR engagement. That is, if a customer is strongly oriented toward CSR and simultaneously exhibits high power, suppliers perceive greater pressure to engage in CSR activities. This pressure leads to an increased intention to engage in CSR activities. As a result, a reasonable assumption is that suppliers are more likely to engage in CSR—which is also what we found in Study 1.

An interesting question is how exactly suppliers’ perceived pressure to engage in CSR activities emerges. As argued previously, we propose that the norm of customer orientation leads supplier firms with low levels of power vis-à-vis their CSR-oriented customers to perceive a pressure to also engage in CSR. It may well be that suppliers’ perceived CSR pressure rests on further psychological mechanisms such as (a) an anticipation of or desire to preempt exerted pressure from their customers (or even from other stakeholders such as policy makers, NGOs, or the media) or (b) a fear to potentially lose customers if not following their example. We expect that suppliers’ perceived CSR pressure is the result of a complex interaction of multiple effects that deserve attention in future research. For the establishment of the extended chain however, our study demonstrated that at a given level of exerted pressure, suppliers will perceive different levels of
pressure to engage in CSR—and that the conventional and extended chain in combination have a higher explanatory value than any of the two in isolation.

**Discussion**

**Research Insights**

*Summary of results.* Our research complements the existing evidence that customers can in fact induce their suppliers to increase their CSR engagement. First, our study confirms the established conventional chain of CSR enforcement according to which (voluntary or regulation-induced) exerted CSR pressure by a customer firm, such as inclusion of CSR requirements in customers’ buying policies and contractual agreements with suppliers, will lead to higher levels of CSR engagement by the suppliers. Second, our research establishes an additional path to increasing suppliers’ CSR engagement even in the absence of exerted pressure—the extended chain of CSR enforcement in B2B supply chains: the interaction of customer’s CSR orientation with customer’s power emerged as an important additional driver of supplier’s CSR engagement.

Furthermore, we found this alternative route to a supplier’s CSR engagement to be mediated by suppliers’ perceived pressure to engage in CSR. At a given level of exerted pressure, suppliers perceive higher levels of pressure if their customers care about CSR and possess power. This higher level of perceived pressure fosters suppliers’ intention to engage in CSR and eventually increases their CSR engagement.

Whether suppliers benefit from a higher CSR reputation with their customers strongly depends on customers’ attributions as to why a supplier engages in CSR, as lower levels of extrinsic attributions strengthen the effect of a supplier’s CSR engagement on CSR reputation. Conversely,
for higher levels of extrinsic attribution, the effect of a supplier’s CSR engagement on CSR reputation may become negative.

Theoretical contributions. Our study makes at least three contributions to academic literature. First, our findings extend prior research on the antecedents of suppliers’ CSR engagement in B2B supply chains. Although prior research has established that customers can explicitly pressure their suppliers to engage in CSR (e.g., Banerjee, Iyer, and Kashyap 2003), an effect we label the conventional chain of CSR enforcement, our study shows that explicit customer pressure is only one of at least two routes to increase CSR in supply chains. The second route—the extended chain of CSR enforcement—comes into play if customers are oriented toward CSR and powerful vis-à-vis their suppliers. Under these circumstances, suppliers perceive pressure to engage in CSR, which ultimately leads to an increase in CSR engagement.

Second, these findings contribute to wider research on stakeholder pressure. Prior research has largely viewed stakeholder pressure as stakeholders’ explicit demands of companies. For example, “outside stakeholder groups can engage in a set of actions such as protests, civil suits, and letter-writing campaigns to advance their interests, [providing] strong incentives for firms to meet stakeholder demands …” (Eesley and Lennox 2006, p. 765). Our results suggest that this view may be too narrow, as we show that even in the absence of explicit pressure, organizations perceive pressure to conform to stakeholders’ values if these stakeholders are powerful. We suggest that literature on stakeholder pressure should incorporate this rather subtle way of stakeholder pressure and examine its applicability and boundaries outside the domain of CSR or customer–supplier interactions.

Third, our results contribute to literature on power in supply chains, which academic literature has frequently recognized to be vital to enforce interests (e.g., Dwyer, Schurr, and Oh 1987;
Lusch and Brown 1982). Our results support the notion that at least three contingency factors determine the power distribution between customers and suppliers: (i) the higher (lower) the competitive intensity in a supplier market, the higher (lower) the power of a given customer vis-à-vis a supplier; (ii) the larger (smaller) a customer compared to a supplier, the higher (lower) the power of the customer vis-à-vis the supplier; and (iii) the more (less) a product or service of a supplier is a commodity, the higher (lower) the power of the customer vis-à-vis the supplier. Future research may examine whether these determinants of power also influence the enforcement of interests outside the CSR domain, such as the enforcement of prices or quality standards.

**Public Policy Implications**

Enforcement of CSR in supply chains has gained significant traction in the past years—not only in practice and research, but also in public policy making (e.g., EU Commission 2014). However, given the continuous increase in the complexities of supplier–customer interactions in B2B supply networks (in which firms can simultaneously take on different roles vis-à-vis each other and that frequently reach across several national/regulatory boundaries) direct and hard regulation of CSR engagement of all actors along their entire value chains might prove to be practically infeasible without unnecessarily inflating transaction costs beyond reasonable levels. Transaction costs will be increased whenever policy makers simultaneously impose multiple kinds of CSR-related regulation (e.g., about social and environmental standards, non-financial reporting, and product labeling) from different angles (e.g., governments, supra-national entities, and financial authorities) to all players within their regulatory regimes. Accordingly, many participants in a multi-stakeholder dialog initiated by the EU Commission argued that one of the main challenges of public policy making was “to strike the right balance between regulatory and voluntary measures” especially regarding Small and Medium Enterprises (SMEs) (EU Commission 2014,
The extended chain of CSR enforcement as a complement to the established, conventional chain allows policy makers to take a much more targeted and pragmatic approach of CSR enforcement as powerful firms’ CSR orientation can trigger a strong domino effect upward in the supply chain along the following considerations.

First, our findings suggest that policy makers can legitimately focus their attention towards the end of the supply chain, i.e. on B2C companies. CSR enforcement is then likely to cascade upstream the supply chain from B2C companies to their B2B suppliers. This is true for the conventional chain, but even more so for the extended chain as the latter works even in absence of company or policy induced enforcement (i) at significantly lower cost, (ii) without regional limitations, and (iii) with lower risks of counter-reactions (Baden, Harwood, and Woodward 2009).

Policies that aim at triggering voluntary CSR engagement along the extended chain starting at B2C firms would not be in line with most current types of CSR regulation. Most existing policies do not differentiate between B2B and B2C, but rather target certain business practices or industry sectors that are considered to be particularly problematic. A focus on leveraging the extended chain by starting with B2C firms, however, could trigger the desired chain effect of increasing CSR engagement from one supply tier to the next supply tier starting at the most logical point without the exertion of pressure. That being said, such a chain effect might take longer as CSR orientation and engagement will need to “travel” upstream in the supply chain.

Second, our research shows that a customer company’s CSR orientation (in interaction with customer power) is an important antecedent for enforcing CSR within the supply chain along the extended chain. To perceive pressure to engage in CSR, supplier firms need to be aware about the importance of CSR for their customers. Accordingly, our research supports the current emphasis on CSR reporting within managerial and regulatory practice: mandatory, voluntary, or “comply
or explain” requirements for CSR reporting have gained significant relevance in the recent past (e.g., KPMG et al. 2016). Together with other forms of CSR communication, CSR reporting can serve as a strong signal of a company’s CSR orientation to its suppliers and lead these suppliers to perceive pressure to engage in CSR. Policy makers might use our empirical insight to confirm this part of their practice and complement their current activities by such proposals that will make CSR reporting not just generally public but especially accessible/targeted to supplier firms.

Third, the extended chain of CSR enforcement points to the importance of power and most notably to the factor of firm size. Policy makers can leverage this insight by focusing soft (and possibly also hard) regulation on large firms. Previous literature sometimes maintained that especially SMEs would not be accessible to voluntary CSR engagement. For example, Williamson and colleagues argued that “the use and development of existing regulatory structures, providing minimum standards for many activities covered by CSR, remains the most effective means through which the behaviour of manufacturing SMEs will be changed in the short to medium-term” (Williamson, Lynch-Wood, and Ramsay 2006, p. 317). The existence of the extended chain of CSR enforcement, however, points to a different public policy implication: Given the role of large firms as important buyers of B2B products and services, policy making can aim at increasing these large firms’ CSR orientation, which will over time lead to an increased CSR engagement of their suppliers—again both as a result of the conventional and the extended chain—especially if these supplier firms are relatively small.

Fourth, sector specific CSR regulation so far frequently focused on aspects such as harm or damage caused (e.g., to employees, communities, or environment). Our research suggests that regulators could advance sector specific regulation along two other dimensions: (a) CSR orientation: Our results show that CSR orientation is an essential prerequisite for the conventional and the
extended chain of CSR enforcement. Accordingly, public policy makers may support additional research about industry specific CSR orientation and focus regulatory pressures on such industries with low levels of CSR orientation. (b) Power: Our research also shows that CSR orientation in absence of customer power will not lead to CSR enforcement along the extended chain. Accordingly, policy makers may identify industries in which customer firms are notoriously weak and target direct regulation on these industries.

Fifth, our analysis supports existing approaches to ensure CSR in business by leveraging the role of governments and supra-national bodies as economic actors (e.g., Fombrun 2005). Governments and supra-national bodies do not only regulate business but are simultaneously economic actors with own interests. For example, state-controlled or government-subsidized companies are usually very important (i.e. typically powerful) buyers of products and services. Given their significance, they can effectively increase their suppliers’ CSR engagement through the conventional and extended chains of CSR enforcement. Along this line, governments can not only enforce CSR engagement of their direct suppliers, but trigger a trickle-down effect of CSR engagement for the larger supply system. Leveraging the extended chain, they can aim at increasing their supply networks’ CSR engagement even without the need of direct regulation and in absence of explicit pressure, by just making their own CSR orientation public.

Sixth and finally, our paper points to a need to reassess the way in which benefits from different policies are being estimated. Our results point to the fact (a) that CSR enforcement can not only be achieved through exerting explicit pressure, but also along the extended chain; (b) that both of these chains taken together will result in higher levels of supplier CSR engagement than each of them individually; and (c) that CSR engagement can trickle down the supply chain. Policy makers therefore ought to be more careful in evaluating the benefits of their policies as a mere focus
on the conventional chain of CSR enforcement might lead them to miss the benefits that—somewhat automatically and seemingly without effort—result through the extended chain and deeper in the supply chain. This aspect points to the danger of systematically underestimating the benefits from policies that address CSR along the supply chain when only looking at the conventional chain or only looking at first level suppliers. Therefore, it is to be expected that currently fewer policies get implemented than would be implemented when taking the benefits derived along the extended chain into consideration.

**Managerial Implications**

Our research has several implications for managerial practice relating to both customer companies and supplier companies. Both might want to pro-actively and voluntarily engage in CSR, (a) to avoid explicit exertion of pressure by customers, (b) to preempt potential regulations by public policy makers, or to (c) avoid negative effects of extrinsic attributions of their CSR engagement. More specifically our study shows, first, that managers of customer firms do not need to explicitly pressure their suppliers to engage in CSR. Even without explicit exertion of pressure, powerful companies can increase the CSR engagement upstream in the supply chain if they truly value CSR and their suppliers are cognizant of this. Therefore, companies that intend to increase CSR engagement in their larger ecosystem might want to communicate the importance they place on CSR vis-à-vis their suppliers and the public. This can be done via different actions, such as CSR reporting, public statements from the top management, or by participating in CSR rankings. Second, in exploring the extended chain of CSR enforcement, customer companies can focus on less powerful suppliers, as our research shows that an elevated power position is a prerequisite for customers’ enforcement of suppliers’ CSR without explicit pressure. This criterion also helps
managers prioritize their efforts, as the complexity of many B2B settings may preclude increasing the CSR engagement of all business partners simultaneously.

Our research also holds important implications for suppliers. First, suppliers should be aware that they might be influenced by their perception of what powerful customers value. More specifically, if customers are CSR-oriented and possess high power, suppliers are tempted to blindly engage in CSR themselves. To avoid preemptive obedience resulting in substantial costs, we suggest that suppliers carefully evaluate whether their customers would truly value suppliers’ CSR engagement. Even if powerful customers make themselves out to be strongly oriented toward CSR, they may not necessarily expect their suppliers to engage in CSR as well.

Second, suppliers should make sure that their customers attribute their CSR engagement to intrinsic motives. This is vital to improving suppliers’ CSR reputation and ultimately to gaining customers’ trust. Therefore, suppliers should carefully devise the communication of their CSR engagement and present it as not (merely) motivated by pressure perceived by their customers or other stakeholders.

Implementing these suggestions may enable managers to extract at least three advantages from the extended chain of CSR enforcement. By refraining from overtly pressuring suppliers, (a) customers and suppliers may save transaction costs (e.g., adaptation of purchasing policies, monitoring of suppliers’ CSR engagements); (b) customers may avoid creating relationship strains and managers may be more likely to receive future relationship benefits; and (c) customers may be less likely to attribute suppliers’ CSR engagement to extrinsic motives, allowing suppliers to generate a higher CSR reputation and enjoy greater levels of customer trust. Thus, both customers and suppliers may be more satisfied with their mutual relationship.
Limitations and Avenues for Further Research

Our study has several limitations that provide avenues for further research. First, our paper aimed at establishing the existence of the extended chain of CSR enforcement and identified supplier perceived CSR pressure as well as customer power as key elements of this extended chain. As mentioned previously, our research did not examine the specific psychological mechanisms linking powerful customers’ CSR orientation and suppliers’ perceived pressure to engage in CSR. We encourage future research to conduct further analyses on these mechanisms. For example, as outlined before, future research may examine to what extent suppliers anticipate their powerful and CSR-oriented customers to exert pressure to engage in CSR.

Second, as we conducted our study solely in B2B industries, we cannot draw conclusions for B2C industries. As in B2B markets typically multiple individuals interact on both the customer and the supplier side, the responsibility for and the enforcement of CSR are distributed and diffused. The interaction of the various effects within the extended chain of CSR enforcement might therefore be different in B2C and possibly also in B2G (business-to-government) settings.

Third, we focused on the conceptualization and empirical testing of an extended chain of CSR enforcement in B2B supply chains for a rather general understanding of CSR. Future studies might differentiate the impact of the extended chain of CSR enforcements on various aspects of CSR, as the interaction effect of customer CSR orientation and customer power on a supplier’s CSR engagement may differ for individual aspects such as philanthropic and business process-related CSR, or for different aspects such as environmental or social CSR activities.

Fourth, neither the conventional nor the extended chain of CSR enforcement claim to holistically explain all drivers or the entire process of a supplier’s implementation of CSR engagement. Rather, they present partial models focusing on specific effects that prevail, ceteris paribus. Future
studies might integrate our results in more comprehensive models of CSR engagement drivers, for example accounting for the influence of further stakeholder groups (including public policy makers) or the general context on suppliers’ CSR engagement. Additionally, future research might examine the process of a supplier’s implementation of CSR engagement as triggered by the conventional and extended chain of CSR enforcement, such as suppliers’ internal decision processes or customer–supplier negotiations.

Fifth, our study is purely descriptive and explicative, and does not contribute to normative debates on how far a company’s supply chain responsibility should reach (e.g., Amaeshi, Osuji, and Nnodim 2008). However, our findings hold important implications for policy makers and managers once they have normatively defined the reach of the supply chain responsibility. Sixth, our research points to a need to further investigate industry specific differences of CSR orientation and power distribution. Such an analysis could contribute to more targeted policy making, aiming to ensure sustainable business practices in those industries in which the conventional and extended chain of CSR enforcement are more likely to fail.

Seventh and finally, as mentioned previously we cannot fully rule out a selection effect in Study 1. Thus, future research should more explicitly ask customer firms whether their selection of the focal supplier was based on this supplier’s CSR engagement. By excluding customer firms who based their selection of a supplier on this supplier’s CSR engagement, future studies may carve out the extended chain of CSR enforcement more rigorously.
References


### TABLE 1: STUDY 1: DESCRIPTIVE STATISTICS AND CORRELATIONS

<table>
<thead>
<tr>
<th>Variable</th>
<th>V1</th>
<th>V2</th>
<th>V3</th>
<th>V4</th>
<th>V5</th>
<th>V6</th>
<th>V7</th>
<th>V8</th>
<th>V9</th>
<th>V10</th>
<th>V11</th>
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<tr>
<td>V1: Customer CSR orientation</td>
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<td>V2: Customer exerted CSR pressure</td>
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<td>V3: Supplier CSR engagement</td>
<td>.18**</td>
<td>.17**</td>
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<td>.27***</td>
<td>.14**</td>
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<td>V5: Supplier competitive intensity</td>
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<td>-.08</td>
<td>.05</td>
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<td>V6: Relative customer firm size</td>
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<td>V8: Extrinsic CSR attribution</td>
<td>.08</td>
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<td>V9: Length of relationship</td>
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<td>V10: Customer risk mitigating supplier selection</td>
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<td>V11: Customer increasing importance of CSR in purchasing</td>
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<td>1.31</td>
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<td>1.99</td>
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<td>.92</td>
<td>.89</td>
<td>.87</td>
<td>.91</td>
<td>.90</td>
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<td>.93</td>
<td>.88</td>
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<tr>
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<td>.57</td>
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<td>.81</td>
<td>.74</td>
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<td>CR</td>
<td>.92</td>
<td>.90</td>
<td>.88</td>
<td>.92</td>
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<td>-.9</td>
<td>.93</td>
<td>.90</td>
<td>-.9</td>
<td>-.9</td>
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*p < .10, **p < .05, ***p < .01 (two-tailed)

Note: M = Mean, SD = Standard Deviation, a = Cronbach’s alpha, AVE = Average Variance Extracted, CR = Composite Reliability, * = Single item
### TABLE 2: STUDY 1: ESTIMATED PATH COEFFICIENTS

<table>
<thead>
<tr>
<th>Paths</th>
<th>Model 1: Full Model</th>
<th>Model 2: Conventional Chain Model</th>
<th>Model 3: Robustness Check</th>
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<tr>
<td><strong>Conventional Chain of CSR Enforcement</strong></td>
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<tr>
<td>Customer CSR orientation → customer exerted CSR pressure</td>
<td>.78***</td>
<td>.78***</td>
<td>.55***</td>
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<tr>
<td>Customer exerted CSR pressure → supplier CSR engagement</td>
<td>.17**</td>
<td>.16**</td>
<td>.18*</td>
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<tr>
<td><strong>Extended Chain of CSR Enforcement</strong></td>
<td></td>
<td></td>
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<tr>
<td>Customer CSR orientation → supplier CSR engagement</td>
<td>.04**</td>
<td></td>
<td>.03**</td>
</tr>
<tr>
<td>Customer CSR orientation × supplier competitive intensity → supplier CSR engagement</td>
<td>H1c: +</td>
<td>.16**</td>
<td>.16**</td>
</tr>
<tr>
<td>Customer CSR orientation × relative customer firm size → supplier CSR engagement</td>
<td>H1c: +</td>
<td>.18***</td>
<td>.18***</td>
</tr>
<tr>
<td>Customer CSR orientation × supplier product commoditization → supplier CSR engagement</td>
<td>H1c: +</td>
<td>.12**</td>
<td>.12**</td>
</tr>
<tr>
<td><strong>Outcomes of Supplier CSR Engagement</strong></td>
<td></td>
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<tr>
<td>Supplier CSR engagement → supplier CSR engagement</td>
<td>.08**</td>
<td>.08*</td>
<td>.08**</td>
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<tr>
<td>Supplier CSR engagement × extrinsic CSR attribution → supplier CSR engagement</td>
<td>H2: +</td>
<td>-.13****</td>
<td>-.12**</td>
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<tr>
<td><strong>Main Effects of Moderators</strong></td>
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<tr>
<td>Supplier competitive intensity → supplier CSR engagement</td>
<td>-.10*</td>
<td></td>
<td>-.10*</td>
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<tr>
<td>Relative customer firm size → supplier CSR engagement</td>
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<td></td>
<td>-.19***</td>
</tr>
<tr>
<td>Supplier product commoditization → supplier CSR engagement</td>
<td>-.04**</td>
<td></td>
<td>-.04**</td>
</tr>
<tr>
<td>Extrinsic CSR attribution → supplier CSR reputation</td>
<td>.28***</td>
<td>.27***</td>
<td>.25***</td>
</tr>
<tr>
<td><strong>Controlled Paths</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer CSR orientation → supplier CSR reputation</td>
<td>.21**</td>
<td>.17*</td>
<td>.14**</td>
</tr>
<tr>
<td>Customer exerted CSR pressure → supplier CSR reputation</td>
<td>.09**</td>
<td>.11**</td>
<td>.06**</td>
</tr>
<tr>
<td>Length of relationship → customer exerted CSR pressure</td>
<td>-.21***</td>
<td>-.19***</td>
<td>-.19***</td>
</tr>
<tr>
<td>Length of relationship → supplier CSR engagement</td>
<td>.17**</td>
<td>.15**</td>
<td>.17**</td>
</tr>
<tr>
<td>Length of relationship → supplier CSR engagement</td>
<td>-.12**</td>
<td>-.10*</td>
<td>-.11**</td>
</tr>
<tr>
<td>Customer risk mitigating supplier selection → supplier CSR reputation</td>
<td></td>
<td></td>
<td>-.01**</td>
</tr>
<tr>
<td>Customer increasing importance of CSR in purchasing → supplier CSR reputation</td>
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<td></td>
<td>.34***</td>
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<td>Customer increasing importance of CSR in purchasing → supplier CSR engagement</td>
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<td>-.01**</td>
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<tr>
<td>Customer increasing importance of CSR in purchasing → supplier CSR reputation</td>
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<td></td>
<td>.11**</td>
</tr>
<tr>
<td>Customer increasing importance of CSR in purchasing × length of relationship → supplier CSR reputation</td>
<td></td>
<td></td>
<td>-.05**</td>
</tr>
<tr>
<td>Customer increasing importance of CSR in purchasing × length of relationship → supplier CSR reputation</td>
<td></td>
<td></td>
<td>-.11*</td>
</tr>
<tr>
<td><strong>Model Fit Indices</strong></td>
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<tr>
<td>Comparative fit index (CFI)</td>
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<td>1.00</td>
<td>.98</td>
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<td>Tucker-Lewis index (TLI)</td>
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<td>.99</td>
<td>.95</td>
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<td>Root mean square error of approximation (RMSEA)</td>
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<td>.03</td>
<td>.04</td>
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<td>Standardized root mean square residual (SRMR)</td>
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<td>.02</td>
<td>.02</td>
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<tr>
<td>χ² (d.f.)</td>
<td>15.19 (16)</td>
<td>5.59 (5)</td>
<td>21.56 (17)</td>
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<td>Akaike Information Criterion (AIC)</td>
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<td>Bayesian Information Criterion (BIC)</td>
<td>1679.14</td>
<td>1705.47</td>
<td>1686.98</td>
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</table>

Notes: We report standardized coefficients.
TABLE 3: STUDY 1: RELATIVE STRENGTH OF THE CONVENTIONAL AND THE EXTENDED CHAIN OF CSR ENFORCEMENT

<table>
<thead>
<tr>
<th>Moderator Levels</th>
<th>Conventional Chain</th>
<th>Extended Chain</th>
<th>Overall Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier Competitive Intensity</td>
<td>Relative Customer Firm Size</td>
<td>Supplier Product Commoditization</td>
<td>Indirect Effect: Customer CSR Orientation → Exerted CSR Pressure Supplier CSR Engagement</td>
</tr>
<tr>
<td>Medium Medium Medium</td>
<td>.14**</td>
<td>.04**</td>
<td>.17***</td>
</tr>
<tr>
<td>High Medium Medium</td>
<td>.14**</td>
<td>.16*</td>
<td>.30***</td>
</tr>
<tr>
<td>Medium High Medium</td>
<td>.14**</td>
<td>.12*</td>
<td>.25***</td>
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<tr>
<td>Medium Medium High</td>
<td>.14**</td>
<td>n.s.</td>
<td>.25***</td>
</tr>
<tr>
<td>High High Medium</td>
<td>.14**</td>
<td>.25***</td>
<td>.38***</td>
</tr>
<tr>
<td>High Medium High</td>
<td>.14**</td>
<td>.24**</td>
<td>.38***</td>
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<tr>
<td>Medium High High</td>
<td>.14**</td>
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<td>.33***</td>
</tr>
<tr>
<td>High High High</td>
<td>.14**</td>
<td>.32***</td>
<td>.46***</td>
</tr>
</tbody>
</table>

*p > .10, *p < .10, **p < .05, ***p < .01 (one-tailed)
Notes: We report standardized coefficients. A high level of a moderator was set to 1 (note that all indicators were previously z-transformed).
## TABLE 4: STUDY 2: ESTIMATED PATH COEFFICIENTS

<table>
<thead>
<tr>
<th>Paths</th>
<th>Measurement of Supplier Perceived CSR Pressure</th>
<th>(1) Based On Unsworth et al. (2012)</th>
<th>(2) Own Operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td></td>
<td>Model 1a:</td>
<td>Model 1b:</td>
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<tr>
<td></td>
<td></td>
<td>Full Sample</td>
<td>Robustness Sample</td>
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<tr>
<td></td>
<td>Customer CSR orientation</td>
<td>→ supplier perceived CSR pressure</td>
<td>.40***</td>
</tr>
<tr>
<td></td>
<td>Supplier perceived CSR pressure</td>
<td>→ supplier CSR intention</td>
<td></td>
</tr>
<tr>
<td>Interaction Effect</td>
<td>Customer CSR orientation × customer power</td>
<td>→ supplier perceived CSR pressure</td>
<td>H2: +</td>
</tr>
<tr>
<td>Main Effect of Moderator</td>
<td>Customer power</td>
<td>→ supplier perceived CSR pressure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attitude toward CSR</td>
<td>→ supplier perceived CSR pressure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attitude toward CSR</td>
<td>→ supplier CSR intention</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employer CSR engagement</td>
<td>→ supplier perceived CSR pressure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employer CSR engagement</td>
<td>→ supplier CSR intention</td>
<td></td>
</tr>
<tr>
<td>Controlled Paths</td>
<td>Comparative fit index (CFI)</td>
<td></td>
<td>1.00</td>
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<tr>
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<td>Tucker-Lewis index (TLI)</td>
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<td>Root mean square error of approximation (RMSEA)</td>
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<td>.00</td>
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<td></td>
<td>Standardized root mean square residual (SRMR)</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>χ² (d.f.)</td>
<td>.76 (3)</td>
<td>.72 (3)</td>
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<td>Akaike Information Criterion (AIC)</td>
<td>1771.47</td>
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<td>Bayesian Information Criterion (BIC)</td>
<td>1809.03</td>
<td>1607.60</td>
</tr>
</tbody>
</table>

Notes: We report standardized coefficients.

*a p > .10, *p < .10, **p < .05, ***p < .01 (one-tailed)
Figure 1

CSR Enforcement in B2B Supply Chains

Exerting Pressure (Conventional Chain of CSR Enforcement)

Leveraging Power (Extended Chain of CSR Enforcement)

Study 1 (field study)

Study 2 (experiment)
Figure 2

Conceptual Framework

**Study 1 (field study)**

- **Customer Firm Data**
  - Customer CSR Orientation
  - Customer Exerted CSR Pressure

- **Supplier Firm Data**
  - Supplier CSR Engagement

- **Customer Firm Data**
  - Supplier CSR Reputation

**Controls:**
- Length of Relationship

**Customer Power**
- Industry: Supplier Competitive Intensity \( H_{1a} (+) \)
- Company: Relative Customer Firm Size \( H_{1b} (+) \)
- Product: Supplier Product Commoditization \( H_{1c} (+) \)

**Extrinsic CSR Attribution** \( H_{4} (-) \)

**Study 2 (experiment)**

- **Customer CSR Orientation**
  - \( H_{2} (+) \)
  - Customer Power

- **Supplier Perceived CSR Pressure**
  - \( H_{3} (+) \)
  - Supplier CSR Intention

**Controls:**
- Personal Attitude Towards CSR
- Employer CSR Orientation

**Manipulated “Customer” Info**

**Measured Data at “Supplier” Side**
Figure 3

Study 2: Supplier Perceived CSR Pressure

![Supplier Perceived CSR Pressure – Measurement (1)](image1)

![Supplier Perceived CSR Pressure – Measurement (2)](image2)

Note: Supplier perceived CSR pressure was measured by multiplying the seven-point Likert items “To what extent do you believe the customer thinks you should increase your engagement in CSR?” and “To what extent do you value the opinion of the customer in relation to increasing your engagement in CSR?” (Unsworth et al. 2012).

Note: Supplier perceived CSR pressure was measured as the average score of three seven-point Likert items (“As Meier GmbH, in this situation, I would …” “… perceive pressure to engage in CSR myself,” “… feel forced to engage in CSR myself,” “… feel rushed to engage in CSR myself.”).