# DOING WELL BY DOING GOOD? THE SELF-INTEREST OF BUYING FIRMS AND SUSTAINABLE SUPPLY CHAIN MANAGEMENT

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This paper investigates how changes in sustainability-related conditions (SRCs) at a supplier influence buyers' economic performance. Using a conceptual theory-building approach and drawing on instrumental stakeholder theory, this research identifies four mediating effects through which suppliers' SRCs affect buyers' economic performance. The four mediating factors are purchasing costs, supply chain sustainability risk costs, cooperation benefits, and benefits stemming from spillovers of a supplier's self-promotion. Purchasing costs exert a negative influence on buyers' performance, whereas the other three factors contribute positively to performance. The study also suggests that the anticipation of performance effects which are salient to the buyer triggers efforts to improve the supplier's SRCs. This research makes several contributions. First, the study identifies and analyzes the causal pathways through which a supplier's SRCs influence buyers' performance, thus contributing to the development of sustainable supply chain management theory. Second, the study helps buyers make better decisions about their suppliers. Finally, the study provides a conceptual platform for improved dialogue between stakeholders and buyers.

**Keywords:** sustainable supply chain management; corporate social responsibility; supply chain risk; stakeholder theory; conceptual theory building

### INTRODUCTION

For many years, buying firms (referred to hereafter as buyers) have been pressured by their stakeholders to improve sustainability-related conditions (SRCs) at their suppliers (Foerstl, Reuter, Hartmann & Blome, 2010; Klassen & Vereecke, 2012), especially with respect to sourcing from emerging markets (Ellram, 2013; Jiang, 2009). However, SRCs in current supply chains remain rather poor (Pagell & Shevchenko, 2014). Given that buyers are able to influence their suppliers' SRCs through supplier management processes, and using tools such as supplier codes of con-

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duct and audits (Carter & Rogers, 2008; Jiang, 2009), a relevant question has yet to be addressed: To what extent is such remedial action in the buyer's self-interest? Attention is thus directed toward associated performance effects. Accordingly, this paper posits the following research question: How do changes in sustainability-related conditions at a supplier influence a buyer's economic performance?

I employ a conceptual theory-building approach (Choi & Krause, 2006; Markman, Gianiodis & Buchholtz, 2009) to identify any indirect causal pathways (i.e., mediating effects) that relate the supplier's SRCs to the buyer's financial performance. In doing so, I draw on instrumental stakeholder theory. Stakeholder theory is concerned with the reciprocal relationships between a firm and its numerous stakeholders, such as suppliers, customers, employees, NGOs, the media, and others (Freeman, 1984; Freeman, Harrison, Wicks, Parmar & de Colle, 2010). Instrumental stakeholder theory essentially views these relationships as a means to achieve the buyer's goals (Donaldson & Preston, 1995) and is hence particularly appropriate to the research question.

This research makes important scholarly, managerial, and social contributions. First, it contributes to the ongoing development of sustainable supply chain management (SSCM) theory (Markman & Krause, 2014) by identifying and analyzing the causal pathways through which a supplier's SRCs influence a buyer's performance, integrates these mechanisms into a comprehensive framework for the study of buyers' self-interests, and highlights extant trade-offs. Consequently, this research mirrors a long-standing debate from the extant corporate social responsibility literature regarding the relationship between corporate social performance and corporate financial performance (McWilliams & Siegel, 2000; Orlitzky, 2001; Perrini, Russo, Tencati & Vurro, 2011). Second, the study helps to develop a "business case" (Carter, 2004, p. 10) for buyers to foster their decision-making. Third, the study's findings provide an incentive for fostering supplier sustainability and offer a platform for improved dialogue between stakeholders and buvers.

The following section establishes the conceptual background of the study. The first subsection reviews the literature, which is aimed at elaboration of the research question and development of an initial theoretical framework. Next, instrumental stakeholder theory is introduced as the theoretical perspective for this research. The following four sections scrutinize different mediating pathways through which a supplier's SRCs might influence a buyer's economic performance. The section thereafter synthesizes the results into a comprehensive theoretical framework. Before concluding the paper, scholarly, managerial, and social implications are discussed, and future research paths are depicted.

#### CONCEPTUAL BACKGROUND

#### Literature Review

Attention to sustainability in supply chains has increased in recent years, primarily in response to influential initial studies (Carter, 2000; Carter & Carter, 1998). "Sustainable" supply chain research denotes scholarship that considers not only the economic dimension traditionally studied within supply chain management but also encompasses at least some green (environmental, ecological) or social-ethical aspects (Carter & Rogers, 2008; Pagell & Shevchenko, 2014; Winter & Knemeyer, 2013). Relevant SSCM research has focused on problems such as scarcity of natural resources (Bell, Autry, Mollenkopf & Thornton, 2012), the greenhouse gas effect (Wu, Ellram & Schuchard, 2014), problematic working conditions (Thornton, Autry, Gligor & Brik, 2013), or other instances in which sustainability is lacking (Pagell & Shevchenko, 2014).

This research is specifically concerned with a supplier's SRCs from the perspective of the buyer. The critical concept of SRCs is first suggested in this study. The underlying idea is to (1) maintain the broad umbrella character (Hirsch & Levin, 1999) of supply chain sustainability, while (2) focusing only on the ordinary states of operational processes. With respect to item 1, supply chain sustainability encompasses numerous green, social, and ethical attributes (Carter & Rogers, 2008; Schleper & Busse, 2013). SRCs are also multi-dimensional, comprising green (e.g., consumption of natural resources and emissions), social (e.g., wages and occupational safety), and ethical issues (e.g., compliance with laws and abstinence from corruption).

However, regarding item 2 above, it may occasionally be commendable to not view all aspects of supply chain sustainability in tandem, in the spirit of Markman, Waldron and Panagopoulos (2015) observation that "trumpeting the excellent conditions for the stitching of jeans is of little use when activists reveal that the cotton was harvested unsustainably." Consider the fictitious example of a shirt that is woven from sustainably grown cotton and promoted by the buyer as a "sustainable" garment, even though it was sewn by a Bangladeshi supplier under highly unsustainable conditions. The example highlights that by viewing product and process sustainability in tandem, unsustainable conditions in production processes may be hidden from view. Conversely, the notion of SRCs excludes effects related to product sustainability, focusing only on operational processes. Moreover, the concept of SRCs focuses on the sustainability-related states of the production processes, rather than on specific incidents. Thereby, the concept illuminates the ordinary conditions that exist in day-to-day operations when no additional triggers draw attention to sustainability questions.

Prior research has shown that buyers' stakeholders care substantially about suppliers' SRCs. They scrutinize suppliers, expecting to find strong green (Ehrgott, Reimann, Kaufmann & Carter, 2013; Wu et al., 2014) and social-ethical conditions (Jiang, 2009; Klassen & Vereecke, 2012), and they often demand improvements. Prior research also calls for such action (Jiang, 2009). Indeed, buyers are capable of influencing suppliers' SRCs using tools such as supplier codes of conduct (Jiang, 2009) and audits (Carter & Rogers, 2008). Moreover, buyers can bring about improvements in suppliers' SRCs through supplier evaluation and selection (Ehrgott, Reimann, Kaufmann & Carter, 2011; Thornton et al., 2013), as well as supplier development processes (Ehrgott et al., 2013; Sancha, Longoni & Giménez, 2015). Furthermore, buyers may also be able to negotiate higher levels of SRCs or issue suppliers with factual directives, given extreme powerdependence constellations.

Normatively, buyer action to improve SRCs seems to be particularly important in the context of sourcing from suppliers in emerging economies. In emerging economies, socio-economic standards tend to be much lower than those in industrialized countries (Ehrgott et al., 2011, 2013). As a result, strong SRCs are relatively less affordable in these countries. Moreover, emerging economies often have weak formal institutions (Mair & Marti, 2009; Puffer, McCarthy & Boisot, 2010), which means that few laws may be in place for fostering SRCs, and existing laws may be ineffective (Busse, Kach & Bode, 2015). Therefore, buyers may often be the only actors capable of fostering sustainability.

Despite academic and real-world interest in SSCM and suppliers' SRCs, true sustainability is lacking in modern supply chains (Pagell & Shevchenko, 2014). One possible explanation for the absence of long-term improvement might be that many buyers simply do not care about suppliers' SRCs, or that such concerns jeopardize their primary goal. Granted, increasingly, firms express a desire to operate and purchase in a sustainable manner, thereby according due attention to all dimensions of the so-called triple bottom line of economic, green, and social outcomes of firm operations (Elkington, 1999). However, the triple bottom line dimensions are not equal. The economic dimension denotes a firm's self-interest ("profit") and is hence considered by all firms, whereas the green and social-ethical dimensions reflect the effects of the firm's actions on third parties ("people" and "planet"). Without assuming that a firm will always prioritize profit when faced with a trade-off, it is necessary to consider to what extent a buying firm has a selfinterest in the SRCs of its suppliers, as reflected in the performance impacts for the buyer.

Organizational performance is a frequently used dependent variable in management research (Richard, Devinney, Yip & Johnson, 2009), as well as SSCM (Golicic & Smith, 2013). The concept has been termed "the ultimate dependent variable of interest for [...] management" (Richard et al., 2009, p. 719; emphasis added). Richard et al. (2009) conceptualize performance as firm outcomes in terms of financial performance, product market performance, and shareholder returns. Importantly, this understanding is purely economic and excludes a firm's social and environmental performance. Subsequently, researchers disaggregated performance components into benefits (i.e., variables that contribute positively to performance) and costs (i.e., variables that influence performance negatively; Busse, Mahlendorf & Bode, 2015).

Against this background, the goal of this paper is to "theorize across the dyad" to answer the following research question: How do changes in sustainability-related conditions at a supplier influence a buyer's eco-

nomic performance? The study will demonstrate that in global supply chains, buyers' self-interest is to care more strongly about a supplier's SRCs than is immediately obvious. However, caring is less a result of buyers' self-interest than society-level requests would suggest.

While no study has been identified that analyzes the causal pathways through which a supplier's SRCs influence buyer performance, prior SSCM research has considered performance effects associated with SSCM practices. For example, Thornton et al. (2013) explored the effects of socially responsible supplier selection on various measures of buyer performance, finding that overall, socially responsible supplier selection appears to be associated with increased buyer performance. This study complements the work of Thornton et al. (2013) by investigating the supplier's SRCs rather than the aggregate practices of the buyer, and by analyzing the causal mechanisms through which changes in the SRCs exert influence over buyers' performance.

Furthermore, large-scale empirical research in particular has also investigated performance effects associated with SSCM (see Golicic & Smith, 2013 for a recent meta-analysis), often striving to demonstrate that "SSCM pays off." This study represents a valuable addition to this work. First, SSCM refers to both product and process sustainability, yet sustainability of a supplier's production processes, as reflected by its SRCs, is less visible to the buyer's stakeholders than the sustainability of manufactured products. Moreover, it is also less important to many stakeholders. Referring back to the previous example, a consumer purchasing a sustainable shirt might base her purchasing decision on expected positive health effects because of the sustainably produced cotton ingredient as well as her wish to attain personal status as a supporter of sustainability (Griskevicius, Tybur & Van den Bergh, 2010). Thus, it is impossible to deduce that because SSCM pays off, so must fostering a supplier's SRCs. Second, in-depth theoretical analysis of causal mechanisms facilitates a deeper understanding of the processes at work, thereby fostering much needed theory development in the domain of SSCM (Markman & Krause, 2014).

The research question is dyadic in that it refers to the influence of a variable in the sphere of the supplier over another variable in the sphere of the buyer. These two variables are also causally quite distant from one another; interest is not directed to what the supplier does to the buyer, but, rather, to what extent a changed state in the supplier influences the "ultimate" outcome variable of the buyer's operations. There is no apparent reason for a direct effect of the independent variable on the dependent variable, nor could any such effect be identified over the course of

this study. Hence, the aim of this research was to identify indirect causal pathways (i.e., mediating effects) through which the independent variable exerts influence over the dependent variable (Hayes, 2013). Moreover, the goal is to identify all causal pathways that are substantially important—in other words, to create a parallel multiple mediator model (Hayes, 2013, pp. 125-130). This study first views the effects of multiple causal pathways independently (together with some fundamental moderating influences), then argues why they are regarded as mutually exclusive and collectively exhaustive, and finally integrates them into a holistic model. Thereby, any trade-offs for the buyer can be explored in much more depth than by focusing on a single causal chain. Figure 1 visualizes the resulting initial theoretical framework.

Four parallel causal mechanisms can be distinguished: purchasing costs, supply chain sustainability risk costs, collaboration benefits, and benefits from the spillover of supplier self-promotion represent these paths as mediator variables. Two of these mediating effects (supply chain sustainability risk costs and collaboration benefits) have already been studied in isolation, whereas the other two have only been hinted at and are explored in depth. Any literature related to individual mediation effects is discussed during the theoretical analysis of the respective effect. The definitions of all key concepts are summarized in Table 1.

#### **Instrumental Stakeholder Theory**

Stakeholder theory revolves around the relationships between a firm and its stakeholders. A classic and often-cited definition of stakeholders stems from Freeman (1984, p. 46): "A stakeholder [...] is (by definition) any group or individual who can affect or is affected by the achievement of the organization's objectives." This broad definition includes individuals within the firm, such as owners, managers, and employees, as well as individuals and organizations outside the firm, such as suppliers, customers, competitors, local communities, NGOs or activist groups, the media, and government agencies (Donaldson & Preston, 1995; Freeman, 1984). Even the natural environment is sometimes considered a stakeholder (Mitchell, Agle & Wood, 1997). Stakeholders in a contractual relationship with the firm are referred to as primary stakeholders (e.g., suppliers and employees); all others are secondary stakeholders (e.g., NGOs and the media; Clarkson, 1995).

Stakeholder theory is frequently used as a theoretical lens for SSCM research (Meixell & Luoma, 2015; Touboulic & Walker, 2015). For example, it has been applied to the environmental development of suppliers from emerging economies (Ehrgott et al., 2013), stakeholder influences on suppliers' adoption of energy efficiency initiatives (Wu et al., 2014), and sustainability-related supply chain risks (Hofmann, Busse, Bode & Henke, 2014). With respect to supply chain problems, stakeholder theory posits that both suppliers and customers are stakeholders (Freeman et al., 2010). Its adequacy in explaining sustainability concerns is explained in further detail below.

Stakeholder theory features descriptive (empirical), normative, and instrumental characteristics (Donaldson & Preston, 1995; Freeman et al., 2010; Mitchell et al., 1997). The descriptive stakeholder theory stud-

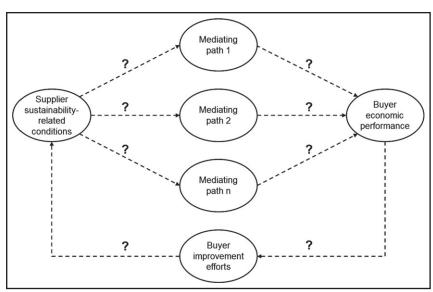


FIGURE 1
Initial Conceptual Framework

TABLE 1
Overview of Key Concepts

Overview of Key Concepts						
Concept	Definition	Role	References			
Sustainability-related conditions (SRCs) at the supplier	The green, social, and ethical attributes of the supplier's operational processes	Independent variable	Newly developed in this study			
Purchasing costs	Direct and indirect expenses for the entirety of products purchased by the buyer from the supplier	Mediator variable	None			
Supply chain sustainability risk costs	The expected loss associated with a supply chain sustainability risk for a certain SRC, given a certain level of severity of the issue	Mediator variable	Newly developed in this study, drawing on Hofmann et al. (2014), March and Shapira (1987), and Rao and Goldsby (2009)			
Buyer vulnerability	The susceptibility of the buyer to loss from supply chain sustainability risks	Moderator variable	Adapted from March and Shapira (1987), Rao and Goldsby (2009), Wagner and Bode (2006), and drawing also on Hofmann et al. (2014)			
Collaboration benefits	All dyadic components of relationship performance in terms of achievement of mutual goals, problem solving, and procedural efficiency	Mediator variable	Newly developed in this study, drawing on Carter and Jennings (2002) and Krause et al. (2009)			
Spillover benefits from supplier self- promotion	Stakeholder trust, positive affection for and loyalty to the buyer in response to the supplier's self-promotion of its SRCs	Mediator variable	Newly developed in this study, drawing on Carter and Jennings (2002), Chaudhuri and Holbrook (2001), Homburg et al. (2013), and Singh et al. (2012)			
Component visibility	The degree to which the buyer's stakeholders perceive the functional importance of the component	Moderator variable	Adapted from Foerstl et al. (2015)			
Buyer economic performance	Desirable firm outcomes in terms of financial performance, product market performance, and shareholder return	Dependent variable	Adopted from Richard et al. (2009) and drawing also on Busse, Mahlendorf et al. (2015)			
Buyer improvement efforts	The efforts of a buyer to improve SRCs at the supplier	Captures reverse causal pathway	None			

ies how firms *take* into account stakeholder interests, driven by both normative and instrumental motives. This perspective will be briefly revisited in a later section. The normative stakeholder theory considers the normative-ethical reasons why firms *should consider* stakeholder interests, thereby resonating with the aforementioned "requests" for buyer action to improve suppliers' SRCs. Since this research is con-

cerned with a buyer's self-interest, normative motives are out of scope. Finally, instrumental stakeholder theory, the perspective adopted herein, explores the *benefits* realized by a corporation that takes stakeholder interests into account (Bridoux & Stoelhorst, 2014; Donaldson & Preston, 1995).

At the heart of instrumental stakeholder theory lies the notion that it is in a firm's own interests to care about stakeholders, because stakeholders provide important input into firms that can either facilitate or hinder their pursuit of economic performance. Accordingly, this view posits that "adherence to stakeholder principles and practices achieves conventional corporate performance objectives as well or better than rival approaches" (Donaldson & Dunfee, 1994, p. 71). Thus, "if consumers demand that products have particular attributes (for example, that they are certified as not being produced in 'sweat shops'), then corporations will need to act, else lose the support" (Deegan & Shelly, 2014, p. 506). Such reasoning is also referred to as enlightened self-interest (Clarkson, 1995; Deegan & Shelly, 2014). The instrumental stakeholder theory perspective facilitates answers to questions such as to what extent "doing good" (as requested by stakeholders) is actually in a firm's selfinterest, thereby contributing to a firm's propensity to "do well." Hence, it provides the ideal perspective from which to seek answers to the research question.

Instrumental stakeholder theory refers to subjective evaluation (i.e., rational calculation or moral judgment) of a buyer's stakeholders regarding suppliers' SRCs at the individual (i.e., stakeholder) level, rather than seemingly objective evaluation at the societal level (Clarkson, 1995; Deegan & Shelly, 2014). While societal-level evaluation standards guide individual-level evaluations in stable times (Bitektine & Haack, 2014), "managers manage relationships with their stakeholders and not with society" (Clarkson, 1995, p. 100; emphasis in the original). Different stakeholders often vary in their interests as well as their roles (Wu et al., 2014) and may focus their attention on different issues (Clarkson, 1995). In this respect, Bridoux and Stoelhorst (2014) recently identified an important distinction regarding the basic motivation of stakeholders, contrasting between so-called self-regarding stakeholders who are predominantly interested in their own well-being and reciprocal stakeholders who expect fairness not only in terms of the way they are treated but also in terms of how others are treated. Reciprocal stakeholders can act on behalf of others (Mitchell et al., 1997) and push buyers to face sustainability-related concerns that might otherwise go unaddressed. Some issues, such as excessive consumption of scarce resources, need the support of reciprocal stakeholders, since the natural environment is reliant upon supporters to voice this issue. Hence, buyers must consider individual stakeholders and not just groups of stakeholders to at least some extent.

Given the costs associated with addressing individual stakeholder concerns and the sheer numbers of customers, suppliers, investors, employees, etc. a firm has, every stakeholder cannot receive the full attention of the buyer. An important practical question is,

hence, how to identify those stakeholders that matter the most. Mitchell et al. (1997) suggest three criteria: namely, power, legitimacy, and urgency. Power relates to the degree to which one actor in a dyadic relationship can influence another to do something that the other would not have done otherwise (Pfeffer, 1981). Legitimacy denotes "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995, p. 574) and refers to the legitimacy of the stakeholders' claims on the firm in this context. Urgency identifies the "degree to which stakeholder claims call for immediate attention" (Mitchell et al., 1997, p. 869) due to time sensitivity or criticality. The more a stakeholder portrays the three attributes of power, legitimacy, and urgency, the more salient the stakeholder's claims on and expectations toward the firm (Mitchell et al., 1997). Accordingly, a supplier of bottleneck components who threatens to terminate its contract, a worker who was just injured, or a powerful NGO who is concerned about workplace security must be addressed, whereas a minor shareholder who wants to speak to the board of directors or a low-level employee who does not get along with his superior may possibly be disregarded.

Instrumental stakeholder theory facilitates our understanding of each of the four mediating mechanisms between a supplier's SRCs and the buyer's performance. A peculiarity of applying it here is that, in three of the four causal mechanisms, "chains" of stakeholders comprised of more than two parties must be considered. The reason is that in these three cases, a connection must be established between the supplying firm (which is already a stakeholder of the buyer) and the buyer's other stakeholders. The stakeholder chains that matter the most for each mechanism are depicted in Table 2. They will be discussed throughout the following section, beginning with the purchasing cost mechanism.

#### **PURCHASING COSTS**

As its name suggests, the purchasing cost mechanism considers the influence of the supplier's SRCs on the buyer's purchasing costs (i.e., the direct and indirect expenses for all products purchased from the supplier), which in turn influence the buyer's economic performance. In terms of stakeholder relationships to be considered, this mechanism refers to the direct interaction between the supplier and the buyer at the firm level. Moreover, it relates to the self-regarding behavior of both parties, which is driven by economic motives.

Let us begin by considering the interaction between buyer and supplier as a form of negotiation. It follows

TABLE 2
Stakeholder Theory Perspective Within Each of the Mediation Paths

Mediation Path	Most Important Stakeholder Relationships
Purchasing costs	Supplier ↔ buyer
Supply chain sustainability risk costs	Supplier ↔ powerless stakeholders of the supplier (e.g., employees, natural environment, local communities) ↔ powerful secondary stakeholders of the buyer (e.g., media, NGOs) ↔ reciprocal primary stakeholders of the buyer (e.g., employees, customers, investors) ↔ buyer
Collaboration benefits	Supplier ↔ select primary stakeholders (i.e., employees and managers) of the supplier firm ↔ select primary stakeholders (i.e., employees and managers) of the supplier firm ↔ buyer
Spillover benefits from supplier self- promotion	Supplier ↔ primary stakeholders of the buyer (e.g., customers, employees) ↔ buyer

Notes. A double-sided arrow denotes a reciprocal relationship in which at least one stakeholder is involved. A chain of double-sided arrows for a mediation path indicates that at least two reciprocal relationships with at least three actors must be viewed in tandem. All stakeholder relationships ultimately connect the supplier with the buyer.

from instrumental stakeholder theory that the buyer has a preference for better, rather than worse, SRCs from the supplier because of the interests and requests of its stakeholders. This means that the better the supplier's SRCs, the more competently the supplier can promote them to the buyer. As a result, the supplier may attempt to exploit better SRCs by pushing for higher prices. However, the buyer would presumably not give in easily, arguing that "better SRCs pay off" for the supplier, a claim which is supported by arguments brought forward by SSCM research (Golicic & Smith, 2013).

Let us consider the supplier's SRCs not as a given, but as an outcome of its own account. Within some operationally defined limits, the supplier is able to influence its SRCs through various measures. For example, resource efficiency may be improved by investment in equipment that operates in a resource-

efficient manner, engagement in managerial planning, utilization of external consultants, or employee efforts dedicated to resource efficiency. Similarly, emission levels can be reduced by employing clean technology; wages can be increased by raising employees' hourly pay; and occupational health and safety can be fostered by investing in workplace security or training people. Each of these measures will improve an SRC of a supplier. However, it can be assumed that the supplier will try to maximize its own economic performance. Therefore, a supplier will not use SRCs as a decision-making criterion, but, rather, the performance effects associated with available measures.

For each SRC improvement measure, associated performance effects can be computed by weighting the associated benefits (i.e., desired effects, especially monetary savings and enlightened self-interest effects from the supplier's relationships to its stakeholders) against the costs (i.e., undesired effects, especially monetary expenses and opportunity costs; Busse, Mahlendorf et al., 2015). To implement the aforementioned resource efficiency measures, a supplier will incur monetary expenses (for machinery and consultants) or opportunity costs (for managerial planning and employee attention), but these measures are also associated with monetary savings as a benefit. The emission-related measures will also cost money but may in turn aid the supplier in complying with the latest regulations as a benefit. Increasing the wages of employees translates directly into monetary costs but also ensures that qualified staff is available, fluctuations decrease, and the workforce is more extrinsically motivated. Finally, occupational health and safety measures will create investment expenses related to workplace security and opportunity costs because of training time but will also generate benefits, such as decreased downtime, decreased medical and insurance costs, and increased staff commitment.

In its pursuit of maximum economic performance, the supplier will seek to implement all measures for which the benefits exceed the costs. Moreover, economic rationality suggests the implementation of such measures in the order of their performance effects. Thus, it is possible to sort all implementable SRCimproving measures by their performance effects, beginning with those that pay off the most strongly, moving through some for which performance effects are more or less equal to zero (i.e., the benefits equal the costs), and finally arriving at some for which the performance effects become ever more negative. When viewing the ordered SRC improvement efforts as a continuum, rather than as discrete individual activities, the supplier's performance as a function of these improvement efforts assumes an inverse U-shape (Figure 2a).

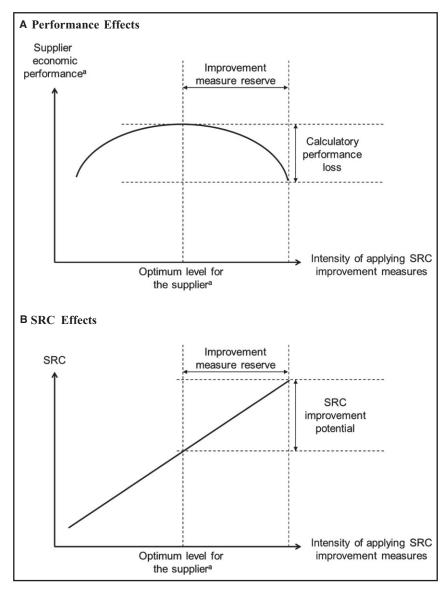
Inverse U-shaped performance functions denote a so-called too-much-of-a-good thing effect, which "oc-

curs when an initially positive relation between an antecedent and a desirable outcome variable (e.g., [...] firm performance, [...]) turns negative when the underlying ordinarily beneficial antecedent is taken too far, such that the overall relation becomes non-monotonic" (Busse, Mahlendorf et al., 2015, p. 2; also see Pierce & Aguinis, 2013). Because of the SRC-related too-much-of-a-good thing effect, the supplier will not do as much as it *can* to improve its own SRCs, but only that which is *required* to maximize its

own economic performance. Figure 2a visualizes the optimum (i.e., performance-maximizing) level of SRC improvement measures for the supplier.

Figure 2b depicts the effects of the SRC improvement measures on an SRC. The most important aspect is that SRCs could be improved further, as depicted by the "improvement measure reserve" and the "SRC improvement potential." The reason for not fully exploiting this potential is the supplier's pursuit of maximizing its own economic performance (as

FIGURE 2
Effects of the Supplier's SRC Improvement Efforts



<sup>a</sup>Before any buyer interventions. Notes: A sustainability-related condition (SRC) is measured by the degree of agreeableness from the perspective of stakeholders, ranging from worse to better. The SRC function is depicted as linear for the sake of simplicity; the theory only predicts monotonicity.

depicted by Figure 2a). Thus, within the practically relevant value range, the buyer will have to *pay* for better SRCs if it pursues this direction. The reason for this is that further improved SRCs are associated with *decreased* supplier economic performance (see the "calculatory performance loss" in Figure 2a). Such a payment would have to occur by means of increased prices for the products purchased by the buyer and would hence lead to higher overall purchasing costs. Coupled with the fact that higher purchasing costs negatively affect the buyer's performance, the first proposition is posited:

**Proposition 1:** Purchasing costs mediate the relationship between a supplier's sustainability-related conditions and a buyer's performance. The better the sustainability-related conditions, the higher the purchasing costs. The higher the purchasing costs, the lower the buyer's performance.

## SUPPLY CHAIN SUSTAINABILITY RISK COSTS

There is broad agreement that supply chain sustainability risk is a central theme within SSCM (Cousins, Lamming & Bowen, 2004; Klassen & Vereecke, 2012; Seuring & Müller, 2008). This section begins with a review of relevant literature. Thereafter, a conceptualization of supply chain sustainability risk costs, borrowing from the sustainability-unrelated supply chain risk management discourse, is suggested. Finally, the analysis turns to the mediating role of this concept between a supplier's SRCs and a buyer's performance.

A buyer's reciprocal stakeholders care about a supplier's SRCs in both environmental (Ehrgott et al., 2013; Wu et al., 2014) and social-ethical terms (Jiang, 2009; Klassen & Vereecke, 2012). Since buyers are capable of shaping suppliers' SRCs through instruments and processes at their discretion, stakeholders often hold buyers accountable for these conditions, assessing both the SRCs as such and the buyer's role from a legitimacy perspective (Hofmann et al., 2014). Accordingly, stakeholders exert myriad forms of pressure on buyers to utilize their capability of influencing responsibly (Meixell & Luoma, 2015). When stakeholders become aware of SRCs they consider illegitimate, they may respond by withdrawing important resources from buyers or punishing them in other ways (Hofmann et al., 2014), leading to (calculatory) losses, including increased costs or reduced revenues (Klassen & Vereecke, 2012). While a buyer is not obliged to comply with the requests of its stakeholders or may fail to enforce decent supplier SRCs, such a failure places the buyer in a risky position (Foerstl et al., 2010; Hartmann & Moeller, 2014). The risk that stakeholders may punish a buyer because of an

SRC or an incident at its supplier is referred to as supply chain sustainability risk (Hofmann et al., 2014). The academic study of these risks commenced about a decade ago and has continuously gained momentum. Increased attention may stem from the fact that with the proliferation of the Internet and social media, the likelihood of stakeholders learning about problematic SRCs at a buyer's suppliers has dramatically increased.

To a large extent, research on supply chain sustainability risks concerns incidents that occur at suppliers' businesses and that are regarded as misconduct by buyers' stakeholders (Foerstl et al., 2010; Hartmann & Moeller, 2014). However, in accordance with our conception of SRCs, permanent states of the SRCs at suppliers can also trigger stakeholder criticism and subsequent punishment (Hofmann et al., 2014). For example, German TV station ARD featured a documentary a few years ago watched by millions of viewers in which the retail firm LIDL was heavily criticized for the SRCs at its Bangladeshi suppliers, although no specific incident had occurred (Busse et al., 2015). Accordingly, problematic SRCs such as famine wages or the absence of workplace security in the social dimension, or toxic environmental emissions and excessive pollution in the environmental dimension, must be understood as sources of supply chain sustainability risks.

The manifestation of supply chain sustainability risk often involves many stakeholders (Busse et al., 2015), as depicted in Table 2. For example, it is possible that the supplier's insufficient SRCs initially manifest themselves in harsh conditions for powerless stakeholders of the supplier (e.g., employees or the natural environment). In a second step, powerful secondary stakeholders of the buyer (e.g., the media or NGOs) learn about the SRCs and make the information publicly known, thereby possibly acting in a self-regarding manner. Finally, reciprocal primary stakeholders of the buyer (e.g., employees or customers) hear about the issue, attribute responsibility to buyers, and punish them accordingly (Bregman, Peng & Chin, 2015; Hartmann & Moeller, 2014). For instance, reciprocal employees might lose their motivation to work for the firm, or reciprocal customers might purchase elsewhere. Such combination processes, in which one stakeholder possesses legitimacy and urgency and another stakeholder possesses power (Mitchell et al., 1997), are particularly dangerous in global supply chains in which buyers are potentially unaware of the legitimate and urgent stakes that lie dormant in their supply chains.

In accordance with the managerial goal of this study to contribute to the development of a business case for buyers, it makes sense to consider costs associated with supply chain sustainability risks. These supply chain sustainability risk costs are defined here as the expected loss associated with a supply chain sustainability risk for a certain type of SRC (e.g., wages), given a certain level of severity for the issue at hand (i.e., a certain wage level). Loss comprises not only actual monetary costs, but also opportunity costs, such as unrealized profits resulting from lost revenues.

By defining risk costs as expected loss, the concept is linked only to negative incidents. This downside-focused view is adequate, because stakeholders focus their legitimacy assessment on the question of whether there is reason to de-legitimize the buyer, departing from established relationships. Moreover, by focusing on potentially negative incidents, the study maintains consistency with the extant (i.e., mostly sustainability-unrelated) supply chain risk management discourse (Bode, Hübner & Wagner, 2014; Bode, Wagner, Petersen & Ellram, 2011; Rao & Goldsby, 2009).

Generalization from one specific type of SRC to the overall SRCs of a supplier, comprised of numerous issues of certain severity levels, is easily possible by means of reviewing all of the component-wise costs and aggregating them afterward. For example, if a supplier has strong working conditions from the perspective of the buyer's reciprocal stakeholders but pays famine wages, then the buyer will incur risk costs related to the wage component. However, if the supplier has insufficient SRCs in both dimensions, then both components contribute to the buyer's risk costs. Similarly, the term can theoretically be used at the level of individual stakeholders or in the aggregate, considering the impacts on all stakeholders jointly.

To facilitate an analysis of the drivers of supply chain sustainability risk costs, the definition of risk suggested by Rao and Goldsby (2009, p. 100) is employed. Accordingly, risk is defined as an "exposure to a premise, the outcome of which is uncertain." Uncertainty refers to the degree to which there is incomplete confidence in the value of risk elements, such as the occurrence of certain events (Holton, 2004; Krause & Tipton, 2015). On many occasions, uncertainty can be quantified by means of probability estimates (Mitchell, 1995; Norrman & Jansson, 2004). The term exposure is most often used synonymously with the concept of vulnerability (Rao & Goldsby, 2009; Wagner & Bode, 2006; Wagner, Mizgier & Arnez, 2014), which refers to the susceptibility of the buyer to loss from stakeholder punishment.

In the context of supply chain sustainability risks, uncertainty surrounds the moral judgment and subsequent punishment behavior of buyers' reciprocally acting primary stakeholders; this group of stakeholders is ultimately responsible for executing punishment. A cognitive decision-making perspective on stakeholder behavior (Barnett, 2014; Hofmann et al., 2014) sug-

gests that punishment only takes place if a reciprocal stakeholder (1) notices the supplier's SRCs, (2) assesses them as illegitimate, (3) regards the buyer as accountable, and (4) chooses to employ punishment. The alternative is that the stakeholder takes no action. The expected loss can hence be computed as the overall probability of punishment (including all of the phases outlined in 1–4 above), which is multiplied by the loss incurred by the buyer. In view of the fact that the stakeholder must also (5) decide how severely to punish the buyer, the calculation can be refined to a weighted average, considering the different loss scenarios and associated probabilities.

The above analysis demonstrates that a changing SRC could impact the probabilities identified in 1 through 4, as well as the severity of the punishment depicted in phase 5, thereby also influencing risk costs. The following effects can be expected: The better a supplier's SRCs, the less likely a reciprocal stakeholder of the buyer is to (1) notice the issue, (2) assess the issue as illegitimate (given that it was noticed), and (4) punish the buyer (given that the SRCs are regarded as illegitimate and the buyer is assessed as responsible). Moreover, the better a supplier's SRCs, the (5) less severe the buyer's punishment (if it is punished at all). In step (3), no influence of the severity of the SRC is apparent. The first influence on awareness is based on the fact that multiple news outlets compete for the stakeholder's scarce attention. The better the SRC, the less likely it is that secondary stakeholders (such as the media and NGOs) will publish the information (Barnett, 2014). The second and third effects, assessing an SRC as illegitimate and deciding to take punitive action, follow from the pursuit of fairness by the reciprocal stakeholder (Bridoux & Stoelhorst, 2014). Finally, the idea that the severity of the punishment should correspond to the severity of the "deed" represents an ancient legal principle (lex talionis). Given that all four influences on changing SRCs point in the same direction, it follows that the severity of the SRCs indeed influence risk costs, which in turn affect the buyers' performance. Hence, the second proposition is posited:

Proposition 2a: Supply chain sustainability risk costs mediate the relationship between a supplier's sustainability-related conditions and a buyer's performance. The better the sustainability-related conditions, the lower the supply chain sustainability risk costs. The higher the supply chain sustainability risk costs, the lower the buyer's performance.

Not only does the severity of the punishment determine the loss a buyer incurs, but also its vulnerability. Various factors may contribute to buyer vulnerability *vis-à-vis* supply chain sustainability risks. For example, Bridoux and Stoelhorst (2014, p. 119) posit a specific

form of path dependency that will allow firms to "actively select certain types of stakeholders and stakeholders self-select to associate with certain firms." Thus, some firms will have a very small share of reciprocal stakeholders, whereas others will have a rather large share. This means that different levels of vulnerability can arise from stakeholder relations. The buyer's supply chain depicts another potential driver of vulnerability. Some firms may be able to adjust their supply base much more quickly than others, thereby "making amends" when they are criticized for their cooperation with certain suppliers. Finally, buyerinternal factors also play a major role. For example, some buyers may have more flexible cost structures than others, leading them to sustain less severe financial performance effects from consumer boycotts than other buyers. Overall, the buyer's vulnerability determines the impact of changes in the supplier's SRC on risk costs. Accordingly, the following is pos-

**Proposition 2b:** The buyer's vulnerability positively moderates the influence of a supplier's sustainability-related conditions on the supply chain sustainability risk costs of the buyer.

#### **COLLABORATION BENEFITS**

The third mediating mechanism relates to potential collaboration benefits between the supplier and the buyer, insofar as they accrue to the buyer. The term collaboration benefits is used here to aggregate all dyadic components of relationship performance in terms of achievement of mutual goals, problem solving, and procedural efficiency (Carter & Jennings, 2002; Krause, Vachon & Klassen, 2009). Since any inter-firm collaboration essentially boils down to inter-personal collaboration (Homburg, Stierl & Bornemann, 2013), collaboration benefits stem from better cooperation between managers and employees (i.e., internal stakeholders of both firms, Table 2) of the supplier and the buyer. To the extent that changes in the SRCs at the supplier impact the way internal stakeholders collaborate with one another, the quality of execution of inter-organizational operational processes and, lastly, buyer performance will be impacted. The analysis of collaboration benefits in this section adopts core arguments from two empirical studies from the supply chain (Carter & Jennings, 2002) and marketing (Homburg et al., 2013) fields.

Carter and Jennings (2002) were the first to investigate cooperation benefits within SSCM. Their investigation concerns the mediating role of trust and cooperation between the social responsibility of the buyer's purchasing function and the supplier's performance. Trust refers to "a willingness to rely on an

exchange partner in whom one has confidence" (Moorman, Deshpande & Zaltman, 1993, p. 82). It serves as a critical mediator variable in social exchange relationships (Cropanzano & Mitchell, 2005). Carter and Jennings (2002) argue that the pursuit of SSCM signals consideration of stakeholder interests to third parties. Thereby, a firm visibly demonstrates that it acts fairly and without opportunism. This effect fosters trust, which in turn triggers subsequent relational benefits, such as better resolution of extant problems in the relationship. A later study by Homburg et al. (2013) builds on the earlier work of Carter and Jennings (2002). The authors investigate how socially responsible core business operations of a supplier create a socially responsible reputation in the view of the customer, subsequently leading to trust in the supplier, and ultimately to customer loyalty. Their reasoning and findings provide further support for the study of Carter and Jennings (2002) with respect to the creation of trust. Specifically, they argue that socially responsible business operations signal reliability and honesty, reduced exchange uncertainty, and lower transaction costs.

The above argument fully applies to this topic. Accordingly, the better the supplier's SRCs, the more likely that managers and employees of the buyer will regard the supplier (as well as the managers and employees who act on its behalf) as trustworthy. Therefore, inter-firm relationships and associated business processes are expected to run more smoothly and efficiently—that is, to generate collaboration benefits. Moreover, in the context of sourcing from emerging markets, improvements in the supplier's SRCs will make the supplier and the buyer increasingly similar in an important contextual condition of firm operations, thereby further augmenting the creation of trust and collaboration benefits. Since collaboration benefits will influence the buyer's overall performance positively, the following is posited:

**Proposition 3:** Collaboration benefits mediate the relationship between a supplier's sustainability-related conditions and a buyer's performance. The better the sustainability-related conditions, the higher the collaboration benefits. The higher the collaboration benefits, the higher the buyer's performance.

# SPILLOVER BENEFITS FROM SUPPLIER SELF-PROMOTION

The fourth mediating mechanism revolves around promotion-induced benefits of the supplier's SRCs that accrue to the buyer. The question is: Do the buyer's stakeholders recognize strong SRCs of the supplier if these are pointed out to them and reward the

buyer by means of a better image or affective attachment? Such promotion spillover effects have not yet been discussed in the SSCM field. I consider three variants in terms of how the buyer may profit from such benefits: direct promotion of the supplier's SRCs by the buyer, indirect exploitation of the supplier's SRCs through the marketing of sustainability standards of the buyer, and, finally, spillovers from the supplier's self-promotion. The last variant is the only one that appears to matter in the context of this research. This means that the chain of stakeholder relationships to be considered involves the supplier firm, primary stakeholders of the buyer (especially customers), and the buyer itself (Table 2).

Can a buyer directly promote excellent SRCs at one of its suppliers, hoping that its stakeholders will reward this? While the analysis in this paper concerns the dyadic relationship between a buyer and one of its suppliers, it must also be considered that any buyer manages numerous suppliers in parallel. A buyer's visibility of its own supply network is limited, which means that it will unavoidably face information deficits related to the sustainability of many of its suppliers and sub-suppliers (Carter, Rogers & Choi, 2015; Choi & Krause, 2006). Highlighting the strong SRCs of one supplier may also automatically draw stakeholder attention to the SRCs of its many other suppliers, which are presumably partly unknown. Recall that every stakeholder is not looking for fairness and behaving as fairly as possible. Some secondary stakeholders, such as certain media outlets, may behave not only in a self-regarding manner, but even in an opportunistic manner. If the buyer indeed promotes the SRCs of one supplier, it may invite such stakeholders to search for insufficient SRCs at another supplier to create bad publicity. Ultimately, the buyer would augment its own supply chain sustainability

Alternatively, indirect exploitation of the supplier's SRCs through the marketing of sustainability standards, awards and certifications of the buyer seems plausible. Such standards are undoubtedly a very important instrument in the marketing of SSCM (Reinecke, Manning & von Hagen, 2012) in that they allow buyers to capitalize on SSCM-related investments (Foerstl, Azadegan, Leppelt & Hartmann, 2015). Moreover, standardization is often a practical necessity for buyers (Foerstl et al., 2015). However, much like supplier codes of conduct, SSCM standards hardly prescribe exact performance levels to be met within suppliers' SRCs, but are, rather, more oriented to product characteristics (Schleper & Busse, 2013). Zero-tolerance SRCs such as forced labor are exceptions for which exact performance levels are prescribed; however, the absence of such issues cannot be promoted. Therefore, the exploitation of sustainability standards is not currently driven by changes in the supplier's SRCs (as would be necessary for a causal effect). This situation may change in the future, based on the design and diffusion of standards that prescribe SRC performance levels.

A third variant of promotional benefits refers to spillovers from the supplier's self-promotion. Consider a supplier who promotes its own strong SRCs so visibly that the buyer's stakeholders become aware of them. The stakeholders may then perceive the promoted SRCs as an expression of fairness and respond with the same trust in the supplier that was discussed in the previous section (Carter & Jennings, 2002). Here, the concern is not so much with the buyer's internal primary stakeholders (i.e., managers and employees), but with its external primary stakeholders, especially customers. Perceived ethical firm behavior has been shown to lead to customer trust, brand affect (that is, "a brand's potential to elicit a positive emotional response in the average consumer as a result of its use," Chaudhuri & Holbrook, 2001, p. 82), and ultimately customer loyalty (Homburg et al., 2013; Singh, Iglesias & Batista-Foguet, 2012). Prior research has yielded initial evidence that such effects may also be transferred from supplier to buyer (Foerstl et al.,

Indeed, some suppliers appear to strive to make their strong SRCs visible to stakeholders of their business customers. For example, garment producer KTC, which operates in China and Laos, positions itself as a hightech firm that not only offers sustainable garments, but also provides full transparency on the working conditions of its employees, referring to conditions as excellent (KTC, 2014). Toward this aim, employees' average salaries are made available online, and the firm posts annual social reports on its website. Coupled with the fact that the firm deliberately strives to be publicly visible in Europe, it appears that KTC is pursuing a strategy of competitive differentiation by direct communication to reciprocal stakeholders of its buyers (presumably expecting a higher willingness to pay for its products from the buyer in return). Contrary to the direct promotion of the supplier's SRCs by the buyer, such a strategy cannot augment the buyer's supply chain sustainability risks, because the buyer is not actively involved. The self-promotion spillover strategy relies primarily on the decency of the supplier's SRCs from the stakeholder perspective. However, it can only be effective if the purchased components (or products) are functionally important and highly visible to the buyer's stakeholders (Foerstl et al., 2015). In contexts where this visibility is absent, no benefits from spillovers of the supplier's self-promotion will accrue to the buyer. Arguing that promotion spillover effects will contribute positively to the buyer's performance, the following are posited:

**Proposition 4a:** Spillover benefits from supplier self-promotion for the buyer mediate the relationship between a supplier's sustainability-related conditions and a buyer's performance. The better the sustainability-related conditions, the higher the spillover benefits from supplier self-promotion for the buyer. The higher the spillover benefits from supplier self-promotion for the buyer, the higher the buyer's performance.

**Proposition 4b:** The visibility and the assumed functional importance of the purchased components for the buyer's stakeholders positively moderate the influence of a supplier's SRCs on spillover benefits realized from supplier self-promotion for the buyer.

#### CONCLUDING FRAMEWORK

In an effort to increase theoretical precision (Edwards & Berry, 2010), this section considers whether the four mediating mechanisms are mutually exclusive and if they collectively exhaust the causal pathways through which a supplier's SRCs influence

buyer performance; a concluding framework is then proposed. The analysis of mechanism exclusivity begins with consideration of the directionality of effects, as posited in the propositions and depicted with plus and minus signs in Figure 3. Any specific indirect effect of the independent variable on the dependent variable through a certain mediator is the product of the effect of the independent variable on the mediator multiplied by the effect of the mediator on the dependent variable (Hayes, 2013). Accordingly, the theorized directionalities of the specific indirect effects can be computed. The effect of SRCs on buyer performance through (1) purchasing costs is negative ((+)\*(-)=(-)), (2) supply chain sustainability risk costs is positive ((-)\*(-) = (+)), (3) collaboration benefits is positive ((+)\*(+) = (+)), and (4) spillover benefits from supplier self-promotion is positive ((+)\*(+) = (+)).

The specific indirect effect through purchasing costs is opposed in directionality to the other three effects and therefore certainly does not overlap with any of the other mechanisms. The supply chain sustainability risk cost pathway and the pathway related to benefits from supplier self-promotion are similar in that both essentially revolve around spillover effects. Hence, it may

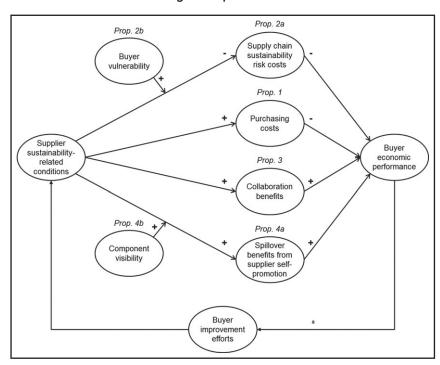


FIGURE 3
Concluding Conceptual Framework

<sup>&</sup>lt;sup>a</sup> The theorized influence stems from the anticipation of those performance effects associated with changes to the supplier's sustainability-related conditions (i.e., mediating effects from supplier sustainability-related conditions to buyer economic performance) that are salient to the buyer's decision-makers.

appear as if they are two sides of the same coin, with one focusing on the downside risk and the other on the upside potential. However, the phenomenon behind the sustainability risk mechanism is de-legitimation, which is the outcome of an ethical-normative judgment process (Hofmann et al., 2014), whereas the promotion spillover mechanism revolves around affective binding to and identification with a (quite likely branded) firm (Chaudhuri & Holbrook, 2001). Finally, when juxtaposing the collaboration benefits and the promotion benefits mechanism, it becomes apparent that the former does not depend on any spillover effects to the buyer. The four mechanisms do in fact differ.

Regarding the collective exhaustiveness of the mechanisms, which cannot be demonstrated with certainty, the emergent framework can be viewed in light of a significant body of prior SSCM literature. In some circumstances, alternative views exist which do not refer to other causal mechanisms. For example, SSCM research is very concerned with the concept of "stakeholder pressures" (Meixell & Luoma, 2015). From the perspective of the buyer's self-interest, this concept is dissected into the associated delegitimation and affect-creating processes and is no longer visible. Moreover, great care was taken not to posit mere correlations as seemingly causal effects of changing the supplier's SRCs (e.g., process optimization efforts may lead to both better SRCs and higher quality in products and processes, but better SRCs do not cause better quality). Hence, it seems that all causal mechanisms through which SRCs curinfluence the buyer's performance included. Any other meaningful mediation path identified in future research should certainly be integrated into the framework to avoid a biased portrayal of the buyer's self-interests. For the sake of precaution, future empirical tests of the influences of SRCs on buyer performance should also include the direct pathway, which would pick up any omitted mediators (Zhao, Lynch & Chen, 2010).

Figure 3 depicts the concluding theoretical framework derived from this research. The upper portion of the model depicts the influences of the supplier's SRCs on the buyer's performance, which, because of the competing influences of the mediating paths on the dependent variable, jointly make up a competitive mediation model (Zhao et al., 2010). In addition to the paths from SRCs to buyer performance, the model includes a reversed causal pathway. This path re-establishes ties to the motivation of this research: that a buyer's self-interest will (at least partly) be responsible for the buyer's efforts related to the improvement of its suppliers' SRCs, in accordance with instrumental and descriptive stakeholder theory. However, understanding this self-interest is anything but trivial, as this study has demonstrated. Assuming that corporate decision-makers are boundedly rational in that their anticipatory abilities are limited (Simon, 1955), they may misinterpret the buyer's overall self-interest, which will result in biased decision-making. Depending upon the extent to which the various mediation paths from a supplier's SRCs to a buyer's performance are salient to the buyer's managers, these paths are likely to be considered in the managers' assessment of their firm's overall self-interest in improving the SRCs. Presumably, perceived self-interest will in turn influence the buyer's efforts to improve the supplier's SRCs.

#### DISCUSSION

This section explains the scholarly, managerial, and social contributions of this research and discusses paths for future research. Table 3 depicts an overview of these aspects.

#### **Scholarly Contributions**

This conceptual manuscript has developed and applied new concepts (see Table 1 for the most important concepts). Of particular importance is the SRC concept, which captures the triple bottom line dimensions in their entirety while focusing on operational processes rather than products and excluding specific incidents. In essence, the SRC notion depicts an innovative means of focusing on "operations that are less observable" (Markman & Krause, 2014) and looking behind the scenes within SSCM.

This study has analyzed four mediating mechanisms between a supplier's SRCs and the buyer's performance. Purchasing costs, supply chain sustainability risk costs, collaboration benefits, and benefits from spillovers of supplier self-promotion represent these paths as mediator variables. The analyses of purchasing costs and promotional spillover effects are believed to be new. Moreover, the study has improved the understanding of supply chain sustainability risks by considering the costs arising from those risks.

In response to the research question, the study has culminated in a novel, comprehensive framework for the study of buyers' self-interests in improving their suppliers' SRCs. The term "framework" is used to highlight the fact that future specifications are feasible and warranted, as described below in further detail. The framework highlights a previously unidentified trade-off for buyers between the purchasing cost effect, through which performance is affected negatively, and the other three effects, which exert positive influences on buyer performance. Moreover, the salience of the various mediation paths to the buyer's managers shapes the buyer's decision-making efforts surrounding its

TABLE 3

#### **Discussion Overview**

Scholarly Contributions	Managerial Contributions	Social Contributions	Future Research
Concept development and applications  Sustainability-related conditions  Mediating and moderating variables Improved understanding of causal pathways  In-depth analysis of purchasing costs  Understanding of supply chain sustainability risk costs  Insights into benefit spillovers from supplier self-promotion  Creation of a comprehensive framework for the study of buyers' self-interests  Transparency regarding trade-offs  Consideration of performance anticipation  Mirroring of the debate on the relationship between corporate social and financial performance  Contributions to stakeholder theory  Consideration of stakeholder chains  Supply chain management as a specialized field for buyer—supplier relationships	Contribution to the development of a business case  Identification of the four mediation paths to consider when assessing overall performance effects and self-interest  Translation of seemingly soft topic into managerial language ("benefits" and "costs")  Simplification to a total-cost framework often possible  Provision of argumentative support  At buyers  With external stakeholders  Reaping performance effects by considering all performance paths in managerial decision-making  Especially relevant when sourcing from emerging markets	Cautioning of society at large regarding extant trade-off  Buyers cannot mention trade-off  Basis for improved dialogue between society at large and buyers  Creation of  an incentive for fostering supplier sustainability by highlighting less salient mediation mechanisms	Specification for certain sustainability-related issues Specification for certain forms of performance Resolution of trade-offs ("curvature-oriented" theorizing) Identification of moderators Empirical validation Extension of framework to incorporate buyer action Extension to network level of analysis Conceptual, empirical, and modeling research

actions to improve the supplier's SRCs. Incorporating such reciprocal links from performance back to its antecedents may prove useful in similar performance-related research. The framework as a whole mirrors a long-standing debate found in corporate social responsibility literature and contextualizes this discourse for buyer–supplier relationships. Finally, in light of some recent criticism, the study highlights

the continued usefulness of instrumental stakeholder theory perspectives within SSCM.

This study also contributes to stakeholder theory by highlighting how, at least in the supply chain management context, it may often be necessary to consider chains of stakeholder relationships through which stakeholders exert influence or are influenced. Another basic insight of this study is that at the level of the dyad, supply chain management is, in essence, a specialized field relevant to the stakeholder relationship between buyer and supplier. It may often be possible for stakeholder theorists to generalize know-how originating from supply chain management to other stakeholder relationships.

#### **Managerial Contributions**

Carter (2004, p. 10) argued that "organizations may be hesitant to initiate or expand (purchasing social responsibility) programs unless a solid business case can be made." This study contributes threefold to the development of a business case. First, it has identified the four mediation paths that firms should consider when assessing overall performance effects associated with changing SRCs. Second, it has translated a seemingly soft topic into hard managerial language by framing each of the mediators as either a benefit or a cost and by linking supplier sustainability to buyer performance. Third, the in-depth conceptual analysis of the four mediation paths further facilitates managerial decision-making. For example, since the promotion spillover path depends on the visibility of the supplier's components to the buyer's stakeholders, it is relevant only rarely in practice. If firms decided to neglect collaboration benefits for the sake of simplifying the decision-making process, then they could often and with only a tiny margin of error exclusively consider costs (Ellram & Siferd, 1993, 1998).

A basic premise of this study is that managerial decision-making revolves to a large extent around anticipated performance effects. In this respect, it is important to note that even if fostering supplier sustainability is objectively in the self-interest of the buyer, buyers may still refrain from such action if they are unaware of some associated effects. Prior research has found that buyers' managers are very concerned about cost increases associated with more sustainable purchasing (Min & Galle, 2001). Coupled with the fact that purchasing managers are usually incentivized by savings, it is reasonable to assume that purchasing managers will be well aware of the purchasing cost effect. However, the benefits associated with the other three mediating effects will likely be less salient to them. In this respect, the framework provides support for internal buyer debates or buyer debates with external stakeholders. Moreover, the study suggests that purchasing managers may foster supplier sustainability in a manner that does not optimally represent the buyer's own interests, in the false belief that "doing good" may jeopardize the buyer's performance. By showing how "doing good" can contribute to "doing well" for buyers, I hope that this work will counteract such a tendency. It seems plausible that buyers may

often reap additional performance effects by means of fostering supplier sustainability.

The emerging market context motivated this study (without restricting its generalizability to other contexts). For firms in developed countries, purchased goods are often so cheap that steep increases in purchasing costs in percentage terms still represent modest increases in absolute terms from the consumer's view. Because of the low labor costs in emerging markets, many SRC dimensions could be improved substantially with a very modest investment. This means that in emerging markets, fostering supplier's SRCs is even more important for buyers than elsewhere (Thornton et al., 2013). At the same time, a normative-ethical perspective indicates that the poor are particularly defenseless against exploitation in emerging markets, as evidenced, for example, by buyer pressure on prices.

#### **Social Contributions**

The focus of this research on buyer's self-interest is not meant to imply that buyers are not (or even "should not be") driven by ethical-normative considerations when interacting with suppliers whose SRCs are insufficient. To the contrary, engaging in SRC improvement for the greater good is clearly socially desirable, and the descriptive stakeholder theory posits that ethical motives also play a role in shaping the behavior of many firms. Yet this research sought to explore to what extent doing good is also in the buyer's own interests-that is, their propensity to do well. In this respect, the study has identified a tradeoff for buyers related to their self-interest, such that better supplier SRCs are associated with increased purchasing costs. This effect is currently neglected in the public debate. It would, however, be naïve for stakeholders to assume that buyers are not aware of it; rather, they generally do not mention it in public for fear of being labeled selfish (or even "evil"). By failing to acknowledge that buyers' self-interests are also valid, stakeholders preclude real dialogue, thereby jeopardizing their chance to highlight the benefits associated with buyer efforts aimed at improving suppliers' SRCs in the process. From the perspective of this study, society at large should consider issuing such requests for improved SRCs somewhat less vigorously (i.e., framed more instrumentally and less normatively) to engage buyers in debates surrounding the best means of fostering supplier sustainability in global supply chains.

By identifying the causal mechanisms that highlight why it is often in buyers' own interests to foster suppliers' SRCs, the study has created an incentive (or removed a disincentive) to act in this manner. Depending upon its reception in the "real world," this

research may hence to some degree contribute to sustainable development across the globe.

#### **Future Research**

Future research can build on this study in various ways. In view of the fact that this investigation used the SRC concept as an umbrella term that encompasses numerous specific sustainability-related issues, future conceptual research can specify the framework for any such issue, arguing that both purchasing cost effects and stakeholder behavior differ (somewhat) in accordance with a specific sustainability-related issue. Based on analogous reasoning surrounding different performance effects, the framework could be specified by focusing on a certain aspect of performance (Markman & Venzin, 2014) as the dependent variable. Another useful means of building on this research would be to engage in more finely grained theoretical analysis, seeking to analyze not only the directionalities of the causal effects viewed, but also, for example, curvatures relating the independent variables to the dependent variables. The analysis of the supplier's decision-making process depicted an example for such "curvilinear theorizing." A better understanding of each of the mediating mechanisms may also be achieved if more potential moderators are analyzed. This study focused on two moderating effects that alter the underlying base effects substantially; however, no claim is made that these are the only important contextual effects.

Another logical next step would be to empirically validate the theory underlying the framework. Because of the umbrella nature of both SRCs and performance (Hirsch & Levin, 1999), it seems commendable to begin by investigating the influence of a specific SRC on a certain performance variable. Moreover, given that supply chain sustainability risks rarely manifest themselves and that a buyer's performance is shaped by numerous factors, such as all of the buyer's supplier relationships, the best means of validating the theory developed herein may be through large-scale secondary data analyses or experimental design as opposed to survey-type research.

This research deliberately focused only on the buyer's self-interest in improving a supplier's SRCs, because this facet has largely been unexplored. A useful amendment would be to incorporate other determinants of buyers' actions, such as normative-ethical motives, and also more practical factors, such as the importance of purchased inputs or top management support (Krause, 1999). Another valuable extension would be to develop a similar model related to the extended supply chain, "from suppliers' suppliers to end consumers" (Markman et al., 2015), or even the entire supply base. Overall, the hope is that this

research facilitates impactful future conceptual, empirical, and modeling research.

#### **CONCLUSION**

This conceptual research analyzed a buyer's selfinterest in suppliers' SRCs, drawing on instrumental stakeholder theory. The study suggests a competitive mediation framework which sheds light on four mediating effects through which a supplier's SRCs influence the buyer's performance. The specific indirect effect on performance through purchasing costs is negative, whereas the other three specific indirect effects, through supply chain sustainability risk costs, collaboration benefits, and benefits stemming from spillovers of a supplier's self-promotion, exert positive influences. Hence, buyers face a trade-off relevant to their self-interest. To the extent that the different mechanisms are salient to the buyer's managers, they will shape the firm's decision-making. The study contributes to the ongoing development of SSCM theory, fosters the development of a business case for buyers surrounding a supplier's SRCs, and serves as a conceptual platform for better and more open dialogue between buyers and their stakeholders.

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