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Cracking the code: the effects of codes of conduct and decision frames on supplier selection in financially distressed firms

Codes of
conduct and
ethical decision
making

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Abstract

Purpose – Firms are increasingly required to make ethical choices when selecting suppliers for their supply chains, and the decisions often rest on individual purchasing managers within the firm. This study builds on the literature on ethical decision-making and the concept of decision frames to investigate the decision-making process of purchasing managers in financially distressed firms. Codes of Conduct (CoC) and how they are enforced (financial rewards and codified procedures for oversight) are studied in terms of their effectiveness in informing and guiding purchasing managers in their supplier selection decisions.

Design/methodology/approach – Four sequential experiments were conducted with a total of 648 purchasing managers from manufacturing firms.

Findings – The results indicate that purchasing managers in firms facing financial distress are more than four times more likely than purchasing managers in the control groups to select the less ethical supplier in favor of better operational performance. As a potential remedy, it is found that enforcing the firm's CoC help to counteract this tendency and increase ethical supplier selection decisions by 2.1- to 2.6-fold. However, CoC enforcement that invokes multiple conflicting decision frames simultaneously is more likely to impair than promote ethical supplier selection decisions, compared to situations where only one enforcement method is present.

Originality/value – These findings develop an improved understanding of purchasers' decision-making processes and shed light on how to effectively use CoCs to guide these decisions.

Keywords Codes of conduct, Decision-making, Purchasing, Social sustainability, Supplier selection

Paper type Research paper

1. Introduction

Politicians and society hold purchasing companies accountable for the unethical practices of their suppliers. This accountability is expressed in laws such as the French Loi de Vigilance, the Modern Slavery Act in the United Kingdom (UK), the Transparency in Supply Chains Act in California and the German Act on Corporate Due Diligence in Supply Chains. Many companies have implemented Codes of Conduct (CoCs) to prevent working with unethical suppliers, but there are serious doubts about their effectiveness (e.g. [Babri et al., 2021](#); [Cowton and Thompson, 2000](#); [Jiang, 2009](#); [Kuruvilla and Li, 2021](#); [LeBaron, 2021](#)). Notably, [Goebel et al. \(2018\)](#) found that the presence and distribution of a CoC within an organization does not inherently lead to an increased willingness among purchasing managers to pay a price premium for sustainability.



In this study, we first investigate whether financial distress – a situation that many firms experience during their lifetimes (Ebeke *et al.*, 2021) – may influence purchasing managers to prefer suppliers that are operationally superior (offering better price, delivery reliability and quality) but pose an increased risk of engaging in unethical practices. We then theorize and test how firms need to enforce their CoC so their purchasing managers select ethical suppliers despite the firm’s financial distress.

The research questions addressed are: (1) “*Do purchasing managers’ supplier selection decisions depend on their companies’ financial situation?*” and (2), “*How can a CoC be enforced in a financially distressed company to encourage purchasing managers to prioritize ethical performance over operational performance when selecting suppliers?*” Our research, like many experimental studies in operations management (e.g. DuHadway *et al.*, 2018; Hartmann *et al.*, 2022) examines how firm actions and attributes influence the decisions of individuals. In our case, how do the financial distress of the firm and the firm’s enforcement of its CoC influence individual purchasing managers’ supplier selection decisions? The level of analysis is then the individual.

This study builds on the proposition that the decision-making process of individual purchasing managers plays a crucial role in supplier selection, as a key element of sustainable operations management (Kleindorfer *et al.*, 2005; Pagell and Gobeli, 2009) and responsible procurement (Agrawal and Lee, 2019; Villena, 2019). Drawing on the ethical decision-making literature (Tenbrunsel and Messick, 1999; Tenbrunsel and Smith-Crowe, 2008), we examine supplier selection decisions that involve trade-offs between operationally and ethically better-performing suppliers, which can be characterized as “difficult decisions” with potential tensions between short-term profit maximization and sustainability (Wu and Pagell, 2011; Saunders *et al.*, 2020).

Financial distress represents an extreme form of pressure for short-term financial results, and even purchasing managers in financially sound firms often face pressures for cost reductions (Goebel *et al.*, 2018). Therefore, our context of financially distressed firms has implications for ethical decision-making by individual purchasing managers under other forms of cost reduction pressure as well. We hypothesize that when pressured by financial distress, purchasing managers may prioritize short-term operational performance, such as price, delivery reliability, and quality, over ethics when selecting suppliers (Wu and Pagell, 2011), which could jeopardize the longer-term financial and ethical performance of the buying firm. Previous research has linked financial distress in a firm to unethical decision-making. For example, chief executive officers (CEOs) in financially distressed firms disregard corporate social responsibility (CSR) practices (Chiu and Walls, 2019). Similarly, the 2008 global financial crisis has been attributed to a slowdown in the sustainability transition (Geels, 2013). Operations and supply chain management research has also shown that as financial risk increases, firms are more likely to violate sustainability-related regulations (Pagell *et al.*, 2019), and the further a firm is from its aspirational financial performance, the more likely it is to behave irresponsibly (Wiengarten *et al.*, 2019). However, the impact of firm-level financial distress, as an extreme form of cost reduction pressure, on the behaviors of individual purchasing managers is not well understood.

We offer insights on whether distressed firms can influence their purchasing managers’ decisions through the enforcement of their CoC. For this, we conducted four scenario-based experiments with purchasing managers from manufacturing firms in Austria, Germany and Switzerland. We found that purchasing managers in financially distressed firms tend to prioritize operational performance over ethical performance when selecting suppliers. However, the presence of a CoC with strong enforcement in financially distressed firms increased the likelihood of choosing an ethical supplier compared to firms with weakly enforced codes. We also highlight that CoCs that emphasize personal rewards or managerial oversight over supplier selection decisions can lead to individual preference for ethical

performance over operational performance. However, the simultaneous use of personal rewards and managerial oversight can elicit contradictory decision frames and negatively impact each other.

2. Literature review

2.1 *Financial distress, ethical decision-making and supplier selection decisions*

Researchers in the field of sustainable operations and supply chain management have long speculated that firms' decisions on investment in sustainability are likely contingent on financial health, which may lead them to prioritize profitability in the short term (Wu and Pagell, 2011). Conditions that can precede firm financial distress, such as financial risk, debt and performance below aspirations, have been linked to improving short-term financial performance at the expense of longer-term investments. Debt, for example, has also been associated with reduced investment in human capital (Liu *et al.*, 2014), research and development and diversification (O'Brien *et al.*, 2014; Simerly and Li, 2000). More concerningly, this short-term focus has been linked to the prioritization of financial performance over worker safety and CSR. Both debt (Pagell *et al.*, 2019) and performing below financial aspirations (Wiengarten *et al.*, 2019) have been associated with violating workplace health and safety regulation. In addition, a study of firms in financial distress found that new CEOs reduce CSR investments to focus only on shareholders versus the broader population of stakeholders (Chiu and Walls, 2019). However, the effects of firm financial distress on the decisions of individual purchasing managers remain underexplored, especially given the increasing societal expectation for firms not to work with unethical suppliers. Following Jones (1991), we define unethical behavior as behavior that is "either illegal or morally unacceptable to the larger community" (p. 365).

To answer our research questions, we investigate individuals' decision-making processes within the business and ethics frames, as outlined in the ethical decision-making literature (e.g. Kern and Chugh, 2009; Tenbrunsel and Messick, 1999; Tenbrunsel and Smith-Crowe, 2008). Decision frames represent what the individual decision-maker perceives to be the dominant characteristics of the decision situation (Tenbrunsel and Smith-Crowe, 2008). These are not the only characteristics that the decision-maker perceives, but the ones perceived as most important or defining of the situation. In the current context, we focus on ethics frames and business frames.

The *ethics frame* is characterized by moral awareness (ibid) and is typically associated with more ethical choices (Tenbrunsel and Messick, 1999; Tenbrunsel and Smith-Crowe, 2008). The *business frame* is focused on financial success and firm survival and lacks moral awareness. Under the influence of a business frame, self-interest dominates the decision-making process (Tenbrunsel and Messick, 1999) and is pursued over other interests (Kouchaki *et al.*, 2013). Kouchaki *et al.* (2013) stated, "A business frame entails the weakening of social bonds, thus making ethical considerations unlikely" (p. 55).

Empirical research has argued that business frames can lead to less ethical behavior among employees. For example, the influence of business frames, such as a bottom-line mentality, can lead employees to think in a self-interested manner resulting in greater customer-directed misbehavior, although this may lead to better service performance (Babalola *et al.*, 2020). Harmful and dysfunctional behavior in response to bottom-line decision-making is also discussed in Babalola *et al.* (2021), Greenbaum *et al.* (2012), Mawritz *et al.* (2016) and Wolfe (1988). For example, when people are reminded of money, they construe their decisions as "business" decisions and are less interpersonally attuned (Vohs, 2015). Kouchaki *et al.* (2013) identified that general exposure to money prompts decision-makers to approach choices within a business frame, leading to fewer ethical choices.

2.2 *The implications of codes of conduct on supplier selection decisions*

CoCs should guide employees' decision-making, providing employees with cues as to the contingencies associated with their choices and criteria by which to judge their decisions. Failure to follow the firm's CoC can have negative consequences for individual employees, the firm and other stakeholders. The managerial, as well as theoretical, question is whether and how CoCs can guide individual purchasing managers to choose more ethical suppliers, by providing cues that counteract the focus on financial success and firm survival associated with financial distress.

While firms may vary in their labeling of their CoC, from "ethical practices statement," to "code of practice," or "code of ethics," the commonly agreed objective of CoCs is to ensure decisions are in line with the values of a firm (White and Montgomery, 1980). Social information processing theory proposes that individuals seek cues from their environment to help them understand their social context (Pfeffer and Salancik, 1978). CoCs can provide decision-makers with these cues because they can indicate firm values and priorities, which induce ethical practices and values across their employees and suppliers.

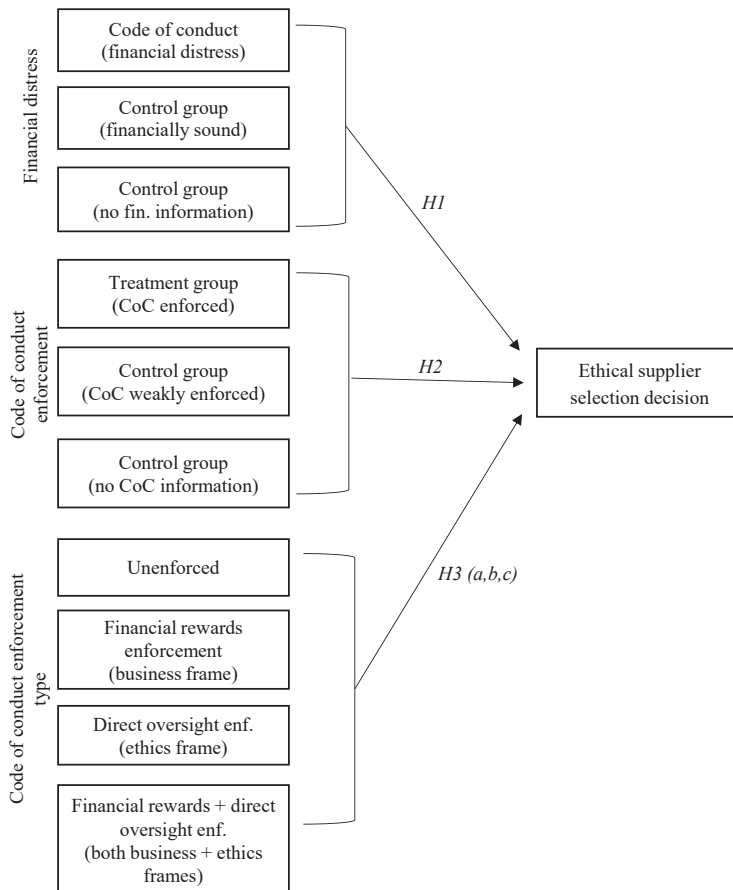
The motivations for firms to adopt CoCs vary. Preuss (2009, 2010) found that large companies primarily adopt CoCs in response to public criticism, anticipated legislation, or to gain a competitive advantage. However, they generally did not adopt CoCs based on organizational ethical values and principles. Other studies suggest that firms seek ways to improve their ethical performance even in the absence of social pressures (Huq *et al.*, 2016), to raise awareness about the firm's norms and the ethical implications of individual employees' decisions. "Ideally, codes of conduct influence the organizational culture by guiding employees' actions and conduct through the promotion of ethical business practices" (Erwin, 2011, p. 536). In this case, the CoC serves as a signal of the firm's commitment to ethical business practices and requires purchasing managers to conduct thorough due diligence before selecting suppliers.

While earlier studies concluded that CoCs can effectively alter firm behavior (Erwin, 2011; Somers, 2001), more recent studies have questioned such generalizations (Kuruvilla and Li, 2021; LeBaron, 2021). The effectiveness of CoC is likely dependent on factors such as the quality, implementation and management of the code (Babri *et al.*, 2021; Cowton and Thompson, 2000; Jiang, 2009; Kuruvilla and Li, 2021; LeBaron, 2021). Nitsch *et al.* (2005) argued that the degree of effectiveness depends on whether wrongdoings are exposed and sanctioned. For example, unenforced CoCs may increase the adoption of business frames and uncooperative decisions (Tenbrunsel and Messick, 1999). An unenforced CoC suggests to decision-makers that the firm does not emphasize ethical considerations. The purely symbolic adoption of such practices implies a bottom-line mentality to managers because it portrays to stakeholders that the firm cares about ethics, while in practice it does not. In the current research, we explore how distressed firms can influence individuals' ethical supplier selection decisions through CoC enforcement. We draw from the ethical decision-making literature and develop our hypotheses in the next section.

3. Hypothesis development

Based on the literature on ethical decision-making, we argue that the decision context emphasizes business and ethical issues among purchasing managers and steers their decision toward a preference for operational or ethical supplier selection. Figure 1 provides an overview of the hypotheses we develop in this section.

This research considers supplier ethics to be an integral aspect of supplier selection that is likely to be focal in ethical decision frames (e.g. Walker *et al.*, 2014). Differently, operational performance mainly relates to a financial aspect of supplier selection, where better supplier performance in terms of cost, quality and delivery helps the buying firm improve its short-term



Source(s): Authors own creation

Figure 1.
Research framework

financial performance (Kannan and Tan, 2002) and is therefore likely to be associated with a business frame. We present individual purchasing managers with a choice between a supplier that is less ethical but more attractive on cost, delivery and quality and a supplier that is more ethical but less operationally attractive. Our hypothesis is that purchasing managers will choose the less ethical supplier more frequently in a situation of firm financial distress than in a situation without financial distress. Subsequently, we propose:

H1. Firm financial distress (associated with business framing) leads to a supplier selection decision that prioritizes supplier operational (i.e. cost, delivery and quality) performance over ethical performance.

[Hypothesis 1](#) is relatively intuitive but untested. Testing it provides a baseline for exploring if CoCs can be a useful tool in ensuring ethical considerations are made in the supplier selection decision.

We propose that a CoC can mitigate the effects of financial distress on individual purchasing managers' tendencies to prioritize supplier operational performance over ethical

performance, but only if they are enforced. We propose that CoC enforcement through managerial actions such as cancellation of orders or termination of supplier contracts following breaches, provides the individual decision-maker with social cues that indicate that the firm considers supplier selection to be an ethical decision. This, in turn, should lead purchasing managers to favor ethical performance over operational performance when selecting suppliers. Further, we argue that a CoC that is not strictly enforced will indicate to the individual decision-maker that the CoC is largely symbolic and therefore exists primarily for business purposes rather than ethical ones. In turn, this will reinforce the importance of business goals in the decision maker's perception of the decision, leading to an even greater preference for operational performance over ethical performance. Subsequently, we propose:

H2. An enforced CoC (associated with ethics framing) leads to a supplier selection decision that favors ethical performance over operational performance.

The literature on CoCs indicates that enforcing CoCs can be problematic and recent calls have been made for research into how codes can be effectively enforced (Kish-Gephart *et al.*, 2010; Lemoine *et al.*, 2018). Therefore, we compare two forms of enforcement. First are reward-based methods of enforcement, such as financial rewards for certain choices, which are linked to business frames [1]. Second are methods that exercise direct influence over the choice such as codified procedures for oversight, in which the purchasing manager must actively engage with the ethics of the decision, which are linked to ethical frames [2]. Further, we test whether these approaches to enforcement complement or counteract one another.

Hypothesis 2 proposes that the enforcement of a CoC can indicate to a purchasing manager that the firm considers supplier selection an ethical decision that leads to an increase in the likelihood of selecting ethical suppliers. This argument draws on previous ethical decision-making literature, which has typically associated the ethics frame with more ethical decisions than the business frame (Babalola *et al.*, 2020; Tenbrunsel and Smith-Crowe, 2008). However, decision frames and decisions themselves are dissociated, such that both ethical and business frames may lead to ethical and unethical decisions (Tenbrunsel and Smith-Crowe, 2008). In other words, a decision-maker can choose an ethical supplier because of their ethical merits, for reasons more aligned with a business frame such as personal gain, or to limit financial risk.

Individual purchasing managers must balance firm priorities and align their purchasing decisions with their firm's corporate strategy. Choosing the ethical supplier could be desirable from a long-term business perspective. This is underpinned by the initial idea of the triple bottom line. Bringing environmental, social and financial success in alignment leads to sustainable competitive advantage. Therefore, we test if the ethical supplier is more likely to be chosen when the firm makes the purchasing manager's financial rewards contingent on it. This situation, in which the financial and ethical goals are aligned, offers a situation in which an ethical choice is likely to be made even when the decision-maker considers their decision a "business" decision rather than an ethical one. Hence, we propose:

H3a. Enforcing a CoC with financial rewards to select more ethical suppliers (associated with business framing) will lead to a supplier selection decision that favors ethical performance over operational performance.

Firms might also be able to increase awareness of the ethical aspects of the decision by having the purchasing manager first persuade superiors that the choice of supplier follows the CoC. Knowing that a selection decision would be evaluated on ethical criteria by upper-level managers from outside purchasing should lead to a greater preference for ethical performance in individual purchasing managers. Hence, we propose:

H3b. Enforcing a CoC with codified procedures for oversight (associated with ethics framing) will lead to a supplier selection decision that favors ethical performance over operational performance.

But what happens when financial rewards co-exist with oversight? The co-existence of cues to both business and ethics framing is not addressed in the ethical decision-making literature. Yet, this scenario is relevant in the purchasing decision-making process as the individual decision-maker is often confronted with multiple and at times conflicting performance objectives (Kull *et al.*, 2014). For example, studies indicate that priming people with ethical considerations makes them less self-concerned (e.g. Ordóñez *et al.*, 2009; Schweitzer *et al.*, 2004; Welsh and Ordóñez, 2014). Hence, asking the purchasing manager to justify and thus engage with the morality of the decision, could undermine the value of a personal reward. Conversely, offering financial rewards may undermine engagement with the morality of the decision, as moral awareness can be muted by business framing cues (Tenbrunsel and Smith-Crowe, 2008). We therefore suggest that these different types of CoC enforcement can counterproductively interact in the financially distressed firm. Subsequently, we propose:

H3c. Enforcing a CoC with both financial rewards (associated with business framing) and codified procedures for oversight (associated with ethics framing) will lead to a supplier selection decision that favors operational performance over ethical performance relative to when only financial rewards or codified procedures for oversight are present.

4. Experimental investigations of ethical supplier selection decisions

Four experiments were conducted to investigate the effect of financial distress and the enforcement of CoC on individual purchasing managers' ethical supplier selection decisions. First, we tested for the effects of financial distress on supplier selection decisions, and then we examined CoC-enforcement and CoC-based interventions.

4.1 Experiments 1A and 1B: financial distress and ethical supplier selection

Experiment 1A is a between-subjects, vignette-based experiment designed to test if purchasing managers' likelihood of selecting ethical suppliers is negatively affected by firm financial distress. Experiment 1B consists of a replication and robustness check of experiment 1A. Data for experiments 1A and 2 were collected before January 2020. Consequently, we replicated experiment 1A in summer 2020 before launching experiment 3, to investigate the potential impact of COVID-19 on supplier selection decisions. Repeating experiment 1A allowed us to observe whether the general patterns of how purchasers act on ethical issues observed before the pandemic had changed.

4.1.1 Participants. Participants in experiment 1A were 153 purchasing managers associated with 153 private and public manufacturing firms in Austria, Germany and Switzerland (incl. Liechtenstein) (mean age = 42.3 years; mean work experience = 13.8 years; male = 121; female = 32; education [high school = 55; university = 95; PhD = 3])

Participants had at least four years of experience in purchasing and the power to select and contract new suppliers for their firm, either individually or jointly with colleagues. The sample was drawn from the list of participants at the 29th through 33rd International Supply Chain Conferences held in Berlin, Germany. To develop this sample, we identified the contact details of 648 manufacturing firms (via manual online searches) from Austria, Germany and Switzerland that were randomly drawn from the conference's directory. Of the 648 manufacturing firms, 183 responded to our survey and provided contacts to purchasing managers. Thirty responses were dropped because respondents had failed attention checks,

their work experience in purchasing was below four years, or the respondent was not responsive to our social desirability questions (see [Section 1](#), e-companion for the questionnaire). Attention checks were placed at both the beginning and the end of our experiment, allowing us to include responses only from participants who were attentive throughout. The final set of usable responses for experiment 1A was 153 who were randomly [3] assigned to one of three experimental conditions: financial distress $n = 60$, financially sound control $n = 45$, no financial information control $n = 48$. See [Section 2](#), e-companion for respondent and firm characteristics and tests of balance, which support the assumption of successful randomization of participants.

Experiment 1B, the replication of experiment 1A, was conducted with a sample of 130 purchasing managers (mean age = 43.58 years; mean work experience = 10.9 years; male = 100; female = 30; education [high school = 82; university = 47; PhD = 1]). As opposed to experiment 1A, experiments 1B, 2 and 3 used a stratified random sampling approach, with high-level strata formed on establishment-level characteristics. National census statistics from Austria, Germany and Switzerland (incl. Liechtenstein) were used to categorize manufacturing establishments in these countries into six groups, depending on their country and size (less than 50 employees or more than 49 employees). See [Section 3](#), e-companion for percentages of each stratum. Participants in experiment 1B and subsequent experiments were required not to have participated in any of the previous experiments. Participants in experiment 1B were asked (directly and indirectly) about the effects of COVID-19 on factors related to selecting ethical suppliers (see [Section 4](#), e-companion). Participants were first asked about norms, attitudes and control over sustainable supplier selection decisions made before the COVID-19 pandemic and then the same constructs since the COVID-19 pandemic (indirect questions). Participants were then asked directly about the effects of the COVID-19 pandemic on the same constructs. We found no direct or moderating effects on supplier selection ($p > 0.1$).

4.1.2 Experimental design and procedure. To test our hypothesis, we used the same vignette-based experiment with a between-subjects design for experiments 1A and 1B. The use of vignette based-experimental designs is common in behavioral operations ([Duan et al., 2021](#); [Ried et al., 2021](#)), as they enable scholars to test causal hypotheses in a way not possible with correlational data ([Aguinis and Bradley, 2014](#)). Establishing causation in our case is important because CoCs and their content may be both a result of firm values and a factor that influences how people within the firm frame decisions. However, the use of vignettes has not been without controversy ([Aguinis and Bradley, 2014](#); [Eckerdt et al., 2021](#)). Respondents may anticipate the study purpose and, because decisions are non-consequential, report untruthful decisions. Acknowledging this risk, we sought ways to reduce the risk of demand effects, for example, by checking manipulations with a separate group of respondents or using a control group with “no information” regarding the treatment.

Vignette studies are recommended when the topic is sensitive ([Aguinis and Bradley, 2014](#); [Eckerdt et al., 2021](#)), as is the case with the ethical decision-making elements of our study. They allow us to examine cause-effect relationships that would be unethical or impossible to manipulate in a field study or randomized controlled trial, such as firm financial distress. Vignette participants were blind to the manipulation ([Eckerdt et al., 2021](#)).

All participants were presented with a vignette regarding a fictional firm and prospective supplier selection decision (see [Section 5](#), e-companion), after which they were presented with text from one of the three treatment conditions. We conducted a series of pre-tests with graduate students to assess the understandability and realism of the vignettes before experimenting. The experiments were assessed regarding their (1) understandability, (2) believability and (3) imaginability (see [Section 6](#), e-companion).

The financial distress manipulation was designed according to our theoretical conceptualization of a purchasing manager’s selection decision when employed in a

financially distressed firm (Vohs, 2015). The financial distress of a firm should drive cognitive processes that focus on success and survival (e.g. Babalola *et al.*, 2020; Vohs, 2015) as is typical in a business frame. Experimental priming has effectively triggered financial distress perceptions among respondents (Krause *et al.*, 2014), even more so than simple recognition memory (Tulving *et al.*, 1982). This prior research suggests that a buyer's framing of a decision can be activated through experimental priming.

We experimentally manipulated the buying firm's financial soundness among the vignettes. Participants in the financial distress condition (treatment group: TG) were informed that the firm was financially distressed (return on investment -3% ; return on asset -8%). Participants in the first control condition (CG1) were informed that the firm was financially sound (return on investment 1.5% ; return on asset 5%); and those in the second control condition (CG2) were not provided any information regarding the firm's finances. The full text of each treatment is available in Section 7 of the e-companion. Two control groups were chosen to reduce issues with omitting a neutral baseline (Lonati *et al.*, 2018). Our hypothesis rests on the idea that financial distress prompts decision-makers to consider their decision as a "business" decision and focus on firm survival. Therefore, we include the second control group so that we can test whether the effect is unique to financial distress, or whether information regarding firm finances has a similar effect relative to no information.

Participants were then asked to make a choice (the dependent variable) between a more ethical (profound ethical tenets with strong efforts to achieve transparency in its supply chain), but less operationally competitive supplier (coded as 1) and a less ethical but more operationally (i.e. 1% lower price, 1% more delivery reliability and 1% fewer defects [quality]) competitive supplier (coded as 0). Both suppliers produce ethylene and thus have links to the petroleum industry. This industry is currently under ethical scrutiny due to its social and environmental impacts. The respondents are all employed by firms in Austria, Germany, or Switzerland. Therefore, like many central European firms, the buying firm in the vignette requires its suppliers to be a member of the UN Global Compact initiative, which both suppliers have signed (Goebel *et al.*, 2018). The literature indicates that location and power imbalances may play key roles in purchasing managers' decision-making. Therefore, we explicitly controlled for this by positioning both suppliers as domestic with no buyer-supplier power imbalance (Crook and Combs, 2007). To reduce social desirability concerns, we used structured projective questioning, such that participants responded as to what their average peer (called "X") would do in their firm, not the participant themselves. The approach helps respondents to protect themselves from anxiety, as it reduces their perceptions of rightness or wrongness (Donoghue, 2000). It has been shown that participants can effectively project their beliefs and evaluations in such indirect response situations, reducing social desirability while not affecting socially neutral variables (Fisher, 1993).

4.1.3 Results. In the analysis, our dependent variable is supplier choice of the operationally better performing supplier (0) vs the ethically better performing supplier (1). We performed two logistic regression models to compare supplier choice in the financial distress group (TG) to supplier choice in the financially sound control group (CG1; Model 1) and to the control group with no information on financial performance (CG2; Model 2). The results from the logistic regression analyses for experiment 1A are reported in Table 1. The results support H1, with fewer ethical supplier selection decisions in TG relative to both control groups. We find that the odds of selecting the ethical supplier in the financial distress condition are 4.452 and 4.449 times lower than the odds of selecting the ethical supplier in control conditions 1 and 2, all other factors being held constant [4]. The effects and standard errors are very similar between the two control groups. Hence, the results are consistent with the H1's prediction that financial distress leads to less ethical supplier selection decisions.

	(1) CG1 β (S.E.)	(2) CG2 β (S.E.)
Constant	1.494*** (0.335)	1.493*** (0.335)
Financial distress (TG)	-1.411*** (0.443)	-1.449*** (0.450)
Observations	108	105
Log Likelihood	-61.81	-59.765
Pseudo R Squared	0.081	0.086

Note(s): Results–logistic regression, dependent variable (selection of more ethical supplier codes as 1; selection of less ethical supplier coded as 0)

CG1: Control Group 1; CG2: Control Group 2 (no information); ***, ** and * indicate significance at the 0.01, 0.05 and 0.1 levels

Source(s): Authors' own creation

Table 1.
Results of
experiment 1A

Experiment 1A was repeated in experiment 1B with a stratified sample of 130 purchasing managers. The results remain qualitatively similar and indicate robustness to the outbreak of the COVID-19 pandemic and stratification of the sample (see [Table 2](#)).

4.2 Experiment 2: the enforcement of codes of conduct

[Hypothesis 2](#) posits that enforced CoCs can mitigate the detrimental effects of financial distress on selecting ethical suppliers. We test this proposition in experiment 2. Participants in experiment 2 were 197 purchasing managers, associated with 197 firms (mean age = 40.82 years; mean work experience = 12.53 years; male = 142; female = 55; education [high school = 91; university = 102; PhD = 4]). Experiment 2 was conducted using the same stratified sampling approach as experiment 1B. A market research firm then manually contacted establishments in each stratum based on the proportions derived from the census statistics. For purchasing managers at establishments who declined our invitation or where our checks for inclusion failed, another establishment in the respective strata was contacted. The same eliminations criteria from experiments 1A were employed. Participants were randomly assigned to one of three experimental conditions: enforced CoC $n = 72$, non-enforced CoC control (CG1) $n = 61$, no CoC info control (CG 2) $n = 64$. See Section 8 of the e-companion for respondent and firm characteristics and tests of balance.

	(1) CG1 β (S.E.)	(2) CG2 β (S.E.)
Constant	0.818*** (0.312)	0.818*** (0.312)
Financial distress (TG)	-1.093** (0.437)	-1.201*** (0.459)
Observations	93	86
Log Likelihood	-60.27	-55.16
Pseudo R Squared	0.052	0.061

Note(s): Replication of experiment 1A–logistic regression, dependent variable (selection of more ethical supplier coded as 1; selection of operationally better performing supplier coded as 0)

CG1: Control Group 1 (financially sound); CG2: Control Group 2 (no information); ***, ** and * indicate significance at the 0.01, 0.05 and 0.1 levels

Source(s): Authors' own creation

Table 2.
Results of
experiment 1B

Experimental design and materials were as for experiment 1A. Once more, the design was between subjects, and participants were randomly assigned to one of the three conditions. The procedure followed experiment 1A, extending the financial distress scenario. Participants in the “enforced CoC” condition read about the firm’s strong commitment to its CoC. This manipulation builds on previous research that suggests that CoCs can prompt an ethics frame if they are enforced (Tenbrunsel and Messick, 1999). Participants in CG1 read that the firm has a CoC that it does not enforce, and participants in CG2 did not receive any information about a CoC. As in experiment 1A, participants chose between the same set of suppliers.

In the analysis, our dependent variable was again supplier choice of the operationally better performing supplier (0) versus the ethically better performing supplier (1). We performed two logistic regression models to compare supplier choice in the enforced CoC group (TG) to supplier choice in the unenforced CoC control group (CG1; Model 1) and to the control group with no information on a CoC (CG2; Model 2). The main results from the logistic regression analyses are reported in Table 3. H2 was supported; relative to both control conditions, enforcement of the CoC was associated with a more ethical supplier selection decision. This means that the odds of selecting the ethical supplier in the CoC enforcement condition are 2.16 and 2.64 times higher than the odds of selecting the ethical supplier in control conditions 1 and 2, all other factors being held constant. The results support the proposition that a strong commitment to the CoC enhances ethical supplier selection decision in financially distressed firms relative to both control vignettes.

4.3 Experiment 3: business frames, ethics frames and codes of conduct

Experiment 3 further investigates the effects of CoC enforcement to test whether CoC enforcement mechanisms that elicit business frames, such as financial reward (H3a) and ethics frames, such as direct oversight, (H3b) can both lead to ethical supplier selection decisions but counteract one another (H3c).

Participants in experiment 3 were 142 purchasing managers, associated with 142 firms (mean age = 39.79 years; mean work experience = 14.60 years; male = 95; female = 47; education [high school = 34; university = 103; PhD = 5]). Participants for experiment 3 were recruited from the same sampling frame and with the same elimination criteria as the previous experiments. As participants could not have participated in any of the previous experiments, it was more challenging to find enough suitable respondents, which resulted in some disproportionate representation in each stratum. Consequently, probability weights for each respondent were developed on a firm-level and included in the analyses. Our test of

	(1) CG1 β (S.E.)	(2) CG2 β (S.E.)
Constant	0.167 (0.237)	-0.033 (0.256)
CoC enforcement (TG)	0.771** (0.365)	0.971*** (0.378)
Observations	136	125
Log likelihood	-87.68	-80.30
Pseudo R-squared	0.026	0.041

Note(s): Results—logistic regression, dependent variable (selection of more ethical supplier coded as 1; selection of operationally better performing supplier coded as 0)

CG1: Control Group 1 (CoC unenforced); CG2: Control Group 2 (no information); ***, ** and * indicate significance at the 0.01, 0.05 and 0.1 levels

Source(s): Authors’ own creation

Table 3.
Results of experiment 2

balance indicated some disproportionate conditions concerning work experience and internationalization of purchasing, which are expanded upon in a robustness check. See section 9 of the e-companion for respondent and firm characteristics and tests of balance.

Experimental design and procedures followed experiments 1A and 2. The design was between subjects where participants were randomly assigned to one of the four conditions. Participants were randomly assigned across the three treatment groups: business frame (financial rewards) absent, ethics frame (direct oversight) present (TG1; $n = 29$); business frame present, ethics frame absent (TG2; $n = 38$); business frame present, ethics frame present (TG3; $n = 36$); and one control group, business frame absent, ethics frame absent (CG; $n = 39$). In all conditions, participants read about a firm in financial distress, which has a CoC in place like the conditions “enforced CoC” and “non-enforced CoC control” of experiment 2 but with no particular detail on its enforcement. Information on the CoC’s enforcement was provided as follows: Participants in the ethics frame present conditions (TG1 and TG3) read that the firm enforces its CoC through oversight mechanisms that require the purchasing manager to justify the ethics of the supplier selection decisions, before supplier appointment; while in the ethics frame absent conditions (TG2) the CoC is not enforced this way. Participants in the business frame present conditions (TG2 and TG3) read that the firm enforces their CoCs through employee reward/recognition systems and employee performance evaluation, while in the business frame absent condition (TG1) the CoC is not enforced this way. As in experiments 1A and 2, participants chose between a more ethical, less operationally competitive supplier, and a less ethical, more operationally competitive supplier.

We performed a logistic regression analysis, comparing supplier choice across the CoC enforcement groups (treatment groups TG1-TG3, see Table 4) to the group with no enforcement (control group CG). The logistic regression estimates are presented in Table 4. Both frames appear to increase the likelihood of ethical supplier selection only when the other frame is absent, relative to no enforcement, supporting H3a and H3b. First, we find that the odds of selecting the ethical supplier when the participants are presented with the business frame (financial reward) only are 6.17 times higher relative to no enforcement. Further, the odds of selecting the ethical supplier when the participants are presented with the ethics frame (direct oversight) only are 146.2 times higher relative to no enforcement. However, when both frames are presented together their effects are dampened, and supplier choice does not differ significantly from the no enforcement group, supporting H3c.

	β (S.E.)
Constant	0.966*** (0.644)
Financial rewards (present)/Direct oversight (present) (TG3)	1.363 (0.58)
Financial rewards (present)/Direct oversight (absent) (TG2)	1.821* (1.020)
Financial rewards (absent)/Direct oversight (present) (TG1)	4.990*** (1.034)
Financial rewards (absent)/Direct oversight (absent) (CG)	–
Observations	142
Log likelihood	–59.922
Pseudo R-squared	0.189

Note(s): Results–logistic regression, dependent variable (selection of more ethical supplier coded as 1; selection of operationally better performing supplier coded as 0)

***, ** and * indicate significance at the 0.01, 0.05 and 0.1 levels

Table 4.

Results of experiment 3

Source(s): Authors’ own creation

4.4 Manipulation checks

Please see Section 10 of the e-companion for information on how we explored whether the manipulations had the intended effects. The results support the experimental manipulations used in this study.

4.5 Robustness and endogeneity

Several robustness checks were conducted, which included the addition of control variables, exploration of whether respondents in experiments 1A and 2 differed significantly on individual and establishment characteristics, and whether the COVID-19 pandemic, which broke out after experiment 2 was conducted, had affected managerial decision-making. See Section 11, e-companion for detailed information. The results indicate that the findings are robust.

We addressed endogeneity in our experiments in various ways. First, each experimental condition was randomly assigned in all four experiments—see balance tests. In our robustness tests, we included control variables to observe if potential systematic variations in group assignments could have affected our results. The results remained stable to the inclusion of variables controlling for the establishment, respondent and social desirability characteristics.

Furthermore, the order of the questions was fixed during the experiments. Each respondent was asked to first read the vignette, respond to the first attention check and indicate which supplier “X” would have chosen. On the next survey page, each respondent was asked for demographic information (experiment 1B included another survey page before this asking about the effects of COVID-19). On the final survey page, respondents were asked to respond to our social desirability questions concluding with the second attention check.

5. Discussion

Purchasing managers’ supplier selection decisions take a central role in steering or implementing a corporate strategy (Narasimhan and Talluri, 2009). While operational considerations continue to be a purchasing priority, ethics have become a pressing concern due to societal and political expectations and legislation. Firms are increasingly expected to address the concerns of a wide range of stakeholders, including regulators and activists (Erhun *et al.*, 2021; Hohn and Durach, 2022). Further, maintaining a record of ethical purchasing has been linked to long-term firm outcomes. For example, when the UK Modern Slavery Act (2015) took effect, firms that had failed to maintain a slave-free supply chain were at a competitive disadvantage (Cousins *et al.*, 2020). Given the growing importance of ethics in supplier selection, identifying effective internal policies that guide individual’s purchasing decisions toward ethical suppliers is important (e.g. Agrawal and Lee, 2019; Villena, 2019). We investigated the potential for tension between business and ethical decision-making in the context of financially distressed firms. Our results from experiment 1A suggest that decision-makers in financially distressed firms were about 4.5 times more likely to favor the operationally better performing supplier. We argued that financial distress leads individual managers to construe their decisions as “business” decisions and to prioritize short-term financial advantage over ethical performance in their supplier selections. This finding indicates that financially distressed firms need to actively manage the decision-making process of their purchasing managers to achieve the desired ethical goals of their corporate strategies and to avoid unethical behavior that could compound their financial problems.

We also find that decision-makers in distressed firms with an enforced CoC were between 2.1 and 2.6 times more likely to choose the ethical supplier than when the firm lacked an enforced CoC (with identical content). The results support the proposition that a firm’s strong commitment to the CoC increases ethical supplier selection in financially distressed firms.

Thus, distressed firms can rely on CoCs when managing purchasing managers' decision-making processes. However, there were nuances in the effectiveness of CoCs due to differences in enforcement practices. We theorized that a firm's enforcement of its CoC through financial rewards would induce a business frame, while enforcement through oversight mechanisms that require the purchasing manager to justify the ethics of the supplier selection before supplier appointment, would induce an ethics frame. Our results were consistent with the conjectures in H3a–c. We identify a negative interaction, with CoCs being less effective in the presence of enforcement strategies associated with both frames than only one frame. Individual purchasing managers were most likely to choose the ethical supplier when the ethics frame alone was present and least likely when both frames were simultaneously present or absent.

5.1 Managerial implications

We analyzed the decision-making of purchasing managers, considering ethical supplier selection for financially distressed firms. The results suggest that financial distress at the firm level affects decision-making at the individual level, calling for active management to prompt purchasing managers to select the desired supplier from an ethical perspective.

We posited that decision-making in financially distressed firms is oriented towards survival in the short term. When firms are under financial distress, top management needs to be aware that this is likely trickling down to their purchasing managers. If firms want to prioritize or maintain ethical goals, they should be aware that this requires active management. Our results indicate that without intervention, the purchasing manager tends to favor operational over ethical performance—*ceteris paribus*—in situations of financial distress. Financial distress in firms, as examined in this study, poses an extreme form of pressure for financial outcomes. Purchasing managers face related forms of pressure in their everyday work, for example, for cost reduction. Hence, we would predict similar results even within financially sound firms.

That financial distress leads to a focus on (likely short term) operational performance is intuitive. But this intuition was previously untested, and by testing it, we can put the results for CoCs into their context and better help managers avoid unethical decisions when in situations of distress. Our findings suggest that one factor leading to the inconclusive findings of the effectiveness of CoCs is whether and how the CoC is enforced. The literature has typically found that decisions are less likely to be ethical when made from a business frame than an ethical one (e.g. Mitchell *et al.*, 2018). This finding suggests that increasing engagement with the ethical aspects is the best way to guide managers to more ethical decisions. However, the results indicate important nuances to that finding. First, while less effective than increased ethical engagement, employee rewards increase the likelihood of ethical supplier selection decisions. Second, purchasing managers can be guided towards ethical supplier selection decisions when the CoC is enforced through either employee rewards or supervision systems alone; however, when used simultaneously they reduce the likelihood of an ethical selection decision. This is a critical insight for managers promoting their purchasing managers ethical priorities, regardless of a firm's financial situation. While more is often better, having multiple enforcement mechanisms employed at the same time dampens the effectiveness of CoCs. The results also suggest that the ethics frame triggered by supervision systems is a more effective tool to manage ethical decision-making than rewarding employee behavior.

5.2 Theoretical implications

This research makes important contributions to the literature on general management, decision framing and ethical decision-making. Our findings highlight the significance of applying ethical decision-making concepts to the context of operations and supply chain

management. We demonstrate that the ethicality of individual purchasing managers' decisions can be effectively predicted by considering the concept of decision frames. Understanding and identifying the dominant decision frame in a particular situation is critical to comprehend and predict possible ethical and unethical decisions (Tenbrunsel and Smith-Crowe, 2008).

Previous research has primarily focused on the negative outcomes of business frames, highlighting the harmful, less ethical and self-interested behavior of employees, while pointing towards the positive outcomes of ethics frames (Babalola *et al.*, 2020, 2021; Greenbaum *et al.*, 2012; Mitchell *et al.*, 2018; Rees *et al.*, 2021). Furthermore, the literature on business ethics has long emphasized the notion that ethical decisions necessitate moral awareness, as evident in the works of Rest (1986), as well as more recent developments in behavioral ethics (e.g. Cremer *et al.*, 2011; Maesschalck, 2021; Mitchell *et al.*, 2020) and bounded ethicality (e.g. Chugh *et al.*, 2005; Rees *et al.*, 2019). Consistent with this perspective, experiments 1A/B reveal that purchasing managers draw situational cues from their firms' financial situations to guide their decision-making processes. In times of financial distress and heightened performance pressure on employees, both in terms of self-interest and firm pressure (Mitchell *et al.*, 2018), purchasing managers appear to prioritize financial performance over ethical performance, underscoring the potential negative ethical consequences of the business frame.

However, the concept of decision frames suggests a dissociation between the effects of framing on cognitive processes and decision outcomes and therefore a more nuanced understanding of the effects of ethics and business frames (Tenbrunsel and Smith-Crowe, 2008). Experiment 3 challenges the notion that increased moral awareness is the only avenue to ethical choice. In experiment 3, we find that business frames can be exploited to drive more ethical choice by aligning ethical choice with personal benefit, while, as indicated by the manipulation checks, respondents are not morally aware. The current research presents a first empirical step in identifying that business frames can be used for good. Future research might explore the specific cognitive mechanisms that underpin this relationship and empirically test whether the same cognitive mechanisms are involved in the effects of business framing on ethical and unethical choice. For example, cost-benefit analysis and a low-level construal of a decision have been posited to underlie a relationship between business frames and unethical outcomes (Kouchaki *et al.*, 2013; Rees *et al.*, 2021).

Although recent studies have determined differences in cognitive processes between the two frames (Kouchaki *et al.*, 2013; Rees *et al.*, 2021), empirical studies examining both frames have been rare. Experiment 3 reveals a pattern regarding the simultaneous presence of opposing decision frames not previously examined in the literature. This oversight is surprising, as it is likely that managers often encounter environmental cues to ethics and business frames simultaneously. The separation of business and ethical issues is increasingly viewed as a problematic and artificial separation (Abela and Shea, 2015; Harris and Freeman, 2008). This idea is well captured in the triple bottom line, which implies that managers must simultaneously consider the financial, environmental and social impacts of their decisions (Goebel *et al.*, 2018; also see Rees *et al.*, 2021). More broadly, the concept of ethical dilemmas indicates competing interests and therefore cues to both ethics and business frames in many cases. For example, there has long been concern that managers must balance short-term profitability against long-term environmental goals (e.g. Wu and Pagell, 2011). We investigate this more deeply in H3a–c. We test the individual and combined implications of enforcement actions. The intent of using enforcement methods that leverage both framings simultaneously is to guide the decision-maker to the ethical choice. However, the result is that they counterproductively interact. Individually, each enforcement method and decision frame can be supportive of the ethical goal, but only if the other enforcement method is absent. Both enforcement actions on their own increase the likelihood of ethical supplier selection. This contradicts the notion that a greater degree of enforcement leads to better results.

Importantly, the current results also support the idea that cues to the ethics and business frames evoke unique and conflicting cognitive processes (e.g. [Messick, 1999](#); [Rees et al., 2021](#)), offering insight into the findings of [Goebel et al. \(2018\)](#), who observed that the mere existence and dissemination of a CoC within an organization does not inherently lead to an increased willingness among purchasing managers to pay a price premium for sustainability.

6. Conclusion and limitations

The decisions of individual purchasing managers have significant implications for the strategic direction and overall performance of firms. In this paper, we analyzed the decisions made by purchasing managers in situations of firm financial distress. We identified that financial distress leads decision-makers to favor operational performance over ethical performance. Our findings offer an entry point for exploring the implications of financial pressure on purchasing managers' decisions. We suspect that other forms of financial pressure, for example, the pressure to lower purchasing costs, may result in similar behavior even at better-performing firms; further research on this would be interesting. Furthermore, we identified nuances as to how CoCs should be enforced to guide purchasing managers in making ethical selection decisions.

Like with any research, it is important to interpret our findings cautiously, considering several limitations that may provide insights for future research. First, our manipulation of a firm's financial distress was relatively strong. Future research may relax this to gain insight as to the strength of financial distress and its association with ethical supplier selection. Second, our stratified sampling approach was confined to the firm level, as we had no information on the population of purchasing managers in the geographical regions. This limitation needs to be considered when interpreting our results. Third, we had to employ probability weights in the analysis of our data for experiment 3. Because participants were not allowed to participate in multiple experiments and we drew all participants from the same sampling frame, not enough purchasing managers were available for experiment 3 to fill all strata to the desired level. Our exploration of the data without probability weights revealed qualitatively similar effects in size, though our sample size remained relatively small. On a similar note, we limited our sample to Germanic countries. This is consistent with approaches taken by previous studies that have been concerned with the biasing influence of significant cultural differences on study outcomes ([Wissuwa et al., 2022](#); [Bode et al., 2011](#)). Future studies may relax this constraint or sample participants in culturally different regions to contribute to the valuable literature stream on the role of national culture in operations and supply chain management ([Gupta and Gupta, 2019](#)). Fourth, another condition of the present study is the various design tradeoffs faced when exploring such a sensitive topic. In the present case, it was important to make sure the manipulations are not salient to the participants and social desirability bias is accounted for ([Eckerd et al., 2021](#)). This included separate manipulations checks, between-subjects designs and projected questioning ([Eckerd et al., 2021](#)). Further, and as a natural consequence of the theoretical framework, the behaviors of interest are not clearly related to economic outcomes and are projected toward a third person. Decision-based incentives would have potentially biased respondents and reduced external validity. We, therefore, decided not to reward participants for their choice. Finally, significant portions of our theorization had to be built on the more general research offered in the ethical decision-making literature, given an absence of literature on the present subject in our domain. In this respect, we acknowledge that the argument development in H3a–c rests on a relatively weak theoretical foundation and should be treated as an exploration rather than a confirmation of what we know. With this study, we seek to expand our knowledge concerning behavioral operations management research ([Croson et al., 2013](#); [Gino and Pisano, 2008](#); [Tan and Netessine, 2019](#); [Durach et al., 2023](#)), which has been flagged as particularly critical for the area of sustainable supply chain management ([Wieland et al., 2016](#)).

Notes

1. A similar method can be found in the CoC of Chr. Hansen Holding, one of the most sustainable firms in 2019, according to Forbes (Strauss, 2019).
2. A similar method can be found in the CoC of Michelin, one of the most reputable firms for CSR in 2018, according to Forbes (Valet, 2018).
3. Randomization was still successful after the 30 respondents were dropped. Dropping the participants was unrelated to the condition to which they were randomly assigned.
4. Here and in the following, the odds ratio are calculated as: $\text{odds ratio} = (\text{odds}(Y = 1 | X = 1)) / (\text{odds}(Y = 1 | X = 0))$. Substituting the logistic function equations for each condition, we get: $\text{odds ratio} = [e^{(\text{constant} + \text{coefficient})} / (1 + e^{(\text{constant} + \text{coefficient})})] / [e^{(\text{constant})} / (1 + e^{(\text{constant})})]$.

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Appendix

The supplementary material for this article can be found online.

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