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Force majeure in business relationships

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ABSTRACT

The management literature traditionally views '*force majeure*' in business relationships as the result of exogenous events, that is, the consequence of external unforeseeable and irresistible catastrophes outside of human control. Yet, recent events suggest that companies frequently invoke force majeure for purposes beyond excusing non-performance due to genuine force majeure events. Drawing on expectancy violation theory and employing a sequential empirical research design – including an analysis of force majeure declarations at a focal firm, semi-structured interviews, and an experiment – this study examines the expectations and outcomes associated with force majeure in buyer–supplier relationships. Contrary to the extant literature, our findings suggest that force majeure declarations are, under certain conditions, used as a pretext or strategic tool to address other underlying issues in the business relationship. Our study broadens the understanding of force majeure declarations in business relationships offers significant managerial insights for effectively navigating force majeure-related challenges.

1. Introduction

Force majeure refers to an event that can neither be anticipated nor controlled, encompassing acts of nature, such as natural disasters, as well as human actions, such as wars (Black's Law Dictionary, 2019). These unpredictable events can have detrimental effects on business relationships. To mitigate some of these effects, firms commonly incorporate force majeure clauses into their contracts with buyers and suppliers, which relieve them from liability or obligations when a force majeure event occurs (Mouzas & Blois, 2013). Research indicates that the inclusion of these clauses reduces the likelihood of contract termination (Susarla, 2012). However, beyond these contractual provisions, various contextual and relational factors influence expectations regarding how adverse events should be resolved before contract termination is considered.

The management literature emphasizes the importance of communicating unforeseeable and uncontrollable disruptive events to supply chain partners – not only to absolve liability for non-performance but also to limit cascading effects and mitigate adverse consequences for relationships (Hartmann & Moeller, 2014; Polyviou, Rungtusanatham, Reczek, & Knemeyer, 2018). In practice, the frequency of force majeure declarations in business relationships appears to have increased, reflecting heightened uncertainty in the contemporary business environment. For instance, in the experimental study conducted as part of this research, more than 76 % of procurement professionals reported having received at least one force majeure declaration from their business partners, such as suppliers, in recent years. Unsurprisingly, studies suggest that the COVID-19 pandemic significantly disrupted the fulfillment of contractual obligations (Yas, 2021), as many buying companies reflexively canceled or curtailed purchase orders (Sherman, 2021).

However, this rise in force majeure declarations is only partially linked to a corresponding increase in adverse events. An emerging trend suggests that firms are opportunistically leveraging force majeure as a pretext to advance their own interests. For example, in July 2022, Gazprom (Russia's state gas monopoly) informed its European customers via letter that it could no longer guarantee gas supplies due to 'extraordinary' circumstances and retroactively declared force majeure on supplies beginning in June 2022. This declaration heightened fears in Europe that Moscow might not restart the Nord Stream 1 pipeline after its maintenance period, potentially as retaliation for sanctions imposed on Russia over the war in Ukraine. Uniper, Germany's largest importer of Russian gas, was among the recipients of this declaration and formally rejected the claim as unjustified (Payne, 2022).

The existing literature often simplifies force majeure by contrasting it with controllable events when studying the relationship implications of supply chain disruptions, such as the attribution of blame (e.g., Park & Rogan, 2019; Polyviou et al., 2018; Wang, Cheng, Craighead, & Li, 2022). Even when disruptions are caused by a genuine force majeure

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Table 1
Relevant extant literature.

Reference	Data	Research context	Theories	Findings related to force majeure
Susarla (2012)	Contracts, 10-Q, 10-K, and 8-K filings	Information technology outsourcing	–	Inclusion of force majeure clauses in contracts reduces the likelihood of contract terminations.
Mouzas and Blois (2013)	Contracts and interviews	Manufacturers of consumer and pharmaceutical products, service providers, and grocery retailers	Relational contract theory	Force majeure clauses aim at addressing risks resulting of contextual contingencies.
Hartmann and Moeller (2014)	Experiment data	Environmental pollution incident at a supplier	Attribution theory	Negative consumer reactions will be stronger if incident results from supplier behavior rather than force majeure.
Polyviou et al. (2018)	Experiment data	Supply disruption at an electronics supplier	Attribution theory	Non-retention and anger are weaker under force majeure than a disruption under the control of the supplier.
Park and Rogan (2019)	PHMSA annual reports, FERC[1] form filings, and survey data	Interstate gas transmission pipeline accidents	Uncertainty and attribution theories	Attenuating effect of character reputation on relationship dissolution is weaker after a controllable adverse event than after force majeure.
Wang et al. (2022)	Experiment data	Supply disruption at an electronics supplier	Attribution and justice theories	Buyer-attributed responsibility is weaker for a force majeure than a disruption under the control of the supplier. Under a force majeure, suppliers nevertheless must invest in justice efforts in the resolution process – taking responsibility for the recurrence of disruptions.
This study	Force majeure declarations, interviews, and experiment data	Various disruptive events at suppliers, with or without supply disruptions and force majeure declarations	Expectancy violation theory	A force majeure declaration is, under certain conditions, used as a cover for, or leverage in, other issues surrounding the business relationship. Force majeure declarations can potentially slow down disruption response actions and increase switching intentions of the recipient. The relationship outcome is influenced by ex-ante expectations, stemming from relationship history and communication behavior.

[1] The Pipeline and Hazardous Materials Safety Administration (PHMSA) is the regulatory organization responsible for pipeline safety in the US and the Federal Energy Regulatory Commission (FERC) is an independent regulatory agency in charge of the US energy industry (Park & Rogan, 2019).

event, business partners maintain *ex-ante* expectations regarding the handling of such situations (e.g., demonstrating best efforts to minimize adverse effects) and *ex-post* evaluations (e.g., perceptions of justice during the disruption recovery process) that have implications for the relationship (Manisaligil et al., 2023; Wang et al., 2022). Moreover, the literature has largely overlooked cases of force majeure declarations made without an actual force majeure event (e.g., Gazprom). The implications of these declarations for business relationships are complex, as they may range from acceptance of the claim to its rejection, enforcement of penalties, or even dissolution of the relationship. Therefore, this study asks the following research question (RQ): "*What are the expectations and outcomes of force majeure in buyer–supplier relationships?*".

To address this research question, we apply a sequential research design. Following a discussion of the corresponding legal basis, we review the sparse management literature on force majeure in business-to-business (B2B) relationships. Subsequently, we conduct a qualitative study consisting of a content analysis of 43 supplier-issued force majeure declarations at a focal firm and in-depth interviews to elaborate on the research question using expectancy violation theory (Burgoon, 1993; Burgoon & Jones, 1976). Finally, a subsequent experiment focuses on the implications of force majeure declarations for the receiving party.

Contrary to prevailing perspectives in the extant literature, our qualitative findings reveal that force majeure declarations are also opportunistically employed as a pretext to address underlying issues within the business relationship. The results indicate that such declarations impede supportive responses from the recipient and increase intentions to switch to alternative suppliers. These effects are influenced by relationship history, with positive history amplifying switching intentions when a force majeure declaration is issued. This highlights the complex and multifaceted effects of force majeure declarations, extending beyond their immediate legal and operational ramifications. In summary, the findings provide novel insights into the expectations and outcomes of force majeure issues and, to the best of our knowledge, represent the first analysis of force majeure declarations in buyer–supplier relationships.

2. Conceptual background and previous research

2.1. Legal basis for force majeure

The term *force majeure* (French for 'superior force') is commonly defined as an event that can neither be anticipated nor controlled, and that results in preventing someone from performing or completing an agreed-upon or officially planned obligation. It encompasses acts of nature and acts of people (Black's Law Dictionary, 2019). Common examples include natural disasters (e.g., floods, earthquakes, storms), fire, electricity outages, arson and sabotage, war, civil unrest, terrorist activities, government sanctions, embargoes, labor disputes, and strikes – all of which, in appropriate contexts, may justify force majeure (Bishoff & Miller, 2009).

Parties to a contract, such as suppliers or buyers, can declare force majeure to protect themselves when they are unable to perform under their contractual obligations. Such declarations typically excuse non-performance during the period of the event, providing a delay or suspension of responsibilities. Legal consequences may include the suspension or termination of the relationship, with the debtor often bearing the consequences of termination. In some cases, parties may be compensated for services already provided, depending on the duration of the force majeure event (Hagedoorn & Hesen, 2007).

For an event to be classified as force majeure under relevant jurisprudence, two conditions must be fulfilled: (i) the event must be beyond a party's reasonable control; and (ii) it must render ongoing performance or completion of an act commercially impossible (at least temporarily) (Bishoff & Miller, 2009). Force majeure thus differs from economic hardship, where the fulfillment of a contractual agreement has become more burdensome than anticipated, but not objectively impossible due to an external cause (Maskow, 1992). In fact, the most disputed issue surrounding force majeure is determining the threshold of events that render contractually agreed-upon performance impossible (Bishoff & Miller, 2009).

2.2. Force majeure in the management literature

Force majeure has received limited attention in the management

literature, including relationship marketing and operations management. Regarded as a catastrophic risk (Wagner & Bode, 2006), an event qualifies as force majeure if it is caused by an 'act of God' and is beyond the control of any party (Hartmann & Moeller, 2014). Beyond natural causes, other external forces, such as industrial accidents or vandalism, have also been cited as examples of force majeure (Wagner & Bode, 2006). In addition to uncontrollability, another principle is that these events could not have been prevented by reasonable measures (e.g., regular maintenance) (Park & Rogan, 2019).

The literature addresses force majeure in two primary ways. First, as summarized in Table 1, research on contracts focuses on force majeure *clauses*, which are contractual provisions designed to allocate the risk of loss when performance becomes impossible or impracticable due to a force majeure event (Black's Law Dictionary, 2019). Such clauses may specify that parties *"bear no liability for damages [that] occurred as a result of war, political unrest, strikes, lockouts, and governmental interventions"* (Mouzas, 2016, p. 58). Extant literature occasionally classifies these force majeure clauses as umbrella agreements, which provide coping mechanisms for complex multilateral exchanges, balancing liabilities and unforeseen events (Mouzas, 2006). Breaching these clauses often triggers saving provisions to ensure the agreement's overall validity despite isolated invalid clauses (Mouzas & Ford, 2006). Force majeure clauses are prevalent in commercial transactions to ensure greater certainty (Egan, 2010; Mouzas & Blois, 2013). For example, 31 % of contracts with IT product and service suppliers incorporate force majeure clauses (Anderson & Dekker, 2005). In technology outsourcing, it has been reported that the inclusion of such clauses reduces the likelihood of contract termination (Susarla, 2012). However, when these clauses are violated, companies often avoid litigation due to the associated uncertainty, costs, time, and reputational risks. Instead, the threat of litigation is often used to assert power (Rindt & Mouzas, 2015).

A second stream of literature utilizes the concept of force majeure to characterize the locus of causality in the context of supplier chain incidents and related disruptions, predominantly adopting attribution theory (cf., Table 1). Consumer and business partner reactions are influenced by the attribution of responsibility. For example, disruptions caused by internal negligence (e.g., poor security systems) provoke stronger negative reactions than those attributed to force majeure events, such as earthquakes (Hartmann & Moeller, 2014). Similarly, a supplier's retention and buyer dissatisfaction after disruptions depend on whether the supplier had control over the event (Polyviou et al., 2018; Primo, Dooley, & Rungtusanatham, 2007). Communication strategies are crucial in these situations (Hartmann & Moeller, 2014; Polyviou et al., 2018). Suppliers must communicate force majeure events effectively to retain customers and manage relationships post-disruption (Polyviou et al., 2018). Yet, suppliers may even shoulder some responsibility for disruptions triggered by a force majeure, depending on procedural and interactional justice in the disruption resolution process (Wang et al., 2022).

Despite these contributions, the literature has significant limitations. First, the concept of force majeure is overly simplified – frequently reduced to an uncontrollable event and used merely as a contrast to events attributed to the fault of a business partner (i.e., locus of causality). However, beyond being unforeseeable and uncontrollable, a valid *force majeure* event also requires an explicit declaration by the affected party, and it must render contractually agreed-upon performance objectively impossible (Black's Law Dictionary, 2019). Second, although Wang et al. (2022) considered expectations in the disruption recovery process – including cases involving force majeure – the effect of ex-ante expectations shaped by prior relationship history (e.g., previous supplier performance) remain unexplored. For example, a buying firm may evaluate the same incident more negatively if it occurs at a supplier with a history of strong performance compared to one with weaker performance (Chen, Rungtusanatham, & Goldstein, 2019; Rhee & Haunschild, 2006). Likewise, expectations regarding how a force majeure and related declarations should be handled will influence uncertainty surrounding the event. Third, opportunistic or improper use of force majeure declarations – as illustrated in the introduction – and their consequences for business relationships have not been systematically investigated. Finally, as shown in Table 1, no prior study has empirically examined force majeure declarations to explore their relationship implications. This study seeks to address these gaps and advance understanding of the intentions, expectations, and outcomes associated with force majeure in B2B settings.

2.3. Expectancy violation theory

Given the legal background, there are regulatory and normative expectations regarding the handling of force majeure issues. However, these expectations are not always met in practice, resulting in varied implications for business relationships. To explore these dynamics, this study draws on expectancy violation theory (EVT; Burgoon, 1993; Burgoon & Jones, 1976). Originally developed in the field of interpersonal communication, EVT posits – somewhat counterintuitively – that violations of expectations can sometimes be more favorable than confirmations (Burgoon, 2015).

Expectancy refers to an enduring pattern of anticipated behavior shaped by the counterparty (i.e., communicator), the nature of the relationship, and the situational context (Burgoon, 1993). When actual behavior deviates from these expectations, an *expectancy violation* occurs; conversely, when behavior is congruent with expectations, it constitutes an *expectancy confirmation* (Burgoon, 2015). Violations can be positive (when behavior exceeds expectations) or negative (when behavior falls short). In line with cumulative prospect theory (i.e., Tversky & Kahneman, 1992), expectancy violations are evaluated relative to a prior reference point rather than in absolute terms. Contracts, in this regard, may function as reference points: Research suggests that expectations about transactional outcomes are anchored in contractual agreements, and any deviation – especially shortfalls – can adversely affect the future of the relationship (Hart & Moore, 2008; Mouzas & Ford, 2012).

EVT also emphasizes the role of subjective valence toward the counterparty (i.e., the interpretation and evaluation of enacted behavior). It suggests that the greater the deviation from expected behavior, the larger its effect (Burgoon, 1993; Burgoon & Jones, 1976). While negative violations lead to worse relationship outcomes than negative confirmations, EVT proposes that positive violations may yield better outcomes than positive confirmations. This prediction – that positive expectancy violations are desirable – distinguishes EVT from traditional views, which assume that all expectancy violations are inherently negative (Burgoon, 2015).

As outlined earlier, for an event to be legitimately classified as force majeure, two conditions must be met: (i) it must be beyond a party's reasonable control, and (ii) it must render contractual performance impossible. Consequently, it is expected that force majeure will only be declared by a business partner when these conditions are met (i.e., expectancy confirmation). If a business partner declares force majeure without satisfying these conditions, it constitutes a negative expectancy violation, likely to damage the relationship. Conversely, if a business partner refrains from invoking force majeure despite being eligible to do so (because the conditions are fulfilled), it could be viewed as a positive expectancy violation, potentially strengthening the relationship. Further factors, such as the subjective valence toward the counterparty, are likely to influence these dynamics and are investigated empirically in this study.

The classification of expectancy confirmations and violations – both positive and negative – highlights the relevance of investigating force majeure declarations in business relationships. EVT has been successfully applied in operations management research, such as examining the role of communication in power dynamics (Han, Handfield, Huo, & Tian, 2022), framing contractual performance incentives in buyer–supplier relationships (Selviaridis & van der Valk, 2019), and

Table 2
Research stages.

Stage	Relatedness to the RQ	Purpose	Data	Method
1	Context, expectations related to reasons and timeframe of related disruption	First analysis of force majeure declarations in management research. Analysis of timeframe related to disruption, if applicable, and potential correlation of reasons mentioned.	Force majeure declarations of 43 suppliers of a focal company	Content Analysis
2	Sources of expectations and their outcome related to force majeure based on situational interaction patterns and relationship history	Background on the focal company, context of the analyzed force majeure declarations and contrast with general prior experiences/ relationship history. In addition, broader scope through the interviewees outside of the focal company for enhancing generalizability and validity of the findings.	Qualitative interview data of 11 professionals experienced with force majeure declarations	Semi-structured interviews
3	Business relationship outcomes of a force majeure based on relationship history and a force majeure declaration	Scrutinizing the effect of the existence of a force majeure declaration on the relationship outcome of an unequivocal force majeure (i.e., tsunami) with relationship history as major contextual factor.	Quantitative experiment data of 134 participants working with interfirm partners, mostly procurement professionals	Scenario-based experiment

Note. The focal research question (RQ) is "*What are the expectations and outcomes of force majeure in buyer–supplier relationships?*".

explaining customer reactions to product defects (Rhee & Haunschild, 2006).

3. Study design

As summarized in Table 2, the study design included both a qualitative and a quantitative approach and consisted of three stages: (1) a content analysis of supplier-issued force majeure declarations, (2) semi-structured interviews with practitioners handling force majeure issues and related disruptions, and (3) a scenario-based experiment to further investigate the implications of force majeure in buyer–supplier relationships in the context of EVT.

The force majeure declarations analyzed in this study were submitted to *Alpha*, a German B2B manufacturing firm specializing in industrial machinery. Alpha operates subsidiaries in Europe, Asia, and the Americas, generates annual revenues of approximately EUR 5 billion, and employs over 10,000 people globally. Using Alpha as the focal firm in the first stage of the research offered several methodological advantages. First, due to increased uncertainty surrounding the outbreak of COVID-19, Alpha began systematically monitoring supply issues in February 2020 and collecting supplier communications, particularly force majeure declarations, over time. Second, although Alpha operates as a multinational corporation, its market position, corporate culture, and supplier management policies are relatively consistent across its supplier base, thereby enhancing the internal validity of the findings (Subramani & Venkatraman, 2003). Third, Alpha manufactures large industrial machines, requiring it to procure small volumes of highly specialized components from suppliers. Consequently, Alpha prioritizes fostering strong relationships with its suppliers, given the competition they face from the suppliers' other high-volume customers. Furthermore, many critical components are sourced from single providers, increasing the risk of severe operational disruptions if issues arise with a sole supplier. Finally, the authors were granted privileged access to Alpha's data and informants as part of an industry collaboration, enabling a rich and detailed investigation.

The initial analysis of the force majeure declarations provided a foundational understanding of the phenomenon (Tangpong, 2011). This was complemented by qualitative insights gathered through semi-structured interviews conducted in the second stage. The interviews were used to contextualize and elaborate EVT within supplier relationships and with regard to force majeure declarations (Ketokivi & Choi, 2014), and to triangulate findings to enhance generalizability (Eisenhardt, 1989; Yin, 2009). Informants also provided insights into events unrelated to the COVID-19 pandemic, such as tsunamis, earthquakes, strikes, and accidents resulting in fires or explosions. Finally, the third stage of the study employed a scenario-based experiment to test specific hypotheses regarding the consequences of force majeure declarations for business relationships.

4. Qualitative study

4.1. Data collection and analysis

Supplier-issued force majeure declarations were gathered by Alpha. Specifically, lead buyers and supply managers saved all digitally received force majeure declarations in a centralized cloud-based repository. Between February and April 2020, Alpha received force majeure declarations from 43 suppliers. The initial dataset was created by associating these supplier declarations with corresponding supplier data, including past performance, strategic importance, country, and material group (i.e., Alpha's hierarchical spend category structure). Supplier performance and strategic importance were rated annually for suppliers that are a part of the top 80 % of the direct spend. The dataset was further enriched by analyzing the protocols from Alpha's weekly supply situation calls with the heads of the logistics and purchasing departments, which provided insights into whether and when disruptions occurred due to supplier issues.

In the second stage, semi-structured interviews were conducted to gather additional contextual information and triangulate observations. Following a purposeful sampling strategy (Patton, 1990), we first reached out to informants at Alpha who had direct contact with the supplier force majeure declarations, including lead buyers, supplier managers, and contract managers. Interview guidelines were carefully designed prior to data collection and included general questions about the firm and the informant's role, as well as specific questions about the suppliers who declared force majeure. These questions focused on the timing of the force majeure event, associated declarations and disruptions, supplier relationship characteristics, and short- and long-term implications. The full interview guidelines are presented in the Appendix. Then, additional informants with experience in force majeure issues outside of Alpha were interviewed using the same guidelines. These informants included those responsible for handling force majeure declarations, such as sourcing professionals with direct supplier contact and corporate lawyers. Data collection ceased when subsequent interviews yielded only minor additional insights, indicating sufficient data saturation to elaborate on EVT in the context of force majeure in

Table 3
Interview sample characteristics.

Firm	Industry	Revenue	Employees	Informant Position	Experience
Alpha	Machine manufacturing	< 5B EUR	> 10,000	Lead Buyer I	26 years
				Lead Buyer II	3 years
				Supplier Manager I	12 years
				Supplier Manager II	3 years
				Contract Manager	22 years
Beta	Building materials	< 20B EUR	> 50,000	Head of Project Procurement	16 years
Gamma	Automotive	< 30B EUR	> 30,000	Buyer	7 years
Delta	Chemicals	> 50B EUR	> 100,000	Head of Indirect Procurement	26 years
Epsilon	Polymer materials	> 15B EUR	< 20,000	Category Manager	28 years
Zeta	Power tools/construction	> 5B CHF	> 30,000	Category Manager	27 years
Eta	IT products and services	< 500 M EUR	> 2,000	Head of Corporate Legal	28 years
Theta	Corporate law	–	< 10	Lawyer	34 years

Note: Interviews took place in February and March 2022 (except for Supplier Manager II, where the interview took place in March 2023) and ranged from 25 to 75 min.

buyer–supplier relationships. With one exception, all interviews took place in February and March 2022, ranging from 25 to 75 min in length. Interviewees were assured full anonymity, and further details about the sample are displayed in Table 3. Extensive notes (and some quotes) were taken during the interviews, as participants preferred not to be recorded. These notes were carefully anonymized, summarized, and subsequently returned to the interviewees for confirmation of accuracy and completeness (Yin, 2009).

Data analysis began with a content analysis of the force majeure declarations. The declarations were coded based on the identified reasons, with some declarations citing multiple reasons. The time lapse between the force majeure declaration and the related disruption was also scrutinized. To enhance reliability, the coding process for the interviews at Alpha was conducted jointly with an Alpha informant (Supplier Manager II) to ensure the identified reasons were appropriately framed as force majeure. Interview notes were analyzed using EVT as conceptual framework. Factors influencing the expectancy of supplier behavior – such as communicator, relationship, and contextual characteristics (Burgoon, 1993) – and interaction patterns (e.g., actions and associated time frames) between buyers and suppliers were examined. Finally, the data was assessed for positive and negative expectancy confirmations or violations, as well as their implications for buyer–supplier relationships. To improve reliability, both authors independently coded and reviewed the data. The findings are presented in the following section.

4.2. Supplier characteristics and force majeure declarations

Alpha received 43 force majeure declarations between February and April 2020, reflecting supplier relationships embedded within the focal firm. Due to Alpha's product line (large machines), procured volumes are relatively low compared to suppliers' other customers. In many material groups, Alpha competes with high-volume industries, such as automotive, for supplier capacities and capabilities. Additionally, almost all components are single-sourced, meaning that disruptions at any supplier could significantly impact Alpha's operations. For these reasons, Alpha employs a sophisticated supplier management system and strives to actively manage most supplier relationships with the goal of achieving mutual benefits. Supplier characteristics, the time span between force majeure declarations and disruptions, and the reasons identified are summarized in Table 4. Nearly half of the declarations were received in calendar week 13, coinciding with a rise in global COVID-19 cases and warnings from the World Health Organization about the accelerating pandemic (BBC, 2020). This context suggests that heightened business uncertainty influenced supplier behavior regarding force majeure declarations.

On average, the declarations cited 1.6 reasons ($SD = 0.9$), ranging from 0 to 5 reasons per declaration. As shown in Table 4, the reasons varied widely, spanning regulatory, operational, and supply chain-related issues. Notably, most suppliers (65.1 %) cited government actions, such as national shutdowns and other official measures, as the primary reason for declaring force majeure. About one-third of the declarations attributed issues to their own suppliers, such as shutdowns at upstream locations. For example, one supplier briefly stated: "*We and our suppliers cannot operate in China.*" Operational issues, such as employees in quarantine and production cessations to protect employee safety, were mentioned in 18.6 % of the declarations. Additionally, 14 % referred to decisions made by the suppliers' other customers and the subsequent impact on production planning. The least-mentioned reason (7 %) was a lack of transportation capacity, such as congested ports. Finally, suppliers also implicitly or explicitly declared force majeure proactively as a precaution. Interestingly, nearly 10 % of the declarations cited no specific reason, instead stating force majeure "*for possible delays in the future*".

Of the 43 suppliers that issued force majeure declarations, only 10 were ultimately unable to fulfill their contractual obligations and were classified as critical due to supply disruptions within the observed timeframe. Conversely, 33 suppliers declared force majeure without any observable impact on supply from the buyer's perspective. As previously noted, a force majeure event must be beyond a party's reasonable control and must render the agreed-upon performance impossible. This discrepancy suggests that the 33 declarations made without evident supply interruptions may not have been fully justified or were potentially issued improperly. This finding indicates that, in the context of an uncertain business environment, force majeure declarations might not always reliably indicate actual disruptions. Moreover, even when a force majeure declaration is associated with a supply disruption, the time lapse between the declaration and the disruption can vary significantly. As illustrated in Table 4, nine of the 10 suppliers issued their force majeure declarations either prior to or simultaneously with the disruption. However, some suppliers declared force majeure more than 20 weeks before the disruption occurred, complicating the practical attribution of the declaration to the disruption.

Finally, comparisons of suppliers with and without disruptions, based on factors such as country of origin, material group, strategic relevance, and cited reasons, revealed no systematic differences. Similarly, comparisons of pre- and post-force majeure ratings for strategic importance and performance showed no or only minimal changes. Among the few suppliers whose ratings did change, no consistent patterns or trends were identified.

4.3. Interaction patterns and outcomes

The volume of force majeure declarations received over a short period was unprecedented, as one lead buyer noted:

> *"Prior to the pandemic, force majeure declarations were rather rare, maybe once every five years"* (Lead Buyer I, Alpha).

Table 4
Supplier characteristics, time from declaration to disruption, and reasons identified.

ID	Strategic relevance	Performance rating	Material group	Country	Calendar week			Reasons mentioned as force majeure					
					Declaration	Disruption	Δ	Government	Suppliers	Employees	Customers	Transport	Precaution
S01	A⟶A	C⟶C	Hydraulics	Germany	11	46	35	x	x				
S02	B⟶B	D⟶C	Coatings/Paintings/Plastics	Germany	10	44	34						x
S03	A⟶B	C⟶C	Electrics/Electronics	Germany	15	46	31	x	x				x
S04	B⟶B	C⟶C	Electrics/Electronics	Switzerland	13	34	21						x
S05	A⟶A	C⟶C	Cabins	Germany	12	21	9	x	x				
S06	A⟶A	C⟶C	Cabins	France	8	12	4			x			
S07	D⟶D	D⟶C	Coatings/Paintings/Plastics	United Kingdom	13	17	4	x					
S08	B⟶B	B⟶C	Power Train/Drivelines	Italy	13	16	3	x	x				
S09	B⟶B	B⟶ –	Cabins	Poland	12	12	0	x					
S10	B⟶B	B⟶B	Power Train/Drivelines	Hungary	13	11	–2	x	x				
S11	A⟶A	C⟶D	Power Pac	Slovenia	6	/	/	x					
S12	A⟶A	– ⟶C	Production Materials/Filters/Belts	France	7	/	/	x	x				
S13	–	–	Production Materials/Filters/Belts	France	7	/	/						x
S14	A⟶A	– ⟶C	Power Pac	Hungary	8	/	/			x		x	
S15	–	–	Machined/Unmachined Parts	Italy	9	/	/	x					
S16	B⟶B	D⟶D	Power Pac	United Kingdom	9	/	/	x	x				
S17	A⟶A	C⟶D	Power Pac	Slovenia	11	/	/		x				
S18	–	–	Production Materials/Filters/Belts	Germany	11	/	/			x			x
S19	A⟶A	C⟶C	Cabins	Germany	12	/	/						
S20	–	–	Production Materials/Filters/Belts	Germany	12	/	/	x					
S21	–	–	Power Train/Drivelines	Germany	12	/	/	x					
S22	A⟶A	C⟶ –	Coatings/Paintings/Plastics	France	12	/	/			x			
S23	–	–	Hydraulics	Germany	13	/	/	x					
S24	B⟶B	B⟶B	Hydraulics	Germany	13	/	/	x					
S25	B⟶B	B⟶B	Coatings/Paintings/Plastics	Germany	13	/	/	x					
S26	B⟶B	D⟶D	Power Pac	United Kingdom	13	/	/	x	x				
S27	B⟶B	B⟶C	Power Pac	Germany	13	/	/			x			
S28	A⟶A	C⟶B	Power Train/Drivelines	Italy	13	/	/	x		x			
S29	A⟶A	B⟶B	Production Materials/Filters/Belts	Germany	13	/	/	x		x			
S30	B⟶B	–	Hydraulics	Germany	13	/	/				x		
S31	B⟶B	B⟶B	Hydraulics	Germany	13	/	/	x			x		
S32	A⟶A	C⟶C	Cabins	Hungary	13	/	/		x		x		
S33	D⟶D	–	Coatings/Paintings/Plastics	France	13	/	/		x	x	x		
S34	A⟶A	B⟶B	Electrics/Electronics	Germany	13	/	/						x
S35	–	–	Production Materials/Filters/Belts	Italy	13	/	/		x		x	x	x
S36	B⟶B	–	Coatings/Paintings/Plastics	Germany	13	/	/	x	x		x	x	x
S37	–	–	Production Materials/Filters/Belts	France	14	/	/	x					
S38	A⟶A	– ⟶C	Power Pac	Hungary	14	/	/	x					
S39	A⟶A	B⟶B	Power Train/Drivelines	Germany	14	/	/	x					
S40	A⟶A	B⟶B	Power Train/Drivelines	Germany	14	/	/	x					
S41	B⟶B	–	Electrics/Electronics	Spain	14	/	/	x					
S42	A⟶A	B⟶B	Tyres/Rims/Bearings	Germany	14	/	/	x	x				
S43	A⟶A	C⟶B	Power Train/Drivelines	Italy	16	/	/	x					

Note. Supplier characteristics show the last rating before the force majeure declaration and the first rating results after the force majeure declaration, if available (ex-ante⟶ex-post). Not all suppliers are rated; suppliers rated on a yearly basis represent the top 80 % of the direct spent. Strategic relevance/performance rating ranges from A (strategic supplier/performance > 90 %) to D (supplier to substitute/performance < 50 %). Suppliers are ordered by the delta of disruption and declaration calendar week, or calendar week of declaration if not disrupted.

Several informants observed that suppliers' thresholds for declaring force majeure had lowered significantly, leading to a proliferation of declarations even for relatively minor issues (Category Manager, Epsilon). This trend created what one informant described as an "*almost inflationary use*" of the concept (Head of Indirect Procurement, Delta), weakening the association between declarations and actual disruptions.

In the short term, nearly all interviewees described activating task forces, maintaining frequent communication with suppliers, and offering support, such as technical assistance or materials, to address the disruptions. Force majeure declarations were typically forwarded to the buying firm's legal department (Category Manager, Epsilon; Buyer, Gamma). Since these declarations are intended to excuse non-performance, there was no strict deadline for responding. Instead, the immediate focus was on securing material availability, while legal issues were addressed as a secondary priority. This approach is exemplified by the following statement:

> *"We always seek a solution with the supplier, for example, by allowing deviations with regard to [company-specific special requirements] or accepting supply from another plant. If this is not possible, we look for other solutions with the supplier, for example, by the supplier granting a license to third parties who can manufacture. Only if all this fails, we try to get further without the supplier that includes buying back spare parts from the market and buying from the competition"* (Contract Manager, Alpha).

Receiving a declaration obviously uncertainty about supplier performance. Often, the timing, duration, and scope of the disruption remained unclear, and in many industries, allocation of limited supply was not transparent ex ante. Some suppliers attached declarations from their own upstream suppliers to justify non-performance (Category Manager, Zeta). These declarations often triggered cascading effects, affecting interfirm R&D projects and broader procurement activities (Head of Project Procurement, Beta; Lawyer, Theta). The following quotes illustrate the inherent uncertainty:

> *"There was an explosion at the facility of a sub-supplier […] the first force majeure was declared by our supplier the same day the sub-supplier made theirs. Then, about 10–12 days after the explosion, we got a letter saying there'd be no supply for 8 weeks. Later, another letter referring to the force majeure came through, extending the delivery stop for all products to at least 4–5 months. It's been one thing after another."* (Category Manager, Zeta)
>
> *"In just one year, we received 46 force majeure declarations, which wasn't a huge surprise given our highly concentrated supply base. After the Texas snowstorm, we were already bracing for impact. The force majeure declarations came in right as or shortly after the disruptions hit, and within 2–3 days, allocation quotas for customers were being put in place."* (Category Manager, Epsilon)

Consequently, force majeure declarations increased the likelihood that the recipient (buyer) will also declare force majeure in the dyad, to project partners, and along the supply chain. Moreover, due to the legal examination and the heightened alertness, the presence of a force majeure declaration had the potential to slightly delay the buying firm's response, including support for the supplier in handling the disruption (Head of Indirect Procurement, Delta; Head of Project Procurement, Beta).

In the long term, most informants planned to retain suppliers that issued force majeure declarations, with relationship termination occurring only in cases of existing poor performance ratings or when plans to phase out the supplier were already in place. This approach reflects the priority placed on securing supply and ensuring business continuity.

As noted earlier, the baseline expectation is that suppliers will declare force majeure only when genuinely affected by an event that renders performance impossible. Nevertheless, several additional factors, such as relationship history and contextual contingencies, influence expectations and outcomes. To further explore interaction patterns and outcomes under different scenarios, the following sections are structured according to the four expectancy congruence cases outlined in EVT: Positive expectancy confirmation, positive expectancy violation, negative expectancy confirmation, and negative expectancy violation (cf., Table 6).

4.3.1. Positive expectancy confirmation

The behavior of suppliers before and after declaring force majeure varied significantly and was often shaped by the history of their relationship with the buyer. Informants highlighted that positive expectations were rooted in a strong and collaborative relationship history, healthy interpersonal dynamics, and well-established communication practices. Suppliers who confirmed positive expectations typically communicated proactively when they were affected by a force majeure event that could impact contractual obligations. These suppliers often announced their intention to declare force majeure before issuing a formal legal letter. Additionally, they were generally open to receiving support from the buyer to recover from the disruption. Buyers, in turn, did not usually assign blame to suppliers for the situation if the force majeure was not declared voluntarily (Buyer, Gamma; Category Manager, Zeta).

A single force majeure event and its related declaration are typically not critical to the long-term sustainability of the business relationship. In cases of positive expectancy confirmation, there are often no adverse consequences for the relationship. However, depending on the severity of the disruption, buying firms might reassess the supplier's financial risks (Head of Indirect Procurement, Delta) or explore alternative supply sources (Category Manager, Epsilon). The preferred approach to handling disruptions and force majeure declarations is summarized in the following quote:

> *"Desirable is a quick communication of a disruption and a prior announcement that a force majeure declaration will arrive, with a clear and justified reason"* (Contract Manager, Alpha).

4.3.2. Positive expectancy violation

Supplier behavior can positively violate expectations in two ways: Either a supplier with a poor or transactional relationship history (negative expectation) acts collaboratively, or a supplier with a strong relationship history (positive expectation) exceeds the behavior described in the previous section in an extraordinary manner (i.e., above confirmation). Although the former case was relatively rare, one informant noted instances where suppliers with a poor prior performance history surprised buyers by providing advance, informal notice of a force majeure declaration and promptly following up with a formal letter (Lead Buyer I, Alpha).

Positive expectancy violations were more frequently observed among suppliers with long-term and collaborative relationships. For instance, some suppliers refrained from declaring force majeure despite being affected by such an event, instead going above and beyond to search for innovative solutions. This approach was perceived positively by buyers, particularly when a force majeure declaration would have been justified (Head of Project Procurement, Beta). In some cases, suppliers even consulted buyers to discuss whether they should declare force majeure (Buyer, Gamma). This behavior not only created a positive impression but also facilitated faster recovery from disruptions, as it avoided delays associated with the legal examination of a declaration.

Although there were no direct negative consequences for the business relationship, these positive impressions could strengthen future collaborations. However, depending on the severity of the disruption, buying firms might still reassess the supplier's financial risks or consider alternative supply sources.

4.3.3. Negative expectancy confirmation

Negative expectations were generally directed at suppliers that relied

on transactional (i.e., market-oriented) methods of interaction in the past, exhibited poor relationship quality, or had recently undergone personnel changes (e.g., a new Sales/Account Manager), resulting in poorly established communication channels (Buyer, Gamma). Negative confirmations typically manifested in the declaration of force majeure without any prior notice. In some instances, the formal force majeure declaration marked the first time the buyer became aware of the disruption at the supplier. These suppliers often treated force majeure as a justification for failing to meet contractual obligations and were reportedly less inclined to seek collaborative solutions.

The mere act of invoking a force majeure declaration was contentious; however, the supplier's behavior during the disruption often had an even greater impact. This behavior ranged from significant delivery delays to the outright neglect of agreed-upon obligations. Furthermore, legal disputes arising from such declarations had the potential to intensify tensions, often accelerating trends toward relationship dissolution. Additional consequences included contract modifications and reassessments of financial risks, as following two quotes depict:

> *"We didn't place any blame on either supplier for the force majeure event. But afterward, we revised the new contract with adjusted force majeure clauses to better cover such eventualities."* (Category Manager, Zeta)
> *"Uncertainty set in as soon as force majeure was declared […] We began to consider the possibility of underlying financial instability."* (Head of Indirect Procurement, Delta)

In general, responses such as imposing penalties or pursuing alternative sources were largely influenced by the buying firm's internal policies and the supplier's anticipated future strategic importance (Lead Buyer II, Alpha).

4.3.4. Negative expectancy violation

Negative expectancy violations occurred in various ways during the period under study. Analogous to positive expectancy violations, there were two primary ways a supplier's behavior could negatively violate expectations: either by having a history of collaborative relationships (positive expectations) and acting poorly, or by failing to meet already low expectations. Informants frequently highlighted issues related to the justification and timing of force majeure declarations, prior notice, and the effort exerted to resolve the situation. For example, a supplier that was considered a strategic partner triggered a force majeure clause without prior notice. This behavior negatively violated expectations and led to repercussions, as described in the following quote:

> *"When a force majeure declaration arrives without warning, it is perceived to some extent as an offense. This negative impression will be communicated directly in the next yearly meeting of [the] buyer and key account manager"* (Lead Buyer II, Alpha).

In other cases, informants observed that force majeure declarations were issued out of desperation, with the impression that some suppliers had failed to adequately plan for their own supply needs (e.g., missing materials) or associated processes, such as machine maintenance (Head of Indirect Procurement, Delta; Category Manager, Epsilon). Informants noted that many of these declarations were unjustified, as the issues worsened gradually over time. Similarly, many declarations received at Alpha failed to provide specific justifications, instead citing only "*possible delays in the future.*" Initially, at the onset of the pandemic, this lack of specificity was perceived positively because such declarations and subsequent communication served as early warnings and "*showed that the supply chain issues were not limited to China*" (Supplier Manager I, Alpha). However, as suppliers increasingly utilized force majeure declarations – sometimes without providing any justification – the initial positive perception eroded. These precautionary declarations were ultimately deemed inconclusive, as a valid force majeure claim requires evidence that fulfilling obligations has become impossible (Head of Project Procurement, Beta). One informant succinctly summarized:

> *"From a legal perspective, a force majeure declaration without mentioning a reason is nonsense"* (Contract Manager, Alpha).

Declarations lacking specific reasons were already viewed with skepticism, but respondents also highlighted that force majeure declarations were increasingly employed for purposes other than excusing non-performance. Examples included securing certifications for production facilities at no cost, inducing additional orders, or leveraging the situation to demand price increases. In particular, a lawyer stated:

> *" In some cases, force majeure is inaccurately invoked as a safeguard, particularly when details like shortage levels, missing quantities, or timelines are still unclear. It can also be a way to test the customer's reaction, guiding the supplier in determining delivery quotas and scheduling."* (Lawyer, Theta)

Such practices constituted not only a negative expectancy violation but also an improper, and often opportunistic, misuse of the legal rationale behind force majeure. Although the underlying motives were not always transparent, informants suggested that legal expertise – or the lack thereof – was a contributing factor. As one lead buyer recalled:

> *"Smaller suppliers try to relate disruptions to force majeure declarations sent almost a year before; those suppliers often issue declarations which are not legally correct, maybe due to missing legal advice and less professional management"* (Lead Buyer II, Alpha).

Despite these challenges, informants generally reported that they planned to retain their suppliers. This is reflected in Table 4, which shows that almost no ratings of strategic importance or performance worsened after force majeure declarations were issued. While only a small proportion of force majeure claims were ultimately accepted, pursuing legal action was uncommon; most companies avoided litigation (e.g., Head of Indirect Procurement, Delta; Buyer, Gamma) and rarely imposed penalties (Supplier Manager I, Alpha). However, negative expectancy violations significantly accelerated existing plans to diversify supply chains, such as establishing additional suppliers (e.g., dual sourcing) or phasing out specific suppliers altogether (i.e., terminating the relationship), as following quotes depict:

> *"When force majeure issues drag on, there's a lot of pressure from internal stakeholders to find an alternative supplier—at the very least, as a secondary source."* (Category Manager, Epsilon.)
> *"Suppliers that endangered business results will likely face consequences."* (Lead Buyer I, Alpha)

5. Experiment

The third stage aimed to provide initial quantitative evidence on the implications of force majeure *declarations*, as existing literature primarily considers the force majeure event itself without examining related formal and informal communication (e.g., Park & Rogan, 2019; Polyviou et al., 2018; Wang et al., 2022). Building on the key findings of the qualitative study and conceptual arguments from EVT, the scenario-based experiment manipulated relationship characteristics (as the main determinant of expectations) and communication behavior in a force majeure disruption. Based on the qualitative findings regarding disruption response, the experiment examined behavioral outcomes of supplier-issued force majeure declarations, focusing on the speed of the buyer's (i.e., recipient's) response actions and switching intentions. The controlled experimental setting allowed us to investigate buyer response behavior without confounding factors, ensuring high internal validity (Aguinis & Bradley, 2014).

5.1. Vignette development

Building on modules adapted from Wang et al. (2022), participants assumed the role of a purchasing manager responsible for managing

Table 5
Sample characteristics of the experiment.

Function	*n*	%	Industry	*n*	%	Job location	*n*	%
Procurement Manager	45	33.58 %	Manufacturing	27	20.15 %	Germany	51	38.06 %
Buyer/Purchaser	21	15.67 %	Automotive	18	13.43 %	USA	47	35.07 %
Senior Buyer/Purchaser	19	14.18 %	Industrial Products	17	12.69 %	Switzerland	10	7.46 %
Supply Chain Manager	16	11.94 %	Health Care/Life Sciences	16	11.94 %	Liechtenstein	4	2.99 %
Vice President Procurement	14	10.45 %	Consumer Products/Retail	13	9.70 %	Australia	2	1.49 %
Chief Procurement Officer	6	4.48 %	High Tech/Software	7	5.22 %	India	2	1.49 %
Supplier Management	6	4.48 %	Chemicals/Oil/Gas	5	3.73 %	Other	18	13.43 %
Supply Chain Consultant	3	2.42 %	Travel/Transport/Logistics	5	3.73 %			
Other	4	2.99 %	Public Sector	4	2.99 %			
			Other	22	16.42 %			
∑	134	100 %	∑	134	100 %	∑	134	100 %

supplier relationships for a mid-sized manufacturing firm. One of their key suppliers, Alpha, experienced a disruption as a result of a tsunami striking its primary seaport for raw materials.

The first vignette described the relationship history with Alpha, which was manipulated to be either *poor* – characterized by transactional, arm's-length interaction and unresponsiveness – or *excellent*, reflecting a collaborative, flexible interaction style (based on Chen et al., 2019; Macneil, 1978). In line with EVT, relationship characteristics were the primary determinant of expectations in the experiment and were outlined before participants encountered the disruption scenarios. Although the results from the qualitative study indicated that force majeure declarations might be increasingly driven by ulterior motives, the experiment excluded such ambiguities by framing the disruption as an unequivocal act of nature (i.e., a tsunami). This allowed us to focus solely on the effects of a force majeure declaration. For simplicity, we did not further manipulate the supplier's recovery efforts or the timing of the force majeure declaration. In both vignettes shown after the disruption, the supplier stated: "*We will do our best to resume operations as soon as possible.*" In one vignette, the supplier issued a formal letter declaring force majeure (*yes*), while in the other, the supplier explicitly refrained from doing so (*no*).

The resulting 2x2 experimental design (relationship: poor/excellent × declaration: no/yes) yielded four scenarios. These were pretested with eleven doctoral students in operations management to ensure credibility and clarity (Rungtusanatham, Wallin, & Eckerd, 2011). Based on feedback, no changes were made. A full description of all modules and factor levels is available in the Appendix.

5.2. Sample and data collection

Data were collected between May and July 2022 using a self-administered online tool. Consistent with methodological guidance for experimental research in operations management, we targeted buyers and supply chain professionals to ensure contextual familiarity and relevance (Eckerd, DuHadway, Bendoly, Carter, & Kaufmann, 2021). Participants were self-recruited and received no compensation other than a summary of the study's results. Each participant was presented with a randomly assigned scenario, resulting in 134 complete responses with an average completion time of 7 min. The participants had an average of 14.9 years of work experience (SD = 9.8); 20.1 % were female, and 76.1 % reported having received at least one force majeure declaration from their interfirm partners (e.g., suppliers) in the past. Further sample characteristics are summarized in Table 5.

5.3. Measures

Aligned with our hypotheses, participants were asked to express their opinions on two dependent variables: *Immediate action* and *switching intention*. Immediate action was measured using the statement: "*If I were in the situation of the purchasing manager, I would immediately act to support Alpha in its disruption recovery efforts*," adapted from McKelvie, Haynie, and Gustavsson (2011). Switching intention was measured with the statement: "*If I were in the situation of the purchasing manager, in the long-term I would switch to a different supplier when my company has an opportunity*," following Wang et al. (2022). Both items used a 7-point Likert-type rating scale (anchored at 1 = 'strongly disagree' to 7 = 'strongly agree'). Consistent with established practice (e.g., McKelvie et al., 2011; Wang et al., 2022), we employed single-item measures, which have demonstrated predictive validity comparable to multi-item scales and are often preferred by practitioners (Bergkvist & Rossiter, 2007).

5.4. Experimental checks

Manipulation and realism checks confirmed the effectiveness of the experimental design. Participants rated their agreement with several statements on a 7-point Likert-type scale (anchored at 1 = 'strongly disagree' and 7 = 'strongly agree'). Scenario realism was assessed using the statements "*The presented scenario is realistic*" and "*You could imagine yourself in a similar situation*" from Dabholkar (1994). The mean score across the two checks was high ($M_{realism}$ = 5.97). Manipulations of relationship characteristics and force majeure declarations were evaluated with the two single items "*Prior to the disruption, you had a really good relationship history with Alpha*" and "*Alpha issued a written letter declaring force majeure to you after the disruption.*" Results indicated that the mean score for the excellent relationship scenarios was significantly higher than for the poor relationship scenarios ($M_{relationship,\ excellent}$ = 6.32, $M_{relationship,\ poor}$ = 3.10, p = 0.000). Similarly, the mean score for the force majeure declaration scenarios was significantly higher than for the no declaration scenarios ($M_{FMdeclaration,\ yes}$ = 5.76, $M_{FMdeclaration,\ no}$ = 3.39, p = 0.000).

5.5. Results

Following methodological standards, we ensured a minimum of 20 observations per treatment cell to support statistical power (Lonati, Quiroga, Zehnder, & Antonakis, 2018; Simmons, Nelson, & Simonsohn, 2011). As shown in Table B1 (Appendix), all treatment cells met this threshold. Fig. 1 presents the mean scores of the two dependent variables across the four treatment groups.

We analyzed the data using a multivariate analysis of variance (MANOVA). While immediate action (i.e., response speed) is high across all four scenarios, the presence of a force majeure declaration has a statistically significant effect on this dependent variable (F(1,130) = 4.43, p = 0.039). This indicates that a force majeure declaration is likely to slow the recipient's disruption response. Relationship characteristics did not produce a statistically significant effect on immediate action, nor did the interaction between the experimental treatments. These results suggest that buyers are inclined to act quickly and collaborate with suppliers to resolve the disruption, regardless of whether the supplier had a poor or excellent relationship history.

In contrast, switching intentions were strongly influenced by

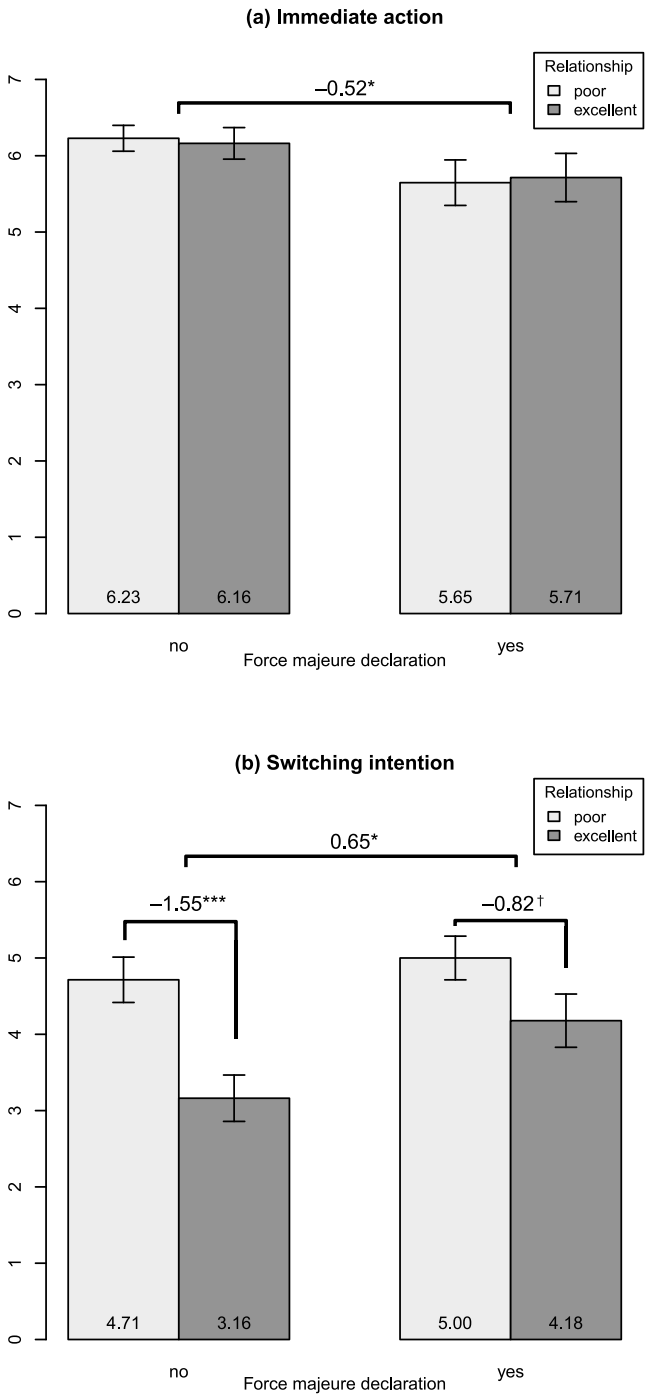

Fig. 1. The effects of a force majeure declaration and relationship history on the business relationship outcome. Note: Panel a illustrates the intention to immediately act to support the supplier in its disruption recovery efforts and panel b illustrates the indicated long-term switching intention. Number of observations n = 134; error bars show ± 1 standard error. Brackets show selected results of pairwise comparison; relationship history has no statistically significant effect on immediate action in panel a. †p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001.

relationship history. Participants reported significantly lower switching intentions in scenarios involving excellent relationships ($F(1,130) = 16.62$, $p < 0.001$), as illustrated in Fig. 1. The lowest switching intentions were observed when the supplier refrained from issuing a force majeure declaration and had an excellent relationship history. The presence of a force majeure declaration also had a statistically significant effect on switching intentions ($F(1,130) = 4.24$, $p = 0.041$). This suggests that buyers facing a force majeure declaration are not only slightly slower to respond but are also more inclined to switch suppliers in the long term. Notably, the increase in switching intentions associated with a declaration was more pronounced for suppliers with excellent relationship histories (cf., Fig. 1 b). A planned contrast confirmed that this effect was statistically significant ($t(130) = 2.28$, $p = 0.024$). In contrast, for suppliers with a poor relationship history, the declaration had no significant impact on switching intentions ($t(130) = 0.67$, $p = 0.506$). This provides additional evidence for EVT in this context: When the relationship was excellent prior to the event, a force majeure declaration led to a significantly higher increase in switching intentions compared to scenarios with poor ex-ante relationships. Additional quantitative analyses, including measures such as past experience with force majeure, are detailed in the Appendix.

6. General discussion

Despite the extensive literature on supply risk and disruptions, the topic of force majeure remains underexplored. While a single force majeure declaration may not critically affect the long-term trajectory of a business relationship, the way in which the declaration is managed – such as through advance notice, a solution-oriented approach, issuing a legally sound and justified statement, or even opting against a formal declaration – has a substantial influence on the recipient firm's perception. Findings from the three empirical stages of this study (summarized in Table 2) demonstrate considerable heterogeneity in the handling of force majeure declarations within buyer–supplier relationships, as further illustrated in Table 6. One explanation for this variability is the frequent absence or inadequacy of contractually defined force majeure clauses. For such clauses to be enforceable and operationally useful, they must be precisely formulated (Yas, 2021). For example, while the COVID-19 pandemic had a profound global impact, few contracts contained clauses addressing pandemics specifically. Terms such as '*pandemic*' were notably absent from most force majeure clauses drafted before the outbreak. In the absence of pandemic-related clauses, parties seeking to invoke force majeure often relied on government-enacted laws or framed the pandemic as an '*act of God*' (Schwartz, 2020).

Beyond occasional ex-post contractual adaptations, informants rarely cited force majeure clauses as central to operational practices. Another factor contributing to the variability in force majeure declarations is the stipulation that performance must be rendered impossible – not merely more expensive or difficult – to justify invoking force majeure (Yas, 2021). Determining this distinction can be especially challenging for multinational suppliers who may retain the ability to produce contracted parts at facilities outside the affected region (Schwartz, 2020).

Collectively, the findings, summarized in Table 6 and illustrated in Fig. 2, suggest that identical behaviors and actions can lead to different outcomes depending on idiosyncratic expectations, as posited by EVT (Burgoon, 1993; Jussim, Coleman, & Lerch, 1987). Expectations regarding force majeure are shaped primarily by context, relationship characteristics, and subjective perceptions of the counterparty. Consistent with EVT, expectancy violations are relative to prior expectations; the greater the deviation from anticipated behavior, the greater the impact of the violation (Burgoon, 1993; Burgoon & Jones, 1976). Similarly, relationship quality outcomes (e.g., improvement, decline, or no change) are influenced by the ex-ante relationship quality. For instance, our experimental results indicate that a supplier with a strong prior relationship who declares force majeure may face harsher judgment compared to a supplier with a weaker relationship who refrains from making such a declaration.

Interestingly, expectancy violations may also yield positive outcomes. The qualitative findings indicate that suppliers with strong relationship histories sometimes waive force majeure claims as a gesture

Table 6
Summary of the empirical studies along expectancy violation theory.

Expectancy congruence		Context and relationship characteristics	Supplier interaction patterns	Outcomes
Positive expectancy confirmation		▪ Force majeure at supplier ▪ Excellent/collaborative relationship	▪ Prior notice of timely and justified declaration ▪ High effort in resolving supply disruption	▪ Unchanged relationship quality ▪ For severe disruptions reassessing financial risks and considering alternative suppliers
Positive expectancy violation	(i)	• Force majeure at supplier • Poor/transactional relationship	• Prior notice of timely and justified declaration • High effort in resolving supply disruption	• Better relationship quality • For severe disruptions reassessing financial risks and considering alternative suppliers
	(ii)	• Force majeure at supplier • Excellent/collaborative relationship	• No declaration • High effort in resolving supply disruption	• Better relationship quality • For severe disruptions reassessing financial risks and considering alternative suppliers
Negative expectancy confirmation		• Force majeure at supplier • Poor/transactional relationship	• Declaration without prior notice • Low effort in resolving supply disruption	• Unchanged relationship quality • For severe disruptions reassessing financial risks and establishing alternative suppliers
Negative expectancy violation	(i)	• Sometimes no force majeure at supplier • Poor/transactional relationship	• Declaration without prior notice and not timely • Declarations without reason or unjustified • Refusing support and low effort in resolving supply disruption • Other purposes (e.g., pressuring buyer)	• Worse relationship quality • More uncertainty of supplier behavior and performance • Establishing alternative suppliers • Penalties and accelerated relationship termination
	(ii)	• Force majeure at supplier • Excellent/collaborative relationship	• Declaration without prior notice • Declarations without reason • Low effort in resolving supply disruption	• Worse relationship quality • More uncertainty of supplier behavior and performance • For severe disruptions reassessing financial risks and establishing alternative suppliers

Note. Expectancy violations (i) and (ii) are illustrated in Fig. 2 among the other expectancy congruence scenarios.

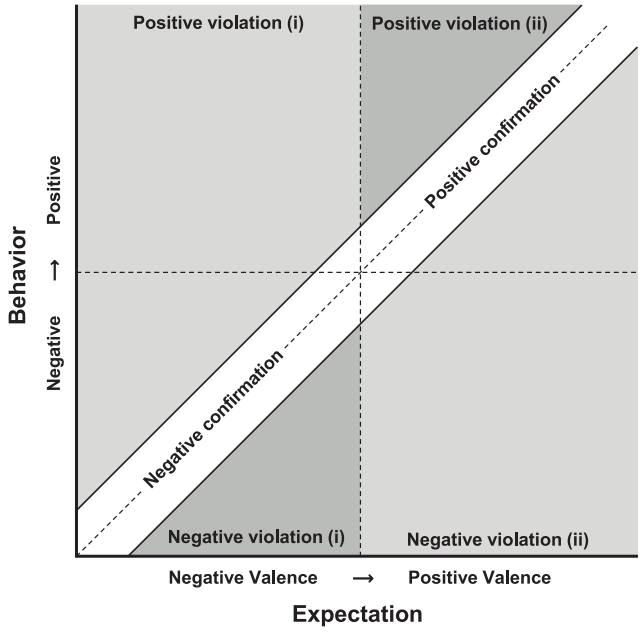

Fig. 2. Expectancy violation and confirmation scenarios mapped along behavior and valence.

of partnership, resulting in positive expectancy violations that can strengthen the relationship. Conversely, negative expectancy violations – such as unjustified declarations – exert the greatest adverse effects on relationships, as evidenced by our experimental findings. Drawing from the legal basis and our qualitative findings, unjustified force majeure declarations refer to those made without a legitimate force majeure event or without a corresponding instance of non-performance. Consistent with prior literature, greater deviations from expected behavior increase uncertainty (Berger, 1993; Kellermann & Reynolds, 1990). Negative expectancy violations exacerbate uncertainty by increasing the "degree of freedom" for predicting future behavior (Afifi & Burgoon, 2000). Uncertainty, coupled with other unexpected interaction patterns (e.g., lack of prior notice), may reinforce negative emotions such as anger, potentially resulting in adverse relationship outcomes, including termination (Polyviou et al., 2018).

6.1. Theoretical contributions

This study addresses several important gaps in the extant literature on force majeure within buyer–supplier relationships and offers multiple theoretical contributions. First, while *force majeure* has traditionally been conceptualized as an exogenous, uncontrollable event – often attributed to an 'act of God' (e.g., Hartmann & Moeller, 2014; Polyviou et al., 2018; Wang et al., 2022) – our findings broaden this view by incorporating the unique characteristics of the COVID-19 pandemic. Specifically, declarations frequently referenced government-imposed restrictions, travel bans, and staff quarantines. In the absence of explicit contractual clauses addressing pandemics, firms often invoked force majeure by citing the effects of such measures (Mouzas, 2016; Schwartz, 2020).

Second, our data reveal a substantial increase in force majeure declarations during the study period, driven by elevated environmental uncertainty. This study introduces the concept of 'improper' force majeure declarations – those made opportunistically or without legitimate cause – which has not been explicitly addressed in prior literature. We emphasize the distinction between force majeure *events* (as external occurrences) and force majeure *declarations* (as choices by firms). While declarations are intended to excuse non-performance, their invocation remains discretionary. Moreover, events that potentially qualify as force majeure may prompt declarations for reasons unrelated to non-performance. Indeed, 33 of the 43 declarations in our dataset were not associated with observable disruptions, and some lacked any stated justification, instead referring to possible future delays. These findings suggest that force majeure declarations are increasingly used as a strategic tool – to shape expectations, influence negotiations, or signal risk to partners – rather than solely to document objective impossibility. This challenges the dominant legal framing and highlights the behavioral and relational implications of such declarations.

Third, while extant research suggests that firms may respond to disruptions by buffering (i.e., reducing dependence on the affected supplier) or bridging (i.e., increasing collaboration) (Bode, Wagner, Petersen, & Ellram, 2011), our study demonstrates that the act of declaring force majeure can significantly affect this choice. Although

previous findings indicate that buffering is less likely in the context of force majeure disruptions (Polyviou et al., 2018; Wang et al., 2022), we show that recipient responses are contingent on their expectations – particularly whether the declaration represents a negative expectancy violation. Consistent with EVT, our findings suggest that the outcomes of such behavior depend heavily on the recipients' expectations (Burgoon, 1993; Burgoon & Jones, 1976), which are shaped by the situational context and the history of the relationship. In other words, identical actions can yield different outcomes depending on the specific expectations involved.

Forth, our findings contribute to the literature on managing supply chain disruptions, which has traditionally focused on force majeure events and recovery efforts (Hartmann & Moeller, 2014; Park & Rogan, 2019; Wang et al., 2022). However, this study highlights the overlooked interplay between ex-ante expectations, communication behavior, and uncontrollable events like force majeure. Our findings suggest that potential declarants of force majeure may benefit from refraining from formal declarations and instead opting for early and transparent communication about the disruption. This approach represents a novel contribution to the management literature on force majeure and somewhat challenges the classical legal perspective. Depending on the recipient's ex-ante expectations, early and open communication can result in positive expectancy violations, thereby strengthening the business relationship. While expectancy violations can have positive outcomes, negative expectancy violations tend to have a pronounced adverse impact on relationships, increasing uncertainty about future behavior (Afifi & Burgoon, 2000). Even if the business relationship is maintained, the party declaring force majeure may face unintended consequences, such as contract adaptations or a reassessment of their financial risks by the recipient. However, our findings also suggest that force majeure issues are rarely pursued or litigated in court, as addressing the issues in the short term is often seen as more pressing.

Finally, our study contributes to the literature on ripple effects in supply chains. The qualitative findings reveal that force majeure declarations can trigger ripple effects (cf. Ivanov, Sokolov, & Dolgui, 2014) leading to further disruptions both upstream and downstream, or even at the same supplier. When force majeure is declared in an interfirm project, the declaring party may face direct reciprocal force majeure declarations or indirect claims from project partners affected by the recipient's reciprocal force majeure declaration (Burkhart & Bode, 2024).

6.2. Managerial implications

The findings provide important implications for managers dealing with force majeure issues in business relationships.

6.2.1. Recommendations for recipients of force majeure declarations

Recipients of force majeure declarations should recognize that force majeure declarations and force majeure events are distinct issues, and not all declarations are justified or reliable. The legitimacy of a force majeure declaration depends on specific individual and situational factors that genuinely render performance *impossible*. Economic hardship, for example, does not meet the criteria for force majeure. Furthermore, not every declaration is linked to a subsequent supply chain disruption. 'Precautionary' letters citing vague reasons and ambiguous timelines are often issued to limit liability and potential penalties in the event of future disruptions. Additionally, force majeure declarations are increasingly employed for ulterior motives, such as exerting pressure during negotiations, managing customer expectations in favor of the issuer, inducing additional orders, or expediting certification processes for alternative production facilities. For this reason, force majeure declarations should always be critically assessed as potential indicators of deeper, underlying relationship issues. When a force majeure declaration is associated with a disruption, the initial letter may not provide final or accurate information, and the timelines communicated may be unreliable. Recipients should be prepared for follow-up declarations if the situation deteriorates further. In essence, recipients of force majeure should ask themselves: "*Is the reason stated beyond the sender's control and does it render its performance impossible?*", "*Did other business partners also receive a force majeure declaration from the sender?*", "*Does the force majeure declaration come to a convenient time for the sender?*" and "*Are the consequences of the force majeure likely to exacerbate for the sender?*".

6.2.2. Recommendations for potential force majeure declarants

Firms affected by a force majeure event should communicate this fact informally to their business partners before issuing a formal declaration. An unannounced declaration is likely to leave a negative impression. Furthermore, the existence of a formal force majeure declaration may delay supportive actions from the recipient, as it often involves additional departments, such as legal, which could slow down decision-making. Recipients may also interpret a force majeure declaration as a warning sign of broader or additional problems. In this context, unintended consequences for the sender could include contract modifications, reassessments of financial risks, and reciprocal force majeure declarations from other parties. Even when a disruption is clearly attributable to an act of nature, issuing a force majeure declaration can increase the recipient's inclination to switch suppliers or, at the very least, motivate them to explore alternative business partners. Notably, this effect is particularly pronounced in cases where the sender has historically maintained a strong business relationship with the recipient, characterized by frequent and cooperative interactions. The trust and mutual dependency built over time in such relationships can make the disruption appear more impactful, thereby intensifying the recipient's motivation to seek alternatives. In summary, firms affected by force majeure should communicate openly and early with their business partners but carefully consider whether a formal declaration is necessary, as it may lead to unintended consequences. In many cases, counterparts are likely to provide support and may even waive penalties without the need for a formal declaration.

Potential declarants of force majeure should carefully evaluate the following questions: "*Are the conditions for force majeure met?*", "*Is declaring force majeure essential for the survival of the company, or can alternative solutions be negotiated with business partners?*" and "*How are our business partners likely to react if we formally declare force majeure?*".

6.3. Limitations and directions for further research

This study has several limitations that should be considered when interpreting the results, alongside opportunities to extend the research. Due to the timeframe of the qualitative studies, many force majeure declarations analyzed were connected, at least partially, to the COVID-19 pandemic. Additionally, the study is based on a relatively small sample of letters ($n = 43$), all issued in early 2020. As a result, more sophisticated statistical analyses could not be conducted, and the study relied on content analysis to explore EVT and force majeure dynamics (Tangpong, 2011). While this dataset is unique, future research should aim to compile a larger set of force majeure declarations, enabling the application of advanced quantitative methods, such as logit or mixed-effects regression models (e.g., in cases involving multiple declarations per supplier or customer). This would allow for a more detailed investigation of the relationships between reasons cited, timing between declaration and disruption, and relationship outcomes. Regarding long-term responses to force majeure declarations, our findings suggest that actions such as enforcing penalties and pursuing alternative sources are largely determined by the buying firm's internal policies and the supplier's estimated future strategic importance. Given our sampling strategy, most long-term responses were assessed 2–3 years after the declared force majeure events. However, certain effects, such as switching to or adding alternative suppliers, may require more time and could be constrained by factors such as limited alternatives or lock-in effects.

Table B1
Description of the experiment.

Scenario descriptions			Participants
Common module	Imagine you are a purchasing manager for a midsized manufacturing company in Germany that makes telecommunication equipment. You have worked with the company for the last 5 years, and a major part of your responsibility in the company is to manage supplier relationships. Any disruption in the supply chain would cause substantial harm to the company. In general, you have been pleased with the performance of all of the suppliers since your arrival at the company.		134
Relationship characteristics	**Poor**	One of your suppliers is Alpha, which supplies important parts for your telecommunication equipment. In the past, the relationship with Alpha was sometimes difficult, the interaction was at 'arm's length', and rather focused on the economic exchange. Further, Alpha has not been very flexible nor very responsive to unexpected, last-minute changes in order quantities and order delivery schedules.	69
	Excellent	One of your suppliers is Alpha, which supplies important parts for your telecommunication equipment. In the past, the relationship with Alpha was excellent, the interaction was on a partnership level, and rather focused on collaboration. Further, Alpha has been very flexible and very responsive to unexpected, last-minute changes in order quantities and order delivery schedules.	65
Common module	Alpha recently informed you about a disruption, which will delay delivery of raw materials by a few weeks. The disruption was caused by an act of nature: a major tsunami affected the key seaport Alpha has used to receive its raw materials. As a result, Alpha had to halt production of parts used in your newly developed telecommunication equipment. Unfortunately, given limited resources, Alpha had little capability to obtain raw materials from alternative sources.		134
Force majeure declaration	**No**	Alpha mentions to you that they do not plan to issue a Force Majeure ('superior force') declaration. Alpha further states that they will do their best to resume operations as soon as possible.	72
	Yes	You receive a letter from Alpha where they state that they do not see any other option than to declare Force Majeure ('superior force') under the applicable agreements with your company and that they bear no responsibility for possible delays or other impacts due to the tsunami. Alpha further states that they will do their best to resume operations as soon as possible.	62

Table B2
Regression results of the post-hoc analysis.

Variables	Immediate action				Switching intention			
	β		*SE*	*CI*	*β*		*SE*	*CI*
Constant	5.64	***	0.33	[5.00, 6.28]	4.50	***	0.42	[3.68, 5.32]
Controls								
Work experience	0.03	*	0.01	[0.00, 0.06]	0.01		0.02	[–0.02, 0.05]
Force majeure experience	0.14		0.29	[–0.44, 0.72]	–0.24		0.38	[–0.99, 0.50]
Main effects								
Relationship history	0.00		0.24	[–0.49, 0.48]	–1.19	***	0.31	[–1.81, –0.58]
Force majeure declaration	–0.51	*	0.24	[–0.99, –0.03]	0.64	*	0.31	[0.03, 1.26]
F	2.78	*			5.40	***		
R^2	0.08				0.14			

Note: OLS regression was used ($n = 134$). Regression estimates (β) and standard errors (*SE*) refer to unstandardized regression coefficients. *CI* refers to bootstrapped (1,000 reps) 95 %-confidence intervals. 'Poor' relationship history and 'no' force majeure declaration served as the baseline categories. The highest variance inflation factor (VIF) among the independent variables is 1.073. $\dagger p < 0.10$, $*p < 0.05$, $**p < 0.01$, $***p < 0.001$.

Despite its frugality, the experiment conducted in this study provides valuable insights into two important outcomes of force majeure declarations: response speed and switching intentions. Future research could explore additional contextual factors identified in the qualitative study. For instance, the impact of prior announcements on both short-term and long-term relationship outcomes could be analyzed – specifically, the extent to which a prior announcement mitigates delays in the recipient's supportive actions and reduces subsequent switching intentions. Moreover, a more granular investigation of the motivations behind force majeure declarations presents an intriguing avenue for research. This could include examining the thresholds at which firms declare force majeure in response to ambiguous events and the situational or behavioral factors influencing these decisions. Similarly, future research could explore how firms frame economic hardships as force majeure to manage normative expectations with their business partners. Another promising direction involves examining the recipient's perceptions or suspicions regarding the sender's intentions, particularly when declarations are received during ongoing price negotiations or before scheduled audits. Additionally, future studies should delve deeper into how relationship characteristics – such as dependency, relationship length, and closeness – affect expectations and outcomes of force majeure declarations. While this study condensed these factors under the broader term 'relationship history', a more detailed analysis could yield richer insights. Finally, exploring force majeure in the context of signaling games could help design contractual mechanisms that encourage honest force majeure declarations and mitigate opportunistic behavior.

This multifaceted approach would contribute to a more comprehensive understanding of the dynamics surrounding force majeure declarations and their implications for buyer–supplier relationships.

CRediT authorship contribution statement

Davide Burkhart: Writing – original draft, Visualization, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Christoph Bode:** Writing – original draft, Supervision, Methodology, Conceptualization.

Appendix A:. Qualitative study

Interview guideline

- Did you receive force majeure declarations in the last years from your suppliers? How many?

- Did the respective suppliers not fulfil his agreed obligations prior, after, or with the release of the force majeure declaration? What were the reasons mentioned?
- Were there other ways with which suppliers communicated disruptions?
- What were the consequences of the declarations? (short-term, long-term, legal?)
- How was the relationship with these suppliers before the pandemic? Did their behavior change your perception of these suppliers?
- Do you plan to work more closely with these suppliers, or do you plan to search for alternatives?
- Did the behavior of your suppliers regarding force majeure issues change in the last years?

Appendix B:. Experiment

Robustness check

We conducted a post-hoc analysis to evaluate the robustness of our findings by employing an alternative estimation method. Specifically, we used ordinary least squares (OLS) regressions to analyze our two dependent variables: *Immediate action* and *switching intention*. In line with comparable studies (e.g., Wang et al., 2022), we included work experience (in years) as a control variable. Additionally, we incorporated experience with force majeure declarations as a binary variable, as this factor could potentially influence the dependent variables. The results of this analysis are presented in Table BII. The OLS regression results align with our initial analyses. While relationship history does not significantly affect immediate action, it exerts the largest (negative) influence on switching intention. As previously noted, 76.1 % of the sample reported having received at least one force majeure declaration from their interfirm partners (e.g., suppliers). However, this experience showed no statistically significant effect on either dependent variable. The only control variable with a statistically significant impact was overall work experience, which exhibited a small positive effect on immediate action ($p = 0.022$). This finding suggests that, all else being equal, buyers with more work experience are more likely to act quickly to support a disrupted supplier. Consistent with our initial analyses, the presence of a force majeure declaration has a statistically significant negative effect on immediate action and a positive effect on switching intention. These results reinforce our earlier conclusions, highlighting the nuanced implications of force majeure declarations for buyer–supplier interactions. See Table B2.

Data availability

The authors do not have permission to share data.

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