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# Event Space and Firm Value: Chinese Listed Firms in the US-China Trade War

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Although past studies in crisis management usually have taken a geography-focused approach to study how physical proximity increases firms' exposure to a crisis, this study draws on event system theory and proposes that independent of firms' geographic locations, an event can have multiple spatial directions and proximities to the firms in the event space. To further unpack the effects of event space, we develop an integrated framework that considers how the event space interacts with entity attributes—which are found to help firms cope with external challenges affecting their market value. Using the shock of the 2018 US-China trade war on listed firms in China's stock market, we find that the trade war has significantly reduced the market value of firms that have spatial proximity to the product market (i.e., firms that belong to target industries) and to the geographic market (i.e., firms that export to the United States) in event space. This negative effect also spills over onto peer organizations with business activities related to target industries or the United States. Moreover, there are differential moderating effects from entity attributes, such as corporate political connections and corporate social responsibility, on the different event spatial directions, pointing to the distinct natures of event spatial directions. This study introduces a novel, multidimensional view of event space and uses it to develop an event space model for geopolitical events, and in so doing, we complement extant work on the role of crises in shaping corporate strategy and performance.

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#### Introduction

International crises, such as terrorism, refugee migrations, climate change, pandemics, and so on, are critical events that have tremendous impacts on business and society (Wenzel, Stanske, & Lieberman, 2020). Scholars across various disciplines have explored how such cross-country crises affect corporate strategies and performance. At the country level, riots, military conflicts, and terrorist attacks can turn many countries from ideal locations for investment into a nightmare for international business adventurers (Dai, Eden, & Beamish, 2013; Dimitriadis, 2021; Li, Arikan, Shenkar, & Arikan, 2020a; Liu & Li, 2020). At the firm level, these crises can also have direct impacts on individual firms by damaging physical properties (Oh & Oetzel, 2011; Tilcsik & Marquis, 2013), disrupting supply chain collaboration (Park, Hong, & Roh, 2013), and triggering the departure of corporate strategic human capital (Stern, Deng, Chen, & Gao, 2021). Although the extant findings are insightful, previous studies have primarily taken an organizational perspective and focused on geographic distance in their efforts to unpack the impacts that a crisis exerts on firms. To date, the research lacks an event perspective from which we can obtain a comprehensive understanding of how a firm can be associated with a crisis through other spaces and how a firm's spatial proximity to the crisis affects its vulnerability to the impacts of that crisis.

Event system theory—a prominent event-oriented approach in organizational research—provides management scholars with an integrated theoretical framework to examine the interactions between events and organizations (Morgeson, Mitchell, & Liu, 2015). Event system theory suggests that the interactions of an entity with an event are multidirectional in the event space and posits that the spatial proximities of the entity to the event in each direction determine how the entity experiences the event's impact. This multidirectional view of event space promises to provide management scholars with novel theoretical lenses to further unpack the relationships between firms and events, but such a perspective has not yet been brought into the field of crisis management (Bundy, Pfarrer, Short, & Coombs, 2017). Within the current focus on geographic space, we find ourselves unable to answer certain types of salient questions; for example, why did some Chinese-listed firms experience significant declines in their stock prices right after the announcement of the US–China trade war, even though they were not the targets of the imposed tariff?

To fill some of these knowledge gaps and introduce the multidimensional perspective of space into crisis management research, we draw on event system theory (Morgeson et al., 2015) and propose that an event can impact firms in multiple spatial directions, independent of the firms' geographic locations. Furthermore, linking event system theory with the interorganizational spillover literature, we argue that multiple spatial proximities exist that allow an event to expand its scope of influence over a broader range of firms. Firms with increased proximity to an event via specific spatial directions are likelier to experience more substantial impacts. Therefore, to further unpack the effects that event spatial direction and proximity exert on firms, we take an integrative theory-building approach, linking event system theory with the interorganizational spillover literature. We develop a comprehensive framework

that considers the interactions between event space and firm/entity attributes related to stake-holder relationships, which are found to help firms cope with external challenges (Godfrey, 2005; Hillman, Keim, & Schuler, 2004; Mellahi, Frynas, Sun, & Siegel, 2015). Within this framework, we further argue that due to the distinct natures of two event spatial directions, stakeholder relationships have differential effects on affected firms, with a positive moderating effect being stronger in one spatial direction than in the other.

We use the US-China trade war, and the international crisis, to test our arguments on a sample of Chinese public firms immediately after the official announcement of the trade war in 2018. This bilateral trade war makes an ideal setting for our research for two primary reasons. First, the trade war was and is an unexpected political shock to the Chinese economy, and some firms felt a direct impact of the trade war whereas others did not. Second, the trade war carries profound social meaning in terms of international politics and economies, thus indicating that multiple spatial directions exist in which firms can be exposed. We adopt an event study method to examine the impact of the trade war on firms' value. Our findings show that the trade war can have strong impacts in two spatial directions —the product market spatial direction (proxied by firms' membership in target industries or firms' activities in related industries) and the geographic market spatial direction (proxied by firms' exporting activities to the United States or firms' activities related to the United States). Firms in the target industries and related industries have experienced significant financial losses in their corporate value. Similarly, firms with exporting activities to the United States or business activities related to the United States also have suffered corporate value loss. Moreover, we find that firms' stakeholder relationships that derive either from political connections or corporate social responsibility (CSR) have been able to buffer or offset the trade war's negative impact to a certain extent, but that effect varies across different spatial directions. Whereas stakeholder relationships have helped mitigate value loss for firms in the target industries, the effect has disappeared for firms with exporting activities to the US market.

This study contributes to the scholarly understanding of business strategy by extending the theorization of space and its role in international crises. The findings complement prior work on the role of crises in shaping corporate strategy and performance (Dai, Eden, & Beamish, 2017; Li et al., 2020a; Liu & Li, 2020; Oh & Oetzel, 2011; Wenzel et al., 2020). Although scholars have emphasized the importance of geographic proximity to a crisis, this study extends the current geography-focused approach by incorporating a novel multidimensional view of event space. In particular, we draw on event system theory (Morgeson et al., 2015) to identify two spatial directions—the product market and the geographic market directions—through which a crisis event could have an intended impact on firms. We further build upon the insights from the interorganizational spillover literature (Shi, Wajda, & Aguilera, 2022) and examine the crisis's unintended spillover effect on peer firms through two spatial proximities—that of relatedness to the target industries and that of conducting export business activities with the United States. Investigating both the intended and unintended impacts of a crisis on firms contributes to a more complete view of the crisis.

Moreover, this study advances event system theory on two fronts. First, we extend the theory to the organizational level. Prior research applying event system theory to explain the impact of a crisis (e.g., Akkermans, Richardson, & Kraimer, 2020; Liu, Chen, & Li, 2021; McFarland, Reeves, Porr, & Ployhart, 2020) had primarily focused on individuals and emphasized how a crisis changes employees' behavior and job performance. Our

examination at the organizational level provides us with new perspectives for understanding event spatial directions outside of the organizational structure, thus complementing the existing knowledge of leader–member exchange (Li, Hausknecht, & Dragoni, 2020b; Lin, Chang, Lee, & Johnson, 2021). Second, this study makes methodological contributions to the theory. Going beyond the traditional uses of psychological and network distances, we draw on the insights from emerging studies on a content-based dynamic classification of firms (Hoberg & Phillips, 2016, 2017), and we introduce a novel method for measuring spatial proximity between an event and organizations.

Finally, this study resonates with the literature on stakeholder strategy (Godfrey, 2005; Hillman et al., 2004; Mellahi et al., 2015). Our findings provide evidence for a political buffer effect and an insurance-like effect that stakeholder relationships can have on firms facing an international political shock. We further identify certain potential boundaries where those effects may fade and disappear.

## **Event Space: Beyond Geographic Place**

Space is a fundamental dimension in understanding the relationships between firms and their macro environments (Beyes & Holt, 2020; Stephenson, Kuismin, Putnam, & Sivunen, 2020). Collectively, management scholars have, to date, invested substantial effort in determining the role of space in our understanding of how an event shapes corporate strategy and performance. With a particular emphasis on a firm's geographic location, researchers argue that the extent to which an event can shape corporate strategy and performance depends primarily on whether the firm is located within or near the central zone of the event (Dai et al., 2013, 2017; Dimitriadis, 2021; Stern et al., 2021).

Nevertheless, some recent advances in organizational theory—particularly event system theory—have suggested that in regard to events, even though "place" is inevitably connected to a fixed geographic location, "space" is a more abstract, conceptual context in which objects and events can have relative positions and directions beyond actual physical boundaries (Lefebvre, 1991). As a socially constructed concept, space allows individuals to impose their own understandings and interpretations onto a situation and to gauge the spatial proximity of objects and organizations to an event (Massey, 2005; Weinfurtner & Seidl, 2019). Event system theory places a special emphasis on space and posits that space is a critical component in our understanding of the link between events and firms, spatial location where a firm interacts with the event (Morgeson et al., 2015).

Through the theoretical lens of event system theory, researchers have constructed a multidimensional view of the links between events and firms. For example, the #MeToo movement is a worldwide social event against sexual harassment in the workplace. In addition to the companies that are the specific targets of the movement, law firms (Tippett, 2018) and social support groups (Tambe, 2020) also are in close spatial proximity to the movement because their organizational offerings are directly related to the subjects (i.e., disadvantaged groups) of the movement. In that light, shifting from the traditional focus of geographic proximity to a broader context of spatial direction and proximity will open new opportunities for event research to identify potentially relevant groups and organizations, thereby enriching our understanding of how an event affects corporate strategy and performance.

Within the framework of event system theory, there are two critical spatial dimensions within which an event can cast an impact on firms. The first dimension is *event spatial direction*, which describes how an event and its effects travel and reach entities. Not only can events travel up and down within organizational structure and shape team and individual behaviors, but they also are able to spread across different market categories and leave impacts on organizations in and around the affected market categories. The second dimension is *event spatial proximity*, which measures the extent to which an entity is close to an event in a single spatial direction. When entities are located closer to the event, they are more likely to receive direct impacts from that event. Together, these two dimensions delineate the impact scope of an event in space, helping us more accurately measure the event's impact on firms.

In organizational studies, there is a broad acceptance that firms, in general, can interact with an event through their corporate activities in the product market. Firms can become the target of an event if their business operation and production are the key causes/triggers of the event. For instance, when ecological scandals occur, firms in high-polluting industries, such as the energy and chemistry industries, often become the target of public critics and social protests (Heyes & King, 2018; Hoffman & Ocasio, 2001), regardless of whether they are located where the scandal happens. The extent to which a firm is being targeted or affected depends, in part, on whether it is a prototypical member of the target industries—that is, whether the firm is highly specialized within those industries.

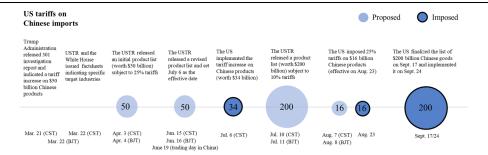
In addition to product market proximity, organizational scholars find that a firm's geographic market proximity to an event also makes it vulnerable to the event's impact. Geographic market proximity differs from geographic distance and reflects the extent to which a firm's business activities are related to the region where an event occurs, irrespective of whether the firm is in that region itself. As a typical example, firms engaged in international business often become involved in political conflicts between their home country and host countries. Fisman, Hamao, and Wang (2014) examined the impacts of critical events in the Sino-Japanese relationship on firm performance and found that Chinese firms with market exposure to Japan experienced financial losses every time a critical event occurred in Japan. The same is also the case in reverse for Japanese firms exposed to the Chinese market.

Whereas it is insightful to introduce the two spatial directions and the varying spatial proximities along those two directions into the organizational research on events, existing studies have examined the effects of the two spatial proximities separately, and we still lack a comprehensive understanding of whether and how an event can affect firms through both of the spatial proximities and, more importantly, how firms can take advantage of certain organizational attributes to buffer or offset the challenges raised by their spatial proximities to an event. In that light, we turn to the recent US—China trade war to unpack the two spatial directions and proximities for a broader understanding of how these spatial attributes function and interact with organizational characteristics in an event space.

# Trade War, Event Space, and Firm Value

One critical feature of the modern economy is its global connectivity across national borders. Establishing a complex global value chain and an international trade network allows firms to enjoy the economic benefits of product costs and supplemental resources. However, it also inevitably increases corporate vulnerability to global, regional, and bilateral

Figure 1
Timeline of the US-China Trade War: The US Additional Tariffs on China (the Year 2018)



Note: Each circle represents the total trade affected by announced tariffs, USD.

Source: US International Trade Commission, Peterson Institute for International Economics, FT research, China Briefing.

crises. Prior studies have explored the corporate consequences of many types of crises, such as financial crises (de Figueiredo, Feldman, & Rawley, 2019; Lim, Das, & Das, 2009), wars (Dai et al., 2013, 2017), terrorist attacks, disasters (Li & Tallman, 2011; Oh & Oetzel, 2011), and global pandemics (Rao & Greve, 2017). Recently, an emerging international policy shock —trade war—has received increasing attention from global investors. A trade war is composed of hostile trading policies between two countries (or national allies), with clear industry targets, such as by raising import tariffs or placing restrictions on imports. A trade war dramatically increases the economic costs and political liabilities for firms that conduct trade business between the countries engaged in the trade war.

One recent high-profile trade war is a series of trade disputes between the United States and China that was initiated on March 22, 2018, when US president Trump signed a memorandum to file a World Trade Organization (WTO) case against China to restrict investment in key technology sectors and impose tariffs on specific groups of Chinese products (such as aerospace, information communication technology, and machinery). On April 2, 2018, China imposed tariffs on 128 products, including seamless steel pipes and recycled aluminum, as retaliation to the US's tariffs. One day later, the United States Trade Representative (USTR) released an initial list of 1,334 proposed products from China that would be subject to a potential 25% tariff. China then reacted to the USTR's initial list and proposed that it would apply 25% tariffs on 106 US export goods, such as soybeans, automobiles, and chemicals. Later, these conflicts (tariffs and import restrictions) escalated into a full-fledged trade war. Figure 1 illustrates a partial timeline for the US-China trade war from March to July 2018.

The US-China trade war event creates fluctuations in affected countries' macroeconomies and dampens investors' enthusiasm, thus leading to sharp volatility in stock markets. The US-China trade war quickly imposed a heavy toll on the Chinese stock market and public firms. The Shanghai Stock Exchange Composite Index lost approximately 3.4% on March 23, 2018, and securities analysts estimated a full-blown trade war would wipe out profit growth at major Chinese public firms (Bu, Zhao, & Wang, 2018). There are two primary reasons for financial market investors to expect negative impacts of the trade war on the

corporate stock price. First, according to a semi-strong form of the efficient market hypothesis, all relevant, publicly available information about a firm is already contained in its stock price (Fama, 1970), and a trade war tends to act on publicly available information. Being targeted by a trade war suggests some new information about a firm that is going to experience extra operation costs and trading difficulties. Investors who read the information generated by the announcement of a trade war will start to question the sustainability of the firm's business model and future cash flow—they will expect that the firm may be difficult to maintain its current market value (Huang, Lin, Liu, & Tang, 2019). Second, a trade war typically represents a political crisis involving a country's political agenda and diplomatic relations. In addition to the trade war's impacts on a firm's operations, such as blocking its financial or labor resource inputs, a trade war may provoke nationalism among market consumers, thus leading to public favorability or animosity toward firms with specific national identities. Even if the trade war does not pose a direct threat to the firm's revenue, it still communicates a political risk to the firm, and investors may feel that this risk has aggravated the market operation risk of the firm, thereby reducing its market value (Hassan, Hollander, van Lent, & Tahoun, 2019).

#### Spatial Directions

The trade war was like an unexpected earthquake hitting China's economy and financial markets, and the impacts of the trade war travel through event space in multiple directions. Firms in the same spatial directions as the "epicenter" of the trade war are likely to experience a more substantial impact. For instance, after the USTR included the aluminum industry in its list of additional tariffs, two leading Chinese aluminum exporters, Jilin Liyuan Precision Manufacturing and Yinbang Clad Material, reported that their overseas sales in the United States dropped to zero as a result of the trade conflict (Shen & Ruwitch, 2018). Such a significant loss in firms' revenues can lead shareholders and investors to lose confidence in corporate operations and can further a permissive expectation of the future corporate value of affected firms in financial markets.

As noted, product market and geographic market are two crucial dimensions in which financial market investors assess whether a firm is in the same spatial direction as the epicenter of the trade war. In the context of the US-China trade war, the USTR has specifically issued a detailed list of target industries and focused on exporting activities to the United States. The target industries and the US exporting activities thus serve as two potential spatial directions for investors to identify the affected firms.

The studies on the sociology of financial markets suggest that audiences tend to rely on an industry-as-category approach to make sense of corporate offerings. In a series of studies on security analysts in the stock market, Zuckerman finds that the industry's categorizations of firms are fundamental to analysts' market valuations (Zuckerman, 1999, 2000, 2004). In their study on financial media reports—which are the professional information intermediaries in financial markets—Rosa, Porac, Runser-Spanjol, and Saxon (1999) find that journalists make comparisons primarily among firms in the same industry. Public firms also reinforce this industry-based categorization in their annual reports by comparing themselves with other firms in their industry (Porac, Wade, & Pollock, 1999). In a more recent study, Paruchuri and Misangyi (2014) find that investors usually respond to the industry as a whole in their reactions to corporate misconduct, so when one firm reveals financial misconduct, others in the industry suffer lower valuations. Taking this information together, we

expect that financial market investors will take an industry-based approach to gauge whether a firm is in the same spatial direction as the epicenter of the trade war, and they will expect that firms in the target industries of the US-China trade war, whether they actually engage in exporting activities to the US, will experience lower financial performance. Therefore, we propose that:

Hypothesis 1a: When a US-China trade war occurs, Chinese firms in target industries will experience a significant financial loss.

A firm's presence in or dependence on a specific geographic market has been used as another critical direction for audiences to categorize firms in financial markets. A trade war is related to international trade and is expected to adversely affect firms with exporting activities. The current US–China trade war is a country-dyadic conflict. Chinese firms that export to the United States are in the same spatial direction as the trade war event and are expected to suffer adverse effects, regardless of whether they are in the target industries. As such, we expect that:

*Hypothesis 1b*: When a US-China trade war occurs, Chinese firms that export to the United States will experience a significant financial loss.

#### Spatial Proximities

In addition to spatial direction, the proximity of a firm to the epicenter of the trade war will affect the extent to which the firm experiences the impacts of the trade war. As is noted in the studies on interorganizational spillover, negative information about a firm is likely to be generalized to other members in its market category (Barnett & King, 2008; Paruchuri & Misangyi, 2014; Zavyalova, Pfarrer, Reger, & Shapiro, 2012)—in other words, the drama related to one firm will affect others that are proximate to it in social space. Consequently, disparaging news related to one firm not only results in social devaluations for the focal firm but also affects its "innocent" peers with similar organizational attributes as the firm, even though they are not involved in any adverse events. For instance, Barnett and King (2008) studied the market valuations of chemical firms following an industrial accident and found that when an industrial accident occurred at one firm, investors evaluated the other firms associated with chemical businesses negatively as a whole, presumably due to their concerns over future increases in regulation within the whole chemicals-related businesses.

Spillover occurs within firms with similar business activities because social categorization primarily depends on the similarity of organizational attributes (Hannan et al., 2019). Moreover, social categorization is a fundamental cognitive process that individuals use to understand the relationships between events and objects. Categories divide social space into groupings of events and objects with different degrees of spatial proximity, and such groupings facilitate social actors' schematic processing and sensemaking of the world around them. In particular, categorizations help people in their decision-making under uncertainty because they provide schemas by which social actors can classify and evaluate new information, actors, and objects as they encounter them (Ashforth & Humphrey, 1997; Sharkey, 2014).

As a result, market investors' classifications of firms as being similar or dissimilar in social space are critical for identifying which firms will be more likely to be affected by particular

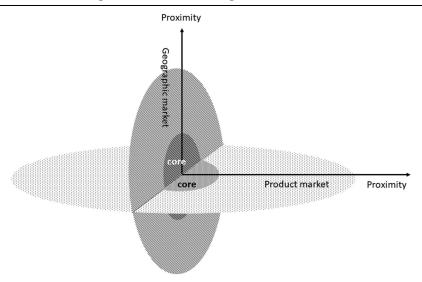


Figure 2
Spatial Directions and Spatial Proximities

*Note:* This figure illustrates the spatial structure of an event of the US–China trade war. Two spatial dimensions—that is, product market and geographic market—are two independent planes of the event. For firms in the two planes, each has its own proximity to the center of the event. Closer proximity exposes a firm to a large impact of the event.

events (Cattani, Porac, & Thomas, 2017). In this vein, we expect that the extent to which a firm's business activities are similar or related to the target industries and the export to the United States can function as its spatial proximities in product market direction and geographic market direction, respectively. The higher-level similarity between a firm's business activities and those in the target industries (or the exporting activities to the United States), the more significant the negative impact of the trade war the firm will experience. Therefore, we posit that:

*Hypothesis 2a*: When a US–China trade war occurs, Chinese firms with business activities related to the target industries will experience a significant financial loss.

*Hypothesis 2b*: When a US–China trade war occurs, Chinese firms with business activities related to the United States will experience a significant financial loss.

To better portray how directions and proximities constitute event space and associate firms to the epicenter of the trade war, we draw a schematic diagram of the structure of the event space (Figure 2). The two directions of the product market and the geographical market constitute the two planes of an event of the trade war. On each independent plane, there is a distance between a firm and the event center. Firms with closer spatial proximity to the center of the event will experience a stronger impact than their distant peers on the same plane.

Although the US-China trade war heavily dampened the overall stock market performance, the spillover of negative impact has not been equally distributed within the

industries, as firms may have different social capitals and buffers with their stakeholders (Huang et al., 2019; Wang, Li, & Wei, 2020). Athough prior research has suggested some plausible ways for corporate social capital to help boost investors' confidence in firms and thus alleviate the impacts of adverse events, we have yet to understand how those methods can protect firms in the event of a trade war. Drawing on the literature on non-market stakeholder relationships, we next proceed to unpack further the interactions between corporate stakeholder relationships (and their supports) and event spatial directions and proximities.

#### The Moderating Effect of Stakeholder Relationships

The literature on stakeholder relationships suggests that maintaining corporate political connections and engaging in corporate social responsibility (CSR) are effective ways for firms to prevent the reputational damage associated with sociopolitical risks in a hostile environment (Frynas, Child, & Tarba, 2017; Mellahi et al., 2015; Muller & Kräussl, 2011). Corporate political connections are a set of corporate investments made by a firm in order to accumulate social capital from political actors and gain favorable policy advantages that can boost the firm's corporate performance (Hillman et al., 2004). Prior works on political connections suggest that such social relationships with governments and officials can serve as a strong political buffer to prevent firms from negative external impacts, especially in weak institutional environments such as those that occur in emerging market countries (Zheng, Singh, & Mitchell, 2015). Of all the types of corporate political connections, those of state ownership and of top management are typical (Aguilera et al., 2021; Tihanyi et al., 2019).

Corporate social responsibility refers to corporate engagement in addressing social concerns. Therefore it not only allows a firm to create a positive organizational image with its public audiences, it leads to performance enhancement, regardless of motive (McWilliams, Siegel, & Wright, 2006). Past studies on firms' engagement in CSR suggest that it may produce an insurance-like effect on the firms' stock prices (Godfrey, 2005; Godfrey, Merrill, & Hansen, 2009). Specifically, when a negative event relating to the corporate operations of a firm occurs, CSR engagement can reduce any potential impact on the firm's stock price. Thus, a firm's engagement in CSR can be regarded as an insurance premium that the firm pays to avoid or reduce any loss of market value due to negative events (Shiu & Yang, 2017).

In general, proper management of stakeholder relationships increases the stakeholders' trust in firms, which in turn generates substantive social and moral capital for firms that, under high levels of operational uncertainty, serve as a buffer to any spillover of negative reputation in the eyes of investors (Godfrey et al., 2009; Henisz, Dorobantu, & Nartey, 2014). Also, favorable political buffers and alternative supplementary resources by the public help firms address the institutional challenges that make market transactions costly (Dorobantu, Kaul, & Zelner, 2017). Altogether, these studies' findings indicate that support from the state and the public can provide a political buffer and an insurance-like effect for firms, helping them survive and thrive in a dynamic institutional environment. Following this logic, we expect that stakeholder relationships, including forging and maintaining political connections and engaging in CSR, will help firms alleviate the impact of a trade war. We thus hypothesize that:

Hypothesis 3a: When a US-China trade war occurs, political connections will have a positive moderating effect on firm value.

Hypothesis 3b: When a US-China trade war occurs, engagement in CSR will have a positive moderating effect on firm value.

# Differential Moderating Effects of Stakeholder Relationships in Two Spatial Directions

Whereas stakeholder relationships can increase a firm's social capital and political resources among its key audiences and provide political-buffer and insurance-like effects to help it cope with adverse events, such effects have boundaries. One critical reason for such limits is that the key audiences vary in their influence along the different spatial dimensions of an event. For instance, home country–specific engagement in CSR by multinational enterprises (MNEs) is often not generalizable to other host countries, the home country have limited influence in the global market (Deephouse, Newburry, & Soleimani, 2016)—and that is especially the case for MNEs in emerging markets (Mukherjee, Makarius, & Stevens, 2021). Likewise, political connections are found to be an influential sponsor for firms in their acquisition of vital resources in their home country, but the same connections are viewed as a critical liability in international mergers and acquisitions because the due completion does not depend predominantly on the willingness and power of the state (Li, Li, & Wang, 2019).

Considering the variations of key audiences' capacity to exert influence along the different spatial directions of the US-China trade war, we expect that the mitigating effect of stakeholder relationships will be more prominent for firms in the target industries than it will for their peers that are conducting international business with the United States. We argue that the differential effects stem from the political nature of the trade war. As scholars in political science note, a trade war is typically a bilateral political conflict (Gowa & Mansfield, 1993) that is reflected in international trade. It ultimately changes not only the deficit of one country's international trade with the other but, more importantly, it alters the bilateral relationship between the two countries. Specifically, the trade war we are investigating was initiated by the United States, and its tariffs and restrictions pressured China to implement significant changes in aspects of its economic system and to create a more permissive environment for the Chinese economy (Hass & Denmark, 2020). In a textual analysis of Chinese public firms' annual reports during the trade war period, Benguria and Saffie (2020) find that the imposed tariffs have led to firms' more frequent use of words relating to policy uncertainty rather than to industry-specific impacts. The increased use of such words exposes a firm's uncertainty in a dynamic international environment.

Moreover, the policy uncertainty created by the US-China trade war is difficult for China alone to reconcile, because the conflict was initiated by the United States and involves collaboration between the two countries (Liu & Woo, 2018). The helping hands of the Chinese government and the public are thus tied in how they can aid the affected firms that conduct international business with the United States. Even if the exporting firms can adjust their international value chain, it takes a long time for them to find alternative consumer markets and reconfigure their organizational structures. Furthermore, these firms' political resources and social capital are hard to generalize to other international markets.

In contrast, governments and the public have more flexibility to supply affected firms with favorable policies and market revenues in and around the target industries. For instance, governments can identify the affected industries as the country's strategic emerging industries and offer them strong policy support for investing in innovation resources and market applications (Jia, Huang, & Zhang, 2018). Domestic consumers can also initiate social movements on national brands (Gerth, 2003) and can increase their consumption of domestic products (He & Wang, 2015), thereby generating considerable market revenue for firms in the target industries. Accordingly, stakeholder relationships and supportive stakeholder activities can play more influential roles in bolstering the affected firms in and around the target industries than they can in helping the counterpart firms with business activities directly related to the US market. Therefore, we expect that:

*Hypothesis 4*: Stakeholder relationships will have a stronger positive moderating effect on firm value in the product market spatial direction than in the geographic market spatial direction.

#### Methods

#### Sample

To examine the impact of the US-China trade war on Chinese public firms, we constructed a unique data set from multiple sources. First, we collected firm-level financial information from the China Stock Market & Accounting Research (CSMAR) database. The CSMAR database provides information on Chinese public firms' daily returns, annual performance, and corporate fundamentals, such as their ownership structure and financial metrics. Second, to identify the target industries of the trade war, we used information from the Determination of Action Pursuant to Section 301 issued by the Office of the United States Trade Representative (USTR) on the heel of Trump's announcement. We identified the Chinese exporters to the United States by using the information from China's General Administration of Customs database, which maintains multinational enterprises' cross-border merchandise transaction records (Fan, Lai, & Li, 2015) and provides detailed information on the product type, deal value, and destination country of each transaction. Third, to measure a firm's business relatedness to the target industry and to the United States, we manually collected the annual reports of all Chinese-listed firms from their official websites and stock exchanges. Last, we drew information on Chinese firms' CSR activity from the China Listed Firm Corporate Social Responsibility Research Database, which has collected and categorized CSR activities reported by listed firms since 2008. The database contains firms' social activities in 10 different CSR issue fields—shareholder protection, creditor protection, employee protection, supplier protection, customer protection, environmental protection, public relations, CSR capacity building (system construction), work safety, and deficiency. The database also contains information on specific social activities from each field. The activity-level information includes project names, values, and units.

The initial sample we screened was all the active public firms listed on the main board of the Shanghai and Shenzhen stock exchanges from 2017 through 2018. We excluded firms in financial service sectors, because their financial statements are substantively special (Dowell, Shackell, & Stuart, 2011). Firms with "special treatment" were also eliminated due to the trading restrictions imposed by stock exchanges (Wang, Wijen, & Heugens, 2018). After

filtering out the firms with missing information, our final sample consisted of 2,157 publicly traded firms.

#### Dependent Variable

Cumulative Abnormal Returns (CARs). Following prior organizational studies on the impact of social events (Hawn, Chatterji, & Mitchell, 2018; King & Soule, 2007), we use the event study method (McWilliams & Siegel, 1997) to assess the influence of a single event on corporate stock return. The event study structure uses the past performance of the firm's stock to calculate the extent to which the stock's current performance deviates substantially from the expected performance.

Specifically, we applied the standard three-factor model (Fama & French, 1993) to estimate the daily expected returns of each publicly listed firm over the event window. The Fama-French model, which controls for the firm size and value characteristics apart from the market return, is universally employed in the extant event studies in management research (e.g., Luo, Wang, Raithel, & Zheng, 2015). The estimation model is specified as follows:

$$(R_{i,t} - r_{f,t}) = \alpha_i + \beta_{i,m} (R_{m,t} - r_{f,t}) + \beta_{i,SMB} SMB_t + \beta_{i,HML} HML_t + \epsilon_{i,t}, \quad (1)$$

where  $R_{i,t}$  denotes the stock return for firm i on day t;  $r_{f,t}$  is the risk-free rate of return;  $R_{m,t}$  denotes the average stock market return; the small-minus-big factor  $SMB_t$  captures the excess return of firm size; the high-minus-low factor  $HML_t$  captures the excess return of stocks with different market-to-book ratio; and  $\epsilon_{i,t}$  is the error term.

Following prior work (e.g., Schepker, Oh, & Patel, 2018), we estimated model coefficients for each firm, using their transaction history in a window of 240 trading days [-261, -21]. We then calculated expected returns upon the imposition of additional duties.

The stock market reaction to the imposition of trade tariffs is captured by the daily abnormal return (AR), which measures how much a firm's stock return deviates from its expected value. The CARs capture the price volatility during the whole event window:

$$AR_{i,t} = R_{i,t} - E(R_{i,t}) \tag{2}$$

$$CAR_{i(t1, t2)} = \sum_{t=1}^{t2} AR_{i,t}$$
 (3)

where  $R_{i,t}$  is the real stock returns, and  $E(R_{i,t})$  is the expected returns estimated by the three-factor model on event date t in the event window  $(t_1, t_2)$ .

We used the tariff proposed date of March 22, 2018, as the event date to calculate the *CARs*. We focused on this proposed date rather than the tariff imposition dates because we are interested in how the initial event of the US–China trade war shaped Chinese financial market investors' attention and cognition. The proposed date, March 22, 2018, is the very first official trade war announcement, and its impacts started to spread right after this date, long before the imposition date. Moreover, because information leakage before the event could violate the assumption of surprise in the event study, we needed to gauge the extent of information leakage before the US–China trade war. We adopted a keyword-screening method in the *Huike* News Database (WiseSearch), the most professional Chinese media

content database with a coverage of more than 1,600 print media sources and roughly 50,000 internet media sources. The Keywords included the expressions *trade war* and *tariff*. We restricted our search to news articles published in mainland China from January 20, 2017, the start of Trump's presidency, to March 22, 2018, the event window. The results show that there were not many news reports on the trade war, before the proposed date, but in March 2018, the number of reports surged. Such a trend suggests that while the trade war had sporadic attention ahead of the official announcement, the outbreak was a surprise that exceeded public expectations.

Considering trading days in the Chinese stock market before and after the additional tariffs, we operationalized the CARs in a four-day event window [-2, +1] as our main dependent variable (Chatterjee, Pacini, & Sambamurthy, 2002; Schepker et al., 2018). We used the average CAR value in the event window [-2, +1] as our main dependent variable because this narrow period can tease out the confounding effects of other events to focus on the effect of the very event in which we are interested, increasing the validity of our study. We also used alternative event windows for 1, 5, 7, and 10 days before and after the event as robustness tests (Bruno, Onali, & Schaeck, 2018; Subramani & Walden, 2001). The results remain qualitatively unchanged.

#### Independent Variables

In this study, we constructed two sets of independent variables to study the impacts of the US-China trade war. The first set of independent variables measured the spatial directions of the impacts, and we used *Target industry* to capture the spatial direction in the product market and *Exports to the US* to represent the spatial direction in the geographic market.

To measure a firm's product market spatial proximity to the trade war, we used a dummy variable to determine whether the firm's primary industry classification had been included in the USTR's list of additional tariffs. Specifically, on March 22, 2018, then US president Trump signed a memorandum and announced that the US Trade Representative (USTR) office would propose additional tariffs on certain products from China. On the same day, both the USTR<sup>1</sup> and the White House<sup>2</sup> issued factsheets on this memorandum on their official websites. In the section titled "25 Percent Ad Valorem Duties," the government specified that "the proposed product list subject to the tariffs will include aerospace, information and communication technology, and machinery." We thus defined *Target industry* as 1 for firms in the target CSRC industry and assigned 0 for other firms. Table 1 reports all target industries under the 2012 China Securities Regulation Commission (CSRC) classification.

To capture a firm's geographic market proximity in the event space of the US-China trade war, we used a continuous variable measuring the percentage of its export income from the US market in its total revenue. Because of the five-year period of data release turnover, we only had access to firms' export data up to 2016 in the Chinese customs database. The first round of trade-war attacks occurred on March 22, before the issue of the 2017 annual reports. Considering investors' information accessibility, we thus followed previous studies to proxy focal firms' revenue percentage of US exports in 2017 by using the average ratios from the previous two years (Berrone & Gomez-Mejia, 2009; Hoggarth, Reis, & Saporta, 2002).

Our second set of independent variables captures the spatial proximities in the product and geographic markets. Specifically, we used content analysis methods to examine public firms'

		1	Table 1	
The	List	of	Target	Industries

Target Sector	CSRC Industry Code & Name
(1) Aerospace	C34 General industrial machinery
(2) Information and communication	C35 Special industrial machinery
technology	C36 Motor vehicles and equipment
(3) Machinery	C37 Railroad, ship & boat, aircraft & space vehicles equipment C38 Electrical machinery and equipment
	C39 Communication equipment, computer, and other electronic equipment
	C40 Measuring instruments and machinery

business descriptions in the management discussion and analysis (MD&A) section of their annual reports, and we constructed two variables, *Related industry* and *Related to the US*, to measure a firm's main position in the product market space.

We designed a three-step method to construct our new measures of spatial proximities. First, we manually collected all listed firms' annual reports for 2015 to 2017 (the three years before the US-China trade war) and used those reports to conduct our content analysis. We then used the Python program *Jieba* to break all sentences in the MD&A into words, and we thus obtained a set of words with which to conduct the content analysis.

Second, we constructed two keyword dictionaries. One dictionary contained the keywords related to target industries, and we constructed this dictionary by using the keywords in the names of the target industries. Table 2 reports the keywords of target industries. The other dictionary included the keywords of business activities related to the United States. We used three keywords to retrieve firms conducting business related to the United States: USA/US ("美利坚"), America ("美国"), and US-China "中美", and we also used four keywords related to exporting activities: import, export, import & export ("进出口"), and trade. Thus, we had a total of 12 combinations to measure the relatedness of a firm's business activities to exporting to the United States.

Third, we used the percentage of keywords frequency—that is, the percentage of keywords that appeared in the MD&A section—to capture a firm's proximity to target industries and to US exporting activities. To do that, Equation (4) shows how we calculated the percentage of keyword *i* frequency:

percentage of frequency<sub>keyword i</sub> = 
$$\frac{n_{keyword i}}{n_{total words in the MD&A}}$$
. (4)

Then we have two new variables, *Related Industry* and *Related to the US*, that measure a firm's spatial proximities to target industries and its exporting activities to the United States.

#### Moderating Variables

We use two variables to capture a firm's political connections to the state. The first variable refers to the firm's institutional political connections: *State ownership*. We followed prior studies and used a continuous variable—the ratio of firm shares owned by the state to a

firm's total shares—to account for the potential influence of state ownership. Our second variable considers the firm's personal political relationships. We again followed prior studies (Li & Lu, 2020; Zheng et al., 2015) to use the political connection of the firm's top management team (TMT) to the state: *TMT connections*. To construct this variable, we collected the resumes of the senior management team members of the company in the CSMAR database. Then we manually identified whether a firm's senior management held or previously held a senior government or political appointment. As the trade war was an event at the national level, we only considered political positions at the central (or the state) level. The TMT members' positions in the following four key political organizations are particularly valuable in China—that is, the central government and the central committees of the Chinese Communist Party, and the nation's two legislative bodies (i.e., the National People's Congress and the Chinese People's Political Consultative Conference). We then calculated a firm's *TMT connections* as its total number of senior managers currently holding or previously held positions in one of those four bodies, at the central level.

We followed a prior event study (Flammer & Ioannou, 2021) and used a firm's total CSR activities for one year before the trade war began as a proxy for its *CSR engagement*, by summing the number of all of the firm's CSR projects in 2017.<sup>3</sup>

#### Control Variables

We include several controls at the firm-year level representing a firm's characteristics, including *Firm age*, *Firm size* (the natural log of total assets), *Return on equity* (ROE), and *Book-to-market ratio*. To control for a firm's market strategies, we controlled for its *Product diversification* by using the Herfindahl-Hirschman index (HHI), which has been used extensively in the strategic management literature to measure business diversification—for instance, in studies of the relationship between a firm's industry diversification and its performance. To account for the potential impact of a firm's foreign ownership on its international activities, we include *Foreign ownership*, measured by the percentage of the firm's ownership held by foreign investors (Xia, Ma, Lu, & Yiu, 2014). To control for geographic proximity to the source of the US-China trade war, we computed the logarithm of the geographic distance from a firm's registered address to the US White House.

We also control for the effect of industry competition, which we term *Industry concentration* and which we captured by the HHI values based on the 50 largest firms in each industry (Rothaermel, Hitt, & Jobe, 2006). Finally, to control the potential influences of information leakage, we calculated a variable, *Media coverage*, by using the number of media reports on the trade war collected from our media search. This variable was the logarithm of the total number of news reports on the US-China trade war issued by media in each province.

### Model Specifications

In this study, we examine how a firm's spatial directions and proximities to the US-China trade war affect the impact that it receives from that trade war event. In addition, we are interested in how corporate stakeholder relationships interact with firms' spatial proximity and

Code Industry Name Keywords C34 General industrial machinery Industrial machinery C35 Special industrial machinery C36 Motor vehicles and equipment Motor vehicle C37 Railroad, ship & boat, aircraft & space vehicles equipment Railroad, ship, boat, aircraft, space, transportation C38 Electrical machinery and equipment Electric, mechanical, instrument C39 Communication equipment, computer, and other electronic Communication, computer, and electronic equipment C40 Measuring instruments and machinery Measuring instruments

Table 2
The Keywords of Target Industries

provide political-buffer and insurance-like effects to shield firms from the event's impact. To examine the impact of the trade war, we adopt an event study design and use the following cross-sectional ordinary least squares model, with all covariates lagged by one year to account for the latency of their effects:

$$CAR_{i,t} = \beta_0 + \beta_1 Spatial \ directions_{i,t} + \beta_2 Spatial \ proximities_{i,t} + \beta_3 Moderators + \beta_4 Spatial \ attributes_{i,t} \times Moderators + \beta_5 Controls_{ijt-1} + \emptyset_{industry} + \epsilon_{ijt-1},$$
 (5)

where  $\beta_0$  is the intercept;  $\beta_1$  is the coefficient for corporate spatial direction (i.e., the product market and the geographic market);  $\beta_2$  is the coefficient for corporate spatial proximities (i.e., the product market and the geographic market);  $\beta_3$  is the coefficient for the moderating variables (i.e., state ownership, political connections, and CSR engagement); and  $\beta_4$  is the coefficient for the interactions between spatial attributes (i.e., spatial directions and proximities) and moderating variables.  $Controls_{i,jt-1}$  is a vector of the firm-year and industry-year-level control variables;  $\emptyset_{industry}$  is the industry fixed effects; and  $\epsilon$  is an error term. Standard errors are clustered at the firm level to correct for a potential cross-sectional correlation in the error term. We report the descriptive statistics of the sample in Table 3.

#### Results

The Impact of the Trade War on Firm Value

We first examine how the trade war has affected firms' stock returns. Table 4 summarizes the results of corporate CARs values in different time windows (i.e., from -1 day to +5 days) during the war's first-round attack on March 22, 2018.

The CARs values in panel A show that the trade war has exerted significant negative impacts on firms' stock returns, and those impacts are stronger for firms in the target industries—their market value has suffered the largest proportional losses in terms of their stock returns. Interestingly, our findings also suggest that the impacts of the trade war did not bring down the firm value of other firms; instead, the CARs of those firms exhibited a growth pattern within the (-2, +2) day period.

Table 3
Descriptive Statistics and Correlation Matrix

					·												I
Variables	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17
1. CAR (-2, 1)	1.00																Ī
2. Target industry	-0.08	1.00															
3. Related industry	-0.06	0.40	1.00														
4. Export to the US	-0.06	0.11	0.03	1.00													
5. Related to the US	-0.07	90.0	0.01	0.12	1.00												
6. State ownership	0.14	-0.16	-0.05	-0.11	-0.07	1.00											
7. TMT connections	-0.05	-0.02	-0.02	0.02	0.05	-0.11	1.00										
8. CSR engagement	0.02	-0.06	-0.02	-0.06	-0.02	0.20	0.01	1.00									
9. Firm age	0.00	-0.12	-0.07	-0.04	-0.05	0.23	0.00	0.10	1.00								
10. Firm size	-0.09	-0.13	-0.06	-0.10	0.03	0.42	0.03	0.26	0.16	1.00							
11. ROE	-0.09	-0.04	-0.07	0.01	0.03	-0.05	0.00	0.05	-0.02	0.13	1.00						
12. Book-to-market ratio	0.01	-0.14	-0.07	-0.08	-0.04	0.43	0.00	0.17	0.21	89.0	-0.23	1.00					
13. Product diversification	90.0	-0.06	0.02	-0.02	0.01	0.11	0.00	0.01	0.10	0.14	-0.11	0.18	1.00				
14. Foreign ownership	-0.03	0.02	-0.01	-0.01	0.03	-0.01	0.01	0.00	0.02	0.00	0.08	-0.04	-0.03	1.00			
15. Industry concentration	90.0	-0.10	0.03	-0.02	-0.03	0.13	0.01	0.02	0.04	0.13	-0.04	0.10	90.0	0.00	1.00		
16. Geographic distance	-0.05	0.09	0.07	90.0	0.02	-0.12	0.04	-0.02	0.02	-0.12	90.0	-0.14	-0.07	0.03	-0.03	1.00	
17. Media coverage	-0.05	0.05	90.0	0.02	0.08	-0.05	-0.01	0.01	-0.08	0.03	0.03	-0.05	0.01	0.01	-0.04	0.04	1.00
N	2157	2157	2157	2157	2157	2157	2157	2157	2157	2157	2157	2157	2157	2157	2157	2157	2157
Mean	-0.29	0.31	0.85	0.02	0.71	13.31	0.16	3.10	19.3	22.39	0.08	0.53	0.24	0.28	0.09	9.36	4.30
SD	5.50	0.46	0.97	0.10	1.61	20.69	0.48	10.91	5.14	1.32	0.08	0.24	0.28	1.87	0.10	90.0	1.06

Note: Significant at 0.05 level when correlations are >0.043 or <-0.043.

Impact on Cumulative Abnormal Return in the First Round of the Trade War Attack on March 22, 2018 (GMT +8) Table 4

		Pane	Panel A. Target Industry	Ę.		
Date: March 22 2018	All Lister	All Listed Firms $(N=2,157)$	Firms in tar	Firms in target industries $(n = 658)$	Other	Other Firms $(n = 1,499)$
Event window	CAR	$T$ statistics $(p ext{-value})$	CAR	T statistics (p-value)	CAR	T statistics (p-value)
(-1,0)	-0.11	-1.66	-0.22	-1.86	90.0-	-0.77
(-1,1)	-0.17	$\frac{(0.97)}{-1.54}$	-0.79	(0.00 <i>2</i> ) -4.08 (0.000)	0.10	0.78
(-2,1)	-0.29	(0.014)	-0.94	(0.000) (0.000)	-0.01	-0.06 (0.952)
(-2,2)	0.02	0.13	-0.52	(0.022) -2.30 (0.022)	0.25	1.81
(-3,2)	-0.11	(0.505) -0.85 (0.304)	-0.46	(5:552) -1.85 (0.064)	0.04	0.28
(-5,5)	-0.34	(0.574) $-2.49$ $(0.013)$	-0.67	$\begin{array}{c} (0.004) \\ -2.49 \\ (0.013) \end{array}$	-0.20	$\begin{array}{c} (0.778) \\ -1.25 \\ (0.211) \end{array}$
		Pane	Panel B. Export to the US	SC		
Date: March 22 2018	All Liste	All Listed Firms $(N=2,157)$	Firms with e	Firms with export to the US $(n = 558)$	Other	Other Firms $(n = 1,599)$
Event window	CAR	T statistics (p-value)	CAR	T statistics (p-value)	CAR	T statistics (p-value)
(-1,0)	-0.11	-1.66 (0.097)	-0.46	-3.90 (0.000)	0.01	0.19 (0.851)
(-1,1)	-0.17	(0.123)	-1.01	(0.000)	0.13	0.96 $(0.335)$
(-2,1)	-0.29	-2.46 $(0.014)$	-1.27	-5.94 (0.000)	0.05	0.37 (0.715)
(-2,2)	0.02	$0.13 \\ (0.900)$	-0.89	-4.08 $(0.000)$	0.33	2.36 (0.018)
(-3,2)	-0.11	-0.83 (0.394)	-1.08	-4.30 $(0.000)$	0.23	1.49 (0.136)
(-5,5)	-0.34	-2.49 (0.013)	-1.45	(0.000)	0.04	(0.793)

Note: Two-tailed tests. Cumulative abnormal return is reported as the percentage.

Panel B of Table 4 presents the results of the impact of the trade war on firms with exporting activities to the United States. Similar to the case of the firms in target industries, the firms exporting to the United States also have experienced a stronger negative impact than other firms have, and their CARs values have continued to decrease over time. Indeed, the negative impact on firms exporting to the United States is larger than the impact on firms in the target industries, indicating that firms with close proximity in the geographic market are more vulnerable to this trade war than their counterparts with close proximity in the product market are.

Table 5 summarizes the primary results of our analysis that used the CARs values in a four-day event window (-2, +1) day period. Model 1 is the baseline model, containing all the controls and moderators. Two moderators, *State ownership* and *CSR engagement*, have positive and significant values, indicating that they contribute positively to a firm's value in adverse situations such as trade wars. Interestingly, the effect from the top management team's political connections (*TMT connections*) is insignificant, implying that institutional ownership by the state has a stronger buffering effect than personal political relationships do.

Model 2 includes the firms' product market spatial direction, Target industry, and the results show a significant negative effect from the trade war on firms in the target industry  $(\beta = -0.65, SE = 0.26, p = 0.013)$ . The results thus support our hypothesis 1a that firms in the target industries will have suffered a stronger impact from the US-China trade war, regardless of whether they conduct any international business in the US market. To better interpret the effects of the types of product market spatial direction, we calculated the marginal effect and found that the inclusion of a firm in the target industries decreased its corporate CAR values by 0.70. Model 3 tests our hypothesis 1b regarding the spatial direction of the geographic market and therefore includes Exports to the US in the analysis, and here too, we find a significant negative effect, this time from being an exporter to the United States ( $\beta$  = -2.87, SE = 0.90, p = 0.001). This means that firms with exporting activities to the United States have experienced a relatively greater impact from the trade war than other firms have, regardless of whether they are in the target industries. The marginal effect of the geographic market spatial direction shows that a one-standard-deviation change (increase) in a firm's exporting activities to the United States reduces the firm's CAR by 0.25. Model 4 includes both spatial directions, and the model's significant negative results offer additional support for hypotheses 1a and 1b.4

Models 5–10 examine our hypotheses 3a and 3b about the moderating effects of corporate stakeholder relationships. We used hierarchical regressions to include three moderators separately. The results indicate that only state ownership ( $\beta = 0.08$ , SE = 0.02, p = 0.000, in Model 5) and CSR engagement ( $\beta = 0.05$ , SE = 0.02, p = 0.035, in Model 9) each have significant buffering and insurance-like effects for firms in the product market spatial direction; in contrast, TMT connections and CSR engagement have no significant moderating effects. To better illustrate the moderating effect of state ownership, we plotted the interaction between state ownership and the product market spatial direction (nearness to the target industry) in Figure 3, and the interaction between CSR engagement and proximity to the target industry in 3(b). Figure 3 shows that in response to the US-China trade war, firms with a low level of state ownership have suffered financial losses in terms of their market returns due to their inclusion in the target industries, whereas firms with a high level of

(continued)

The Impact of the Trade War on Cumulative Abnormal Return (March 22, 2018): Target Industry and Export to the US Table 5

DV = CAR	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
1. Target industry		-0.65		09:0-	-1.39	09:0-	-0.59	09.0-	-0.71	-0.60
		(0.013)	i d	(0.022)	(0.000)	(0.022)	(0.035)	(0.022)	(0.008)	(0.022)
2. Export to the US			-2.87	-2.62	-2.25	-2.55	-2.62	-2.72	-2.58	-2.59
3 State ownership	0.04	0	(0.001)	(0.004)	(0.016)	(0.007)	(0.004)	(0.009)	(0.005)	(0.005)
direction and the	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
4. TMT connections	-0.27	-0.28	-0.26	-0.28	-0.27	-0.28	-0.27	-0.29	-0.27	-0.28
	(0.195)	(0.172)	(0.203)	(0.180)	(0.201)	(0.179)	(0.226)	(0.179)	(0.188)	(0.180)
<ol><li>CSR engagement</li></ol>	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02
	(0.069)	(0.076)	(0.081)	(0.088)	(0.078)	(0.089)	(0.088)	(0.088)	(0.499)	(0.088)
1×3					0.08					
					(0.000)					
2×3						-0.02 (0.853)				
1×4							-0.03			
							(0.962)			
2×4								0.47		
								(0.712)		
1×5									0.05	
Ų									(0.035)	0
6 X 7										(0.887)
Firm age	0.08	0.07	0.07	0.07	90.0	0.07	0.07	0.07	0.07	0.07
	(0.001)	(0.003)	(0.002)	(0.003)	(0.006)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)
Firm size	-0.90	-0.89	-0.91	-0.90	-0.92	-0.91	-0.90	-0.90	-0.92	-0.90
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROE	-2.57	-2.92	-2.50	-2.83	-2.86	-2.83	-2.83	-2.84	-2.70	-2.82
	(0.160)	(0.110)	(0.172)	(0.121)	(0.116)	(0.122)	(0.121)	(0.121)	(0.140)	(0.123)

Table 5 (continued)

DV = CAR	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Book-to-market ratio	0.83		0.84	0.73	0.81		0.73	0.72	0.78	0.73
	(0.236)		(0.231)	(0.301)	(0.246)		(0.301)	(0.306)	(0.272)	(0.303)
Product diversification	1.03		1.04	1.00	1.11		1.00	1.00	1.03	1.00
	(0.013)		(0.013)	(0.015)	(0.007)		(0.015)	(0.015)	(0.013)	(0.015)
Foreign ownership	-0.06		90.0-	90.0-	-0.06		-0.00	90.0-	-0.06	-0.06
	(0.009)	(0.009)	(0.007)	(0.008)	(0.010)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Industry concentration	2.91		2.91	2.69	2.66		2.68	2.68	2.65	2.68
	(0.013)		(0.013)	(0.024)	(0.025)		(0.024)	(0.024)	(0.026)	(0.024)
Geographic distance	-4.23		-4.01	-3.69	-3.38		-3.69	-3.68	-3.61	-3.69
	(0.045)		(0.057)	(0.080)	(0.107)		(0.080)	(0.080)	(0.086)	(0.080)
Media coverage	-0.14		-0.13	-0.13	-0.11		-0.13	-0.13	-0.13	-0.13
	(0.225)		(0.242)	(0.273)	(0.350)		(0.273)	(0.273)	(0.260)	(0.273)
Constant	57.18		55.49	52.70	50.41		52.71	52.63	52.40	52.73
	(0.004)		(0.006)	(0.000)	(0.012)		(0.009)	(0.009)	(0.009)	(0.008)
Observations	2,157		2,157	2,157	2,157		2,157	2,157	2,157	2,157
R-squared	990.0		0.068	0.071	0.084		0.071	0.071	0.072	0.071

Note: p-value in parentheses.

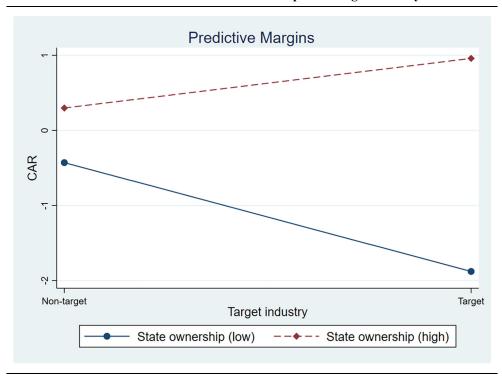


Figure 3
Interaction Between State Ownership and Target Industry

state ownership have been able to escape such losses and have even gained additional market returns.

Figure 4 illustrates that although firms in the target industries all have experienced financial losses in terms of their market returns in response to the trade war, firms with a high level of CSR engagement have experienced fewer losses than their peers with a low level of engagement in CSR have. Those results partially support our hypothesis 3a, and they further suggest that direct control by the state plays a more critical role in shielding firms from the negative impact of an external political shock than engaging in CSR does.

In Table 6, we summarize the results of our examination of the relationship between the trade war's effects on firms' performance and their two types of spatial proximities. As we did in Table 5, we use Model 2 to Model 4 to examine the effects that a firm's spatial proximity in the product market and in the geographic market have on the impact that the trade war has on the firm's returns. The results show that spatial proximities in both the product market ( $\beta = -0.36$ , SE = 0.12, p = 0.004) and the geographic market ( $\beta = -0.14$ , SE = 0.05, p = 0.005) will significantly increase the impacts of the trade war on the focal firm. Specifically, a positive change by one standard deviation in a firm's spatial proximity in the product market will decrease its corporate CAR by 0.35, and a one-standard-deviation

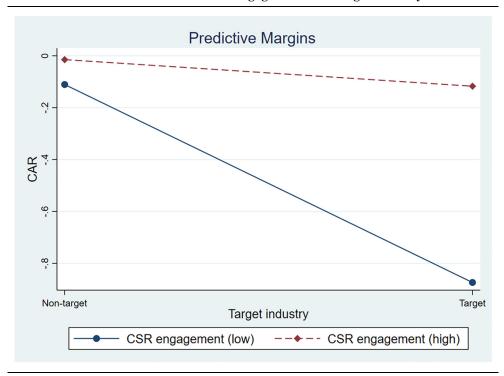


Figure 4
Interaction Between CSR Engagement and Target Industry

positive change in spatial proximity in the firm's geographic market will decrease its corporate CAR by 0.23. These results provide supportive evidence for our hypotheses 2a and 2b.

We next examine the moderating influences that corporate stakeholder relationships exert on the effects of spatial proximities in the product and geographic markets in the face of the US-China trade war in Models 5 through 10. We again find results similar to those for the spatial directions, with only state ownership having a significant buffering effect for firms with close spatial proximity in the product market ( $\beta = 0.02$ , SE = 0.01, p = 0.001) and with neither TMT connections nor CSR engagement having any mitigating effects for firms that conduct export business activities in the US market. These results also partially support hypothesis 3a. In Figure 5, we have plotted the interaction between state ownership and corporate relatedness to the target industry. The figure demonstrates that whereas a firm's relatedness to the target industry will reduce the firm's financial market returns in response to the trade war, firms with a high level of state ownership will experience fewer losses than their peers with a low level of state ownership will.

From the results listed in Tables 5 and 6, we also find supportive evidence for our hypothesis 4, which posits that stakeholder relationships will have a stronger positive mitigating effect on firms' value in the product market spatial direction than they will on firms' value in the geographic market proximity spatial direction, because the only significant moderating

(continued,

The Impact of Trade War on Cumulative Abnormal Return (March 22, 2018): Related Industry and Related to the United States Table 6

DV = CAR	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
1 Related industry		98 0-		-0.35	<i>C9</i> 0-	-0.35	-0 33	-0.35	-0 38	-0 36
. remed means		(0.004)		(0.005)	(0.000)	(0.005)	(0.013)	(0.005)	(0.003)	(0.005)
2. Related to the US			-0.14	-0.14	-0.14	_0.20	-0.14	-0.16	-0.14	-0.15
			(0.005)	(0.006)	(0.006)	(0.001)	(0.005)	(0.011)	(0.005)	(0.000)
3. State ownership	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.04
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
4. TMT connections	-0.27	-0.29	-0.25	-0.27	-0.30	-0.28	-0.14	-0.30	-0.27	-0.26
	(0.195)	(0.163)	(0.225)	(0.189)	(0.149)	(0.179)	(0.595)	(0.173)	(0.183)	(0.197)
5. CSR engagement	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
	(0.069)	(0.066)	(0.077)	(0.074)	(0.086)	(0.073)	(0.073)	(0.073)	(0.543)	(0.167)
1×3					0.02 (0.001)					
2×3						0.01				
						(0.144)				
1×4							-0.18			
							(0.426)			
2×4								0.02		
1×5								(75+.0)	0.01	
									(0.299)	
2×5										0.01 (0.476)
Firm age	80.0	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	(0.001)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Firm size	-0.90	-0.89	-0.88	-0.87	-0.88	-0.88	-0.87	-0.88	-0.88	-0.87
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROE	-2.57	-2.99	-2 58	-2 00	_3 13	20.05	2 00	00 0	2 01	3 00

Table 6 (continued)

DV = CAR	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
	(0.160)		(0.159)	(0.104)	(0.088)	(0.109)	(0.104)	(0.107)	(0.114)	(0.104)
Book-to-market ratio	0.83		0.76	0.65	0.70	89.0	0.64	99.0	0.67	99.0
	(0.236)	(0.309)	(0.276)	(0.356)	(0.322)	(0.339)	(0.362)	(0.351)	(0.345)	(0.354)
Product diversification	1.03		1.05	1.08	1.07	1.06	1.08	1.08	1.09	1.08
	(0.013)		(0.012)	(0.010)	(0.010)	(0.011)	(0.00)	(0.010)	(0.000)	(0.009)
Foreign ownership	-0.06		90.0-	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
	(0.009)		(0.014)	(0.013)	(0.012)	(0.016)	(0.012)	(0.013)	(0.013)	(0.013)
Industry concentration	2.91		2.84	3.00	2.95	3.01	3.01	3.00	3.00	3.00
	(0.013)		(0.016)	(0.011)	(0.011)	(0.010)	(0.010)	(0.011)	(0.011)	(0.011)
Geographic distance	-4.23		-4.20	-3.82	-3.94	-3.86	-3.78	-3.84	-3.80	-3.82
	(0.045)		(0.046)	(0.069)	(0.060)	(0.066)	(0.072)	(0.068)	(0.070)	(0.069)
Media coverage	-0.14		-0.13	-0.11	-0.09	-0.11	-0.11	-0.11	-0.11	-0.11
	(0.225)		(0.272)	(0.348)	(0.436)	(0.325)	(0.357)	(0.356)	(0.348)	(0.348)
Constant	57.18		56.58	53.30	54.70	53.82	52.85	53.51	53.20	53.34
	(0.004)		(0.005)	(0.008)	(0.006)	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)
Observations	2,157	(1	2,157	2,157	2,157	2,157	2,157	2,157	2,157	2,157
R-squared	990.0		0.067	0.071	0.077	0.072	0.071	0.071	0.072	0.071

Note: p-value in parentheses.

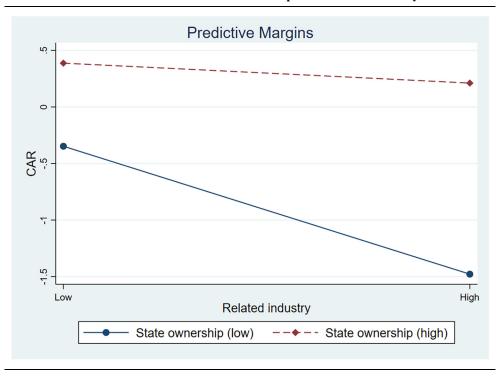


Figure 5
Interaction Between State Ownership and Related Industry

effects that we found were those from state ownership and CSR engagement moderating the value losses of firms in the target industries. The results, therefore, confirm our conjecture that the trade war leaves a stronger impact on geographic market space than it does on target market space, due to the war's political (country-specific) nature.

#### Additional Analyses

To build a more comprehensive understanding of how event spatial direction and proximity interact with corporate characteristics in shaping a firm's value, we follow event system theory to consider the event's developmental trend's role in altering those effects.

Events are dynamic and have evolutionary trajectories (Morgeson et al., 2015). As an event unfolds and interacts with circumstances and entities after its inception, its overall strength can change (become stronger or weaker) over time. Moreover, individuals and firms will improve their understanding of the event by collecting and interpreting the signals as it unfolds (Bansal, Kim, & Wood, 2018). In the context of the US-China trade war, the strengths of trading tariffs and restrictions continue escalating, and the list of target industries keeps expanding over different waves of attacks (Bown & Kolb, 2022). We expect that both the impact induced by firms' spatial directions and proximities to the trade war, and the mitigating effects of corporate stakeholder

relationships, will decay over time. To test this conjecture, we follow the timeline of the US-China trade war, select four subsequent rounds of tariff announcements—on April 4, June 19, July 11, and August 8, 2018—and report the results of those different rounds in Table 7. The subsequent analyses show that the effects of spatial directions do indeed exhibit a declining pattern. The negative effect of being in the target industries becomes insignificant in the second round of tariff announcement ( $\beta = 0.00$ , SE = 0.00, p = 0.832, in Model 3), and the effect of exporting to the United States lasts longer but ultimately turns insignificant in the fourth round ( $\beta = 0.00$ , SE = 0.01, p = 0.673, in Model 7). The results of spatial proximities show a similar declining pattern. Being in a related industry to the target industry becomes insignificant in the second round ( $\beta = 0.00$ , SE = 0.00, p = 0.341, in Model 4), but being in an industry related to exporting to the United States stands until the third round ( $\beta = 0.00$ , SE = 0.00, p = 0.420 in Model 6).

In addition to the analyses on multiple waves, we also examine the moderating role of media coverage on the events related to the trade war. The purpose of this additional analysis is to further investigate how event spatial direction and proximity may interact with audiences' attention on the event. The results find no significant interactions among direction, proximity, and media coverage, implying that event space may function independently of other event attributes.

#### Robustness Tests

To increase the robustness of our study, we conducted a series of additional analyses. First, we examined whether the trade war could impact annual corporate accounting and financial performance indicators, such as ROA and analysts' recommendations. Our tests found no significant effects from the event spatial directions and proximities, thus indicating that the effects of these event attributes only exist when the event occurs. Second, we reestimated our model using the hierarchical linear model (HLM) regressions to account for the nested nature of our data. The results of the HLM model are consistent with the classic event study method. Third, we used an alternative measure of CSR engagement—CSR type, which is the total number of CSR issue fields a firm covers in its annual CSR report—and found consistent results. Finally, we followed Zhang, Wang, and Zhou (2020)'s method to construct an industry-adjusted and field-adjusted CSR. The results of weighted CSR measures are consistent with our main analysis. The results of all robustness tests are available upon request.

#### **Conclusion and Discussion**

This study seeks to advance the existing knowledge of the impact of a major contemporary sociopolitical crisis on firm value. We focus our inquiry on a major bilateral political crisis that has been less studied in past management research—a trade war. To better understand the impact of a trade war, we draw on the insights of event system theory (Morgeson et al., 2015) and organizational studies on spillover (Shi et al., 2022) in an effort to unpack the event space in which a firm interacts in the event. We examined the effects of spatial directions in which firms engage with the trade war, as well as the spatial proximity between the firms and the trade war. Our study argues that an event can influence firms through the different spatial directions of an event and the proximity within each spatial direction determines the degree of impact that the event has on firms. Specifically, our empirical

(continued)

Table 7 The Time-Varying Effect of Trade War

	March 22, 2018	2, 2018	April 4, 2018	2018	June 19, 2018	, 2018	July 11, 2018	, 2018	August 8, 2018	3, 2018
DV = CAR	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Wodel 9	Model 10
Target industry	09:0-		0.00		0.00		0.00		0.00	
Export to the US	(0.022) $-2.62$		(0.823) -0.02		(0.287) -0.03		0.00		(0.640) -0.02	
Related industry	(0.004)	-0.35	(0.008)	0.00	(0.009)	0.00	(0.6/3)	00.00	(0.085)	0.00
Related to the US		(0.005) -0.14 (0.006)		(0.341) $-0.00$ $(0.024)$		(0.198) -0.00 (0.420)		(0.960) 0.00 (0.043)		(0.884) -0.00 (0.864)
State ownership	0.04	0.04	0.00	0.00	0.00	0.00	-0.00	-0.00	0.00	0.00
TMT connections	-0.28	-0.27	0.00	0.00	0.01	0.01	0.00	0.00	-0.00	-0.00
	(0.180)	(0.189)	(0.558)	(0.490)	(0.012)	(0.012)	(0.055)	(0.066)	(0.129)	(0.125)
CSR engagement	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	-0.00
	(0.088)	(0.074)	(0.820)	(0.807)	(0.502)	(0.480)	(0.479)	(0.446)	(0.786)	(0.813)
Firm age	0.07	0.07	-0.00	-0.00	-0.00	-0.00	0.00	0.00	-0.00	-0.00
	(0.003)	(0.003)	(0.797)	(0.798)	(0.005)	(0.005)	(0.719)	(0.745)	(0.062)	(0.061)
Firm size	-0.90	-0.87	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.000)	(0.000)	(0.000)	(0.001)	(0.860)	(0.987)	(0.654)	(0.582)	(0.222)	(0.257)
ROE	-2.83	-2.99	-0.02	-0.02	0.03	0.03	0.04	0.04	-0.07	-0.07
	(0.121)	(0.104)	(0.214)	(0.222)	(0.232)	(0.246)	(0.049)	(0.059)	(0.000)	(0.000)
Book-to-market ratio	0.73	0.65	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.02	0.02
	(0.301)	(0.356)	(0.205)	(0.180)	(0.358)	(0.337)	(0.059)	(0.059)	(0.002)	(0.002)
Product diversification	1.00	1.08	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	0.01	0.01
	(0.015)	(0.010)	(0.488)	(0.480)	(0.935)	(0.885)	(0.101)	(0.087)	(0.018)	(0.019)
Foreign ownership	90.0-	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.008)	(0.013)	(0.425)	(0.281)	(0.626)	(0.497)	(0.739)	(0.765)	(0.973)	(0.915)
Industry concentration	2.69	3.00	0.01	0.01	-0.03	-0.04	-0.01	-0.01	0.01	0.01

Table 7 (continued)

	March 2	2, 2018	April 4, 2018	, 2018	June 19	June 19, 2018	July 11	1, 2018	August 8, 2018	8, 2018
DV = CAR	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
	(0.024)	(0.011)	(0.407)	(0.492)	(0.011)	(0.007)		(0.264)	(0.472)	(0.511)
Geographic distance	-3.69	-3.82	-0.01	-0.01	-0.01	-0.01		-0.00	-0.03	-0.03
	(0.080)	(0.069)	(0.625)	(0.525)	(0.711)	(0.623)	(0.803)	(0.856)	(0.113)	(0.103)
Media coverage	-0.13	-0.11	-0.00	-0.00	0.00	0.00		-0.00	-0.00	-0.00
	(0.273)	(0.348)	(0.006)	(0.007)	(0.049)	(0.055)		(0.339)	(0.914)	(0.904)
Constant	52.70	53.30	0.17	0.19	0.00	0.11		0.05	0.27	0.28
	(0.000)	(0.008)	(0.265)	(0.225)	(0.659)	(0.595)		(0.743)	(0.081)	(0.076)
Observations	2,157	2,157	2,157	2,157	2,157	2,157	(1	2,157	2,157	2,157
R-squared	0.071	0.071	0.025	0.025	0.019	0.017		0.026	0.036	0.035

*Note: p*-value in parentheses.

findings support the arguments and show that the US-China trade war has left strong negative impacts on firms in two spatial directions: the product market and the geographic market. The spatial proximities in those two directions have further shaped the impacts of the trade war on firms. The closer a firm's spatial proximity is to the trade war in the product or geographic market direction, the more likely the firm will be affected by the event. Furthermore, we found that corporate stakeholder relationships—that is, state ownership and CSR engagement—can help, at varying levels, to mitigate the adverse effects of the trade war.

Our findings have important implications for future research. We advance the findings of extant studies regarding how events impact organizations. The primary focus of those studies is the physical distance from an organization to the location where an event occurs (Dai et al., 2017; Li et al., 2020a; Liu & Li, 2020). Drawing on event system theory (Morgeson et al., 2015), we contend that event space is multidimensional (Lawrence & Dover, 2015; Rodner, Roulet, Kerrigan, & Lehn, 2020), and that although physical distance makes intuitive sense when an event has a physical existence, such as military wars and terrorist attacks, space is not equivalent to location or place. Indeed, a trade war does not have a physical presence, and its event space is composed of a number of directions, such as a product market (Paruchuri & Misangyi, 2014; Zuckerman, 1999, 2000, 2004) or a geographic market (Fisman et al., 2014; Li et al., 2020a). These spatial directions are, in fact, constructed by people's cognitive classification system of markets and organizations. Recognizing the importance of the cognitive classification system is vital in organizational studies on events, and it opens research opportunities for scholars to identify novel paths (and directions) through which events and their effects can travel and reach organizations.

In summary, we show that these two spatial directions delineate the trade war's scope of influence, and the spatial proximity in each direction determines the degree of the trade war's impact on firms. Prior studies on spatial proximity have mainly focused on the association between events and their target organizations, and we borrow the insight of interorganizational spillover to further develop the concept of spatial proximity. Specifically, the literature on interorganizational spillover (Paruchuri & Misangyi, 2014; Shi et al., 2022) suggests that organizational relatedness—the associations among organizations resulting from overlapping social identities and market categories—can expose some firms to an event's impact via such effects as scandal and a negative reputation, even though those firms are not the target of the events. Our study builds on this insight of organizational relatedness and, in so doing, expands the traditional definition of spatial proximity to include peripheral organizations. In addition, we draw on some recent studies on dynamic industry classification (Hoberg & Phillips, 2016, 2017) to provide a novel method for calculating organizational relatedness through computer-aided content analysis.

Relatedly, our construction of spatial proximity also speaks to the categories literature (Hannan et al., 2019; Porac et al., 1999). This study provides evidence on how international crises contribute to the social construction of industry categories and categorizations by affecting firms that are in the same direction and proximity to an event. It extends the current research scope of categories literature—focusing on how industry rivals, the media, and the focal firm were creating industry categories—and discusses how social events can also create new organizational categories, providing a novel way for future research to further integrate event system theory and categories literature in studying corporate strategies.

Moreover, our investigation takes an integrative theory-building approach to further theorize the interactions between event spatial direction, proximity, and corporate characteristics. Although our findings confirm the value of stakeholder relationships—state ownership, TMT connections, and CSR engagement—in protecting firm value in a crisis, their effectiveness varies. Such relationships seem more effective in protecting the value of firms in target industries than those in target geographic markets, thus pointing to the location embeddedness of assets built through stakeholder relationships. Furthermore, state ownership has the strongest mitigating effect among the three types of stakeholder relationships, thus suggesting that institution-based political connections perform better than individual political connections. One possible reason behind these findings could relate to the transitional nature of the Chinese economy, in which the state has the ultimate control over resources, and the backup support by the state presents the most potent form of insurance against adverse events. The political nature of the trade war also makes it likely that the state will mobilize resources to support affected firms. That said, our findings further suggest that all three types of stakeholder relationships have a diminishing effect as the attacks of a trade war become stronger (e.g., Shiu & Yang, 2017).

This study also contributes to the organizational research on crisis management (Bundy et al., 2017; Williams, Gruber, Sutcliffe, Shepherd, & Zhao, 2017). Prior research in this regard has focused primarily on business-related crises, such as product quality, industrial pollution, consumer affairs, employee benefits, and so forth. In some recent studies, researchers have noticed that due to the increased connectivity in the global value chain, firms are increasingly exposed to significant challenges from the social, political, economic, and ecological systems that span national borders (Wenzel et al., 2020).

Relatedly, our study also makes contextual contributions by uncovering a trade war's key characteristics. Whereas trade wars have been occurring more frequently in recent decades (Mandel & Anderson, 2018) and are attracting increasing attention from financial analysts and research institutes, they are less thoroughly studied in the management literature, and we have very limited knowledge about how they may link to corporate strategies. Comparing trade wars with other major global crises, we identify three key characteristics: they are highly associated with political agendas, have specific company targets, and increase nationalism in domestic markets. Moreover, we further unpack these characteristics in the context of the current US-China trade war, thus providing some empirical evidence for scholars to use in forming a concrete understanding of this trade war.

The study also resonates with the literature on nonmarket stakeholder engagement (Hillman et al., 2004; Mellahi et al., 2015). Although some scholars have attempted to integrate the two major types of stakeholder engagements—that is, political connections and CSR engagement—into a comprehensive framework, we still have very limited knowledge about how these two engagements may differ in providing an insurance-like effect for firms in the face of a rapidly escalating sociopolitical crisis. By situating the study in the US-China trade war, we find that political ownership has a stronger effect than CSR because it can supplement firms with critical resources and offer favorable policy opportunities, thus leading to a strong political buffer for firms that are under the trade war's attacks. Moreover, by examining how the event's development trend interacts with stakeholder engagements, we also identify a similar but diminishing pattern in the effects of stakeholder engagements, as prior studies have suggested. We not only echo the findings of previous CSR studies, which show that

the effects of CSR engagement will disappear in the subsequent adverse events (Shiu & Yang, 2017; Vanhamme & Grobben, 2008), but we also provide novel evidence that the effects of political ownership will also fade in conjunction with repetitive adverse events.

In addition to the study's contributions to academic literature, our findings also have practical implications for corporate executives who are responsible for crisis management. Our results indicate that when a trade war occurs, financial market investors will rely on the information about a firm's stakeholder relationships to form their expectations of firm prospects. With today's increased connectivity in the global value chain, it is time for corporate leaders to consider how their corporate strategies can best cope with the challenges of emerging global sociopolitical issues. In particular, for firms in emerging markets where resources and opportunities are not fully distributed throughout the market systems, it is critical to make substantive investments in engaging stakeholders, because relational exchanges are prevailing and long-lasting in such countries (Haveman, Jia, Shi, & Wang, 2016).

When interpreting our current findings, it is important to consider the limitations associated with this study. First, whereas we try to extend the theories of events to corporate strategy research, this study considers just two basic attributes of an event. In event system theory and the ontological view of an event, a number of event attributes have already been suggested—such as event time, space, and strength—as have the underlying mechanisms through which organizations miss critical events. However, due to the limited available data, we were unable to identify and test the roles of other event attributes in regulating the effects of corporate strategies. We thus expect that in the future, researchers will use more sophisticated methods to collect additional information about event attributes and conduct more nuanced studies.

Second, although ideally a comprehensive investigation of the effectiveness of corporate strategies under trade war attacks should cover the entire package of corporate strategies, we have considered only the most common risk-managing stakeholder relationships. Although such a limitation is also observed in the previous studies that we cite (Hillman et al., 2004; Mellahi et al., 2015), future researchers are encouraged to develop a more comprehensive framework that can incorporate additional types of corporate strategies.

Third, our study focuses on a single side of the US-China trade war—Chinese firms—and explores how their corporate strategies protect firm value. We pay limited attention to the other side of the trade war—the US firms—and we have a limited understanding of how the trade war will impact US firms and how their responses will further influence the reactions of Chinese firms. We notice that some of the latest economic research studies have focused on the dyadic relationship between US firms and Chinese firms (e.g., Huang et al., 2019), and we encourage management scholars to conduct more complete studies that compare the strategies of the firms in both countries involved in a trade war.

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#### Notes

 $1. \quad https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2018/march/section-301-fact-sheet fact-sheets/2018/march/section-301-fact-sheet fact-sheets/2018/march/section-301-fact-sheet fact-sheets/2018/march/section-301-fact-sheet fact-sheet fact-sheets/2018/march/section-301-fact-sheet fact-sheet fact-s$ 

- $2. \quad https://trumpwhitehouse.archives.gov/briefings-statements/president-donald-j-trump-standing-american-innovation/$
- 3. In addition to CSR project numbers, we used CSR project types and industry-weighted and type-weighted CSR project numbers as robustness tests. The results are consistent with our main analysis.
- 4. We also examined the interactions between the two spatial directions and found no significant result, thus suggesting that these two directions' effects are independent.

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