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Alfredo Jiménez
Kedge Business School

Nathaniel C. Lupton
San Jose State University, nathaniel.lupton@sjsu.edu

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Terrorism hazard and infrastructure projects: The moderating role of home experience and institutions

Alfredo Jiménez [a], Nathaniel C. Lupton [b,*]

[a] KEDGE Business School, 680 Cours de la Libération, 33405 Talence, France
[b] Lucas College of Business, San Jose State University, 1 Washington Sq., San Jose, CA 95192, USA

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ABSTRACT

This paper analyzes the impact of terrorism hazard on the performance of private participation infrastructure projects. Applying transaction cost theory, we hypothesize that terrorism hazard has a negative relationship with infrastructure project completion, and that host government accountability and investor experience with terrorism hazard have opposing impacts on this relationship. Host government accountability, we argue, produces higher indirect costs of managing terrorism hazard, which reduces investor confidence, and reinforces the negative relationship between terrorism hazard and the probability of satisfactory project completion. Conversely, investor's experience with terrorism hazard increases investor confidence and hence partially mitigates the negative consequences of terrorism hazard which hamper project completion. Hence, the impact of terrorism is weakened for projects led by firms from higher terrorism hazard countries. We find support for our hypotheses using a sample of 5,083 projects in 135 countries from 2002 to 2017.

1. Introduction

Acts of terrorism pose significant threats to people and their property all over the world (Czinkota, Knight, Liesch, & Steen, 2010). These acts of violence and destruction, while rare, are highly unpredictable, ever-present threats in developing and developed countries alike (Dau, Moore, & Abrahms, 2018; Henisz, Mansfield, & Glinow, 2010). Government responses to terrorism, in the form of deterrence and enhanced security measures, create additional burdens on the citizens, international travelers, distribution channels, and institutions of countries that have experienced terrorist activities (Abadie & Dermisi, 2008; Chasdi, 2017a). Terrorism has substantially impacted both business interests and decisions in Latin America, Western Europe, the Middle East, and North Africa, especially since the 1970s (Newcomer & Adkins, 1980). Following high-profile events, like the attacks on the World Trade Center in New York, the impacts of terrorism have become an apparent fact of life in North America as well. Attacks on infrastructure, in particular, are a major concern of the state, necessitating both private and government intervention (Lian & Haimes, 2006; Stewart, 2010).

International business scholars have taken an increasing interest in the impact of violent conflict on the level of investment and performance of multinational firms (Driffield, Jones, & Crotty, 2013; Li & Vashchilko, 2010; Oetzel & Getz, 2012; Oh & Oetzel, 2011, 2017). Terrorism hazard, in particular, increases business insolvency in both developing and fragile states, alike (Dai, Eden, & Beamish, 2017; Tingbani, Okafor, Tauringana, & Zalata, 2019). Terrorism also produces non-intuitive business behaviors, such as increasing acts of corporate social responsibility (Abrahms, Dau, & Moore, 2019) and shunning investment in urban centers, even in cities that have not experienced a major terrorist attack (Abadie & Dermisi, 2008). Researchers of public policy and the built environment have long sought to identify successful strategies for assessing risk and mitigating the occurrence and destructive outcomes of terrorist attacks (Greenbaum, Dugan, & Lafree, 2007; Matsika, O'Neill, Battista, Khosravi, Laporte, & Munoz, 2016; Thöns & Stewart, 2020). Critical infrastructure is identified as both a primary target of terrorist attacks, through which the effects of the attack are felt widely by the populace, as well as a potential tool to be used in terrorist attacks, as was the case in the attacks on the World Trade Center in 2011 (Clarke, 2004; Zoli, Steinberg, Grabowski, & Hermann, 2018). Critical infrastructure is also essential to a wide range of business operations, from transporting goods and people to conducting financial transactions electronically. Motivated by prior research in international business, public policy and the built environment, we thus turn our attention to the impact of terrorism hazard on private investment in infrastructure

* Corresponding author.
E-mail addresses: alfredo.jimenez@kedgebs.com (A. Jiménez), Nathaniel.Lupton@sjsu.edu (N.C. Lupton).

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projects in developing countries. The goal of this paper is to assess the extent to which terrorism impacts investments abroad, in the context of complex, private participation infrastructure (PPI) projects. In doing so, we aim to provide new insights into how terrorism hazard impacts international business decisions, in the context of partnering for PPI project construction (Liu & Li, 2020).

PPI projects are infrastructure developments in which all or a portion of the capital is provided by private investors. Traditionally, PPI projects have been limited by national security concerns and consequent perceived erosion of sovereignty (Henisz, Zelner, & Guillén, 2005). However, as governments of developing economies increasingly recognize the critical role of infrastructure in economic development, and often find it difficult to raise capital through fiscal policy, they seek to accelerate development through the inclusion of private capital and ownership (Jiang, Peng, Yang, & Mutlu, 2015; Ramamurti & Doh, 2004). As a result, the volume of capital contributed to these projects has increased tenfold between 1994 and 2013, from $41.3 billion to $415.0 billion, and is forecasted to reach more than $90 trillion in the period 2015–2030 (Bielenberg, Kerlin, Oppenheim, & Roberts, 2016; Dorobantu, Lindner, & Müllner, 2020; Esty, 1999).

PPIs are a concession-oriented type of public–private partnership (i.e. the private sector is involved and operates as a contractor) (Hodge & Greve, 2007; Klijn, Edelenbos, Kort, & Van Twist, 2008) in which a financially and organizationally independent entity is created temporarily by a consortium of companies, called sponsors, who collaborate closely to ensure the successful execution and completion of the project (Eriksson, Larsson, & Pesämaa, 2017). Designed as stand-alone project companies with no previous history or assets, these entities are typically funded through non-recourse loans which are secured only by the future cash flows generated by the infrastructure (Dorobantu et al., 2020). The ability of sponsors to tolerate various transaction costs has a critical role on the actual cost and viability of the projects. Despite being temporary, these projects may last years or decades, especially when the infrastructure is yet to be built. Given their cost, duration, and their strategic and long-lasting impact on the countrýs development, private participation infrastructure projects are often politically important though at times also controversial (Eriksson et al., 2017).

Governments that are more accountable to their citizens are typically more responsive to the threats posed by terrorism, and the policies implemented by the state tend to disrupt the orderly movement of people and materials within an infrastructure system (Spich & Grosse, 2005). We therefore predict that government accountability in the PPI host country strengthens the negative relationship between terrorism hazard and project success, as more responsive governments are likely to mitigate the perceptual hazards of terrorism through heightened security measures. We also examine the potential mitigating effect of investors' experience with terrorism hazard in their home country. We thus address the following research questions: (1) to what extent does terrorism hazard impact project completion? and, (2) to what extent is the hazard posed by terrorism on project completion influenced by the level of voice and accountability of the host country and experience with terrorism hazard in the investors' home country?

Applying transaction cost theory (TCT: Henisz et al., 2010; Williamson, 1981), we argue that terrorism hazard is negatively associated with the performance of private participation projects because terrorism produces both direct and indirect consequences that increase the risk of cost overruns. One of the key insight of TCT is that organizational actors choose the most efficient structure for transactions, depending on their relative degree of uncertainty, frequency and, especially, asset specificity (Williamson, 1985). Given that PPIs are idiosyncratic to the needs of the country that has opened them to private bidding, and that the organization for fulfilling these contracts is temporary in nature, their organizational structure can be conceptualized as a nexus of asset-specific, incomplete contracts between government, transnational organizations (e.g. the World Bank, International Monetary Fund, etc.), and private construction enterprises. Similar to the manner in which cultural and linguistic differences between contracting partners increase uncertainty and information asymmetries, thereby impacting organizational performance, (Brouthers & Brouthers, 2001; Cuypers, Gokhan, & Hennart, 2015), we argue that terrorism hazard increases transaction costs within this nexus of contracts.

We also examine two mitigating factors impacting the degree to which terrorism hazard impacts project success. We argue for a strengthening of the negative relationship when accountability of the host country government is higher, as accountability leads to higher transaction costs for PPI via enhanced supply chain security measures (Spich & Grosse, 2005). Also, based on the finding that firm-specific assets can reduce transaction costs, (Buckley, 1988; Buckley, Chen, Clegg, & Voss, 2018; Feinberg & Gupta, 2009), we predict that when investors have more experience dealing with terrorism hazard, they are less averse to the risks it poses and more effective in dealing with them, which increases the firms' commitment to the project and hence the likelihood of its successful completion. This prediction is aligned with extensions to TCT which show that psychological framing of risks impacts aversion to exchange in incomplete contracts, thus raising transaction costs (Weber, Mayer, & Macher, 2011).

To answer our research questions, we analyze a sample of 5,083 projects in 135 developing economy countries from 2002 to 2017 and find robust empirical support to validate our hypotheses. In responding to these research questions, our paper makes the following contributions. First, we contribute to the body of literature devoted to private participation projects (Doh & Ramamurti, 2003; Jiménez, Jiang, Petersen, & Gammelgaard, 2019; Ramamurti & Doh, 2004) by showing empirical evidence that terrorism hazard has a negative, relationship with the likelihood of PPI project completion. We also find that projects undertaken in countries with more responsive governments (those with stronger voice and accountability) tend to face increased hazard, suggesting that government response to terrorism may unintentionally impede infrastructure development. Finally, we find that experiential learning (Dai, Eden, & Beamish, 2013; Getz & Oetzel, 2009) from home country terrorism levels is partially transferrable to projects in countries where terrorism poses a similar threat.

Our study also contributes to existing transaction cost analyses of exchange contexts comprised of a mixture of market and non-market transactions (Buckley & Boddewyn, 2015). Evidence from prior research on investment location choice suggests that the costs related to terrorism do not deter MNE investment (Oh & Oetzel, 2017). We argue that this is because the costs are not easily estimated *a priori*, whereas in the case of PPI these costs are gradually realized as projects proceed through the building and operating phases. Hence, the probability of successfully completing projects undertaken in countries with higher terrorist activity will be reduced due to higher than expected costs and increased investor anxiety.

2. Theory and hypotheses

2.1. Terrorism hazard and infrastructure development project completion

Transaction cost theory (TCT) provides a valuable lens through which to examine the impact of various types of hazards on investment by profit-seeking organizations (Henisz, 2002; Williamson, 1981). Transaction costs, comprised of contract negotiation, monitoring, and enforcement costs, are incurred when searching for, engaging with, and monitoring customer and supplier relationships (Hennart, 1991). These costs exist due to the behavioral assumptions of bounded rationality, opportunism, and bounded reliability, where organizational performance is dependent upon properly aligning governance mechanisms with the characteristics of the transaction (Williamson, 1981). For multinational business, transaction costs vary from country to country depending on the qualities of property rights, macro-economic policy, and cultural differences (Cuypers et al., 2015; Cuypers, 2021). TCT, originally applied to the "make vs. buy" decision, is also fruitfully

applied to the study of organizational forms that are prevalent in PPI, including strategic alliances, supply chains, and public–private partnerships (Cuypers, 2021). PPIs, being large-scale construction projects, designed to idiosyncratic specifications (i.e. possessing asset-specificity), involve several entities such as contractors, suppliers of material, equipment, engineering services, and so forth. This diverse network of actors, while working together over a period spanning many years and even decades, are nonetheless temporary in nature, such that governance mechanisms are inevitably a mix of market and hierarchy. The cost of conducting these transactions tends to increase in the presence of uncertainty, incomplete information, and specificity of the product or service created (Ramamurti & Doh, 2004; Williamson, 1985). Terrorism hazard adds an additional element of uncertainty, and is costly to mitigate (Chasdi, 2017b; Czinkota et al., 2010).

Terrorist activity is intermittent, isolated, and driven by ideology, and usually targets non-combatants (Wernick, 2006). The frequency and severity of prior terrorist incidents are therefore imprecise predictors of future incidents. Building on TCT logic, and the current empirical evidence, terrorism hazard is likely to increase transaction costs, as an unavoidable consequence of regulatory responses (Chasdi, 2017a; Czinkota et al., 2010). In this study, we focus on the extent to which terrorism hazard impacts the performance of private participation projects, dependent upon not only the absolute hazard posed by terrorism in the host country, but also the hazard relative to that of the investors' home country. Performance, in this case, is not related to the profitability or subsequent survival of a venture, but to the successful completion of the project, which can be threatened when investors choose to withdraw their support in the face of changing risk and/or their tolerance for it. Hence, given the boundaries for rational decision-making specific to PPI investment (i.e. the inability of multinational investors to select an ideal location for a specific project, and to infer future terrorist events from prior events), the costs of the project cannot be accurately predicted prior to investment, and tend to reveal themselves gradually through supply chain inefficiencies and added security costs.

Terrorism has both direct and indirect impacts on firms (Tingbani et al., 2019). The direct effects, including loss of life and property damage, are felt acutely at the site of an attack and these attacks can also have lasting impacts on the systems and psyche of the societies in which they occur (Chasdi, 2017a). Despite being intermittent and relatively rare, the profound and lasting impact of terrorism motivates firms to take actions and incur additional expenses to prevent or minimize the direct effects of a terrorist attack. These indirect effects of terrorism are the primary impacts of terrorism on the daily operations of firms (Czinkota, Knight, & Liesch, 2004). Costs are derived from the investments in enhanced security, contract monitoring, and negotiation, information asymmetry arising from the myriad government policies designed to reduce the risks of terrorist attacks on the built environment, and supply chain inefficiencies resulting from added oversight and reduced mobility of resources, especially across borders (Czinkota et al., 2010; Lian & Haimes, 2006; Matsika et al., 2016).

Building resiliency into a system is costly (O'Rourke, 2007; Stewart, 2010), as are construction methods used to maintain the structural integrity of buildings in the presence of damaging forces. Heightened security and increased insurance premiums impede the flow of both people and materials, in turn reducing transaction efficiency (Powers & Choi, 2012). Like the enhanced screening procedures of the Transportation Safety Administration introduced following terrorist attacks in the US, which had a negative impact on air travel in the days following the 9/11 attacks and can still be felt to a lesser extent today, new inefficiencies and costs are created by incremental changes to existing, complex systems (Spich & Grosse, 2005). Both the enhanced security and the improvements made to increase the flow of traffic are costly, and these costs are borne by travelers, airlines, airports, and/or governments. These costs also reduce the mobility of financial assets and the materials required in abundance for infrastructure projects, especially when crossing borders.

PPI projects are thus an ideal empirical setting for testing the impact of terrorism hazard on organizational performance. Given that investors' interests are secyred by future cash flows, the financing of these projects is very sensitive to host country hazard characteristics (Esty, 1999; Esty & Megginson, 2003; Hainz & Kleimeier, 2012; Byoun & Xu, 2014; Müllner, 2017; Dorobantu & Müllner, 2019). PPIs are usually very large investments and require the deployment of many physical assets that are subject to the potentially damaging effects of terrorist attacks. Likewise, foreign ownership of these projects creates a particularly salient symbol of colonialism making them salient targets for left-wing terrorism (Chasdi, 2017a). Finally, infrastructure projects tend to be idiosyncratic with respect to their design and hence heterogeneous with respect to the types and quantities of materials and knowledge required to complete them successfully. Hence, the effects of supply chain disruption, created by changes in importation and transportation policies in response to terrorism threats, are likely to have a particularly acute impact.

Based on the transaction cost consequences of terrorism hazard described above, we therefore propose the following hypothesis:

H1: Host country terrorism hazard is negatively associated with the probability of completion of a private participation project.

2.2. Government accountability and terrorism hazard

In addition to altering the relevance of firm-specific assets, differences in the governance environment from country to country can also influence the magnitude of transaction costs (Chi, 2015; Hennart, 2009). Terrorism creates an environment in which conducting transactions is less efficient, due to government interventions aimed at enhancing security and thwarting attacks (Czinkota et al., 2004; Spich & Grosse, 2005). Countries with stronger accountability to their citizens typically respond more quickly and forcefully to crises, implementing disaster-mitigating policies that disrupt the movement of people, money and materials within an orderly supply chain (Spich & Grosse, 2005). Governments that are more accountable are also more responsive to the demands of important stakeholders, and their commitments are considered more credible (Delios & Henisz, 2003). Research has consistently shown that MNEs are more likely to choose locations in which governments have demonstrated accountability (Daude & Stein, 2007) and consequently foreign subsidiaries tend to survive longer in these locations. However, we argue that accountability also has a downside for conducting transactions efficiently in the context of terrorism hazard.

The ability of citizens to express their concerns about the effective control and prevention of terrorist activity, along with the expectation that national governments will act within the best interests of the citizens, is a crucial feedback mechanism for the implementation of policies and practices aimed at curbing terrorist violence. In countries where accountability is higher, disasters tend to result in fewer deaths and shorter disruptions (Gassebner, Keck, & Teh, 2010). Overt displays of heightened security, such as the presence of heavily armed police in the transportation network of New York city in the years following the attacks on the World Trade Center, are intended to both deter would-be attackers and instill confidence among the multitude of travelers who contribute to the local economy (Spich & Grosse, 2005). All of these responses add extra bureaucratic obstacles to the flow of goods and people, creating additional costs which are gradually revealed during the execution phase of large infrastructure projects.

In summary, a country's accountability increases its government's motivation to respond to terrorist threats, thereby improving public trust. The associated costs of reassuring the public can, in turn, aggravate the relationship between terrorism hazard and the completion of PPI projects.

H2: The negative relationship between a country's terrorism hazard and the probability of completion of a private participation project in that country is stronger in host countries with higher levels of voice and accountability.

2.3. Transferability of terrorism hazard experience

TCT posits that firms engage in investments abroad where conducting arms-length (i.e. market-based) transactions in intermediate product markets is more expensive (Buckley & Casson, 1976). Following extensions to the original TCT (Hennart, 2009; Rugman, 1981) we consider the impact of the interaction between location characteristics and firm-specific assets driving ownership structure, strategy and, ultimately, performance. Following research in international business, in particular, (Li & Vashchilko, 2010; Oetzel & Getz, 2012; Oh & Oetzel, 2017), we argue that experience with terrorism hazard in the investor's home country mitigates the negative impact of terrorism hazard in the host country on project completion. That is, experience working within a supply chain and institutional system impacted by policy response to terrorism (i.e. enhanced screening of people, financial and material assets, added security, disclosure, and information gathering requirements) is a firm-specific asset that is transferrable to locations with similar hazard profiles.

TCT also stresses the contextual relevance of firm-specific assets for reducing transaction costs, with an emphasis on moderating influences of location characteristics (Erramilli, Agarwal, & Kim, 1997; Hennart, 2009; Rugman, 1981). That is, the extent to which a firm-specific asset is fungible depends on its relevance and strength compared with host country domestic competition. Therefore, while terrorism hazard is expected to add costs to most projects, we argue that these costs will transfer at different rates amongst projects. Investors from countries with high levels of terrorism hazard likely have experience dealing with heightened security measures and policies that impact the efficiency of supply chains, distribution channels, and overall cost of construction (Driffield et al., 2013).

Prior research has found that a firm's country-specific experience managing subsidiaries in violence-prone regions decreases the impact of violence on subsequent investments, but that this experience may not always be transferrable to other countries. Other things being equal, firms will tend to avoid high-conflict regions, and experience operating in a country with high conflict neither improves nor reduces the odds of investing in another high-conflict country (Oh & Oetzel, 2017). While this suggests that foreign investors may not perceive their experience with conflict as an asset to be exploited, it does not necessarily mean that it cannot provide a benefit after an investment in a similarly high-risk context is made. Furthermore, given the location-bound nature of PPI, investors have substantially fewer options when choosing locations and hence must be more involved in managing hazards where an opportunity arises (Jiang et al., 2015). Finally, terrorism is sporadic, and its effects are more commonly felt by business indirectly (Abadie & Dermisi, 2008). These effects can create an "imprinting" effect on business organizations, which impacts how firms react to future opportunities and hazards in different institutional environments (Konara & Shirodkar, 2018; Stinchcombe, 1965). Therefore, we argue not only that the costs arising from heightened terrorism hazard (insurance, using distribution channels, security, etc.) can be better anticipated by more experienced investors, but also that experience with heightened terrorism hazard reduces investors' anxiety. Hence, experienced investors will tend to exhibit more patience in the face of increased terrorism hazard, leading to a higher probability that they will remain committed to the project through completion.

Hence, we predict that projects funded by investors from countries with higher terrorism hazard will be more likely to succeed.

H3: The relationship between a host country's terrorism hazard and the probability of completion of a private participation project in that country is weaker when the level of terrorism hazard of the investor's home country is high.

3. Method

3.1. Sample

Our sample consists of private participation projects from the World Bank's Private Participation in Infrastructure (PPI) Project Database, a source commonly used in the literature (Fleta-Asin, Munoz, & Rosell-Martinez, 2019; Jiang et al., 2015; Jiménez, Salvaj, & Lee, 2018; Wang, Liu, Xiong, & Zhu, 2019). It is comprised of 5,875 private participation projects, of which the main sponsor is a foreign investor, between 2002 and 2013, in 135 developing economy countries for which data on terrorism hazard is available. Accounting for missing data on variables of interest, our final sample size is 5,083. Host countries included in the sample are shown in Table 1.

3.2. Variables

3.2.1. Dependent variable

A PPI project is deemed complete when its investors fulfill the capitalization requirements, develop the facility, and provide the services outlined in a legally-binding contract (Jiang et al., 2015). When the concession period is terminated prematurely by either the government or other sponsors, then the project is deemed to be incomplete.

The World Bank's PPI Project Database contains five categories of

Table 1
Host countries included in sample of PPI projects.

Afghanistan	Côte d'Ivoire	Lebanon	Senegal
Albania	Djibouti	Lesotho	Seychelles
Algeria	Dominica	Liberia	Sierra Leone
American Samoa	Dominican Republic	Macedonia, FYR	Solomon Islands
Angola	Ecuador	Madagascar	Somalia
Antigua and Barbuda	Egypt, Arab Rep.	Malawi	South Africa
Argentina	El Salvador	Malaysia	South Sudan
Armenia	Eritrea	Maldives	Sri Lanka
Azerbaijan	Ethiopia	Mali	St. Lucia
Bangladesh	Fiji	Mauritania	St. Vincent and Grenadines
Belarus	Gabon	Mauritius	Sudan
Belize	Gambia, The	Mexico	Suriname
Benin	Georgia	Moldova	Swaziland
Bhutan	Ghana	Mongolia	Syrian Arab Republic
Bolivia	Grenada	Montenegro	Tajikistan
Bosnia and Herzegovina	Guatemala	Morocco	Tanzania
Botswana	Guinea	Mozambique	Thailand
Brazil	Guinea-Bissau	Myanmar	Timor-Leste
Bulgaria	Guyana, CR	Namibia	Togo
Burkina Faso	Haiti	Nepal	Tonga
Burundi	Honduras	Nicaragua	Tunisia
Cambodia	India	Niger	Turkey
Cameroon	Indonesia	Nigeria	Turkmenistan
Cape Verde	Iran, Islamic Rep.	Pakistan	Uganda
Central African Republic	Iraq	Panama	Ukraine
Chad	Jamaica	Papua New Guinea	Uzbekistan
China	Jordan	Paraguay	Vanuatu
Colombia	Kazakhstan	Peru	Venezuela, RB
Comoros	Kenya	Philippines	Vietnam
Congo, Dem. Rep.	Korea, Dem. People's Rep	Romania	West Bank and Gaza
Congo, Rep.	Kosovo	Russian Federation	Yemen, Rep.
Costa Rica	Kyrgyz Republic	Rwanda	Zambia
Cuba	Lao PDR	Samoa	Zimbabwe

project status. Among these statuses are "operational", when the project is in service; "merged", when the project has been combined with another active project; and "concluded", when the contract period has expired. Each of these three statuses is considered complete, as each indicates that the project is either functional, concluded, or actively working towards the expected outcome. A project status of "cancelled" or "distressed" indicates that the project has either been abandoned or is in arbitration. The private sector investor(s) may have exited the project in any of the following ways: selling or transferring the economic interest back to the government before fulfilling the contract terms; removing all personnel from the project; or ceasing operation, service provision, or construction for 15 percent or more of the license or concession period, following the revocation of the license or repudiation of the contract. We thus consider either of these two statuses as failures, and code a binary variable accordingly (1 = completed).

3.2.2. Independent variable

To measure host and home countries' terrorism hazard, we use the Global Terrorism Database (GTD, 2017), which has been previously used in the literature (Tingbani et al., 2019). Terrorism hazard is measured by the number of terrorist incidents within a country. Terrorist incidents include threat and violence, with social, religious, political, and economic motives (Greenbaum et al., 2007). We lagged all the explanatory variables included in the model (independent, moderators, and controls) by one year.

3.2.3. Moderating variables

We propose in Hypothesis 2 that the relationship between terrorism hazard in the host country and private participation projects will be moderated by the level of voice and accountability in the host country. We obtain this variable from the Worldwide Governance Indicators database (Kaufmann, Kraay, & Mastruzzi, 2006; Kaufmann, Kraay, & Mastruzzi, 2008). Next, we propose in Hypothesis 3 that the relationship between terrorism hazard in the host country and private participation projects will be moderated by the level of terrorism hazard in the home country. We again use the GTD to obtain data on the level of terrorism hazard in the home countries of the main investor of the project, i.e. the one holding the largest share of ownership.

3.2.4. Control variables

Our models include country fixed effects, to account for potential unobserved heterogeneity between the 135 host countries in our sample. We also include project-level control variables in the model that could have a potential impact on project performance. First, we include the age of the project, and the delay between the project closure and the project commitment. We also include dummy variables to control for projects that include the host government as a sponsor, and for those that are greenfield investments. Finally, we include dummy variables for the sectors identified in the PPI dataset (energy, telecommunications, water sewerage, and transport). Telecommunications is used as the reference category, so a variable was not generated for this sector. To control for unobserved country-level effects, we include country indicators (i.e. dummy variables). Table 2 provides the definition and operationalization of the variables included in the model

3.3. Model estimation

To study the impact of terrorism hazard on the performance of private participation projects we use binary logistic regression models. Regarding the moderation hypotheses, Haans, Pieters, and He (2016) have recently demonstrated that mean-centering the interacted variables is not necessary. However, mean-centering and standardizing improve interpretability of the coefficients and plotting interactions (Osborne, 2015) Hence we report in the main models the results when continuous variables all mean-centered.

Table 2
Description of key variables.

Variable name	Description
Completion	*1 if project status is "operational", "merged", or "concluded", 0 if project status is "cancelled" or "distressed" (PPI Project Database)*
Sector (energy, telecommunications, transport, water sewerage)	*Set of four dummy variables representing sectors. 1 if project is in the sector, 0 otherwise (PPI Project Database)*
Total investment	*Log of the total amount of investment in the project (PPI Project Database)*
Age	*Time lapse between the year in which the project took place and nowadays (PPI Project Database)*
Delay	*Delay between project closure and the project commitment (PPI Project Database)*
Greenfield	*1 if project is greenfield, 0 otherwise (PPI Project Database)*
Host government ownership	*1 if project consortium includes the host government as an owner, 0 otherwise (PPI Project Database)*
Host terrorism hazard	*Number of terrorist incidents within the host country in the previous year (Global Terrorism Database)*
Voice and accountability	*Index of perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media (Worldwide Governance Indicators)*
Home terrorism hazard	*Number of terrorist incidents within the home country in the previous year (Global Terrorism Database)*

4. Results

We report the descriptive statistics and correlations of the variables in the model in Table 3. All correlation coefficients are not high, and all individual VIFs are lower than 10 as advised by (Studenmund & Cassidy, 1992), except that related to voice. Yet, collinearity does not seem to be a serious concern as the correlation coefficients of voice with all other variables are very low (<0.3). Besides, following Kalnins (2018), we checked that the signs and magnitudes of the rest of the variables in the models are consistent when voice is excluded. Finally, as noted by Lindner, Puck, and Verbeke (2019) "… multicollinearity in a regression model is likely to do no worse than inflate standard errors which, although not optimal, will do no more than making results more conservative" (p. 9) as it does not bias the coefficient estimates.

We present the results of sequential logistic regression analyses hierarchically in Table 4. Model 1 is the base model including only the control variables. Model 2 adds the level of terrorism hazard in the host country to test Hypothesis 1. Model 3 includes the level of voice and accountability of the host country and its interaction with the level of host country terrorism hazard to test Hypothesis 2. Model 4 includes the home country's level of terrorism hazard and its interaction with the level of host country terrorism hazard to test Hypothesis 3.

Hypothesis 1 predicts a negative relationship between terrorism hazard of the country in which a PPI project is located and project completion. The rationale was that lower levels of terrorism hazard would have minimal impact on project completion, but higher levels of hazards would begin to substantially impact policies that would reduce factor mobility, in turn reducing the efficiency of the supply chain. The results show that the coefficient terrorism hazard in the host country is negative and significant (β = -0.825, $p < 0.001$, *s.e.* = 0.228). Since logistic regression produces a non-linear estimate of the relationship between terrorism hazard and the probability of PPI project success (i.e. by estimating the linear relationship between the log of the odds ratio of success and the independent variable; in this case, terrorism hazard), we provide the plot depicted in Fig. 1.

Table 3
Descriptive statistics and correlation matrix.

	Mean	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Completion	0.970	(0.170)												
2. Telecommunication	0.122	−0.080	(0.327)											
3. Energy	0.547	0.066	−0.411	(0.498)										
4. Transport	0.201	−0.031	−0.187	−0.552	(0.401)									
5. Water sewerage	0.130	0.016	−0.143	−0.424	−0.192	(0.337)								
6. Total investment	474.0	−0.010	0.268	−0.117	−0.007	−0.080	(1.727)							
7. Age	7.854	−0.103	−0.068	−0.127	0.087	0.151	−0.110	(4.049)						
8. Delay	2.211	−0.079	0.637	−0.235	−0.114	−0.138	0.351	−0.116	(4.971)					
9. Greenfield	0.685	0.110	0.097	0.383	−0.401	−0.176	−0.070	−0.139	−0.100	(0.464)				
10. Host government ownership	0.204	−0.026	0.065	−0.009	−0.063	0.025	0.076	0.208	0.165	−0.129	(0.403)			
11. Host terrorism hazard	90.80	−0.035	−0.011	−0.051	0.190	−0.140	0.022	−0.096	−0.034	−0.077	−0.126	(207.4)		
12. Voice and accountability	−0.337	−0.038	−0.043	0.084	0.175	−0.292	0.064	−0.114	0.054	−0.107	−0.177	0.232	(0.822)	
13. Home terrorism hazard	135.34	0.002	0.005	−0.022	0.156	−0.156	0.024	−0.210	−0.040	−0.042	−0.138	0.748	0.205	(279.5)

Standard deviation on the diagonal, in brackets.

Table 4
Logit regression result.

VARIABLES	(1) Base model	(2) Host terrorism hazard	(3) Host terrorism hazard * Voice	(4) Host terrorism hazard * Home terrorism hazard
Controls				
Sector = Energy	0.795**	0.782**	0.812**	0.810**
	(0.289)	(0.295)	(0.298)	(0.299)
Sector = Transport	1.06**	1.014**	1.022**	0.990**
	(0.374)	(0.382)	(0.385)	(0.385)
Sector = Water sewerage	0.766	0.766	0.797	0.780 (0.678)
	(0.433)	(0.439)	(0.443)	
Total investment	0.00	0.000	0.000	0.000
	(0.00005)	(0.00005)	(0.00005)	(0.00005)
Age	−0.657***	−0.880***	−0.931***	−0.921***
	(0.099)	(0.115)	(0.118)	(0.120)
Delay	−0.089	−0.150	−0.177	−0.172
	(0.104)	(0.107)	(0.108)	(0.108)
Greenfield	1.228***	1.196***	1.211***	1.210***
	(0.232)	(0.234)	(0.237)	(0.238)
Host government ownership	−0.121	−0.136	−0.093	−0.098
	(0.226)	(0.232)	(0.237)	(0.238)
Predictors				
Host terrorism hazard (H1)		−0.931***	−0.599**	−0.825***
		(0.220)	(0.218)	(0.228)
Voice and accountability			−0.320	−0.538
			(0.665)	(0.678)
Home terrorism hazard				0.019 (0.208)
Interactions				
Host terrorism hazard * Voice (H2)			−0.819**	−1.389**
			(0.283)	(0.401)
Host terrorism hazard * Home terrorism hazard (H3)				0.285*
				(0.144)
Constant	−0.247	−0.660	−0.558	−0.580
	(0.928)	(0.957)	(0.978)	(0.996)
Log likelihood	−523.75	−559.61	−549.71	−547.32
Pseudo R2	0.249	0.263	0.269	0.272
Observations	5,110	5,110	5,083	5,083

Notes: Country indicators included in all models. Base category for *sector* is ICT.
*p < 0.05, **p < 0.01, ***p < 0.001.

Fig. 1. Probability of project success and terrorism hazard. Notes: Terrorism hazard is normalized (unit = 1 standard deviation), bands represent 95% confidence intervals for predicted values of probability of success.

Model 3 includes the interaction between the host country's level of terrorism hazard and the level of voice and accountability. Hypothesis 2 proposes that the negative relationship between terrorism hazard in the host country and project performance will be strengthened when the level of voice and accountability in the host country is higher. The interaction term between terrorism hazard in the host country and the level of voice and accountability is negative and statistically significant (β = -1.389, p < 0.01, *s.e.* = 0.401). Given the logistic nature of the relationship we study, we rely on graphical analysis to depict the moderating relationship (Ai & Norton, 2003; Boellis, Mariotti, Minichilli, & Piscitello, 2016). The plot of the predicted relationship, for values of voice and accountability 1.5 standard deviations above and below the mean, is depicted in Fig. 2, showing a strengthening effect on the negative relationship between host terrorism hazard and project completion, at higher levels of voice and accountability. The 95% confidence intervals for the predicted marginal effects are not overlapping for values of host country terrorism hazard two or more standard deviations above the mean. This result suggests that higher levels of voice and accountability in the host country attenuate the inverted effect of terrorism hazard in the host country on project performance, thus supporting Hypothesis 2.

Model 4 adds the interaction between host and home countries' level of terrorism hazard. Hypothesis 3 proposes that the relationship between terrorism hazard in the host country and project performance will be stronger when the level of terrorism hazard in the home country is higher. The interaction term between terrorism hazard in the host country and in the home country is positive and statistically significant (β = 0.285, p = 0.05, *s.e.* = 144). Fig. 3 plots the relationship between host country terrorism hazard and the probability of project success for values of home country terrorism hazard one standard deviation below, and four standard deviations above, the mean. Where the 95% confidence intervals for estimates of the margin effects are not overlapping, the nature of the interaction is a weakening effect on the negative relationship between host terrorism hazard and project completion, at higher levels of main sponsor home country terrorism hazard. This result suggests that higher terrorism hazard in the home country of private investors attenuates the effect of terrorism hazard in the host country on project performance, thus supporting Hypothesis 3.

5. Discussion

In this study we analyzed the relationship between terrorism hazard and the likelihood of completion of private participation projects in emerging countries. Drawing on a sample of 5,083 projects in 109 countries from 2002 to 2017, we argued and found statistically

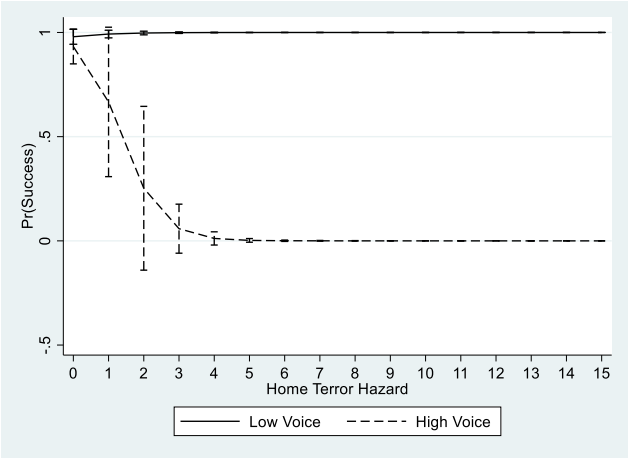

Fig. 2. Interaction of host government voice and accountability and terrorism hazard.

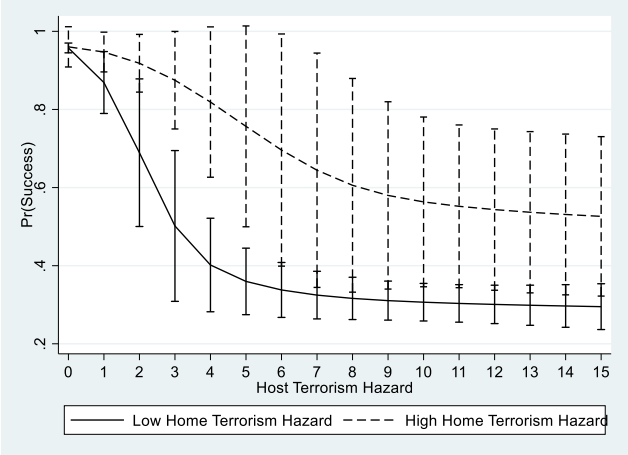

Fig. 3. Interaction of home country terrorism hazard experience and host country terrorism hazard.

significant evidence of a negative relationship between terrorism hazard and private participation projects' completion. Building on transaction cost theory (Williamson, 1985), we hypothesized that higher terrorism hazard would increase transaction costs, and therefore decrease the probability of project success (Abadie & Dermisi, 2008; Branzei & Abdelnour, 2010; Chasdi, 2017a; Henisz et al., 2010). We also found that higher host government accountability aggravated the impact of terrorism hazard on the completion of these projects. Finally, investors' prior experience with terrorism hazard at home, as predicted, appears to weaken the relationship between terrorism hazard level in the host country, and the probability of PPI project completion, supporting our argument that, within this context, experience with terrorism hazard is transferrable.

This paper contributes to the growing literature on PPI projects (Jiménez et al., 2019; Jiménez et al., 2018; Li, Liu, Shrestha, Martek, & Zhang, 2018) as an extension to the more commonly studied manufacturing and commercial organizations. Following others (e.g. Buckley & Boddewyn, 2015), we extend TCT to non-market transactions involved in building and managing PPI projects in host locations. The two main premises of TCT, derived from rational action modeling (Buckley & Casson, 1998), are that firms select the lowest (expected) cost location for the investment, and that they own and manage assets, rather than contracting for services, to the extent that the added costs of further growth exceed the benefits. We likewise argue that terrorism hazard is associated with higher location and transaction costs. In accordance with the global systems perspective derived from the original theory, which views firms and institutions as interconnected and mutually embedded (Buckley & Hashai, 2004), we explored some of the implications of an exogenous hazard and its cost implications. Given the unpredictability of terrorism, it is not easily factored into the needed return on investment for infrastructure projects and, as a result, investors are more likely to withdraw support for projects prior to completion when the hazard is high.

To date, business research explaining the impact of conflict and terrorism has focused primarily on private investment that is aimed at generating new revenue streams or improving supply chain efficiency (Chen, 2017; Oh & Oetzel, 2011; Witte, Burger, Ianchovichina, & Pennings, 2017). Research on terrorism hazard in the built environment, on the other hand, has focused on the impact of attacks on infrastructure and its occupants, as well as public policy formulation to mitigate these impacts (Clarke, 2004; Zoli et al., 2018). This study provides a transaction cost perspective on the growing literature on PPI projects as non-traditional, yet increasingly relevant, investment opportunities. Previous studies on private participation projects have examined the impact of project-specific characteristics, such as the method of privatization

(Djankov, 1999), and state ownership (Doh, 2000; Doh, Teegen, & Mudambi, 2004; Inoue, Lazzarini, & Musacchio, 2013), on their completion. Others have examined the effect of country characteristics such as government credibility (Ramamurti, 2003), policy reforms (Henisz et al., 2005), and political risk/stability (Jiang et al., 2015; Jiménez et al., 2018). To the best of our knowledge, this is the first study to examine the impact of host country terrorism hazard on project completion rates.

We also found that host country accountability weakens the impact of terrorism hazard on project completion, a finding which aligns with the notion that host country-specific characteristics can impact transaction costs (Buckley, 2016; Hennart, 2009). Accountability, and its strong association with private property rights, is a key enabler of economic growth and also plays an important role in FDI attraction (Alesina & Rodrik, 1994; Henisz, 2000). In the case of PPI projects, government accountability is also deemed important for completing projects in a cost-effective manner (Wu, Liu, Jin, & Sing, 2016). However, as governments strive to meet the needs of different stakeholder groups, the extreme physical and psychological threats posed by terrorism will often outweigh concerns for transaction efficiency. While it is not suggested that governments should de-emphasize threat-mitigation efforts, the need for a more effective and consistent approach to doing so should be a priority for transnational organizations, especially as the approaches used vary substantially between countries at present (Matsika et al., 2016).

Finally, through our examination of the mitigating effect of firms' terrorism hazard experience on the relationship between terrorism hazard and project completion, we contribute to the cross-border applicability of non-production related management knowledge as a firm-specific asset that can be helpful in reducing transaction costs associated with increased terrorism hazard (Buckley, 2016; Rugman, 1981). Experience operating business in the context of higher conflict hazard does not always transfer readily across borders, perhaps because the type of conflict is very idiosyncratic from one location to the next (Oh & Oetzel, 2011). As a result, it has been found that terrorism hazard experience is not a major factor when selecting investment locations (Oh & Oetzel, 2017). However, in the context of PPIs, we find supporting evidence that the impact of prior experience mitigates the negative relationship between terrorism hazard and project completion. The reason, we argue, is that this type of home country environment not only allows managers to learn how to deal with similar institutions in other countries (Holburn & Zelner, 2010), but more importantly impacts perceptions of investment opportunities and risks, such that their commitment to projects is stronger (Konara & Shirodkar, 2018). Thus, our findings support that experience with terrorism hazard in the home country leads to a higher probability of a favorable outcome, and hence this form of learning is at least partly transferrable to new projects and locations.

Our paper also has relevant implications for managers and policymakers. First, in addition to highlighting the importance of terrorism hazard in the host country, our paper suggests managers should be aware that their prior exposure and familiarity with terrorism in their home country can influence how they perceive hazards abroad. For policymakers, our results emphasize the role of voice and accountability in mitigating terrorism hazard. Hence, increasing the perception of their countries as destinations where reforms are taking place to increase both supply chain efficiency and the level of government accountability will boost the performance of foreign infrastructure investments.

5.1. Limitations and avenues for future research

We acknowledge that our paper is subject to several limitations, which create avenues for future research. First, we only analyze the impact of our variables of interest on the likelihood of completion of private participation projects, but they could also affect other issues such as profitability or repeated investments in a specific country. Second, in this paper we focus on terrorism hazard, but the literature on major risks/hazards has identified other potential sources of uncertainty for investors such as technological disasters, war, and climate risks. Future studies can analyze how these types of risks affect private participation projects. Third, the year coverage in our analysis (2002–2017) is constrained by the data availability in the sources we employ, and future studies could confirm if our findings hold in other periods.

Overall, we believe that our paper adds to the growing body of literature on privatization projects (Fleta-Asin et al., 2019; Jiang et al., 2015; Jiménez et al., 2018; Li et al., 2018; Wang et al., 2019) and on major disasters (Oh & Oetzel, 2011) and addresses calls for new business-oriented perspectives on terrorism hazard (Czinkota et al., 2010; Henisz et al., 2010). Yet, more efforts are needed to understand how major disasters affect private participation projects, and we encourage other scholars to continue this line of investigation to deepen our knowledge on this topic.

6. Conclusion

Through an empirical study of PPIs in emerging economies, we found that terrorism hazard increases the failure rate of projects. Applying a transaction cost lens and conducting a moderated binary logistic regression analysis, we found support for our prediction that, due to the fact that PPI projects are undertaken by a complex network of actors working in temporary governance arrangements, they are subject to transaction costs arising from incomplete contracts and the bounded reliability of partners. We reported evidence that these transaction costs associated with terrorism hazard are negatively associated with project completion rates, especially when the external policy environment (i.e. voice and accountability) favors safety, and psychological security, over transaction efficiency. Furthermore, firms that have experience with terrorism hazard at home are less prone to the psychological impact of terrorism hazard on project risk assessment, such that projects involving more experienced firms have a higher probability of success. Further research is needed to assess the extent to which various configurations of public, private, and NGO actors are beneficial when dealing with the heightened transaction inefficiencies posed by terrorism hazard.

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References

Abadie, A., & Dermisi, S. (2008). Is terrorism eroding agglomeration economies in central business districts? Lessons from the office real estate market in downtown Chicago. *Journal of Urban Economics, 64*(2), 451–463.

Abrahms, M., Dau, L. A., & Moore, E. M. (2019). Terrorism and corporate social responsibility: Testing the impact of attacks on CSR behavior. *Journal of International Business Policy, 2*(3), 237–257. https://doi.org/10.1057/s42214-019-00029-6.

Ai, C., & Norton, E. C. (2003). Interaction terms in logit and probit models. *Economics Letters, 80*(1), 123–129. https://doi.org/10.1016/S0165-1765(03)00032-6.

Alesina, A., & Rodrik, D. (1994). Distributive politics and economic-growth. *Quarterly Journal of Economics, 109*(2), 465–490. https://doi.org/10.2307/2118470.

Bielenberg, A., Kerlin, M., Oppenheim, J., & Roberts, M. (2016). The next generation of infrastructure. Sustainability & Resource Productivity, (March).

Boellis, A., Mariotti, S., Minichilli, A., & Piscitello, L. (2016). Family involvement and firms' establishment mode choice in foreign markets. *Journal of International Business Studies, 47*(8), 929–950. https://doi.org/10.1057/jibs.2016.23.

Branzei, O., & Abdelnour, S. (2010). Another day, another dollar: Enterprise resilience under terrorism in developing countries. *Journal of International Business Studies, 41*(5), 804–825. https://doi.org/10.1057/jibs.2010.6.

Brouthers, K. D., & Brouthers, L. E. (2001). Explaining the national cultural distance paradox. *Journal of International Business Studies, 32*(1), 177–189. https://doi.org/10.1057/palgrave.jibs.8490944.

Buckley, P. J. (1988). The limits of explanation: Testing the internalization theory of the multinational enterprise. Journal of International Business Studies, 19(2), 181-193. 10.1057%2fpalgrave.jibs.8490382.

Buckley, P. J. (2016). Alan Rugman and internalisation theory. *International Business Review, 25*(3), 753–757. https://doi.org/10.1016/j.ibusrev.2016.01.016.
Buckley, P. J., & Boddewyn, J. J. (2015). The internalization of societal failures by multinational enterprises. *Multinational Business Review, 23*(3), 170–187. https://doi.org/10.1108/Mbr-08-2014-0041.
Buckley, P. J., & Casson, M. (1976). *The future of multinational enterprise*. London: Macmillan.
Buckley, P. J., & Casson, M. C. (1998). Analyzing foreign market entry strategies: Extending the internalization approach. *Journal of International Business Studies, 29*(3), 539–561. https://doi.org/10.1057/palgrave.jibs.8490006.
Buckley, P. J., Chen, L., Clegg, L. J., & Voss, H. (2018). Risk propensity in the foreign direct investment location decision of emerging multinationals. *Journal of International Business Studies, 49*(2), 153–171. https://doi.org/10.1057/s41267-017-0126-4.
Buckley, P. J., & Hashai, N. (2004). A global system view of firm boundaries. *Journal of International Business Studies, 35*(1), 33–45. https://doi.org/10.1057/palgrave.jibs.8400059.
Byoun, S., & Xu, Z. X. (2014). Contracts, governance, and country risk in project finance: Theory and evidence. *Journal of Corporate Finance, 26*, 124–144.
Chasdi, R. J. (2017a). *Corporate security crossroads: Responding to terrorism, cyberthreats, and other hazards in the global business environment*. ABC-CLIO.
Chasdi, R. J. (2017b). Relationships between traditional terrorism, virtual world threats, and the international political system: Impact on international business. In *Corporate Security Crossroads: Responding to Terrorism, Cyberthreats, and Other Hazards in the Global Business Environment* (pp. 19–39). Santa Barbara: CA: ABC-CLIO.
Chen, S. (2017). Profiting from FDI in conflict zones. *Journal of World Business, 52*(6), 760–768. https://doi.org/10.1016/j.jwb.2017.06.005.
Chi, T. (2015). Commentary: Internalization theory and its relation to RBV and TCE. *Journal of World Business, 50*(4), 634–636. https://doi.org/10.1016/j.jwb.2015.08.003.
Clarke, M. C. (2004). Terrorism, engineering and the environment: Their interrelationships. *Terrorism and Political Violence, 16*(2), 294–304. https://doi.org/10.1080/09546550490483431.
Cuypers, I. R., Gokhan, E., & Hennart, J.-F. (2015). The effects of linguistic distance and lingua franca proficiency on the stake taken by acquirers in cross-border acquisitions. *Journal of International Business Studies, 46*(4), 429–442. https://doi.org/10.1057/jibs.2014.71.
Cuypers, I. R. P. H., Jean-Francois ; Silverman, Brian S ; Ertug, Gokhan. (2021). Transaction cost theory: Past progress, current challenges, and suggestions for the future. The Academy of Management annals, 15(1), 111-150. 10.5465/annals.2019.0051.
Czinkota, M., Knight, G., & Liesch, P. (2004). Terrorism and international business: Conceptual foundations. In G. Suder (Ed.), *Terrorism and the international business environment: The security-business nexus* (pp. 43–57). Nottingham: Edward Elgar.
Czinkota, M. R., Knight, G., Liesch, P. W., & Steen, J. (2010). Terrorism and international business: A research agenda. *Journal of International Business Studies, 41*(5), 826–843. https://doi.org/10.1057/jibs.2010.12.
Dai, L., Eden, L., & Beamish, P. W. (2013). Place, space, and geographical exposure: Foreign subsidiary survival in conflict zones. *Journal of International Business Studies, 44*(6), 554–578. https://doi.org/10.1057/jibs.2013.12.
Dai, L., Eden, L., & Beamish, P. W. (2017). Caught in the crossfire: Dimensions of vulnerability and foreign multinationals' exit from war-afflicted countries. *Strategic Management Journal, 38*(7), 1478–1498. https://doi.org/10.1002/smj.2599.
Dau, L. A., Moore, E. M., & Abrahms, M. (2018). Global security risks, emerging markets and firm responses: Assessing the impact of terrorism. In D. Castellani, R. Narula, Q. T. K. Nguyen, I. Surdu, & J. T. Walker (Eds.), *Contemporary Issues in International Business: Institutions, Strategy and Performance* (pp. 79–97). Cham, Switzerland: Springer International Publishing AG.
Daude, C., & Stein, E. (2007). The quality of institutions and foreign direct investment. *Economics & Politics, 19*(3), 317–344. https://doi.org/10.1111/j.1468-0343.2007.00318.x.
Delios, A., & Henisz, W. J. (2003). Political hazards, experience, and sequential entry strategies: The international expansion of Japanese firms, 1980–1998. *Strategic Management Journal, 24*(11), 1153–1164. https://doi.org/10.1002/smj.355.
Djankov, S. (1999). The restructuring of insider-dominated firms: A comparative analysis. *Economics of Transition, 7*(2), 467–479. https://doi.org/10.1111/1468-0351.00021.
Doh, J. P. (2000). Entrepreneurial privatization strategies: Order of entry and local partner collaboration as sources of competitive advantage. *The Academy of Management Review, 25*(3), 551–571. https://doi.org/10.5465/AMR.2000.3363516.
Doh, J. P., & Ramamurti, R. (2003). Reassessing risk in developing country infrastructure. *Long Range Planning, 36*(4), 337–353. https://doi.org/10.1016/S0024-6301(03)00069-4.
Doh, J. P., Teegen, H., & Mudambi, R. (2004). Balancing private and state ownership in emerging markets' telecommunications infrastructure: Country, industry, and firm influences. *Journal of International Business Studies, 35*(3), 233–250. https://doi.org/10.1057/palgrave.jibs.8400082.
Dorobantu, S., Lindner, T., & Müllner, J. (2020). Political risk and alliance diversity: A two-stage model of partner selection in multipartner alliances. *Academy of Management Journal, 63*(6), 1775–1806. https://doi.org/10.5465/amj.2017.0265.
Dorobantu, S., & Müllner, J. (2019). Debt-side governance and the geography of project finance syndicates. *Journal of Corporate Finance, 57*, 161–179.
Driffield, N., Jones, C., & Crotty, J. (2013). International business research and risky investments, an analysis of FDI in conflict zones. *International Business Review, 22*(1), 140–155. https://doi.org/10.1016/j.ibusrev.2012.03.001.
Eriksson, P. E., Larsson, J., & Pesämaa, O. (2017). Managing complex projects in the infrastructure sector: A structural equation model for flexibility-focused project management. *International Journal of Project Management, 35*(8), 1512–1523. https://doi.org/10.1016/j.ijproman.2017.08.015.
Erramilli, M. K., Agarwal, S., & Kim, S. S. (1997). Are firm-specific advantages location-specific too? *Journal of International Business Studies, 28*(4), 735–757. https://doi.org/10.1057/palgrave.jibs.8490117.
Esty, B. C. (1999). Petrozuata: A case study of the effective use of project finance. *Journal of Applied Corporate Finance, 12*(3), 26–42. https://doi.org/10.1111/j.1745-6622.1999.tb00028.x.
Esty, B. C., & Megginson, W. L. (2003). Creditor rights, enforcement, and debt ownership structure: Evidence from the global syndicated loan market. *Journal of Financial and Quantitative Analysis, 38*(1), 37–59.
Feinberg, S. E., & Gupta, A. K. (2009). MNC subsidiaries and country risk: Internalization as a safeguard against weak external institutions. *Academy of Management Journal, 52*(2), 381–399. https://doi.org/10.5465/Amj.2009.37315470.
Fleta-Asin, J., Munoz, F., & Rosell-Martinez, J. (2019). Public-private partnerships: Determinants of the type of governance structure. *Public Management Review*. https://doi.org/10.1080/14719037.2019.1637014.
Gassebner, M., Keck, A., & Teh, R. (2010). Shaken, not stirred: The impact of disasters on international trade. *Review of International Economics, 18*(2), 351–368. https://doi.org/10.1111/j.1467-9396.2010.00868.x.
Getz, K. A., & Oetzel, J. (2009). MNE strategic intervention in violent conflict: Variations based on conflict characteristics. *Journal of Business Ethics, 89*, 375–386. https://doi.org/10.1007/s10551-010-0412-6.
Greenbaum, R. T., Dugan, L., & Lafree, G. (2007). The impact of terrorism on Italian employment and business activity. *Urban Studies, 44*(5–6), 1093–1108. https://doi.org/10.1080/00420980701255999.
Gtd. (2017). Global terrorism database.
Haans, R., Pieters, C., & He, Z. L. (2016). Thinking about U: Theorizing and testing U - and inverted U-shaped relationships in strategy research. *Strategic Management Journal, 37*(7), 1177–1195. https://doi.org/10.1002/smj.2399.
Hainz, C., & Kleimeier, S. (2012). Political risk, project finance, and the participation of development banks in syndicated lending. *Journal of Financial Intermediation, 21*(2), 287–314.
Henisz, W. J. (2000). The institutional environment for economic growth. *Economics and Politics, 12*(1), 1–31. https://doi.org/10.1111/1468-0343.00066.
Henisz, W. J. (2002). The institutional environment for infrastructure investment. *Industrial and Corporate Change, 11*(2), 355–389. https://doi.org/10.1093/icc/11.2.355.
Henisz, W. J., Mansfield, E. D., & Glinow, M. a. V. (2010). Conflict, security, and political risk: International business in challenging times. Journal of International Business Studies, 41(5), 759-764. 10.1057/jibs.2010.11.
Henisz, W. J., Zelner, B. A., & Guillén, M. F. (2005). The worldwide diffusion of market-oriented infrastructure reform, 1977–1999. *American Sociological Review, 70*(6), 871–897.
Hennart, J. F. (1991). The transaction costs theory of joint ventures: An empirical study of Japanese subsidiaries in the United States. *Management Science, 37*(4), 483–497. https://doi.org/10.1287/mnsc.37.4.483.
Hennart, J. F. (2009). Down with MNE-centric theories! Market entry and expansion as the bundling of MNE and local assets. *Journal of International Business Studies, 40*(9), 1432–1454. https://doi.org/10.1057/jibs.2009.42.
Hodge, G. A., & Greve, C. (2007). Public-private partnerships: An international performance review. *Public Administration Review, 67*(3), 545–558. https://doi.org/10.1111/j.1540-6210.2007.00736.x.
Holburn, G. L. F., & Zelner, B. A. (2010). Political capabilities, policy risk, and international investment strategy: Evidence from the global electric power generation industry. *Strategic Management Journal, 31*(12), 1290–1315. https://doi.org/10.1002/smj.860.
Inoue, C. F. K. V., Lazzarini, S. G., & Musacchio, A. (2013). Leviathan as a minority shareholder: Firm-level implications of state equity purchases. *Academy of Management Journal, 56*(6), 1775–1801. https://doi.org/10.5465/amj.2012.0406.
Jiang, Y., Peng, M. W., Yang, X., & Mutlu, C. C. (2015). Privatization, governance, and survival: MNE investments in private participation projects in emerging economies. *Journal of world Business: JWB, 50*(2), 294–301. https://doi.org/10.1016/j.jwb.2014.10.006.
Jiménez, A., Jiang, G. F., Petersen, B., & Gammelgaard, J. (2019). Within-country religious diversity and the performance of private participation infrastructure projects. *Journal of Business Research, 95*, 13–25. https://doi.org/10.1016/j.jbusres.2018.08.027.
Jiménez, A., Salvaj, E., & Lee, J. Y. (2018). Policy risk, distance, and private participation projects in Latin America. *Journal of Business Research, 88*, 123–131. https://doi.org/10.1016/j.jbusres.2018.03.017.
Jiménez, A., Salvaj, E., & Lee, J. Y. (2018). Multicollinearity: How common factors cause Type 1 errors in multivariate regression. *Strategic Management Journal, 38*(8), 2362–2385.
Kaufmann, D., Kraay, A., & Mastruzzi, M. (2006). *The worldwide governance indicators project: Answering the critics*. Washington, DC: World Bank.
Kaufmann, D., Kraay, A., & Mastruzzi, M. (2008). Governance matters VII: Aggregate and individual governance indicators, 1996-2007. World Bank Policy Research Working Paper(4654).
Klijn, E.-H., Edelenbos, J., Kort, M., & Van Twist, M. (2008). Facing management choices: An analysis of managerial choices in 18 complex environmental public-private partnership projects. *International Review of Administrative Sciences, 74*(2), 251–282. https://doi.org/10.1177/0020852308089905.

Konara, P., & Shirodkar, V. (2018). Regulatory institutional distance and MNCs' subsidiary performance: Climbing up vs. climbing down the institutional ladder. *Journal of International Management, 24*(4), 333–347. https://doi.org/10.1016/j.intman.2018.04.004.

Li, K., Liu, G., Shrestha, A., Martek, I., & Zhang, X. (2018). The role of local private participation in china's transition to domestically developed renewable energy technologies. *Journal of Cleaner Production, 173*, 217–224. https://doi.org/10.1016/j.jclepro.2017.04.125.

Li, Q. A., & Vashchilko, T. (2010). Dyadic military conflict, security alliances, and bilateral FDI flows. *Journal of International Business Studies, 41*(5), 765–782. https://doi.org/10.1057/jibs.2009.91.

Lian, C., & Haimes, Y. Y. (2006). Managing the risk of terrorism to interdependent infrastructure systems through the dynamic inoperability input–output model. *Systems Engineering, 9*(3), 241–258. https://doi.org/10.1002/sys.20051.

Lindner, T., Puck, J., & Verbeke, A. (2019). Misconceptions about multicollinearity in international business research: Identification, consequences, and remedies. Journal of International Business Studies, 51(3): 283-298 0.1057/s41267-019-00257-1.

Liu, C., & Li, D. (2020). Divestment response to host-country terrorist attacks: Inter-firm influence and the role of temporal consistency. *Journal of International Business Studies, 51*(8), 1331–1346. https://doi.org/10.1057/s41267-020-00333-x.

Matsika, E., O'neill, C., Battista, U., Khosravi, M., Laporte, A. D. S., & Munoz, E. (2016). Development of risk assessment specifications for analysing terrorist attacks vulnerability on metro and light rail systems. Transportation Research Procedia, 14, 1345-1354. 10.1016/j.trpro.2016.05.207.

Müllner, J. (2017). International project finance: review and implications for international finance and international business. *Management Review Quarterly, 67*(2), 97–133.

Newcomer, H. A., & Adkins, J. W. (1980). Terrorism and the business executive. *Personnel Journal, 59*(11), 913–915.

O'Rourke, T. D. (2007). Critical infrastructure, interdependencies, and resilience. *The Bridge, 37*(1), 22–29.

Oetzel, J., & Getz, K. (2012). Why and how might firms respond strategically to violent conflict? *Journal of International Business Studies, 43*(2), 166–186. https://doi.org/10.1057/jibs.2011.50.

Oh, C. H., & Oetzel, J. (2011). Multinationals' response to major disasters: How does subsidiary investment vary in response to the type of disaster and the quality of country governance? *Strategic Management Journal, 32*(6), 658–681. https://doi.org/10.1002/smj.904.

Oh, C. H., & Oetzel, J. (2017). Once bitten twice shy? Experience managing violent conflict risk and MNC subsidiary-level investment and expansion. *Strategic Management Journal, 38*(3), 714–731. https://doi.org/10.1002/smj.2498.

Osborne, J. W. (2015). *Best Practices in Logistic Regression*. Los Angeles, CA: Sage.

Powers, M., & Choi, S. W. (2012). Does transnational terrorism reduce foreign direct investment? Business-related versus non-business-related terrorism. *Journal of Peace Research, 49*(3), 407–422. https://doi.org/10.1177/0022343312436768.

Ramamurti, R. (2003). Can governments make credible promises? Insights from infrastructure projects in emerging economies. *Journal of International Management, 9*(3), 253–269. https://doi.org/10.1016/S1075-4253(03)00036-X.

Ramamurti, R., & Doh, J. P. (2004). Rethinking foreign infrastructure investment in developing countries. *Journal of World Business, 39*(2), 151–167. https://doi.org/10.1016/j.jwb.2003.08.010.

Rugman, A. M. (1981). *Inside the multinationals: The economics of internal markets*. New York, NY: Columbia University Press.

Spich, R., & Grosse, R. (2005). How does homeland security affect U.S. Firms' international competitiveness? *Journal of International Management, 11*(4), 457–478. https://doi.org/10.1016/j.intman.2005.09.005.

Stewart, M. G. (2010). Risk-informed decision support for assessing the costs and benefits of counter-terrorism protective measures for infrastructure. *International Journal of Critical Infrastructure Protection, 3*(1), 29–40. https://doi.org/10.1016/j.ijcip.2009.09.001.

Stinchcombe, A. L. (1965). Organizations and social structure. In J. G. March (Ed.), *Handbook of organizations*. Chicago: Rand-McNally.

Studenmund, A. H., & Cassidy, H. J. (1992). *Using econometrics: A practical guide*. Addison-Wesley Educational Publishers.

Thöns, S., & Stewart, M. G. (2020). On the cost-efficiency, significance and effectiveness of terrorism risk reduction strategies for buildings. *Structural Safety, 85*, Article 101957. https://doi.org/10.1016/j.strusafe.2020.101957.

Tingbani, I., Okafor, G., Tauringana, V., & Zalata, A. M. (2019). Terrorism and country-level global business failure. *Journal of Business Research, 98*, 430–440. https://doi.org/10.1016/j.jbusres.2018.08.037.

Wang, H., Liu, Y., Xiong, W., & Zhu, D. (2019). Government support programs and private investments in PPP markets. *International Public Management Journal, 22*(3), 499–523. https://doi.org/10.1080/10967494.2018.1538025.

Weber, L., Mayer, K. J., & Macher, J. T. (2011). An analysis of extendibility and early termination provisions: The importance of framing duration safeguards. *Academy of Management Journal, 54*(1), 182–202. https://doi.org/10.5465/amj.2011.59215083.

Wernick, D. (2006). Terror incognito: International business in an era of heightened geopolitical risk. In G. G. S. Suder (Ed.), *Corporate strategies under international terrorism and adversity* (pp. 59–82). Cheltenham, UK: Edward Elgar Publishing Limited.

Williamson, O. E. (1981). The economics of organization the transaction cost approach. *American Journal of Sociology, 87*(3), 548–577. https://doi.org/10.1086/227496.

Williamson, O. E. (1985). *The economic institutions of capitalism: Firms, markets, relational contracting*. New York, NY: Free Press.

Witte, C. T., Burger, M. J., Ianchovichina, E. I., & Pennings, E. (2017). Dodging bullets: The heterogeneous effect of political violence on greenfield FDI. *Journal of International Business Studies, 48*(7), 862–892. https://doi.org/10.1057/s41267-017-0079-7.

Wu, J., Liu, J., Jin, X., & Sing, M. C. P. (2016). Government accountability within infrastructure public–private partnerships. *International journal of project management, 34*(8), 1471–1478. https://doi.org/10.1016/j.ijproman.2016.08.003.

Zoli, C., Steinberg, L. J., Grabowski, M., & Hermann, M. (2018). Terrorist critical infrastructures, organizational capacity and security risk. *Safety Science, 110*, 121–130. https://doi.org/10.1016/j.ssci.2018.05.021.

Dr. Alfredo Jiménez is Full Professor at the Kedge Business School (France). His research interests are focused on the process and the determinants of success in the internationalization strategy of firms including political risk, cultural and psychic distance and corruption. In addition, he is also working on a research line devoted to virtual team and multi-cultural team management and dynamics. He has previously published several papers in several international relevant journals, including *Journal of International Business Studies, Harvard Business Review, Journal of Business Research, Journal of World Business, International Business Review, Journal of International Management, Business and Society,* and others. He has also been a visiting scholar in different institutions in Australia, Denmark, Ecuador, Germany, Italy, Mexico, Norway and Singapore. In 2021 he was included in the 40 under 40 best MBA professors of Poets and Quants.

Nathaniel C. Lupton (PhD, Western University) is an assistant professor at the Lucas College of Business at San Jose State University. His research interests include foreign direct investment strategy, international knowledge diffusion, international research networks, and development economics. His ongoing research examines the determinants of national and international inequality, international infrastructure projects, and institutional arbitrage. His research has appeared in journals such as *Academy of Management Perspectives*, *Journal of World Business*, *Journal of Knowledge Management*, *Business and Society*, and others.