



The impact of institutional hazards on foreign multinational activity: A contingency perspective

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Abstract

Prior studies have shown that institutional hazards in the form of formal governance deficiencies and informal cultural distance are both negatively related to the amount of foreign multinational activity in countries. We argue that the strength of these negative relationships varies systematically with the type of foreign activity (horizontal or vertical) and the type of institutional hazard (governance or cultural). Because institutional hazards striking vertical affiliates generally also have negative consequences for other parts of a multinational enterprise (MNE) while those striking horizontal affiliates do not, we hypothesize that institutional hazards are more negatively related to *vertical* foreign activity than to *horizontal* foreign activity. Since cultural hazards can generally be reduced or resolved once they materialize while governance hazards cannot, we also hypothesize that the impact of governance hazards on each type of foreign activity is more negative than the impact of cultural hazards on that type of activity. A panel data analysis of sales by US foreign affiliates to affiliated and local unaffiliated customers over the period 1996–2004 lends support to these hypotheses. Our findings thus show that the impact of institutional hazards on foreign MNE activity is more complex than previously assumed.

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INTRODUCTION

Multinational enterprises (MNEs) that establish value-creating activities abroad start to operate in new sociocultural, political, and legal environments, and may therefore be confronted with informal and formal institutional hazards (Delios & Henisz, 2003; North, 1990; Zaheer, 1995). The magnitude of the informal institutional hazards faced by an MNE in a host country depends on the cultural distance between the MNE's home country and the host country (Dikova, Rao Sahib, & van Witteloostuijn, 2010; Kogut & Singh, 1988). The larger this cultural distance, the more the organizational and managerial practices, communication and negotiation styles, desired behaviors, customer preferences, and effective marketing tactics in the two countries differ from one another (Adler, 1986; Campbell, Graham, Jolibert, & Meissner, 1988; Hofstede, 1980; Schneider & De Meyer, 1991; Van Mesdag,

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2000), and hence the larger the informal institutional hazards faced by the MNE. The formal institutional hazards that MNEs face in a given host country, on the other hand, depend on the quality of the country's governance system (Dikova & van Witteloostuijn, 2007), defined as the "public institutions and policies created by governments as a framework for economic, legal, and social relations" (Globerman & Shapiro, 2003: 20). The lower the quality of this system, the higher the level of political instability and corruption, and the higher the risk that the local government will suddenly implement less favorable policies towards foreign-owned affiliates (Delios & Henisz, 2000; Rodriguez, Uhlenbruck, & Eden, 2005; Root, 1987). Hence the more deficient a country's governance system, the larger the formal institutional hazards faced by foreign MNEs operating in that country.

The potential negative consequences of informal and formal institutional hazards for MNEs have been found to play important roles in the foreign investment decisions of these firms. Extant studies have found that MNEs are less likely to locate value-creating activity in countries characterized by a greater cultural distance or a more deficient governance system (Flores & Aguilera, 2007; Henisz & Delios, 2001; Kim & Kim, 1993), and that such countries receive less foreign direct investment (FDI) and hence host less foreign-owned activity (Bevan, Estrin, & Meyer, 2004; Globerman & Shapiro, 2003; Loree & Guisinger, 1995; Sethi, Guisinger, Phelan, & Berg, 2003).

While generating important insights, these studies have not considered two important issues. First, they have not taken into account that the negative consequences of institutional hazards for MNEs are likely to differ across different types of value-creating activity. We argue that these consequences are generally local when a foreign affiliate performs horizontal (i.e., market-seeking) activity, but often regional or global when the affiliate performs vertical (i.e., efficiency or natural resource-seeking) activity. Second, prior studies have overlooked the fact that formal governance deficiencies and informal cultural differences are fundamentally different types of institutional hazards. Whereas governance deficiencies represent hazards that generally cannot be resolved once they become reality, cultural differences represent hazards that MNEs can usually resolve at least partly (Cuypers & Martin, 2010; Li & Rugman, 2007).

We integrate these two overlooked issues into a contingency framework to argue that the impact of

institutional hazards on the amount of foreign MNE activity in a country is contingent upon the type of foreign activity (horizontal or vertical) and the type of institutional hazard (governance or cultural). Specifically, we hypothesize that governance deficiencies and cultural distance have more negative effects on the amount of foreign-owned *vertical* activity in host countries than on the amount of foreign-owned *horizontal* activity in these countries. We also hypothesize that the effect of governance deficiencies on each type of foreign activity is more negative than the effect of cultural distance on that type of activity. We test these hypotheses over the period 1996–2004, using novel data on the aggregate sales of goods by US foreign affiliates to unaffiliated customers residing in the focal host country (our proxy for horizontal US MNE activity) and to all affiliated customers, both US parents and fellow affiliates (our proxy for vertical US MNE activity). Controlling for many other factors and performing several robustness checks, we find consistent support for our hypotheses. Our findings make clear that the impact of institutional hazards on foreign MNE activity is more complex than previously assumed.

Our study makes two important contributions to the international business (IB) literature. First, it is the first to examine how the effect of institutional hazards varies across vertical and horizontal value-creating activities, and one of the first macro-level IB studies to empirically distinguish between these two activity types. Only a few macro-level studies have empirically distinguished between different types of foreign-owned activities, and they have not examined how the effect of institutional hazards differs between these activity types (Beugelsdijk, Smeets, & Zwinkels, 2008; Brouthers, Gao, & McNicol, 2008; Nachum & Zaheer, 2005). Second, our study is also the first to compare the effects of formal and informal institutional hazards with one another. Specifically, we are the first to examine whether the effect of governance deficiencies on our two types of foreign activity differs substantially from the effect of cultural distance on these two activity types. Prior studies have generally focused on either formal or informal institutional hazards (Barkema, Bell, & Pennings, 1996; Bevan et al., 2004; Globerman & Shapiro, 2003; Henisz & Delios, 2001; Kogut & Singh, 1988; Nigh, 1985), and the few studies that did consider both hazard types did not explore their comparative effects (Delios & Henisz, 2003; Flores & Aguilera, 2007; Loree & Guisinger, 1995; Sanchez-Peinado &

Pla-Barber, 2006). Overall, our study identifies a novel set of contingency relationships that jointly offer a more detailed and complete view of the extent to which institutional hazards influence MNEs' foreign investment decisions.

THEORY AND HYPOTHESES: A CONTINGENCY FRAMEWORK

Horizontal vs Vertical Foreign Activity

One way to classify the different types of value-creating activities that MNEs perform abroad is to distinguish between horizontal and vertical foreign activity (Beugelsdijk et al., 2008; Caves, 2007; Kobrin, 1976; Zaheer, 1995). Horizontal activity, also referred to as market-seeking activity (Brouthers et al., 2008; Dunning, 1993; Nachum & Zaheer, 2005), is performed by standalone affiliates that manufacture products for unaffiliated local customers. Such affiliates typically perform all major value chain activities, ranging from procurement and production to marketing and sales (Caves, 2007; Zaheer, 1995). They often aim to be locally responsive by tailoring the goods that they manufacture to the needs and tastes of their local customers (Dunning, 1993). To achieve that aim, they try to maintain close ties with their customers, participate in local networks to obtain local market knowledge, and often rely on local suppliers. As a result, they operate rather independently of their parents and fellow affiliates, and are relatively well embedded in their local environment (Kobrin, 1976; Prahalad & Doz, 1987).

Vertical activity, on the other hand, is performed by interlinked affiliates that extract or process natural resources or process intermediate goods, and which subsequently sell their outputs to affiliated parties for further processing or final sale (Caves, 2007; Zaheer, 1995). The affiliated party can be the parent of the focal affiliate, or a fellow affiliate located in the same host country or in a third country. Vertical affiliates are thus typically part of a geographically dispersed MNE network of interconnected affiliates that all perform only one or a few stages in the production process of a limited set of fairly standardized products (Caves, 2007; Zaheer, 1995). MNEs consisting of such a dispersed network of specialized and interlinked affiliates aim to take advantage of inter-country differences in the availability of factor endowments, such as natural resources and inexpensive labor (Dunning, 1993; Kobrin, 1991; Nachum & Zaheer, 2005). Vertical activity can thus be both

natural resource-seeking and efficiency-seeking (Brouthers et al., 2008). Since vertical affiliates sell their output to affiliated rather than to unaffiliated parties, and since such affiliates are typically supplied by fellow affiliates rather than by local firms, they are generally more tightly integrated in the corporate network of their parent and have less autonomy than horizontal affiliates (Prahalad & Doz, 1987).

Because horizontal affiliates sell their output to unaffiliated local customers while vertical affiliates sell it to fellow MNE entities, we expect that the amount of foreign-owned horizontal activity in countries will respond differently to institutional hazards than the amount of foreign-owned vertical activity. Our starting point is that foreign-owned affiliates may be struck by two types of institutional hazards: formal governance hazards and informal cultural hazards. Examples of governance hazards are suddenly imposed export quota, nationalizations whereby key managers are replaced by less knowledgeable government officials, and local violence, whereas cultural hazards include cultural conflicts between parent executives or expatriates on the one hand and local stakeholders such as workers, suppliers, or customers on the other. When a foreign-owned affiliate is struck by either type of institutional hazard, some or all of its operational processes are likely to suffer, causing the magnitude or quality of its output to diminish. However, the negative consequences of this disturbance in affiliate output for other parts of the MNE are likely to differ between horizontal and vertical affiliates. When an institutional hazard negatively affects the magnitude or quality of the output of a *horizontal* affiliate, its fellow MNE entities are unlikely to suffer, because the affiliate does not sell its output to these fellow entities but instead sells it locally. Thus institutional hazards striking horizontal affiliates will generally have local adverse effects for MNEs.

By contrast, when an institutional hazard negatively affects the magnitude or quality of the output of a *vertical* affiliate, some or all of its fellow MNE entities will generally also suffer, because these entities rely on the output of the stricken affiliate (Lenway & Murtha, 1994). That is, part or all of the geographically dispersed corporate production chain to which the affiliate belongs is likely to be harmed. Hence institutional hazards striking vertical affiliates are likely to have regional or global adverse effects for MNEs. Because governance and cultural hazards have local adverse effects in the



case of horizontal activity but regional or global adverse effects in the case of vertical activity, MNEs should be more reluctant to expose vertical activity to both types of institutional hazards than to expose horizontal activity to both hazard types.¹ We therefore hypothesize:

Hypothesis 1a: Governance imperfections are more negatively related to the total amount of vertical activity in a country than to the total amount of horizontal activity.

Hypothesis 1b: Cultural distance is more negatively related to the total amount of vertical activity in a country than to the total amount of horizontal activity.

Exogenous vs Endogenous Hazards

In essence, there are two types of business hazards: exogenous and endogenous ones (Folta, 1998; Root, 1988; Shan, 1991). Exogenous hazards are hazards that cannot be resolved once they become reality. Such hazards need to be taken as a given by firms. Endogenous hazards, on the other hand, are hazards that can be partly or fully resolved once they materialize (Folta, 1998; Root, 1988). By undertaking specific actions, firms can reduce and sometimes even eliminate the harmful consequences of these hazards for their operations.

This distinction between exogenous and endogenous hazards is important, because governance imperfections generally represent exogenous hazards for MNEs whereas cultural differences usually represent endogenous ones (Cuypers & Martin, 2010; Li & Rugman, 2007). Governance hazards striking foreign-owned affiliates typically take the form of irreversible governmental decisions and political or societal turmoil, and are hence generally impossible for MNEs to resolve once they become reality. That is, a materialized governance hazard typically represents a *fait accompli* for an MNE (Benito, 1997: 1368; Li & Rugman, 2007). For instance, once a host government has formally decided to nationalize a foreign-owned affiliate, or to impose an export quota on it, it will usually be very difficult, if not impossible, for the affiliate and its parent to undo such a decision. Similarly, MNEs can generally do very little to stop violence disrupting their local production activities.²

Cultural hazards striking foreign affiliates, on the other hand, can usually be reduced or resolved by MNEs (Barkema et al., 1996; Cuypers & Martin,

2010). Such hazards refer to conflicts and other culture-related problems that may arise both within and outside an MNE's corporate network. Extant research has shown that these internal and external cultural problems can both be reduced by MNE parents, a process called double-layered acculturation (Barkema et al., 1996). Parent executives can, for instance, reduce or resolve internal cultural conflicts by organizing workshops to familiarize local managers and workers with the parent's culture-specific organizational and managerial practices, or by replacing those locals who remain unable or unwilling to accept these practices. Over time parent executives and expatriates also learn how they can communicate more successfully with local managers and workers (Black, Mendenhall, & Oddou, 1991; Yamazaki & Kayes, 2007), enabling them to reduce or resolve internal cultural tensions. They also become more familiar with local negotiation styles, customer preferences, and effective marketing tactics, allowing them to reduce or resolve external cultural problems with suppliers and customers (Cuypers & Martin, 2010). Thus, whereas host-country governance imperfections generally represent hazards that cannot be resolved once they materialize, home–host cultural differences typically represent hazards that MNEs can resolve at least partly. As a result, MNEs should be more reluctant to expose their horizontal and vertical activities to governance hazards than to expose these activities to cultural hazards. We therefore hypothesize:

Hypothesis 2a: The impact of governance imperfections on aggregate *vertical* activity in a country is more negative than the impact of cultural distance on such activity.

Hypothesis 2b: The impact of governance imperfections on aggregate *horizontal* activity in a country is more negative than the impact of cultural distance on such activity.

METHODOLOGY

Data and Sample

We test our contingency framework using cross-sectional time-series data on the aggregate sales of goods by US foreign affiliates located in different host countries. We obtained these aggregate affiliate sales data from the database *US Direct Investment Abroad: Financial and Operating Data* of the US Bureau of Economic Analysis (BEA). This database

contains aggregated financial and operating data on all US parents and their foreign affiliates on a yearly basis. The BEA collects these data through annual surveys in which participation is mandatory. For non-bank US parents, the sales by their majority-owned non-bank affiliates are broken down into sales to unaffiliated parties located in the focal host country, the US, and third countries, and into sales to affiliated parties located in these three categories of countries. As explained below, we use this detailed subdivision of affiliate sales to distinguish between different types of foreign activities. While the BEA also reports financial and operating data for other groups of affiliates, including all foreign affiliates of all US parents and US-based affiliates of foreign firms, these data are not broken down either by customer category (affiliated or unaffiliated) or by customer location (focal host country, US, or third country), and hence do not enable us to distinguish between different types of foreign activities. FDI data reported by the BEA and by international agencies such as UNCTAD also do not enable us to make this distinction, since such data are not broken down into investment in affiliates serving local markets (horizontal FDI) and investment in affiliates producing outputs for affiliated parties (vertical FDI).

We obtained the data on our key independent variables (i.e., the level of governance imperfections in specific host countries and their cultural distance from the US) and our control variables from a variety of sources specified below. Data on all variables were available for 46 host countries over the period 1996–2004, albeit not always for all 9 years, resulting in a sample of 294 host-country-year observations. The host countries included in the sample are listed in the Appendix.

Dependent Variables

While the conceptual distinction between vertical and horizontal foreign activity is well accepted in IB, the macro-level measurement of these two main activity types has lagged behind (Beugelsdijk et al., 2008). We therefore created the following new variables.

Vertical foreign activity. We measure the amount of vertical activity performed by US affiliates in a given host country by the aggregate sales by these affiliates to affiliated parties. These parties are either US parents or fellow affiliates located in the focal host country or in third countries. This operationalization corresponds to our conceptualization of vertical

affiliates as efficiency-seeking or natural resource-seeking affiliates whose output forms the input for fellow MNE entities. We use this dependent variable to test our hypothesis that the impact of governance imperfections on vertical activity is more negative than the impact of cultural distance on that activity (Hypothesis 2a).

Horizontal foreign activity. By contrast, we measure the amount of horizontal activity performed by US affiliates in a given host country by the aggregate sales by these affiliates to unaffiliated parties located in that given country. This operationalization is in line with our conceptualization of horizontal affiliates as market-seeking affiliates serving local consumers or independent local firms. We use this dependent variable to test our hypothesis that the impact of governance imperfections on horizontal activity is more negative than the impact of cultural distance on that activity (Hypothesis 2b).

Ratio of vertical to horizontal foreign activity. We use the ratio of vertical to horizontal US activity in each host country to test our hypotheses that both governance imperfections and cultural distance have a more negative impact on vertical than on horizontal activity (Hypotheses 1a and 1b). Even if vertical and horizontal activity are correlated, their ratio is an appropriate dependent variable to test Hypotheses 1a and 1b, since by taking this ratio we eliminate all variance that vertical and horizontal activity may have in common. The ratio reflects any additional variance in vertical activity not present in horizontal activity, and vice versa. A similar dependent variable was used by Brainard (1997), who analyzed the ratio of exports to total foreign sales (i.e., the sum of exports and foreign affiliate sales), and the ratio of foreign affiliate sales to total foreign sales.

Key Independent Variables

Governance imperfections. Our measure of the level of governance imperfections in each host country is based on Kaufmann, Kraay, and Mastruzzi's (2006) analysis of several hundreds of variables measuring aspects of governance quality. These variables were drawn from 31 sources, such as the Political Risk Services' *International Country Risk Guide*, the Heritage Foundation's *Economic Freedom Index*, the World Bank's *Country Policy and Institutional Assessments*, and the World Economic Forum's *Global Competitiveness Report*. Kaufmann et al.

(2006) identified six dimensions along which countries differ from one another in terms of governance quality:

- (1) voice and accountability;
- (2) political stability and absence of violence;
- (3) government effectiveness;
- (4) regulatory quality;
- (5) rule of law; and
- (6) control of corruption.

They assigned most of the 213 countries included in their analysis a score on each dimension that varies between -2.5 and 2.5 , with higher scores indicating higher governance quality levels. These scores are available on a biannual basis for the period 1996–2002 and on an annual basis as of 2002. For the years 1997, 1999, and 2001, we used the dimension scores of the preceding year. We reversed the scores on the six dimensions, so that higher scores indicate higher levels of governance imperfections. Since the dimensions are highly correlated with one another, we followed Dikova and van Witteloostuijn (2007) and averaged their reversed scores into a composite measure of host-country governance imperfections.

Cultural distance. Following prior studies (Brouthers & Brouthers, 2001; Chang & Rosenzweig, 2001; Vermeulen & Barkema, 2001), we measure the cultural distance between the US and each host country through a Euclidean distance version of the Kogut and Singh (1988) index. Like the original Kogut and Singh index, this Euclidean distance measure is based on the scores of the US and each host country on Hofstede's (1980) four dimensions of national culture: power distance, uncertainty avoidance, individualism, and masculinity. While the original Kogut and Singh index implicitly assumes that all these dimensions are equally important in determining the cultural distance between countries, its Euclidean distance version relaxes this unproven assumption (Shenkar, 2001).³ Following Flores and Aguilera (2007), we also incorporated Shenkar's (2001) suggestion to control for country-specific factors correlated with cultural distance, such as geographic distance and the lack of a common language (see below).

Control Variables

To avoid omitted-variable bias, we control for a large number of other potential determinants of the amount of US-owned vertical and horizontal activity in each of our host countries. First, we

control for the great-circle geographic distance (in kilometers) between Washington, DC, and the capital of each host country (Bevan et al., 2004; Flores & Aguilera, 2007; Grosse & Trevino, 1996). This distance was obtained from the distance calculator of the US Department of Agriculture.

We control for host-market size through the population size of each host country (in thousands of inhabitants) as reported in the *World Development Indicators* (Habib & Zurawicki, 2002; Sethi et al., 2003). We enter population size rather than GDP because countries such as China and India have relatively large populations compared with their GDPs. The huge populations of these countries are an important reason for foreign MNEs to undertake horizontal and vertical activity there (Khanna, 2007), making population size a better proxy for host-market size than GDP.⁴ In addition to the size of each host market, we also control for its growth rate through its annual GDP per capita growth. This growth rate was also obtained from the *World Development Indicators*.

We control for differences in economic development levels across our host countries through a set of dummy variables indicating whether the World Bank classified a country as a low, lower-middle, upper-middle, or high income country based on its per capita gross national income. The data on this classification were obtained from the *World Development Indicators*. High-income countries were used as the reference category.

We control for each host country's openness to FDI through its inward FDI stock as a percentage of its GDP (Habib & Zurawicki, 2002; Kumar, 1994). This percentage was obtained from UNCTAD's *Foreign Direct Investment* database.

We also enter the average wage rate of employees of majority-owned non-bank US affiliates located in each host country. Following Loree and Guisinger (1995), that average wage rate was obtained by dividing the total annual employee compensation expenses of majority-owned non-bank US affiliates by the total number of employees of these affiliates. Both the compensation expenses and employment figures were obtained from the BEA database *US Direct Investment Abroad: Financial and Operating Data*.

Following Loree and Guisinger (1995), we control for the effective corporate income tax rate in each host country through the total income taxes paid by majority-owned non-bank affiliates of non-bank US parents as a percentage of the total income earned by these affiliates. Data on both income taxes paid and total income earned by US foreign affiliates were

obtained from the BEA database *US Direct Investment Abroad: Financial and Operating Data*.

We control for the natural-resource abundance of each host country through the share of its ores and metals exports and the share of its fuel exports in its total exports. Data on these two shares were taken from the *World Development Indicators*.

We control for the interconnectedness between the US and a given host country through three dummy variables indicating whether the host country shared NAFTA, WTO, or NATO membership with the US (Ingram, Robinson, & Busch, 2005). Membership data were obtained from the websites of the three international governmental organizations. We also include a dummy variable indicating whether English is an official language in the focal host country according to the CIA's *World Factbook*. This common language dummy also captures the direct colonial ties of the US with the UK, and its indirect ties (through the UK) with such countries as Australia and Hong Kong (Rangan & Drummond, 2004). Besides the above tie-based variables, we also enter dummies for African and Asian host countries to control for the possibility that our results are driven by the inclusion of countries from underrepresented or idiosyncratic regions.

Our dependent variables may also be influenced by the industrial composition of US MNE activity in each host country.⁵ Although the above-described control variables are country-level ones, they should capture the prevalence of US MNE activity in specific types of industries in a given host country reasonably well. The average wage rate should capture the prevalence of US MNE activity in labor-intensive industries; the ores, metals, and fuel export shares the prevalence of US MNE activity in extractive industries; and the income dummies the prevalence of US MNE activity in high-skilled manufacturing and differentiated consumer goods (Dunning, 1993: Chapter 2).⁶

Besides country-specific control variables, we also include a time trend variable (taking the values of 1996 through 2004) to control for the possibility that the effects of our time-varying independents are driven by the fact that these independents share a time trend with our dependents, and year dummies to control for year-specific factors affecting all US-owned foreign activity in the same way.

Method

We ran three sets of regression models: one set to explain vertical activity, one to explain horizontal

activity, and one to explain the ratio of vertical to horizontal activity. Because we have cross-sectional time-series data, we estimated these models through panel data analysis, using Stata 9.1. Modified Wald chi-squared tests for heteroskedasticity in panel datasets indicated that all regression models displayed below in Table 2 contained within-panel heteroskedasticity ($p < 0.001$), while Wooldridge's (2002) test for autocorrelation in panel datasets indicated that most models also contained first-order autocorrelation ($p < 0.05$ in all models, except for Model 3, where $p = 0.46$). We therefore estimated our models through feasible generalized least squares (FGLS) regression analysis, as this statistical method enabled us to correct the standard errors for both heteroskedasticity and autocorrelation.

RESULTS

Table 1 gives the descriptive statistics of all variables and their correlations. All correlations between the independent variables are low to moderately high, suggesting the absence of multicollinearity. This was confirmed by the fact that the variance inflation factors (VIFs) of all variables in all models reported in Table 2 were lower than the commonly accepted multicollinearity threshold of 10 (Hair, Anderson, Tatham, & Black, 1998), with the highest VIF being 7.27.⁷ As an additional multicollinearity check, we also inspected the variance decomposition proportions of the regression coefficients and the condition indices of our models. With the exception of one model, the regression coefficients of governance imperfections and cultural distance did not share more than 50% of their variance with a single condition index. In the one model where the coefficient of governance imperfections did share more than 50% of its variance with a single condition index, the value of that index was well below the multicollinearity threshold of 10 (Belsley, Kuh, & Welsch, 1980). These analyses indicate that our results do not suffer from multicollinearity.

Table 2 displays the results of the regression analyses that we ran to test our contingency framework of the impact of different types of institutional hazards on different types of foreign activity. All continuous independent variables and all dependent variables were standardized before they were entered. Hence the reported regression coefficients of the continuous independent variables represent standardized betas. We can thus test Hypothesis 2a by comparing the coefficient of governance imperfections with that of cultural distance within the model

Table 1 Descriptive statistics and correlations ($N=294$)^a

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. Vertical foreign activity ^b	8.39	1.69																						
2. Horizontal foreign activity ^b	9.34	1.42	0.81																					
3. Ratio of vertical to horizontal activity ^b	-0.94	0.99	0.55	-0.05																				
4. Governance imperfections	-0.77	0.83	-0.52	-0.45	-0.24																			
5. Cultural distance	2.59	1.10	-0.43	-0.49	-0.02	0.53																		
6. Geographic distance	8227.67	3714.38	-0.19	-0.09	-0.20	0.17	-0.02																	
7. Market size ^b	17.21	1.45	0.04	0.29	-0.34	0.55	0.11	0.27																
8. Market growth	2.59	2.99	-0.03	-0.08	0.06	0.10	0.08	0.11	0.15															
9. Low income dummy	0.04	0.21	-0.20	-0.16	-0.11	0.31	0.04	0.28	0.49	0.13														
10. Lower-middle income dummy	0.19	0.39	-0.34	-0.38	-0.04	0.59	0.33	0.07	0.25	0.09	-0.11													
11. Upper-middle income dummy	0.22	0.41	-0.20	-0.19	-0.06	0.27	0.22	-0.05	-0.02	-0.02	-0.12	-0.26												
12. FDI openness ^b	3.09	0.96	0.19	-0.05	0.39	-0.30	-0.18	-0.12	-0.57	0.05	-0.31	-0.09	0.09											
13. Average wage rate	31.64	18.91	0.53	0.53	0.15	-0.71	-0.39	-0.18	-0.29	-0.23	-0.27	-0.45	-0.39	-0.05										
14. Corporate income tax rate ^b	1.55	0.33	-0.20	-0.22	-0.03	0.23	0.26	0.15	0.09	0.09	0.16	0.18	-0.12	-0.31	-0.11									
15. Ores and metals export share ^b	1.05	1.04	-0.28	-0.04	-0.41	0.02	-0.11	0.18	0.09	-0.09	0.04	0.04	0.12	-0.01	-0.06	0.16								
16. Fuel export share ^b	1.21	1.52	-0.17	-0.02	-0.26	0.29	0.08	-0.01	0.16	0.01	0.02	0.22	0.02	0.03	-0.24	0.43	0.24							
17. NAFTA dummy	0.04	0.21	0.31	0.33	0.07	-0.05	-0.16	-0.38	0.07	-0.04	-0.04	-0.11	0.09	0.02	-0.08	-0.01	0.02	0.16						
18. WTO dummy	0.97	0.18	0.07	0.08	0.01	-0.29	-0.18	-0.08	-0.37	-0.30	-0.13	-0.28	0.09	0.04	0.21	0.03	-0.03	-0.13	0.04					
19. NATO dummy	0.35	0.48	0.33	0.38	0.01	-0.40	-0.24	-0.40	-0.06	-0.04	-0.16	-0.32	-0.09	0.06	0.25	-0.01	-0.08	0.10	0.12	0.14				
20. Common language dummy	0.31	0.46	0.05	0.07	-0.01	-0.15	-0.45	0.29	-0.21	0.01	-0.15	0.09	-0.21	0.28	-0.05	-0.02	0.02	-0.03	0.14	0.12	-0.19			
21. Africa dummy	0.05	0.22	-0.26	-0.16	-0.22	0.20	-0.11	0.21	0.09	-0.07	-0.05	0.28	0.06	-0.01	-0.18	0.14	0.24	0.24	-0.05	0.04	-0.17	0.34		
22. Asia dummy	0.22	0.42	-0.03	-0.03	-0.01	0.38	0.36	0.61	0.50	0.23	0.41	0.19	-0.11	-0.31	-0.22	0.15	-0.17	-0.10	-0.12	-0.35	-0.40	0.07	-0.12	
23. Time trend	2000	2.59	0.11	0.08	0.08	-0.01	0.01	0.02	-0.03	0.04	-0.04	-0.02	0.02	0.26	0.06	-0.04	0.01	0.13	-0.03	0.04	0.04	-0.04	-0.03	0.00

^aCorrelations greater than or equal to |0.12| are significant at $p < 0.05$ (two-tailed).

^bLogged to remove skewness and/or outliers.

Table 2 FLGS regression estimates of the determinants of vertical foreign activity, horizontal foreign activity, and their ratio ($N=294$)^a

Independent variable	Dependent variable: Vertical foreign activity				Dependent variable: Horizontal foreign activity				Dependent variable: Ratio of vertical to horizontal activity
	Model 1a	Model 1b	Model 1c	Model 1d	Model 2a	Model 2b	Model 2c	Model 2d	Model 3
Governance imperfections		-0.46 (0.06)***		-0.41 (0.05)***		-0.38 (0.04)***		-0.35 (0.04)***	-0.16 (0.09)†
Cultural distance			-0.33 (0.04)***	-0.26 (0.04)***			-0.18 (0.04)***	-0.14 (0.04)***	-0.40 (0.08)***
Geographic distance	0.16 (0.05)**	0.04 (0.04)	-0.03 (0.05)	-0.11 (0.05)**	0.13 (0.04)**	0.03 (0.04)	-0.01 (0.05)	-0.05 (0.04)	-0.36 (0.08)***
Market size	0.52 (0.05)***	0.68 (0.05)***	0.55 (0.04)***	0.64 (0.05)***	0.88 (0.05)***	1.06 (0.04)***	0.87 (0.04)***	1.02 (0.04)***	-0.36 (0.07)***
Market growth	0.01 (0.01)	-0.01 (0.02)	0.01 (0.01)	-0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.005 (0.01)	-0.03 (0.02)
Low income dummy	-0.40 (0.17)*	-0.20 (0.19)	-0.78 (0.20)***	-0.43 (0.20)*	-0.98 (0.14)***	-0.74 (0.15)***	-1.22 (0.16)***	-0.98 (0.16)***	0.53 (0.20)**
Lower-middle income dummy	-0.11 (0.11)	0.16 (0.12)	-0.29 (0.11)**	0.03 (0.11)	-0.71 (0.09)***	-0.40 (0.09)***	-0.81 (0.09)***	-0.49 (0.09)***	0.54 (0.16)**
Upper-middle income dummy	-0.17 (0.09)†	0.05 (0.09)	-0.26 (0.08)**	-0.06 (0.09)	-0.49 (0.08)***	-0.21 (0.07)***	-0.50 (0.08)***	-0.26 (0.07)***	0.22 (0.13)†
FDI openness	0.40 (0.04)***	0.37 (0.04)***	0.46 (0.04)***	0.39 (0.03)***	0.12 (0.04)**	0.14 (0.03)***	0.18 (0.03)***	0.17 (0.03)***	0.44 (0.05)***
Average wage rate	0.49 (0.04)***	0.37 (0.04)***	0.36 (0.05)***	0.26 (0.04)***	0.36 (0.04)***	0.30 (0.03)***	0.34 (0.04)***	0.27 (0.04)***	0.009 (0.06)
Corporate income tax rate	-0.01 (0.03)	0.04 (0.03)	0.07 (0.03)*	0.06 (0.03)*	-0.02 (0.02)	-0.002 (0.02)	-0.01 (0.01)	0.005 (0.01)	0.08 (0.04)*
Ores and metals export share	-0.19 (0.03)***	-0.27 (0.03)***	-0.19 (0.03)***	-0.25 (0.03)***	-0.09 (0.03)**	-0.10 (0.02)***	-0.06 (0.02)*	-0.08 (0.02)**	-0.20 (0.06)***
Fuel export share	-0.09 (0.03)**	-0.08 (0.03)*	-0.11 (0.03)***	-0.07 (0.03)*	0.01 (0.03)	0.05 (0.03)*	0.04 (0.03)	0.08 (0.02)**	-0.08 (0.05)
NAFTA dummy	1.60 (0.13)***	1.19 (0.14)***	1.20 (0.14)***	0.91 (0.14)***	1.19 (0.16)***	0.88 (0.12)***	0.90 (0.14)***	0.72 (0.12)***	-0.12 (0.24)
WTO dummy	0.29 (0.19)	0.25 (0.19)	0.54 (0.21)*	0.43 (0.20)*	0.40 (0.17)**	0.56 (0.19)**	0.61 (0.19)***	0.72 (0.19)***	-0.17 (0.14)
NATO dummy	0.30 (0.07)***	0.05 (0.07)	0.05 (0.07)	-0.10 (0.07)	0.20 (0.07)**	0.05 (0.06)	0.09 (0.06)	-0.03 (0.05)	-0.15 (0.12)
Common language dummy	0.14 (0.08)	0.14 (0.08)	-0.26 (0.09)**	-0.16 (0.09)†	0.49 (0.09)***	0.43 (0.07)***	0.24 (0.10)*	0.21 (0.09)*	-0.83 (0.14)***
Africa dummy	-0.75 (0.19)***	-0.57 (0.16)**	-0.61 (0.16)***	-0.47 (0.15)**	-0.88 (0.18)***	-0.77 (0.15)**	-0.67 (0.16)***	-0.65 (0.14)***	-0.04 (0.27)
Asia dummy	-0.26 (0.13)*	-0.19 (0.11)†	0.33 (0.14)*	0.32 (0.12)*	-0.71 (0.13)***	-0.52 (0.10)***	-0.15 (0.15)	0.15 (0.13)	1.32 (0.24)***
Time trend	-0.01 (0.01)	0.01 (0.02)	-0.01 (0.02)	0.02 (0.02)	0.03 (0.02)†	0.04 (0.01)**	0.009 (0.01)	0.03 (0.01)*	-0.01 (0.03)
Model χ^2	2621.39***	2173.66***	2444.36***	2094.56***	1893.70***	3385.20***	3266.17***	4565.24***	385.79***
χ^2 test of focal model vs model containing controls only		63.12***	54.17***	112.23***		72.90***	19.38***	10.79**	36.90***

^aStandardized betas are reported for all continuous independent variables. Robust standard errors (corrected for heteroskedasticity and autocorrelation) are listed in parentheses. Year dummies and intercept are included but not shown.

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (two-tailed).

explaining vertical activity, and test Hypothesis 2b by comparing these coefficients within the model explaining horizontal activity.

Models 1b through 1d and 2b through 2d in Table 2 show that both governance imperfections and cultural distance are negatively related to both types of foreign activity. Hypotheses 1a and 1b predict, however, that both types of institutional hazards will be more negatively related to vertical than to horizontal activity. These hypotheses are tested in Model 3, which shows that both governance imperfections and cultural distance have a significantly negative effect on the ratio of vertical to horizontal activity, although the effect of governance imperfections is only marginally significant ($p < 0.10$). Combined with our earlier finding that both hazards are negatively related to vertical activity as well as to horizontal activity, their negative effects on the ratio of vertical to horizontal activity indicate that their impact on vertical activity is more negative than their impact on horizontal activity. We thus find support for Hypotheses 1a and 1b.⁸

Hypothesis 2a predicts that the impact of governance imperfections on vertical activity will be more negative than the impact of cultural distance on such activity. This hypothesis is tested in Model 1d, which shows that the standardized beta of governance imperfections ($\beta = -0.41$) in the vertical activity regression is indeed more negative than that of cultural distance ($\beta = -0.26$). A Wald test indicates that the difference between these betas is significant at $p < 0.05$, offering support for Hypothesis 2a.

Hypothesis 2b, finally, predicts that the impact of governance imperfections on horizontal activity will also be more negative than the impact of cultural distance on such activity. This hypothesis is tested in Model 2d, which shows that the standardized beta of governance imperfections in the horizontal activity regression is -0.35 and that of cultural distance -0.14 . A Wald test indicates that the difference between these betas is significant at $p < 0.01$, offering support for Hypothesis 2b.

In sum, we find substantial support for our contingency view that the impact of institutional hazards on foreign MNE activity depends on both the type of hazard and the type of activity. All our hypotheses are supported, although Hypothesis 1a only at $p < 0.10$.

ADDITIONAL ANALYSES

To explore the robustness of the above findings, we perform several additional analyses, whose results

are summarized in Panels B through D of Table 3. To facilitate the comparison with our earlier findings, Panel A repeats our most important initial results (i.e., those from Models 1d, 2d, and 3 of Table 2).

First, we estimate Models 1d (vertical activity) and 2d (horizontal activity) simultaneously through Zellner's (1962) seemingly unrelated regression (SUR) analysis. We do so for two reasons. First, the correlation between vertical and horizontal activity is 0.81, indicating that the error term of the vertical activity regression is likely to correlate with that of the horizontal activity regression. Our earlier FGLS-based regressions of vertical and horizontal activity did not account for this possible intercorrelation, thereby potentially biasing the regression coefficients of the two equations and hence the results of our Wald tests of Hypotheses 2a and 2b. A SUR analysis solves this potential bias problem by estimating the vertical and horizontal activity regressions simultaneously (through GLS), and by correcting the regression coefficients for intercorrelations between the error terms of the two regressions (Globerman & Shapiro, 1999; Greene, 2008). The second reason for performing an SUR analysis is that this type of analysis allows us to conduct a complementary test of Hypotheses 1a and 1b. Specifically, it allows us to formally compare the regression coefficients of our institutional hazards variables in the vertical activity regression with their counterparts in the horizontal activity regression through Wald tests between equations. Our earlier FGLS-based analysis only allowed us to test Hypotheses 1a and 1b by using the ratio of vertical to horizontal activity as the dependent variable, since Wald tests between equations are unavailable for FGLS regressions.

The most important results of the SUR analysis are reported in Panel B of Table 3. In line with our earlier ratio analysis, the complementary Wald tests between equations indicated that the effect of both types of institutional hazards on vertical activity is significantly more negative than their effect on horizontal activity ($p < 0.05$), offering further support for Hypotheses 1a and 1b. The Wald tests *within* equations continued to indicate that the effect of governance imperfections on each activity type is more negative than the effect of cultural distance on that activity type. These findings offer further support for Hypotheses 2a and 2b.

Second, following Globerman and Shapiro (2003) and Slangen and Hennart (2008), we estimated our main regression models through Heckman's (1979)

Table 3 Results of additional analyses^a

	<i>Dependent variables</i>			<i>Outcome of hypotheses tests</i>	
	<i>Vertical foreign activity</i>	<i>Horizontal foreign activity</i>	<i>Ratio of vertical to horizontal activity</i>	<i>Hypotheses 1a and 1b supported?</i>	<i>Hypotheses 2a and 2b supported?</i>
<i>Panel A: Initial results from Table 2</i>					
Governance imperfections	−0.41 (0.05)***	−0.35 (0.04)***	−0.16 (0.09)†	1a: Yes (at p<0.10)	2a: Yes
Cultural distance	−0.26 (0.04)***	−0.14 (0.04)***	−0.40 (0.08)***	1b: Yes	2b: Yes
<i>Panel B: Seemingly unrelated regression (SUR) analysis</i>					
Governance imperfections	−0.41 (0.07)***	−0.27 (0.04)***	Not available	1a: Yes	2a: Yes
Cultural distance	−0.20 (0.05)***	−0.12 (0.04)***	Not available	1b: Yes	2b: Yes
<i>Panel C: Correcting for possible sample selection bias through Heckman's two-stage procedure</i>					
Governance imperfections	−0.41 (0.05)***	−0.35 (0.04)***	−0.16 (0.09)†	1a: Yes (at p<0.10)	2a: Yes
Cultural distance	−0.26 (0.04)***	−0.13 (0.04)**	−0.41 (0.08)***	1b: Yes	2b: Yes
<i>Panel D: Vertical activity measured by US foreign affiliate sales to fellow affiliates</i>					
Governance imperfections	−0.48 (0.06)***	−0.34 (0.04)***	−0.35 (0.09)***	1a: Yes	2a: Yes
Cultural distance	−0.30 (0.05)***	−0.14 (0.04)***	−0.35 (0.08)***	1b: Yes	2b: Yes

^aFor each model the standardized regression coefficients of the key independent variables are reported, along with their robust standard errors (in parentheses). All panels contain the same control variables as those reported in Table 2.

†p<0.10; *p<0.05; **p<0.01; ***p<0.001 (two-tailed).

two-stage procedure to correct for potential sample-selection bias. We first ran a cross-sectional time-series probit regression to regress a set of relevant independent variables on a dependent variable coded 1 if a particular country-year observation was included in our sample and 0 if it was not. We then used the results of this probit regression to generate a correction term for sample selection (the so-called inverse Mills ratio), and added this correction term to our main FGLS-based regression models. The most important results of this two-stage procedure are shown in Panel C of Table 3, and are highly similar to our initial results.

Finally, we examine whether our initial results are robust to an alternative specification of vertical foreign activity. So far we have measured this activity through the sales by US foreign affiliates to all affiliated parties, both US parents and fellow affiliates. However, our argument that institutional hazards striking vertical affiliates cause disruptions in MNEs' production chains may apply more strongly to vertical affiliates supplying fellow affiliates than to those supplying their parents. This is because fellow affiliates are more likely to be transfer points in production chains than parent firms, which often sell the products they import from their vertical foreign affiliates to unaffiliated home-country customers (Beugelsdijk, Pedersen, & Petersen, 2009). We therefore re-ran our main models using US foreign affiliate sales to fellow affiliates as our measure of vertical activity. The key results of these analyses are shown in Panel D of Table 3, and are in line with our initial results. In fact, we now find even stronger support for most of our hypotheses, especially for Hypothesis 1a, which is now supported at $p < 0.001$.

In sum, the results of our additional analyses corroborate our earlier findings, and hence offer further support for our contingency perspective.

DISCUSSION AND CONCLUSION

It is widely accepted in the IB literature that MNEs generally perform less value-creating activity in countries that pose larger institutional threats, either in terms of formal governance deficiencies or in terms of informal cultural distance (Delios & Henisz, 2003; Flores & Aguilera, 2007; Globberman & Shapiro, 2003; Henisz & Delios, 2001; Sethi et al., 2003). Our findings support this view, since they indicate that governance imperfections and cultural distance are both negatively related to the two main types of foreign activity (i.e., horizontal and vertical activity). However, our findings also show

that matters are more complex, in that the strength of the negative relationship between institutional hazards and foreign activity is contingent upon the type of activity and the type of hazard. Controlling for many other factors, we find support for our hypotheses that governance and cultural hazards both have a stronger negative impact on vertical than on horizontal activity. These findings support the idea that institutional hazards are a greater threat to vertical activity than to horizontal activity. We also examined whether the impact of institutional hazards on each main type of foreign activity depends on the type of institutional hazard (i.e., exogenous or endogenous). We find that governance imperfections have a more negative impact than cultural differences, both on vertical activity and on horizontal activity. These findings suggest that exogenous governance hazards are a larger threat to both types of foreign activity than endogenous cultural hazards.

Our finding that institutional hazards have more negative effects on vertical activity than on horizontal activity contrasts with Kobrin's prediction that vertical activity "is less likely to be sensitive to environmental variables" than horizontal activity (1976: 32, emphasis added). His prediction is based on the observation that vertical activity "is often export oriented" whereas horizontal activity is "linked to the local economy" (Kobrin, 1976: 32). While this observation is true, it ignores the fact that precisely because vertical affiliates often engage in intra-firm exports, they are tightly linked to fellow MNE entities, causing institutional hazards striking vertical affiliates to "spill over" to these entities. Our findings suggest that the threat of such negative spillovers is an important barrier to undertaking vertical activity in institutionally hazardous countries, in that MNEs seem to limit vertical activity in such countries significantly more than horizontal activity. Micro-level studies may shed light on the exact ways in which MNE parent executives incorporate this spillover threat in their location decisions for individual vertical affiliates.

Our finding that both vertical and horizontal activity decrease more rapidly with governance imperfections than with cultural distance suggests that formal governance factors are generally a larger source of hazards for MNE affiliates than informal sociocultural factors. This finding contrasts with Kostova and Zaheer's (1999) proposition that formal (regulatory) institutional factors are a *smaller* source of hazards for foreign affiliates than informal

(sociocultural) factors. Kostova and Zaheer based their proposition on the argument that parent executives can more easily observe the formal laws, rules, and regulations of a host society than its informal norms, values, and cognitive structures. Our finding that vertical and horizontal activity are more sensitive to governance imperfections than to cultural differences suggests that it may not so much be the *ex ante* observability of a hazard that determines the magnitude of its negative impact, but rather its *ex post* resolvability, with irresolvable governance hazards having a larger negative impact than (partly) resolvable cultural hazards. This potentially important distinction between the *ex ante* observability and *ex post* resolvability of institutional hazards constitutes an interesting avenue for future research.

One limitation of our study is that while we made a conceptual and empirical distinction between horizontal (i.e., market-seeking) and vertical (i.e., natural resource and efficiency-seeking) activity, MNEs may also have other motives for expanding abroad. They may for instance wish to respond to strategic moves of their competitors, obtain intangible capabilities, or escape unfavorable home-country regulation (Dunning, 1993; Hennart & Park, 1994; Nachum & Zaheer, 2005). Unfortunately, our affiliate sales data do not allow us to identify foreign activities driven by these other motives. Future studies could therefore examine how such activities are affected by institutional hazards.

Another limitation is that we could not perform our analyses at the industry level, because the BEA does not classify US foreign affiliate sales to affiliated parties, nor those to unaffiliated ones, by industry. This is unfortunate, because the strength of the relationships constituting our contingency framework may differ across industries. While we excluded affiliate sales of services to reduce the industry variation in our sample, the contingency relationships that we identified could still vary across our remaining industries. We therefore recommend that future studies try to obtain industry-level data to explore the existence of inter-industry differences in the validity of our contingency framework.

Despite these limitations, our paper has noteworthy implications for IB research on the institutional determinants of macro-level MNE activity and micro-level affiliate location choices. First, because institutional hazards have a differential impact on vertical and horizontal activity, future IB

studies should empirically account for this differential impact. They should either analyze separately affiliates performing vertical activity and those performing horizontal activity, or include interaction terms of institutional hazard variables and variables indicating whether the main activities performed by the affiliates are of a horizontal or vertical nature. Prior studies have typically implemented neither of these options (e.g., Delios & Henisz, 2003; Flores & Aguilera, 2007; Globerman & Shapiro, 2003; Henisz & Delios, 2001; Loree & Guisinger, 1995; Sethi et al., 2003), thus ignoring the fact that institutional hazards affect vertical and horizontal activity in fundamentally different ways. Second, future studies of the institutional determinants of macro-level MNE activity and micro-level location choice should always consider both formal and informal institutional hazards, because each hazard type has its own unique impact. Prior studies have often focused on either formal or informal institutional hazards (e.g., Bevan et al., 2004; Globerman & Shapiro, 2003; Henisz & Delios, 2001; Nigh, 1985), resulting in an incomplete view of MNEs' foreign investment decisions. Our study shows that such decisions are contingent upon both the type of institutional hazard and the type of foreign activity.

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NOTES

¹Although vertically integrated MNEs can sometimes restore their production chains by relocating vertical affiliates that have been struck by an institutional hazard, relocation processes are time consuming and costly, and lead MNEs to incur substantial sunk costs (Benito, 1997; Motta & Thisse, 1994). Hence even MNEs with vertical affiliates whose activities can be relocated should be very reluctant to locate such affiliates in institutionally hazardous countries.

²Note that we do not intend to argue that foreign MNEs cannot reduce governance hazards *ex ante*.



Indeed, MNEs may be able to change a host country's governance system to their advantage (Root, 1988). We argue only that MNEs generally cannot resolve governance hazards *once these hazards become reality*, i.e., once they materialize in governmental decisions or in political or societal upheaval with negative consequences for MNE affiliates.

³When we used the original Kogut and Singh index, we obtained results similar to those reported in Table 2.

⁴This was confirmed by the fact that the replacement of population size by GDP generally lowered the explanatory power of our models and yielded a non-significant effect of GDP in several models.

⁵We thank an anonymous reviewer for bringing this point to our attention.

⁶To directly control for inter-country differences in the sectoral composition of US MNE activity, we

collected data on the shares in total US affiliate value-added of a selection of industries for which sufficient and usable data were available from the BEA. When we added these sectoral value-added shares to our regression models, we obtained results quantitatively and qualitatively similar to those reported in Table 2.

⁷Following Cannella, Park, and Lee (2008), we generated the VIFs through OLS regressions, since VIFs are unavailable for FGLS regressions.

⁸The sizes of the standardized betas of governance imperfections ($\beta = -0.16$) and cultural distance ($\beta = -0.40$) in Model 3 indicate that the extent to which institutional hazards have a more negative effect on vertical activity than on horizontal activity is 2.5 times larger for cultural hazards than for governance hazards. We thank an anonymous reviewer for bringing this point to our attention.

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APPENDIX

See Table A1.

Table A1 Host countries included in the sample

Argentina	Denmark	Ireland	Poland
Australia	Ecuador	Israel	Portugal
Austria	Egypt	Italy	Russia
Belgium	Finland	Jamaica	South Africa
Brazil	France	Japan	South Korea
Canada	Germany	Malaysia	Spain
Chile	Greece	Mexico	Sweden
China	Hong Kong	Netherlands	Switzerland
Costa Rica	Hungary	New Zealand	Thailand
Colombia	India	Norway	Turkey
Czech Republic	Indonesia	Peru	United Kingdom
		Philippines	Venezuela

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