

POLITICAL CAPABILITIES, POLICY RISK, AND INTERNATIONAL INVESTMENT STRATEGY: EVIDENCE FROM THE GLOBAL ELECTRIC POWER INDUSTRY*

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Whereas conventional wisdom holds that multinational firms (MNEs) invest less in host countries that pose greater policy risk—the risk that a government will opportunistically alter policies to expropriate an investing firm’s profits or assets—we argue that MNEs vary in their response to host-country policy risk as a result of differences in organizational capabilities for assessing such risk and managing the policymaking process. We hypothesize that firms from home countries characterized by weaker institutional constraints on policymakers or greater redistributive pressures associated with political rent-seeking will be less sensitive to host-country policy risk in their international expansion strategies. Moreover, firms from home countries characterized by sufficiently weak institutional constraints or sufficiently strong redistributive pressures will seek out riskier host countries for their international investments to leverage their political capabilities, which permit them to attain and defend attractive positions or industry structures. We find support for our hypotheses in a statistical analysis of the FDI location choices of multinational firms in the electric power generation industry during the period 1990–1999, the industry’s first decade of internationalization.

Key words: foreign entry; location choice; foreign direct investment; political capabilities; political risk; policy risk

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INTRODUCTION

Conventional wisdom holds that multinational firms (MNEs) invest less in countries that pose greater policy risk—the risk that a government will opportunistically alter policies to directly or indirectly expropriate a firm’s profits or assets. Research in international business (e.g., Kobrin, 1978, 1979) economics (e.g., Brunetti and Weder, 1998) and political science (e.g., Jensen, 2003) supports this view, finding a negative relationship between various sources of policy risk—such as government instability, political violence, or corruption—and inward country-level foreign direct investment (FDI) flows. In focusing on aggregate investment flows, this research necessarily abstracts away from variation in firms’ strategic responses to policy risk. In many cases, however, multinational firms (MNEs) do invest in risky host countries. For example, in the empirical setting that we examine below, the global electric power industry, almost 25 percent of the cross-border investments made by privately-owned firms during the 1990s were into countries that ranked in the top quartile of policy risk, according to one measure.¹

We argue that variation in MNEs’ strategic responses to host-country policy risk reflects differences in political capabilities—organizational capabilities for assessing policy risk and managing the policymaking process—shaped by a firm’s home-country policymaking environment. Prior research linking influences present in a firm’s home-country environment to the development of capabilities that may be leveraged abroad has focused primarily on market-related or technological capabilities (e.g., Dunning, 1980; Erramilli, Agarwal, and Kim, 1997; Porter, 1990). A more limited body of research, in contrast, has considered the influences that shape firms’ political capabilities. Firm-level studies in this vein have considered the effect of prior experience in risky foreign host countries (Delios and Henisz, 2003a, 2003b) or in a regulated home-country industry (Garcia-Canal and Guillén, 2008) on the outward FDI choices

¹ As discussed below, we measure policy risk using Henisz’s (2000) political constraints index (*POLCON*).

of firms from a single home country. At the country level, empirical research has linked the level of domestic conflict in countries originating FDI flows to the volume of such flows into a single host country (Tallman, 1988). We advance this research conceptually by theorizing more explicitly about the nature and development of firms' political capabilities and identifying specific home-country sociopolitical influences on the formation of such capabilities. Empirically, we exploit variation in both home- and host-country attributes to demonstrate that home-country influences interact with the level of host-country policy risk to shape MNEs' geographic expansion choices, providing some of the broadest and most direct empirical evidence to date on the origin and role of firms' political capabilities.

The specific source of policy risk on which we focus is the extent to which the formal policymaking process lacks checks and balances or 'institutional constraints' (Henisz, 2000a; Knack and Keefer, 1995) that would otherwise constrain the behavior of policymakers motivated to expropriate some portion of MNEs' income streams through post-investment policy changes, such as increased taxes, tariffs, or local content requirements. We hypothesize that firms from more contentious home-country policymaking environments—environments characterized by relatively weak institutional constraints on policymakers or in which redistributive pressures associated with political rent-seeking are relatively strong—develop political capabilities that render them less sensitive to host-country policy risk stemming from weak institutional constraints. Firms from home-country policymaking environments with sufficiently weak institutional constraints or strong enough redistributive pressures, moreover, will seek out riskier host countries for their international investments to leverage their political capabilities, which permit them to attain and defend attractive positions or industry structures. We find support for our hypotheses in a statistical analysis of the FDI location choices of MNEs in the electric power

generation industry throughout the industry's first decade of internationalization (1990–1999). During this period, 64 countries opened to and received FDI in power generation and 186 firms from 28 home countries invested in foreign power projects, yielding a unique dataset with substantial heterogeneity in home- and host-country policymaking environments.

THEORY

Political capabilities

National policymaking processes afford opportunities for interested actors to shape policy outcomes, creating a source of policy risk for firms when opposed domestic groups are politically organized (Henisz and Zelner, 2005) and political opportunity when domestic resistance is muted or can be overcome. Firms rely on their political resources and capabilities both to safeguard sunk investments against the potentially adverse policy consequences of rival groups' political rent-seeking efforts and to shape the policy environment to their own benefit (Henisz, 2003).

Paralleling the distinction originally made by Amit and Schoemaker (1993) in the context of a firm's market environment, we conceive of a firm's 'political resources' as stocks of available political factors to which the firm gains access, primarily ties with pivotal political actors (Faccio, 2006; Fisman, 2001; Henisz and Delios, 2004; Holburn and Vanden Bergh, 2002, 2004; Siegel, 2007) such as government officials and the interest groups that seek to influence them. Correspondingly, 'political capabilities' include a firm's capacity to deploy (Amit and Schoemaker, 1993) or leverage (Tallman and Fladmoe-Lindquist, 2002) its political resources on an ongoing basis, for example, by identifying common ground among the stakeholder groups to which the firm has developed ties and organizing these groups into coalitions capable of exerting

sufficient pressure on government officials to initiate or maintain favorable public policies (Henisz and Zelner, 2005).

The capacity to choose the right resources *ex ante* (Makadok, 2001)—to identify key local political actors and their preferences—represents an especially important component of political capabilities for MNEs entering new host countries. MNEs suffer a liability of foreignness (Zaheer, 1995) relative to domestic competitors and interest groups as a result of local actors' superior jurisdiction-specific political resources, including detailed knowledge of the identities and preferences of key local political actors and, in many cases, direct ties to these actors. Strong host-country institutional constraints resulting from multiple checks and balances in the policymaking process may help to rectify this imbalance by constraining policymakers from responding to rival domestic actors' rent-seeking efforts. Where institutional constraints are weak, in contrast, MNEs face a greater risk of expropriation through adverse changes to policies or contracts as well as more limited opportunities to shape such covenants to their own benefit.

One option for MNEs confronting weak host-country institutional constraints is to hire politically knowledgeable or connected consultants or employees, who may identify and broker relationships with key local political actors. But using the market to access political resources is hazardous: just as potential entrants lack detailed knowledge of the identity and preferences of key host-country political actors, so too do they lack knowledge of who the best local agents are to provide advice or assistance, a problem compounded by the fact that such agents may misrepresent themselves or—if they have their own political agendas—deploy their superior local knowledge and ties against an MNE's interests *ex post* (Henisz, 2000b). More generally, the potential value of *ex ante* 'resource-picking' lies as much in avoiding 'losers' as it does in discerning 'winners' (Makadok, 2001: 388).

Given domestic political actors' jurisdiction-specific political advantages and the risks inherent in accessing political resources through the market, MNEs entering a host country with weak institutional constraints are more likely to succeed—and thus more likely to enter in the first place—if they possess political capabilities to facilitate the identification of key actors and formation of winning coalitions, both to secure attractive terms *ex ante* and defend against adverse policy or contractual changes *ex post*. A relatively contentious home-country policymaking environment fosters the development of such capabilities—and creates barriers to their imitation by firms from home countries with less contentious policymaking environments—through two mechanisms, organizational learning and cognitive imprinting.

Learning

Firms learn from their own experience (Levitt and March, 1988). Repeated engagement in an activity permits a firm to infer from previous outcomes and adjust its actions and routines accordingly (Cyert and March, 1963). In the multinational context, prior research has found a positive association between an MNE's direct experience operating in a given host country and the likelihood that its operations there will survive (Barkema *et al.*, 1996).

In the political realm, the knowledge that firms develop about how the policymaking process operates when governed by a particular institutional configuration can be applied to other countries with similar institutional configurations (Delios and Henisz, 2003b; Henisz and Delios, 2002). As Henisz contends, 'Although the specific micro-level routines and practices necessary to manage idiosyncratic institutional environments will probably differ from country to country, firms may develop broader meta-level routines both to identify the idiosyncrasies in the institutional environment and to lobby or influence the actors who can best prevent an adverse policy change or promote a favorable policy change' (Henisz, 2003: 174).

Existing research examining such ‘meta-level routines’—or political capabilities—has focused mainly on the role of firms’ prior international experience in shaping these capabilities (Delios and Henisz, 2003b; Henisz and Delios, 2001; Henisz and Macher, 2004). A firm’s experience in its home-country policymaking environment, however, arguably represents a more fundamental influence. Firms from more contentious home-country environments—environments characterized by weaker institutional checks and balances or heightened political rent-seeking—necessarily participate more intensively in the policymaking process than do firms from less contentious environments because the performance of the former depends more heavily on their ability to influence policy outcomes. As a result, such firms develop superior capabilities for assessing political dynamics and managing relationships with political actors (Boddeyn and Brewer, 1994). These political capabilities may serve as a source of international competitive advantage because they are difficult for other firms to imitate, both as the result of time-compression diseconomies (Dierickx and Cool, 1989) and because ‘the most effective political behaviors are often covert in nature, whether legal or not’ (Boddeyn and Brewer, 1994: 136; Etzioni, 1988: 220).

Imprinting

The second channel through which a firm’s home-country policymaking environment shapes its political capabilities is cognitive imprinting (Stinchcombe, 1965). As a result of shared experiences, home-country managers develop mental models—simplified representations of reality—which they then use to interpret the environment and guide their actions under conditions of uncertainty (Denzau and North, 1994; Walsh, 1995; Weick, 1995).² Guillén has

² Much of the early strategy research on mental models focused on how managers in the same industry or strategic group developed convergent mental models (e.g., Porac *et al.*, 1995). In our empirical analysis, however, we examined the first decade after the electric power industry’s internationalization, prior to which firms operated only in their domestic institutional context. Thus, we do not expect to observe a ‘global’ industry-level imprint, but rather

applied these insights in a cross-national context, arguing that the ‘structured setting of the nation-state’, characterized in part by ‘institutional patterns’ (Guillén, 1994: 6-7), affects the organizational ideologies used by managers to ‘sort out the complexities of reality, frame the relevant issues, and choose among alternative paths of action’ (Ibid.: 4).

Oliver has linked this notion to the concept of imitation barriers. Differences in managerial resource choices reflect ‘cognitive sunk costs’ associated with engrained habits or routines, which are themselves rooted in and legitimated by historical precedent (Oliver, 1997: 702)—in the current case, precedent established in a firm’s home-country policymaking environment. To the extent that managers are unable or unwilling to access resources that are incompatible with the imprint made by their home-country institutions, a firm’s home-country environment may serve as an ‘institutional isolating mechanism’ (Oliver, 1997: 704) that advantages firms whose home-country institutions facilitate the resource choices necessary for success in a given host-country environment.

Thus, in addition to developing market-based advantages as a result of influences in their home-country environment which they may then leverage abroad (Tallman and Fladmoe-Lindquist, 2002), firms also develop political capabilities which they leverage by entering new jurisdictions where the policymaking process is relatively fluid(2008)(2008)(2008)(2008), requiring deft political navigation to secure and defend advantageous positions. Garcia-Canal and Guillén (2008) have made a parallel argument about firms originating in regulated industries, arguing that such firms are more likely to expand into host countries whose governments have broader policymaking discretion because these countries present better opportunities for negotiating favorable entry terms.

heterogeneous imprints reflecting diverse domestic contexts. This expectation is broadly consistent with strategy research focusing on the sources of heterogeneity in mental models (e.g., Hodgkinson and Johnson, 1994).

HYPOTHESES

Home-country institutional constraints

The first set of hypotheses concerns the influence of a firm's home-country political institutions on its ability to manage policymaking outcomes in host countries with weak institutional constraints on policymakers. Building on early research which emphasized the impact of military coups, political violence and government instability on a country's level of political risk and the consequent threat of direct expropriation (Kobrin, 1979), more recent research in international business (Henisz, 2000a), political science (Tsebelis, 2003) and political economy (Knack and Keefer, 1995) has identified the extent of institutional constraints on policymakers—checks and balances—as a central determinant of policy risk and the consequent threat of indirect or “creeping” expropriation. National policymaking systems requiring agreement among more numerous and diverse institutional actors to change policy—e.g., systems with multiple constitutionally separate branches of government populated by individual policymakers with differing partisan affiliations—are characterized by relatively high stability and thus pose a relatively low level of policy risk. Conversely, systems in which policymaking authority is more concentrated or shared among actors with similar preferences are characterized by lower policy stability and thus pose a higher level of policy risk (Henisz, 2000a). This conceptualization of policy risk is especially common in ‘large n’ cross-national analyses because of its generality and the availability of relevant data.

As a result of organizational learning and imprinting processes, firms from home countries with weaker institutional constraints on policymakers are more adept at manipulating policy outcomes than are firms from countries with stronger institutional constraints. These firms' political capabilities reduce the level of uncertainty surrounding relevant policymaking outcomes

in host countries with weaker institutional constraints and consequently mute the entry-deterring effect of host-country policy risk. Moreover, because political capabilities may serve as a source of superior performance (Henisz, 2003), firms from home countries with sufficiently weak institutional constraints will be more likely to enter host countries with relatively weak institutional constraints.

Hypothesis 1a. The entry-deterring effect of host-country policy risk resulting from weak institutional constraints is smaller for firms from home countries with weaker institutional constraints.

Hypothesis 1b. For firms from home countries with sufficiently weak institutional constraints, greater host-country policy risk encourages entry.

Home-country redistributive pressures

Hypotheses 1A and 1B offer an explanation for why firms from countries whose formal political institutions fail to constrain policymakers (as is the case in many developing countries) invest in other countries with high policy risk resulting from weak institutional constraints. These hypotheses do not explain, however, why firms from countries with relatively strong institutional constraints (as is the case in many developed countries) also invest in risky host countries. In the empirical setting that we examine below, however, over half of the cross-border electricity generation investments received by countries in the riskiest quartile worldwide, as measured by institutional constraints, were made by firms from home countries whose level of institutional constraints placed them in the least risky quintile.

We attribute this pattern to a second attribute of a firm's home-country policymaking environment, the level of redistributive pressures resulting from distributional conflict among resident socioeconomic groups. Greater conflict of this type is associated with more intense

political rent-seeking (Easterly *et al.*, 2006; Keefer and Knack, 2002; Rodrik, 1999), which shapes individuals' mental models of the policymaking process and consequently the skills and organizational routines used to manage this process. These skills and routines can be used to assess and manage host-country policy risk because, institutional constraints notwithstanding, such risk ultimately derives from the demands of opposed local actors, as discussed above. Such demands are likely to be especially pronounced when new policies such as privatization and liberalization upset prevailing social bargains (Rodrik, 1999). For example, in the electric power industry, domestic producers disadvantaged by the entry of foreign firms in many cases lobbied governments for 'asymmetric regulation' and public sector labor unions lobbied for restrictive labor laws (Henisz and Zelner, forthcoming). Foreign entrants whose political capabilities bear the imprint of a more contentious home-country policymaking process are better able to anticipate and counter such demands.

Prior cross-national research has directly or indirectly linked two main types of home-country socioeconomic cleavages to the intensity of political rent-seeking, a country's level of income inequality and the degree of fragmentation among resident ethnic groups. Higher income inequality is associated with greater redistributive pressures—and thus a more contentious policymaking process—because governments may be able to increase their political support by expropriating industries or businesses that serve substantial parts of the population, such as financial services and utilities (Levy and Spiller, 1994). Empirical studies supporting this argument have found a negative association between income inequality, on the one hand, and measures of contractual and property rights, sociopolitical instability and economic growth, on the other (Alesina and Perotti, 1996; Alesina and Rodrik, 1994; Easterly *et al.*, 2006; Keefer and Knack, 2002; Persson and Tabellini, 1992, 1994; Rodrik, 1999).

A similar logic underlies the relationship between ethnic fractionalization and political rent-seeking. Easterly and Levine (1997) have summarized, writing that ‘an assortment of political economy models suggest that [ethnically] polarized societies will be... prone to competitive rent-seeking by the different groups’ (see also Alesina *et al.*, 2003). In addition to Easterly and Levin’s supportive empirical results, empirical studies linking greater ethnic fractionalization to weaker contractual and property rights (Keefer and Knack, 2002), the quality of government (La Porta *et al.*, 1999) and economic growth (Easterly *et al.*, 2006; Rodrik, 1999) have also provided supportive evidence.

Hypothesis 2a. The entry-detering effect of host-country policy risk resulting from weak institutional constraints is smaller for firms from home countries with higher income inequality.

Hypothesis 2b. For firms from home countries with sufficiently high income inequality, greater host-country policy risk encourages entry.

Hypothesis 3a. The entry-detering effect of host-country policy risk resulting from weak institutional constraints is smaller for firms from home countries with higher ethnic fractionalization.

Hypothesis 3b. For firms from home countries with sufficiently high ethnic fractionalization, greater host-country policy risk encourages entry.

INDUSTRY SETTING AND STATISTICAL METHODOLOGY

Setting

We tested the hypotheses using data on private electricity producers’ choice of host countries for cross-border investment in electricity generating facilities during the period 1990 – 1999. The data cover all private investments in generation worldwide during the sample period except for inward investments to the United States and Canada.

The global private electricity production industry is an attractive setting in which to test the hypotheses for two main reasons. First, during the sample period, which represents the global industry's first decade of operation, many firms lacked significant prior international experience. Prior to 1990, only a handful of countries permitted private investment of any sort in electricity generating facilities, and none permitted inward FDI. By 1995, 43 countries or territories had opened to and received such FDI through legislative or administrative reforms; by 1999, the number was 64. (We obtained information on privatization reforms, including dates of legislative acts, executive decrees and administrative rule changes, and privatizations, from a variety of sources, including Gilbert and Kahn (1996), APEC (1997), OECD (1997), International Private Power Quarterly (1998) and the Asian Development Bank (1999).) During this period, 186 firms from a total of 28 countries made 745 cross-border investments in generation, accounting for roughly 130 gigawatts of capacity. Of these 186 firms, 39 percent, accounting for 43 percent of the investments, were traditional state-owned or recently privatized domestic incumbents, which typically lacked significant (if any) prior international experience. Of the remaining non-utility firms, 30 percent were aged 10 years or less when they made their first cross-border investment in generation. Thus, approximately 57 percent of the firms in the sample had little or no prior international experience. The influence of the home-country environment on international investment strategy should have been particularly pronounced for these firms.

A second appealing aspect of the global private electricity production industry for testing the hypotheses is the potential for conflict between the interests of host-country political actors and those of foreign investors. The large up-front capital costs and long payback periods for investments in generating facilities depress electricity investors' *ex post* bargaining power, while the high political salience of infrastructure industries recently opened to private investment in the

sample period rendered investors—especially foreign ones—susceptible to claims of monopoly abuse and other forms of exploitative behavior (Henisz and Zelner, 2005; Levy and Spiller, 1994). Hence, the influence of host-country policy risk on multinationals' location choices should have been substantial, as should the relevance of capabilities for assessing and managing such risk.

Dependent variable and data structure

The data set includes 496 firm-investment-years, defined as a year in which a given firm made one or more cross-border investments in electricity generation.³ Each firm-investment-year consists of multiple records, with each record representing a potential investment choice, i.e., a host country that was open to FDI in electricity generation that year. The number of records increases with each successive year due to the increasing number of countries that permitted foreign investment in power generation, ranging from a minimum of four (for the single firm making a cross-border investment in generation in 1990) to a maximum of 64 (for each of the 35 firms that invested in 1999). The average number of host countries chosen by an investing firm in a single firm-investment-year was 1.5, and ranged from a minimum of one in 344 firm-investment years to a maximum of eight in a single firm-investment-year.

The dependent variable in our main specification, Y_{ijt} , is a binary measure that takes a value of one if firm i made an investment in a new generation facility (i.e., a facility in which it had not previously invested) in country j in year t , and zero otherwise. We obtained the data used to construct our dependent variable from Hagler Bailly, a private consulting firm that tracked

³ Data from years in which a given firm made no cross-border investment cannot be used to shed light on our research question, which concerns the relative attractiveness of potential host countries, conditional on a firm's decision to make a cross-border investment. In the fixed-effects logit models that we estimated (discussed below), the records comprising a firm-year with no investment drop out because they do not contribute to the log-likelihood. Although it is possible that our results may reflect a selection bias if the set of variables influencing the decision to expand abroad overlapped with those influencing location choice (Shaver, 1998), we lack the data necessary to address the possibility of such bias econometrically.

international investment activity in the utilities sector, and the World Bank's 'Private Participation in Infrastructure' database.

Independent variables

We modeled firm i 's choice of whether or not to enter country j in year t as:

$$Y_{ijt} = f(POLRISK_{jt} + POLRISK_{it} + POLRISK_{it} \times POLRISK_{jt} + GINI_{it} + GINI_{it} \times POLRISK_{jt} + ELF_{it} + ELF_{it} \times POLRISK_{jt} + EXPERIENCE_{ijt} + DISTANCE_{ij+} + DYADIC_{ijt} + MARKET_{jt})$$

Table 1 contains descriptive statistics and correlation coefficients.

[Insert Table 1 about here]

Policy risk. In our primary specification, we used the variables $POLRISK_{jt}$ and $POLRISK_{it}$ to measure the extent of institutional constraints in (potential) host country j and home country i , respectively, as of year t . These variables are based on Henisz's political constraints variable, $POLCON$, which reflects the extent to which the formal relationships among a country's branches of government (i.e., executive, legislative and judicial) and the partisan composition of the individual actors inhabiting these branches constrain any one institutional actor from unilaterally effecting a change in policy (Henisz, 2000a). $POLCON$ is perhaps the most widely used variable for measuring policy risk or stability, having appeared in over 100 empirical studies in the last decade, including several published in the *Strategic Management Journal* (Delios and Henisz, 2003; Garcia-Canal and Guillén, 2008; Goerzen and Beamish, 2003).

$POLCON$ is derived using spatial modeling techniques from positive political theory. A value of zero reflects the absence of effective veto players and thus a complete concentration of policymaking authority. Each additional institutional veto player (a branch of government that is both constitutionally effective and controlled by a different party from the other branches) has a positive but diminishing effect on $POLCON$'s value. Greater (less) partisan fractionalization

within an aligned (opposed) branch also increases *POLCON*'s value, whose theoretical and maximum value is one. For complete details on *POLCON*'s derivation, see Henisz (2000a).

In our main specification, we defined policy risk for host country j in year t as $POLRISK_{jt} = 1 - POLCON_{jt}$. To test Hypotheses 1A and 1B, we also defined, for a firm from home country i as of year t , $POLRISK_{it} = 1 - POLCON_{it}$ which we included in both a multiplicative interaction term with $POLRISK_{jt}$ and by itself. Because values of *POLRISK* may fluctuate annually due to changes in partisan composition (and occasionally due to constitutional changes), we used a three-year moving average to reflect a firm's recent home-country experience. As discussed below, we also confirmed the robustness of our results to the use of different moving average windows as well as the use of a conceptually related alternative measure, *CHECKS* (Beck *et al.*, 2001).

Income inequality. To test Hypotheses 2A and 2B, we included a firm's time-varying home-country Gini coefficient, $GINI_{it}$, and a multiplicative interaction term equal to the product of host-country policy risk in year t , $POLRISK_{jt}$, and $GINI_{it}$. The Gini coefficient is a commonly used measure of income dispersion from economic growth research that ranges from a theoretical minimum of zero, indicating perfect income equality among the residents of a country, to a theoretical maximum of one, indicating the possession of all national wealth by a single individual. In our main specification, we used Gini coefficients from the World Bank's 'World Development Indicators' database. We also tested our results for robustness to alternative measures, as discussed below.⁴

⁴ Because Gini coefficients are reported at irregular intervals that vary by country, we interpolated missing annual values. In our main specification, we used the resultant annual home-country Gini coefficients to define $GINI_{it} = 1 - \frac{1}{3} \sum_{i=t-2}^t GINI_{it}$ to reflect a firm's recent home-country experience. We confirmed the robustness of our results to different moving average windows, as discussed below.

Ethnic fractionalization. To test Hypotheses 3A and 3B, we included a measure of a firm's home-country ethnolinguistic fractionalization level, ELF_i , as well as a multiplicative interaction term equal to the product of host-country policy risk in year t , $POLRISK_{jt}$, and ELF_i . The ELF index measures the probability that two randomly selected people from a given country do not belong to the same ethnolinguistic group. It was originally developed by a team of researchers at the Miklukho-Maklai Ethnological Institute in the Soviet Union and subsequently adopted by Easterly and Levine (1997) and others. We also tested our results for robustness to alternative measures, as discussed below.

Host-country experience. Prior research has considered the effects of an MNE's prior experience in a given host country on its subsequent decisions to make additional investments there (Delios and Henisz, 2000; Henisz and Delios, 2001; Henisz and Macher, 2004). Following these studies, we included, for each firm-investment-year, a firm's accumulated stock of experience in a given host country. We calculated this variable as the natural logarithm of one plus the firm's total prior project-years in the relevant host country to reflect the decreasing incremental value of a year of experience (Henisz and Macher, 2004).

Distance. In addition to our measures of primary theoretical interest, we included a vector of variables, labeled $DISTANCE_{ij}$, to capture various dimensions of distance between a firm's home country i and host country j . Empirical research in international business (e.g., Barkema *et al.*, 1996; Davidson, 1980; Nordström and Vahlne, 1994) and international trade (see Disdier and Head, 2008) has found that greater geographic distance and dissimilarity of cultural, administrative and economic institutions (Ghemawat, 2001) depress bilateral investment and trade flows, presumably because the 'psychic' costs of doing business in a more distant host

country are greater (Johanson and Vahlne, 1977), raising a firm's hurdle rate of return for investing there.

We drew our distance measures from this broad body of research. For the cultural distance between a firm's home country and a (potential) host country, we used the composite index developed by Kogut and Singh (1988) in their classic study of entry mode choice, which is based on Hofstede's data on national cultural attributes (Hofstede, 2003) and has been used in several hundred empirical studies appearing in the *Strategic Management Journal* and elsewhere. This index is equal to the average, across Hofstede's four dimensions of culture (power distance, individualism, masculinity, and uncertainty avoidance), of the ratio of the squared difference between two countries' values for a given dimension to the population variance of this dimension. We also included a variable commonly used in research on international trade that takes a value of one when two countries have the same official language and zero otherwise. This variable was constructed by Rose and van Wincoop (2001) from the CIA's *World Factbook*.

To capture additional aspects of cultural as well as administrative distance, we included a colonial linkage measure that takes a value of one if two countries ever had a colonial relationship or one country colonized the other after 1945, and zero otherwise.⁵ The measure of geographic distance is the great circle distance between two countries' capital cities. The source for both of these variables is the 'Distances' database published by the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII). We measured economic distance as the natural logarithm of the absolute value of the difference between two countries' GDP per capita, which we obtained from the World Bank's 'World Development Indicators' database.

⁵ Pre-1945 colony-colonizer relationships are largely reflected in the common language variable.

In addition to these traditional measures of bilateral distance, we also included a technological distance measure to capture the fit between the technical capabilities that an electricity producer was likely to have developed in its home-country technological environment and the composition of the generating capacity in a (potential) host country. The major technologies used to generate electricity are mature and there is relatively little variation in the skills and capabilities required to maintain and operate generating units that use the same fuel type in one location versus another. The skills and capabilities required to operate generating units powered by different fuel types do vary, however (Sillin, 2004).

Although data on the technology type portfolios of most of the individual firms in our analysis are unavailable, the World Bank's 'World Development Indicators' database includes annual country-level data on the fraction of electricity production using the five fuel types (coal, gas, oil, nuclear and hydro) that account for the vast majority of electricity generation worldwide. We employed these data to construct a technological distance measure based on a similar formula to that used for the cultural distance measure. Specifically, we calculated the average, across the five fuel types, of the ratio of the squared difference between two countries' fuel type share values to the population variance of this value. The version of this measure included in our main specification incorporates a three-year moving average of a firm's home-country fuel shares to reflect a firm's recent home-country experience. We also confirmed the robustness of our results to the use of one-year lags and different moving average windows in the construction of the technological distance measure.

Dyadic political influences. In addition to the distance measures described above, we also included two time-varying dyadic measures to capture the predisposition of political officials in a given host country to treat firms from a given home country unfavorably. The first dyadic

measure gauges societal sentiment in a (potential) host country toward an investing firm's home country. Politically astute firms are more likely to anticipate greater popular backlash against their presence—and the consequent risk of politically-motivated expropriation—in countries where such sentiment is negative (Henisz and Zelner, 2005) and might thus be less likely to enter such countries. Where host-country sentiment toward a firm's home country is sufficiently negative, political officials might even preclude the firm from entering in the first place, despite the presence of a 'competitive' bidding processes.

We measured host-country societal sentiment toward an investing firm's home country using content analysis of press accounts. Specifically, the information extraction software⁶ described in Bond *et al.*(2003) was used to analyze the first sentence of the approximately 8 million Reuters news stories published during the period 1990–1999. These sentences were tokenized, lexically processed and syntactically analyzed to identify the subject, verb and object of each sentence, as well as the subject's and object's country of origin. The “event” in each sentence (an actual physical event or a verbal expression) was then classified according to a 157-category hierarchical typology derived from the Integrated Data for Events Analysis (IDEA) protocol. Each event category was assigned a sentiment score ranging from -12 (most negative) to 0 (neutral) to +7 (most positive) based on a modified version of Goldstein's (1992) conflict-cooperation scale first developed for use in the field of International Relations.

The final measure is equal to the average annual sentiment score for all first sentences in the corpus of Reuters new stories in which the subject is associated with (potential) host country A

⁶ Information extraction is a subfield of computational linguistics that combines 'linguistics, the study of the form and function of languages, and computer science, which is concerned with any kind of data representation and processing that can be described algorithmically and implemented on computers). Information extraction is a constrained form of natural language understanding in which only pre-specified information is acquired from textual data' (King and Lowe, 2003: 238).

and the object is associated with a firm's home country B. For the minority of dyad-years for which there are no relevant Reuters news stories, we assigned a sentiment score of 0 (neutral) to reflect the absence of strong public sentiment in this year. In our main specification, we lagged the societal sentiment score by one year to reduce endogeneity concerns, including the possibility that the sentiment score might reflect public reaction to a given electricity producer's proposed or actual entry.

The second dyadic political variable reflects the economic leverage that a firm's home-country government has over a (potential) host-country government. Prior research has advanced the notion that MNEs may employ the leverage that their home-country government has over a dependent host-country government to resist expropriation (Henisz and Zelner, 2005). Conceptually, such leverage represents a political resource to which a firm has access by virtue of its country of origin. We measured this leverage using a trade dependence (Caves, 2007) ratio, $TDR_{ijt} = \frac{TRADE_{ijt}}{TRADE_{jt}}$, where TDR_{ijt} represents (potential host) country j 's trade dependence on (home) country i in year t , $TRADE_{ijt}$ represents total trade between country i and country j in year t , and $TRADE_{jt}$ represents total international trade by country j in year t . In our main specification, we lagged this variable one year to reduce endogeneity concerns. The source for the data used to construct this measure is the 'NBER-United Nations Trade Data, 1962 – 2000' database constructed by Robert Feenstra and Robert Lipsey (Feenstra *et al.*, 2005)

Market Attractiveness. The five variables included in $MARKET_{jt}$ are time-varying measures of host-country market attractiveness. Three of these reflect the derived host-country demand for electricity generating facilities, including the natural logarithm of host-country population; the ratio of host-country GDP (in constant U.S. dollars) to population; and the annual percentage growth rate of host-country real GDP per capita. The source for these measures is the World

Bank's 'World Development Indicators' database. We also included a binary variable that takes a value of one in years in which a host-country government solicited bids for private investment in electricity generation and zero otherwise. The sources used to construct this variable are Gilbert and Kahn (1996), APEC (1997), OECD (1997), *International Private Power Quarterly* (1998) and the Asian Development Bank (1999). Finally, we included the total number of entries by all firms into a given host country in the prior year to account for possible 'bandwagon effects' (McNamara *et al.*, 2008).

Estimation technique

Two primary attributes of the data determined our choice of estimation technique: (1) the dichotomous dependent variable and (2) the dependence among the records comprising each firm-investment-year. A fixed-effects logit model is appropriate for data with these attributes and can be estimated using either the conditional or unconditional maximum likelihood estimator. In the current case, the latter estimator has two main advantages over the former. First, because the conditional estimator conditions on the total number of events in a group, the loss of a even single record from the group due to missing data requires that the entire group be dropped (Katz, 2001: 380). This would mean dropping any firm-investment-year for which data for even a single potential host-country record were missing. Second, the conditional estimator permits the inclusion of independent variables that vary by either choice (host country) or chooser (firm), but not both. This limitation is problematic in the current case because the interaction model necessarily contains both types of variables (see Friedrich, 1982; Jaccard, 2001; Brambor, Clark, and Golder, 2006).

The conditional estimator is more commonly used in empirical applications because its asymptotic properties are superior to those of the unconditional estimator, and in many fixed-

effect logit applications, each of the ‘groups’ (in this case, firm-investment-years) includes only a small number of alternatives (potential host countries). For current application, however, where only one group contains fewer than nine alternatives, the unconditional estimator exhibits minimal bias.⁷ We therefore used the unconditional estimator in the main specification but also present results obtained using the conditional estimator for comparison.

The fixed-effects logit model accounts for unobserved heterogeneity among firms as well as the effects of unobserved temporal shocks because it includes a dummy variable for each firm-investment-year. Although the fixed effects are intended to pick up potential cross-period correlation among the choices made by a given chooser (i.e., firm), we also ran specifications including a lagged dependent variable and a dependent variable reflecting first entries only, which we discuss in our robustness analysis.⁸ To account for unobserved heterogeneity among host countries, we included a set of host-country regional dummy variables.⁹

Statistical interpretation

Following standard practice, we report the estimated coefficients and their standard errors. As in all non-linear models, however, the coefficients in the unconditional fixed-effects model do not represent marginal effects, making direct substantive interpretation (apart from the direction of

⁷ Studies using Monte Carlo simulations to assess the finite-sample properties of the two estimators have found that the bias in the unconditional estimator is negligible in groups containing 16 or more alternatives, and small for those containing between nine and 15 choices (Katz, 2001: 383-384; Coupe, 2005). In the current case, only a single firm-investment-year (in 1990) contains fewer than nine alternatives, and in only seven (in 1991) does the number of alternatives lie between nine and 15. For the remaining 488 firm-investment-years, the number of alternatives ranges from 18 (in 1992) to 64 (in 1999).

⁸ The standard errors cannot be clustered by firm because the resulting covariance matrix estimator would have 186 degrees of freedom, while the fixed-effects logit model requires estimation of over 500 parameters.

⁹ Fixed-effect logit models sometimes include alternative-specific constants (which in this case would take the form of host-country dummies) to account for unobserved cross-sectional heterogeneity. Such a specification is inappropriate for testing the hypotheses because it exploits variation within host countries, whereas the hypotheses revolve around variation in policy risk across host countries. The measure of policy risk, *POLRISK*, varies substantially across host countries—the average annual host-country mean value is 0.42, with an average annual standard deviation across countries of 0.26—but relatively little within them. Among the 64 potential host countries in the sample, the median within-country standard deviation of *POLRISK* was 0.008, and only 16 potential host countries had a within-country standard deviation greater than 0.05 during the sample period.

an effect) difficult. This difficulty is compounded for the interaction terms necessary to test the conditional relationships posited in the hypotheses because the coefficient on an interaction term in a nonlinear model does not represent a cross-partial derivative, as does its counterpart in a linear model (Ai and Norton, 2003; Hoetker, 2007). Thus, the estimated coefficients for the interaction terms in the model and hypothesis tests based on their associated standard errors convey no direct information about the magnitude or statistical significance of the conditional effects of interest.

To address these issues, we assessed the conditional effects posited in the hypotheses using the simulation-based approach developed by King, Tomz, and Wittenberg (2000), which in recent years has gained widespread adherence in the field of Political Science. The starting point for this approach is the same central limit theorem result underlying conventional hypothesis testing, specifically, that if enough samples were to be drawn from the sampling population and used for estimation, the resulting coefficient estimates would be distributed joint-normally (Ibid.: 350). Instead of constructing confidence intervals or test statistics based on standard errors and a normal distribution table, however, the distribution of the coefficient estimates is simulated by repeatedly drawing new values of these estimates from the multivariate normal distribution.

Specifically, the simulation-based approach consists of taking M draws from the multivariate normal distribution with mean $\hat{\beta}$, the estimated coefficient vector; and variance matrix $V(\hat{\beta})$, the estimated variance-covariance matrix for the coefficients in the model. The M draws yield M simulated coefficient vectors. The mean simulated coefficient vector converges to the original estimated coefficient vector, and the distribution of the M simulated coefficient vectors reflects the precision of the coefficient estimates (Ibid.: 349 – 350). Using the M simulated coefficient vectors, the researcher may then calculate simulated predicted probabilities or any function of

these quantities, along with corresponding confidence intervals. In the current context, the function of interest is the difference in predicted probabilities associated with a one standard deviation increase in the value of host-country policy risk ($POLRISK_j$) from its mean, conditional on specified values of the three home-country variables ($POLRISK_i$, $ETHFRAC_i$ and $GINI_i$). To calculate confidence intervals for this estimated different, we simulated the parameters 1,000 times using King *et al.*'s (2001) 'CLARIFY' commands for Stata.

EMPIRICAL RESULTS

Table 2 reports estimated coefficients and standard errors for seven specifications. Columns 1 and 2 contain results for a base specification that omits the home-country influences of main theoretical interest, respectively estimated using the conditional and unconditional estimators. Columns 3–5 contain results for specifications that each include only one of the three home-country policy environment variables and associated interaction term. Column 6 contains results for the full specification including all of the independent variables discussed above and column 7 contains a specification from which we omitted the host-country experience and bandwagon effects variables (for reasons that we discuss below).

[Insert Table 2 about here]

The specifications reported in Table 2 perform well. The pseudo- R^2 is 0.19 for the base specification reported in column 2 and 0.20 for the full specification reported in column 6. Additionally, the estimated coefficients and corresponding standard errors in columns 1 and 2 are similar, demonstrating that the choice of the unconditional estimator over the conditional estimator has minimal impact on our results.

The market attractiveness variables perform largely as expected. The coefficients on host-country population and the government solicitation dummy are positive in sign and statistically significant at $p \leq 0.01$, as is the coefficient on the variable measuring other firms' entries into a given host country in the prior year. The coefficient on GDP per capita is not statistically significant at conventional levels and, contrary to expectations, the estimated coefficient on GDP growth is negative in sign and statistically significant at $p \leq 0.01$. These results may reflect the greater incidence among economically challenged countries of investment incentives such as 'take-or-pay' contracts as well as the adoption by these countries of liberalization reforms required as a condition of receiving aid from multilateral lenders (Henisz *et al.*, 2005).

As expected, the estimated coefficient on the variable measuring a firm's own prior host-country experience is positive and significant at $p \leq 0.01$. The estimated coefficients on the six 'distance' variables are also signed as expected and all except for that on economic distance are statistically significant at $p \leq 0.01$ or $p \leq 0.05$. Thus, firms are more likely to invest in host countries that are geographically and culturally closer to their home country, use the same language, share colonial ties, and have technologically similar electricity generating profiles. More positive societal sentiment toward and greater trade dependence on a given home country are also both associated with a higher probability of entry. The insignificance of the economic distance variable may be peculiar to our setting, as the organizational capabilities needed to 'market' electricity are less likely to differ based on income than those needed for goods with more elastic demand (see Ghemawat, 2001).

In the specifications reported in Columns 1 – 2, the effect of host-country policy risk on entry is statistically insignificant. The lack of significance is consistent with the arguments advanced above: if some firms are more likely to enter host countries with higher policy risk than other

firms are as a result of differences in political capabilities shaped by omitted home-country attributes, then the coefficient on host-country policy risk in these specifications reflects an ‘average’ effect of such risk and is imprecisely estimated because of the heterogeneity of underlying responses.

The results for the market attractiveness variables, distance variables, dyadic political influence variables and own and others’ experience measures are highly consistent across the specifications in Columns 3–5. The estimated coefficient on host-country policy risk is significant in these specifications as well, as are the estimated coefficients on home-country policy risk, home-country ethnolinguistic fractionalization and the interaction terms including these variables. In column 4, the estimated coefficient on home-country income inequality is marginally significant at $p \leq 0.10$ and that on the interaction term including this variable is significant at $p \leq 0.01$. The effects of variables included in the interaction terms, however, cannot be interpreted directly from the raw coefficient estimates and standard errors, as discussed above.

Column 6 contains the main specification. The results for the market attractiveness variables, distance variables, dyadic political influence variables and own and others’ experience measures are again consistent with those in Columns 1–5. To interpret the effects of the variables included in the interaction terms, we use King et al.’s simulation-based approach, as discussed above. To facilitate intuition, and also to present the results for a wide range of observed variable values, we display the results graphically (Hoetker, 2007; Zelner, 2009) in Figures 1–3. Each of these figures depicts, for different combinations of the home-country policymaking environment variables, the percentage change in the predicted probability of entry associated with a one standard deviation increase in host-country policy risk from its mean, when all of the other host-

country and dyadic variables are held at their sample mean (for continuous variables) or mode (for binary variables).

Home-country institutional constraints

Figure 1 depicts the estimated relationship between home-country institutional constraints—as reflected by the level of home-country policy risk (*POLRISK*), observed values of which are depicted on the horizontal axis—and the percentage change in the predicted probability of entry associated with a one standard deviation increase in host-country policy risk from this variable's host-country mean, measured on the vertical axis. The five schedules appearing in the figure illustrate this relationship when the other two home-country policymaking environment variables (the Gini coefficient and *ELF* index) take values ranging from one standard deviation below their home-country mean (bottom schedule) to one standard deviation above their home-country mean (top schedule), with the middle schedule reflecting mean values for these two variables. The solid circles on the schedules indicate regions where the change in the predicted probability of entry differs significantly from zero at $p \leq 0.05$ and the hollow circles indicate regions where the change in the predicted probability of entry differs statistically from zero at $p \leq 0.10$ (two-tailed tests). The dotted vertical lines respectively signify, from left to right, the home-country sample mean value of policy risk minus one standard deviation, the home-country sample mean value of policy risk, and the home-country sample mean plus one standard deviation.

[Insert Figure 1 about here]

The pattern of results is consistent with Hypotheses 1A and 1B. First consider a hypothetical firm whose home country *ELF* index and Gini coefficient are both equal to the home-country sample mean (the middle schedule), reflecting an 'average' level of exposure to domestic redistributive pressures and political rent-seeking. If this firm is from a home country with the

greatest level of institutional policymaking constraints—as reflected by the lowest observed level of the home-country policy risk variable (*POLRISK*)—the probability that it will enter a host country whose level of *POLRISK* is one standard deviation above the sample mean is over 13 percent lower than the probability that this firm will enter a host country whose level of *POLRISK* is equal to the sample mean (point A). This result is consistent with the conventional wisdom that host-country policy risk deters foreign direct investment.

The upward slope of the schedule to the right of point A indicates that the negative effect of host-country *POLRISK* diminishes in absolute magnitude for firms from home countries with weaker institutional constraints, as reflected by higher values of home-country *POLRISK*. Moreover, the probability that a firm from a home country with sufficiently weak institutional constraints—reflected in a home-country value of *POLRISK* roughly one standard deviation above the home-country mean (point B) or greater—will invest in a host country whose level of *POLRISK* is one standard deviation above the host-country mean is significantly greater than the probability that such a firm will invest in a country whose level of *POLRISK* is equal to the host-country mean. The probability that a firm from a home country with the weakest observed institutional constraints—reflected in the highest observed level of home-country *POLRISK*—will invest in a host country whose level of *POLRISK* is one standard deviation above the host-country mean is 156 percent higher than the probability that such a firm will invest in a country whose level of *POLRISK* is equal to the host-country mean (point C). Furthermore, the null hypothesis that this positive change in predicted probability is not greater than the negative change in predicted probability for a firm from a home country with the strongest observed institutional constraints—reflected in the lowest observed value of home-country *POLRISK*—can be rejected at $p \leq 0.01$ (one-tailed test). In sum, the level of institutional constraints in an

MNE's home-country policymaking environment conditions the MNE's response to host-country policy risk in a manner consistent with Hypotheses 1A and 1B.

The pattern of results when the home-country Gini coefficient and *ELF* index take values above or below their home-country means is also consistent with the arguments advanced above. Consider the lowermost schedule in Figure 1, which depicts the relationship between home-country institutional constraints, as measured by *POLRISK*, and the response to host-country policy risk for a hypothetical firm from a home country with low redistributive pressures, reflected by a Gini coefficient and *ELF* index that are both one standard deviation below the home-country mean. The reduction in the predicted probability of entry associated with a one standard deviation increase in host-country policy risk is greater than it is for a hypothetical firm from a home country with higher levels of income inequality and ethnic fractionalization (represented by higher schedules). This result is intuitive because weaker redistributive pressures in the home-country policymaking environment are less likely to foster the development of strong political capabilities.

The converse is true for a hypothetical firm whose home-country policymaking environment is characterized by relatively strong redistributive pressures, as measured by a Gini coefficient and *ELF* index that are both one standard deviation above the mean for the home countries in the sample (depicted by the top schedule in Figure 1). Regardless of the strength of home-country institutional constraints, such a firm always exhibits a higher probability of entering a host country whose level of policy risk is one standard deviation above the sample mean than it does of entering a country whose level of policy risk is equal to the sample mean, suggesting that more intense redistributive pressures in a firm's home-country policymaking environment imbue the firm with stronger political capabilities. Moreover, the level of home-country policy risk for

which this firm becomes risk-seeking—presumably to leverage its political capabilities—is lower than it is for a hypothetical firm exposed to weaker home-country redistributive pressures (as depicted by the lower schedules in the figure).

Home-country income inequality

Figure 2 is similar to Figure 1, but the home-country Gini coefficient appears on the horizontal axis and the five schedules are associated with differing levels of home-country *POLRISK* and *ELF*, again ranging from one standard deviation below the home-country mean for both measures (bottom schedule) to one standard deviation above the home-country mean (top schedule). In this case, the hypothetical firm depicted by the middle schedule—whose home-country institutional policymaking constraints (measured by *POLRISK*) and *ELF* levels are at the sample mean—does not exhibit a response to increased host-country policy risk that differs significantly from zero risk at conventional levels, regardless of the level of income inequality in its home country.

[Insert Figure 2 about here]

For a hypothetical firm from a home country with stronger institutional constraints and lower ethnic fractionalization than the home-country average, as reflected in the lower two schedules in Figure 2, support for Hypothesis 2A is stronger. For example, for a hypothetical firm whose home-country *POLRISK* and *ELF* levels are one standard deviation below the home-country sample mean and whose home-country income inequality level is also one standard deviation below the sample mean (point A), the probability of entering a host country whose level of policy risk is one standard deviation above the host-country sample mean is roughly 25 percent lower than it is for entering a host country whose level of policy risk is equal to the host-country sample mean. This negative effect is greater in absolute magnitude for a hypothetical firm from a

home country with a lower level of income inequality (to the left of point A) and smaller in absolute magnitude for a hypothetical firm from a home country with a higher level of income inequality (to the right of point A).

Similarly, for a hypothetical firm from a home country with weaker institutional constraints and higher ethnic fractionalization than the home-country average, as reflected in the upper two schedules in Figure 2, support Hypothesis 2B is stronger. For example, for a hypothetical firm whose home-country *POLRISK* and *ELF* levels are one standard deviation above the home-country mean and whose home-country income inequality level is equal to the sample mean (point B), the probability of entering a country whose level of policy risk is one standard deviation above the sample mean is 25 percent higher than the probability of entering a country whose level of policy risk is equal to the sample mean. This effect is greater in magnitude for a hypothetical firm from a home country with a higher level of income inequality (to the right of point B), and smaller in absolute magnitude for a hypothetical firm from a home country with a higher level of income inequality (to the left of point B).

Support for Hypotheses 2A and 2B is thus conditional on the extent to which the other two observed dimensions of the home-country policymaking environment—institutional constraints and ethnic fractionalization—foster the development of political capabilities. It is important to recognize in this connection that the mean values of the home-country *POLRISK* and *ELF* variables—at which the results for the home-country *GINI* variable are not statistically significant—have no special conceptual or empirical significance (Kennedy, 2003: 266). Moreover, although we have not formulated specific hypotheses about how individual home-

country environmental influences interact with each other to shape a firm's political capabilities, the cumulative pattern revealed by the data is intuitively plausible.¹⁰

Home-country ethnic fractionalization

Figure 3 is analogous to Figures 1 and 2 but depicts the relationship between the level of ethnic fractionalization (as measured by *ELF*) in the home-country policymaking environment and a firm's response to host-country policy risk, conditional on the levels of the other two home-country policymaking environment variables.

[Insert Figure 3 about here]

The results depicted support Hypotheses 3A and 3B. For a firm from a home country whose levels of institutional constraints and income inequality are equal to the home-country sample mean (middle schedule), the effect of host-country policy risk on the probability of entry is negative and statistically significant when the level of home-country ethnic fractionalization is at its lowest observed level (point A). The impact of host-country policy risk declines in absolute magnitude as home-country ethnic fractionalization rises and becomes positive and statistically significant when home-country ethnic fractionalization is sufficiently high (point B). Moreover, the null hypothesis that the positive estimated response to host-country policy risk of a firm from a home country with the highest observed value of *ELF* is not greater than the negative response of a firm from a home country with the lowest observed level of ethnic fractionalization can be rejected at $p \leq 0.01$ (one-tailed test). Additionally, the estimated effect of home-country *ELF* for a firm from a country with institutional constraints weaker than the home-country mean and

¹⁰ For example, a policymaking environment with weak institutional constraints and weak redistributive pressures is likely to have greater policy stability than one with weak institutional constraints and strong redistributive pressures, and thus less likely to foster the development of strong political capabilities. Conversely, a policymaking environment characterized by strong institutional constraints and strong redistributive pressures is likely to be more contentious—and thus foster the development of stronger political capabilities—than one characterized by strong institutional constraints but weak redistributive pressures.

income inequality higher than the home-country mean (upper two schedules), as well as that for a firm from a home country with institutional constraints stronger than the home-country mean and income inequality lower than the home-country mean (bottom two schedules), is also consistent with Hypotheses 3A and 3B, as well as the conjecture that individual attributes of the home-country policymaking environment have a cumulative effect on a firm's political capabilities.

Aggregate estimated effect of policymaking environment variables

Figure 4 further illustrates the empirical results by displaying the predicted response to host-country policy risk of 28 hypothetical firms, each characterized by an actual combination of policymaking environment attributes from one of the home countries near the end of the sample period.¹¹ Like the schedules in Figures 1 – 3, the height of each vertical bar represents, for a given hypothetical firm, the percentage change in the predicted probability of entry associated with a one standard deviation increase in host-country policy risk from its mean. Shaded bars represent estimated effects that differ significantly from zero at the five percent level or better (two-tailed tests). The three spikes overlaid on each bar represent, respectively, the level of home-country institutional policymaking constraints, as measured by *POLRISK* (circles); the home-country Gini coefficient (diamonds); and the home-country *ELF* index (squares). Each of these home-country attributes is expressed in terms of the number of standard deviations of the relevant variable from its home-country mean, as indicated on the right vertical axis.

[Insert Figure 4 about here]

¹¹ As in Figures 1–3, the host-country variables other than policy risk are set to their sample mean (for continuous variables) or mode (for binary variables). The home-country attributes used are those from the last year (1997 – 1999) in the sample in which a firm from a given country made an investment (or, in the case of Hong Kong, 1996). The effects displayed are the average of those for the individual firms from the relevant country.

The hypothetical firms depicted on the left side exhibit the greatest aversion to host-country policy risk. For example, when host-country policy risk increases by one standard from its mean, the probability that an average firm from Germany will invest falls by over 27 percent and that one from Japan will invest falls by over 20 percent. The pattern of spikes in Figure 4 provides an explanation for this behavior that is consistent with the arguments advanced above about the influence of the home-country environment on firms' political capabilities: Germany and Japan exhibit relatively strong institutional constraints (reflected in low *POLRISK* values) as well as some of the lowest observed values of income inequality and ethnic fractionalization.

Figure 4 reveals a corollary pattern for risk-seeking firms. When the level of host-country risk increases by one standard deviation from its mean, firms from Indonesia and the Philippines—the most risk-seeking in the sample—respectively become 286 percent and 97 percent more likely to invest. The reason, as illustrated by the positive spikes, is that the policymaking environments of these countries foster the development of strong capabilities for assessing and managing policy risk. Indonesia had a *POLRISK* score of 1.0—the highest possible—through 1997, reflecting the extraordinary concentration of power under President Suharto during this period, and Indonesian society is acutely fractionalized on an ethnic basis, leading to more intense redistributive pressures and political rent-seeking. Although the Philippines enjoyed relatively constraining political institutions, this country had the highest observed level of ethnic fractionalization among the home countries in the sample as well as a Gini coefficient more than half a standard deviation above the home-country mean.

Robustness

We estimated a series of alternative specifications to assess the robustness of our results.¹² First, we substituted alternative measures for the independent variables of primary conceptual interest, including Gini coefficients compiled by Deininger and Squire (1996), Alesina *et al.*'s measure of ethnic fractionalization (2003), five- and 10-year retrospective averages of home-country policy risk instead of a three-year average, and an alternative cross-national measure of institutional veto players known as 'CHECKS' (Beck *et al.*, 2001). Our results are robust to these changes in variable definitions, with support for H1 stronger than in the main specification in some cases and support for H2 slightly weaker in some. We also estimated two specifications in which we redefined our dependent variable to take a value of one for equity investments exceeding a 10 or 20 percent stake, respectively reducing the observed number of entries to 688 and 581. The coefficient estimates are stable under both of these redefinitions of the dependent variable and the schedules depicted in Figures 1 and 3 continue to support H1 and H3. Support for H2 is again mixed.

We also rotated in a series of additional macroeconomic variables that might plausibly affect a host country's attractiveness to multinational investors (see Vaaler, 2008). These include current account balance, external debt, fiscal budget balance, fuel exports, total government expenditures, and the sum of exports and imports, all as a fraction of GDP; the CPI inflation rate; and a dummy variable that takes a value of one in years in which a country experienced a banking crisis, currency crisis, stabilization episode or some form of financial default. The sources for these data are the World Bank's 'World Development Indicators' database and, for the crisis variable, the measures developed by Detragiache and Spillimbergo (2001), Frankel and Rose (1996), Hamann and Prati (2003), and Kaminsky (2003). The addition of the variables

¹² Results of the robustness tests are available from the authors upon request.

reduces the size of the estimating sample by almost half. Nonetheless, the main results are nonetheless robust to their inclusion, with slightly diminished support for H2 only. Three of the additional variables—fuel exports, fiscal balance and the crisis dummy—are significant at $p \leq 0.05$. The results also persist in a specification that includes these three additional macroeconomic variables but not the others.

We conducted additional robustness checks by adding to our main specification measures of other firm-level attributes that might plausibly affect firms' entry choices, including measures of firm size (assets and sales) and several alternative measures of prior international experience in the electric power production industry, including a binary experience dummy, cumulative years of prior international experience, and several weighted measures capturing years of experience in countries with various threshold values of institutional constraints, income inequality and ethnolinguistic fractionalization. None of these variables is statistically significant, and their inclusion does not diminish the substantive or statistical significance of our main results. We also estimated our primary specification for several subsamples of our data, including non-U.S. firms, non-E.U. firms, and non-Indonesian firms. The results are again similar to those from our main specification, although less precisely estimated for subsamples with significantly fewer observations.

Several additional specifications address a potential alternative hypothesis, which we refer to as 'sorting.' One variant of this hypothesis is that firms from less developed countries—which are more likely to be characterized by weak institutional constraints—have not developed sufficiently strong technological or managerial capabilities to compete with firms from more developed countries and therefore enter other less developed countries because these are 'left over.' Another variant of this hypothesis is that weak home-country institutional constraints

serve as a proxy for a firm's status in the global community—on the premise that home-country institutional constraints are correlated with a country's level of economic development and firms from poorer countries have lower status—which in turn reduces a firm's ability to enter richer, high-status countries with lower policy risk.

The primary specification already includes variables that partially address the sorting hypothesis, including the technological distance measure, which captures differences in technological capabilities; the dummy variable for each firm-investment-year, which captures unobserved firm-year (and more generally, firm-level) factors, including managerial capabilities; the dyadic sentiment measure, which is likely correlated with the status attributed to a firm from a given home country by actors in a given host country; and the economic distance measure, which captures the gap between rich and poor countries. To further test the sorting hypothesis, we estimated alternative versions of our primary specification including, respectively, a firm's home-country GDP per capita, both by itself and interacted with host-country *POLRISK*; economic distance variables reflecting the gap in GDP per capita between a firm's home country and a (potential) host country when the former country is richer than the latter one when the latter is richer than the former; and a dummy variable that takes a value of one when a firm's home country is poorer than the host country and zero otherwise. None of these additional variables is statistically significant, nor does their inclusion diminish the substantive or statistical significance of the main empirical results.

Another set of robustness tests addresses the possibility of autocorrelation. To the extent that autocorrelation (either cross-period correlation among multiple investment-years for a given firm or cross-sectional correlation among the observations for firms from a given home country) occurs as the result of omitted variables, the presence of a dummy variable for each firm-

investment-year in the fixed-effects logit specification should be sufficient to eliminate the autocorrelation. Nonetheless, the possibility of some residual correlation remains.

We estimated two alternative specifications to address the possibility of residual serial correlation. Both are identical to the main specification except that one includes a lagged dependent variable on the right-hand side (Baker, 2007; Beck and Katz, 1996) and the other employs a dependent variable that takes a value of one only when a firm makes its first entry into a given host country (after which this host country drops out of the firm's choice set). The substantive and economic significance of the results from the former specification are extremely similar to those from the main specification. The results from the latter specification are also similar, although the standard errors of the estimated coefficients are slightly larger as a result of the smaller number of effective observations, leading to diminished statistical significance for some combinations of the independent variable values depicted in Figures 1–3 but an overall pattern of results that is still consistent with the hypotheses.

To address the possibility of residual cross-sectional correlation across the observations for firms from a given home country, we restructured the sample into home country-investment-years, defined as a year in which any firm from a given home country made one or more cross-border investments in electricity generation. We used these restructured data to estimate an unconditional fixed-effects negative binomial model where each fixed effect is associated with a given home-country-investment-year. Each of the records in a home country-investment-year again reflects a host country that was open to investment, the independent variables are the same as in the primary specification, and the dependent variable in each record reflects number of entries. The results are again very similar to those from the primary specification, with slightly larger standard errors on the estimated coefficients, leading to diminished statistical significance

for some combinations of the independent variable values depicted in Figures 1–3 (again due to the smaller number of effective observations as well as this specification’s reduced ability to address the effects of firm-level heterogeneity), but an overall pattern of results that is still consistent with the hypotheses.

For the final robustness check, we re-estimated the main specification without the variables reflecting a firm’s prior host-country experience and other firms’ prior entries. The results appear in column 7 of Table 2. Although the estimated coefficients on these two experience variables are statistically significant in the main specification, it is possible that the variables may be jointly determined with the dependent variable. Specifically, if unobserved influences operating over multiple years render some potential host countries more attractive to potential investors than others, then the inclusion of any type of lagged variable reflecting prior entry decisions poses the possibility of biased and inconsistent parameter estimates. The similarity of the results reported in column 7 to those in column 6 strongly suggests that the main specification adequately accounts for any such unobserved influences.

CONCLUSION

Host-country policy risk arising from weak institutional constraints on policymakers need not deter foreign direct investment by multinational firms, as conventional wisdom holds, and may sometimes attract it. We have argued that the explanation for this empirical pattern lies in political capabilities that firms develop through organizational learning and cognitive imprinting in their home-country environment. These capabilities are strongest for firms from home countries with relatively weak institutional constraints or in which economic or ethnic divisions are more pronounced, leading to more intense rent-seeking. For many firms, such capabilities reduce the deterrent effect of policy risk in their foreign entry decisions; for those with

sufficiently strong political capabilities, riskier countries are more attractive as potential investment destinations. A statistical analysis of FDI location choices in a sample consisting of almost the entire population of MNEs in the global electric power industry during the industry's first decade of internationalization provides robust empirical support for these predictions.

Our findings broaden existing notions of the sources and nature of international competitive advantage and deepen existing conceptions of the deterrent effects of various forms of 'distance' on bilateral FDI and trade flows by adding an organizational dimension. Along with other recent research (Garcia-Canal and Guillén, 2008), our analysis also helps link the industry analysis perspective on strategy with resource- and capability-based theories by suggesting that firms may acquire political resources and develop capabilities that permit them to secure and sustain attractive positions or industry structures (see Amit and Schoemaker, 1993; Mahoney and Pandian, 1992; Montgomery and Wernerfelt, 1988; Wernerfelt and Montgomery, 1986, 1988).

Naturally, the analysis has limitations. First, the data do not include observations on firms that chose not to engage in FDI at all, which may create a selection bias if the set of variables influencing a firm's decision to expand abroad overlaps with those influencing location choice (Shaver, 1998). Unfortunately, we lack the data necessary to address the possibility of such bias econometrically. Second, the findings pertain to a single industry in the early stages of its international development. As firms gain more international experience, the relative influence of the home-country institutional environment—and thus the capabilities that it fosters—may decline, and the importance of a firm's international experience may grow (see Perkins-Rodriguez, 2005). Moreover, given the highly politicized nature of the electricity industry, the effect of host-country policy risk—as well as the advantage afforded by superior political capabilities—may be greater for firms in this industry than in others. Additionally, firms may

sometimes engage in FDI as a means of ‘knowledge-seeking’ to develop new capabilities or upgrade existing ones (Cantwell, 1989; see also Chung and Alcacer, 2002), and the analysis does not isolate such cases (even though to the extent that such cases exist in the data, their effect would be to weaken support for the hypotheses). Another limitation, common to much research on organizational capabilities, is that the data do not permit us to directly observe the political capabilities or mechanisms central to the hypotheses, even though the empirical results are consistent with their presence.

Finally, we note the broader implications for emerging patterns of global competition between MNEs from different countries or regions. Even though globalization has increased the intensity of competitive pressures in many markets, MNEs that succeed in some host countries may not be able to replicate their performance in other countries, as heterogeneous capabilities—developed partly as a result of home-country influences—both enable and constrain individual firms from attaining competitive advantage in specific institutional contexts. In this sense, global competitive pressures may result not so much in a flat playing field (e.g., Friedman, 2005), but rather in a complex competition along multiple market and non-market dimensions.

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References

- Ai CR, Norton EC. 2003. Interaction terms in logit and probit models. *Economics Letters* **80**(1): 123-129.
- Alesina A, Devleeschauwer A, Easterly W, Kurlat S, Wacziarg R. 2003. Fractionalization. *Journal of Economic Growth* **8**(2): 155-194.
- Alesina A, Perotti R. 1996. Income distribution, political instability, and investment. *European Economic Review* **40**(6): 1203-1228.
- Alesina A, Rodrik D. 1994. Distributive politics and economic growth. *Quarterly Journal of Economics* **109**(2): 465-490.
- Amit R, Schoemaker PJH. 1993. Strategic Assets and Organizational Rent. *Strategic Management Journal* **14**(1): 33-46.
- APEC. 1997. Report of Energy Regulators' Forum. Asia Pacific Economic Cooperation
- Asian Development Bank. 1999. Governance and Regulatory Regimes for Private Sector Infrastructure Development. Asian Development Bank
- Baker RM. 2007. Lagged Dependent Variables and Reality: Did You Specify that Autocorrelation a priori?, *Annual Meeting of the American Political Science Association*: Chicago, IL.
- Barkema HG, Bell JHJ, Pennings JM. 1996. Foreign entry, cultural barriers, and learning. *Strategic Management Journal* **17**(2): 151-166.
- Beck N, Katz JN. 1996. Nuisance vs. Substance: Specifying and Estimating Time-Series-Cross-Section Models. *Political Analysis* **6**(1): 1-36.
- Beck T, Clarke G, Groff A, Keefer P, Walsh P. 2001. New tools in comparative political economy: The database of political institutions. *World Bank Economic Review* **15**(1): 165-176.
- Boddewyn JJ, Brewer TL. 1994. International Business Political Behavior: New Theoretical Directions. *The Academy of Management Review* **19**(1): 119-143.
- Bond D, Bond J, Oh C, Jenkins JC, Taylor CL. 2003. Integrated data for events analysis (IDEA): An event typology for automated events data development. *Journal of Peace Research* **40**(6): 733-745.
- Brambor T, Clark WR, Golder M. 2006. Understanding interaction models: Improving empirical analyses. *Political Analysis* **14**(1): 63-82.
- Brunetti A, Weder B. 1998. Investment and institutional uncertainty: A comparative study of different uncertainty measures. *Weltwirtschaftliches Archiv-Review of World Economics* **134**(3): 513-533.
- Cantwell J. 1989. *Technological innovation and multinational corporations*. B. Blackwell: New York, NY, USA.
- Caves RE. 2007. *Multinational enterprise and economic analysis* (3rd ed.). Cambridge University Press: Cambridge ; New York.

- Chung W, Alcacer J. 2002. Knowledge seeking and location choice of foreign direct investment in the United States. *Management Science* **48**(12): 1534-1554.
- Coupe T. 2005. Bias in conditional and unconditional fixed effects logit estimation: A correction (vol 9, pg 379, 2001). *Political Analysis* **13**(3): 292-295.
- Cyert RM, March JG. 1963. *A Behavior Theory of the Firm*. Prentice-Hall: Englewood Cliffs, N.J.
- Davidson WH. 1980. The Location of Foreign Investment Activity. *Journal of International Business Studies* **11**: 9-23.
- Deininger K, Squire L. 1996. A new data set measuring income inequality. *World Bank Economic Review* **10**(3): 565-591.
- Delios A, Henisz WJ. 2000. Japanese firms' investment strategies in emerging economies. *Academy of Management Journal* **43**(3): 305-323.
- Delios A, Henisz WJ. 2003a. Policy uncertainty and the sequence of entry by Japanese firms, 1980-1998. *Journal of International Business Studies* **34**(3): 227-241.
- Delios A, Henisz WJ. 2003b. Political hazards, experience, and sequential entry strategies: The international expansion of Japanese firms, 1980-1998. *Strategic Management Journal* **24**(11): 1153-1164.
- Denzau AT, North DC. 1994. Shared mental models: ideologies and institutions. *Kyklos* **47**(1): 3-31.
- Detragiache E, Spilimbergo A. 2001. Crises and Liquidity: Evidence and Interpretation. *SSRN eLibrary*
- Dierickx I, Cool K. 1989. Asset Stock Accumulation and Sustainability of Competitive Advantage. *Management Science* **35**(12): 1504-1511.
- Disdier AC, Head K. 2008. "The puzzling persistence of the distance effect on bilateral trade." *Review of Economics and Statistics* **90**(1): 37-48.
- Dunning JH. 1980. Towards an eclectic theory of international production: some empirical tests. *Journal of International Business Studies* **11**(1): 9-31.
- Easterly W, Levine R. 1997. Africa's growth tragedy: Policies and ethnic divisions. *Quarterly Journal of Economics* **112**(4): 1203-1250.
- Easterly W, Ritzen J, Woolcock M. 2006. Social Cohesion, Institutions and Growth. *Economics, Politics* **18**(2): 103-120.
- Erramilli MK, Agarwal S, Kim SS. 1997. Are firm-specific advantages location-specific too? *Journal of International Business Studies* **28**(4): 735-757.
- Etzioni A. 1988. *The moral dimension : toward a new economics*. Free Press and Collier Macmillan: New York, London.
- Faccio M. 2006. Politically connected firms. *American Economic Review* **96**(1): 369-386.
- Feenstra RC, Lipsey RE, Deng H, Ma AC, Mo H. 2005. World Trade Flows: 1960 - 2000, *NBER Working Papers*. National Bureau of Economic Research: Cambridge, MA.

- Fisman R. 2001. Estimating the value of political connections. *American Economic Review* **91**(4): 1095-1102.
- Frankel J, Rose A. 2002. An estimate of the effect of common currencies on trade and income. *Quarterly Journal of Economics* **117**(2): 437-466.
- Frankel JA, Rose AK. 1996. Currency crashes in emerging markets: An empirical treatment: 351-366. Elsevier Science BV.
- Friedman, TL. 2005. The world is flat: a brief history of the twenty-first century. New York: Farrar, Straus and Giroux.
- Friedrich RJ. 1982. In defense of multiplicative terms in multiple-regression equations. *American Journal of Political Science* **26**(4): 797-833.
- Garcia-Canal E, Guillén MF. 2008. Risk and the strategy of foreign location choice in regulated industries. *Strategic Management Journal* **29**(10): 1097-1115.
- Ghemawat P. 2001. Distance Still Matters: The Hard Reality of Global Expansion. *Harvard Business Review* **79**(8): 10.
- Gilbert RJ, Kahn EP. 1996. *International Comparisons of Electricity Regulation*. Cambridge University Press
- Goerzen A, Beamish PW. 2003. Geographic scope and multinational enterprise performance. *Strategic Management Journal* **24**(13): 1289-1306.
- Goldstein JS. 1992. A Conflict-Cooperation Scale for WEIS Events Data. *Journal of Conflict Resolution* **36**(2): 369-385.
- Guillén MF. 1994. *Models of management : work, authority, and organization in a comparative perspective*. University of Chicago Press: Chiacgo.
- Hamann AJ, Alessandro P. 2003. Why Do Many Disinflation Fail? The Importance of Luck, Timing, and Political Institutions. International Monetary Fund
- Henisz WJ. 2000a. The Institutional Environment for Economic Growth. *Economics and Politics* **12**(1): 1-31.
- Henisz WJ. 2000b. The institutional environment for multinational investment. *Journal of Law Economics, Organization* **16**(2): 334-364.
- Henisz WJ. 2003. The power of the Buckley and Casson thesis: the ability to manage institutional idiosyncrasies. *Journal Of International Business Studies* **34**(2): 173-184.
- Henisz WJ, Delios A. 2001. Uncertainty, imitation, and plant location: Japanese multinational corporations, 1990-1996. *Administrative Science Quarterly* **46**(3): 443-475.
- Henisz WJ, Delios A. 2002. Learning about the institutional environment, *New Institutionalism in Strategic Management*, Vol. 19: 339-372
- Henisz WJ, Delios A. 2004. Information or influence? The benefits of experience for managing political uncertainty. *Strategic Organization* **2**(4): 389-421.
- Henisz WJ, Macher JT. 2004. Firm- and country-level trade-offs and contingencies in the evaluation of foreign investment: The semiconductor industry, 1994-2002. *Organization Science* **15**(5): 537-554.

- Henisz WJ, Zelner BA. 2005. Legitimacy, interest group pressures, and change in emergent institutions: The case of foreign investors and host country governments. *Academy of Management Review* **30**(2): 361-382.
- Henisz WJ, Zelner BA. Managing Political Risk in Infrastructure Investment. *Harvard Business Review*. Forthcoming.
- Henisz WJ, Zelner BA, Guillén MF. 2005. The worldwide diffusion of market-oriented infrastructure reform, 1977-1999. *American Sociological Review* **70**(6): 871-897.
- Hodgkinson GP, Johnson G. 1994. Exploring the mental models of competitive strategists: the case for a processual approach. *Journal of Management Studies* **31**(4): 525-551.
- Hoetker G. 2007. The use of logit and probit models in strategic management research: Critical issues. *Strategic Management Journal* **28**(4): 331-343.
- Hofstede G. 2003. *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations* (2nd edition ed.). Sage Publications: Thousand Oaks, CA.
- Holburn GLF, Vanden Bergh RG. 2002. Policy and process: A game-theoretic framework for the design of non-market strategy, *New Institutionalism in Strategic Management*, Vol. 19: 33-66
- Holburn GLF, Vanden Bergh RG. 2004. Influencing agencies through pivotal political institutions. *Journal of Law Economics, Organization* **20**(2): 458-483.
- International Private Power Quarterly. 1998. McGraw-Hill
- Jaccard JJ. 2001. *Interaction Effects in Multiple Regression*. Sage Publications: Thousand Oaks, CA.
- Jensen NM. 2003. Democratic governance and multinational corporations: Political regimes and inflows of foreign direct investment. *International Organization* **57**(3): 587-+.
- Johanson J, Vahlne JE. 1977. The Internationalization Process of the Firm-A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies* **8**(1): 23-32.
- Kaminsky GL. 2003. Varieties of Currency Crises. *National Bureau of Economic Research Working Paper Series No. 10193*
- Katz E. 2001. Bias in Conditional and Unconditional Fixed Effects Logit Estimation. *Political Analysis* **9**(4): 379-384.
- Keefer P, Knack S. 2002. Polarization, politics and property rights: Links between inequality and growth. *Public Choice* **111**(1-2): 127-154.
- Kennedy P. 2003. *A guide to econometrics* (5th ed.). MIT Press: Cambridge, Mass.
- King G, Lowe W. 2003. An Automated Information Extraction Tool for International Conflict Data with Performance as Good as Human Coders: A Rare Events Evaluation Design. *International Organization* **57**(3): 617-642.
- King G, Tomz M, Wittenberg J. 2000. Making the most of statistical analyses: Improving interpretation and presentation. *American Journal of Political Science* **44**(2): 347-361.
- King G, Tomz M, Wittenberg J. 2001. CLARIFY: Software for Interpreting and Presenting Statistical Results, 2.0 ed. Harvard University: Cambridge, MA.

- Knack S, Keefer P. 1995. Institutions and Economic Performance: Cross-country tests using alternative institutional measures. *Economics and Politics* **7**(3): 207-227.
- Kobrin SJ. 1978. When does political instability result in increased investment risk? *Columbia Journal of World Business* **13**(3): 113-122.
- Kobrin SJ. 1979. Political risk: review and reconsideration. *Journal of International Business Studies* **10**(1): 67-80.
- Kogut B, Singh H. 1988. The Effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies* **19**(3): 411-432.
- La Porta R, Lopez-De-Silanes F, Shleifer A, Vishny R. 1999. The quality of government. *Journal of Law Economics, Organization* **15**(1): 222-279.
- Levitt B, March JG. 1988. Organizational Learning. *Annual Review of Sociology* **14**: 319-340.
- Levy B, Spiller PT. 1994. The Institutional Foundations of Regulatory Commitment: A Comparative Analysis of Telecommunications Regulation. *Journal of Law, Economics and Organization* **10**(2): 201-246.
- Mahoney JT, Pandian JR. 1992. The resource-based view within the conversation of strategic management. *Strategic Management Journal* **13**(5): 363-380.
- Makadok R. 2001. Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal* **22**(5): 387-401.
- McNamara GM, Halebian J, Dykes BJ. 2008. The performance implications of participating in an acquisition wave: Early mover advantages, bandwagon effects, and the moderating influence of industry characteristics and acquirer tactics. *Academy of Management Journal* **51**(1): 113-130.
- Montgomery CA, Wernerfelt B. 1988. Diversification, Ricardian Rents and Tobin's Q. *Rand Journal of Economics* **19**(4): 623-632.
- Nordström KA, Vahlne JE. 1994. Is the Globe Shrinking? Psychic Distance and the Establishment of Swedish Sales Subsidiaries during the Last 100 Years. In M Landeck (Ed.), *International trade: regional and global issues*. St. Martins Press: Basingstoke.
- OECD. 1997. Application of Competition Policy to the Electricity Sector OECD, Paris
- Oliver C. 1997. Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal* **18**(9): 697-713.
- Perkins-Rodriguez S. 2005. Institutional Environment Relatedness and Foreign Investment Failures in the Brazilian Telecommunications Industry, *Academy of Management Best Paper Proceedings*: T1-T6. Academy of Management
- Persson T, Tabellini G. 1992. Growth, distribution and politics. *European Economic Review* **36**(2-3): 593-602.
- Persson T, Tabellini G. 1994. Is inequality harmful for growth? *American Economic Review* **84**(3): 600-621.
- Porac JF, Thomas H, Wilson F, Paton D, Kanfer A. 1995. Rivalry and the Industry Model of Scottish Knitwear Producers. *Administrative Science Quarterly* **40**(2)
- Porter ME. 1990. *The Competitive Advantage of Nations*. The Free Press: New York.

- Rodrik D. 1999. Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses. *Journal of Economic Growth* **4**(4): 385-412.
- Rose AK, van Wincoop E. 2001. National money as a barrier to international trade: The real case for currency union. *American Economic Review* **91**(2): 386-390.
- Shaver JM. 1998. Accounting for Endogeneity When Assessing Strategy Performance: Does Entry Mode Choice Affect FDI Survival? *Management Science* **44**(4): 571-585.
- Siegel J. 2007. Contingent political capital and international alliances: Evidence from South Korea. *Administrative Science Quarterly* **52**(4): 621-666.
- Sillin JO. 2004. The Electric Power Industry Business Model for the 21st Century. *The Electricity Journal* **17**(3): 42-51.
- Stinchcombe AL. 1965. Organizations and social structure. In JG March (Ed.), *Handbook of Organizations*: 142-193. Rand-McNally
- Tallman S, Fladmoe-Lindquist K. 2002. Internationalization, globalization, and capability-based strategy. *California Management Review* **45**(1): 116-+.
- Tallman SB. 1988. Home Country Political Risk and Foreign Direct Investment in The United States. *Journal of International Business Studies* **19**(2): 219.
- Tsebelis G. 2003. Veto players: How political institutions work. Princeton University Press and Russell Sage Foundation: Princeton, NJ.
- Vaaler PM. 2008. How do MNCs vote in developing country elections? *Academy of Management Journal* **51**(1): 21-43.
- Walsh JP. 1995. Managerial and organizational cognition: Notes from a trip down memory lane. *Organization Science* **6**(3): 280-321.
- Weick KE. 1995. *Sensemaking in Organizations*. Sage Publications: Thousand Oaks, CA.
- Wernerfelt B, Montgomery CA. 1986. What is an attractive industry? *Management Science* **32**(10): 1223-1230.
- Wernerfelt B, Montgomery CA. 1988. Tobin's q and the importance of focus in firm performance. *American Economic Review* **78**(1): 246-250.
- Zaheer S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal* **38**(2): 341-363.
- Zelner BA. 2009. Using Simulation to Interpret and Present Logit and Probit Results. *Strategic Management Journal*. Forthcoming.

Table 1. Descriptive statistics and correlation coefficients

	<u>Mean</u>	<u>S.D.</u>	<u>Min</u>	<u>Max</u>	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>	<u>(6)</u>	<u>(7)</u>
(1) Population	77.85	217.42	0.73	1250.00	1.00						
(2) GDP per capita	0.06	0.08	0.00	0.36	-0.17	1.00					
(3) GDP growth	4.02	3.50	-13.13	14.20	0.25	-0.07	1.00				
(4) Prior year entries by other firms	2.15	3.28	0.00	23.00	0.40	0.00	-0.02	1.00			
(5) Govt solicitation	0.25	0.43	0.00	1.00	0.15	0.04	-0.05	0.25	1.00		
(6) Prior host-country experience	0.12	0.81	0.00	17.00	0.06	0.03	-0.02	0.16	0.05	1.00	
(7) Geographic distance	8.28	4.37	0.17	19.77	0.09	-0.14	0.06	0.09	0.00	-0.06	1.00
(8) Cultural distance	2.62	1.43	0.02	8.69	-0.02	-0.27	0.04	-0.05	-0.08	-0.03	-0.08
(9) Colonial link	0.07	0.25	0.00	1.00	0.00	0.07	-0.02	0.14	-0.04	0.06	0.00
(10) Common language	0.16	0.37	0.00	1.00	0.08	0.02	0.01	0.05	-0.03	0.04	0.07
(11) Economic distance	14.34	0.91	6.08	15.12	0.07	-0.52	0.02	0.00	-0.04	-0.01	0.07
(12) Technological distance	1.86	1.28	0.00	9.19	-0.13	-0.15	0.01	-0.16	-0.14	-0.04	-0.07
(13) Societal sentiment	1.08	1.27	-12.00	7.00	0.05	0.04	0.00	0.02	0.04	0.02	-0.09
(14) Trade dependence	0.15	0.19	0.00	0.80	-0.04	-0.15	0.00	-0.03	-0.07	0.04	-0.40
(15) POLRISK (host)	0.42	0.26	0.11	1.00	0.22	-0.42	0.14	0.00	-0.07	-0.02	0.08
(16) POLRISK (home)	0.19	0.09	0.11	0.92	0.01	0.01	-0.01	0.01	0.02	0.00	0.06
(17) Gini (home)	37.79	6.34	24.85	59.93	0.01	0.02	0.01	0.01	0.01	-0.03	0.06
(18) ELF (home)	0.19	0.11	0.00	0.72	0.00	0.01	0.00	0.02	0.02	-0.02	0.01
	<u>(8)</u>	<u>(9)</u>	<u>(10)</u>	<u>(11)</u>	<u>(12)</u>	<u>(13)</u>	<u>(14)</u>	<u>(15)</u>	<u>(16)</u>	<u>(17)</u>	<u>(18)</u>
(1) Population											
(2) GDP per capita											
(3) GDP growth											
(4) Prior year entries by other firms											
(5) Govt solicitation											
(6) Prior host-country experience											
(7) Geographic distance											
(8) Cultural distance	1.00										
(9) Colonial link	-0.18	1.00									
(10) Common language	-0.29	0.37	1.00								
(11) Economic distance	0.35	-0.07	-0.01	1.00							
(12) Technological distance	0.11	-0.04	-0.02	0.04	1.00						
(13) Societal sentiment	0.06	0.02	0.07	0.09	-0.01	1.00					
(14) Trade dependence	0.32	-0.04	0.08	0.29	0.11	0.09	1.00				
(15) POLRISK (host)	0.22	-0.09	-0.13	0.23	0.13	-0.04	0.02	1.00			
(16) POLRISK (home)	-0.14	0.12	-0.05	-0.25	0.14	-0.15	-0.29	0.00	1.00		
(17) Gini (home)	-0.04	0.07	0.17	-0.08	-0.13	0.09	0.21	-0.01	-0.06	1.00	
(18) ELF (home)	-0.07	0.08	0.09	-0.15	-0.04	0.06	0.06	0.00	-0.01	0.49	1.00

Table 2. Estimation results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Population	0.174 (0.035)***	0.183 (0.035)***	0.182 (0.035)***	0.184 (0.035)***	0.185 (0.035)***	0.185 (0.035)***	0.281 (0.029)***
GDP per capita	-0.833 (0.913)	-0.805 (0.927)	-0.776 (0.929)	-0.537 (0.939)	-0.649 (0.931)	-0.528 (0.946)	0.916 (0.893)
GDP growth	-0.033 (0.012)***	-0.034 (0.013)***	-0.035 (0.013)***	-0.033 (0.013)***	-0.034 (0.013)***	-0.035 (0.013)***	-0.035 (0.012)***
Govt solicitation	0.920 (0.099)***	0.970 (0.095)***	0.976 (0.095)***	0.980 (0.096)***	0.979 (0.095)***	0.988 (0.096)***	1.029 (0.092)***
Prior year entries by other firms	0.037 (0.011)***	0.039 (0.011)***	0.038 (0.011)***	0.038 (0.011)***	0.038 (0.011)***	0.037 (0.012)***	
Prior host-country experience	1.063 (0.088)***	1.161 (0.089)***	1.163 (0.089)***	1.156 (0.089)***	1.155 (0.089)***	1.154 (0.089)***	
Geographic distance	-0.085 (0.014)***	-0.091 (0.014)***	-0.090 (0.014)***	-0.096 (0.014)***	-0.094 (0.014)***	-0.094 (0.014)***	-0.102 (0.014)***
Cultural distance	-0.139 (0.046)***	-0.146 (0.046)***	-0.128 (0.047)***	-0.137 (0.046)***	-0.131 (0.046)***	-0.108 (0.047)**	-0.116 (0.046)**
Colonial link	0.513 (0.144)***	0.531 (0.147)***	0.569 (0.148)***	0.562 (0.148)***	0.563 (0.148)***	0.618 (0.149)***	0.786 (0.143)***
Common language	0.414 (0.125)***	0.460 (0.128)***	0.429 (0.129)***	0.490 (0.129)***	0.489 (0.130)***	0.463 (0.131)***	0.518 (0.125)***
Economic distance	-0.042 (0.069)	-0.041 (0.065)	-0.043 (0.066)	-0.014 (0.068)	-0.026 (0.066)	-0.021 (0.069)	-0.003 (0.067)
Technological distance	-0.184 (0.048)***	-0.193 (0.049)***	-0.201 (0.050)***	-0.182 (0.049)***	-0.193 (0.049)***	-0.196 (0.050)***	-0.236 (0.048)***
Societal sentiment	0.082 (0.032)**	0.087 (0.033)***	0.086 (0.033)***	0.085 (0.033)**	0.083 (0.034)**	0.082 (0.033)**	0.096 (0.032)***
Trade dependence	1.087 (0.435)**	1.116 (0.432)***	1.120 (0.430)***	0.960 (0.438)**	1.011 (0.434)**	0.963 (0.436)**	1.115 (0.424)***
POLRISK (host)	-0.082 (0.186)	-0.060 (0.191)	-1.084 (0.415)***	-2.273 (0.835)***	-0.957 (0.319)***	-3.107 (0.990)***	-3.367 (0.934)***
POLRISK (home)			-8.101 (1.878)***			-8.331 (2.467)***	-8.330 (2.450)***
POLRISK (host) x POLRISK (home)			5.091 (1.703)***			6.006 (1.981)***	6.177 (1.858)***
Gini (home)				-0.061 (0.036)*		-0.034 (0.037)	-0.042 (0.036)
POLRISK (host) x Gini (home)				0.059 (0.021)***		0.028 (0.025)	0.035 (0.023)
ELF (home)					-6.291 (2.046)***	-3.183 (2.432)	-3.177 (2.507)
POLRISK (host) x ELF (home)					4.660 (1.358)***	4.205 (1.652)**	4.623 (1.648)***
Pseudo-R ²	0.19	0.19	0.19	0.19	0.19	0.20	0.17
Observations	22925	22925	22925	22925	22925	22925	22925
Firm-investment-years	496	496	496	496	496	496	496

Robust standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Figure 1. Estimated effect of firm’s home-country institutional constraints

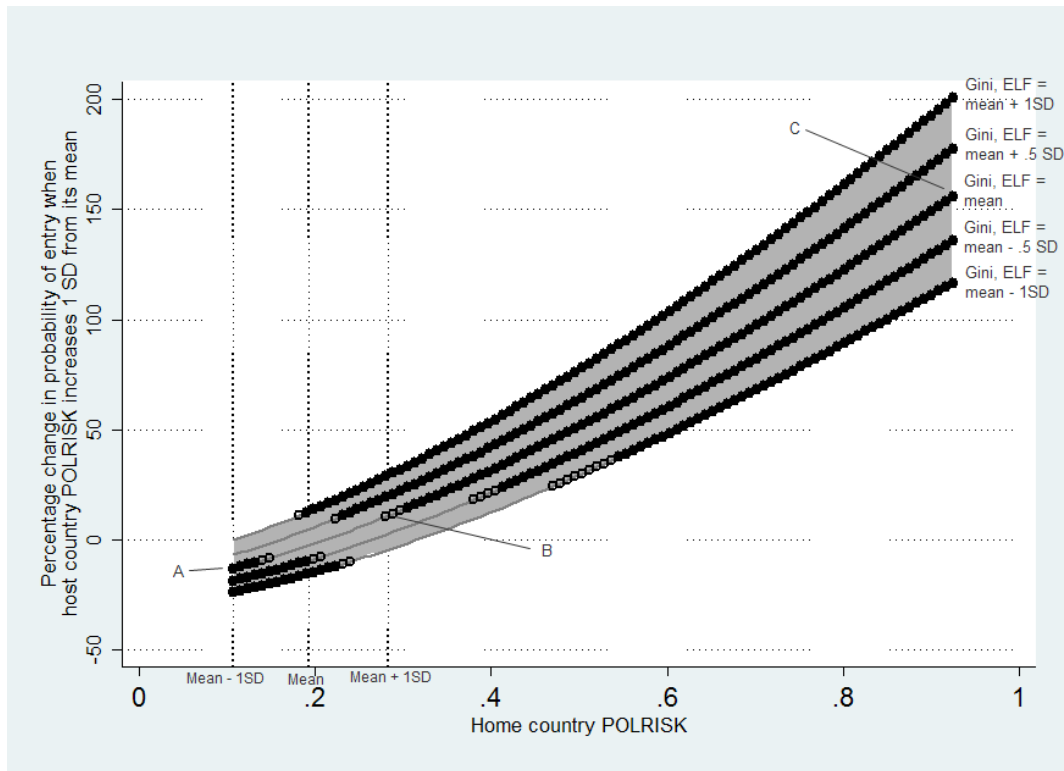


Figure 2. Estimated effect of firm’s home-country income inequality*

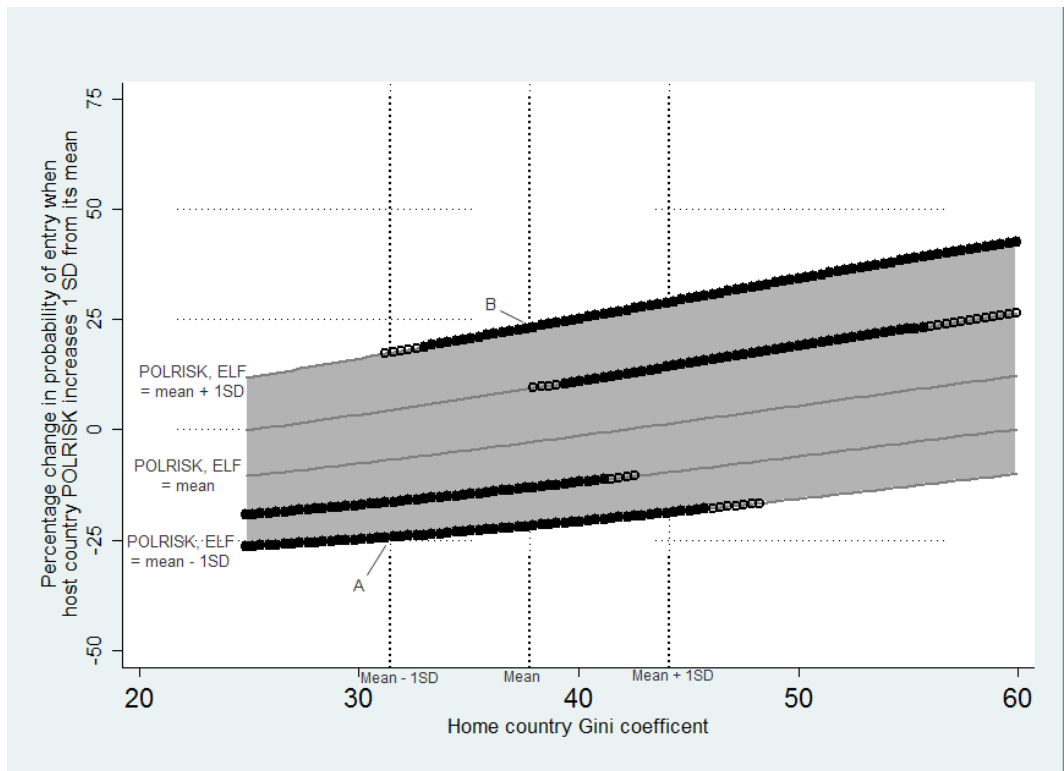


Figure 3. Estimated effect of firm’s home-country ethnic fractionalization

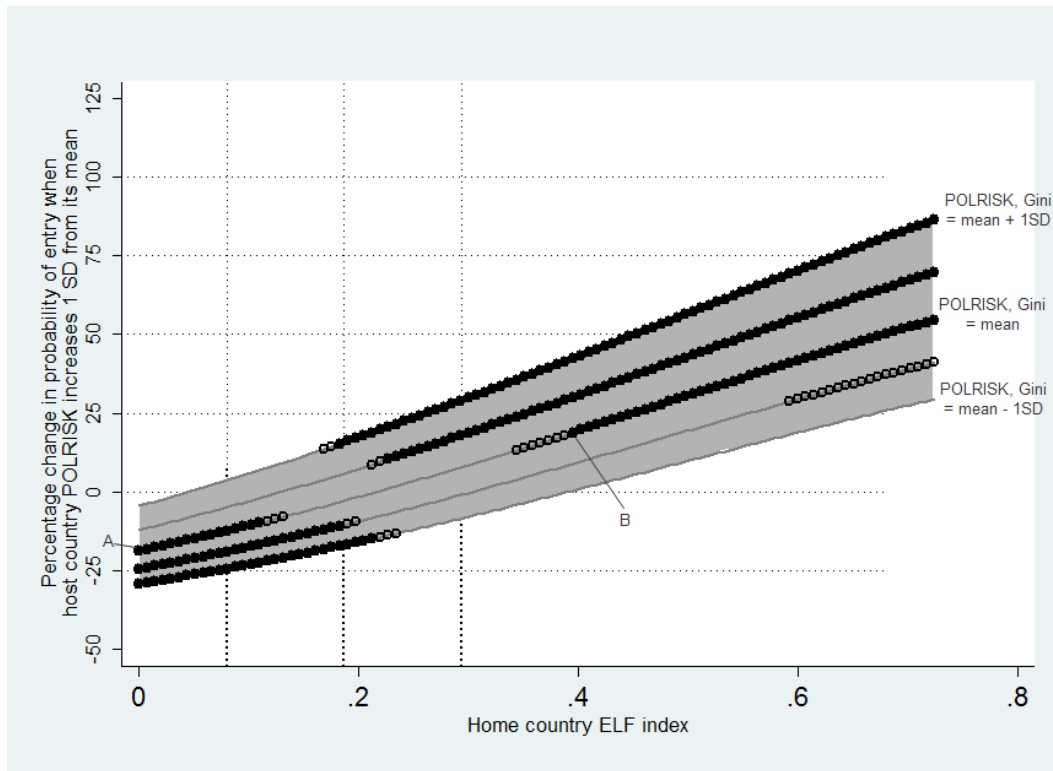


Figure 4. Aggregate estimated effect of firm’s home-country attributes

