

Policy Risk, Political Capabilities and International Investment Strategy: Evidence from the Global Electric Power Industry*

Guy L. F. Holburn
University of Western Ontario
Richard Ivey School of Business
1151 Richmond Street North,
London, Ontario N6A 3K7, Canada.
Tel: (519) 661-4247
Email: gholburn@ivey.uwo.ca

Bennet A. Zelner
Fuqua School of Business
Duke University
Box 90120
Durham, NC 27708-0120, USA
Tel: (919) 660-1093
Email: bzelner@duke.edu

February 5, 2008

ABSTRACT

Whereas conventional wisdom holds that policy risk—the risk that a government will opportunistically alter policies to expropriate a firm’s profits or assets—deters foreign direct investment (FDI), we argue that multinational firms vary in their response to host-country policy risk as the result of differences in organizational capabilities for assessing and managing such risk, which are shaped by the home-country policymaking environment. Specifically, we hypothesize that firms from home countries with weaker institutional constraints on policymakers, or more intense policy competition among interest groups divided along economic or ethnic lines, will be less sensitive to host-country policy risk in their international expansion strategies. Moreover, firms from sufficiently risky or contentious home-country environments will seek out riskier host countries for their international investments, in order to leverage their political capabilities and attain competitive advantage. We find support for our hypotheses in a statistical analysis of the FDI location choices of multinational firms in the electric power industry during the period 1990 – 1999, the industry’s first decade of internationalization.

* Author order is alphabetical and does not reflect relative contribution. We are grateful to Witold Henisz, Amy Hillman, David Mowery, Joanne Oxley, Beth Rose, Pablo Spiller, Oliver Williamson and to seminar participants at the University of California, Berkeley, the Academy of Management, the Academy of International Business and the Strategy Research Forum for many helpful comments and suggestions on this and earlier drafts of the paper.

1. Introduction

Conventional wisdom holds that policy risk—the risk that a government will opportunistically alter policies to expropriate a firm’s profits or assets—deters foreign direct investment (FDI). Research in international business (Kobrin 1978; Kobrin 1979), economics (Brunetti and Weder 1998; Wei 2000; see also Mauro 1995) and political science (Jensen 2003) supports this view, finding a negative relationship between various measures of institutional weakness or instability and inward FDI. In focusing on aggregate investment flows, this research necessarily abstracts away from variation in firm-level responses to policy risk. Yet, in many cases, multinational firms 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 commonly-used measure.¹

In this paper, we argue that variation in multinationals’ responses to host-country policy risk is attributable to differences in organizational capabilities for assessing and managing such risk that are shaped by a firm’s home-country policymaking environment. We hypothesize that firms from home-country environments characterized by weaker institutional constraints on policymakers or more intense policy competition among interest groups—i.e., environments which facilitate the development of “political” capabilities—will be less sensitive to host-country policy risk in their international expansion strategies. Moreover, firms from sufficiently risky or contentious home-country environments will seek out riskier host countries for their international investments, in order to leverage their political capabilities and attain competitive advantage.

We find support for our hypotheses in a statistical analysis of the FDI location choices of multinational firms in the electric power industry. Between 1990 and 1999, more than 65 countries introduced reforms to allow FDI in power generation, spurring the birth of a new global industry. During this period, almost 200 firms from 28 home countries invested in roughly 130 gigawatts of generating capacity. As we

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

demonstrate below, firms from home countries with weaker institutional constraints on policymakers and more pronounced interest group cleavages were less averse to host-country policy risk in their location decisions, and in some cases exhibited risk-seeking behavior.

In Section 2, we develop our theoretical arguments and relate them to prior research. Section 3 contains a discussion of our empirical approach, industry setting and data. We discuss the results of our statistical analysis in Section 4, along with their robustness to alternative specifications and subsamples. Section 5 concludes with a short summary and suggestions for future research.

2. Theory

2.1. Institutional Distance and International Investment Strategy

Research in international business and economics, emphasizing both the organizational constraints and the advantages that a firm's home-country environment may create for doing business elsewhere, provides insight into why multinational firms vary in their response to host-country policy risk. The central thesis in research emphasizing constraints is that differences between a firm's home-country business environment and the environment in a potential host country increase the "psychic" costs of doing business in this host country (Johanson and Vahlne 1977), and thus raise the firm's hurdle rate of return for investing there. Members of the "Uppsala School" have focused primarily on the deterrent effect of dissimilar cultural and economic institutions, especially in the early stages of internationalization (Davidson 1980; Benito and Gripsrud 1992; Barkema *et al.* 1996). Similarly, economists working with gravity models of international trade have found that various measures of distance between two countries—e.g., differences in colonial heritage and language, as well as geographic distance—are negatively correlated with bilateral trade flows (e.g., Frankel and Rose 2002). Ghemawat (2001) has synthesized these findings, identifying four specific dimensions of distance—cultural, administrative/political, geographic and economic—whose importance for international trade and investment varies by industry. In the context of policy risk, the chief implication of this broad body of research is that the deterrent effect of policy risk on a firm's decision to enter a country depends not just

on features of the potential host's investment climate, but also on uncertainty arising from dissimilarity between salient features of the home- and host-country environments.

In contrast, another body of research holds that firms develop distinctive advantages—such as technological and marketing capabilities (Erramilli *et al.* 1997) and low production costs (Wells 1983)—as a result of resources or influences present in their home-country environment, which in turn facilitate competitive success abroad. Dunning (1980), for example, has related a firm's distinctive “ownership endowments” to its country of origin, while Porter (1990) has attributed international competitive advantage to a cluster of reinforcing home country and industry-level attributes. These insights are broadly consistent with the resource-based view of the firm (Wernerfelt 1984; Barney 1991), which explains competitive advantage (Peteraf 1993) in terms of a firm's distinctive resources and capabilities, including organizational skills and routines developed in a specific market setting (Nelson and Winter, 1982). In the current context, the resource-based view implies that firms whose home-country environments have endowed them with political capabilities that are well matched to the environments found in specific host countries will be more likely to invest in these countries. By exploiting such capabilities, multinationals can not only mitigate their “liability of foreignness” (Hymer 1976; Zaheer 1995), but may also be able to attain competitive advantage.

2.2. Organizational Learning and Imprinting

A firm's home-country environment shapes its political capabilities through two channels: organizational learning and cognitive imprinting. The former is the result of a firm's direct experience in identifying and attempting to influence the preferences of pivotal domestic political and interest group actors (Holburn 2001; e.g., Holburn and Vanden Bergh 2002; 2004). Some of this learning—for example, knowledge of the identity and preferences of specific influential actors—is country-specific and cannot be deployed elsewhere. In contrast, knowledge about how the structure of home-country political and socioeconomic institutions affects policymaking can be more readily generalized to other countries with similar institutional configurations (Henisz and Delios 2002; Delios and Henisz 2003). For example, a firm entering a host country whose policymaking process is governed by a similar institutional

configuration to that which it has navigated at home can more readily identify influential actors on the basis of their position in the policymaking structure, relative to a firm lacking such experience (Henisz 2003). Likewise, a firm entering a host country whose socioeconomic structure is similar to that of its home country is better able to anticipate the sources and intensity of interest group opposition to its operations than a firm from a socioeconomically disparate society can.

The second channel through which the structure of a firm's home-country policymaking environment affects its capabilities for managing policy risk is cognitive imprinting (Stinchcombe 1965). Individuals with common backgrounds and experiences develop convergent "mental models," internal representations used to interpret the environment and guide actions under conditions of uncertainty (Denzau and North 1994). The common mental model of the policymaking process shared by managers and employees from the same home country necessarily informs the skills and routines that these actors develop to assess and manage policy risk in the uncertain environment represented by a new host country.

Organizational sociologists have explicitly considered the link between a firm's internal structures and processes and the external conditions in its founding environment. Stinchcombe (1965) originally pointed to the persistent imprint of founding conditions on a firm's "form" or "type" across time. Guillén has generalized this insight to the cross-national context, arguing that the "structured setting of the nation-state"—characterized by "institutional patterns, as well as economic and technological factors" (Guillen 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" (Guillen 1994: 4).

Organizational learning and imprinting processes in the home country therefore shape a firm's political capabilities for assessing and managing policy risk both at home and abroad. For firms from riskier home-country policymaking environments, these capabilities reduce the level of uncertainty surrounding policymaking outcomes in riskier host countries, and consequently mute the entry-detering effect of host-country policy risk. Moreover, because political capabilities may serve as a source of competitive advantage, firms from sufficiently risky home-country environments will seek out riskier host countries in order to generate economic rents (Henisz 2003).

2.3. Political Institutions and Policy Risk

Our first set of hypotheses follows directly from these arguments. Research in international business (Henisz 2000), political science (Tsebelis 2003) and political economy (Knack and Keefer 1995) has identified the extent of institutional constraints on policymakers—i.e., checks and balances—as a central determinant of policy risk. National policymaking systems requiring agreement among more numerous and diverse institutional actors to change policy—e.g., those with multiple constitutionally separate branches of government populated by individual policymakers with differing partisan affiliations—are characterized by relatively high policy stability, and thus pose a relatively low level of policy risk. Conversely, systems in which policymaking authority is more concentrated, or is shared among actors with similar preferences, are characterized by lower policy stability and thus pose a higher level of policy risk (Henisz 2000). This conceptualization of policy risk is dominant in “large n” cross-national analyses because of its generality and the availability of relevant data.

HYPOTHESIS 1A. *The negative effect of host-country policy risk on the probability of entry is smaller for firms from home countries with weaker institutional political constraints.*

HYPOTHESIS 1B. *For firms from home countries with sufficiently weak institutional political constraints, the probability of entering a given host country increases with host-country policy risk.*

2.4. Interest Group Competition

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. However, these hypotheses do not explain why firms from countries with relatively strong formal institutional safeguards against policy change—as is the case in many developed countries—also invest in risky host countries. For example, in our empirical setting, over half of the cross-border electricity generation investments received by countries in the riskiest quartile worldwide, as measured by political constraints, were made by firms from home countries whose level of political constraints placed them in the least risky quintile.

The explanation for this pattern lies in a second attribute of the home-country policymaking environment that shapes a firm's political capabilities: the level of political rent-seeking (Bhagwati 1982) by opposed interest groups. The link between home-country interest group competition and capabilities for assessing and managing host-country policy risk stems from the fact that policy risk ultimately derives from interest group demands (Rodrik 1996; Persson and Tabellini 2000; Grossman and Helpman 2001; Keefer and Knack 2002; Henisz and Zelner 2005). Interest groups that are disadvantaged by the entry of foreign firms, such as local competitors, may seek redress through the policymaking process, especially when such entry has occurred in response to new public policies, including privatization and liberalization reforms (Lora and Panizza 2003; Henisz and Zelner 2005). The specific risk to foreign entrants is that opposed local interest groups will have sufficient political influence to overturn or modify these policies.

Direct experience in countering the demands of opposed home-country interest groups, as well as the cognitive imprint made by a contentious home-country policymaking environment, both foster the development of political capabilities. However, our empirical focus is on capabilities resulting from imprinting. Because the specific interest group cleavages that underpin policy risk vary substantially by country (and, more generally, by industry), measures of the underlying sources of host-country policy risk, as well as measures of relevant home-country experience, are elusive in a cross-national empirical context such as ours. In contrast, broad cleavages that affect the overall level of interest group competition in a firm's home-country environment—and thus the imprint that this environment leaves on individual actors' mental models of the policymaking process, and resultant skills and organizational routines that they develop for managing policy risk—are more readily observed.

We focus in particular on two types of interest group cleavages associated with rent-seeking that have received attention in prior cross-national research: a country's level of income inequality and the degree of fragmentation among resident ethnic groups (Mauro 1995; Alesina and Perotti 1996; Easterly and Levine 1997; Keefer and Knack 2002; Alesina *et al.* 2003). Greater income inequality leads to a higher level of home-country interest group competition because, as such inequality increases, so do pressures for redistribution through political measures. Governments may be able to increase their political support

by implementing policies that redistribute resources from wealthy minority segments to poorer segments of society by, for example, adopting progressive tax policies; weakening state protection of property rights; or expropriating industries or businesses that serve substantial parts of the population, such as financial services and utilities (Levy and Spiller 1994). Empirical evidence supports these arguments: in an extensive study using data on more than 100 countries, Keefer and Knack (2002) found a strong negative relationship between income inequality and the security of contractual and property rights.

A similar logic underlies the relationship between ethnic fractionalization and the level of political rent-seeking. Easterly and Levine (1997) have summarized existing political economy research on this link, 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). Their empirical analysis supports this argument, as do empirical studies linking greater ethnic polarization to weaker contractual and property rights (Keefer and Knack 2002) and corruption (Mauro 1995).

HYPOTHESIS 2A. *The negative effect of host-country policy risk on the probability of entry is smaller for firms from home countries with greater income inequality.*

HYPOTHESIS 2B. *For firms from home countries with sufficiently high income inequality, the probability of entering a given host country increases with the level of host-country policy risk.*

HYPOTHESIS 3A. *The negative effect of host-country policy risk on the probability of entry is smaller for firms from home countries with greater ethnic fractionalization.*

HYPOTHESIS 3B. *For firms from home countries with sufficiently high ethnic fractionalization, the probability of entering a given host country increases with the level of host-country policy risk.*

3. Industry Setting and Statistical Methodology

3.1. Setting

We test the hypotheses developed above using data on private electricity producers’ choice of host countries for cross-border investment in electricity generating facilities during the period 1990 – 1999.

Our 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 ideal setting in which to test our hypotheses for two main reasons. First, during the sample period, which represents the industry's first decade of operation, many of the firms participating in the industry 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 such FDI through legislative or administrative reforms; by 1999, the number was 64.² During this time, 186 firms from a total of 28 countries made 747 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 (or 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 likely had little or no prior international experience. We expect the influence of the home-country environment on location choice to be particularly pronounced for these firms.

A second appealing aspect of the global private electricity production industry for testing our hypotheses is the potential for conflict between the interests of host-country political actors and those of foreign investors (Levy and Spiller 1994; Henisz and Zelner 2005). The large up-front capital costs and long payback periods for investments in generating facilities reduce investors' *ex post* bargaining power, while the high political salience of recently privatized infrastructure industries leaves investors—especially foreign ones—susceptible to claims of monopoly abuse and other forms of exploitative behavior. Hence, the influence of host-country policy risk on multinationals' location choices should be substantial, as should the relevance of capabilities for assessing and managing such risk.

² 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).

3.2. Dependent variable and data structure

The data set includes 491 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 in a given firm-investment-year ranges from a minimum of four (for the single firm making a cross-border investment in electricity generation in 1990) to a maximum of 67 (for each of the 35 firms that invested during 1999). The average number of host countries chosen by an investing firm in a single firm-investment-year is 1.5, and ranges 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 variable 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 tracks international investment activity in the utilities sector, and the World Bank's "Private Participation in Infrastructure" database .

3.3. Independent Variables

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

$$Y_{ijt} = f \left(\begin{array}{c} POLRISK_{jt} + \\ POLRISK_{it} + POLRISK_{it} \times POLRISK_{jt} + \\ GINI_{it} + POLRISK_{jt} \times GINI_{it} + \\ ELF_i + POLRISK_{jt} \times ELF_i + \\ DISTANCE_{ij} + MARKET_{jt} \end{array} \right)$$

Table 1 contains descriptive statistics and correlation coefficients.

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 estimate (discussed below), the records comprising a firm-year with no investment drop out of the model because they do not contribute to the log-likelihood function.

Policy risk. The variables $POLRISK_{jt}$ and $POLRISK_{it}$ measure the extent of institutional political 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 that inhabit these branches constrain any one institutional actor from unilaterally effecting a change in policy (Henisz 2000).

$POLCON$ 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 party different 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 maximum is one and whose sample maximum is 0.893 (Belgium, 1992 – 1999). For complete details on $POLCON$'s derivation, see Henisz (2000).

In our main specification, we define policy risk for host country j in year t as $POLRISK_{jt} = 1 - POLCON_{jt}$. In order to test Hypotheses 1A and 1B, we also define, for a firm from home country i as of year t , $POLRISK_{it} = 1 - \frac{1}{3} \sum_{i=t-2}^t POLCON_{it}$, which appears both in a multiplicative interaction term with $POLRISK_{jt}$ and by itself.

Income inequality. To test Hypotheses 2a and 2b, we include 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 the economic growth literature, and ranges from a theoretical minimum of zero (indicating perfect income equality among all the residents of a country) to a theoretical maximum of one (indicating that all

of a country's wealth is held by a single individual). In our main specification, we use Gini coefficients from the World Bank's "World Development Indicators" database.⁴

Ethnic fractionalization. In order to test Hypothesis 3, we include 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 ethnic 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). It has since been used in numerous other analyses in business, economics and political science.

Distance. In addition to our measures of primary theoretical interest, we also include a vector of time-invariant measures, $DISTANCE_{ij}$, to capture various dimensions of distance between a firm's home country i and host country j . For the cultural distance between two countries, we use the composite index developed by Kogut and Singh (1988), which is based on Hofstede's data on national cultural attributes (Hofstede 2003). 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, divided by the population variance of this dimension. We also include 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. The source for this variable is Rose and van Wincoop (2001)

Our other measures of distance are also drawn from research on international trade. In order to capture aspects of administrative distance other than the policymaking environment differences captured by our interaction terms, we include a colonial linkage measure that take a value of one if two countries ever had

⁴ Because Gini coefficients are reported at irregular intervals that vary by country, we interpolate missing annual values or. In our main specification, we use the resultant annual home-country Gini coefficients to define $GINI_{it} = 1 - \frac{1}{3} \sum_{i=t-2}^t GINI_{it}$.

a colonial relationship or one country colonized the other after 1945, and zero otherwise.⁵ Our 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). Finally, we measure economic distance as the difference between two countries' GDP per capita, calculated using data from the World Bank's "World Development Indicators" database.

Market Attractiveness. The variables included in $MARKET_{jt}$ are time-varying measures of host-country market attractiveness. The first four measures reflect potential host-country demand for electricity and electricity generating facilities, and include the natural logarithm of host-country population; the ratio of host-country GDP (in constant U.S. dollars) to host-country 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.

Our fourth measure of market attractiveness is 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 include a variable to proxy for other unmeasured attributes of the host-country investment climate that might affect a firm's decision to invest there. This proxy is equal to the ratio of a country's level of inward FDI to GDP, and was obtained from the World Bank's "World Development Indicators" database.

3.4. Estimation Technique

Two primary attributes of the data determine our choice of estimation technique: (1) the dichotomous nature of the 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 maximum likelihood estimator or the unconditional maximum

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

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 an even single record from the group due to missing data requires that the entire group be dropped (Katz 2001: 380). In our dataset, this would mean dropping any firm-investment-year in 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 our model necessarily contains both types of variables.⁶ The unconditional estimator does not have this limitation.⁷

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 context, firm-investment years) includes only a small number of alternatives (in this context, potential host countries). However, for applications such as ours, where only one group contains fewer than nine alternatives, the unconditional estimator exhibits minimal bias.⁸ We therefore use the unconditional estimator in our analysis. For our baseline model, we also present results obtained using the conditional estimator for purposes of comparison.

3.5. Unobserved Heterogeneity

Our fixed-effects logit model accounts for unobserved heterogeneity among firms, as well as the effects of unobserved temporal shocks, because it necessarily includes a dummy variable for each firm-investment-year. In order to account for unobserved heterogeneity among host countries, we also include a set of host-country regional dummy variables in our primary specification.

⁶ As discussed above, we include the three home-country attributes hypothesized to affect a firm’s response to host-country policy risk separately as well as in interaction terms. Failure to include the constitutive variables in an interaction term separately can lead to inferential errors (Friedrich 1982; Jaccard 2001; Brambor *et al.* 2006: 66-70).

⁷ Additional drawbacks of the conditional estimator include its greater computational complexity and its inability to produce estimates of the incidental parameters (Katz 2001: 380).

⁸ Studies using Monte Carlo simulations to assess the finite-sample properties of the conditional and unconditional estimators find that the bias of 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 our data, only a single firm-investment-year (in 1990) contains fewer than nine alternatives, and in only seven (in 1991) does the number of alternatives range between nine and 15. For the remaining 491 firm-investment-years, the number of alternatives ranges from 18 (in 1992) to 67 (in 1999).

Fixed-effect logit models sometimes include alternative-specific constants (ASCs) to account for unobserved cross-sectional heterogeneity. Even though we discuss results from a specification including ASCs in our robustness analysis, such a specification is inappropriate for testing our hypotheses because it exploits variation within cross-sectional units—i.e., host countries—only (Greene 2003:290; Kennedy 2003: 307), whereas our hypotheses revolve around variation in policy risk across countries. Indeed, our measure of policy risk, *POLRISK*, varies substantially across host countries—the average annual host-country mean value is 0.448, with an average annual standard deviation of 0.278—but relatively little within them. Among the 67 potential host countries in our sample (i.e., countries that were open to FDI in electricity generation at some point), the median within-country standard deviation of *POLRISK* was .008, and only 24 potential host countries had a within-country standard deviation greater than .02 during the sample period. Estimates from a specification including ASCs would primarily reflect this within-country variation, not the cross-country variation of interest.⁹

3.6. Statistical Interpretation

Following standard practice, we report the estimated coefficients and their standard errors. However, as in all non-linear models, the coefficients in our unconditional fixed-effects models do not represent marginal effects, making direct substantive interpretation (apart from the direction of an effect) difficult. This difficulty is compounded for the interaction terms necessary to test the conditional relationships posited in our hypotheses because the coefficient on an interaction term in a nonlinear model does not represent a cross-partial derivative, as does an interaction term coefficient from a linear model (Ai and Norton 2003; Norton *et al.* 2004). Thus, the estimated coefficients for the interaction terms in our model and *t*-tests based on their associated standard errors convey no direct information about the magnitude or statistical significance of the conditional effects of interest.

In order to address these issues, we interpret the conditional effects posited in our hypotheses using the simulation-based approach to statistical interpretation developed by King et al. (2000), which in recent

⁹ A related issue is multicollinearity. A linear regression of host-country *POLRISK* on the host-country dummies has an r-squared of 0.936.

years has gained widespread adherence in the field of political science. The starting point for the simulation-based approach is the same central limit theorem result underlying conventional hypothesis testing: if enough samples were drawn from the sampling population and used for estimation, the resulting coefficient estimates would be distributed joint-normally (King *et al.* 2000: 350). The difference is that, instead of constructing confidence intervals or test statistics based on standard errors and a normal distribution table, the researcher simulates the distribution of the coefficient estimates directly 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 (King *et al.* 2000 :349-350). With the M simulated coefficient vectors in hand, the researcher may then calculate simulated predicted probabilities or any function of these quantities, as well as associated confidence intervals.

The function of primary interest in the current context is the difference in predicted probabilities associated with an increase in the value of host-country policy risk ($POLRISK_j$), conditional on the values of the three home-country policymaking environment variables ($POLRISK_i$, $ETHFRAC_i$ and $GINI_i$). We use the procedure outlined above to simulate the first difference in predicted probabilities associated with a one-standard deviation increase in host-country policy risk ($POLRISK_j$) from its mean when the home-country policy environment variables are set to different observed values, and also to determine the confidence intervals for conducting the necessary hypothesis tests (see Zelner 2007).¹⁰

¹⁰ We implement the simulation-based approach using the “CLARIFY” software written by King et al. (2001) in Stata 10. Following common practice, we simulate the model parameters 1000 times.

4. Empirical Results

Table 2 reports estimated coefficients and standard errors for six specifications. Columns 1 and 2 contain results for a specification including host-country attributes only, 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, and column 6 contains estimated coefficients and standard errors for our main specification, which includes all of the home-country policy environment variables and associated interaction terms.

First consider the results in columns 1 and 2. The estimated coefficients and associated standard errors in the two columns are very similar, as expected. The coefficients on host-country population and the government solicitation dummy are positive in sign and statistically significant at a p-value of less than 0.01. However, contrary to expectations, the coefficients on GDP per capita and GDP growth are negative in sign, and the former is statistically significant at conventional levels, while the latter is marginally so. The explanation for these negative coefficient estimates may relate to the absence of a statistically significant estimate of the coefficient on the FDI/GDP ratio, which was intended to capture government inducements to private investors not reflected in the government solicitation dummy. Specifically, the state-owned electricity systems of economically challenged countries with relatively low levels of development were more likely to have experienced severe performance shortfalls or full-blown crises in the years preceding privatization, and cash-strapped governments more likely to have offered inducements to private investors in the form of guaranteed offtake contracts (also known as “take or pay” contracts), exclusive franchises and the like (Henisz and Zelner 2005). The negative coefficients on variables related to GDP may reflect the greater incidence of such inducements among these countries.

The estimated coefficients on the five “distance” variables are signed as expected, and all except for that on economic distance are statistically significant with a p-value of 0.01 or less. Thus, firms are more likely to invest in host countries that are geographically and culturally closer to their home country, that use the same language, and that have common colonial ties. The marginal significance of the economic distance variable may be peculiar to our industry setting, as the organizational capabilities needed to

“market” electricity are less likely to differ based on resident income levels than are those needed to market goods with more elastic demand, such as automobiles (see Ghemawat 2001).

Consistent with the conventional wisdom regarding the effect of policy risk on FDI, the estimated coefficient on the policy risk variable is negative, but is statistically insignificant. The lack of statistical significance is in line with the arguments advanced above: if some firms are more likely to enter host countries with higher policy risk than other firms as a result of home-country characteristics, which are omitted from the specifications in columns 1 and 2, then the coefficient on the policy risk variable in these specifications reflects the “average” effect of host-country policy risk, and is estimated imprecisely because of the heterogeneity of underlying responses.

In columns 3 – 5, the coefficients for the host-country attribute variables and distance measures, and the statistical significance of these coefficients, are highly consistent among the specifications. Additionally, the coefficients on host-country policy risk, the home-country policymaking environment variables and the interaction terms are all statistically significant according to conventional criteria. However, we reiterate that the effects of the variables included in the interaction terms cannot be interpreted directly from the raw coefficients and associated standard errors.

Column 6 contains our main specification, including the host-country attributes and distance measures, as well as the home-country policymaking environment variables and the interaction terms containing these variables. The coefficients for the host-country variables and distance measures and statistical significance of these coefficients are consistent with the results in columns 1 – 5. In order to interpret the effects of the variables included in the interaction terms—which are used to capture the conditional effects posited in hypotheses 1 – 3—we use King et al.’s simulation-based approach, as discussed above. To facilitate intuition, and also to present our results for a wide range of observed variable values, we display these results graphically in Figures 1 – 4.

4.1. Home-Country Political Constraints

Figure 1 depicts the estimated relationship between home-country policy risk stemming from weak institutional political constraints, measured on the horizontal axis, and the change in the predicted

probability of entry associated with a one standard deviation increase in host-country policy risk from its mean, measured on the vertical axis and expressed as a fraction of the initial predicted probability of entry (i.e., +1.00 indicates a 100 percent increase in the probability of entry). The five different schedules appearing on the figure illustrate this relationship when the other two home-country policy environment variables (the Gini coefficient and ELF index) both take values ranging from one standard deviation below their home-country means to one standard deviation above their home-country means.¹¹ The solid circles on the schedules indicate regions where the change in the predicted probability of entry differs statistically from zero at the five percent level or better (using a two-tailed test), and the hollow circles indicate regions where the change in the predicted probability of entry differs statistically from zero at the 10 percent level or better (using a two-tailed test). The dotted vertical lines signify, from left to right, the sample minimum value of home-country policy risk (which is within one standard deviation of the mean), the sample mean value, and the sample mean plus one standard deviation, respectively.

The pattern of results depicted in Figure 1 is consistent with Hypotheses 1A and 1A. First consider a hypothetical firm whose home country ELF index and Gini coefficient are both equal to the home-country sample mean (represented by the middle schedule), reflecting an “average” level of exposure to interest group competition. If this firm is also from a home country with more effective political constraints, resulting in a relatively low level of home-country policy risk (left side of the figure), the change in the probability of entry associated with a one standard deviation increase in host-country policy risk from its sample mean is negative, reaching a minimum value of -14 percent for a firm from a home country with the lowest observed level of policy risk. This finding is consistent with the conventional wisdom that firms are less likely to invest in politically risky countries. However, for an otherwise identical firm from a home country characterized by relatively weak political constraints—resulting in a relatively high level of policy risk—the change in the probability of entry associated with a one standard deviation increase in host-country policy risk from its sample mean is positive (right side of the figure), reaching a maximum

¹¹ The host-country variables other than policy risk are set to their sample mean (for continuous variables) or mode (for binary variables).

value of +143 percent for a firm from a home country with the highest observed level of policy risk. Furthermore, the null hypothesis that the latter, positive change in predicted probability is not greater than the former, negative change in predicted probability can be rejected at $p \leq 0.01$ (one-tailed test).

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 our theoretical arguments. Consider the lowermost schedule in Figure 1, which depicts the relationship between home-country policy risk and the response to host-country policy risk for a hypothetical firm from a home country with low interest group competition, reflected by a Gini coefficient and ELF index that are both one standard deviation below the mean for the home countries in the sample. For such a firm, 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. This result makes intuitive sense, because a lower level of interest group competition in the home-country policymaking environment is less likely to foster the development of strong political capabilities. As the extent of home-country political constraints decreases, exposing this hypothetical firm to greater home-country policy risk (i.e., moving from the left side of the figure to the right side), the deterrent effect of host-country policy risk becomes smaller, as posited in Hypothesis 1A. However, this deterrent effect persists for higher values of home-country policy risk than it does for firms from home countries with higher Gini coefficient and ELF index values, and becomes positive only when the level of home-country policy risk is several standard deviations above the mean.

The converse is true for a hypothetical firm whose home-country policymaking environment is characterized by a relatively high level of interest competition, as measured by a Gini coefficient and ELF index that are one standard deviation above the mean for the home countries in the sample (depicted by the top schedule in Figure 1). Regardless of the effectiveness of political constraints in the home country, such a firm is never deterred by host-country policy risk, suggesting that intense interest group competition in the home-country policymaking environment imbues firms with superior political capabilities. Moreover, the level of home-country policy risk for which this firm becomes risk-seeking—

presumably to leverage these capabilities—is lower than it is for a hypothetical firm with exposure to less interest competition in its home country (as depicted by the lower schedules in the figure).

4.2. Home-Country Income Inequality

Figure 2 is similar to Figure 1, but the home-country Gini coefficient appears on the horizontal axis instead of home-country policy risk, and the five schedules are associated with differing values of home-country policy risk and home-country ELF index, ranging from one standard deviation below the home-country mean (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 policy risk and ELF index levels are at the sample mean—exhibits a marginally significant negative response to host-country policy risk when its home-country Gini coefficient is low (left side of the schedule). Even if this firm is from a home country with high income inequality—leading to greater interest group competition—it still does not exhibit a statistically significant level of risk-seeking behavior. At the same time, the null hypothesis that the imprecisely estimated increase in the predicted probability of entry for a firm from a home country with a high Gini coefficient (equal to the sample maximum) is not greater than the more precisely estimated decrease in the predicted probability of entry for a firm with a low home-country Gini coefficient (equal to the sample minimum) can be rejected at $p \leq 0.05$ (one-tailed test). Moreover, a hypothetical firm from a home country characterized by policy risk and ELF indices below the home-country mean (lower two schedules) as well as a low home-country Gini coefficient is significantly less likely to enter risky countries. Greater home-country income inequality mutes this effect but does not change its direction. Conversely, a hypothetical firm from a home country characterized by policy risk and an ELF index above the home-country mean (upper two schedules) is significantly more likely to enter risky countries when the home-country Gini coefficient is sufficiently high; lower home-country income inequality mutes this effect, but does not change its direction. Thus, empirical support for Hypotheses 2a and 2b is conditional on the extent to which other dimensions of the home-country policymaking environment foster the development of political capabilities, suggesting that the various capability-enhancing influences to which a firm and its employees are exposed have an additive effect.

4.3. Home-Country Ethnic Fractionalization

Figure 3 is analogous to Figures 1 and 2, but depicts the relationship between the level of ethnic fractionalization 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. The results depicted provide strong support for Hypotheses 3A and 3B. Firms from home countries characterized by low ethnic fractionalization—and thus a less contentious policymaking environment—are deterred by host-country policy risk. This effect diminishes as the level of home-country ethnic fractionalization rises, and firms from home countries with sufficiently high ethnic fractionalization seek out riskier host-country environments in their international investments. The null hypothesis that the positive change in predicted probability for the latter firms is not greater than the negative change for the former can be rejected at $p \leq 0.01$ (one-tailed test).

4.4. Aggregate Estimated Effect of Policymaking Environment Variables

Figures 1 – 3 provide empirical support for our hypotheses by interpreting the econometric results in Table 2 for different combinations of observed values of the variables of primary theoretical interest. Figure 4 provides additional insight 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 in the sample near the end of the sample period.¹² Like the schedules in Figures 1 – 3, the height of each vertical bar represents, for a given hypothetical firm, the fractional change in the predicted probability of entry (e.g., +1.00 = +100%) associated with a one standard deviation increase in host-country policy risk from its mean level. Bars with dark shading represent estimated effects that differ significantly from zero at the five percent level or better (two-tailed test), bars with light shading represent estimated effects that differ significantly from zero at the 10 percent level or better (two-tailed test), and bars with no shading represent estimated effects that do not differ significantly

¹² 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.

from zero at conventional levels. The three spikes overlaid on each bar represent, respectively, the level of home-country policy risk stemming from political constraints (circles), the home-country Gini coefficient (diamonds) and the home-country ELF index (squares), each measured in terms of the number of standard deviations of the relevant variable from its home-country mean.

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 firms from Germany and Japan will invest falls by 30 percent and 25 percent, respectively. The pattern of spikes in Figure 4 provides an explanation for this behavior that is consistent with our arguments about how the home-country environment shapes firms' political capabilities: Germany and Japan exhibit relatively strong political constraints (reflected in low *POLRISK* values), as well as some of the lowest observed values of income inequality and ethnic fractionalization. In an environment such as this, firms are less likely to develop the capabilities for assessing and managing policy risk that lend competitive advantage in risky host countries.

Further inspection of Figure 4 reveals a corollary pattern for hypothetical firms that are attracted by host-country policy risk. 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 294 and 103 percent more likely to enter. The reason, as illustrated by the spikes, is that the policymaking environments of these countries foster the development of organizational capabilities for assessing and managing policy risks: 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 rent-seeking by interest groups in the political arena. Although the Philippines enjoys relatively constraining political institutions, this country has the highest observed level of ethnic fractionalization among the home countries in the sample, as well as a Gini coefficient that is more than half a standard deviation above the home-country mean.

4.5. Robustness Analysis

In order to assess the robustness of our results, we replicate our main specification using Gini coefficients compiled by Deininger and Squire (1996) and a measure of ethnic fractionalization developed by Alesina et al. (2003). We also use a five-year retrospective average of home-country policy risk instead of a three-year average, contemporaneous annual values of this variable, and an alternative cross-national measure of institutional veto players known as “CHECKS” (Beck *et al.* 2001). The core results depicted in Figures 1 – 3 do not substantively change.

In another alternative specification, we redefine our dependent variable to take a value of one for a firm’s first entry into a given host country and zero otherwise. The conditional effects depicted in Figures 1 – 3 remain similar in magnitude, but are statistically significant over smaller ranges of independent variable values as a result of the substantial reduction (roughly one third) in the number of firm-investment-years in the estimating sample.

We also re-estimate our main specification using the subsample of non-U.S. firms, which account for roughly 45 percent of the firms in our main sample. The conditional effects depicted in Figure 1 – 3 are again similar, with only a slight reduction in statistical significance for some combinations of independent variable values. These same statements hold true when we eliminate firms from E.U. countries.

We conduct additional robustness checks by re-estimating our main specification with additional firm- and country-level independent variables, including firm size, measured in terms of both assets and sales; a firm’s prior international experience in the electric power production industry, measured using an experience dummy, cumulative years of international experience, and weighted measures capturing years of experience in institutionally similar countries; and home-country GDP per capita, included both by itself and in an interaction term with host-country policy risk. None of these variables is statistically significant, nor does their inclusion significantly change our results.

Finally, we replicate our main specification using host-country dummies rather than regional dummies. As discussed above, because this specification does not exploit cross-sectional variation in host-country policy risk, the results it produces regarding the effects of such risk on firms’ location choices primarily

reflect intertemporal variation in *POLRISK* in the relatively small number of home countries exhibiting such variation to any significant degree during the sample period.¹³ Nonetheless, the coefficient estimates are similar to those from our main specification, and most of the variables that are not highly correlated with the host-country dummies continue to be statistically significant at conventional levels. The conditional effects depicted in Figure 1 – 3 decline in magnitude and, unsurprisingly, are statistically significant over smaller ranges of independent variable values.

5. Conclusion

By focusing our analysis of the impact of host-country policy risk at the organizational level, we have developed the argument that policy risk need not deter foreign direct investment by multinationals, as the conventional wisdom holds, but may instead attract it. Specifically, we have argued that firms develop political management capabilities through organizational learning and cognitive imprinting mechanisms in the context of their home-country environment, which provide them with a competitive advantage when investing in host countries where there is an increased risk of government expropriation. Organizational capabilities to effectively mitigate policy risk are especially likely to develop in home countries with relatively weak institutional political constraints, or in which more pronounced societal divisions exist along economic or ethnic dimensions. 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 become more attractive as potential investment destinations. We have found robust empirical support for these predictions in a statistical analysis of firms' foreign investment location choices in a sample consisting of almost the entire population of multinationals in an industry during its first decade of internationalization.

Our findings are consistent with and also extend the scope of the resource-based view of the firm (Wernerfelt 1984; Barney 1986). While the thesis that firms develop heterogeneous capabilities is relatively general, the focus of this body of research has largely been on technological and market-related

¹³ Additionally, multicollinearity between the host-country dummies and other host-country attributes that changed little over time also inflates the standard errors on the variables measuring these attributes.

capabilities, and the ways in which these shape product market diversification strategies (see Teece 1982). Here, we have argued that political management capabilities shape firms' geographic diversification strategies, and may also enable some firms to achieve superior performance. Moreover, the fact that domestic political experience affects firms' sensitivity to host-country policy risk provides support for the existence of "institutional" capabilities that can be leveraged in multiple environments (Henisz 2003), as opposed to knowledge and social ties relevant only to a particular jurisdiction. Our findings thus broaden existing interpretations of the sources and nature of competitive advantage in the context of international business.

Naturally, there are several limitations to our analysis. First, the findings pertain to a single industry in the early stages of its international development. As firms gain more international experience, one might expect the relative influence of the home-country environment to decline. Also, given the highly politicized nature of the electricity industry, the effect of host-country policy risk—as well as the extent of competitive advantage afforded by superior political capabilities—may be greater for firms in this industry than in others. A third limitation, common to resource-based studies, is that we do not directly observe organizational capabilities in our empirical investigation, even though they are central to our theoretically-based predictions. Our results are thus consistent with the presence of firm-level variation in political capabilities, but do not constitute direct evidence thereof. Finally, we have implicitly treated firms' entry mode as independent of the entry decision. Future research may attempt to address the limitations of the present study by explicitly taking into account differences in entry modes, examining the effects of the home-country policymaking environment on country choices of firms operating in other industries, and adopting a more micro-analytic perspective on the organizational locus of political capabilities.

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	76.81	211.14	0.73	1250.00	1.00						
(2) GDP per capita	7054.23	9087.08	187.60	37202.48	-0.13	1.00					
(3) GDP growth	3.91	3.48	-13.13	14.20	0.24	-0.13	1.00				
(4) Govt solicitation	0.24	0.43	0.00	1.00	0.14	-0.02	-0.03	1.00			
(5) FDI/GDP	3.19	3.67	-1.33	56.83	-0.06	-0.01	0.09	0.08	1.00		
(6) Geographic distance	8349.03	4392.73	173.03	19772.34	0.08	-0.11	0.06	-0.01	-0.05	1.00	
(7) Cultural distance	2.60	1.42	0.02	8.69	-0.02	-0.21	0.03	-0.07	0.05	-0.07	1.00
(8) Colonial link	0.08	0.27	0.00	1.00	-0.01	0.10	-0.04	-0.05	-0.05	-0.02	-0.19
(9) Common language	0.16	0.36	0.00	1.00	0.07	0.00	0.01	-0.02	0.07	0.07	-0.28
(10) Economic distance	9.68	0.95	0.67	10.52	0.07	-0.49	0.04	-0.01	0.00	0.05	0.34
(11) POLRISK (host)	0.42	0.27	0.11	1.00	0.20	-0.39	0.13	-0.06	-0.03	0.08	0.21
(12) POLRISK (home)	0.19	0.09	0.11	0.92	0.00	0.00	-0.01	0.01	-0.01	0.06	-0.14
(13) ELF (home)	0.19	0.11	0.00	0.72	0.00	0.01	0.00	0.01	-0.01	0.03	-0.07
(14) Gini (home)	37.83	6.50	24.85	59.93	0.00	0.02	0.01	0.00	-0.02	0.08	-0.07
					<u>(8)</u>	<u>(9)</u>	<u>(10)</u>	<u>(11)</u>	<u>(12)</u>	<u>(13)</u>	<u>(14)</u>
(8) Colonial link					1.00						
(9) Common language					0.32	1.00					
(10) Economic distance					-0.08	-0.01	1.00				
(11) POLRISK (host)					-0.10	-0.10	0.20	1.00			
(12) POLRISK (home)					0.08	-0.05	-0.23	0.00	1.00		
(13) ELF (home)					0.10	0.09	-0.16	0.00	0.00	1.00	
(14) Gini (home)					0.08	0.16	-0.10	0.00	-0.04	0.48	1.00

Table 2. Estimation Results

	(1)	(2)	(3)	(4)	(5)	(6)
Population	0.258 (0.029)***	0.273 (0.029)***	0.271 (0.029)***	0.274 (0.029)***	0.273 (0.029)***	0.272 (0.029)***
GDP per capita	-0.00002 (0.00001)***	-0.00002 (0.00001)***	-0.00002 (0.00001)***	-0.00002 (0.00001)***	-0.00002 (0.00001)***	-0.00002 (0.00001)***
GDP growth	-0.024 (0.013)*	-0.024 (0.013)*	-0.025 (0.013)*	-0.024 (0.013)*	-0.023 (0.013)*	-0.024 (0.013)*
Govt solicitation	1.125 (0.093)***	1.174 (0.088)***	1.180 (0.088)***	1.185 (0.088)***	1.189 (0.089)***	1.197 (0.089)***
FDI/GDP	-0.006 (0.012)	-0.005 (0.012)	-0.006 (0.013)	-0.006 (0.012)	-0.005 (0.012)	-0.006 (0.012)
Geographic distance	-0.00011 (0.00001)***	-0.00012 (0.00001)***	-0.00012 (0.00001)***	-0.00012 (0.00001)***	-0.00012 (0.00001)***	-0.00012 (0.00001)***
Cultural distance	-0.152 (0.045)***	-0.159 (0.044)***	-0.141 (0.045)***	-0.146 (0.044)***	-0.153 (0.044)***	-0.126 (0.045)***
Colonial link	0.567 (0.133)***	0.595 (0.136)***	0.628 (0.136)***	0.636 (0.137)***	0.638 (0.137)***	0.695 (0.137)***
Common language	0.710 (0.109)***	0.759 (0.113)***	0.738 (0.112)***	0.781 (0.114)***	0.777 (0.114)***	0.758 (0.114)***
Economic distance	-0.094 (0.059)	-0.093 (0.056)*	-0.098 (0.057)*	-0.090 (0.057)	-0.069 (0.058)	-0.085 (0.059)
POLRISK (host)	-0.097 (0.172)	-0.089 (0.181)	-1.057 (0.390)***	-1.081 (0.309)***	-2.819 (0.783)***	-3.605 (0.916)***
POLRISK (home)			-7.375 (1.811)***			-7.083 (2.393)***
POLRISK (host) x POLRISK (home)			4.729 (1.577)***			5.719 (1.770)***
Gini (home)					-0.071 (0.035)**	-0.045 (0.036)
POLRISK (host) x Gini (home)					0.073 (0.020)***	0.041 (0.024)*
ELF (home)				-5.946 (2.727)**		-4.022 (2.493)
POLRISK (host) x ELF (home)				5.276 (1.401)***		4.427 (1.725)**
Constant		-4.606 (1.059)***	-2.905 (1.293)**	-4.084 (1.116)***	-2.790 (1.617)*	-1.432 (1.685)
Observations	24623	24623	24623	24623	24623	24623
Firm-investment-years	494	494	494	494	494	494

Notes: Robust standard errors in parentheses. Host-country regional dummies included.

* p <= 0.10; ** p <= 0.05; *** p <= 0.01.

Figure 1. Estimated Effect of Home-Country Political Constraints*

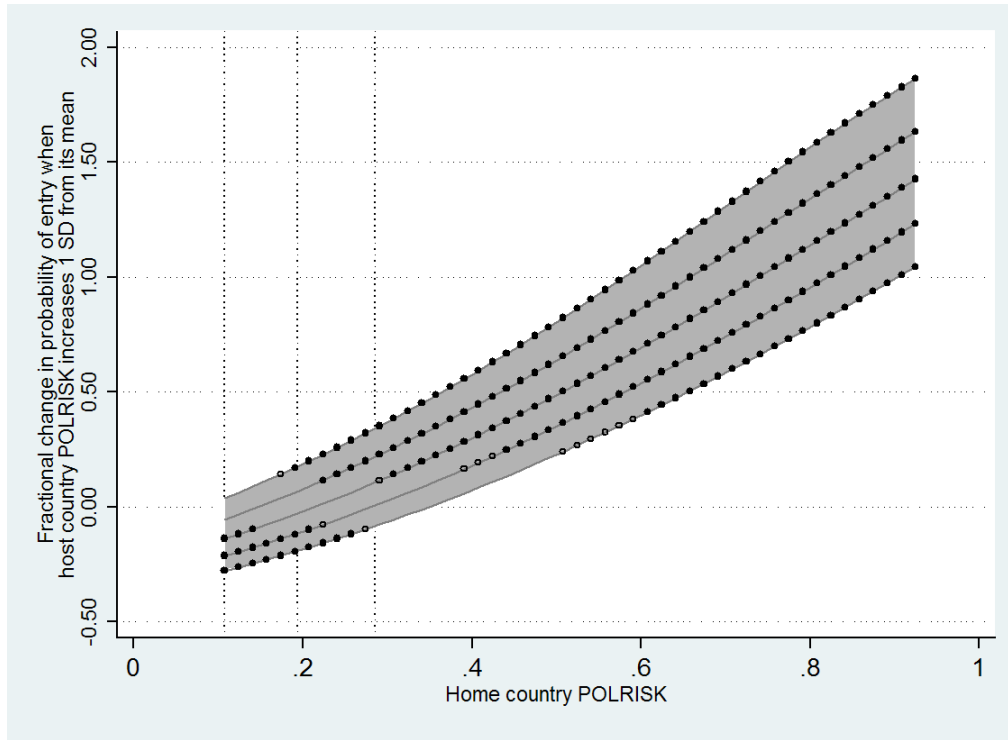
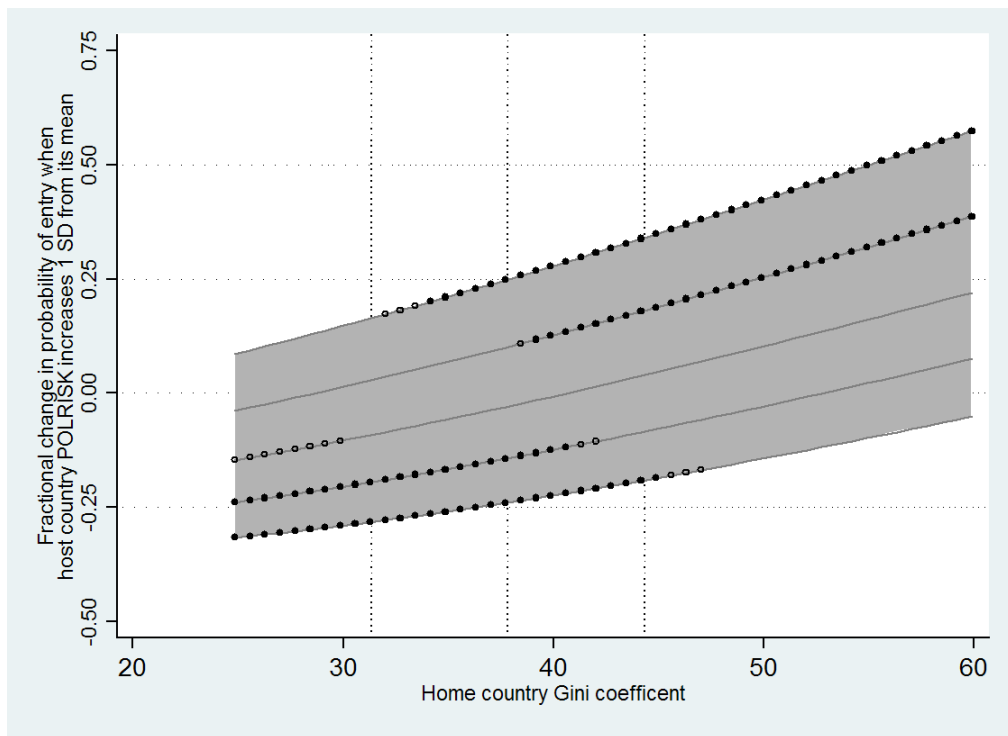


Figure 2. Estimated Effect of Home-Country Income Inequality*



* Figures explained in Sections 4.1 – 4.4.

Figure 3. Estimated Effect of Home-Country Ethnic Fractionalization*

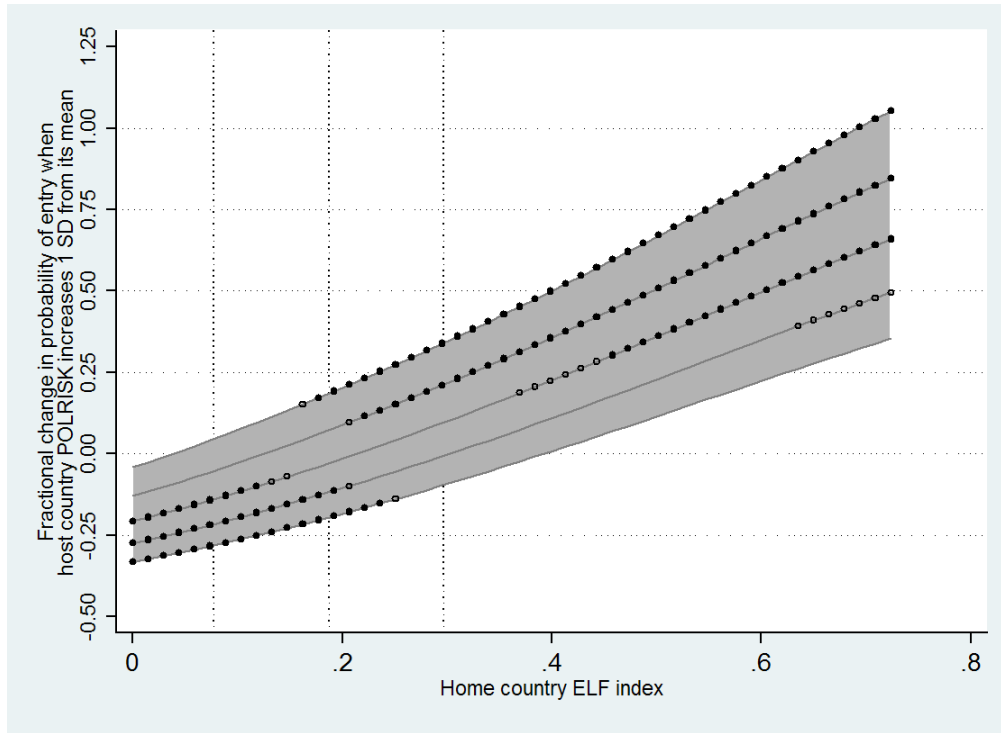
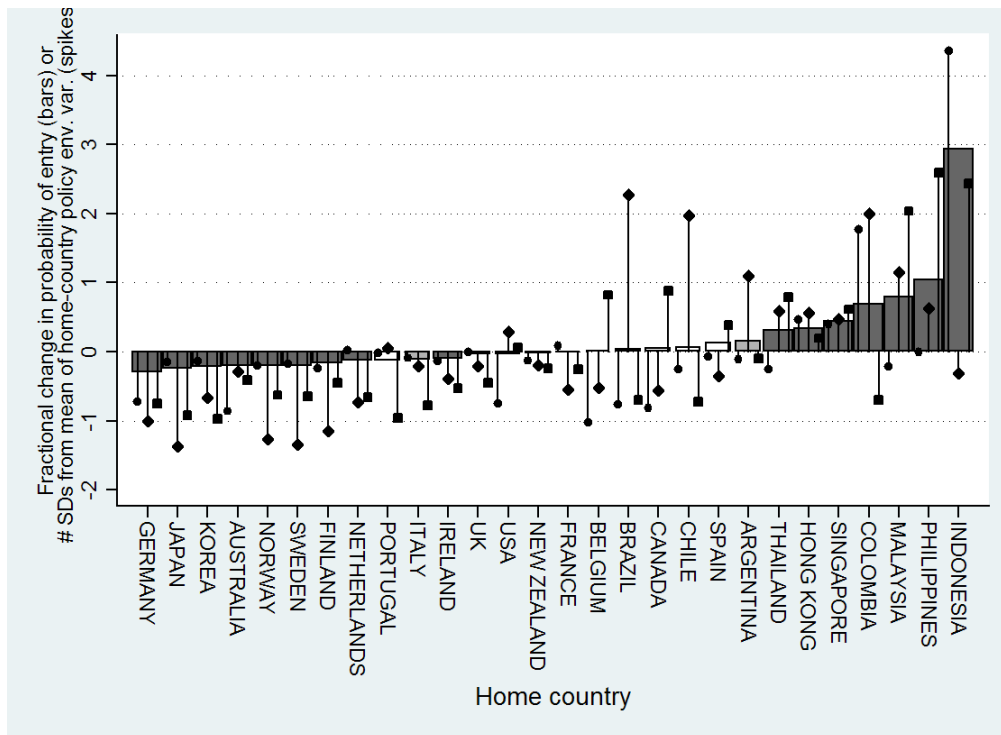


Figure 4. Estimated Aggregate Effect of Home-Country Variables*



* Figures explained in Sections 4.1 – 4.4.

References

- Ai, C. R. and E. C. Norton (2003). "Interaction terms in logit and probit models." *Economics Letters* 80(1): 123-129.
- Alesina, A., A. Devleeschauwer, et al. (2003). "Fractionalization." *Journal of Economic Growth* 8(2): 155-194.
- Alesina, A. and R. Perotti (1996). "Income distribution, political instability, and investment." *European Economic Review* 40(6): 1203-1228.
- 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.
- Barkema, H. G., J. H. J. Bell, et al. (1996). "Foreign entry, cultural barriers, and learning." *Strategic Management Journal* 17(2): 151-166.
- Barney, J. B. (1986). "Strategic Factor Markets: Expectations, Luck, and Business Strategy." *Management Science* 32(10): 1231-1241.
- Barney, J. B. (1991). "Firm resources and sustainable competitive advantage." *Journal of Management* 17: 99-120.
- Beck, T., G. Clarke, et al. (2001). "New Tools in Comparative Political Economy: The Database of Political Institutions." *World Bank Economic Review* 15(1): 165-176.
- Benito, G. R. G. and G. Gripsrud (1992). "The expansion of foreign direct investments: discrete rational location choices or a cultural learning process?" *Journal of International Business Studies* 23(3): 461-476.
- Bhagwati, J. N. (1982). "Directly unproductive, profit-seeking (DUP) activities." *Journal of Political Economy* 90(5): 988-1002.
- Brambor, T., W. R. Clark, et al. (2006). "Understanding interaction models: Improving empirical analyses." *Political Analysis* 14(1): 63-82.
- Brunetti, A. and B. Weder (1998). "Investment and institutional uncertainty: A comparative study of different uncertainty measures." *Weltwirtschaftliches Archiv-Review of World Economics* 134(3): 513-533.
- 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.
- Davidson, W. H. (1980). "The Location of Foreign Investment Activity." *Journal of International Business Studies* 11: 9-23.
- Deininger, K. and L. Squire (1996). "A new data set measuring income inequality." *World Bank Economic Review* 10(3): 565-591.
- Delios, A. and W. J. Henisz (2003). "Political hazards, experience, and sequential entry strategies: The international expansion of Japanese firms, 1980-1998." *Strategic Management Journal* 24(11): 1153-1164.
- Denzau, A. T. and D. C. North (1994). "Shared mental models: ideologies and institutions." *Kyklos* 47(1): 3-31.
- Dunning, J. H. (1980). "Towards an eclectic theory of international production: some empirical tests." *Journal of International Business Studies* 11(1): 9-31.
- Easterly, W. and R. Levine (1997). "Africa's growth tragedy: Policies and ethnic divisions." *Quarterly Journal of Economics* 112(4): 1203-1250.
- Erramilli, M. K., S. Agarwal, et al. (1997). "Are firm-specific advantages location-specific too?" *Journal of International Business Studies* 28(4): 735-757.
- Frankel, J. and A. Rose (2002). "An estimate of the effect of common currencies on trade and income." *Quarterly Journal of Economics* 117(2): 437-466.
- Friedrich, R. J. (1982). "In defense of multiplicative terms in multiple-regression equations." *American Journal of Political Science* 26(4): 797-833.

- Ghemawat, P. (2001). "Distance Still Matters: The Hard Reality of Global Expansion." *Harvard Business Review* 79(8): 10.
- Gilbert, R. J. and E. P. Kahn (1996). *International Comparisons of Electricity Regulation*, Cambridge University Press.
- Greene, W. H. (2003). *Econometric analysis*. Upper Saddle River, N.J., Prentice Hall.
- Grossman, G. M. and E. Helpman (2001). *Special Interest Politics*, MIT Pr.
- Guillen, M. F. (1994). *Models of management : work, authority, and organization in a comparative perspective*. Chicago, University of Chicago Press.
- Henisz, W. J. (2000). "The Institutional Environment for Economic Growth." *Economics and Politics* 12(1): 1-31.
- Henisz, W. J. (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, W. J. and A. Delios (2002). Learning about the institutional environment. *New Institutionalism in Strategic Management*. 19: 339-372.
- Henisz, W. J. and B. A. Zelner (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.
- Hofstede, G. (2003). *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*. Thousand Oaks, CA, Sage Publications.
- Holburn, G. L. F. (2001). *Regulatory Institutions and Firm Strategy: Theory and Evidence from the Electric Power Industry*, University of California, Berkeley. Doctoral dissertation.
- Holburn, G. L. F. and R. G. Vanden Bergh (2002). Policy and process: A game-theoretic framework for the design of non-market strategy. *New Institutionalism in Strategic Management*. 19: 33-66.
- Holburn, G. L. F. and R. G. Vanden Bergh (2004). "Influencing agencies through pivotal political institutions." *Journal of Law Economics & Organization* 20(2): 458-483.
- Hymer, S. (1976). *The international operations of national firms : a study of direct foreign investment*. Cambridge, Mass., MIT Press.
- International Private Power Quarterly (1998). McGraw-Hill.
- Jaccard, J. J. (2001). *Interaction Effects in Multiple Regression*. Thousand Oaks, CA, Sage Publications.
- Jensen, N. M. (2003). "Democratic governance and multinational corporations: Political regimes and inflows of foreign direct investment." *International Organization* 57(3): 587-+.
- Johanson, J. and J. E. Vahlne (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.
- Katz, E. (2001). "Bias in Conditional and Unconditional Fixed Effects Logit Estimation." *Political Analysis* 9(4): 379-384.
- Keefer, P. and S. Knack (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*. Cambridge, Mass., MIT Press.
- King, G., M. Tomz, et al. (2000). "Making the most of statistical analyses: Improving interpretation and presentation." *American Journal of Political Science* 44(2): 347-361.
- King, G., M. Tomz, et al. (2001). *CLARIFY: Software for Interpreting and Presenting Statistical Results*. Cambridge, MA, Harvard University.
- Knack, S. and P. Keefer (1995). "Institutions and Economic Performance: Cross-country tests using alternative institutional measures." *Economics and Politics* 7(3): 207-227.
- Kobrin, S. J. (1978). "When does political instability result in increased investment risk?" *Columbia Journal of World Business* 13(3): 113-122.
- Kobrin, S. J. (1979). "Political risk: review and reconsideration." *Journal of International Business Studies* 10(1): 67-80.
- Kogut, B. and H. Singh (1988). "The Effect of National Culture on the Choice of Entry Mode." *Journal of International Business Studies* 19(3): 411-432.

- Levy, B. and P. T. Spiller (1994). "The Institutional Foundations of Regulatory Commitment: A Comparative Analysis of Telecommunications Regulation." *Journal of Law, Economics and Organization* 10(2): 201-246.
- Lora, E. and U. Panizza (2003). "The future of structural reform." *Journal of Democracy* 14(2): 123-137.
- Mauro, P. (1995). "Corruption and growth." *Quarterly Journal of Economics* 110(3): 681-712.
- Norton, E. C., H. Wang, et al. (2004). "Computing interaction effects and standard errors in logit and probit models." *The Stata Journal* 4(2): 103-116.
- OECD (1997). *Application of Competition Policy to the Electricity Sector* OECD, Paris.
- Persson, T. and G. Tabellini (2000). *Political Economics: Explaining Public Policy*, Cambridge, MA: The MIT Press.
- Peteraf, M. A. (1993). "The cornerstones of competitive advantage: a resource-based view." *Strategic Management Journal* 14(3): 179-191.
- Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York, The Free Press.
- Rodrik, D. (1996). "Understanding economic policy reform." *Journal of Economic Literature* 34(1): 9-41.
- Rose, A. K. and E. van Wincoop (2001). "National money as a barrier to international trade: The real case for currency union." *American Economic Review* 91(2): 386-390.
- Stinchcombe, A. L. (1965). Organizations and social structure. *Handbook of Organizations*. J. G. March, Rand-McNally: 142-193.
- Teece, D. J. (1982). "Towards an economic theory of the multiproduct firm." *Journal of Economic Behavior & Organization* 3(1): 39-63.
- Tsebelis, G. (2003). *Veto players: How political institutions work*. Princeton, NJ, Princeton University Press and Russell Sage Foundation.
- Wei, S. J. (2000). "How taxing is corruption on international investors?" *Review of Economics and Statistics* 82(1): 1-11.
- Wells, L. T. (1983). *Third World multinationals : the rise of foreign investment from developing countries*. Cambridge, Mass., MIT Press.
- Wernerfelt, B. (1984). "A Resource-Based View of the Firm." *Strategic Management Journal* 12: 75-94.
- Zaheer, S. (1995). "Overcoming the liability of foreignness." *Academy of Management Journal* 38(2): 341-363.
- Zelner, B. A. (2007). "Improving the Interpretation and Presentation of Logit and Probit Results." Durham, NC, Duke University.