

Institutions vs. Institutions: Mode of Entry Choice among MNCs in Turkey, 1996-2003

Abstract

Drawing on institutional theory and new institutional economics, we offer an integrated framework and examine the role of institutions on multinational corporations' (MNCs) entry mode decisions in emerging economies. Particularly, this study investigates whether foreign entrants determine their ownership strategies according to external legitimacy concerns or focus more on institutional development of the host country in order to reduce entry costs and improve operational efficiency. Hypotheses are tested on 2,292 foreign entries into Turkey, undertaken by MNCs from 46 countries for the time period 1996-2003. Empirical results suggest that both legitimacy and efficiency considerations are at play in MNCs' entry decisions, whereas the former has slightly higher effect.

1. Introduction

How do Multinational Corporations (MNCs) go about deciding which entry mode to use while entering into a new country? This is one of the perennial questions that have attracted substantial attention from international business scholars for the last couple of decades.

Given its hard-to-reverse nature and implications for firm- and subsidiary-level performance, MNCs' entry mode decisions have been studied through wide variety of theoretical approaches and frameworks. In a recent review of entry mode literature, Canabal and White III (2008) identified 12 main theoretical approaches and constructs used in entry mode research between 1980 and 2006.

Accompanying the ongoing theorizing on entry mode choice, "institutions" started to occupy a more central position in studies looking at location decision (e.g. Bevan, Estrin, & Meyer 2004; Grosse & Trevino, 2005; Henisz & Delios, 2001) and ownership strategies (e.g. Chan & Makino, 2007; Dikova & Van Witteloostuijn, 2007; Lu, 2002; Yiu & Makino, 2002) of MNCs. Notwithstanding this rising interest in the domains beyond enter/no-enter decision; the consensus on which and how different aspects of institutional environment matter for internationalization strategies is still lacking (Bevan et al., 2004). This is in part because the term "institutions" entails different connotations and working logics in different theoretical domains. Based on the sociological orientation of *new institutional theory*, a growing stream of research scrutinizes the ways with which MNCs determine their international expansion strategies in order to cater to residing norms and values within both their organizational structure and the host. Research based on this approach focuses on understanding MNCs' foreign market entry behavior by paying particular attention to their internal and external legitimacy concerns (Davis, Desai, & Francis, 2000; Kostova & Roth, 2002; Rosenzweig & Singh, 1991). On the other hand, studies drawing on *new institutional economics* (NIE) divert the attention to the issue of transactional economization by pondering on the cost-related

implications of entry strategies. More specifically, studies in this strand of research look at the relationship between host countries' institutional development level and its implications for the efficiency of MNCs' entry decisions (Anderson & Gatignon, 1986; Delios & Henisz, 2000; Oxley, 1999).

We intend to contribute to this growing body of literature in three different ways. First, to the best of our knowledge, there has been no systematic empirical attempt at integrating institutional theory and NIE so as to decipher which attributes of the institutional environment matter and play more important role than others in foreign firms' entry strategies. Thus, following the suggestion of Meyer and Peng (2005), the central purpose of this study is to put different institutional mechanisms together and compare MNCs' efficiency needs with legitimacy concerns, while choosing among alternative modes of entry (see Figure 1). Second, although NIE has been extensively applied in the context of emerging economies, there has been limited empirical research using the theoretical framework of institutional theory to understand MNCs' entry mode choices particularly in emerging economies (see Ionascu, Meyer, & Estrin, 2004 and Uhlenbruck, Rodriguez, Doh, & Eden, 2006 as two exceptions). Third, granted that emerging economies entail highly dynamic institutional landscape, we go beyond the static depiction of the institutional environments of emerging economies. Adopting a dynamic approach to institutions and viewing them as changing across time separate our work from earlier studies, most of which have assumed that formal and informal institutions and their effects on MNCs within host countries are static. To that end, we incorporate a time-variant operationalization of institutional dimensions in order to capture the changing nature of institutions and relevant implications for MNCs' entry behavior into a single host country (viz. Turkey) over a eight-year period (1996-2003).

--- Insert Figure 1 about here ---

2. Theoretical Background and Hypothesis Development

2.1. Institutional Theory and Entry Mode Decision

While Transaction Cost Economics (TCE) and Resource-Based View (RBV) of the firm are the two most prevalently applied theoretical perspective to the mode of entry choice (for a recent review, see Canabal & White III, 2008), recent studies have started to shed light on the entry behavior of MNCs with a sociological approach by using institutional theory as the conceptual foundation of entry mode choice between joint venture (JV) and wholly owned subsidiary (WOS) (e.g. Chan & Makino, 2007; Davis et al., 2000; Lu, 2002; Yiu & Makino, 2002). The central argument of institutional theory is that organizations within a particular environment tend to conform to institutional norms and values as this conformance bestows them with increased legitimacy in the eyes of other institutional actors (DiMaggio & Powell, 1983). Suchman (1995:574) defines legitimacy as “generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions”. Thus, the need for legitimacy and associated benefits of gaining social acceptance by other constituents of institutional stakeholders are claimed to create isomorphism and homogeneity among organizations.

Institutional theorists (e.g. Suchman, 1995) have identified a number of domains of the institutional environment, such as social, political, cultural and cognitive; which are assumed to affect the behavior and legitimacy of an organizational unit. Scott (1995) combines different institutional domains into three categories, namely regulatory, cognitive and normative pillars. Eden and Miller (2004) note that three institutional pillars relates to what organizations and individuals may or may not do (*regulatory pillar*), can or cannot do (*cognitive pillar*) and should or should not do (*normative pillar*).

2.1.1. Regulatory Domain

The *regulatory domain* of the institutional environment consists of formal rules and laws established by regulatory agencies. Requirements of the legislative system either promote or restrict certain form of behavior and, therefore, would shape the way organizations structure and conduct themselves in order to gain acceptance and license to operate within the institutional context (Kostova, 1997). In their eminent study, DiMaggio and Powell (1983) stipulate the role of governmental mandates and common legal framework in the process with which firms within a particular institutional environment tend to adopt similar practices and structures over time. While mainstream institutional theorists (e.g. Slack & Hinnings, 1994) assume that state's dominance and legitimizing power apply equally across organizations, international business scholars (e.g. Hymer, 1976; Zaheer, 1995) take notice of the negative discrimination applied by host country governments towards foreign entrants. The risk of being exposed to negative discrimination by the host country government, which Eden and Miller (2004) label as "discrimination hazards", requires MNC pay special attention to obtain legitimacy in the eyes of governmental agencies. Thus, we depart from previous studies looking at the regulatory *distance* between home and host countries (Ionascu et al., 2004; Xu, Pan, & Beamish, 2004) and analyze the extent to which such governmental mandates are applied *discriminatorily* towards MNCs vis-à-vis domestic investors. This is because it is possible to observe that a host country with high distance on regulatory domain may design and implement FDI policies, which are compliant with national-treatment principle and do not cause MNCs substantial costs arising out of them being foreign.

In addition to alternative strategic options MNCs' can use to hedge them against state interference (Kogut, 1985), foreign firms can also moderate the hazard of negative governmental treatment while deciding on their mode of entry. As noted by Yiu and Makino

(2002), forming joint ventures can help MNCs reduce risk of negative discrimination and gain legitimacy in two ways. Since negative discrimination is applied against MNCs due to their foreignness, including a partner in the overseas subsidiary is likely to moderate regulatory institutional pressures levied on the foreign entrant. Moreover, MNCs can benefit from local firms' knowledge about how to deal with governmental requirements and mandates. Besides, forming joint venture with a local partner that has good relationships with governmental agencies and officers would be beneficial especially in transition economies where managerial ties and personal networks happen to play crucial role (Peng & Luo, 2000). The findings of previous empirical work also accord with the above reasoning that there is a negative relationship between ownership of the foreign subsidiary and the restrictiveness of governmental policies towards FDI (Kobrin, 1988; Yiu & Makino, 2002). Accordingly, we expect that:

Hypothesis 1: The lower the level of regulative restrictions imposed discriminatorily on foreign investors at the host country, the higher the likelihood that MNCs would prefer JV over WOS.

2.1.2. Normative Domain

Normative pillar refers to the taken-for-granted rules and norms defining appropriate and acceptable forms of behavior, to which organizations are inclined to conform without much conscious thought and deliberate thinking (DiMaggio & Powell, 1983). Differences in norms and values between home and host countries render it more difficult for foreign entrants to get familiar with the institutional context of the host country. Correspondingly, MNCs' inability to understand and act upon expectations of local stakeholders complicates obtaining external

legitimacy and increases the likelihood of discriminatory treatment (Kostova & Zaheer, 1999).

As noted above, larger normative distance amplifies negative effects of being foreign due to lack of legitimacy and hazards associated with unfamiliarity with local norms and discriminatory treatment by local actors (Xu & Shenkar, 2002). When this is the case, it has been proposed (Eden and Miller, 2004) and empirically verified (Kogut and Singh, 1988; Xu et al., 2004; Yiu and Makino, 2002) that MNCs prefer to share ownership with local partners. The institutional reasoning behind the negative relationship between degree of ownership and level of normative distance is that a foreign entrant can circumvent the legitimization process by benefitting from the social reputation and acceptance of its local partner at the host country. Additionally, a joint venture with a domestic firm endows the subsidiary with some type of local identity. By partnering with and learning from a domestic firm, an MNC can also mitigate the risks emerging from shallow understanding of the local norms, values and expectations. Accordingly, we put forward that:

Hypothesis 2_a: The higher the normative distance between home and host countries, the higher the likelihood that MNCs would prefer JV over WOS.

Contrary to the above reasoning, it has been also argued that higher differences in normative pillar create the problem of “double-layered acculturation” (Barkema, Bell, & Pennings, 1996). Therefore, in order to smooth out further setbacks that may emerge from the mingling of different organizational cultures, MNCs may prefer to claim sole ownership of the foreign venture so as to reduce the acculturation from double (corporate plus national) to single (corporate only) layer. Similarly, establishing subunits as WOS may help MNCs ensure headquarter mandates are conformed to by foreign subsidiaries, which would foster internal legitimacy and consistency across different regions (Kostova and Roth, 2002). Thus, we also propose the competing hypothesis that:

Hypothesis 2_b: The higher the normative distance between home and host countries, the lower the likelihood that MNCs would prefer JV over WOS.

2.1.3. Cognitive Domain

Cognitive domain focuses on the mental filters through which institutional actors view and make sense of the world. Since these cognitive programs are socially constructed and impose some kind of mental limitation, individuals within the same social environment tend to adopt similar ways of sensing and construing external stimuli (Kostova, 1999). Hence, cognitive pillar creates homogeneity in the way with which things are seen and judged within a given institutional environment (Scott, 1995). In the case of MNCs' ownership strategy, cognitive domain of the institutional environment could create a context for mimicry among foreign entrants. There are certain underlying mechanisms that could construct such imitative process. First of all, DiMaggio and Powell (1983:152) contend that "new organizations are modeled upon old ones throughout the economy, and managers actively seek model upon which to build." Granted that internationalization process and entry into a new country in general, and into emerging economies in particular, entails considerable uncertainties (Johanson & Vahlne, 1977), MNCs would find it more viable to follow the behavior of earlier entrants. Moreover, pattern of previous entries may also induce cognitive filters and mental programs among followers. Such schemata could play a restrictive role in the way individuals search, think about and choose alternative courses of action (Simon, 1976). This phenomenon is also referred to as *imprinting*, which suggests that "once a practice or decision has been implemented it reduces the likelihood of alternatives being used in future decisions" (Lu, 2002:22). Thirdly, local stakeholders would make sense of and judge the legitimacy of new foreign entrants based on past entry patterns for they may consider all foreign firms to belong the same cognitive category due to representativeness heuristic (Tversky & Kahneman, 1974;

Yiu & Makino, 2002). Since local constituents' definition of legitimate foreign firm is based on the behavior of previous entrants, a new entrant can increase its chances of gaining social acceptance and legitimacy simply by mimicking incumbent foreign firms.

Following Chan and Makino (2007), we expect a focal foreign entrant to imitate previous entrants, (1) operating in the same industry for they would share a common institutional logic and/or (2) coming from the same home country for they are more likely to undergo a comparable legitimization process due to same institutional distance between home and host countries¹. In consequence, we claim that:

Hypothesis 3_a: MNCs' likelihood of choosing a particular entry mode preferred by previous foreign entrants from same sector would be higher than the possibility of choosing non-dominant modes of entry.

Hypothesis 3_b: MNCs' likelihood of choosing a particular entry mode preferred by previous foreign entrants from same home country would be higher than the possibility of choosing non-dominant modes of entry.

2.2. New Institutional Economics and Entry Mode Decision

While institutional theory provides a solid theoretical foundation to understand antecedents of a *legitimate* market entry, NIE is useful to figure out country-level factors that influence the quest for *efficient* market entry. Specifically, the institutional infrastructure of an economy determines operating risks, costs of undertaking transactions and obtaining information (Hoskisson, Eden, Lau, & Wright, 2000). Thus, the logic of NIE is analogous to that of TCE, which is increasing the efficiency of operations by minimizing transaction costs (Williamson, 1985). However, these two theories differ in terms of their units-of-analysis: NIE focuses on

¹ It is important to note that, unlike previous studies (Lu, 2002; Yiu and Makino, 2002) our empirical model does not include internal mimicry and isomorphism within MNCs. This is because; none of the firms in our dataset appear to undertake more than one entry throughout the period studied. Hence, there is no trace of a possible internal imprinting among firms in our sample.

the advancement of institutional context within which transactions take place whereas TCE looks at variations among transactional characteristics, such as asset specificity and transaction frequency.

Below, we will develop our hypothesis concerning three institutional mechanisms, namely *economic/political stability intellectual property right (IPR) protection and corruption*. We acknowledge that there are couple of other institutional constructs used in previous research (e.g. privatization, bilateral investment treaties etc.), which are shown to affect MNCs' internationalization strategies. There is no question that these institutional features have substantial impact on the investment attractiveness of a host economy, which is more pertinent to MNCs' host country selection. Yet, for the sake of parsimony, we will focus our analysis on aforementioned three institutional attributes for we reckon them to be theoretically more germane to MNCs' ownership strategy.

2.2.1. Economic/Political Stability

Past research has looked at the effect of economic and political risks on MNCs' ownership choices (Anderson & Gatignon, 1986; Delios & Henisz, 2000). The empirical results of these studies reveal that MNCs tend to assume lower levels of ownership as political and economic stability decrease and investment risks increase. Hill, Hwang and Kim (1990) explain the effect of environmental hazards on ownership strategy by noting that the firm should "limit its exposure to them by reducing its resource commitments and increasing its ability to exit from the market quickly without taking a substantial loss should the environment worsen" (p.122). Accordingly, we estimate that:

Hypothesis 4: The higher the economic and political instability at the host country, the higher the likelihood that MNCs would prefer JV over WOS.

2.2.2. Intellectual property right protection

A consistent theme across different theoretical perspectives used to explain foreign market entry decision is the existence of some firm-specific assets as a prerequisite for geographical expansion of firm's operations (Dunning, 1980; Hymer, 1976). Thus, the success of international operations hinges on the extent to which a MNC can successfully transfer its knowledge-based advantages to its overseas units. However, as pointed by Meyer (2001:360) "in transition economies, the diffusion of knowledge is of particular concern because the institutional framework does not provide for the efficient protection of intellectual property rights". The lack of institutional safeguards increases the risk of intangible asset expropriation for MNCs, which poses a problem for their long-term competitive advantage at the host country. With this substantive background, scholars investigated the impact of intellectual property right protection on the composition of FDI inflows. For instance Javorcik (2004) looks at 1405 investments in Eastern Europe and former Soviet Republics for the time period 1989-1994 and finds that MNCs tend not to transfer their value-adding activities when IPR protection is weaker at the host market. Oxley (1999) show that, whenever IPR controls are ineffective, US firms prefer joint ventures over contractual arrangements in order to improve their monitoring and control capabilities. The claim that hierarchical modes of governance is more effective for safeguarding knowledge-based advantages and capabilities is also endorsed by TCE scholars (e.g. Anderson and Gatignon, 1986). Based on this, we hypothesize that MNCs would prefer higher degrees of ownership to minimize the risk of asset expropriation. Hence, we claim that:

Hypothesis 5: The stronger the institutional mechanisms protecting intellectual property rights at the host country, the higher the likelihood that MNCs would prefer JV over WOS.

2.2.3. Corruption

In addition to regulative mechanisms protecting intellectual property rights, the extent of corruption is another institutional parameter affecting MNCs' strategy for entering foreign markets. In its simplest sense, corruption can be defined as the abuse or misuse of regulatory power to realize personal gain at the expense of public and private interest. Based on the analysis of aggregate FDI flows, prior research has shown that high pervasiveness of corruption act as an entry barrier and deter foreign entrants to locate their investments in that country (Habib & Zurawicki, 2002). Scholars have also scrutinized the effects of corruption on firms' entry behavior. In their econometric analysis of foreign entrants' ownership decision, Smarzynska and Wei (2000) confirm that, by partnering with domestic firms, foreign investors can reduce costs of securing local permits and obtaining licenses as the level of corruption increases. Similarly, based on the reasoning that a foreign firm can reduce uncertainty and learn how to deal with corrupt institutions by having a local partner, Uhlenbruck et al. (2006) find empirical support for their hypothesis that the likelihood of MNCs' choosing joint venture increases as local regulations of the host country get more ambiguous and arbitrary.

Taking on a relative, instead of an absolute, approach to the effects of corruption of firm level behavior, Cuervo-Cazurra (2006) show that sensitivity of foreign investor behavior to host-country corruption depends on investor's country of origin. Specifically, he discovers that MNCs originating from countries with high corruption tend to enter host countries with high level of corruption. According to Habib and Zurawicki (2002), this type of behavior could be attributed to firms' inclination to enter markets that are psychically close (c.f. Johanson and Vahlne, 1977). Extending this behavioral approach further, one can contend that the difference in the corruption levels between the home and host countries would also affect MNCs' resource commitment and ownership decisions. Specifically, it stands to reason that

the likelihood of entrants choosing WOS would be higher when the home and host countries are similarly corrupt. Thus, we expect that:

Hypothesis 6: The higher the difference in the level of corruption between home and host countries, the higher the likelihood that MNCs would prefer JV over WOS.

3. Data and Methodology

3.1. Sample and Data Sources

To empirically test the hypotheses formulated in previous section, we examined investment decisions of foreign firms in Turkey. This data was drawn from the database of International Investors Association of Turkey (IIAT), which records 9,755 foreign entries into Turkey between 1954-2003. However, we restrict our analysis to the foreign investments realized throughout the eight-year period between 1996-2003, during which Turkey had gone through two major economic crises as well as changed her laws and regulations for FDI. Thus, given the primary purpose and focus of the present study, this time period provides an ideal setting to understand the role of dynamic institutional and economic environments on the entry behavior of foreign investors. In order to avoid qualitative differences between a JV formed between a foreign and local firm compared to a JV between two foreign firms, we excluded alliances that do not involve a Turkish partner. In addition to that, we also removed entries with invested capital less than real value of 50 million TL (adjusted to 1987 prices)². As a result, the final sample consisted of 2,292 manufacturing and service subsidiaries established by investors from 46 different countries.

The main purpose of this study is to decipher the effects of changes in external contextual variables on foreign firms' entry decisions. Therefore, we combined a number of secondary

² This procedure rests on the assumption that when the capital investment of foreign entry is trivial, and thus entail lower stakes at risk, MNCs would have lower likelihood to engage in a systematic decision-making among alternative modes of entry. Admittedly, our choice of lower bound for capital investment is rather arbitrary.

sources to draw the pattern of annual institutional changes in Turkey during the time period under investigation. The main annual indices we used in this study are Index of Economic Freedom published by Heritage Foundation and Economic Freedom of the World Index prepared by Fraser Institute. Additionally, we used the comprehensive database of Central Bank of the Republic of Turkey to draw historical information on macroeconomic variables. We matched one-year lagged values of time-varying contextual parameters with each corresponding entry, in order to allow for the time period between the decision and implementation of the investment.

3.2. Measures

3.2.1. Dependent Variable

Our dependent variable, the *mode of entry*, is dichotomous (WOS and JV) and operationalized based on the data provided in IIAT registries. This database records the type of ownership claimed by the foreign investors. Moreover, IIAT database includes information about each partner firm (e.g. country-of origin, percentage of ownership), whenever multiple parties are involved in the foreign investment. While earlier research used different thresholds, ranging from 80% (Makino & Beamish, 1998) to 95% (Hennart, 1991), to differentiate sole ownership from joint ownership, we adopted a middle-ground and used 90% equity ownership as the cutoff point to classify an entry as a WOS. We cataloged an entry as JV if the foreign firm claimed ownership stake between 10%-89% and partnered with a Turkish firm.

3.2.2. Independent Variables

In this study, *regulatory institutions* (REGULAT) refer to the ways with which foreign investors are treated by formal authorities. As we note earlier, this variable captures the extent to which foreign firms are subjected to the same regulations compared to domestic investors. Of the ten sub-indices provided in Heritage Foundation's Index of Economic Freedom, Investment Freedom scrutinizes whether foreign investors receive fair and equitable treatment

under law. The calculation of this sub-index is based on a number of secondary sources for data on capital flows and foreign investment regulations (see Beach and Kane, 2007 for a comprehensive account of methodology and data sources). The values range from 0-100 and the higher the score the fairer the foreign investors are treated by host country governments. We operationalized *normative distance* (NORMDIST) by calculating cultural distance between Turkey and country-of-origin of the focal entrant. Although we are aware of the suggestion that delineation and measurement of institutional dimensions are domain-specific and shall reflect the particular issue under study (Busenitz, Gomez & Spencer, 2000), we adopt the conventional approach used by previous studies and postulate cultural distance may reflect differences in normative belief systems between host and home countries (Ionascu et al., 2004; Yiu and Makino, 2002). Correspondingly we computed cultural distance by using the index developed by Kogut and Singh (1988)³, which incorporate four cultural dimensions (viz. masculinity/femininity, individualism/collectivism, uncertainty avoidance and power distance) measured by Hofstede (1980).

Cognitive institutions relate to the pattern of behavior adopted by previous actors, which shapes the choices of the focal actor under investigation. As we have explained before, this study analyzes trait-based imitation of foreign entrants (Haunschild and Miner, 1997).

Following Chan and Makino (2007), we expect the focal firm to imitate mode decision of earlier entrants from same home country (IMIT-H) and operating in the same industry (IMIT-S). For this purpose, we separately determined dominant modes of entry used by previous entrants for these two reference groups by calculating the ratio of each entry mode at the time of focal investment.

³ Technically, cultural distance index was developed by the following formula:

$CD_j = \sqrt{\sum \{(I_{ij} - I_{ih})^2 / V_i\} / 4}$, where CD_j is the cultural distance between home country j and Turkey, I_{ij} is the index of the i^{th} cultural dimension and the j^{th} country, h represents Turkey and V_i is the variance of the index of the i^{th} dimension.

We adopted a multivariate operationalization for the *economic instability* of the host country. We developed a comprehensive measure of macroeconomic stability by including a number of macroeconomic instability indicators. Following human development index methodology of UNDP, we incorporated four macroeconomic instability indicators into the index: (1) inflation rate, (2) public deficit to GNP ratio, (3) external debt to GNP ratio and (4) change in exchange rate. In order to standardize the unit and range of these values, we transformed each of the sub-index by using the general formula of Ismihan (2003): $I_t = (X_t - X_{Min}) / (X_{Max} - X_{Min})$, where I_t refers to the index value of variable X in year t , X_t refers to the value of indicator X in year t , and X_{Min} (X_{Max}) refers to the minimum (maximum) value of indicator X over the whole period under consideration. Next, we took simple average of the four sub-indices obtained as above. Hence, our composite index of macroeconomic instability varies between 0 (minimum economic instability) and 1 (maximum economic instability). For *political stability*, we used the political hazard index developed by Henisz (2000), which measures the likelihood that a change in one of the five governmental branches (viz. executive, upper and lower legislative chambers, judiciary and subfederal institutions) leads to a change in the overall policy of the host country government. Similar to our index of economic stability, the range varies from 0 (minimum political risk) to 1 (maximum political risk). Due to the possibility of a correlation between these two indices, we took a simple average of economic and political instability parameters (labeled as INSTAB) and convert the final values to 0 to 100 scale by multiplying them with 100.

To measure *IPR protection* (IPRP), we draw data for Turkey from Economic Freedom of the World Index. The index for IPR protection contains five categories: (1) extent of coverage, (2) membership in international patent agreements, (3) provisions for loss of protection, (4) enforcement mechanisms, and (5) duration of protection. Each of these categories is given a score ranging from 0 (low protection) to 1 (high protection), based on 17 individual proxies.

The unweighted sum of the scores from these categories yields the overall value of the IPR protection index. The index, therefore, ranges in value from 0 to 5 (see Park, 2001 for a detailed description of methodology). Values for the *corruption* (CORRUPT) variable are taken from Index of Economic Freedom, which relies mostly on Transparency International's Corruption Perceptions Index. The range of corruption is on a 0 to 100 scale, wherein low values refer to little corruption at the host country and vice versa (Beach and Kane, 2007).

3.2.3. Control Variables

Previous studies (e.g. Yiu and Makino, 2002) have identified R&D expenditure of MNCs as a key transaction-cost variable that affects foreign entrants' choice between joint venture and WOS. Unfortunately, our dataset does not provide parent-level data on annual R&D expenditure of firms. However, IAT database contains sectoral information on the 3-digit SIC code of each foreign entry. Based on this information, we assigned each observation to one of the three *knowledge intensity* categories developed by Lee and Has (1996). Specifically, this taxonomy compares mean R&D spending and ratio of knowledge-intensive workers in different industries to classify them into the following categories: (1) High-knowledge (KNOW-HIGH), (2) Medium-knowledge (KNOW-MED), (3) Low-knowledge (KNOW-LOW). While we acknowledge potential limitations of using high level of aggregation in classifying R&D intensity of foreign entrants, we aim to control industry-level effects of knowledge intensity on MNCs' entry mode choice with this variable. In addition to that, we also controlled for the changes in inflation-adjusted level of Turkish GDP, as a general proxy for market size. Ceteris paribus, one can expect foreign entrants to claim higher ownership stake in larger markets where potential returns are likely to increase (Uhlenbruck et al., 2006).

3.3. Methodology

Since the dependent variable in our study is categorical and dichotomous, we used binomial logit model with maximum likelihood estimation technique to test our hypotheses. In binominal logit models, logistic transformation function is used as a link function and given by;

$$\text{logit}(p_i) = \log\left(\frac{p_i}{1-p_i}\right)$$

, where p_i is probability of desired outcome.

For a binary dependent variable $Y \in \{0,1\}$ and an explanatory variable vector \vec{X} where

$p_i = P(Y = 1 | \vec{X}) = 1 - P(Y = 0 | \vec{X})$, the binominal logistic regression function via notation of Powers and Xie (1999) could be written as;

$$\Pr(y_i = 1 | \vec{x}_i) = \frac{e^{\vec{x}_i \beta}}{1 + e^{\vec{x}_i \beta}}$$

Using the above formula, the probability of JV as entrance mode, compared to WOS, could be determined based on the parameters (β_i) and independent variables (x_i).

3.4. Results

Table 1 provides the descriptive statistics and correlation coefficients for the variables included in our analyses. Table 2 shows the results of the logistic regression analyses, in which WOS is taken as the reference mode and estimates are indicating MNCs' likelihood of choosing JV vis-à-vis WOS. Overall, all of the models have satisfactory goodness-of-fit, with χ^2 s being significant at $p < 0.001$. Model 1 is our base model, where we included our control variables. In line with the logics of TCE and RBV, knowledge intensity ($\beta = -0.25$, $P < 0.01$ and

$\beta = -0.20$, $P < 0.01$ for high- and medium knowledge-intensity, respectively) reduces the probability of choosing JV as the mode of entry.

Model 2 includes parameters investigated within the framework of institutional theory.

Hypothesis 1 predicts that decrease in investment regulations imposed exclusively on MNCs, which implies that foreign and domestic firms are treated equally, would reduce the likelihood of JV, since MNCs would not need local partners to alleviate discriminatory hazards at the host country. As predicted, regulatory freedom have negative relationship with JV ($\beta = -0.03$, $P < 0.01$), lending support for Hypothesis 1. We developed two competing hypotheses for the effect of normative distance on entry mode choice. Results ($\beta = -0.18$, $P < 0.001$) show that the likelihood of MNCs' forming JV with local firms reduces substantially as the normative distance between home and host countries increases, strongly supporting Hypothesis 2b. This confirms the argument that foreign firms favor sole ownership to mitigate difficulties of going through a double-layered acculturation process (Barkema et al., 1996). Hypothesis 3a and Hypothesis 3b relates to the cognitive dimension of institutional environment. Indeed, our estimations display that a foreign firm don't imitate previous entrants, neither from the same home country nor operating in the same sector. This could be because we followed the approach of previous studies looking at a cumulative rate of JV over WOS (Chan & Makino, 2007; Yiu & Makino, 2002). Intuitively speaking, it is likely that a focal firm pays attention to the modes of only most recent entries prior to its decision among alternative options.

--- Insert Table 1 about here ---

--- Insert Table 2 about here ---

Model 3 tests the effects of variables that are hypothesized to impact the entry mode choice based on NIE and efficiency concerns of MNCs. As we expected, higher political and economic instability relates positively to the choice of JV as the mode of entry into a transition economy ($\beta = 0.04$, $P < 0.05$), in support of Hypothesis 4. Regarding IPRP, we

predicted that stronger safeguard mechanisms would protect MNCs from the hazard of intangible asset expropriation, which would in turn decrease incentives for claiming full ownership to increase monitoring and control capabilities. Our empirical results ($\beta = 3.53$, $P < 0.01$) cohere with the expected relationship and we found support for Hypothesis 5. Yet, contrary to Hypothesis 6, the possibility of JV to be the preferred entry mode gets lower ($\beta = -0.29$, $P < 0.01$) as the home and host countries get different in terms of corruption level. One explanation for that is the fact that majority of the MNCs (84%) in our sample originate from countries that had lower corruption levels than Turkey. Thus, it is probable that foreign firms may want to take the control while dealing with corrupt entities at the host country. In fact, this point was also theorized, but was not empirically verified, in the study of Uhlenbruck et al. (2006:406), where authors suggest MNCs engage in WOS to increase their control over decisions “especially where the risks of corrupt behavior are high [and] internal consistency is a major concern”.

In order to figure out whether foreign entrants into an emerging economy determine their ownership strategies according to external legitimacy concerns or focus more on reducing entry costs and improving operational efficiency, we compared Model 2 and Model 3. To that end, we computed Akaike Information Criterion (AIC), which is a widely used statistic for model comparison (Burnham & Anderson, 2004). Since this criterion is rather sensitive to sample sizes, the corrected version of Akaike information criterion (AIC_c) should be used in empirical analyses. AIC_c has the property that, as sample size increases AIC_c converges to AIC. This can be expressed mathematically as;

$$AIC_c = AIC + \left(\frac{2k(k+1)}{n-k-1} \right)$$

where n is the number of observations and k is the number of parameters estimated in the model. Since AIC_c converges to AIC as n gets large, it is suitable to use AIC_c regardless of sample size (Burnham & Anderson, 2004). Using the notation of Mc Quarrie and Tsai (1998: 22), AIC_c can be defined as;

$$AIC_c = \ln\left(\frac{RSS}{n}\right) + \left(\frac{n+k}{n-k-2}\right)$$

, where RSS is residual sum of squares. Given that RSS is at the nominator in the above formula, it is clear that a particular model's explanatory power would be higher as AIC_c tends to get lower.

The AIC_c values for Model 2 and Model 3 (see Table 2) gives an exploratory foundation to compare the relative explanatory merits of institutional theory and NIE, respectively. As it can be seen in Table 2, AIC_c values don't vary substantially between alternative models albeit Model 2 ($AIC_{c2} = -0.5512$) has a slightly lower value, and thus offers an explanation for a larger portion of variance, with respect to Model 3 ($AIC_{c3} = -0.5463$). To check whether this holds true for an alternative comparison method, we also calculated Hannan-Quinn information criterion (Hannan & Quinn, 1979) via:

$$HQC = n \ln\left(\frac{RSS}{n}\right) + 2k \ln(\ln(n))$$

In line with AIC_c values, HQC also suggests that Model 2 ($HQC_2 = -3,536.57$) does a better job in explaining the variance in choice between WOS and JV vis-à-vis Model 3 ($HQC_3 = -3,527.45$). However, since this interpretation rests on descriptive results and not on a formal statistical analysis for testing the significance of variance, our interpretation of results should be taken with caution.

4. Conclusion and Discussion

In this paper, we aimed at having a closer and more integrated look at how different types of institutions affect MNCs' decision of market entry mode. Specifically, we tried to explain which aspects of the institutional environment at the host country have a bearing on firms' international expansion strategies. Our results suggest that, overall, both institutional theory and NIE does a good job in explaining entry mode choice between WOS and JV. Yet, comparison of different models suggests that institutional theory is a slightly better framework to understand MNC's behavior while they strategize on their foreign market penetration strategies.

The empirical design and findings of this study suggest couple of implications for managers. To start with, it appears that entry decision should be taken by looking at a multitude of contextual factors residing at the potential host country. Particularly, it is important to understand whether government of the host country applies policies discriminatorily towards foreign investors. Should this is the case, partnering with local firms may help alleviate restrictive governmental mandates and regulatory pressures levied on the foreign entrant (Kobrin, 1988). While local partnerships offers a way to get familiar with local norms and values, as well as to shorten the legitimization process (Xu et al., 2004). However, our empirical findings imply that it is also quite important to pay attention to additional difficulties associated with putting two different corporate cultures at work, which may create some problems for the subsidiary to gain its internal legitimacy within the global system of MNC (Kostova and Roth, 2002). In line with extant literature, we found that MNCs could reduce their operating risks and increase efficiency by preferring shared modes of ownership whenever economic/political instability is high (Delios and Henisz, 2000) and formal mechanisms for protecting IPRs are weak (Oxley, 1999). Counter to the study of Smarzynska

and Wei (2000), we found that MNCs choose WOS whenever corruption level at the host country is high. This could mean that foreign firms prefer to have higher control over decisions taken at the subsidiary level due to their lack of trust at local institutions (c.f. Uhlenbruck et al., 2006).

While it offers couple of interesting insights on the effects of dynamic evolution of institutional contingencies at a transforming economy on MNCs' behavior, this study is subject to several limitations. First, since we draw on theories that operate on country level-of-analysis, our models involved limited number of variables on firm-level data, R&D spending and overall international experience being the most central ones. Although we controlled for R&D intensity of foreign entrants on industry-level, this procedure rests on the assumption that firms within a given industry make homogenous investments on knowledge intensive activities. Similarly, due to the limitations of our dataset, we could not check whether experienced entrants have adopted different ways of coping with internal and external uncertainty (Davidson, 1982) and anticipating risk-return tradeoff in foreign operations (Erramilli, 1991). Second, although we provided a picture of antecedent factors affecting the ownership choice of MNCs, we didn't test whether a particular entry decision taken in line with theoretical postulates outperform those that are realized in an ad hoc and less systematic manner. We hope future studies will improve our understanding of the role of different institutions on MNCs behavior by building on and improving the integrative framework proposed in this article.

References

- Anderson, E., and Gatignon, H. (1986). Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies*, 17, 1-26.
- Barkema, H.G., Bell, J.H.J. and Pennings, J. M. (1996). Foreign entry, cultural barriers, and learning. *Strategic Management Journal*, 17, 151-166.
- Beach, W.W., and Kane, T. (2007). Methodology: Measuring the 10 economic freedoms. In T. Kane, K.R. Holmes, and M. Anastasia (Eds.), *The 2007 Index of Economic Freedom*, Washington, DC: The Heritage Foundation, 39-55.
- Bevan, A., Estrin, S., and Meyer, K. (2004). Foreign investment location and institutional development in transition economies. *International Business Review*, 13, 43-64.
- Burnham, K. P., and Anderson, D. R. (2004). Multimodel inference: understanding AIC and BIC in model Selection. *Sociological Methods and Research*, 33/2, 261-304.
- Busenitz, L.W., Gomez, C., and Spencer, J.W. (2000). Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management Journal*, 43/5, 994-1003.
- Canabal, A., and White III, G.O. (2008). Entry mode research: past and future. *International Business Review*, 17, 267-284.
- Chan, C.M., and Makino, S. (2007). Legitimacy and multi-level institutional environments: implications for foreign subsidiary ownership structure. *Journal of International Business Studies*, 38, 621-638.
- Cuervo-Cazurra, A., (2006). Who cares about corruption? *Journal of International Business Studies*, 37, 807-822.
- Davidson, W.H. (1982). *Global strategic management*. New York, NY: John Wiley & Sons.

- Davis, P.S., Desai, A.B., and Francis, J.D. (2000). Mode of international entry: an isomorphism perspective. *Journal of International Business Studies*, 31, 239-258.
- Delios A, and Henisz W.J. (2000). Japanese firms' investment strategies in emerging markets. *Academy of Management Journal*, 43, 305-323.
- DiMaggio, P., and Powell, W. 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147-160.
- Dikova, D., and Van Witteloostuijn, A. (2007). Foreign direct investment mode choice: entry and establishment modes in transition economies. *Journal of International Business Studies*, 38, 1013-1033.
- Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies*, 11, 9-31.
- Eden, L., and Miller, S. (2004). Distance matters: Liability of foreignness, institutional distance and ownership strategy. In M. A. Hitt, J.L.C. Cheng (Eds.) *The evolving theory of the multinational firm. Advances in International Management*, Amsterdam, Netherlands: Elsevier, 16: 187-221.
- Erramilli, M.K. (1991). The experience factor in foreign market entry behavior of service firms. *Journal of International Business Studies*, 22, 479-501.
- Grosse, R., and Trevino, L.J. (2005). New institutional economics and FDI location in Central and Eastern Europe. *Management International Review*, 45/2, 123-145.
- Habib, M., and Zurawicki, L. (2002). Corruption and foreign direct investment. *Journal of International Business Studies*, 33/2, 291-307.
- Hannan, E.J., and Quinn, B.G. (1979). The determination of the order of an autoregression. *Journal of the Royal Statistical Society*, 41, 190-195.
- Haunschild, P., and Miner, A. (1997). Modes of inter-organizational imitation: the effects of outcome salience and uncertainty. *Administrative Science Quarterly*, 42/3, 472-500.

- Henisz, W.J. (2000). The institutional environment for economic growth. *Economics and Politics*, 12/1, 1-31.
- Henisz, W.J., and Delios, A. (2001). Uncertainty, Imitation, and Plant Location: Japanese Multinational Corporations, 1990-(1996). *Administrative Science Quarterly*, 46/3, 443-475.
- Hennart, J.F. 1991. The transaction costs theory of joint ventures: An empirical study of Japanese subsidiaries in the United States. *Management Science*, 17/4, 483-497.
- Hill, C.W., Hwang, P., and Kim, W.C. (1990). An eclectic theory of the choice of international entry mode. *Strategic Management Journal*, 11/2, 117-128.
- Hofstede, G. (1980). *Culture's consequences*. New York, NY: Sage.
- Hoskisson, R., Eden, L. Lau, C.M., and Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, 43, 249-267.
- Hymer, S.H. (1976). *The international operations of national firms: a study of foreign direct investment*. Cambridge, MA: MIT Press.
- Ionascu, D., Meyer, K.E., and Estrin, S. (2004). *Institutional distance and international business strategies in emerging economies*. William Davidson Institute Working Paper Series, no. 728.
- Ismihan, M. (2003). *The role of politics and instability on public spending dynamics and macroeconomic performance: theory and evidence from Turkey*. Unpublished doctoral dissertation, Middle East Technical University, Ankara.
- Javorcik, B.S. (2004). The composition of foreign direct investment and protection of intellectual property rights: Evidence from transition economies. *European Economic Review*, 48/1, 39-62.
- Johanson, J., and Vahlne, J.E. (1977). The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8,23-32.

- Kobrin, S.J. (1988). Trends in ownership of U.S. manufacturing subsidiaries in developing countries: An inter-industry analysis. In F.J. Contractor, P. Lorange (Eds.) *Cooperative strategies in international business*, New York, NY: Lexington Books, 129-142.
- Kogut, B.M. (1985). Designing global strategies: profiting from operational flexibility. *Sloan Management Review*, 27(1): 27-38.
- Kogut, B., and Singh. H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19/3, 411-432.
- Kostova, T. (1997). Country institutional profile: Concept and measurement. *Best Paper Proceedings of the Academy of Management*: 180-184.
- Kostova, T. (1999). Transnational transfer of strategic organizational practices: A contextual perspective. *Academy of Management Review*, 24, 308-324.
- Kostova, T., and Roth, K. (2002). Adoption of an organizational practice by subsidiaries of multinational corporations: institutional and relational effects. *Academy of Management Journal*, 45/1, 215-233.
- Kostova, T., and Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: the case of the multinational enterprise. *Academy of Management Review*, 24/1, 64-81.
- Lee, F., and Has, H. (1996). A quantitative assessment of high-knowledge industries versus industries. In P. Howitt (Ed.). *The implications of knowledge-based growth for micro-economic policies*, The Industry Canada Research Series. Calgary: The University of Calgary Press , 39-81
- Lu, J.W. (2002). Intra- and inter-organizational imitative behavior: institutional influences on Japanese firms' entry mode choice. *Journal of International Business Studies*, 33/1, 19-37.
- Makino, S., Beamish, P.W. (1998). Performance and survival of joint ventures with non-conventional ownership structures. *Journal of International Business Studies*, 29/4, 797-818.

- McQuarrie, A. D. R., and Tsai, C.-L., (1998). *Regression and time series model selection*. Singapore: World Scientific Press.
- Meyer, K.E. (2001). Institutions, transaction costs and entry mode choice in Eastern Europe. *Journal of International Business Studies*, 32/2, 357-367.
- Meyer, K.E., Peng, M.W. (2005). Probing theoretically into Central and Eastern Europe: transactions, resources, and institutions. *Journal of International Business Studies*, 36, 600-621.
- Oxley, J.E. (1999). Institutional environment and the mechanisms of governance: The impact of intellectual property protection on the structure of inter-firm alliances. *Journal of Economic Behavior and Organization*, 38/3, 283-309.
- Park, W.G. (2001). Intellectual property and patent regimes. In J. Gwartney, R. Lawson, W.G. Park, C. Skipton (Eds.) *Economic freedom of the world 2001 annual report*, Vancouver, BC: The Fraser Institute, 110-118.
- Peng, M.W., and Luo, Y. (2000). Managerial ties and firm performance in a transition economy: The nature of a micro-macro link. *Academy of Management Journal*, 43/3, 486-501.
- Powers, D.A., Xie, Y. (1999). *Statistical methods for categorical data analysis*. San Diego, CA: Academic Press.
- Rosenzweig, P., and Singh, H. (1991). Organizational environments and the multinational enterprise. *Academy of Management Review*, 16/2, 340-361
- Scott, R. (1995). *Institutions and organizations*. Thousand Oaks, CA: Sage.
- Simon, H.A. (1976). *Administrative behavior: a study of decision-making processes in administrative organization*. New York, NY: Free Press.
- Slack, T., and Hinings, B. (1994). Institutional pressures and isomorphic change: an empirical test. *Organization Studies*, 15/6, 803-827.

- Smarzynska, B., Wei, S.-J. (2000). *Corruption and the composition of foreign direct investment: firm-level evidence*. NBER Working Paper No. 7969, National Bureau of Economic Research, Cambridge, MA.
- Suchman, M.C. (1995). Managing legitimacy: strategic and institutional approaches. *Academy of Management Review*, 20/3, 571-610.
- Tversky, A., and Kahnemann, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185/4157, 1124-1131.
- Uhlenbruck, K., Rodriguez, P., Doh, J., and Eden, L. (2006). The impact of corruption on entry strategy: evidence from telecommunications projects in emerging economies. *Organization Science*, 17/3, 402-414.
- Williamson, O.E. (1985). *The economic institutions of capitalism*. New York, NY: Basic Books.
- Xu, D., Pan, Y., and Beamish, P.W. (2004). The effect of regulative and normative distances on MNE ownership and expatriate strategies. *Management International Review*, 44/3, 285-307.
- Xu, D., and Shenkar, O. (2002). Institutional distance and the multinational enterprise. *Academy of Management Review*, 27/4, 608-618.
- Yiu, D., and Makino, S. (2002). The choice between joint venture and wholly owned subsidiary: An institutional perspective. *Organization Science*, 13/6, 667-683.
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, 38/2, 341-363.

Figure 1: Proposed Framework

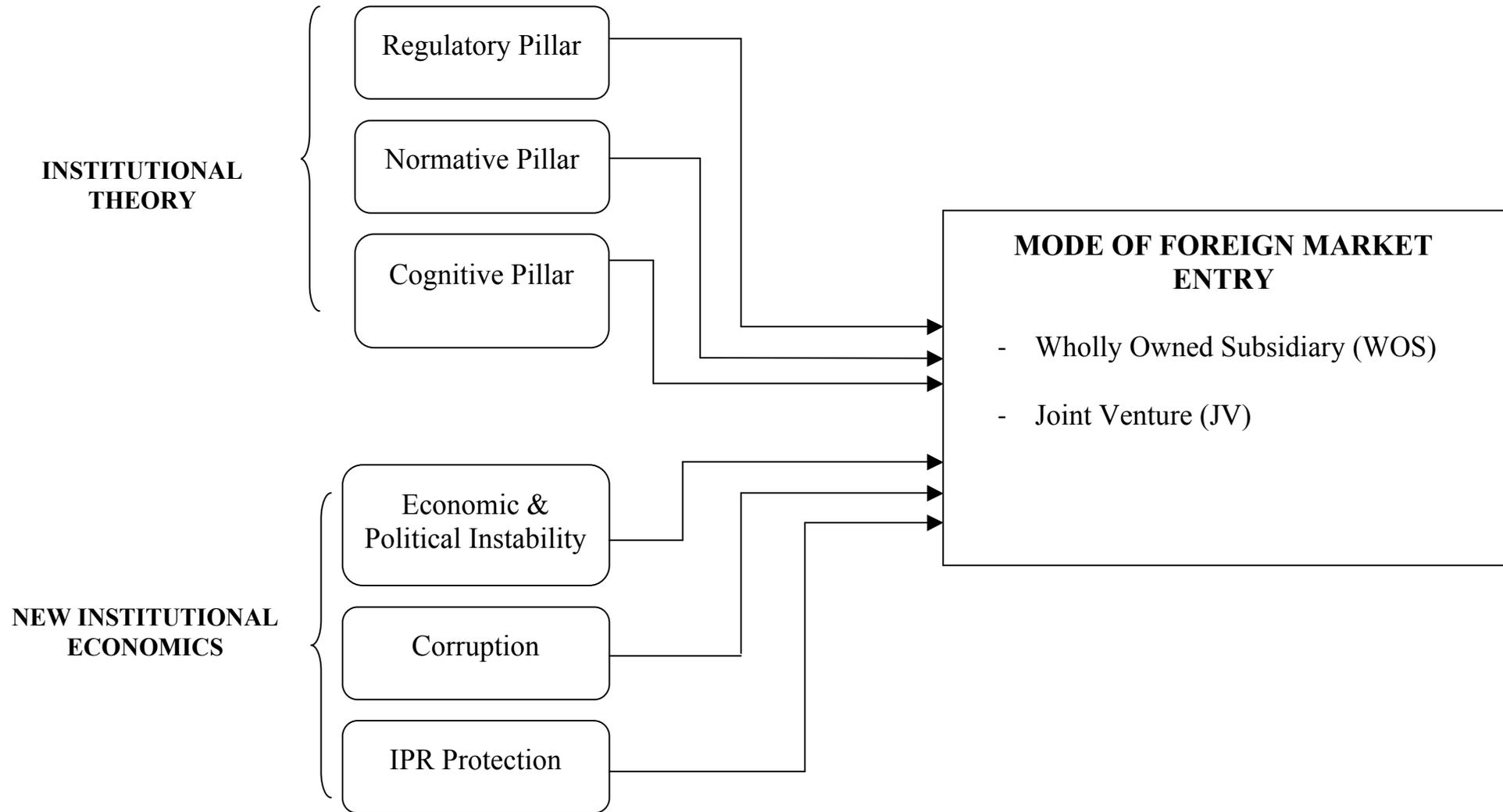


Table 1: Descriptive Statistics and Correlation Matrix

	MEAN	S.D.	ENTRYMODE	GDP	CAPINV	KNOWLEDGE	REGULAT	NORMDIST	IMIT-H	IMIT-S	INSTAB	IPRP	CORRUPT
ENTRYMODE	0.30	0.461	1.00										
GDP	110931.63	6452.709	0.016	1.00									
CAPINV	5499.05	58929.539	0.009	-0.055	1.00								
KNOWLEDGE	2.90	0.759	-0.080	-0.039	-0.027	1.00							
REGULAT	69.28	3.715	.052	-.229	0.017	-0.014	1.00						
NORMDIST	1.51	0.917	.086	.062	0.016	-.094	0.010	1.00					
IMIT-H	0.24	0.431	0.019	-.121	0.016	-.073	.051	.191	1.00				
IMIT-S	0.19	0.393	0.023	-.147	.074	-.204	.058	.059	.090	1.00			
INSTAB	48.39	7.00	0.018	.092	-0.028	.069	-.150	0.004	-.081	-.131	1.00		
IPRP	3.73	0.464	-0.023	-.474	.050	0.012	.306	-.041	.116	.135	-.613	1.00	
CORRUPT	60.47	5.936	-0.019	-.708	.057	0.039	.340	-.055	.126	.145	-.382	.937	1.00

N=2,292

Table 2: Logistic Regression Results

Variable	Hypothesis	Model 1	Model 2	Model 3	Model 4
GDP		-0.00 (0.00)	-0.00 (0.00)	0.00** (0.00)	0.00* (0.00)
CAPINV		-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
KNOW-HIGH		-0.25** (0.13)	-0.21† (0.13)	-0.26** (0.13)	-0.22† (0.13)
KNOW-MED		-0.20** (0.10)	-0.18† (0.10)	-0.20** (0.10)	-0.19* (0.10)
KNOW-LOW		0.12* (0.07)	0.098 (0.07)	0.14 (0.07)	0.11 (0.07)
REGULAT	H1 (-)		-0.03** (0.014)		-0.03* (0.01)
NORMDIST	H2a(+), H2b(-)		-0.18*** (0.05)		-0.18*** (0.05)
IMIT-H	H3a		0.05 (0.10)		-0.01 (0.10)
IMIT-S	H3b		-0.01 (0.12)		-0.01 (0.12)
INSTAB	H4 (+)			0.04* (0.02)	0.03 (0.02)
IPRP	H5 (+)			3.53** (1.37)	2.54† (1.45)
CORRUPT	H6 (+)			-0.29** (0.11)	-0.20† (0.12)
Intercept		1.17 (0.79)	4.39** (1.44)	11.52** (4.39)	10.91** (4.45)
Model χ^2		2,291.62***	2,290.56***	2,289.43***	2,288.06***
Log-likelihood		-1408.13	-1397.60	-1404.22	-1394.85
RSS		48548	48122	48400	48024
Akaike Information Criterion		-5459	-5512	-5463	-5506
Hannan-Quinn Information Criterion		-353272	-353657	-352745	-352896

Dependent variable: 0= WOS, 1=JV

Notes: Standard errors between parentheses. Base model is WOS and estimates in each model show the relative likelihood of JV.

N=2,292

†p<0.10, *p<0.05, **p<0.01, ***p<0.001