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Ownership Strategies and Survival of Foreign Subsidiaries: Impacts of Institutional Distance and Experience†

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This article integrates institutional theory and organizational learning perspective and proposes a contingency framework on the relationship between ownership strategies and subsidiary performance. Using a sample of Japanese subsidiaries worldwide, the article finds important main effects of ownership, institutional distance, and host country experience on subsidiary survival. Furthermore, the effect of ownership is contingent on institutional distance and host country experience. In institutionally distant countries, subsidiaries have better survival chances if foreign parents have more ownership. Host country experience has a negative impact on subsidiary survival, but the effect is weaker if foreign parents have larger ownership positions in the subsidiaries.

Keywords: subsidiary performance; regulative distance; normative distance; equity ownership; wholly owned subsidiaries; joint ventures

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One of the key decisions multinational enterprises (MNEs) have to make while investing abroad relates to their choice of ownership strategies for foreign operations. Ownership strategies consist of two key decisions. First, foreign investors need to decide an entry mode, that is, whether to make the investments by themselves in the form of a wholly owned subsidiary or make the investments in partnership with others in the form of an international joint venture. If joint venture is chosen as the entry mode, a subsequent decision is the level of ownership to acquire. These two decisions on ownership strategies have important performance implications for subsidiaries, both in terms of survival (e.g., Makino & Beamish, 1998) and profitability (e.g., Delios & Beamish, 2004; Woodcock, Beamish, & Makino, 1994).

Examining the relationship between ownership strategy and subsidiary performance, scholars have found positive, negative, and no relationships between foreign equity control and subsidiary performance (Delios & Beamish, 2004; Geringer & Hebert, 1989). This confusion has prompted scholars to look for factors on which the ownership–performance relationship may be contingent (Luo, Shenkar, & Nyaw, 2001; Yan & Gray, 1994). In fact, the existing theories of foreign direct investment, such as internalization theory (Hennart, 1991) or eclectic paradigm (Dunning, 1993), do not suggest that a particular entry mode or a specific ownership level would be optimal for foreign investment performance. Implicit in these theories is the importance of contingency factors that make a particular type of strategy superior under certain conditions.

The inconsistent findings on the relationship between ownership strategy and subsidiary performance call for such investigation to be made using alternate theoretical lenses. Although the majority of extant literature primarily focuses on transaction cost considerations (e.g., Geringer & Hebert, 1989; Killing, 1983) and resource-based view of the firm (e.g., Woodcock et al., 1994), new theoretical approaches can shed new light on the ownership–performance relationship and help resolve the equivocal results.

In this study, we investigate the relationship between ownership strategy and foreign investment survival by bringing together arguments from two theoretical perspectives, namely, institutional theory (Kostova, 1999; Scott, 1995; Xu & Shenkar, 2002) and organizational learning perspective (Barkema, Bell, & Pennings, 1996; Delios & Beamish, 2001). We argue that, holding other things constant, ownership level, differences in the institutional environment, and experiential learning will each affect the survival of foreign subsidiaries. We also suggest that it is important to study not only the individual effects but also the combined effect of these factors on subsidiary survival. We focus on subsidiary survival because survival in foreign countries is an important indicator of venture success. Prior studies have found empirical evidence that survival correlates positively with financial and satisfaction measures of performance (Geringer & Hebert, 1991).

We test our hypotheses in a sample of 20,177 Japanese foreign investments in 52 countries. Japanese foreign subsidiaries provide an appropriate empirical setting because Japanese firms have very actively engaged in foreign direct investment activities in many countries across the globe. The wide geographic coverage of the sample gives us good variance to test for varying impact of institutional distance measures.

Our findings suggest that a contingency perspective is indeed useful in predicting the ownership–performance relationship of foreign investments. Besides their important main effects, both institutional distance and host country–specific experience are found to positively moderate the
ownership–performance relationship. Our findings confirm the value of a contingency approach and of the application of institutional and learning perspectives to ownership strategy and subsidiary performance literature.

Theory and Hypotheses

MNEs’ ownership strategies in their foreign operations have important implications for resource commitment, organizational control, and consequently the performance of their foreign operations. In the entry mode literature, scholars have extensively investigated the performance implications of entry modes and of ownership level within joint venture mode.

Studies that compared performance across entry modes have reported inconsistent findings. Although some found that international joint ventures had lower survival rates than did wholly owned subsidiaries (Hennart, Kim, & Zeng, 1998; Li, 1995), others found no substantial differences between the two entry modes in terms of either survival rates (Chowdhury, 1992; Delios & Beamish, 2004) or perceived financial performance (Delios & Beamish, 2004).

Studies that examined the performance effect of ownership levels have found similar conflicting results. Some researchers have reported a positive association between the level of control by the foreign partner and foreign investment performance (Killing, 1983; Luo et al., 2001). Others have found that equally split equity ownership improved performance (Bleeke & Ernst, 1991).

We contend that the conflicting findings about ownership strategies and foreign investment survival could be due to two reasons. First, different ownership strategies will have different implications for survival and performance depending on the differences in the environments between the host country and the home country as captured by institutional distance. Second, with time, organizations learn through experience and become adept at working in different environments. This necessitates that we incorporate the roles played by institutional distance and organizational learning in the ownership–performance relationship.

In the sections below, we first elaborate the main effects of ownership strategy, institutional distance, and host country experience. We then discuss how institutional distance and host country experience could moderate the ownership–performance relationship.

Ownership Strategy

The extant literature suggests that higher levels of ownership in the form of a wholly owned subsidiary or a larger equity position in an international joint venture can enhance the survival of foreign subsidiaries in two ways. First, a higher level of equity ownership provides a parent firm with a greater degree of control over the systems, methods, and decisions of its subsidiary (Anderson & Gatignon, 1986). For example, a larger equity position in a subsidiary gives leverage to a foreign parent firm to appoint its own people to the board of directors and senior management positions such as heads of business divisions and general managers. Compared to local staff, these people are more likely to identify with the global strategic intent of the foreign parent firm and comply with directives from its headquarter in
the home country (Kobrin, 1988). Therefore, ownership level in a subsidiary is related to the level of influence an MNE can exercise in subsidiary operations (Mjoen & Tallman, 1997).

Furthermore, greater control as a result of a higher level of equity ownership by foreign partners can lead to faster and more efficient decision making and less scope for conflict (Anderson & Gatignon, 1986; Gomes-Casseres, 1990; Hennart, 1991). Killing (1983) argued that international joint ventures with dominant ownership structure can outperform those with shared ownership structures because the former structure minimizes transaction costs arising from coordination problems. The reduction in coordination costs associated with higher levels of equity ownership should enhance the survival likelihood of the foreign subsidiaries.

Second, higher level of ownership by a foreign partner also means a larger degree of commitment toward its subsidiary (Delios & Beamish, 1999; Dhanraj & Beamish, 2004). In the case of shared ownership or minority ownership, an MNE may have less incentive to contribute to its subsidiary as compared to when an MNE has full ownership or majority ownership (Gomes-Casseres, 1990). With increased equity position, MNEs are less hesitant to transfer their firm-specific resources and capabilities because they are more confident that there is less likelihood of misuse of such resources and capabilities. The transfer of resources and capabilities from foreign parents should enhance the competitiveness of their foreign subsidiaries, which in turn should lead to higher survival rates.

Taken together, a larger ownership position assumed by a foreign partner is likely to enhance the survival chances of its subsidiaries, ceteris paribus.

Hypothesis 1a: Wholly owned foreign subsidiaries will have higher survival rates than international joint ventures will.

Hypothesis 1b: International joint ventures with higher levels of equity ownership by foreign parents will have higher survival rates than will international joint ventures with lower levels of equity ownership by foreign parents.

It is important to note here that the positive effects of higher levels of ownership on the survival rates of foreign subsidiaries may vary, depending on the institutional differences between home and host countries and foreign parents’ operating experience in host countries. We elaborate these points in the following sections.

Institutional Distance

Institutional distance is a recently developed construct in strategic management literature that captures the differences between the institutional environments of two countries (Kostova, 1999). It is based on the three pillars of institutional environment, namely, the regulative, normative, and cognitive pillars as defined by Scott (1995). Whereas regulative pillar refers to the formal rules and regulations as sanctioned by a state (North, 1990), normative pillar refers to legitimate means to pursue goals (Scott, 1995). Cognitive pillar, on the other hand, refers to the beliefs and value system of a society (DiMaggio & Powell, 1983).

Following institutional theorists, we define institutional distance as the extent of similarity or dissimilarity between the formal or regulative and the informal or normative and cognitive...
aspects of institutions of any two countries. We call these *regulative* and *normative distances*. Grouping the normative and cognitive aspects of institutions into one concept is reasonable because these two aspects of institutions are quite similar to one another (Scott, 1995). Together, regulative and normative distances define the differences in institutional environments between the home and host countries.

North (1990) argues that institutions provide the rules of the game for functioning in societies and that organizations follow these formal and informal rules in their interactions with various actors in societies. The rules, regulations, and norms of doing business in foreign countries can be quite different from those in MNEs’ home countries. Such differences present both opportunities and challenges to MNEs and to their foreign subsidiaries.

On one hand, the differences in institutional environments may present opportunities for institutional arbitrage. By definition, a firm is most familiar with its domestic institutional environment. But this does not necessarily mean that the home institutional environment is most favorable for all kinds of activities. Dunning’s (1993) ownership–location–internalization framework suggests that economic systems and environmental conditions of some locations may provide better opportunities for exploitation of certain types of ownership advantages. For particular activities along the value chain, the institutional environment, either regulative or normative, of a different country could be more favorable. For example, it is common for many MNEs to set up their research and development centers in the United States because of a more advanced regulatory regime for copyright protection in the United States and greater emphasis on technology and innovation among U.S. firms. The exploration of location-specific advantages and exploitation of firm-specific resources have been identified as the key motives for internationalization for many firms (Delios & Beamish, 2001; Luo, 2002).

As the institutional differences between the home and the host country increase, the differences between resources and capabilities of the foreign parent developed in home countries and the resources available in host countries will become more substantial, presenting more potential benefits from institutional arbitrage. However, there are diminishing benefits from the increase in institutional distance in a way similar to the way returns from scope economies diminish (Lu & Beamish, 2004). As a firm enters into increasingly distant host countries, the scope of institutional arbitrage becomes narrower and the marginal benefits decline.

On the other hand, the difference in institutional environments necessitates learning about the new environments (Benito & Gripsrud, 1992). MNEs’ unfamiliarity with new environments causes competitive disadvantage and additional costs of doing business abroad (Eden & Miller, 2004; Mezias, 2002). These costs can be classified into two categories: *unfamiliarity hazards* and *relational hazards*. Unfamiliarity hazards arise from lack of knowledge of the host environment (Caves, 1971). Relational hazards are associated with problems in managing relationships at a distance and include costs of monitoring, dispute settlement, opportunistic behavior of local partners, and lack of trust in unknown partners (Buckley & Casson, 1998; Henisz & Williamson, 1999).

When institutional distance is low, these costs are marginal or even negligible because of minimal requirements for learning. However, as the institutional distance between the home country and the host country increases, the costs increase (Eden & Miller, 2004; Xu & Shenkar, 2002).
In highly uncertain environments, firms may even face the risks of complete appropriation by governments or locally based hostile pressure groups such as nongovernmental organizations, trade unions, and so on (Delios & Henisz, 2003). Thus, marginal costs increase exponentially in countries with large institutional distances from an MNE’s home country.

This discussion highlights the diminishing benefits from institutional arbitrage and the escalating costs from unfamiliarity and relational hazards as institutional distance increases. Taking both the benefits and the costs of institutional distance into consideration, we propose an inverted U-shaped relationship between institutional distances and subsidiary survival. Specifically, when the institutional distance is small to medium, the potential benefits arising from location advantage in the new institutional environment should outweigh the costs of doing business in a different institutional environment, contributing to a foreign subsidiary’s survival. However, as institutional distance and the subsequent level of unfamiliarity with host country environment increase, costs accelerate (Davidson, 1980; Kostova & Zaheer, 1999) at a rate higher than that of benefits. In host countries with large institutional distance from home countries, costs may eventually exceed benefits, making it difficult for MNEs to sustain their operations. This will be the point of inflection for the relationship between institutional distance and foreign subsidiary survival. Accordingly, we expect an inverted U-shaped relationship between regulative and normative distances and survival of foreign subsidiaries, although not all firms will encounter the same curve, as core research on multinational enterprise indicates that the extent of benefits and costs is related to a firm’s capabilities (Tallman, 1991).

Hypothesis 2: There is an inverted U-shaped relationship between regulative and normative distances and the survival rates of foreign subsidiaries, such that the survival rates increase at low to medium levels of institutional distance but decrease at high levels of institutional distance.

Although the costs of doing business in institutionally distant countries could be high, there are strategies to mitigate such costs. Ownership strategy has been identified as a useful tool in this regard. As argued earlier, ownership is a critical control mechanism. A higher level of ownership in foreign subsidiaries provides MNEs with a larger degree of control over subsidiary operations and enables the MNEs to guard against the relational hazards and opportunistic behavior of partners in unknown environments. With more efficient monitoring and control, MNEs can make quick decisions to tackle exigencies arising in unfamiliar conditions.

How to reduce the costs associated with unfamiliarity hazards is a more complicated issue. MNEs can alleviate unfamiliarity hazards with the help of local partners (Makino & Delios, 1996). With superior local knowledge and local connections, local partners can help foreign subsidiaries reduce unfamiliarity with the local environment and enhance their local legitimacy. This argument makes good sense in theory. In practice, however, the choice of a local partner in unfamiliar environments itself is a challenge (Anderson & Gatignon, 1986). As institutional distance increases, it becomes more difficult to find trustworthy local partners. In the process of joint operations, local partners may act opportunistically, requiring higher levels of monitoring and coordination efforts (Gomes-Casseres, 1990). As this happens, the increase in costs related to relational hazards may exceed the reduction in costs stemming from unfamiliarity hazards. Thus, as the institutional distance increases, it is more effective for MNEs to have higher levels of ownership so as to have tight control over their subsidiaries, which will subsequently enhance the survival chances of foreign subsidiaries.
We differentiate between the regulative and normative aspects of institutional distance for different ownership strategies. Consistent with prior studies (Xu, Pan, & Beamish, 2004; Xu & Shenkar, 2002; ), we propose that regulative distance is more relevant for comparing the effectiveness of the wholly owned and joint venture modes of entry, whereas normative distance is more relevant for comparing ownership levels within the joint venture mode of entry.

The regulative aspects of institutions are more formal in nature and more clearly stated (Scott, 1995). Even when regulative distance is large, foreign firms can easily find information about these aspects on their own, using secondary sources. Thus, compared to normative distance, regulative distance causes less unfamiliarity hazard for foreign firms. As foreign firms do not need to rely on local partners for overcoming unfamiliarity with regulative aspects, they can choose to enter foreign markets through wholly owned modes. In this way, they will not encounter relational hazards related to the use of local partners. The subsequent reduction in costs should lead to enhanced survival chances of foreign investments.

Hypothesis 3a: There is a positive interaction between the wholly owned entry mode and regulative distance such that foreign subsidiaries have higher survival rates if they are wholly owned by foreign parents in countries where regulative distance is larger.

In contrast, the normative aspects of institutions are usually informal and embedded in the social environments (Scott, 1995). In the context of foreign subsidiaries, normative aspects of institutions relate to softer issues in subsidiary management, such as understanding the aspirations of each partner, transferring organizational routines between the partners, efficient monitoring, managing conflict, and adapting to local environment (Kostova, 1999; Xu & Shenkar, 2002). These aspects are more relevant in the case of international joint ventures (Cullen, Johnson, & Sakano, 2000).

When normative distance is large, it can be quite challenging for a foreign firm to find information about these aspects, and local partners can be helpful in overcoming unfamiliarity arising from large normative distance. However, it has been well documented that local partners can be difficult to work with (Gomes-Casseres, 1990). The difficulties of working with local partners will be heightened in countries with large normative distance. For example, in some countries, contracts are expected to be renegotiated on an ongoing basis, and bribery is a common way of getting things done. In the presence of such normative differences, the use of local partners would be beneficial only if the design of governance structure of a joint venture can take care of the potential problems arising from large normative distance.

Prior studies have emphasized the use of a higher level of equity ownership for more control and influence in joint venture operations to overcome these problems (Anderson & Gatignon, 1986; Gomes-Casseres, 1990; Killing, 1983). With enhanced control and influence over the joint ventures in institutionally distant countries, MNEs can protect their interests in case local partners act opportunistically and can ensure that the joint ventures are operated in a way that is consistent with the parent firms’ objectives. Consistent with prior studies, we hypothesize the following:

Hypothesis 3b: There is a positive interaction between the level of equity ownership and normative distance such that international joint ventures have higher survival rates if their foreign parents have higher levels of equity ownership in countries where normative distance is larger.
Host Country Experience

The importance of experience for international operations was realized very early by Johanson and Vahlne (1977) in their Uppsala model of international expansion. They viewed international expansion as an incremental process, developing as firms learn the necessary knowledge through experience abroad. Many other researchers have also emphasized the importance of experiential learning in firms’ international expansion strategy (Anderson, 1993; Barkema et al., 1996; Chang, 1995; Delios & Beamish, 2001).

As elaborated earlier, lack of experience in new environments gives rise to unfamiliarity and relational hazards. One way to overcome these problems is to develop new knowledge and capabilities for operating in the new environments (Barkema & Vermeulen, 1997; Delios & Beamish, 2001; Luo & Peng, 1999). Host country experience plays an important role in the development of such capabilities. With host country experience, MNEs develop more social knowledge (Sohn, 1994) and rapport with the local businesses and governments. Longer presence in local markets helps in more prudent market-segment selection, in product differentiation, and in establishing superior marketing channels and corporate image (Mitchell, Shaver, & Yeung, 1992). In addition, local knowledge gained through host country experience helps in obtaining local legitimacy (Zaheer & Mosakowski, 1997).

Host country experience also helps in more effective transfer of firm-specific resources and strategic organizational practices across borders (Delios & Beamish, 2001; Kostova, 1999). Strategic organizational practices reflect the core competencies of a firm and provide differentiation and competitive advantages (Kostova, 1999). For example, just-in-time manufacturing is one such organizational practice that has significant strategic implications. Such practices tend to be either highly formalized and technical or informal and social (Winter, 1990) and are often embedded in the institutional environment of the country in which they have been developed (Kostova, 1999). Given these characteristics, the successful transfer of strategic organizational practices between related organizations located in different nations is challenging, as the effectiveness of transfer depends on the adoption of formal and informal rules and procedures and on institutionalizing these rules and procedures in the subsidiary (Jensen & Szulanski, 2004). With longer experience in operating in a host country, firms develop more knowledge about the culture and institutional environment of that country (Luo, 1997), which makes it easier to adapt the strategic organizational practices to the local environment.

This discussion points to the positive effects that host country specific experience has on foreign investment performance. Therefore, we hypothesize the following:

**Hypothesis 4:** Foreign subsidiaries whose foreign parents have greater host country experience will have higher survival rates.

As noted earlier, there are monitoring and coordinating costs associated with the use of local partners. Such costs might be justified when MNEs do not have much knowledge about local environment and are dependent on their local partners for local knowledge (Makino & Delios, 1996; Shan & Hamilton, 1991). As MNEs accumulate host country experience, the utility of local partners in providing local knowledge substantially declines. Eventually, local partners
may even become redundant in their local knowledge. As this happens, MNEs are more likely to use a wholly owned subsidiary as an entry mode. The subsequent economization on monitoring and coordination costs should enhance the survival chances of foreign subsidiaries.

Likewise, the increase in MNEs’ host country experience will enhance the incentive for MNEs to assume higher levels of equity ownership when they do use international joint ventures. The substitutive role of MNEs’ host country experience to local partners’ local knowledge reduces MNEs’ dependence on local partners. Consequently, MNEs’ bargaining power over their local partners increases, and MNEs can demand more control in the management of their international joint ventures. As a platform for control, MNEs’ equity ownership in international joint ventures should be larger as MNEs accumulate host country experience. Otherwise, there are likely to be conflicts between foreign and local partners due to the change in their bargaining power. Such conflicts can lead to instability or even dissolution of an international joint venture (Inkpen & Beamish, 1997).

In short, with increases in foreign investors’ host country experience, higher level of ownership in foreign subsidiaries, in the form of either wholly owned subsidiaries or higher levels of equity ownership in international joint ventures, should be associated with improvement in the survival chances of subsidiaries.

Hypothesis 5a: There is a positive interaction between wholly owned entry mode and host country experience such that foreign subsidiaries have higher survival rates if they are wholly owned by foreign parents in countries where the parents have higher levels of host country experience.

Hypothesis 5b: There is a positive interaction between level of equity ownership and host country experience such that international joint ventures have higher survival rates if their foreign parents have higher levels of equity ownership in countries where they have higher levels of host country experience.

Methods

Sample

We implemented our investigation in a sample of Japanese foreign subsidiaries. Japan has been a leading source country for outward foreign investment. More than 100 countries had received Japanese foreign direct investment by 1999, with 54 countries receiving at least 30 investments by Japanese firms. Such a large number of Japanese subsidiaries across various countries provides good country-level variance in the institutional environments. Furthermore, there are few countries with institutional environments similar to that in Japan (Hofstede, 1980). These features make Japanese foreign subsidiaries an ideal setting for the testing of our hypotheses, which focus on the influences of institutional environments.

We derived our list of foreign subsidiaries from Kaigai Shinshutsu Kigyou Souran (Japanese Overseas Investment; Toyo Keizai Inc., 1986-2001), an annual directory of the foreign investment activities of Japanese firms published by Toyo Keizai Inc. This directory reports information on the subsidiary’s date of establishment, entry mode, number of employees, industry, equity capital, sales, total employment, and local and expatriate employment levels. It also reports the host country of each Japanese foreign subsidiary, a piece of information...
cruicial to our study. Toyo Keizai conducts an annual mail and telephone survey of major listed and nonlisted Japanese firms to collect these pieces of information, which are supported by archival data where necessary. The coverage of this database is close to the population of Japanese foreign subsidiaries (Beamish, Delios, & Lecraw, 1997).

For this study, we used editions from 1986 to 2001 to develop a longitudinal database of Japanese foreign direct investments. Because the majority of Japanese investments were made after the 1980s (World Investment Report, 1997), left censoring is not a serious concern in this study. The 2001 edition has information on 30,922 subsidiaries. We restricted the sample to subsidiaries that had at least 2 years of operation to minimize the sample bias toward surviving subsidiaries from the “honeymoon effect” (Li, 1995; Park & Russo, 1996). Because this study is concerned with ownership level within international joint ventures and comparison between wholly owned subsidiary and international joint venture modes of entry, we restricted the sample to only these two entry modes. The analysis was also restricted to 52 countries for which we could gather information on institutional environment variables. These restrictions, however, did not reduce the sample size much because wholly owned subsidiary and international joint venture are the main entry modes, and the majority of Japanese foreign direct investments are located in these 52 countries. Finally, we identified the cases in which international joint ventures became wholly owned subsidiaries and vice versa by tracing the change in Japanese parents’ ownership levels across different years. There were very few such cases (less than 5%), and we removed these from additional analysis. The final sample comprised 20,177 Japanese foreign subsidiaries, of which 9,633 were international joint ventures and 10,544 were wholly owned subsidiaries.

Variables

Dependent variable: Our measure of subsidiary performance was subsidiary exit (Kogut, 1988). A subsidiary is assumed to have exited once it is removed from the listing in a particular edition after appearing consistently for 1 or more years (Chowdhury, 1992; Li, 1995). We identified exiting subsidiaries by comparing preceding editions of Kaigai Shinshutsu Kigyou Souran with later editions. The earliest edition we used was 1986, and the latest edition was 2001. Exits were coded as 1, and surviving international ventures were coded as 0. The duration of international venture was computed as the number of years from its foundation year to its time of exit or to the year 2001.

Explanatory variables: Entry mode (wholly owned subsidiary vs. international joint venture), ownership levels of Japanese parents in the joint ventures, regulative distance, normative distance, and host country experience were the key explanatory variables of our study. We first measured Japanese equity ownership as a proportion of equity owned by Japanese parents in their foreign subsidiaries. We then used an indicator variable to distinguish wholly owned subsidiaries from international joint ventures. Consistent with prior studies (Gomes-Casseres, 1990), the distinction criterion between a wholly owned subsidiary and an international joint venture was 95% equity ownership by foreign parents. We coded wholly owned subsidiaries (minimum 95% equity ownership by Japanese parents) as 1 and international
joint ventures (less than 95% equity ownership by Japanese parents) as 0. For the equity ownership of Japanese parents in international joint ventures, we used a logarithmic transformation (Cohen & Cohen, 1983) of this measure in all the models because the raw values were highly skewed.

We measured Japanese parents’ host country experience as the total number of subsidiary years by Japanese parents in each host country in a particular year. A subsidiary year represented 1 year of operations by one subsidiary. We used a natural logarithm of this measure in all the models.

We calculated regulative and normative distance measures based on Scott’s (1995) conception of regulative and normative pillars. According to Scott (p. 35), regulative processes include rule setting, monitoring, and sanctioning activities. On the other hand, norms specify how things should be done and define legitimate means to pursue valued ends (p. 37). Based on these conceptions, we obtained data on country-level indicators related to regulative and normative aspects of institutional environment from various editions of the World Competitiveness Yearbook (1991-2001). World Competitiveness Yearbooks have been used by researchers to measure country differences in institutional environments (Delios & Beamish, 1999). We supplemented this information with a political risk rating variable obtained from various editions of Country Risk Ratings: Euromoney (Euromoney, 1991-2001). We had information from 1991 to 2001 on a total of 14 country-level indicators. We list these indicators in Table 1.

As per Scott’s (1995) conception of regulative and normative pillars, items number 1 to 7 (see Table 1) seem to capture the legal and regulative aspects, whereas items number 8 to 14 are related to the normative aspects of a country’s institutional environment. As shown in Table 1, items such as intellectual property protection, judicial system efficiency, and so on relate to the efficiency of rules and regulations in a country. On the other hand, items such as bureaucratic problems, government’s transparency, and so on relate to the norms of doing business in a country. For example, in some countries it may be a desirable goal of businesses to be seen as a favorite of the government. To pursue this goal, giving gifts to government officials may be a legitimate means and not taboo. The same may be treated as bribery and be very undesirable in some other countries. The items under the normative dimension reflect the extent to which such practices are acceptable in the society.

To confirm our theoretical conception of regulative and normative dimensions of country institutional environment, we factor analyzed these items separately for all the years using principal factor analysis with varimax rotation. The analysis typically yielded two distinct factors after dropping items number 13 and 14, which were not clearly loading on either of the factors. Table 1 presents the rotated factor loadings for the two factors obtained through factor analysis on the data for year 2001. These factors were obtained by setting the criteria of selecting factors with eigenvalues greater than 1.

In our final computation of regulative and normative distance, we dropped items number 13 and 14. The Cronbach’s alphas for regulative and normative items were 0.77 and 0.75, respectively, which are above the acceptable cutoff point of 0.70. Utilizing information from these indicators, we constructed regulative and normative distances from the home country (Japan) to each host country, using a euclidean distance calculation similar to that used in Kogut and Singh (1988). Our formula is:
RD_k / ND_k = \frac{n}{\sum_{i=1}^{n} \left[ \frac{(I_k - I_j)^2}{V_I} \right]}^n

where I_k refers to the institutional indicator (I) for country k, I_j refers to the institutional indicator (I) for Japan (j), and V_I is the variance of indicator I. RD_k and ND_k are regulative and normative distances of country k from Japan. The symbol n refers to number of indicators for a particular measure. RD_k comprises seven indicators whereas ND_k comprises five indicators.

This gave us the measures of regulative distance and normative distance from Japan for each of the countries in analysis for each year from 1991 to 2001. The use of multiple indicators to calculate regulative and normative distance allowed us to reduce the sensitivity of our measures to differences in any one indicator. The larger the values of regulative distance and normative distance, the greater are the differences between the regulative and normative aspects of institutional environments between Japan and a particular host country. We matched this longitudinal data on regulative distance and normative distance to the longitudinal data on subsidiaries by the exit year of a subsidiary. For subsidiaries that exited before 1991, we used the values of year 1991.
In all models, we controlled for subsidiary size and industry effects. We measured subsidiary size by number of employees. For industry effect, we identified 10 broad industry categories and controlled for these using nine industry indicator variables, with the miscellaneous category being the omitted category. To avoid a potential multicollinearity problem due to interaction terms, we mean centered all the continuous explanatory variables following Aiken and West (1991).

**Modeling Procedure**

We used Cox’s proportional hazard model (Cox & Oakes, 1984) to test all our hypotheses. The model estimates the influence of explanatory variables on the hazard of exit without specifying a parametric form for the precise time to failure. Instead, it ranks ventures in terms of the sequence of exit and maximizes the partial likelihood that a particular venture should exit conditional on the characteristics of the other ventures at risk at the time of exit. By incorporating the age distribution directly into the estimation, the Cox regression procedure corrects for the problems of censored data and for aging effects on international venture dissolution and brings the exit rate closer to the failure rate.

**Results**

As described earlier, we used two samples to test our hypotheses. We tested the performance effect of entry mode choice (wholly owned subsidiary vs. international joint venture) in a sample of 20,177 Japanese foreign subsidiaries, and then we restricted the test on equity ownership to its subsample of 9,633 international joint ventures. Table 2 presents the descriptive statistics for these two samples. Fifty-two percent of the cases in the entire sample were wholly owned subsidiaries. Among the subsample of international joint ventures, the average percentage of equity ownership by Japanese parents was 52%. The average size as measured by total number of employees was slightly greater for the international joint ventures as compared to the entire sample. The average host country experience of Japanese parents for international joint ventures was greater than the average for the entire sample. The average regulative distance and normative distance from Japan of the countries in which international joint ventures were established was 1.29 and 2.53, respectively, as compared to 0.98 and 3.24 for the entire sample. The average age was 12.56 and 13.38 years, respectively, for the international joint ventures and the entire sample. The exit rates were 42% for the international joint ventures and 41% for the entire sample.

We conducted independent-sample t tests between the full sample and the international joint ventures. There was a significant difference at the p < .001 level in the means of all the variables. We also conducted independent-sample t tests to compare the wholly owned subsidiaries with the international joint ventures within the full sample. Here again, there was a significant difference between the two groups in the means of all the variables at the p < .001 level, except for the exit rates, which were significantly different at the p < .05 level.

The correlations between the explanatory variables were not high enough to warrant any serious concern of multicollinearity. To test this conclusion formally, we entered all the explanatory variables along with the interaction term in a linear regression and calculated the
Table 2
Descriptive Statistics and Correlations

<table>
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<th>Variables</th>
<th>Sample of FDI with both IJV and WOS mode of entry</th>
<th>Sample of FDI with only IJV mode of entry</th>
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<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>1. WOS (= 1)</td>
<td>0.52</td>
<td>0.50</td>
</tr>
<tr>
<td>2. Japanese parent’s equity ownership (percentage)</td>
<td>51.90</td>
<td>21.15</td>
</tr>
<tr>
<td>3. Number of employees</td>
<td>181.03</td>
<td>656.01</td>
</tr>
<tr>
<td>4. Host country–specific experience</td>
<td>25.13</td>
<td>99.67</td>
</tr>
<tr>
<td>5. Regulative distance</td>
<td>0.98</td>
<td>1.12</td>
</tr>
<tr>
<td>6. Normative distance</td>
<td>3.24</td>
<td>2.70</td>
</tr>
<tr>
<td>7. Subsidiary age</td>
<td>13.38</td>
<td>8.77</td>
</tr>
<tr>
<td>8. Survival or exit (0/1)</td>
<td>0.41</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Source: Data variables 1 to 4 and 7 to 8 from Kaigai Shinshutsu Kigyou Souran (Toyo Keizai Inc., 1986-2001). Data for variables 5 and 6 from Country risk ratings: Euromoney (Euromoney, 1991-2001) and World Competitiveness Yearbook (1991-2001) and based on computations shown in Table 1.

Note: FDI = foreign direct investment; IJV = international joint venture; WOS = wholly owned subsidiary. Means and standard deviations based on raw values. Correlations based on transformed and mean-centered values as used in the survival models. Numbers above the diagonal in the correlation matrix are for sample of FDI with both IJV and WOS mode of entry ($N = 20,177$). Numbers below the diagonal of the correlation matrix are for sample of FDI with only IJV mode of entry ($N = 9,633$).

a. WOS was the independent variable in the sample of FDI with both IJV and WOS modes of entry.
b. Japanese parent’s equity ownership was the independent variable in the sample of FDI with only IJV mode of entry.

Significant at the .05 level (two-tailed test) when Pearson correlations >.005 or <.005 below diagonal of correlation matrix; all correlations significant above diagonal of correlation matrix.
variance inflation factors. All the variance inflation factor values were in the range of 1 to 5, suggesting no serious problem of multicollinearity. Stability of the coefficients of our explanatory variables across the models also confirms that multicollinearity does not pose any threat to our analyses and results.

We tested our hypotheses using two sets of three regressions, one for the whole sample and the other for the subsample of international joint ventures. Each set of three regressions was developed in a hierarchical manner. We first developed our base model, including subsidiary size and industry indicator variables as controls. We then entered all the main effect variables including ownership strategy variables, the linear and square terms of regulative and normative distances, and Japanese parents’ host country experience in the second model, followed by the introduction of all two-way interaction terms in the third model. Table 3 reports the regression results for the entire sample, in which ownership was gauged by entry mode (wholly owned subsidiary vs. international joint venture). Table 4 reports the regression results for the subsample of international joint ventures, in which ownership was gauged by the percentage of equity held by Japanese parents. Model 4 in both tables presents results of one of our robustness tests, in which we used a majority–minority categorization of ownership variables in both samples.

As shown by model chi-square and incremental chi-square statistics, all models were significant, and the inclusion of additional terms in each step resulted in significant model improvements. The results of Cox regression are presented in the form of a hazard ratio, which represents the change in odds of exit associated with a unit change in the explanatory variables (Allison, 1995). A value of hazard ratio greater than 1 suggests that an increase in the explanatory variable enhances the chances of subsidiary exit, whereas a hazard ratio less than 1 suggests that an increase in the explanatory variable leads to improved chances of subsidiary survival.

All the explanatory variables and control variables had consistent and significant effects across all the models. The industry indicator variables were significant in all the models, suggesting that survival chances of subsidiaries vary by the main industries in which subsidiaries operate. Subsidiary size as measured by total number of employees had a hazard ratio less than 1 in all the models, suggesting that an increase in size leads to improved survival chances.

As shown in Table 3 (Model 1), the use of wholly owned subsidiaries improved the chances of subsidiary survival, providing support to Hypothesis 1a. In Table 4 (Model 1), the hazard ratio for Japanese parents’ equity ownership was less than 1, suggesting that an increase in Japanese parents’ ownership level leads to greater chances of survival for international joint ventures. This confirms our Hypothesis 1b.

In both the full sample (Table 3) and the subsample of international joint ventures (Table 4), the linear terms of regulative distance and normative distance had hazard ratios less than 1, whereas the square terms of these two institutional distance measures had hazard ratios greater than 1, suggesting an inverted U-shaped relationship between distance measures and subsidiary survival. Specifically, as the two institutional distances increase from small to medium, the survival chances of subsidiaries improve, but when the distances become too large, the survival chances deteriorate. Our Hypothesis 2 received strong support. We calculated the inflection point at which the survival chances start to deteriorate. Based on the
Table 3  Results of Survival Analysis (Cox’s Proportional Hazard Model: Exit = 1) Using Sample of FDI With Both IJV and WOS Mode of Entry (N = 20,177)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4a</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of employees (log)</td>
<td>0.828***</td>
<td>0.815***</td>
<td>0.814***</td>
<td>0.816***</td>
</tr>
<tr>
<td></td>
<td>0.007</td>
<td>0.007</td>
<td>0.007</td>
<td>0.007</td>
</tr>
<tr>
<td>Agriculture, forestry, and fishing</td>
<td>0.345***</td>
<td>0.358***</td>
<td>0.363***</td>
<td>0.360***</td>
</tr>
<tr>
<td></td>
<td>0.188</td>
<td>0.189</td>
<td>0.189</td>
<td>0.188</td>
</tr>
<tr>
<td>Mining</td>
<td>0.179***</td>
<td>0.235***</td>
<td>0.238***</td>
<td>0.239***</td>
</tr>
<tr>
<td></td>
<td>0.206</td>
<td>0.207</td>
<td>0.207</td>
<td>0.207</td>
</tr>
<tr>
<td>Construction</td>
<td>0.267***</td>
<td>0.331***</td>
<td>0.333***</td>
<td>0.333***</td>
</tr>
<tr>
<td></td>
<td>0.163</td>
<td>0.163</td>
<td>0.163</td>
<td>0.163</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.247***</td>
<td>0.274***</td>
<td>0.279***</td>
<td>0.280***</td>
</tr>
<tr>
<td></td>
<td>0.146</td>
<td>0.146</td>
<td>0.146</td>
<td>0.146</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.203***</td>
<td>0.251***</td>
<td>0.253***</td>
<td>0.255***</td>
</tr>
<tr>
<td></td>
<td>0.154</td>
<td>0.154</td>
<td>0.154</td>
<td>0.154</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>0.138***</td>
<td>0.184***</td>
<td>0.186***</td>
<td>0.187***</td>
</tr>
<tr>
<td></td>
<td>0.146</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
</tr>
<tr>
<td>Retail trade</td>
<td>0.390***</td>
<td>0.385***</td>
<td>0.388***</td>
<td>0.393***</td>
</tr>
<tr>
<td></td>
<td>0.155</td>
<td>0.156</td>
<td>0.156</td>
<td>0.156</td>
</tr>
<tr>
<td>Finance, insurance, and real estate</td>
<td>0.253***</td>
<td>0.306***</td>
<td>0.306***</td>
<td>0.309***</td>
</tr>
<tr>
<td></td>
<td>0.147</td>
<td>0.148</td>
<td>0.148</td>
<td>0.148</td>
</tr>
<tr>
<td>Services</td>
<td>0.325***</td>
<td>0.377***</td>
<td>0.380***</td>
<td>0.381***</td>
</tr>
<tr>
<td></td>
<td>0.148</td>
<td>0.148</td>
<td>0.148</td>
<td>0.148</td>
</tr>
<tr>
<td><strong>Main effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOS or majority</td>
<td>0.893***</td>
<td>0.882***</td>
<td>0.882***</td>
<td>0.852***</td>
</tr>
<tr>
<td></td>
<td>0.025</td>
<td>0.026</td>
<td>0.026</td>
<td>0.027</td>
</tr>
<tr>
<td>Experienceb</td>
<td>1.255***</td>
<td>1.272***</td>
<td>1.272***</td>
<td>1.284***</td>
</tr>
<tr>
<td></td>
<td>0.006</td>
<td>0.008</td>
<td>0.008</td>
<td>0.011</td>
</tr>
<tr>
<td>RDc</td>
<td>0.798***</td>
<td>0.834***</td>
<td>0.834***</td>
<td>0.833***</td>
</tr>
<tr>
<td></td>
<td>0.017</td>
<td>0.019</td>
<td>0.019</td>
<td>0.023</td>
</tr>
<tr>
<td>NDc</td>
<td>0.794***</td>
<td>0.793***</td>
<td>0.793***</td>
<td>0.794***</td>
</tr>
<tr>
<td></td>
<td>0.007</td>
<td>0.007</td>
<td>0.007</td>
<td>0.007</td>
</tr>
<tr>
<td>RD square</td>
<td>1.041***</td>
<td>1.038***</td>
<td>1.038***</td>
<td>1.040***</td>
</tr>
<tr>
<td></td>
<td>0.005</td>
<td>0.005</td>
<td>0.005</td>
<td>0.005</td>
</tr>
<tr>
<td>ND square</td>
<td>1.016***</td>
<td>1.016***</td>
<td>1.016***</td>
<td>1.016***</td>
</tr>
<tr>
<td></td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td><strong>Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOS or Majority × RD</td>
<td>0.893***</td>
<td>0.929***</td>
<td>0.929***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.024</td>
<td>0.022</td>
<td>0.022</td>
<td></td>
</tr>
<tr>
<td>WOS or Majority × Experience</td>
<td>0.974*</td>
<td>0.972*</td>
<td>0.972*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.012</td>
<td>0.013</td>
<td>0.013</td>
<td></td>
</tr>
<tr>
<td>2 log likelihood</td>
<td>147038.88</td>
<td>144486.86</td>
<td>144459.59</td>
<td>144448.37</td>
</tr>
<tr>
<td>Model chi-square</td>
<td>1786.48***</td>
<td>4558.26***</td>
<td>4606.62***</td>
<td>4627.12***</td>
</tr>
<tr>
<td>Degrees of freedom (df)</td>
<td>10</td>
<td>16</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Incremental chi-square</td>
<td>2552.02***</td>
<td>27.26***</td>
<td>14.81**</td>
<td></td>
</tr>
</tbody>
</table>

Note: experience = host country experience; FDI = foreign direct investment; IJV = international joint venture; ND = normative distance; RD = regulative distance; WOS = wholly owned subsidiary; majority = majority ownership in the subsidiary by the foreign parent. A hazard ratio less than 1 suggests higher chances of survival, whereas a hazard ratio greater than 1 suggests higher chances of failure.

a. Dichotomous variable based on majority ownership (>50%) used in place of WOS in Model 4.
b. Variables mean centered.

*p = .05; **p = .01; ***p < .001 (all two-tailed tests)
Table 4  Results of Survival Analysis (Cox’s Proportional Hazard Model: Exit = 1) Using Sample of FDI With Only IJV Mode of Entry (N = 9,633)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Hazard Ratio</th>
<th>Standard Error</th>
<th>Hazard Ratio</th>
<th>Standard Error</th>
<th>Hazard Ratio</th>
<th>Standard Error</th>
<th>Hazard Ratio</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of employees (log)b</td>
<td>0.821***</td>
<td>0.010</td>
<td>0.822***</td>
<td>0.010</td>
<td>0.822***</td>
<td>0.010</td>
<td>0.822***</td>
<td>0.010</td>
</tr>
<tr>
<td>Agriculture, forestry, and fishing</td>
<td>0.272***</td>
<td>0.225</td>
<td>0.263***</td>
<td>0.225</td>
<td>0.264***</td>
<td>0.225</td>
<td>0.262***</td>
<td>0.225</td>
</tr>
<tr>
<td>Mining</td>
<td>0.160***</td>
<td>0.283</td>
<td>0.170***</td>
<td>0.284</td>
<td>0.166***</td>
<td>0.284</td>
<td>0.168***</td>
<td>0.284</td>
</tr>
<tr>
<td>Construction</td>
<td>0.189***</td>
<td>0.203</td>
<td>0.166***</td>
<td>0.204</td>
<td>0.214***</td>
<td>0.204</td>
<td>0.210***</td>
<td>0.204</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.192***</td>
<td>0.181</td>
<td>0.195***</td>
<td>0.182</td>
<td>0.193***</td>
<td>0.182</td>
<td>0.193***</td>
<td>0.182</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.170***</td>
<td>0.193</td>
<td>0.171***</td>
<td>0.194</td>
<td>0.170***</td>
<td>0.194</td>
<td>0.168***</td>
<td>0.194</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>0.133***</td>
<td>0.184</td>
<td>0.141***</td>
<td>0.185</td>
<td>0.139***</td>
<td>0.185</td>
<td>0.139***</td>
<td>0.185</td>
</tr>
<tr>
<td>Retail trade</td>
<td>0.322***</td>
<td>0.197</td>
<td>0.308***</td>
<td>0.198</td>
<td>0.307***</td>
<td>0.198</td>
<td>0.306***</td>
<td>0.198</td>
</tr>
<tr>
<td>Finance, insurance, and real estate</td>
<td>0.875***</td>
<td>0.186</td>
<td>0.747***</td>
<td>0.186</td>
<td>0.279***</td>
<td>0.186</td>
<td>0.277***</td>
<td>0.186</td>
</tr>
<tr>
<td><strong>Main effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity (log)b or majority</td>
<td>0.879***</td>
<td>0.025</td>
<td>0.877***</td>
<td>0.025</td>
<td>0.834***</td>
<td>0.033</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienceb</td>
<td>1.258***</td>
<td>0.009</td>
<td>1.259***</td>
<td>0.009</td>
<td>1.260***</td>
<td>0.009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDb</td>
<td>0.899***</td>
<td>0.020</td>
<td>0.899***</td>
<td>0.020</td>
<td>0.897***</td>
<td>0.020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NDb</td>
<td>0.863***</td>
<td>0.013</td>
<td>0.865***</td>
<td>0.013</td>
<td>0.883***</td>
<td>0.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RD square</td>
<td>1.029***</td>
<td>0.006</td>
<td>1.029***</td>
<td>0.006</td>
<td>1.030***</td>
<td>0.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ND square</td>
<td>1.005*</td>
<td>0.002</td>
<td>1.005*</td>
<td>0.002</td>
<td>1.004*</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity or Majority × ND</td>
<td>0.974*</td>
<td>0.012</td>
<td>0.961***</td>
<td>0.015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity or Majority × Experience</td>
<td>0.965**</td>
<td>0.013</td>
<td>0.968*</td>
<td>0.014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 log likelihood</td>
<td>65857.31</td>
<td>64985.63</td>
<td>64973.42</td>
<td>64967.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model chi-square</td>
<td>778.05***</td>
<td>1765.08***</td>
<td>1797.85***</td>
<td>1785.55***</td>
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</tr>
<tr>
<td>Degrees of freedom (df)</td>
<td>10</td>
<td>16</td>
<td>18</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incremental chi-square</td>
<td>871.68***</td>
<td>12.21**</td>
<td>12.76**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: equity = Japanese parent’s equity level; experience = host country experience; FDI = foreign direct investment; IJV = international joint venture; ND = normative distance; RD = regulatory distance; WOS = wholly owned subsidiary. A hazard ratio less than 1 suggests higher chances of survival, whereas a hazard ratio greater than 1 suggests higher chances of failure.

a. Dichotomous variable based on majority ownership (>50%) used in place of equity in Model 4.
b. Variables mean centered.

* p < .05; ** p < .01; *** p < .001 (all two-tailed tests)
regulative distance measure, there are 7 countries in which the subsidiaries of the full sample have lower survival rates. For the subsample of international joint ventures, there are 8 countries (including the 7 countries in the full sample) in which the subsidiaries have lower survival rates. These countries include Indonesia, Colombia, Vietnam, Ukraine, Zimbabwe, Venezuela, Turkey, and Russia.

Model 2 in Table 3 and 4 also displays the main effect of Japanese parents’ host country experience on subsidiary survival. The hazard ratio for Japanese parents’ host country experience was greater than 1 in both tables, suggesting that an increase in host country experience leads to reduction in the chances of subsidiary survival. This is contrary to Hypothesis 4, which suggests that more host country experience of Japanese parent firms leads to improved survival chances of the subsidiaries. Hypothesis 4 is not supported.

In Model 3 (Tables 3 and 4), we entered the hypothesized interaction terms. Hypotheses 3a and 3b predict a positive interaction effect between institutional distance and greater ownership. Consistent with Hypothesis 3a, the hazard ratio for the interaction term of regulative distance and wholly owned subsidiary mode of entry was less than 1, suggesting increased survival chances for wholly owned subsidiaries as compared to international joint ventures in countries that have a larger regulative distance from Japan. Likewise, the hazard ratio for the interaction term of normative distance with Japanese parents’ equity ownership in international joint ventures was less than 1, suggesting that an increase in the equity level of Japanese parents enhanced survival chances of their international joint ventures in countries that have a larger normative distance from Japan. Hypotheses 3a and 3b are supported.

Hypotheses 5a and 5b predict a positive interaction effect between Japanese parents’ host country experience and ownership strategies. Consistent with our prediction, the hazard ratios for the interaction terms between host country experience and wholly owned subsidiaries and between host country experience and Japanese parents’ equity ownership were less than 1, indicating that the negative direct impact of host country experience on subsidiary survival was weaker when Japanese parents had greater ownership in their subsidiaries. Hypotheses 5a and 5b are supported.

Robustness Tests

We first checked the robustness of our results using majority–minority classification of ownership strategy in both the samples. We recoded the ownership variable as majority ownership if Japanese parents held 50% or greater equity ownership and as minority otherwise. Model 4 in Tables 3 and 4 presents the results of the final model based on majority–minority classification. The results are qualitatively similar to the ones obtained based on wholly owned subsidiary–international joint venture classification in the full sample and ownership level in the subsample of international joint ventures. The survival chances of majority-owned subsidiaries are better than those of minority-owned subsidiaries. As the regulative and normative distances between Japan and host countries increase, the survival chances improve, if the subsidiaries are majority owned by Japanese parents. Likewise, the negative impact of host country experience on subsidiary survival is weaker if the subsidiary is majority owned.

We also assessed the robustness of our results using a few alternate sampling procedures, model specifications, and alternate variables. We removed the age restriction of minimum 2
years for the inclusion of a subsidiary in our sample. The results were the same in the unrestricted sample. Next we entered the interaction of ownership with both regulative and normative distance measures in the same model. The hypothesized relationships remained the same, even though we also found significant interaction effects between wholly owned subsidiaries and normative distance and between equity ownership and regulative distance. We then tested the hypothesized relationships in the full sample instead of in two samples. In the full sample, we used the continuous measure of equity ownership for both wholly owned subsidiaries and international joint ventures and included a dummy variable to control for wholly owned subsidiaries. All the results remained the same.

We used alternate definitions of wholly owned subsidiary, varying the amount of equity ownership. We changed the definition of wholly owned subsidiary from 95% to 90% and then to 80% ownership levels by Japanese parents. The findings were robust to these definitions, except that the significance level for the interaction of different definitions of wholly owned subsidiary and host country experience dropped slightly in the model using an 80% criterion for a wholly owned subsidiary. To test the robustness of experience effects, we used an alternate definition of our experience variable. We calculated Japanese parents’ total international experience as reflected in total number of subsidiary years in all foreign countries, and used this figure in place of host country–specific experience. The direct effect of Japanese parents’ total international experience and its interactions with different definitions of wholly owned subsidiary and Japanese parents’ equity level were the same as those obtained using Japanese parents’ host country experience. We also removed the control variables for firm size and industry membership from the equation; the results remained the same.

Finally, we controlled for the absolute level of regulative strength in a country. We measured a country’s regulative strength by aggregating our items of regulative distance. A larger value suggested a stronger regulative regime. The coefficient for this variable was not significant in any of the models, whereas other hypothesized relationships remained significant. We elaborate on these findings and explore probable causes of contrary findings to Hypothesis 4 in the next section.

**Discussion**

This study investigated the issue of ownership strategy and foreign investment survival through two theoretical lenses—institutional theory and organizational learning perspective. We argued that, holding other things constant, higher levels of ownership by foreign parents and greater host country experience of foreign parents will each enhance the survival chances of foreign subsidiaries. We also suggested that regulative and normative distances between the home and host countries will have an inverted U-shaped relationship with subsidiary survival.

More importantly, we specified that the effect of ownership strategy on subsidiary survival would depend on institutional distance and host country experience. As regulative distance increases, foreign subsidiaries will have better survival chances if they are wholly owned by their foreign parents. Likewise, as normative distance increases, international joint ventures will have better survival chances if their foreign parents have higher levels of equity ownership.
Finally, we suggested that higher levels of host country experience will be beneficial if MNEs pursue higher levels of equity ownership in their foreign subsidiaries.

Good empirical support was received for all the hypotheses except Hypothesis 4 on the main effect of host country experience. Wholly owned subsidiaries had better survival chances than did international joint ventures, and within international joint venture mode, survival chances improved if Japanese parents held a higher level of equity ownership. As the regulative and normative distances between Japan and the host countries increased from small to medium, the chances of subsidiary survival improved. However, when the distances increased further, the chances of subsidiary survival deteriorated. The negative effects of operating in foreign countries outweigh the benefits only in a few countries for which the institutional distance is excessively large.

The direct effect of host country experience, although unexpected, is not entirely inconsistent with previous work (Delios & Beamish, 2001; Li, 1995; Lu & Hebert, 2005). There could be two reasons why host country experience may not be beneficial for subsidiary survival. First, to make use of host country experience for enhancing subsidiary survival, foreign parents need sufficient influence and control over subsidiary operations. As argued earlier, ownership level in foreign subsidiaries is an important indicator of influence and control over subsidiary operations. Therefore, foreign parents’ host country experience may be beneficial only when the foreign parents have a higher level of ownership in the subsidiaries. Barkema et al. (1996) found support for these arguments when they observed a positive relationship between host country experience and international joint venture survival if a foreign parent held majority equity control but observed a negative relationship if a foreign parent held minority equity control. Our robustness analyses using majority–minority categorization of ownership also provides evidence for this explanation.

Second, not all types of experience will have a similar effect on foreign investment performance (Shaver, Mitchell, & Young, 1997). For example, learning obtained in one industry or one kind of institutional setting may not be relevant in overcoming the knowledge deficiency in another industry or institutional setting. When such learning is applied in a different context, it may result in misjudgment about the potential problems and lead to the venture failure. The experience measure employed in this study focused on host country experience without taking into account other types of experience. It would be useful for future studies to measure different types of experiences and test their differential effects on foreign subsidiary survival.

We found support for the hypothesized interaction effects. There were positive interaction effects between the ownership variables and the distance measures. Wholly owned subsidiaries had better survival chances than did international joint ventures as the regulative distance increased. Likewise, in countries with larger normative distance from Japan, international joint ventures had better survival chances if Japanese parents held a higher level of equity ownership.

The findings that higher levels of ownership enhance the survival chances of subsidiaries in institutionally distant countries may seem contrary to the arguments in some prior studies, which emphasized that in unknown environments, firms would need the support of local players to guide them through (Xu et al., 2004; Xu & Shenkar, 2002). A possible reason for these contrary findings could lie in the unique nature of Japanese firms’ international strategies.
In foreign markets, Japanese firms tend to replicate the pattern of relationships they have with other Japanese firms in domestic and other markets. As a result, Japanese firms may rely on other Japanese firms rather than on local partners in overcoming problems due to environmental differences, making local partners relatively less useful for Japanese firms in overcoming institutional distance. A few other scholars have also found that locally based advantages do not always help in improving the performance of foreign subsidiaries (Nachum, 2003; Zaheer, 1995).

We also found a positive interaction effect between Japanese firms’ host country experience and their levels of equity ownership in their foreign subsidiaries. The interaction effect of host country experience with ownership strategies suggested that Japanese parents’ host country experience was less harmful for subsidiary survival when the subsidiaries were wholly owned or when the Japanese parents held larger equity positions in the subsidiaries.

To gain additional insight into these relationships, we plotted the interaction effects in the full sample and in the subsample by computing the expected probabilities of foreign subsidiary survival at differing levels of moderating variables for wholly owned subsidiaries and international joint ventures. The plots derived from the full sample and subsample look alike; hence, we discuss the plots for the full sample only.

Figure 1 depicts the main effect of regulative distance and its interaction with Japanese parents’ ownership strategy. The two curves for wholly owned subsidiaries and international joint ventures support the inverted U-shaped relationship between regulative distance and subsidiary survival (Hypothesis 2). The relative slopes of the two curves support our Hypothesis

![Figure 1: Interaction between Regulative Distance and Entry Mode Strategy](image-url)
3a; as the regulative distance between Japan and host countries increases, of wholly owned subsidiaries improve in comparison to of international joint ventures.

Figure 2 depicts the main effect of host country experience and its interaction with Japanese parents’ ownership strategy. The negative slopes of the two lines show the main effect of host country experience, contrary to Hypothesis 4. However, the relative slopes of the two lines illustrate the hypothesized interaction between host country experience and ownership strategy. The line for wholly owned subsidiaries has less negative slope than does the line for international joint ventures, suggesting that with an increase in host country experience, the survival chances of foreign subsidiaries are better if they are wholly owned by Japanese parents than if they are joint ventures.

The similarities in the findings with respect to the effect of ownership in the wholly owned subsidiary and international joint venture samples and the two distance measures are worthy of our attention. We found that higher level of ownership, whether in the form of a wholly owned subsidiary or in the form of greater equity in an international joint venture, helped subsidiary survival. This provides strong support to the control (Anderson & Gatignon, 1986; Gomes-Casseres, 1990) and commitment (Delios & Beamish, 1999; Dhanraj & Beamish, 2004) arguments for enhancing foreign subsidiary survival. Likewise, the direct and interaction effects of the two distance measures were qualitatively the same. This suggests that unfamiliarity with foreign institutional environments, resulting either from

Note: WOS = wholly owned subsidiary; IJV = international joint venture. Low and high values of host country experience refer to one standard deviation above and below the mean host country experience.
regulative differences or from normative differences, has qualitatively the same impact on foreign subsidiary survival.

These results highlight the contingent value of equity ownership in foreign subsidiaries. In a new environment, it may be very difficult to assess the performance of local partners (Lu & Herbert, 2005; Makino & Beamish, 1998). Local partners may behave opportunistically, making it necessary for foreign partners to continuously monitor their activities. Monitoring, however, can be very costly. Greater ownership by foreign parents not only mitigates the need for such monitoring activities but also contributes to subsidiary survival by enhanced commitment from foreign parents. Our results also suggest that subsidiaries whose foreign parents have higher levels of host country experience may have higher survival chances if their foreign parents assume larger ownership positions.

Conclusions

Before any conclusions can be drawn from this study, its limitations need be noted. First, although the study is generalizable in terms of the geographic spread of the subsidiaries, it was limited to the foreign investments of Japanese firms. Japanese firms are characterized by certain unique features, which may raise the question of the generalizability of our findings. For example, Japanese firms heavily rely on the development of internal labor markets for manning international operations, with a strong emphasis on an intense socialization of employees (Hatvany & Pucik, 1983). This may not always work with local partners because local employees have their own customs and traditions. As a result, Japanese firms tend to employ expatriates extensively in their foreign operations (Keeley, 2001). Mezias (2002) found Japanese subsidiaries in the United States to be more prone to labor-related lawsuits, partially because of their unique human resource management practices. Thus, Japanese firms’ ethnocentric approach to management may make it difficult for them to capitalize on the support provided by local partners. Future studies need to explore the generalizability of these findings using foreign investments by firms from other countries.

Second, this study focuses only on the survival chances of foreign subsidiaries. Performance is a multidimensional construct, and survival is not a complete measure of subsidiary performance, even though prior studies have found empirical evidence that survival correlates positively with financial and satisfaction measures of performance (Geringer & Hebert, 1991). Future studies could investigate the effect of ownership strategies, institutional distance, and host country experience on other performance measures, such as a managerial satisfaction measure. Finally, our measures of regulative and normative distances may not be the best ones. We have attempted to develop time-variant measures of regulative and normative distance for a large number of countries, based on theoretical considerations as rooted in institutional theory (Scott, 1995). The regulative and normative distance indicators relate to institutional factors such as a country’s political systems, its laws and regulations, and its societal attributes. Together, these features measure variance across multiple dimensions of national institutional environments, going beyond solitary dimensions as used in much of the extant literature. Such conceptualization more accurately reflects the challenges an MNE faces in operating in multiple nations (Delios & Henisz, 2003). Future studies may refine our measures and test their robustness in other theoretical and empirical contexts.
This study has important implications for furthering the research on ownership strategy–subsidiary performance relationship. Our contingency framework presents a more comprehensive account of the relationship between ownership strategy and subsidiary survival. The curvilinear effect of regulative and normative distance is an important addition to the literature, which mostly depicts differences in institutional environment as being disadvantageous for foreign subsidiaries. We also found that institutional environments positively moderate the effect of ownership strategy on subsidiary survival. The larger the institutional distance, the more useful the high-control ownership strategy. The significant interaction effect of ownership strategies and host country experience helps resolve the unexpected direct effect of host country experience observed in this study and in earlier studies (Delios & Beamish, 2001; Li, 1995; Lu & Hebert, 2005). As we argued and found, host country experience has a weaker negative impact on subsidiary survival when coupled with high-control ownership strategies.

Furthermore, the development of time-variant regulative and normative distance measures could be useful for future cross-country studies. The use of regulative and normative dimensions provides a conceptualization of a nation’s institutional environment that more fully reflects the incentives, guidelines, and constraints that influence how actors in a particular environment behave. The development of these measures in this study and their significant impacts highlight the value of moving beyond narrow constructs of environmental differences to more theoretically grounded constructs.

The findings of this study also have implications for internationalizing Japanese firms and for managers involved in the international operations of Japanese firms. The design of governance structure of international investments should take into account the role played by dissimilarities in the institutional environments and the Japanese firm’s host country experience. There are heightened unfamiliarity hazards and relational hazards in unknown environments. The former will decrease and diminish as foreign investors accumulate experience in the local environments. As this happens, the need to share control with local partners to reduce unfamiliarity hazards is reduced. The latter will remain as an ongoing concern in the absence of a higher-control governance structure. Therefore, as the dissimilarities between the home and host country’s institutional environments increase and as managers gain more experience in unknown environments, Japanese firms should increase their control over their foreign subsidiaries through higher levels of ownership, which in turn should lead to improved subsidiary survival rates.

References


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