How First Mover Advantages and Agglomeration Economies Affect Foreign Entry Survival

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While entry timing literatures suggest firms to enter a foreign market as pioneers to gain the first mover advantages, studies on entry locations recommend firms to enter a market where there is already a critical mass of their peers, i.e., to be late movers in order to benefit from the agglomeration effects. As two important dimensions of foreign entry strategy, entry timing and location literatures seem to offer opposite recommendations. To resolve this apparent paradox, this study builds a network-based foreign entry and performance model. We argue that these two dimensions of market entry are interdependent. Entry strategies that can achieve fit between these two dimensions will perform better. We found support for our arguments in an empirical analysis of a sample of Japanese MNEs’ nearly 10,000 FDI market entries spanning 16 years and in over 50 countries.

Field of Research: Foreign entry strategy; agglomeration; first mover advantages

1. Introduction

When and where to enter a foreign market to achieve success are important questions for both practitioners and scholars (García-Canal and Guillén, 2008, Lee, 2008). However, current studies on these two interrelated dimensions of market entry have advanced in two separated streams of research: entry timing and location. Such an isolated approach has resulted in conflicting research findings and fallen short in explaining foreign entry performance. On the one hand, entry timing research suggests entering a foreign market as pioneers enables firms to gain first mover advantages; on the other hand, entry location studies maintain that being a late mover helps firms to benefit from agglomeration economies.

The question therefore arises: Between first mover advantages and agglomeration effects, how much do they matter, and when do they matter, with respect to market entry performance? To find an answer, we need to examine the interactions between entry location and timing. However, to our surprises, there have been very few studies trying to answer these important questions. Motivated by filling this research gap, this study focuses on simultaneously investigating entry timing and location and investigating how these two dimensions of foreign entry jointly influence entry performance, survival in particular. Two theoretical lenses are introduced and integrated to explain the puzzle: network perspective and strategic alignment theory.

From the network perspective, a multinational enterprise (MNE) can be viewed as an internal network composed of its headquarters and subsidiaries located worldwide. Meanwhile, these subsidiaries are embedded in various networks of the different host

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countries, or “external networks” (Ghoshal and Bartlett, 1990, Nohria and Ghoshal, 1997). Therefore, foreign market entry through equity investments can be viewed as building a new network node (foreign subsidiary) connecting the MNE internal network with the local business networks in the host country. In parallel to the expansion of the MNE internal network is the process of establishing a peer network of foreign subsidiaries in the host country (composed of foreign subsidiaries from the same country and operating similar businesses). As such, entry timing can be defined in terms of the temporal order of building this new node in the peer network. The locality of the peer network in the host country represents the “where” dimension – entry location.

Built upon the assumption that firms’ organization, strategy and environment are interdependent, strategic alignment theory predicts that firms that achieve strategic fit with the environment and/or organization contexts will perform better than those that do not (Venkatraman and Camillus, 1984, Miles and Snow, 1994, Doty et al., 1993, Zajac et al., 2000, Adner and Kapoor, 2010, Mahoney et al., 2009). Following this line of thinking, this study is focused on the alignment between the two dimensions of market entry (timing and location). The chosen entry strategy that achieves strategic fit between these two dimensions has positive impact on foreign entry performance.

Based on these two theoretical perspectives, we argue that timing and location are interdependent. During the foreign entry process, as two competing forces, first mover advantages and agglomeration economies interact and jointly affect foreign entry survival. As a result, an inverted U-shaped curvilinear relationship between foreign entry timing and survival is hypothesized. The empirical analysis lends strong support to this non-linear relationship, which not only resolves the conflicting findings in previous studies, but also provides a holistic explanation of the relationship between foreign entry strategy and performance.

The paper proceeds as follows. The next section provides a brief review of prior research linking entry timing and location with entry performance, respectively. The key research gaps are pointed out. This is followed by presenting a theoretical framework explaining the network-based conceptualizations of foreign market entry. Hypotheses are developed and tested thereafter. The paper is concluded by summarizing major findings and contributions of this paper and pointing out future research directions.

2. Literature Review and Hypothesis Development

Foreign Entry Timing
Entry timing research has examined the “when” question, including the concept of first mover advantage (Lieberman and Montgomery, 1988, Frynas et al., 2006). Compared with the numerous studies in the domestic settings of firms entering a new product space (see Lieberman and Montgomery, 1998 for a comprehensive review) or adopting an organizational practice in an industry (Carow et al., 2004), few studies have paid attention to the conduct of geographic pioneers or late movers (Fuentelsaz et al., 2002). When it comes to the differential performance that is attributable to entry timing in a geographic sense, studies are even more scarce (e.g. Isobe et al., 2000, Luo, 1998, Pan et al., 1999, Delios and Makino, 2003). Nonetheless, these studies were carried out in a single country setting, for instance, China, which means that at the country level, location is considered a constant variable.
Differences across locations (e.g., countries) exert significant influences on business performance (Makino et al., 2004, Cantwell, 2009). When firms face multiple locations, geographical entry timing decisions become more complicated. Fuentelsaz et al. (2002) demonstrated this complexity in a study of the entry timing issues faced by the Spanish savings banks when expanding into multiple geographic markets. This complexity comes from the interdependency between entry timing and location decisions. Correspondingly, in studying the performance implications of entry timing, location should be included as a variable, not as a constant. Unfortunately, we have found few studies that examine first mover advantages when firms choose to enter multiple geographic locations.

**Foreign Entry Location**

In recent years, the research on economic activities across geographic locations, a traditional economic geography domain (Krugman, 1991a), has increasingly drawn attention from both international business and strategic management scholars (e.g. Ricart et al., 2004, Dunning, 1998, Buckley and Ghauri, 2004, McCann and Folta, 2008, McCann and Vroom, 2010, Whittington et al., 2009), with a focus on agglomeration economies (Li, 2004). Agglomeration economies, defined as external economies accruing from firms co-locating (Marshall, 1920), also affects firms’ location choices (Nachum and Wymb, 2005, Chang and Park, 2005, Chung and Alcacer, 2002, Head et al., 1995, Shaver and Flyer, 2000, Kalnins and Chung, 2004) and influences firm performance in geographic clusters (Chung and Kalnins, 2001, Shaver and Flyer, 2000, Canina et al., 2005).

However, current studies on locations are primarily static, focusing on the location characteristics at a given point in time. The temporal dimension of firms entering a new geographic location is largely absent, despite the interdependence between these two dimensions of market entry. This also leads to the isolation between entry timing and location research. Pouder & St. John (1996) developed an evolutionary model showing that the formation and development of regional clusters are a dynamic process. However, empirical examinations are extremely rare. In addition, as pointed out by Kethen, Snow and Hoover (2004), potential theoretical contradictions exist between the regional cluster literature and entry timing research. While the former would suggest firms to be late movers in order to free-ride the agglomeration externalities that are derived from the critical mass of firms in a geographic location, the latter might recommend that companies enter a location early in order to gain first mover advantages.

In summary, entry timing and location are two interdependent dimensions of market entry. Isolated research has presented an incomplete picture of the foreign entry phenomenon. The lack of both theoretical and empirical integrations of these two dimensions has failed to provide conclusive explanations for the performance variations of market entry. This provides the point of departure for this study. Starting in the next section, we will build a new theoretical framework to uncover the foreign market entry process and define foreign entry timing and location from a network perspective.

**Theoretical Framework**

An MNE can be viewed as a differentiated yet integrated network of affiliated subsidiaries, which are embedded in different local business networks in the host countries (Ghoshal & Bartlett, 1990; Nohtia & Ghoshal, 1997). While all the relationships and linkages that exist among the different subsidiaries and its headquarters constitute
the MNE’s internal network, each of the national operating subsidiaries of the MNE is embedded in a unique context in which each has connections to various parties such as suppliers, customers and equity investors outside the MNE. No matter how global an MNE may be, its subsidiaries are always born in a specific location in the host country. While we can consider an MNE an intra-corporate network (Inkpen and Tsang, 2005), the subsidiaries are naturally embedded in both the internal network of the corporate parent and the external networks in the local environment. Therefore, a new foreign market entry through equity investment can be seen as building a foreign subsidiary to connect the MNE’s internal network with the external networks in the host country.

Foreign Peer Network
Among the various external networks in the host county stands an important sub-network which is made up of foreign subsidiaries that are from the same country and operating same or similar businesses. This sub-network, defined as Foreign Peer network (FPN) in this study, helps tore think the traditional timing and location concepts in the context of international networks. Such an FPN conceptualization is rooted in both sociological and economic theories. Social network theory has long argued that actor similarity and physical proximity are important antecedents of interpersonal networks (Brass et al., 2004) since “similar people tend to interact with each other. Similarity is thought to ease communication, increase predictability of behavior and foster trust and reciprocity (2004: 796).” Forces that drive the creation of interpersonal networks explain the formation of interorganizational networks as well (Brass et al., 2004). Although the FPN is an interorganizational network formed by foreign subsidiaries, it is created by individual managers, so-called “boundary spanners” (Kostova and Roth, 2003). FPN members are from the same home country and operate similar businesses in the same geographic location in the host country; therefore, they are similar (in many aspects) and physically close to each other. On the economic side, economists have shown that physical proximity is an essential condition to form an industrial cluster (e.g., Krugman, 1991b).

Similarity and proximity set the foundation for the creation of foreign peer networks. When it comes to motivations, three theories offer explanations about why foreign subsidiaries form peer networks in a foreign country. It can be driven by the oligopolistic reaction, as suggested by industrial organization (I/O) economists (e.g., Knickerbocker, 1973, Flowers, 1976); or it can be motivated by reduced uncertainty or heightened legitimacy, as sociologists argued (e.g., DiMaggio and Powell, 1983); and/or drawn by the agglomeration effects, as suggested by economic geographers (e.g., Krugman, 1991b, Head et al., 1995, Ellison et al., 2010). I/O economics and institutional theories predict that firms follow their industry peers when expanding into a new foreign market (Guillen, 2002, Knickerbocker, 1973, Ethiraj and Zhu, 2008). Economic geographers further argue that firms not only react to their peers’ strategic moves going international but also are likely to establish their presences in the same geographic locations (Chung and Song, 2004, Head et al., 1995).

Defining Network-based Entry Timing and Entry Location
Formation of the foreign peer network (FPN) is a dynamic process. Foreign subsidiaries may enter this network at the different stages of FPN formation. Therefore, timing of foreign firms entering a new geographic market can be measured by the temporal order of entry into the FPN in the local environment. Consistent with previous studies (see VanderWerf and Mahon, 1997 for reviews), entry timing can be gauged either by the time lapse since the first peer entry, or by the entry order, that is, new entry can be seen
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as 1st, 2nd etc. in the FPN. Meanwhile, agglomeration, defined as the geographic concentrations of firms in a location, has drawn much attention in studying the location effects on firm performance (Li, 2004). Agglomeration can be defined in terms of the number of peer subsidiaries in the FPN at the time of the subsidiary's founding. This is consistent with the previous studies on agglomerations (e.g., Arthur, 1990, Folta et al., 2006, Chang and Park, 2005).

When comparing entry timing (order) with the agglomeration measure, it is clear that they are two sides of the same coin, i.e., the number of peer firms in the foreign peer network. Entry order is an ordinal number while agglomeration is cardinal. If the foreign firm enters the new geographic market at the point that there were 3 firms in the FPN, we can say that the new entrant is the 4th player, while the concentration level will be 4. This conceptualization also implies the tradeoff relationship (or negative relationship) between entry timing (order) and the agglomeration aspect of location decisions. The earlier the foreign subsidiary enters the FPN in the new location, the less likely it will be that it can enjoy agglomeration economies. On the flip side, if firms enter a location already offering peer firms agglomeration benefits, the entering firms are by no means first movers or early followers but, rather, late movers. As such, this conceptualization enables us to differentiate the impact of first mover advantages from the agglomeration effects on foreign entry performance.

Hypothesis Development

This study seeks to identify the influences of foreign firms' market entry timing and location decisions on foreign entry performance, therefore tackling the puzzle between first mover advantages and agglomeration effects. While entry timing is specific to the foreign subsidiary, the location effects are essentially contextual, even though the foreign parent decides where to locate its subsidiaries. Strategic fit theory (e.g. Venkatraman and Camillus, 1984, Van De Ven and Drazin, 1985, Mahoney et al., 2009, Adner and Kapoor, 2010) assumes that superior performance can be achieved through aligning the strategy of the firm with its organizational and environment contingencies. In this study, we focus on the alignment among the two dimensions of the entry strategy, which we define as strategic consistency. Therefore, in examining the effects of foreign entry on entry performance, it is imperative to uncover the interactions between entry timing and entry location, i.e., agglomeration.

In studying foreign market entry strategies, subsidiary survival has been commonly used as an important indicator of foreign entry performance (e.g. Delios and Beamish, 2001, Pan and Chi, 1999, Li, 1995). We use subsidiary survival to develop our hypotheses as follows.

Foreign market entry is conceptualized as involving a dynamic process of developing a foreign peer network in the local business environment. This process implies a tradeoff between the first mover advantages and agglomeration effects. First mover advantages sit upon the premise that no or few other peer firms operates in the same domain, therefore, early movers can preemptively occupy key resource space or accelerate progress along learning curves to achieve competitive advantages (1998, Lieberman and Montgomery, 1988). However, this also means that there will be no agglomeration benefits for early movers because the number of firms in the network is too small to generate agglomeration effects yet.
Although pioneering firms may have certain competitive advantages by being first players, they face higher exit risks as well since they do not have a network of peers to turn to for risk sharing in the new environment. They also lack the legitimacy to be accepted by the local businesses. Organizational ecologists consider this the liability of newness (Aldrich and Fiol, 1994, Singh et al., 1986). For international pioneers, the situation is still worse due to the liability of doing business in a foreign country. This is called liability of foreignness (e.g. Zaheer, 1995, Hymer, 1972). First movers are like missionaries in a new geographic, cultural and religious territory. As a result, they face a higher risk of being misunderstood and driven out of the local environment. In addition, when a crisis occurs, they do not have a network of peers to provide support. These factors make the pioneering firms particularly vulnerable.

After the first firms entered a new geographic market, other firms will follow the entry pioneers (Henisz and Delios, 2001, Knickerbocker, 1973, Guillen, 2002). With an increased number of organizations comes increased legitimacy (Hannan and Freeman, 1989) and increased agglomeration externalities (Arthur, 1990). The increased public good benefits each member of the network, which substantially lowers the risk and enables them to collectively withstand the pressure from the environment. Analogous to the forest of trees, one tree may find it hard to stand against the wind, while a forest can stand strong. Therefore, firms that join the peer networks as followers face relatively lower exit risk.

However, network growth within the geographic boundary will encounter limits sooner or later. Network members jointly create network externalities, but they are, after all, competing to appropriate these benefits. As industry networks grow beyond a certain point, the marginal benefits of belonging to a cluster decline (Folta et al., 2006). Crowded competitors facing limited resource domains will drive up factor costs, such as labor and natural resources, which lead to diseconomies of agglomeration (Arthur, 1990). The exhausted local business domain finds it hard to support new business entrants. Meanwhile, given the high level of awareness among competitors within an established industrial network, new entrants will be more likely considered direct competitors by all the incumbents. In summary, the crowdedness of competitors and entry barriers set a higher hurdle for new entrants (the super late-movers) to penetrate and survive within a network when entering a particular geographic domain.

In summary, once the foreign peer network is formed, it follows its own life cycle. At the early development stage, the peer network serves as a risk buffer to protect the entry followers from the external shocks in the local environment, but as the peer network grows and takes on its own life, the risk buffer function diminishes. The buffer becomes a barrier that excludes the new entrants from penetrating into the peer network. Therefore, the exit risks faced by the new entrants will vary, depending upon the stage at which they enter the peer network in the local environment. Based on the above analyses, the following hypotheses are proposed.

**H1:** Foreign subsidiaries arriving in the middle of the foreign peer network (FPN) life cycle will be more likely to survive; as such, the number of peer firms in a local business network at the time of foreign subsidiary founding will have an inverted U-shaped relationship with foreign subsidiary survival.

This hypothesis can be theorized separately in terms of entry timing and location decisions:
H1a: First movers are less likely to survive than entry followers, while the survival chances become even slimmer if the firm enters late.

H1b: Foreign subsidiaries set up in a location having few peer firms will be less likely to survive than those set up in a location having a moderate number of peer firms, while those set up in a location crowded with their peer firms will face a lower chance of survival.

3. Methodology

Sample and Data Source
Since Japanese firms rely extensively on network forms of organization (Gerlach, 1992, Lincoln et al., 1996), Japanese samples are quite relevant for network research. We use the foreign subsidiaries of Japanese MNEs to test our hypotheses.

We collected data on these subsidiaries from the information published in six editions of Kaigai shinshutsu kigyou soran (Toyo Keizai 1986, 1992, 1994, 1997, 1999, 2001). This directory is compiled annually from public information as well as a survey of top-level Japanese managers in foreign subsidiaries. The coverage of the survey is extensive, and the publication is a valid source of data for the study of Japanese foreign direct investment (Hennart, 1991). The parent firm and industry information was from the Analysts’ Guide that matched to the parent firms listed in the TK database. Country information was from the annual Global Competitiveness Report published by the World Economic Forum and the World Bank annual report.

This study focuses on foreign entries made by Japanese MNEs between 1985 and 2001. A starting point of 1985 was used since it marked the year when Japanese outward foreign direct investment regained its momentum (Beamish et al., 2001). The data includes 9,576 market entries over the 16-year period. Since this research focus was on the performance implications of foreign entry strategy, we included the parent firm and country level data from the time of subsidiary founding only.

Measurement
Subsidiary Survival: Consistent with previous research, a subsidiary that ceased to be listed in a particular year’s directory, after disappearing consistently for one or more years, was deemed as terminated (Delios and Beamish, 2001, Dhanaraj and Beamish, 2004). Subsidiaries that continued to survive at the end of the period were treated as censored cases.

Entry Timing: As discussed above, entry timing can be measured by two variables: timing and order. Entry timing was calculated by subtracting the year when the first FPN member entered the foreign market from the new subsidiary’s foundation year. Entry order was measured by adding 1 to the number of Japanese subsidiaries in the FPN at the time of the new subsidiary founding. This is an ordinal number. For instance, if there were 5 peer subsidiaries in the market at the time of new subsidiary entry, this entry would be consider the 6th.

Entry location-agglomeration: As we discussed earlier, agglomeration was measured in the same way as the entry order measure, that is, the number of Japanese subsidiaries in the FPN at the time of the new subsidiary founding. Economic geography
research has used the number of firms in a cluster (economic network) to measure the level of agglomeration (e.g., Folta et al., 2006).

Control Variables
Consistent with other international location studies (Zhou et al., 2002, e.g., Li, 2004), we include factor endowment as a control variable, which was measured using three items – GDP per capita, telephone lines and percentage of people with secondary education – which refers to economic resource, infrastructure and labor quality respectively in the local environment.

Also in line with previous studies on foreign subsidiary performance (e.g. Dhanaraj and Beamish, 2004, Delios and Beamish, 2001, Li, 1995, Mitchell et al., 1994, Pan and Chi, 1999, Shaver et al., 1997), we included various control variables. Industry has drawn much attention in explaining firm performance (e.g., McGahan and Porter, 1997). This study used a set of industry dummies based on the broad industry group. Parent firm size was controlled and measured by the log of the parent firm’s total assets. Parent firm resource profile including financial (ROA, ROS etc.), marketing (Advertising intensity and sales budget) and intellectual (R&D intensity and international experience) resources was also controlled.

Subsidiary size, measured by the log of the subsidiary’s capitalization at founding, and subsidiary age and entry mode influence performance (e.g., Woodcock et al., 1994, Pan and Chi, 1999); hence, these were included as control variables.

We also controlled for cultural distance between home and host countries, which was computed using the methodology outlined in Kogut & Singh (1988). Since countries have different regulations regarding equity ownerships of foreign subsidiaries, this study also controlled for local ownership restriction. Region was controlled due to the uneven distribution of Japanese subsidiaries across different geographic locations (Asia, North America, Europe, South America, Oceania, Africa and Middle East). Various host country environment factors including resource endowment, growth opportunities and openness to foreign businesses are also controlled. Exchange rate between U.S. dollars (USD) and Japanese Yen (JPY) was included as a control variable for both the temporal effects (Chung, 2006) and the effects of Japanese currency value on Japanese FDI.

4. Results and Analysis
Given the nature of the dependent variable, survival analysis using Cox regression was used to examine the exit risk of foreign subsidiaries; Since our dependent variable is exit risk for the survival analysis, a positive (or negative) coefficient in the model indicates a negative (or positive) relationship between the variable and foreign subsidiary survival. To test the curvilinear relationship, we created the square term for the entry timing and entry order variables. We followed a hierarchical approach to test these hypotheses. Results were reported in Table 1.
Table 1: Entry Strategy Consistency and Foreign Subsidiary Survival

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Industry</td>
<td>ind ***</td>
<td>ind ***</td>
<td>ind ***</td>
</tr>
<tr>
<td>2 Parent size</td>
<td>0.22 ***</td>
<td>0.21 ***</td>
<td>0.21 ***</td>
</tr>
<tr>
<td>3 Subsidiary size</td>
<td>-0.03 *</td>
<td>-0.03</td>
<td>-0.03</td>
</tr>
<tr>
<td>4 Subsidiary age</td>
<td>-1.53 ***</td>
<td>-1.56 ***</td>
<td>-1.53 ***</td>
</tr>
<tr>
<td>5 Cultural distance</td>
<td>0.07 ***</td>
<td>0.05 **</td>
<td>0.07 ***</td>
</tr>
<tr>
<td>6 Ownership restriction</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>7 Region</td>
<td>0.00 ***</td>
<td>0.00 ***</td>
<td>0.00 ***</td>
</tr>
<tr>
<td>8 Exchange rate</td>
<td>0.57 ***</td>
<td>0.56 ***</td>
<td>0.56 ***</td>
</tr>
<tr>
<td>9 Local opportunities</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>10 Local openness</td>
<td>0.16 ***</td>
<td>0.16 ***</td>
<td>0.15 ***</td>
</tr>
<tr>
<td>11 Financial resources</td>
<td>0.02</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>12 Marketing resources</td>
<td>-0.04 *</td>
<td>-0.05 **</td>
<td>-0.04 *</td>
</tr>
<tr>
<td>13 Intellectual resources</td>
<td>-0.23 ***</td>
<td>-0.23 ***</td>
<td>-0.23 ***</td>
</tr>
<tr>
<td>14 Entry mode</td>
<td>0.18 ***</td>
<td>0.18 ***</td>
<td>0.17 ***</td>
</tr>
<tr>
<td>15 Factor endowment</td>
<td>-0.63 ***</td>
<td>-0.57 ***</td>
<td>-0.57 ***</td>
</tr>
<tr>
<td>16 Entry timing</td>
<td>-0.15 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Entry timing²</td>
<td>-0.14 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Entry order</td>
<td></td>
<td>-0.18 ***</td>
<td></td>
</tr>
<tr>
<td>19 Entry order²</td>
<td></td>
<td>0.04 ***</td>
<td></td>
</tr>
</tbody>
</table>

Model Chi-square: 4849.2 *** 4936.1 *** 4906.4 ***
Degree of freedom: 27 29 29
-2 Log Likelihood: 56681 56631 56662
Change of -2 Log Likelihood: 132.6 *** 49.8 *** 18.4 ***

1. ***p<.01; **p<.05; *p<.10; two tailed tests
2. Industry and region as dummy variables, only the significance is reported.
3. Sample size (n=9,576)

We input the control variable first in model 1. As shown in Table 1, most control variables are significant. Since space is limited, we will not discuss each variable in detail. Generally they are consistent with previous studies. It is worth noting that local factor endowment was negatively associated subsidiary exit risk (-0.63) and was significant at p<0.01 level. This suggests that the higher the endowment level in the local environment, the more likely the entering subsidiaries survive. This is consistent with the previous location studies (e.g., Pan and Chi, 1999).

We argued in hypothesis 1 that entry timing had an inverted-U shaped (or U-shaped) curvilinear relationship with subsidiary survival (exit risk). To test this hypothesis, entry timing, entry order and their squared terms were plugged in Models 2 and 3 respectively. Both coefficients for the entry timing variables (-0.15, p<0.01; -0.14, p<0.01) in Model 2 were negative and significant, suggesting that the foreign subsidiary survival was positively associated with the time lapse since the first peer entry in the foreign market. This means that the survival likelihood of foreign entrants increases over time. In model 3, the two coefficients for entry order and the square term (-0.18 and 0.04, p<0.01) point to a U-shaped curvilinear relationship between entry order and subsidiary exit risk. Such a curvilinear relationship is illustrated in Figure 1.
Figure 1: Entry Timing and Foreign Subsidiary Exit Risk

As the figure shows, exit risk first decreases, but after an inflection point, the decreasing trend reversed itself. This means that entry followers are more likely to survive than are early movers. After passing the inflection point, late movers will be less likely to survive than will entry followers. This supports the inverted U-shaped curvilinear relationship between entry timing (order) and foreign subsidiary survival. Hypotheses 1 is supported.

Question arises. Why was the hypothesized U-shaped exit risk curve not found for the time lapse measure of entry timing? The answer lies in the difference between the two timing measures. The time lapse measure primarily captured the length of time that the foreign peer network as a whole has been presented in the host country. The longer they have presented in the host country, the more deeply they would be embedded in the external networks in the local environment, thereby, less likely to exit. The entry order measure, on the other hand, did not capture the temporal pace, but rather reflected the level (or scale) of the foreign presence. As we discussed earlier, it essentially measures the level of peer concentration or agglomeration in the local environment. Therefore, the U-shaped curve is a result of the struggle among three competing forces: legitimating, agglomerating and crowding (heighten competition among peers). Examining together the results for both the time elapse and entry order variables, we can offer two observations: 1) the relationship between entry timing and foreign entry performance is driven by multiple forces including first mover advantage or disadvantage, legitimating, agglomerating and crowding. Competition among these forces leads to a curvilinear relationship between entry timing and survival; 2) entry timing and the agglomeration aspect of the location attributes are interdependent. Location choices should be considered simultaneously with the timing decision. First mover (dis)advantages trade off with agglomeration effects.
5. Conclusion and Implications

We built a network-based foreign entry and survival model to integrate the previously separated research on the two dimensions of foreign entry strategy, timing and location, and investigated the interaction effects of these two dimensions on foreign subsidiary survival. Using a large sample of Japanese MNEs’ nearly 10,000 foreign market entries worldwide, we found an inverted-U-shaped curvilinear relationship between entry timing (location-agglomeration) and foreign subsidiary survival. This suggests that the effects of foreign entry timing and location on foreign entry survival are interdependent. Such results help explain the foreign entry strategy paradox. First mover advantages trade off with the agglomeration effects in affecting foreign entry performance. They won't take effects at the same time. A conclusive suggestion is to consider both entry timing and location choices simultaneously when making foreign entry decisions.

This paper makes several contributions to the current strategy and international business research. It is the first study trying to theoretically integrate the two dimensions of foreign market entry and empirically link the interactions among entry timing and location with foreign subsidiary performance. In doing so, it provides a clearer and more complete picture of the foreign entry phenomena and enriches our understanding of the impact of foreign entry decisions on foreign subsidiary performance. This may in partial solve the puzzle whether and when first mover advantages or agglomeration effects matter more for firm performance (Ketchen et al., 2004). This study also contributes to strategic alignment theory. In addition to extending the application of strategic alignment theory to international strategy research, we introduce a new alignment concept: strategy consistency, which is defined as the alignment among the different components of the same strategy, for instance, the two dimensions of foreign market entry strategy. Our study suggests that strategic consistency is also critical for foreign subsidiary performance. This paper also contributes to the network paradigm by mapping out major international networks in the foreign market entry context. Our network-based conceptualization of foreign market entry using foreign peer networks enriches understanding of the development process of a network, which has been lack in current network research.

This paper also has important implications for managers. Entry timing and location decisions are interdependent. To achieve better performance, managers need to consider simultaneously entry timing and the target market’s location conditions. As far as exit risk or survival is concerned, if there are very few peer firms in the target foreign market, it would pay off to wait for the presence of peer firms reaching certain scale in that foreign market. A critical mass of peer firms (agglomeration) help new entrant to survive. However, it should not wait for too long but enter the market before it is saturated. Of course, if the resources in the target market are quite rich, entry timing or the agglomeration level in the market matters much less.

There are also limitations in this paper. First, our study was at the country level, which might be too macro a level to operationalize the foreign peer network concept and the corresponding entry strategy measures. The regional differences within a large country may be larger than the differences between countries. The country level studies have aggregation problems (Makino et al., 2004). Future studies using data at the sub-national or at the even more micro-levels would be appropriate. Second, we only examined the foreign subsidiary’s survival. Previous research suggested that entry timing effects hinge up which performance measures are examined (Luo, 1998, Mitchell, 1991).
studies including other performance measures such as financial or market performance will be valuable. Third, our entry timing and entry order measures were based upon the one year time interval. Since firms may enter a foreign market in bunches (Knickerbocker, 1973), our measures could not capture the entry timing variance within a year. Future studies using a shorter time span such as months or even days will be preferable. Finally, our sample only included subsidiaries of Japanese MNEs, which limits the generalizability of this study. However, because our study was at the subsidiary level and the data covered over 40 host countries, this limitation is not a very large concern for us. A promising next step is to replicate such a study using MNEs from multiple countries.

References


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