

**Emerging Economy Multinationals as Reference Groups: Institutional Environments
and Investment in China**

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Abstract

This study addresses the internationalization process of multinational firms from emerging economies, including those from Asia and outside of Asia, in investing in one of the leading emerging markets, China. Drawing on the institutional perspective, this study examines two research questions: 1) how mimetic influences from different FDI reference groups affect foreign market entry behavior of firms from emerging economies; and 2) how the imitative mechanism varies according to the institutional environments in the host and the home market. Data on the foreign-invested manufacturing ventures in China set up by multinational firms from emerging economies (Asia and non-Asia) provides the empirical context for our investigation of mimetic impacts from different reference groups and the interactions of the home and the host institutional environments on international expansion.

Key words: Reference groups, Asia, Emerging economies.

Factors triggering the foreign expansion of firms have received extensive attention in the international management literature. The extant research in this field has embraced the economic perspective that views cost minimization as a driving force (see Caves, 1996 for a review), the capability-based perspective that emphasizes capability building as an inducement (e.g., Chang, 1995; Song, 2002), and more recently, macro organizational perspectives such as the institutional theory and organizational ecology to the study of international market entry (e.g., Guillén, 2002). These studies contribute substantially to our understanding of reasons for multinational corporations (MNCs) to expand into foreign arenas. However, they fall short in explaining the pattern of international entry of firms from emerging economies and the institutional contexts upon which the pattern is contingent (see also Peng, Wang, & Jiang, 2008).

Research drawing on the institutional perspective has flourished since the 1970s (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Although the isomorphic pressure faced by organizations has long been a central focus for researchers in this field, the literature may have overlooked the potentially momentous role of wide-ranging institutional transitions in shaping organizational behavior (Oliver, 1992; Peng et al., 2008). Because the feature of emerging economies is institutional change, characterized by “fundamental and comprehensive changes introduced to the formal and informal rules of the game that affect organizations as players” (Peng, 2003: 275), research on emerging economies could contribute to a deeper understanding of the dynamic interactions between institutions and organizations in large-scale institutional transitions (Hoskisson, Eden, Lau, & Wright, 2000; Peng et al., 2008; Wright, Filatotchev, Hoskisson, & Peng, 2005). However, focusing predominantly on multinationals from developed economies, mainly Europe, Japan, and the United States, the international management literature has not attached adequate importance to emerging economies (Hoskisson et al., 2000). Even in those limited number of studies

addressing emerging economies, their focus so far has been on a limited number of countries such as China, Korea, and those from Eastern Europe. Given the notable variations in the degree of economic and institutional development among the 64 countries that have been identified as emerging economies (Hoskisson et al., 2000), more research is necessary to broaden our understanding of the pattern of international expansion of multinationals from dissimilar emerging economies.

Furthermore, past studies in the international management literature have not systematically explored how contextual differences in the institutional environment shape foreign expansions, e.g., mimetic strategies resulting from isomorphic pressures. Prior research has documented the crucial role played by institutional frameworks in the host market in shaping FDI location decisions and entry mode choices (Delios & Henisz, 2000, 2003; Henisz & Delios, 2001), yet with insufficient attention to the heterogeneities across MNC home countries. Recent work by Wan and Hoskisson (2003) has suggested that home country institutional environments with different levels of munificence have significant implications for the performance of internationalization. By considering both the home and the host institutional contexts, this study helps to provide a better understanding of how contextual differences shape the pattern of international expansion from an institutional perspective.

The current study has two objectives. First, we identify sources of influences at the level of foreign direct investment (FDI) reference group on the FDI entry decisions. We investigate the strength of the impacts of prior investments from different reference groups of firms in an emerging economy, on the regional market entry behavior of foreign firms in a sub-national context. In particular, FDI reference groups are defined depending on whether MMC subunits are from the same home country, from other emerging economies (Asia or non-Asia) or from developed economies (Asia or non-Asia). Second, we study the contingent

factors of the different kinds of imitative strategies by examining two dimensions of the institutional environment in which MNCs are embedded, environmental dynamism and complexity. Specifically, we investigate the environmental dynamism associated with the presence of political institutions that induce policy unpredictability in a host market (Henisz & Delios, 2001) and environmental complexity related to the dissimilarity of the institutional profiles between a home and a host country (Kostova, 1999; Kostova & Zaheer, 1999).

We thus have two research questions for the current study: 1) how mimetic influences from different FDI reference groups affect foreign market entry behavior of firms from emerging economies; and 2) how the imitative mechanism varies according to the institutional environments in the host and the home market. Our investigation of mimetic impacts from different reference groups parallels to recent recognition that the types of firms constituting a regional network are heterogeneous and create varying degrees of externalities (Chang & Park, 2005). By incorporating the home and the host institutional environments into the study of international expansion, our study promises to contribute to the question of how environmental dynamism and complexity moderate the adoption of mimetic strategies.

THEORETICAL BACKGROUND

FDI Reference Groups

Building on the literature on strategic groups, we identify several strategic groups which can serve as reference points for multinationals to make foreign market entry decisions. Strategic groups are defined as clusters of firms that are comparable in key strategic aspects (Caves & Porter, 1977; Hunt, 1972). The notion of strategic groups allows firms to specify rivals and position themselves within industries, which makes more sense of competition (Hatten, Schendel, & Cooper, 1978; Porter, 1980). Strategic group could also act as reference points for group members to make decisions in the following ways (Fiegenbaum

& Thomas, 1995). Inter-firm mimicry and signaling enable strategic group members to tune their strategies toward an appropriate group reference point and formulate strategic moves in concert (Porter, 1980). Additionally, through inter-group comparisons group members reposition their strategies by viewing other strategic groups as benchmarks (Kumar, Thomas, & Fiegenbaum, 1990). The recognition of strategic groups as reference points is further reinforced by institutional and ecological mechanisms, which propose that collections of firm-level strategic recipes could provide legitimization to the action and generate isomorphic pressures (DiMaggio & Powell, 1983; Hannan & Freeman, 1977).

In the context of FDI, MNCs belonging to the same strategic group are imitating targets with regard to each other, thus playing significant roles in affecting each other's entry decisions. We further identify several reference groups based on the multinational's country of origin, which has previously been applied for defining recognizable populations of organizations (Guillén, 2003; Yiu & Makino, 2002). In this study, in addition to the multinationals from the same home country, we develop a four-cell typology of the cognitively related FDI reference groups to a focal firm from an emerging economy in a particular host market: 1) multinationals from emerging economies (Asia or non-Asia); and 2) multinationals from developed economies (Asia or non-Asia). The focus in this study was on the rate at which MNCs from emerging economies enter a host market, which is proposed to be affected by prior entries from different reference groups.

We identify reference groups based on whether MNCs are from the same home country or from emerging economies for the following reasons. First, originally embedded in identical factor and institutional environments, multinationals from the same home country tend to have similar organizational structures and to possess comparable resources, thereby facilitating collective strategic moves (Wan & Hoskisson, 2003). Hence we regard multinationals from the same home country as one reference group. Second, given that

emerging economies are “low-income, rapid-growth countries using economic liberalization as their primary engine of growth” (Hoskisson et al., 2000: 249), multinationals from emerging economies are normally regarded as residing in less munificent resource environments compared to firms from developed economies. When investing in other emerging economies, MNCs from emerging economies are more likely to formulate similar exploitative strategies (Wright et al., 2005), owing to the readily transfer of resources and capabilities to a host emerging market, which is likely to be in similar institutional settings to their home markets (Lee & Beamish, 1995; Pananond & Zeithaml, 1998). Consequently, foreign subunits from emerging economies could be viewed as within a large reference group. Third, all multinationals, either from emerging economies or from developed economies, suffer from the liability of foreignness and the limited market opportunities enforced by the domestic government, relative to domestic firms (Kostova & Zaheer, 1999; Nachum, 2003; Zaheer, 1995; Zaheer & Mosakowski, 1997). Conceiving all foreign subsidiaries in a host market as cognitively related, we also identify the population of foreign firms from developed economies as a large reference group for firms from an emerging economy. Finally, we further differentiate between Asian and non-Asian firms within each reference group. The cultural distance between China and other Asian countries is likely to be relatively low, compared with the distance between China and non-Asian economies (Hofstede, 1980).

Institutional Environment: Dynamism and Complexity

Organizations are entrenched in a “milieu”, representing external conditions, consisting of technological, economic, and institutional environments, over which the organization has limited control (Scott, 2001). Following institutional economists, most notably North (1990), we focus on institutions, or “the rules of the game” that play a central role in regulating business activities by prescribing a country’s incentive structures. Drawing

on insights from Dess and Beard (1984), we specify two principal dimensions of MNCs' institutional environment: dynamism and complexity. Both dimensions have been studied by organizational theorists in a variety of contexts (e.g. Pfeffer & Salancik, 1978; Scott, 2001) and both are proposed to be related to hazards of organizations. Yet little is known about how these two dimensions of institutional environments shape patterns of foreign expansions and adoption of imitative strategies in FDI.

Defined as an absence of a pattern, dynamism is “restricted to change that is hard to predict and that heightens uncertainty” (Dess & Beard, 1984: 56). Coping with such uncertainty has long been noted as the fundamental nature of the administrative process (Thompson, 1967). For instance, organizational learning researchers contend that organizations must make sense of the noisy information from the environment (Cohen & Sproull, 1996; Weick, 1979). Institutional theorists also maintain that organizations tend to avoid uncertainty by following social rules (Meyer & Scott, 1983). In the FDI setting, a multinational faces substantial uncertainty about investment conditions in a host market and must successfully counteract it so as to achieve the desired performance level (Martin, Swaminathan, & Mitchell, 1998). Much of the literature suggests that environmental unpredictability is one of the best measures of dynamism (Dess & Beard, 1984). Among those kinds of unpredictability faced by multinationals, we highlight the unpredictability derived from the presence of political institutions and related to the credibility and effectiveness of a country's policies.

An organization's environment is proposed to be complex to the extent that it must keep track of heterogeneous actors and activities outside its borders (Dess & Beard, 1984; Scott, 2001). Complex environments are found to be hazardous to organizations because they are difficult to monitor and explain (Thompson, 1967). For a multinational, the complexity of an MNC environments is reflected “in the multiple domains of the institutional environments

and in the multiplicity of institutional environments faced by MNCs” (Kostova & Zaheer, 1999: 67). An important facet of the variety of the institutional environments in which MNCs are embedded is the institutional distance between the host and the home country, reflecting the extent of dissimilarity between the institutional profiles of the two countries (Kostova, 1999, Kostova & Zaheer, 1999).

HYPOTHESES

Impacts of Different Reference Groups

Economists have long noticed the potential benefits of organizational agglomeration, such as increased accessibility to specialized factors, augmented technological spillovers, enhanced cooperative opportunities, and so on (Marshall, 1920; Porter, 1980). Consequently organizations are proposed to tend to locate in a place where many peers have made investments. Besides this economic rationale, the institutional perspective emphasizes the legitimacy benefits of organizational mimetic entry. The imitation of prior entry behavior by other organizations is argued to provide legitimization to a similar behavior (DiMaggio & Powell, 1983). For multinationals, the importance of this social consideration is increased owing to high levels of uncertainty in FDI (Scott, 2001). Moreover, bounded rationality and information asymmetry assumptions make firms more likely to imitate others that are easily observable, similar to themselves, or socially prominent (Haunschild & Miner, 1997). Therefore, foreign investors who are eager to fit in with the host country environment tend to follow previous FDI entries (Guillén, 2003; Yiu & Makino, 2002). This isomorphic tendency is likely to be particularly strong among foreign investors from the same home country, as they are bonded by similar identity and inclined to pay more attention to each other (Chang & Park, 2005; Guillén, 2002; Henisz & Delios, 2001). Hence, the FDI entry rates will be

enhanced with an increasing number of MNC entries from the same home country in a particular location.

This isomorphic mechanism tends to operate across national borders (Hannan, Carroll, Dundon, & Torres, 1995), but many prior studies have been unable to examine this broad effect because of the "boundary specification problem" (Laumann, Marsden, & Prensky, 1989). Lee and Pennings (2002), for example, proposed that the diffusion of the partner/associate organizational form within the Dutch accounting sector could be influenced by how foreign accounting firms were structured. While their study could not investigate these influences due to data limitations, they suggested that these higher-level processes should be explored in future studies. In this study, we examine the cross-national mimetic influence on the entry behavior of firms from an emerging economy by decomposing all foreign firms of different nationalities into four cells: those from other emerging economies (Asia or non-Asia), and those from developed economies (Asia or non-Asia). Therefore the FDI entry rate of firms from an emerging economy is hypothesized to be enhanced with the increasing entry by foreign investors from five reference groups: 1) the same home country; 2) from other emerging economies (Asia or non-Asia); and 3) from developed economies (Asia or non-Asia).

Accordingly, we propose:

Hypothesis 1a: The FDI entry rate of firms from an emerging economy into a given location in China increases as the number of FDIs already established by firms from the home country increases.

Hypothesis 1b: The FDI entry rate of firms from an emerging economy into a given location in China increases as the number of FDIs already established by firms from other emerging economies (Asia or non-Asia) increases.

Hypothesis 1c: The FDI entry rate of firms from an emerging economy into a given location in China increases as the number of FDIs already established by firms from developed economies (Asia or non-Asia) increases.

The strength of the influences emanating from the five FDI reference groups may, of course, be different. The impact from FDIs from the same home country is expected to be the greatest among the five reference groups. Given that each country is characterized by distinctive culture, some experiential knowledge generated by a firm may be country specific (Hofstede, 1980) and may not be easily transferable among organizations with different national origins (Chang & Park, 2005). Additionally, a firm may be inclined to pay more attention to the actions of those firms from the same nation when searching for information cues. This home country-based mimicry in molding market expansion has been emphasized in the international management literature (Guillén, 2002; Henisz & Delios, 2001).

We also expect that the strength of the impact of firms from other emerging economies (Asia or non-Asia) is greater than that from developed economies (Asia or non-Asia). Established in similar economic and institutional contexts, multinationals from emerging economies face a low knowledge gap with respect to each other which eases spillover across them. For instance, Lee and Beamish (1995) found that Korean firms can readily transfer their knowledge to other emerging economies. Further, trait-based imitation proposes that the practices of the population enjoying high status or high similarity to a focal firm receive extra weight in mimetic strategies (Fombrun & Shanley, 1990; Haveman, 1993; Haveman & Rao, 1997; Strang & Tuma, 1993); therefore organizations from emerging economies tend to observe each other for making decisions. Applying this logic to our five reference groups, the organizational population from the same home country would be expected to exert a stronger influence than the other four reference groups and the population from other emerging economies (Asia or non-Asia) is likely to have a stronger impact than that from developed economies (Asia or non-Asia). Therefore,

Hypothesis 1d: The effect of prior FDIs from the same home country on the FDI entry rate of firms from an emerging economy into China will be stronger than the effects of FDIs from other emerging economies (Asia or non-Asia) or developed economies (Asia or non-Asia).

Hypothesis 1e: The effect of prior FDI from other emerging economies (Asia or non-Asia) on the FDI entry rate of firms from an emerging economy into China will be stronger than the effects of FDI from developed economies (Asia or non-Asia).

Moderating Impacts of Institutional Environment

The present study also examines how the imitative mechanism varies according to the institutional environments in the host and the home market. Two dimensions of the institutional environment are considered: environmental dynamism in the host market stemming from the presence of political institutions that induce policy uncertainty, and environmental complexity derived from the institutional distance between the home and the host country which affects the difficulty of understanding and coping with local institutional environment. For foreign expansion decisions, the role of both types of hazard is vital (Delios & Henisz, 2000, 2003; Henisz & Delios, 2001; Kostova, 1999; Kostova & Zaheer, 1999). The interactions between the two dimensions of institutional environment and the indicators of inter-organizational mimicry were estimated to test their hypothesized effects on FDI market entry decisions.

Host location policy uncertainty. Environmental uncertainty, “the degree to which future states of the world cannot be anticipated and accurately predicted” (Pfeffer & Salancik, 1978: 67), is predicted to be a significant dimension of the context that impacts organizations’ responses to institutional influences (Oliver, 1991). With an increased level of environmental uncertainty, organizations are motivated to follow others so as to conform to institutional demands and obtain legitimacy (Meyer & Rowan, 1977; Oliver, 1991). Consistent with this institutional logic, organizational learning theory also proposes that one prominent strategy for firms to mitigate uncertainty is mimetic learning (Levitt & March, 1988). In general the fundamental idea is that environmental uncertainty enhances the importance of social criteria (Abrahamson & Rosenkopf, 1993; DiMaggio & Powell, 1983;

Festinger, 1954; Haunschild & Miner, 1997). The greater the uncertainty, the less inclined organizations are to look internally for solutions, and the more heavily organizations rely on social bases for making decisions (Festinger, 1954). Because the frequency of a practice adopted by other firms represents social factors, the impact of the counts of other firms from the same home country, other emerging economies, and developed economies entering a location, is expected to be greater under conditions of environmental uncertainty. In this study we mainly concentrate on environmental uncertainty associated with the presence of political institutions in the host market which affects the credibility of a country's bureaucratic infrastructure (Bergara, Henisz, & Spiller, 1998). When status-quo policies in a host market are volatile due to changes in the preferences of existing policymakers and few constraints on policy alteration, firms would face a high level of policy uncertainty (Delios & Henisz, 2000; Henisz & Delios, 2001). Consequently, we predict that

Hypothesis 2a: The number of prior FDI's already established by firms from the same home country on the FDI entry rate of firms from an emerging economy into a given location in China will be strengthened for markets with a high level of policy uncertainty.

Hypothesis 2b: The number of prior FDI's already established by firms from other emerging economies (Asia or non-Asia) on the FDI entry rate of firms from an emerging economy into a given location in China will be strengthened for markets with a high level of policy uncertainty.

Hypothesis 2c: The number of prior FDI's already established by firms from developed economies (Asia or non-Asia) on the FDI entry rate of firms from an emerging economy into a given location in China will be strengthened for markets with a high level of policy uncertainty.

It is noted that our hypotheses go beyond the research on policy uncertainty and imitation by Henisz and Delios (2001). Based on a sample of foreign firms from one developed economy (ie, Japan) which made investment decisions across multiple countries, their study found that organizational strategies of imitation were not influenced by the extent of policy uncertainty in a host country. Differently, we examine the sub-national FDI entry

rates from multiple emerging economies into China, another emerging economy. Owing to the fact that the state normally possesses a legal monopoly on coercion and the institutional environment is of high variance in emerging economies, multinationals face heightened exposure to expropriation hazards. Therefore the establishment of legitimacy and the alleviation of political hazards are a more important matter of concern for foreign firms in emerging economies than in developed economies. The accumulation of host country experience and industry experience was found to enhance the abilities of organizations to mitigate such hazards (Delios & Henisz, 2000). We further argue that the agglomeration of foreign firms in one specific location could generate network externalities to reduce hazards (Chang & Park, 2005) because of the legitimacy spillovers across organizational boundaries and the inter-organizational learning of hazard-mitigating capabilities. Therefore the more politically hazardous a host market, the more likely organizations follow other firms in FDI entry decisions so as to exploit the above mentioned externalities.

Home country institutional distance. While host market policy uncertainty arises from unpredictability about future regulative or macroeconomic policies in host environments (Henisz & Delios, 2001), the institutional distance between the home and the host country emphasizes the difficulty of a foreign multinational to comprehend and respond to local institutional environments (Kostova, 1999; Kostova & Zaheer, 1999). Researchers propose that institutional distance has constituted a threat for multinationals to transfer routines across countries (Kostova, 1999), and to build legitimacy in a host market (Kostova & Zaheer, 1999). The greater the institutional distance, the greater the challenge of acquiring legitimacy in the local environment. Therefore in an institutional distant environment, organizations may try to gain legitimacy by complying more with other firms' entry decisions.

However this mimetic process can be highly selective, in that the practices of some subsets of the population weight more than others. That is, when encountered with high

institutional distance, multinationals rely more on firms from other countries as reference groups, but attach less importance to organizations from the same home country. This is because certain traits, e.g., the prestige or the status of the organizations adopting a practice, influence subsequent mimicry by others (Haunschild & Miner, 1997; Strang & Tuma, 1993). Given that foreign subunits from the same country of origin which is institutional dissimilar from the host market face similarly high levels of legitimacy concerns, they are normally regarded as of lower status in the host environment. Because organizations are less motivated to imitate lower-status organizations (Fombrun & Shanley, 1990), we hypothesize that the impact of prior investments from the same home county on the FDI entry rates will be weakened with increased institutional distance. Combining the above arguments, we predict that:

Hypothesis 3a: The number of prior FDIs already established by firms from the same home country on the FDI entry rate will be weakened for firms from countries with a high level of institutional distance with China.

Hypothesis 3b: The number of prior FDIs already established by firms from other emerging economies (Asia or non-Asia) on the FDI entry rate will be strengthened for firms from countries with a high level of institutional distance with China.

Hypothesis 3c: The number of prior FDIs already established by firms from developed economies (Asia or non-Asia) on the FDI entry rate will be strengthened for firms from countries with a high level of institutional distance with China.

RESEARCH METHODS

Sample and Data Sources

The hypotheses were tested using data covering all foreign-invested manufacturing ventures established in China over the period 1979-95, by multinationals from 32 emerging economies (Hoskisson et al., 2000). Several factors make China an excellent setting for the study. First, inter-organizational influences on decision making in FDI can be followed from the beginning of China's economic transition. Second, China's institutional context during the study period was widely considered as complex, with high uncertainty (Child, 1994).

Under high environmental uncertainty, social considerations are likely to be of critical importance (Scott, 2002). This is particularly salient of FDI location decisions, because uncertainty created by a firm's lack of information about unfamiliar locations can be reduced by observing and imitating other firms' choices.

During the study period, multinationals from 32 emerging economies launched a total of 17,337 manufacturing subsidiaries across 28 provinces and municipalities in China. We focused this study on foreign entries in manufacturing industries, excluding those in service sectors where the government tended to have more restrictions on foreign ownership (Fu, 2000). Focusing on the manufacturing industries also allowed us to compare our results with other recent studies of FDI in China (e.g., Chang & Park, 2005; Guillén, 2002).

Three main data sources were used in this study. Raw data on direct investment in China by MNCs from emerging economies was obtained from the research institute of the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) in Beijing. This database contains brief profiles on each foreign-invested firm that has operated in the country from 1979-95, providing data on the location, industry, and national origin of the investment. The second main data source, *China Statistical Yearbook*, was used to collect data on all location level and some industry level control variables such as province level trade growth, and industry R&D intensity. It was also used to derive one of the two moderators, location level policy uncertainty. The third, the political hazard index developed by Henisz (2002) was used to identify country level institutional profile and to calculate investing country's institutional distance with China, another moderator in our study.

The level of analysis of this study – the industry-home country-host location level – facilitated a focus on the emergence of foreign subsidiaries by considering all potential agents, which was consistent with the conceptual framework. The foreign entry data was first aggregated from the subsidiary level to the home country, industry and host location level.

Hence, the potential number of country-industry-location-year combinations is 401,408 (32 countries x 28 industries x 28 locations x 16 years). Following the lead of previous studies, the first year of FDI entry in the home country/industry data was taken as the beginning of the observation (Carroll & Hannan, 2000; Henisz & Delios, 2001). The final sample consisted of 8,716 home country-industry-location-year cells. In order to correct for a potential bias of excluding country-industry cells without any FDI entries in China, we apply a two-stage sample selection technique (Polillo & Guillén, 2005). In the first stage, we estimate the probability of non-zero investments for the country-industry-location pair during year t ¹. In the second stage, we include the estimated probability as a control variable to predict the FDI entry rate. By controlling for this potential selection bias, we are confident that our results are robust and not biased because of sample selection issues.

Variables and Measures

Dependent variable. The dependent variable, *FDI entry rate*, was measured as the number of FDI entries per year in a particular province in an industry from a home country.

Independent variables. All independent variables were lagged one year ($t-1$) for predicting FDI entries in the following year. To investigate the effects of the five FDI reference groups, density measures were calculated within the bounded FDI reference groups. *Same country FDI density* was measured by the total number of FDIs from the same home country in the same industry in the previous year. *Emerging economy FDI density* was measured as the total number of FDIs from all other emerging economies in the data set in the same industry in the previous year. *Emerging economy FDI density* was further decomposed into two subgroups: *Asian emerging economy FDI density*, measured as the total

¹ We estimated the following probit model using the longitudinal data set of 25,088 country-industry-location pairs (32 countries x 28 industries x 28 provinces) over 16 years, where the numbers in parentheses are the standard errors of the coefficients: probability of inclusion in the sample = $-2.87(0.02) + 2.92 \times \text{GDP growth}(0.04) + 0.35 \times \text{trade growth}(0.01) + 0.95 \times \text{sales volume}(0.07) - 0.02 \times \text{concentration ratio}(0.001) + 0.01 \times \text{advertising intensity}(0.003)$.

number of FDIs from all Asian emerging economies in the data set in the same industry in the previous year, and *non-Asian emerging economy FDI density*, measured as the total number of FDIs from all non-Asian emerging economies in the data set in the same industry in the previous year. *Developed economy FDI density* was measured as the total number of FDIs from developed economies in the data set in the same industry in the previous year.

Developed economy FDI density was further decomposed into two subgroups: *Asian developed economy FDI density*, measured as the total number of FDIs from all Asian developed economies in the data set in the same industry in the previous year, and *non-Asian developed economy FDI density*, measured as the total number of FDIs from all non-Asian developed economies in the data set in the same industry in the previous year.

To test the moderating effects, the interactions of *host location policy uncertainty* and *home country institutional distance* from China were added separately with five FDI group densities. To measure the home country institutional distance from China, we obtained yearly information on country level political hazards from Henisz (2002) as one proxy of country institutional profile. We then calculated the distance of political hazards between the investing home country and China. To measure host country environmental uncertainty across provinces in China, we developed a new index of policy uncertainty at the provincial level. We believe that capturing policy uncertainty at this more refined level is necessary because China's institutional environment was heterogeneous during the period of study such that regions differed greatly from one another in market size, technology base, political institutions, and even culture (Chang & Park, 2005). Since the economic reform in late 1970s, much of economic decision making power in China had been decentralized to the provincial government levels (Zhao & Zhang, 1999). To develop this new policy uncertainty index at the provincial level, we factor analyzed variables which capture China's formal and informal institutions (North, 1990) as they are relevant to FDI decisions.

All variables for interactions were mean-centered.

Control variables. We included in the models four sets of control variables: home country, host province, industry, and entry year. To control for possible MNC home country heterogeneities, we included two home country-level control variables, *GDP per capita* and *import flow with China* in the models. Information on investing country's trade flow with China was obtained from Freenstra (2000). Most prior research on FDI entry rates has traditionally embraced an economic perspective, emphasizing location factors such as market potential, economic growth, and trade (Broadman & Sun, 1997; Cheng & Kwan, 2000; Coughlin & Segev, 2000). Therefore provincial *GDP*, *GDP growth*, *trade growth*, and *population* in each year were included in the models. We also controlled for three industry-level variables, *industry concentration ratio*, *R&D intensity*, and *advertising intensity*. To account for industry competitive structure, we included in the models *industry concentration ratio*, measured as the percentage of industry revenues in China accounted for by the eight largest firms. The data came from *China's Top 100 companies across industries*, which covers the period 1992-95. A four-year average of this ratio was used in the models. Industry *R&D intensity* and *advertising intensity*, measured as R&D and advertising expenditures as a percentage of sales, were included in the models to control for technology-driven differences in investment levels across industries (Song, 2002).

In all our models, we also added host location, home country, industry, and year dummies to control for unobserved heterogeneities.

RESULTS

Since significant intercorrelations were found among a number of the density variables, any potential multicollinearity was further investigated using variance inflation factors (VIFs). The maximum VIF obtained in any of the models was substantially below the

rule-of-thumb cutoff of 10 for regression models (Ryan, 1997). Therefore, multicollinearity was not considered an important issue for these results.

----- Insert Table 1 here -----

Table 1 reports the results of negative binomial regressions (Greene, 1996) modeling the entry rate of FDIs from the same home country entering a particular industry, incrementally adding the theoretical variables of interest. While Models 1 to 7 included FDI reference groups without differentiating Asia from non-Asia, Models 8 to 16 decomposed emerging economy FDI density into Asian and non-Asian emerging economy density, and developed economy FDI density into Asian and non-Asian developed economy density.

Model 1 and Model 8 show effects from the FDI reference groups. The coefficient for FDI density from the same country is positive and significant, supporting Hypotheses 1a. The coefficient for FDI density from the other emerging economies is also positive and significant (Model 1). We further differentiate Asian from non-Asian emerging economies in Model 8, the results show that the coefficient for FDI density from Asian emerging economies is positive and significant, but the coefficient for non-Asian emerging economies is not significant, partly supporting Hypothesis 1b. This suggests the rate at which MNCs from emerging economies enter a host market was affected by prior entries from the reference group of Asian emerging economies, but not from the group of non-Asian emerging economies. The coefficients for FDI density from developed economies (Asia or non-Asia) are negative, contradicting Hypothesis 1c. Therefore, competition exists between firms from emerging economies and firms from developed economies. As competition among organizations drawing on the same resource base is systematically linked to economic adversity and organizational failure (Hannan & Freeman, 1989), there might be a negative effect on the entry rate as the number of FDIs already established from developed economy increases. To test Hypothesis 1d and 1e, Wald tests were conducted comparing the strength of

the legitimating influences from the three FDI reference groups (Greve, 2002), and same country FDI density was indeed found to have the strongest legitimating impact on the FDI entry rate. The effect of emerging economy FDI density was in the middle, and the effect of developed economy FDI density was the weakest (Table 2). Therefore, H1d and H1e are supported.

Models 2-7 and Models 9-16 showed individual interactions between the investment count measures in the FDI reference groups and the host location policy uncertainty and home country institutional distance indicators. The significant Chi-square changes over the baseline model suggest that the theoretical variables add significant value to the effects that have been explored in previous studies. Due to collinearity among the interactions, we do not report a model showing all interactions entered simultaneously. The coefficient estimates on the interactions between the counts of prior FDIs from same country, other emerging economies and other developed economies and the provincial policy uncertainty measure are all positive, supporting H2a, 2b and 2c. It shows that with the increase of policy uncertainty in the host environment, MNCs are inclined to imitate other's FDI entry decisions. In addition, host country institutional distance with China is found to significantly moderate the impact of the FDI counts from the same home country and from Asian emerging economies on the FDI entry rates. The higher the level of home county's institutional distance with China, the less likely MNCs follow other firms from the same home country in the FDI entry decisions, but the more likely they imitate entry behavior of foreign firms from Asian emerging economies, supporting H3a and partly supporting H3b. The coefficient estimates on the interactions between the counts of prior FDIs from developed economies and the institutional distance measure are not significant, hence H3c is not supported.

Several control variables representing other factors suspected of influencing the rate of FDI entries also showed the expected effects. MNCs from countries with high trade status

with China and high level of GDP per capita were found to incline to make investments in China. As expected, significant effects were also found related to industry concentration ratio. Local industry concentration was negatively related to the entry of FDIs in China. MNCs may avoid entering industries dominated by a few large domestic players. Furthermore, our two-stage model controlling for the probability of sample selection verified the robustness of our results.

DISCUSSIONS

This study addresses the internationalization process of multinational firms from emerging economies, including those from Asia and outside of Asia, in investing in one of the leading emerging markets, China. The trend is clear that emerging economy firms are becoming important participants in the global economy, where these new multinationals use each other as reference points in their international market entry decisions. They do, however, face the competition from the more established incumbent multinationals from developed economies in this internationalization process, as shown clearly from our key findings.

Drawing on the institutional theory perspective, this study has examined two research questions related to how mimetic influences from different FDI reference groups affect foreign market entry behavior of emerging economy firms; and how the imitative mechanism varies according to the institutional environments in the host and the home market. Our study contributes to the research on international expansion of emerging economy multinationals, by investigating mimetic impacts from different reference groups and the interactions of the home and the host country institutions. By examining two dimensions of the institutional environment (host location policy uncertainty and home country institutional distance), this study improves the understanding of how institutional forces shape organization strategies in

emerging economies (Hoskisson et al., 2000; Shenkar & von Glinow, 1994; Wright et al., 2005).

Second, we contribute to the literature on reference groups and identities by showing that the strength of the impacts of prior investments from different reference groups varies in emerging economies. Specifically, multinationals from emerging economies are more likely to be influenced by prior entries from the same country of origin than from other countries, and more prone to follow entries from other emerging economy firms than those from developed economies. Prior investments by developed economy firms even deter the new entries of emerging economy multinationals, suggesting that intensified competition from developed economy firms outweighs the potential spillovers from agglomeration and legitimation in foreign market entry. Hence, one of the key challenges for emerging economy firms is how to catch up as their developed economy peers are likely to be endorsed with superior resources and capabilities.

Third, we have investigated the role of Asian firms, both from emerging and developed economies, in influencing the globalization of emerging economy multinationals. Asian emerging economy firms serve as key reference points for other emerging economy multinationals in their foreign investment decisions in China. While this might not be surprising, it is important to understand that this is not a simple cultural similarity story, as assumed in most of early studies. As we have demonstrated, Asian developed economy firms actually had a competitive and deterring effect on China investment decisions of emerging economy multinationals. Instead, the positive effect of Asian emerging economy firms lies in both the institutional and cultural similarities, which provide them with insights and understanding of investing in China, as compared to non-Asian emerging economy firms.

Finally, by exploring sub-national level policy uncertainty, our study sheds new light on how within-country institutional differences affect FDI provincial-level location decisions.

Indeed, location has received little attention in recent years, leading Dunning (1998) to call it 'the neglected factor' of the OLI framework (Ownership advantages, Locational advantages, and Internalization incentives). When studying the location decisions of multinationals, the international business literature has largely focused on countries as the unit of analysis and examined how country-level institutional variables influence the selection of host countries (Globerman & Shapiro, 2003; Loree & Guisinger, 1995; Oxelheim & Ghauri, 2004), without paying much attention to location decisions within countries. The specific location of operations is a major concern to multinational firms (Shaver & Flyer, 2000) and is of particular importance in large and decentralized emerging markets where policies vary at the provincial or even local level (Head & Ries, 1996; Zhou et al., 2002). Such subnational-level institutions within a country, in addition to the national institutions, influence foreign entry location strategies (Meyer & Nguyen, 2005). By capturing institutional difference across provinces within China and developing a new index of provincial-level policy uncertainty, our study thus improves our understanding of the relationship between institutions and location decisions at a more refined level.

Limitations and future research

Several limitations of the study suggest promising areas for future research. First, this study examined the early stages of foreign direct investment in a leading emerging economy, China, from 1979 to 1995. Future research can extend this study with more recent data to capture the changing impacts of market transition in China. For instance, a somewhat surprising finding of this study is that when the host location-level economic indicators (i.e. GDP and GDP growth) and the host location-level social indicators (i.e. mimetic influences from different reference groups) are both included in the models, the impacts of GDP and GDP growth on foreign market entry behavior of firms from emerging economies are not

consistent with the traditional economic explanations. One possible explanation is that in the early stages of market transition in emerging economies, social influences are more dominant in shaping organizational strategies than economic influences. Governmental and social influences are stronger in emerging economies than in developed economies (Hoskisson et al., 2000). For multinationals, the importance of the social consideration is increased arising from the high levels of uncertainty associated with entries into foreign emerging economies (Scott, 2002). But as the Chinese market continues to develop, we expect that economic explanations could become more important in accounting for the entry behaviors of emerging economy firms into China (Hoskisson et al., 2000). Since our examination period is the early stage of China's transition, future research with more recent data can compare social and economic influences at different stages of market transition in China.

CONCLUSION

Data on the foreign-invested manufacturing ventures in China set up by multinational firms from emerging economies (Asia and non-Asia) provides the empirical context for our investigation of mimetic impacts from different reference groups and the interactions of the home and the host institutional environments on international expansion. Our key findings suggest that firms from emerging economies are more likely to invest in China when their peers from the same country or from other emerging economies have established ventures there. In particular, the investment patterns of multinationals from Asian emerging economies serve as a more salient reference point than those from non-Asian emerging economies. In addition, host location policy uncertainty and home country institutional distance moderate this mimetic influence from different FDI reference groups, such that the mimicry is enhanced under conditions of higher policy uncertainty and large institutional distance.

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TABLE 1: Results of Negative Binomial Analysis: Entry Rate of Foreign Subsidiaries from Emerging Economies in China ^a

Variables	Model						
	1	2	3	4	5	6	7
FDI Reference groups							
Same country FDI density	0.06*** (.01)	0.05*** (.01)	0.05*** (.01)	0.05*** (.01)	0.05*** (.01)	0.05*** (.01)	0.05*** (.01)
Emerging economy FDI density	0.01*** (.01)	0.01*** (.01)	.01*** (.01)	.01*** (.01)	0.01*** (.01)	0.01*** (.01)	0.01*** (.01)
Developed economy FDI density	-0.01 ⁺ (.01)	-0.01 (.01)	-0.01* (.01)	-0.01 ⁺ (.01)	-0.01* (.01)	-0.01* (.01)	-0.01* (.01)
Host location policy uncertainty	-0.44*** (.02)	-0.46*** (.02)	-0.43*** (.02)	-0.42*** (.02)	-0.42*** (.02)	-0.44*** (.02)	-0.44*** (.02)
Home country institutional distance	-0.69*** (.09)	-0.69*** (.09)	-0.68*** (.09)	-0.69*** (.09)	-0.95*** (.10)	-0.69*** (.09)	-0.70*** (.09)
Moderating effects:							
Host location policy uncertainty:							
Same country FDI density x Host location policy uncertainty		0.01*** (.01)					
Emerging economy FDI density x Host location policy uncertainty			0.01*** (.01)				
Developed economy FDI density x Host location policy uncertainty				0.01*** (.01)			
Home country institutional distance:							
Same country FDI density x Home country institutional distance					-0.11*** (.02)		
Emerging economy FDI density x Home country institutional distance						0.01* (.01)	
Developed economy FDI density x Home country institutional distance							0.01 (.01)
Home country-level Control Variables							
GDP per capita(/1000)	0.16*** (.01)	0.16*** (.01)	0.16*** (.01)	0.16*** (.01)	0.16*** (.01)	0.16*** (.01)	0.16*** (.01)
Import flow with China (/1000)	0.01*** (.01)	0.01*** (.01)	0.01*** (.01)	0.01*** (.01)	0.01*** (.01)	0.01*** (.01)	0.01*** (.01)
Industry-level Control Variables							
Industry concentration	-0.01*** (0.01)	-0.01*** (0.01)	-0.01** (0.01)	-0.01*** (0.01)	-0.01*** (0.01)	-0.01*** (0.01)	-0.01*** (0.01)
R&D intensity	-0.02 ⁺ (0.01)	-0.02 ⁺ (0.01)	-0.02 ⁺ (0.01)	-0.02 ⁺ (0.01)	-0.02 ⁺ (0.01)	-0.02 ⁺ (0.01)	-0.02 ⁺ (0.01)
Advertising intensity	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Host location-level Control Variables							
GDP(/1000)	-0.67*** (0.03)	-0.66*** (0.03)	-0.64*** (0.03)	-0.65*** (0.03)	-0.66*** (0.03)	-0.67*** (0.03)	-0.67*** (0.03)
GDP growth	-1.13*** (0.18)	-1.21*** (0.18)	-1.29*** (0.18)	-1.22*** (0.18)	-1.05*** (0.18)	-1.08*** (0.18)	-1.13*** (0.18)
Trade growth	-0.04 (0.03)	-0.03 (0.03)	-0.05 ⁺ (0.03)	-0.04 (0.03)	-0.04 (0.03)	-0.04 (0.03)	-0.04 (0.03)
Population (/1000)	0.19*** (0.01)	0.19*** (0.01)	0.18*** (0.01)	0.19*** (0.01)	0.18*** (0.01)	0.19*** (0.01)	0.19*** (0.01)
Probability of sample selection	0.20*** (0.06)	0.18** (0.06)	0.23*** (0.06)	0.21*** (0.06)	0.13* (0.06)	0.21*** (0.06)	0.20*** (0.06)
Dispersion parameter (α)	0.68	0.68	0.67	0.67	0.66	0.67	0.68
Test of coefficient equality ^b							
Same country > Emerging economy	550.2***						
Same country > Developed economy	593.8***						
Emerging economy > Developed economy	22.7***						
Log likelihood	9787.7	9801.8	9832.9	9815.6	9804.5	9790.6	9787.8
Chi-square change (<i>df</i>) vs. baseline		28.2***	90.4***	55.8***	33.6***	5.8*	0.2

^a N = 8,716; Values in parentheses are standard errors; Coefficient estimates for year, industry, home region and host location dummies are not reported; *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$;

^b Wald tests .

TABLE 1: Entry Rate of Foreign Subsidiaries from Emerging Economies in China
(continued)^a

Variables	Model									
	8	9	10	11	12	13	14	15	16	
FDI Reference groups										
Same country FDI density	0.06*** (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.06*** (0.01)	0.05*** (0.01)	0.06*** (0.01)	0.05*** (0.01)	0.05*** (0.01)	
Emerging economy FDI density										
- Asian Emerging economy	0.01*** (0.01)	0.01*** (.01)	0.01*** (.01)	0.01*** (.01)	0.01*** (0.01)	0.01*** (.01)	0.01*** (0.01)	0.01*** (0.01)	0.01*** (0.01)	
- Non-Asian Emerging economy	-0.01 (0.01)	-0.01 (0.01)	0.02 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	
Developed economy FDI density										
- Asian developed economy	-0.01* (0.01)	-0.01* (0.01)	-0.01* (0.01)	0.01 (0.01)	-0.01* (0.01)	-0.01* (0.01)	-0.01* (0.01)	-0.01* (0.01)	-0.01* (0.01)	
- Non-Asian developed economy	-0.01* (0.01)	0.01 (0.01)	-0.01 ⁺ (0.01)	0.01 (0.01)	-0.01 (0.01)	-0.01* (0.01)	-0.01* (0.01)	-0.01* (0.01)	-0.01* (0.01)	
Host location policy uncertainty	-0.45*** (0.02)	-0.43*** (0.02)	-0.44*** (0.02)	-0.43*** (0.02)	-0.40*** (0.02)	-0.45*** (0.02)	-0.45*** (0.02)	-0.45*** (0.02)	-0.45*** (0.02)	
Home country institutional distance	-0.69*** (0.09)	-0.68*** (0.09)	-0.71*** (0.09)	-0.69*** (0.09)	-0.73*** (0.09)	-0.69*** (0.09)	-0.69*** (0.09)	-0.69*** (0.09)	-0.69*** (0.09)	
Moderating effects:										
Host location policy uncertainty:										
Asian emerging economy FDI density x Host location policy uncertainty		0.01*** (0.01)								
Non-Asian emerging economy FDI density x Host location policy uncertainty			0.03** (0.01)							
Asian developed economy FDI density x Host location policy uncertainty				0.01*** (0.01)						
Non-Asian developed economy FDI density x Host location policy uncertainty					0.01*** (0.01)					
Home country institutional distance:										
Asian emerging economy FDI density x Home country institutional distance						0.01* (0.01)				
Non-Asian emerging economy FDI density x Home country institutional distance							0.02 (0.03)			
Asian developed economy FDI density x Home country institutional distance								0.01 (0.01)		
Non-Asian developed economy FDI density x Home country institutional distance									0.01 (0.01)	
Home country-level Control Variables										
GDP per capita(/1000)	0.16*** (0.01)	0.17*** (0.01)	0.17*** (0.01)	0.16*** (0.01)	0.16*** (0.01)	0.16*** (0.01)	0.16*** (0.01)	0.17*** (0.01)	0.17*** (0.01)	
Import flow with China (/1000)	0.01*** (0.01)	0.01*** (0.01)	0.01*** (0.01)	0.01*** (0.01)	0.01*** (0.01)	0.01*** (0.01)	0.01*** (0.01)	0.01*** (0.01)	0.01*** (0.01)	
Industry-level Control Variables										
Industry concentration	-0.01*** (0.01)	-0.01** (0.01)	-0.01*** (0.01)	-0.01*** (0.01)	-0.01** (0.01)	-0.01*** (0.01)	-0.01*** (0.01)	-0.01*** (0.01)	-0.01*** (0.01)	
R&D intensity	-0.01 (0.01)	-0.02 ⁺ (0.01)	-0.02 (0.01)	-0.02 ⁺ (0.01)	-0.02 ⁺ (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	
Advertising intensity	-0.02 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	
Host location-level Control Variables										
GDP(/1000)	-0.67*** (0.03)	-0.64*** (0.03)	-0.68*** (0.03)	-0.65*** (0.03)	-0.70*** (0.03)	-0.67*** (0.03)	-0.67*** (0.03)	-0.67*** (0.03)	-0.67*** (0.03)	
GDP growth	-1.14*** (0.18)	-1.29*** (0.18)	-1.13*** (0.18)	-1.21*** (0.18)	-1.13*** (0.18)	-1.09*** (0.18)	-1.14*** (0.18)	-1.14*** (0.18)	-1.14*** (0.18)	
Trade growth	-0.04 (0.03)	-0.05 ⁺ (0.03)	-0.04 (0.03)	-0.04 (0.03)	-0.06 ⁺ (0.03)	-0.04 (0.03)	-0.04 (0.03)	-0.04 (0.03)	-0.04 (0.03)	
Population (/1000)	0.17*** (0.01)	0.18*** (0.01)	0.19*** (0.01)	0.18*** (0.01)	0.20*** (0.01)	0.18*** (0.01)	0.19*** (0.01)	0.19*** (0.01)	0.19*** (0.01)	
Probability of sample selection	0.18** (0.06)	0.23*** (0.06)	0.19** (0.06)	0.21*** (0.06)	0.20*** (0.06)	0.18** (0.06)	0.18** (0.06)	0.18** (0.06)	0.18** (0.06)	
Dispersion parameter (α)	0.67	0.67	0.67	0.67	0.65	0.67	0.67	0.67	0.67	
Log likelihood	9797.6	9834.3	9802.2	9813.2	9841.6	9800.1	9797.9	9797.6	9797.6	
Chi-square change (<i>df</i>) vs. baseline		73.4***	9.2**	31.2***	88.0***	5.0*	0.6	0	0	

^a N = 8,716; Values in parentheses are standard errors; Coefficient estimates for year, industry, home region and host location dummies are not reported; *** $p < 0.001$, ** $p < .01$, * $p < .05$, + $p < .10$;