Do indigenous firms incur a liability of localness when operating in their home market? The case of China

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ABSTRACT

Liability of foreignness has been one of the building blocks of theories of multinational enterprises. This paper looks at a parallel issue - the liability of localness that local firms may face as a result of foreign firms' presence in their country. The results show that local Chinese firms enjoy location-based advantages over their foreign counterparts and these, together with their firm-specific advantages, have significant positive effects on their performance. The superior firm-specific advantages of foreign firms appear to erase the magnitude of such effects and create a significant negative impact on local Chinese firms' performance, and this effect is heightened by foreign firms' multinationality advantages. The research suggests that local Chinese firms incur a liability of localness, and the extent of the negative impact of such liability on local firm performance is largely dependent on the relative strength of various advantages that the local and foreign firms possess.

Keywords: Liability of localness, foreign firms, local firms, institutions,

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1. Introduction

For at least fifty years, leading international business researchers (most notably Hymer, 1960/1976) have argued that firms operating abroad face considerable challenges and incur additional costs (i.e., a liability of foreignness, or LOF) relative to indigenous firms. These challenges and costs result from their lack of familiarity with local cultural norms and values, different economic, political, and legal systems, lack of experience in foreign markets and the geographic distance between the home and foreign host countries. As a result, an enterprise that operates outside of its national boundaries will incur additional costs relative to the local firms in the host country market (Miller and Parkhe, 2002; Zaheer, 1995). A number of studies have recently re-examined this issue and in general confirmed that LOF-based competitive disadvantage still exists and affects firms' performance adversely in foreign markets (e.g., Miller and Parkhe, 2002; Zaheer, 1995; Zaheer and Mosakowski, 1997). However, Nachum (2003) and Kronborg and Thomsen (2009) challenged the conventional wisdom of the LOF, arguing that the LOF may not exist, and that foreignness may be either an asset or a liability depending on the circumstances (Nachum, 2010). While most studies of international competition are undertaken from the perspective of foreign firms, we argue that local firms are just as important to examine. How they view the nature of international competition may be of strategic importance to all of the players in the game and to their competitive positions in this 'playground'. Therefore, this study goes beyond previous LOF studies and looks at the

players on ‘the other side of the fence’, namely locally-owned firms operating in their home country, suggesting that these firms may incur added costs in doing business at home; that is, they may suffer from a *liability of localness*, or LOL (Perez-Batres and Eden, 2008).

From an institutional perspective, Perez-Batres and Eden (2008) first defined the concept of LOL as the added cost faced by local firms on account of sudden changes in the regulatory environment within the host country, allowing inward foreign investment and leading to a change in the ‘rules of the game’ for domestic firms. They elaborate that LOL would result from institutional misalignment, where newly formed institutions would favor foreign firms over local firms. Regulatory punctuations would undermine and ultimately change the host market institutions that guide local firms’ business practices. The net effect would be that local firms would not be familiar with the new ‘rules of the game’, incurring a liability of localness, inducing a negative impact on local firms’ performance. Our study extends Perez-Batres and Eden’s in two important dimensions. First, Perez-Batres and Eden suggest that LOL occurs when sudden institutional changes (i.e., punctuations) take place. We, however, argue that the LOL and the effects of it on local firm performance are not limited to such punctuations, but may remain present for as long as the foreign firms exhibit a significant competitive advantage over their local counterparts. This is particularly evident in the context of an emerging country such as China where economic liberalization began about three decades ago with the so-called ‘Reform and Opening Up’ initiated by

Deng Xiaoping, and where the new institutional arrangements (involving some fundamental changes to economic rules) have already permeated to the minds and perceptions of managers. Second, even if local (surviving) firms have successfully adapted to the new way of doing business locally, they are for the most part perceived as less legitimate (i.e., having fewer firm-specific advantages) than their foreign counterparts, which in turn negatively affects local firms' performance. Accordingly, our central research question is: Do superior competitive advantages of foreign firms contribute to the creation of added costs (i.e., LOL) for local Chinese firms? If so, do such added costs have a significant negative impact on local Chinese firms' performance in China?

2. Institutional development and change of competitive landscape

Institutions are social, economic and political bodies that articulate and maintain widely observed norms and rules (North, 1990). Since it opened up its economy and began the process of economic reform in 1978, China has experienced significant institutional change and development particularly in the way that political power is used (Gilley, 2008), the role of government in the economic and business activities, the structure of industries and firms, and the emergence of intermediate institutions such as professional and efficient business support services. Many of those changes and developments have gradually favored foreign investors (Child and Tse, 2001). Following a gradual relaxation of entry restrictions during the 1980s and 1990s, when

many previously restricted industries such as retailing, insurance, medical services, trading, accounting services, and banking were opened up to foreign investors, since about 2000 there has been a significant shift in governmental policies on foreign investment, aimed at gradually eliminating discrimination against foreign firms in the areas of operating rights. This progressive convergence in the regulatory treatment of foreign and local firms represents an important step toward equality for both sets of players (Luo, 2007). These institutional changes and developments have reduced the costs associated with institutional distance for foreign firms, improving the legitimacy of foreign firms operating in the host market (Zaheer, 2002). Relatively speaking, the local firms gradually lost the legitimacy that they took for granted under the old institutional arrangements. Therefore, such institutional developments, together with market liberalization, can be expected to decrease the negative effect of the LOF for foreign firms (Zaheer and Mosakowski, 1997), while a LOL may have been created for local firms, in turn having a negative impact on local firms' performance.

In the last decade or so, China's competitive environment has fundamentally changed. Many foreign firms in China have transformed themselves from foreign investors to strategic insiders, shifting competition from niche to mass markets, from single- to multi-markets, and from structural similarity to multiplicity (Luo, 2007). They are now seeking to expand into and penetrate all market segments (Chen, 2003), aggressively expanding the scale and scope of their investment in new or existing projects

across numerous locations in China, continuing to improve their competence building and value-chain localization using corporate capital, fortifying their dominant foothold in certain market segments using the retained earnings accumulated on account of their China-based operations, and replicating their success elsewhere in China (Luo, 2007).

Local firms in transitional economies often rely heavily on institutional-based strategies as the main source of competitive advantage, whereas their foreign counterparts usually rely on resource-based strategies as their main source of competitive advantage (Hermelo and Vassolo, 2010). Since the set of advantages and disadvantages are both time- and extent-specific (Marinova, Child, and Marinov, 2011), when institutions are impacted by developments such as liberalization and privatization, the traditional and static sources of competitive advantage are replaced by a more dynamic perspective in which advantages are temporal (D'Aveni, 1994). Advantages, such as location, that pertain to institutional-based strategies then become less important, while advantages that pertain to resource-based strategies, such as firm-specific advantages, become vital sources of competitive advantage. As a result, local firms struggle to remain competitive while foreign subsidiaries are better prepared to sustain their competitive position and often outperform their local counterparts (Hermelo and Vassolo, 2010). Therefore, the competitive position of local and foreign firms in China is likely to be determined by the relative strength of their respective competitive advantages in institutional- and/or resource-based strategies that they developed after the sudden change

in the ‘rules of the game’ thirty years ago. This proposition provides the basis for the theoretical framework and the development of hypotheses that are discussed in the next section.

3. Theory and hypotheses

Studies of the advantages held by MNCs implicitly and/or explicitly identify and distinguish between several aspects of competitive advantage, including firm-specific advantages (FSAs) arising from the possession of certain intangible capabilities; multi-nationality advantages (MNAs) associated with multinational activity per se; and home- or location-based advantages (LBAs) arising from the exclusive access of firms to resources and institutional conditions in their home countries. These advantages together form the competitiveness of firms in global markets, and the strength of these advantages can determine the relative competitive position of foreign MNCs and local firms (Nachum, 2003). Therefore, the existence, strength, and extent of LOL in China will be dependent on the relative strength of each of these advantages possessed by foreign and local firms, respectively. We adapted Nachum’s (2003) three-dimensional model (that is, FSA, MNA, and LBA) with some necessary extensions. In Nachum’s (2003) model, the three types of advantage of foreign firms were used to test LOF. We argue that either LOF or LOL is the aggregated outcome of various competitive advantages that are possessed by players from each side when competing in the same (China) market, consequently determining the strength of LOL. In order to

capture the joint impact of the three types of advantage that both local and foreign firms may possess, we incorporated FSAs and LBAs of both foreign and local firms as independent variable constructs in our framework. MNAs that arise directly from undertaking cross-border business activities in subsidiary units in various locations under a common governance structure (Nachum, 2003) are significant sources contributing to the creation and development of FSAs (Birkinshaw, Hood, and Jonsson, 1998; Dunning, 1988; Rugman and Verbeke, 1992). Therefore, in our conceptual framework, we included the multinationality advantages of both foreign and local firms as interactive variables that moderate the relationship between FSAs and firm performance. Our conceptual framework is depicted in Fig. 1.

Place Fig. 1 about here

3.1 Firm-specific advantages

Firm-specific advantages have constituted the building blocks of foreign direct investment research since Hymer (1960/1976) first elaborated the need for some FSAs as a necessary condition for foreign activities. FSAs stem from the proprietary assets of MNCs that arise from their production and/or marketing activities (Dunning, 1977). These advantages are based on the possession and use of certain intangible assets, such as patents, trademarks, management skills (Caves, 1996), and brand names, as well as skilled labor, knowledge of technology, and efficient production processes (Wernerfelt, 1984), which enable the firm to reach high levels of technical or price

efficiency (Caves, 1996). These intangible advantages of MNCs are geographically mobile and can be transferred internally within the MNC across national borders. These are the areas in which foreign firms have advantages that are superior to those of local firms, enabling them to compensate for the lack of access to local resources and for the additional costs associated with doing business abroad, and thereby to compete successfully in foreign countries (Hymer, 1960/1976). Foreign firms are generally superior to domestic firms in R&D and production and marketing, as they may benefit from significantly better strategic capabilities relative to their local domestic competitors in respect of internal dimensions, with a significantly higher ability to adapt to competition in the foreign markets in the context of external dimensions (Fiegenbaum, Hart, and Schendel, 1996), and may be better able than their local counterparts to deal with rapid change (Lavie and Fiegenbaum, 2000). In the Chinese context, most foreign firms have clear competitive advantages over local firms in capabilities such as technology, know-how and innovation, branding, financing, IT and value-chain creation (Williamson and Zeng, 2004). Furthermore, the theory of the MNC suggests that MNCs also possess advantages that arise from their favorable access to resources within their home countries (Hu, 1992; Nachum, 1999). MNCs of developed countries, having operated in sophisticated home markets, have built skill bases that confer clear advantages over firms in most other countries (Erramilli, Agarwal, and Kim, 1997).

In contrast, local Chinese firms lag far behind foreign firms in the development of FSAs—especially with respect to technology (Nolan, 2004), experience in innovative activities and top management talent (Rugman and Li, 2007). Chinese firms also tend to be protected, resource-based, labor-intensive, low-technology, and inefficient (Nolan, 2004). Their competitive advantage is based on home-country location-specific advantages in cheap, unskilled and skilled labor. Thus, Chinese firms have a long way to go to become competitive in international markets because of intense global competition and because they lack the necessary FSAs (Rugman and Li, 2007). In contrast, the superior FSAs of foreign firms operating in China help them to mitigate LOF that they may incur and enhance their competitiveness in the market in competing with Chinese firms. Correspondingly, this creates enormous pressure on local firms and increases their cost of doing business. As institutions develop, FSAs become more and more important. Accordingly, the relative strength of foreign firms over local firms, and the relative weakness of local firms compared with foreign firms, becomes more apparent. To compensate for and/or mitigate such competitive disadvantages requires local firms to commit significant additional firm resources and effort, in turn increasing their costs of doing business due to the presence of foreign firms. We therefore propose the following hypothesis:

Hypothesis 1. Foreign firms outperform local Chinese firms in terms of FSAs, and these foreign firms' competitive advantages create an LOL for local Chinese firms, with a negative effect on local Chinese firms' performance.

3.2 Location (China)-based advantages

Hymer (1960/1976) argued that indigenous firms have the general advantage of better information about their country regarding its economy, language, laws, and policies. Local firms enjoy favorable access to the resources of their home country relative to foreign firms, due to favorable treatment by the government, consumers and suppliers. His theoretical propositions have since been supported by many important studies (e.g., Miller and Parkhe, 2002; Zaheer, 1995; Zaheer and Mosakowski, 1997). Arguably, this paradigm should be even more strongly supported when multinational companies from the developed world explore business opportunities in emerging markets in which there are, to a greater or lesser extent, institutional voids such as the absence of specialized intermediaries and contract-enforcement mechanisms. However, managers from foreign firms are used to operating in economies with well-developed institutional infrastructures and are generally therefore ill-equipped to deal with such voids. In contrast, the managers of local companies know how to work around institutional voids because they have had years of experience doing so (Khanna and Palepu, 2006), and they are often able to turn such institutional voids to their competitive advantage. Hence, we can expect indigenous firms

to possess more of the advantages that arise from the utilization of the resources of their home countries.

Firms are also the product of the locations in which they operate, and effective firms will seek to build on competencies forged in their home country. Local firms are established in the context of appreciable location-specific advantages and proceed in a way that showcases those advantages (Erramilli et al., 1997). Thus, they are usually well versed in domestic customs and priorities and have the ability to utilize this local knowledge to their advantage (Vachani, 1990). This advantage is further emphasized in high-context cultures such as China, where 'guanxi' relationships pervade all levels of enterprise and government, and outsiders can find it difficult to gain traction (Ping, 2003). China is a complex society and this complexity could be a critical challenge for most outsiders operating in China, but it could also be a competitive advantage for local firms that are deeply rooted in the environment (Jiang, 2005). Such location-related assets provide local firms with some strong competitive advantages that foreign firms do not have (Nachum, 2003). We can thus expect local Chinese firms to outperform foreign firms in China in terms of location-based advantages. We therefore propose the following hypothesis:

Hypothesis 2. Local Chinese firms outperform foreign firms in terms of LBAs, and these local Chinese firms' competitive advantages eliminate the negative effect of the LOL for local Chinese firms, with a positive effect on local Chinese firms' performance.

3.3 Multi-nationality advantages

An MNC's firm-specific advantages can originate in both the parent company and its subsidiaries (Dunning, 1988), and the subsidiaries can play an even more important role in the creation and maintenance of such advantages (Rugman and Verbeke, 1992). The existing literature has revealed a shift in the locus of firm-specific advantage creation from parent company to subsidiaries (e.g. Birkinshaw and Morrison, 1996). Subsidiaries can play such a role by acting as contributors to or leaders of innovation projects (Bartlett and Ghoshal, 1986). They could provide major outflows of valued resources to the rest of the corporation (Gupta and Govindarajan, 1994), and they can gain mandates for developing and producing certain product lines on a global basis (Roth and Morrison, 1992). Therefore, many subsidiaries could act as specialized contributors or strategic leaders, contributing substantially to the creation and maintenance of FSAs. However, it should be noted that subsidiaries vary in the role they play with respect to contributing to FSAs. Some subsidiaries could also act as implementer and branch plant, having simple market exploitation roles (Birkinshaw, Hood, and Jonsson, 1998).

Multi-nationality advantages arise directly from undertaking cross-border business activities under a common governance structure (Nachum, 2003). The advantages of multi-nationality are thus associated with the coordination of multiple geographically-dispersed, value-added activities, including the ability to spread common and central overhead over many different nations

(which is especially critical in R&D-intensive industries that require amortization of R&D from more than a few markets) (Kobrin, 1991; Tallman and Li, 1996); the facilitation of greater learning from international experience (Kobrin, 1991); access to cheaper and valuable resources in foreign countries (which could include cheaper labor, better technology, or any country-specific resource) (Porter, 1990); the ability to monitor global rivals, markets, and other profit opportunities; and better cross-subsidization, price discrimination, and arbitrage potential as a result of the greater geographic scope (Contractor, Kundu, and Hsu, 2003). Hence, the greater the degree of multi-nationality of a given MNC, the better will be its management regime (Teece, 1977). This leads to improved firm performance, especially when the firm's degree of multi-nationality is based on FDI (Morck and Yeung, 1992).

Foreign firms conducting FDI in China are by definition participants in international networks. The set of competitive advantages of an MNC thus includes competitive advantages that are partly derived from the resources of the home country as well as those resulting from the strategic activities of the firm in the global marketplace (Dunning, 1977). MNCs benefit from national differences in market structure, product life cycles, and environmental resources through utilizing their monopolistic advantages (Hymer, 1960/1976). Their cross-border business activities and associated benefits help them develop and enhance their FSAs. These advantages can eliminate

the LOF they may face and enhance their competitiveness in competing with Chinese firms in the market.

Hypothesis 3a. The multinationality advantages of foreign firms moderate the relationship between their firm-specific advantages and local firm performance, such that the negative relationship between multinationality advantages of foreign firms and performance of local firms is stronger when the level of advancement of multinationality advantages of foreign firms is high.

Local Chinese firms arguably do not possess many strong competitive advantages compared with their global rivals (Cui and Jiang, 2009; Rui and Yip, 2008). This is mainly due to the fact that these firms have firm-specific disadvantages in many areas such as lack of production and technological knowhow, lack of brand recognition, lack of production resources, lack of management knowhow, lack of marketing skills, lack of quality control systems, and limited financial resources. Innovations, knowhow, technology, production processes, marketing, and managerial expertise are readily available in developed country contexts where they could be accessed by Chinese firms investing outwards (Marinova, Child, and Marinov, 2011). Thus, Chinese firms may move into developed markets with the strategic intent to acquire such assets with the potential to enhance their FSAs (Cui and

Jiang, 2009; Rui and Yip, 2008), and to compensate for competitive disadvantages in the host country context (Child & Rodrigues, 2005).

Thus, outward-investing firms from emerging countries that have firm-specific disadvantages often attempt to acquire strategic resources such as technology, design, and brands from companies in developed economies (Schüler-Zhou & Schüler, 2009). This is needed as such firms often do not have the capabilities or resources to turn firm-specific disadvantages into FSAs on their own or in partnership with foreign firms in their home country. Firm-specific disadvantages can be compensated for in the international arena by means of transfer (e.g. joint ventures, licensing), acquisition (of technologies, designs, brands, etc.), and internal independent learning (Child & Rodrigues, 2005; Marinova, Child, and Marinov, 2011; Rugman and Li, 2007), especially when R&D centers are set up in developed host countries (Forest, 2001), as most Chinese outward-investing firms have been doing (Marinova, Child, and Marinov, 2011; Wang, 2002). Thus outward FDI is pulled towards unavailable, complementary and compatible resources, especially in the form of knowledge that can be used as a stepping stone to accelerate independent innovation. Compensating for firm-specific disadvantages has become a key priority for Chinese firms and the Chinese government. In line with Confucian notions of self-development through continuous learning from peers, the rapid internationalization of Chinese companies in recent years is an attempt to acquire needed capabilities (Cui and Jiang, 2009; Wesson, 2004) with the intention of enhancing their FSAs.

This is evident in a number of leading Chinese companies such as Haier, Galanz, Gree, Lenovo, Huawei, and Nanjing Automotive, which initially experienced various firm-specific disadvantages but successfully turned them into FSAs a few years after conducting outward investment (Marinova, Child, and Marinov, 2011). We therefore propose the following hypothesis:

Hypothesis 3b. The multinationality advantages of local firms moderate the relationship between their firm-specific advantages and firm performance, such that the positive relationship between multinationality advantages of local firms and local firm performance is stronger when the level of advancement of multinationality advantages of local firms is high.

3.4 Relative importance of various advantages

Although local firms are often well placed to assess and respond to economic trends within their own country, such firms occupy a potentially risky position depending on the economic characteristics of their home country. MNCs, on the other hand, are able to reduce risk by effectively engaging in international portfolio investment. It is the firm's ability to balance this portfolio that will determine risks and returns and that will ultimately prove to be either a competitive advantage or a weakness. MNCs from developed countries have a significant competitive advantage in this regard, outperforming their developing country counterparts, and the most profitable enterprises may prove to be those developed-country MNCs that

have operations in developing countries (Collins, 1990). A multinational firm can reduce the negative impact of its liability of foreignness compared to domestic competitors by learning about the host-country environment through the accumulation of investment experience there (Barkema, Bell, and Pennings, 1996) and by gaining capabilities that are relevant to the host country (Chang, 1995). This process of learning about the host-country environment may further strengthen some of the FSAs of MNCs because the relevance and importance of FSAs are host-location specific, too (Buckley, 1990; Dunning, 1988). The host country becomes especially important in studies dealing with FDI, since the different configuration of a host-country's institutional development can either strengthen them or render them redundant (Hermelo and Vassolo, 2010).

China now is very far away from a centrally-planned economic system (Elliot, Jiang, Redding and Stening, 2010), and the level of the development of its institutions has moved to a much more advanced level compared to that which existed before the country opened its door for foreign investment over thirty years ago (Child and Tse, 2001). In line with the logic of Hermelo and Vassolo (2010), as institutions develop, the resource-based advantages of firms, such as FSAs and MNAs, have been becoming more important for competitive success than institutional-based advantages that result from access to LBAs. Therefore, in the Chinese context, FSAs and MNAs may provide more explanatory power for the relative performance of foreign firms vis-à-vis local firms than location-based advantages. On the one hand, this

means that the FSAs and MNAs that foreign firms possess can help them offset the negative impacts of competitive disadvantages (i.e. LOF). On the other hand, the advantages enjoyed by local Chinese firms as a result of their favorable access to LBAs cannot compensate for the negative effects of their competitive disadvantage in terms of firm-specific and multi-nationality advantages. We therefore propose the following hypothesis:

Hypothesis 4. The positive effect of local Chinese firms' location-based advantages over foreign firms on the performance of local firms is not sufficient to compensate for the negative effect of local firms' lack of competitiveness in terms of firm-specific and multi-nationality disadvantages.

4. Methods

4.1 Sample and data collection

Large Chinese firms, especially those located in China's east coastal areas which have attracted over eighty percent of foreign investments, are on the front line in competing with foreign entrants and are usually the main Chinese competitors targeted by foreign firms. For that reason, we determined that they should constitute the sample frame for our study. We identified the largest 1,000 purely local firms (i.e. Chinese firms with no foreign ownership) from the ORBIS Database published by Bureau van Dijk Electronic Publishing in 2007. The senior executives (e.g., CEOs, general managers, and marketing directors/managers) of those firms are best placed to provide

information about the nature of competition and tensions between their firm and foreign firms in mainland China. They, then, were the people to whom our request for information was directed.

A structured questionnaire was used to obtain the perceptions of senior executives of local Chinese firms regarding the strength of the three types of advantages and the performance of both local firms and their main foreign competitors. The questionnaire was translated into Chinese by two bilinguals and was pre-tested before the survey commenced. We required that the respondents be senior executives who had sufficient knowledge about the competitive positions of their own company and their main foreign competitors in China. The respondents were assured of the anonymity and confidentiality of their responses, that there are no right or wrong answers, and that they should answer as honestly as possible. They were asked to first evaluate the level of advancement in terms of each of the independent variable indicators (the various advantages) and the level of firm performance as measured by the dependent variable metrics of their own (local Chinese) firms. They were then also asked to evaluate the same set of independent variable indicators for their main respective foreign competitors that had been competing in the same market segment or product market. Following a common practice in Delphi studies (Sniezek, 1989), the respondents were also requested to estimate their self-perceived level of "expertise" on five-point scales ('1' being lowest and '5' being highest) in relation to their subjective evaluation of each of the independent and dependent variable indicators.

These “expertise” ratings were included as weights to reflect the fact that, in assessing various advantages of both foreign and local firms, it was likely that some respondents would not feel equally competent to provide estimates of the level of advantages of their foreign competitors as they would for those of their own firm. The weighted score for each dependent and independent variable indicator was generated by means of multiplying the original raw score of each indicator by the self-assessed score of expertise in evaluating the variable indicator, which was then divided by the sum of scores of all the observations. The subsequent steps in the statistical analyses used the weighted scores, with the exception of the scale reliability test and Harman’s one-factor test to detect the presence of common method effect.

A total of 935 questionnaires were delivered, mainly via facsimile (but complemented by postal mail), of which 136 were completed and returned after telephone follow-ups, over a period of two months in 2007. In addition, 65 questionnaires were delivered in person to firms in the sample frame via networking connections, 63 of which were completed and returned to us. In total, 199 firms returned questionnaires. A screening of the returned questionnaires found that 185 were usable, constituting a response rate of 18.5%. The main foreign rivals identified by the respondents are from 17 economies: 70.1% from developed countries, 25.6% firms from newly industrialized economies, and 4.3% from developing countries.

4.2 Measures

We used the performance of local Chinese firms as the dependent variable. Following Nachum's (2003) approach, we then created a single compound measure for the dependent and each of the independent variable constructs by summing the weighted scores of the individual variable indicators for each construct. This is also consistent with the hypotheses that we developed at the level of overall advantages, referring specifically to the three types of advantage rather than to their individual indicator items.

4.2.1 Dependent variable indicators

The performance of the local Chinese firms was measured using five subjective assessment questions on five-point scales ('1' being poor and '5' being outstanding). The five firm-performance indicators ($\alpha = 0.93$) covered profitability, market share, sales growth, competitive position (Aulakh, Kotabe, and Teegen, 2000; Fey and Bjorkman, 2001), and the quality of products/services (Fey and Bjorkman, 2001). These measures have been widely used for the performance of both emerging and foreign firms in prior studies. The measurement of firm performance may be particularly problematic in emerging economies. Financial reporting problems emanate from a variety of causes, including lack of standards, differing regimes and systems, lack of enforcement of reporting, unreported activity involving bartering, and substantial inflation and devaluation of local currencies. These sorts of problems apply to all facets of the accounting process and to both listed and non-listed companies in emerging economies (Hoskisson et al.,

2000). China is no exception. As Devonshire-Ellis and Zhang (2011) note, accounts have consistently been shown to be incorrectly prepared for reasons ranging from incompetence (low levels of accounting education) to fraud. Therefore, just as subjective measures of firm performance relative to competitors are frequently more reliable and valid in studying emerging businesses (Chandler and Hanks, 1994), so are they likely to be more suitable in measuring firm performance in emerging countries. Such a subjective managerial assessment approach has been widely used in research studies focused on China (e.g., Luo, 1997).

4.2.2 Independent variable indicators

The independent variable indicators were adopted from earlier research studies. In comparison with most prior studies on the LOF, we incorporate a relatively larger set of variables with the aim of capturing as comprehensively as possible the various advantages that a local or foreign firm may possess; this was necessary to address the shortcomings of using a limited number of indicative items, as suggested by prior studies (e.g., Nachum, 2003). The indicators and sources of the indicators, and *Cronbach's Alpha* for each variable, are summarized in Table 1. All of the indicators for each independent variable were measured on a five-point scale (‘1’ being very low and ‘5’ being very high).

Place Table 1 about here

4.2.3 Control variables

A set of control variables that has commonly been used in prior studies (e.g., Luo and Park, 2001; Nachum, 2003) was included in our model tests. Given the substantial differences in market conditions between industrial and nonindustrial sectors, we controlled for industry effects using a dummy variable. The service sector was coded as '0' and the manufacturing sector was coded as '1'. The age and ownership of local Chinese firms were included in our LOL model. The age of firms was expressed in terms of the number of years since their establishment. A state-owned local firm was coded as '1'; otherwise, the firm was coded as '0'.

4.2.4 Model specification

In order to test the hypotheses, a model was constructed to examine the effects of the various types of advantage of both foreign and Chinese firms on local Chinese firms' performance.

$$P_{lc} = \beta_0 + \beta_1 L\_FSAs + \beta_2 \_LBAs + \beta_3 F\_FSAs + \beta_4 F\_LBAs +$$
$$\beta_5 L\_MNAs + \beta_6 F\_MNAs + \beta_7 L\_FSAs \times L\_MNAs + \beta_8 F\_FSAs \times F\_MNAs$$
$$+ IS + Age + SO + e$$

Where, P_{lc} = performance of local Chinese firm; *L_FSAs* = firm-specific advantages of Chinese firm; *L_LBAs* = location (China)-based advantages of Chinese firm; *F_FSAs* = firm-specific advantages of foreign firm; *F_LBAs* =

location (China)-based advantages of foreign firm; *L_MNAs* = multi-nationality advantages of Chinese firm (moderator); *F_MNAs* = multi-nationality advantages of foreign firm (moderator); *F_FSAs*×*F_MNAs* and *L_FSAs*×*L_MNAs and interactive terms; IS* = industrial sector; *SO* = state ownership of Chinese firm; and *Age* = age of Chinese firm.

5. Analysis and results

5.1 Descriptive statistics

Table 2 presents the operational measures, descriptive statistics, and correlations between independent and moderating variables, as well as the control variables. None of the correlation coefficients is greater than 0.6. A correlation coefficient above 0.6 is considered somewhat high (Churchill, 1991). We further checked the variance inflation factor (VIF) when performing the regression analysis procedures. The VIF for all of the variables are well below the suggested cut-off point of ten (Hair et al., 1998). The VIF for the variables in the full model (Model 10) are reported in Table 3.

Place Table 2 about here

5.2 Model fit

We performed hierarchical moderated multiple regression to test the impact of various advantages of local Chinese and foreign firms on local Chinese

firms' performance, and the results are presented in Table 3. The results show that the *F* statistics generated in all of the models are all significant at the .001 level, indicating good fit of the models.

Place Table 3 about here

5.3 Hypothesis test results

The signs of the beta coefficients[1] for all of main effect (independent) variables are in the hypothesized direction. Amongst the four independent variables, three of which, namely L_FSA, L_LBA, and F_FSA were found statistically significant, while the estimate for F_LBA was insignificant. F_FSAs (resource-based advantages) has the largest beta coefficient with the highest level of significance amongst all the independent variables. The positive signs of coefficients for L_FSA and L_LBA, with p-values less than .05 and .001 respectively, mean that local firms' firm-specific and location-based advantages contributed positively to their firm performance, while the negative sign of the coefficients for F_FSA, with p-values less than .01, suggests a negative effect on local firm performance. By comparing the beta coefficients of the independent variables, we found that the relative power in explaining the contribution of various advantages to the performance of local firms between each pair of the corresponding advantages (L_FSAs vs. F_FSAs, and L_LBAs vs. F_LBAs) was in line with Hypothesis 1 and Hypothesis 2, respectively. The beta coefficient of F_FSA (β_3=-0.281, p<.001) was significantly higher than that of L_FSA (β_1=0.138, p<.05), suggesting

that foreign firms outperform local firms in FSAs (resource-based advantages). In contrast, the beta coefficient of L_LBA (β_2=0.203, p<.01) was significantly greater than that of F_LBA (β_4=-0.082, p>.1), suggesting that local firms outperform foreign firms in LBAs (institutional-based advantages). When comparing Model 2, that included only the advantages of local firms, with the full model (Model 10), that included all types of advantages of both foreign and local firms, there was a significant improvement (24.8% improvement in Adj-R^2) in the regression.

The magnitudes of beta coefficients for all types of advantages of local firms were significantly decreased after the variables of various advantages foreign firms were included in the regression analyses in subsequent steps, suggesting that foreign firm advantages reduce the magnitude of the positive effect of local firm advantages on the performance of local firms, exerting negative impacts on local firms' performance metrics. To summarize, these results suggest that foreign firms outperform local firms in terms of firm-specific advantages (resource-based advantages), and the competitive advantages of foreign firms over local firms create added costs for the local firms (i.e. a LOL) and exert a significant and direct negative impact on local firms' performance. In contrast, local firms outperform foreign firms in terms of location-based (institutional-based) advantages, and the competitive advantages of local firms over foreign firms in location-based advantages eliminate the negative effect of LOL and have a positive effect on local firm

performance. Therefore, both Hypothesis 1 and Hypothesis 2 are supported, respectively.

Hypothesis 3a argues that the negative relationship between the multinationality advantages of foreign firms and local firm performance is stronger when the level of advancement of multinationality advantages of foreign firms is high. As shown in Model 8, the interaction term (F_LBAs×F_MNAs) was negative and statistically significant ($p<0.05$). Moreover, the results in the full model (Model 10) corroborate this result very well. This model includes another two-way interaction term (L_LBAs×L_MNAs). Even with the other interaction term, the effect of F_FSAs by F_MNAs remains negative and statistically significant. We also graphed the interactions of F_FSAs and F_MNAs on the performance of local firms (see Fig. 2). As expected, the plot reveals that the negative relationship between multinationality advantages of foreign firms and local firm performance is stronger when the level of advancement of multinationality advantages of foreign firms is high. Thus, Hypothesis 3a is supported.

Place Fig. 2 about here

In contrast, Hypothesis 3b argues that the positive relationship between multinationality advantages and performance of local firms is stronger when the level of advancement of multinationality advantages of local firms is high. As shown in Model 6, although the interaction term (L_LBAs×L_MNAs) was

positive, it was not statistically significant (p=0.760). Moreover, the results in the full model (Model 10) corroborate this result very well. The plot in Fig. 3 also reveals that the positive relationship between firm-specific advantages and performance of local firms is not significantly stronger when the multinationality advantages of local firms is high. Thus, Hypothesis 3b is not supported.

Place Fig. 3 about here

The results also show that there are four variables including three independent variables and one moderator which exhibit a significant direct impact on local firm performance. Of the three independent variables that are significant in the model, both L_FSA and L_LBA exhibit significant and positive impacts on the performance of local firms, thereby eliminating the negative impact of the LOL for local firms, whereas, F_FSAs and F_MNAs (a moderator that also has a significant direct impact on the dependent variable) exhibit a significant and negative impact on the performance of local firms. However, the combined explanatory power of the L_FSAs and L_LBAs ($\beta_{1+}\beta_2$=0.341) is significantly weaker than that of F_FSAs and F_MNAs ($\beta_{3+}\beta_6$ = 0.429), suggesting that the overall positive effect of local firm's firm-specific and location-based advantages on their firm performance are not sufficient to eliminate the negative effect of the foreign firms' superior firm-specific and multi-nationality advantages on local firm performance.

Hypothesis 4 is therefore supported. Model 10 also shows that the older Chinese firms may incur more LOL (β=0.178, $p<.01$).

5.4 Results validation

In the absence of an additional sample, we performed validity tests before and after model-testing procedures. Prior to model testing, we tested the non-response bias in our analysis sample of 185 firms. Independent sample t-tests were performed to compare the early and later response groups on the values of all the variables, and no significant difference is found between early and late response groups. This suggests that non-response bias did not exist in our sample.

We also adopted the following approach suggested by Hair et al. (1998) to validate the results. We split the sample into two sub-samples. Sub-sample 1 included the first 50% of the received usable questionnaires (n=93), and Sub-sample 2 included the second 50% of the received usable questionnaires (n=92). We then performed stepwise regression analysis for the main effect variables plus one of the moderators – F_MNAs – which also had a significant main effect on the dependent variable using the overall sample (n=185) and the two sub-samples. The results are shown in Table 4. Comparison of the overall model fit indicates a high level of similarity of the results with respect to R^2, adjusted R^2, and standard error of the estimates. In comparing the individual coefficients, three out of four variables appear to be consistent across all three samples. However, one difference does appear. In

sub-sample 1 and sub-sample 2, one variable – *Firm-specific advantages of local firms* – did not enter in the stepwise results as it did in the overall sample. The omission of this variable in the two sub-samples may confirm that it was the weakest predictor amongst four variables, as indicated by the beta and t values in the overall model. In addition, the smaller sample size of the sub-samples may have also contributed to the results. Overall, the results indicate that the samples represent the population.

Studies that investigate perceptions using surveys run the risk of common method variance, that is, variance that is attributable to the measurement methods or construct indicators rather than to the constructs of interest. Following Podsakoff and Organ's (1986) study, we used Harman's one-factor test to measure the presence of the common method effect, and found no evidence of common method variance in the data.

Place Table 4 about here

6. Discussion and conclusions

Prior LOF-based studies focused on the additional cost confronted by foreign firms, adjusting to the changes of geographical location – physical distance, or as Perez-Batres and Eden (2008) noted, adjusting to "here" being different from "there". Perez-Batres and Eden's (2008) LOL study concerns the added cost to local firms, adjusting to changes in institutional settings over time – time horizon, or adjusting to "now" being different from "then". In our study, we look at what happened to LOL after Perez-Batres and Eden's (2008)

"now" and argue that, in the case of China, the LOL is still evident even after about three decades of changes in the 'rules of the game', the evolution and development of institutions and the adjustment of local firms' strategies to address such changes. We further argue that, complementing Perez-Batres and Eden's study, the persistence of such LOL is due to the inability of local firms to adapt to those institutional developments, making LBAs less legitimate, and to the ineffectiveness of those firms in addressing their resource-based competitive disadvantages relative to their foreign counterparts. While all other hypotheses are supported, there was not sufficient evidence to support Hypothesis 3b. This unexpected finding may suggest that rather than acting as contributors to headquarters or leaders of innovation projects that contribute to the development or enhancement of FSAs (Bartlett and Ghoshal, 1986), the subsidiaries of most Chinese MNEs are likely playing roles as implementers and branch plants that do not contribute significantly to FSAs, as described by Birkinshaw, Hood, and Jonsson (1998). International expansion (e.g. acquisitions) can be an effective way to acquire knowledge in the form of technological capabilities, management, and strategic skills. However, this may not apply to Chinese firms which are still at an early stage of internationalization because of their broad lack of experience with innovation, making it difficult for them to recognize and absorb all of the potential value of an acquired company. The lack of such experience may delay the knowledge transfer and integration process (Rugman and Li, 2007).

Overall, this study goes beyond the previous studies on LOF-related MNCs theories from foreign firms' perspectives that have been a building block of MNCs theory development in the last fifty years, and taken from local firms' perspectives, joins academic debates on one of the new frontier, yet under-researched issues, LOL, that confront international business researchers and practitioners. This line of research may challenge many existing MNCs theories that have been developed based on 'one side of perspective. Therefore, the findings of this study carry important implications for academics, managers of foreign and local firms, and policy makers in China.

6.1 Implications for theory

This research has contributed to theory by looking at the other side of the LOF-fence, that is, the impact on local indigenous firms of foreign firms' entry and foreign firm's competitive advantages over those local firms – in other words, the liability of localness. More specifically, this study contextualizes the organization-level variables that may directly explain the cause and existence of LOL and the impact of LOL on firm performance. This complements the pioneering study of LOL by Perez-Batres and Eden (2008) that explained the institutional-level (i.e. indirect) conditions that may cause LOL.

6.2 Managerial relevance

The findings of this study carry important practical implications for both local and foreign firms in China. In relation to local firms, as foreign firms catch up with LBAs such as local market knowledge (Li-Hua, 2007), and Chinese institutions keep developing, the superior LBAs of local firms may not be sustained for long. Local firms should thus avoid reliance on such type of advantages, especially those created by the institutional support provided by the home-country government, and should seek to become more effective and innovative in capability upgrading which is essential to the evolutionary development of sustainable advantages and creating new bundles of resources (Luo, 2000).

Chinese firms have been proactively seeking cooperation with foreign firms at home and abroad with the aim of addressing their firm-specific disadvantages (Cui and Jiang, 2009 and 2012; Kang and Jiang, 2012), while MNCs, especially from developed countries, often view cooperation with local partners (e.g. joint venture) as inferior to sole-operator enterprises which allow foreign firms to maximize the returns on their FSAs (Jiang, 2006). The findings of this study clearly reveal that both local and foreign firms have their competitive advantages as well as competitive disadvantages, and their strengths and weaknesses are highly complementary to each other. Adopting the logic underpinning the implications for North American scholars in the study by Perez-Batres, Pisani, and Doh (2010), foreign firms should take a proactive role in forming cooperation with local firms in order to effectively address their institutional-based disadvantages in China and to be more

effectively eliminating the LOF they may confront there. China is becoming an increasingly competitive market, and its fast growing economy continues to present many win-win opportunities through cooperation with the local businesses. Thus, cooperation should form an important part of the long-term sustainable competitive strategy of firms (Dagnino, 2009), especially for foreign firms operating in countries such as China where the ever-changing business environment keeps posing never-ending challenges for them.

The structure of markets in developing countries often helps local firms counter their foreign rivals (Khanna and Palepu, 2006). The Chinese product market is comprised of five tiers; foreign rivals often find it difficult and costly to serve anything but the tier 1 and tier 2 markets due to institutional voids (Chen, 2003). The managers of local firms, on the other hand, know how to work around and exploit such institutional voids because they have had years of experience doing so. Their familiarity with the local context allows them to identify and meet customers' needs more effectively and efficiently (Khanna and Palepu, 2006). In addition, some large Chinese firms such as Lenovo and Huawei are competing successfully in countries on the basis of FSAs which they have developed in recent years (Marinova, Child, and Marinov, 2011). These, together with their LBAs, mean that they are capable of competing with and outperforming foreign giants in the Chinese market. Therefore, a higher level of cooperation and collaboration with such present (or future) leading Chinese firms will certainly strengthen the foreign firms' competitive position in China and internationally. Foreign firms in

China have been aiming to turn themselves from foreign investors to strategic insiders in China (Luo, 2007). Now may be the time for them to consider transforming themselves further to become strategic allies of selected Chinese firms. More specifically, foreign firms could achieve this by forming or strengthening vertical and/or inter-organizational linkages with relatively competitive Chinese firms in order to combine the strength of, or take advantage of the complementary resources and capabilities of, both local Chinese and foreign firms. Besides helping them compete successfully with other competitors in the China market, it should help the foreign firms achieve greater corporate-level synergy among subsidiaries globally, providing competitive advantages in the global marketplace, especially in the markets of other transitional economies.

6.3 Implications for policy makers

Policy makers in China might also draw some implications from this study. In particular, they should reflect on the need to further improve the investment environment to create fair competition, providing incentives and necessary support for local firms to become more innovative, so as to develop and strengthen their resource-based competitive advantages such as FSAs and MNAs. While much has already been done to reform the system in relation to enterprises that are state-owned, efforts to make all Chinese enterprises competitive players, not only in China but internationally, should be a national priority.

6.4 Limitations and future research directions

An important limitation that future research should seek to address is that this study has provided a snapshot that does not capture all of the complexities of the real situation. Thus, besides incorporating the perspectives of foreign firms, future research should seek to build a longitudinal data set to examine how LOL evolves and how the competitive position of both foreign and Chinese firms changes over time in this huge and rapidly-changing market.

Both Perez-Batres and Eden's study (2008) and this study have firmly argued that LOL does exist. However, whether localness always presents a liability would be an interesting theoretical and practical proposition for future studies to examine. The inclusion of a number of parameters such as the FDI motivation of foreign firms, entry mode of foreign firms, definition of targeted product market, and level of institutional development in a given host country may better explain whether localness is a liability or a benefit for local firms. Empirically, both Perez-Batres and Eden's study (2008) and this study were undertaken in the context of emerging developing economies. In recent years, many MNCs from emerging developing economies such as China and India have been actively investing in developed countries. Do local firms in developed countries incur a liability of localness as a result of the presence of developing country MNCs in their country? An investigation into this issue could make useful theoretical and empirical contributions. Finally, the nature of the dynamics of LOL and LOF and the interactions between

them may be another area of interest and significance to academics, practitioners, and policy makers.

Notes

1. We used standardized regression coefficients (β) (Hair et al., 1998) for the purpose of comparing the relative strength of the various types of advantage for a local Chinese or a foreign firm in relation to their impacts on their relative performance.

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References

Aulakh, S. P., Kotabe, M., & Teegen, H. (2000). Export strategies and performance of firms from emerging economies: Evidence from Brazil, Chile, and Mexico. *Academy of Management Journal*, *43*(3): 342-361.

Barkema, H. G., Bell, J. H., & Pennings, J. M. (1996). Foreign entry, cultural barriers and learning. *Strategic Management Journal*, *17*(2): 151-166.

Bartlett, C. A., & Ghoshal, S. (1986). Tap your subsidiaries for global reach. *Harvard Business Review*, *64*(6): 87–94.

Birkinshaw, J., Hood, N. & Jonsson, S. (1998). Building firm-specific advantages in multinational corporations: The role of subsidiary initiative. *Strategic Management Journal, 19*(3): 221-241.

Birkinshaw, J. M., & Morrison, A. J. (1996). Configurations of strategy and structure in multinational subsidiaries. *Journal of International Business Studies, 26*(4): 729–794.

Buckley, P. J. (1990). Problems and developments in the core theory of international business. *Journal of International Business Studies, 21*(4): 657-666.

Caves, R. E. (1996). *Multinational Enterprises and Economic Analysis*. New York : Cambridge University Press.

Chang, S. J. (1995). International expansion strategy of Japanese firms: Capability building through sequential entry. *Academy of Management Journal, 38*(2): 383-407.

Chandler, G. N., & Hanks, S. H. (1994). Founder competence, the environment, and venture performance, *Entrepreneurship Theory and Practice, 18*(3): 77-89.

Chen, R. (2003). Price wars. *The China Business Review, 30*(5):42-51.

Child, J., & Rodrigues, S. (2005). The Internationalisation of Chinese firms: A case for theoretical expansion? *Management and Organization Review, 1*(3): 381-410.

Child, J., & Tse, D. (2001). China's transition and its implications for international business. *Journal of International Business Studies, 32*(1): 5-21.

Churchill, G. A. (1991). *Marketing Research: Methodological Foundation*, 5th ed. Chicago: The Dryden Press.

Collins, J. M. (1990). A market performance comparison of U.S. firms active in domestic, developed and developing countries. *Journal of International Business Studies, 21*(2): 271-287.

Contractor, J. F., Kundu, K. S., & Hsu, C. C. (2003). A three-stage theory of international expansion: The link between multinationality and performance in the service sector. *Journal of International Business Studies, 34*(1): 5-18.

Cui, L., & Jiang, F. (2009). FDI entry mode choice of Chinese firms: A strategic behavior perspective. *Journal of World Business, 44*(4): 434-444.

Cui, L., & Jiang, F. (2012). State ownership effect on firms' FDI ownership decisions under institutional pressure: A study of Chinese outward-investing firms. *Journal of International Business Studies, 43*(3): 264-284.

Dagnino, G. B. (2009). Coopetition strategy: A new kind of interfirm dynamics for value creation. In G. B. Dagnino & E. Rocco (Eds), *Coopetition Strategy: Theory, Experiments and Cases*: 25-43. London: Routledge Taylor & Francis Group.

D'Aveni, R. A. (1994). Hypercompetition: *Managing the Dynamics of Strategic Maneuvering.* New York: The Free Press.

Derkinderen, F. G. J. (1982). Transnational business latitude in developing countries. *Management International Review, 22*(4): 55-65.

Devonshire-Ellis, C., & Zhang, S. (2011). Analyzing Chinese financial reporting. *China Briefing: Magazine and Daily News Service*, February 7, 2011. (www.china-briefing.com)

Dunning, J. H. (1977). Trade, location of economic activity and the MNE: A search for an eclectic approach. In B. Ohlin, P. Hesselborn, & M. Wijkman (eds), *The International Allocation of Economic Activity*. New York: Holmes and Meier.

Dunning, J. H. (1988). The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of International Business Studies, 19*(1): 9-31.

Elliot, G., Jiang, F., Redding, G., & Stening, B. (2010). The Chinese business environment in the next decade: Report from a Delphi study. *Asian Business and Management, 9*(4): 459-480.

Erramilli, M. K., Agarwal, S., & Kim, S. S. (1997). Are firm-specific advantages location-specific too? *Journal of International Business Studies, 28*(4): 735-757.

Fey, C. F., & Bjorkman, I. (2001). The effect of human resource management practices on MNC subsidiary performance in Russia. *Journal of International Business Studies, 32*(1): 59-75.

Fiegenbaum, A., Hart, S., & Schendel, D. (1996). Strategic reference point theory. *Strategic Management Journal, 17*(3): 219-235.

Fiegenbaum, A., Lavie, D., & Shoham, A. (2004). The competitive positioning of foreign MNEs in domestic markets: theoretical extensions and evidence from the Israeli market. *Management International Review, 44*(3): 261-284.

Forest, T. (2001). The geographic sources of foreign subsidiaries' innovations. *Strategic Management Journal, 22*(2): 101-123.

Ger, G. (1999). Localizing in the global village: local firms competing in global markets. *California Management Review, 41*(4): 64-83.

Gilley, B. (2008). Legitimacy and institutional change: The case of China. *Comparative Political Studies, 41*(3): 259-284.

Gupta, A. K., & Govindarajan, V. (1994). Organizing for knowledge within MNCs, *International Business Review, 3*(4): 443–457.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis,* 5th ed. New Jersey: Prentice Hall.

Helpman, E. (1984). A simple theory of international trade with multinational corporations. *Journal of Political Economy, 9*2(3): 451-471.

Hermelo, F. D., & Vassolo, R. (2010). Institutional development and hypercompetition in emerging economies. *Strategic Management Journal, 31*(13): 1457-1473.

Hoskisson, E. R., Eden, L., Lau, C. M., & Wright M. (2000). Strategy in emerging economies. *Academy of Management Journal, 43*(3): 249-267.

Hu, Y. S. (1992). Global or stateless corporations are national firms with international operations. *California Management Review, 34*(2): 107-126.

Hymer, S. H. (1960/1976). *International Operations of National Firms: A Study of Direct Foreign Investment*. Cambridge, MA: MIT Press.

Jiang, F. (2005). Driving forces of international pharmaceutical firms' FDI into China. *Journal of Business Strategies, 22*(1): 21-40.

Jiang, F. (2006). *Foreign Pharmaceutical Firms' FDI Entry Strategies into China*. Panjagutta: The ICFAI University Press.

Kang, Y., & Jiang, F. (2012). FDI location choice of Chinese multinationals in East and Southeast Asia: Traditional economic factors and institutional perspective. *Journal of World Business, 47*(1): 45-53.

Khanna, T., & Palepu, K. G. (2006). Emerging giants: Building world class companies in developing countries. *Harvard Business Review*, October, 60-70.

Kobrin, S. J. (1991). An empirical analysis of the determinants of global integration. *Strategic Management Journal, 12*(Special issue): 17-37.

Kronborg, D., Thomsen, S. (2009). Foreign ownership and long-term survival. *Strategic Management Journal, 30*(2): 207-219.

Lavie, D., & Fiegenbaum, A. (2000). The strategic reaction of domestic firms to foreign MNC dominance: The Israeli experience. *Long Range Planning, 33*(5): 651-672.

Lemi, A. (2006). Determinants of sales destinations of U.S. multinational firms' affiliates in developing countries. *The International Trade Journal, 20*(3): 263-305.

Li-Hua, R. (2007). Benchmarking China firm competitiveness: A strategic framework. *Journal of Technology Management in China, 2*(2): 105-118.

Luo, Y. (1997). Partner selection and venturing success: The case of joint ventures with firms in the People's Republic of China. *Organization Science, 8*(6): 648-662.

Luo, Y. (2000). Dynamic capabilities in international expansion. *Journal of World Business*, *35*(4): 355-378.

Luo, Y. (2007). From foreign investors to strategic insiders: Shifting parameters, prescriptions and paradigms for MNCs in China. *Journal of World Business, 42*(1):14-34.

Luo, Y., & Park, S. H. (2001). Strategic alignment and performance of market- seeking MNCs in China. *Strategic Management Journal, 22*(2): 141-55.

Marinova, S., Child, J., & Marinov, M. (2011). Evolution of firm- and country-specific advantages and disadvantages in the process of Chinese firm internationalization. *Advances in International Management*, *24*: 235–269

Meyer, K. E. 2004. Perspectives on multinational enterprises in emerging economies. *Journal of International Business Studies, 35*(4): 259-276.

Miller, S., & Parkhe, A. (2002). Is there a liability of foreignness in global banking? An empirical test of banks' X-efficiency. *Strategic Management Journal, 23*(1): 55-75.

Morck, R., & Yeung, B. (1992). Internalization: An event study test. *Journal of International Economics, 33*(1-2): 41-56

Nachum, L. (1999). Does nationality of ownership make any difference and, if so, under what circumstances? Professional service MNEs in global competition. *Journal of International Management, 9*(1): 1-32.

Nachum, L. (2003). Liability of foreignness in global competition? Financial service affiliates in the city of London. *Strategic Management Journal, 24*(12):1187-1208.

Nachum, L. (2010). When is foreignness an asset or a liability? Explaining the performance differential between foreign and local firms. *Journal of Management, 36*(3): 714-739.

Nolan, P. (2004). *China at the Crossroads*. Cambridge: Polity Press.

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

Perez-Batres, L. A., & Eden L. (2008). Is there a liability of localness? How emerging market firms respond to regulatory punctuations. *Journal of International Management, 14*(3): 232-251.

Perez-Batres, L. A., Pisani, M. J., & Doh, J. P. (2010). A perspective on international business scholarship: Is it regional or global? *Multinational Business Review, 18*(1): 73-87.

Ping, D. (2003). Foreign investment by multinationals from emerging countries: The case of China. *Journal of Leadership and Organizational Studies, 10*(2): 113-124.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, *12*(2): 531-544.

Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: The Free Press.

Roth, K., & Morrison, A. J. (1992). Implementing global strategy: Characteristics of global subsidiary mandates. *Journal of International Business Studies*, *23*(4): 715–736.

Rugman, A. M. (1981). *Inside the Multinationals: The Economics of Internal Markets*. New York: Columbia University Press.

Rugman, A., & Li, J. (2007). Will China's multinationals succeed globally or regionally? *European Management Journal*, *25*(5): 333-343.

Rugman, A., & Verbeke, A. (1992). A note on the transnational solution and the transaction cost theory of multinational strategic management. *Journal of International Business Studies*, *23*(4): 761–772.

Rugman, A. M., & Sukpabich, N. (2006). Firm-specific advantages- intra-regional-sales-and-performance of multinational enterprises. *The International Trade Journal*, *20*(3): 355-382

Rui, H. & Yip, G. (2008). Foreign acquisitions by Chinese firms: A strategic intent perspective. *Journal of World Business*, *43*(2): 213-226.

Sally, S. (2007). Globalization and performance in the new millennium: A look at firms from developed and developing nations. *Journal of American Academy of Business*, Cambridge, *10*(2): 51-60.

Schüler-Zhou, Y. & Schüler, M. (2009). The internationalization of Chinese companies: What do official statistics tell us about Chinese outward foreign direct investment? *Chinese Management Studies*, *3*(1): 25-42.

Sniezek, J. A. (1989). An examination of group process in judgmental forecasting. *International Journal of Forecasting*, *5*(2): 171-178.

Tallman, S., & Li, J. T. (1996). Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management Journal*, *39*(1): 179-196.

Teece, D. J. (1977). Technology transfer by multinational firms: The resource cost of transferring technological know-how. *Economic Journal*, *87*(346): 242-261.

Vachani, S. (1990). Strategic responses of multinationals to competition from developing-country cottage firms. *International Marketing Review*, *7*(3): 31-47.

Wang, M. Y. (2002). The motivations behind China's government-initiated industrial investment overseas. *Pacific Affairs*, *75*(2): 187-206.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, *5*(2): 171-180.

Wesson, T. (2004). *Foreign Direct Investment and Competitive Advantage.* Cheltenham: Edward Elgar.

Williamson, P., & Zeng, M. (2004). Strategies for competing in a changed China. *MIT Sloan Management Review*, *45*(4): 85-91.

Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, *38*(2): 341-363.

Zaheer, S. (2002). The liability of foreignness, redux: A commentary. *Journal of International Management*, *8*(3):351-358.

Zaheer, S., & Mosakowski, E. (1997). The dynamic of the liability of foreignness: A global study of survey. *Strategic Management Journal*, *18*(6): 439-464.

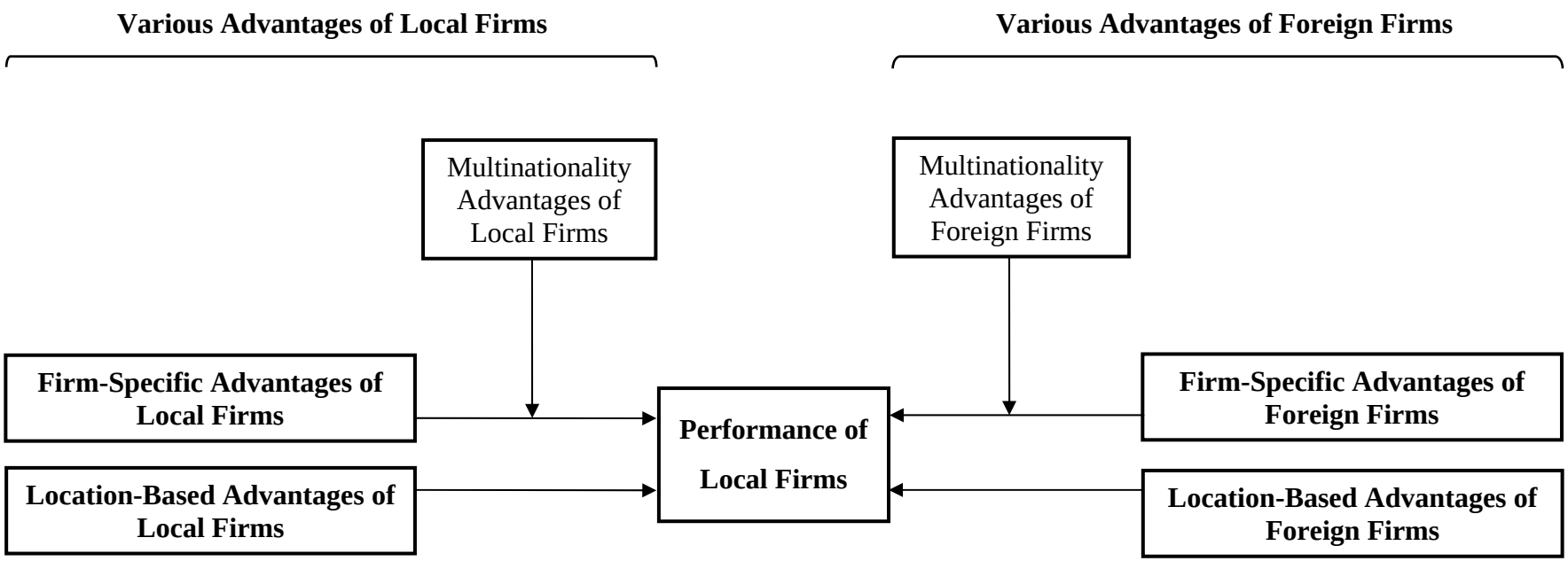

Fig. 1. Relative competitive strength of various advantages of local and foreign firms determining local firm performance.

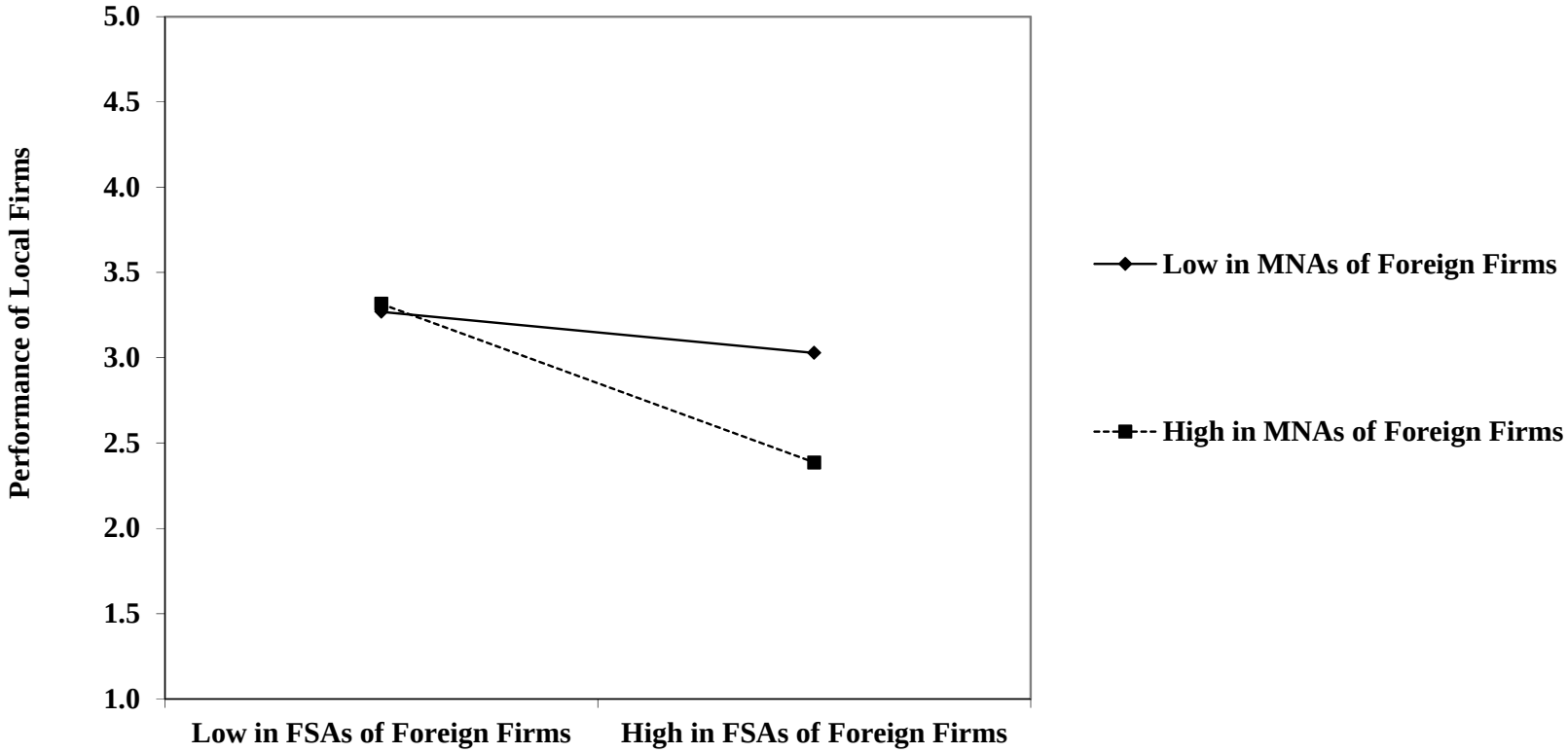

Fig. 2. Interaction effect between MNAs and FSAs of foreign firms on performance of local firms

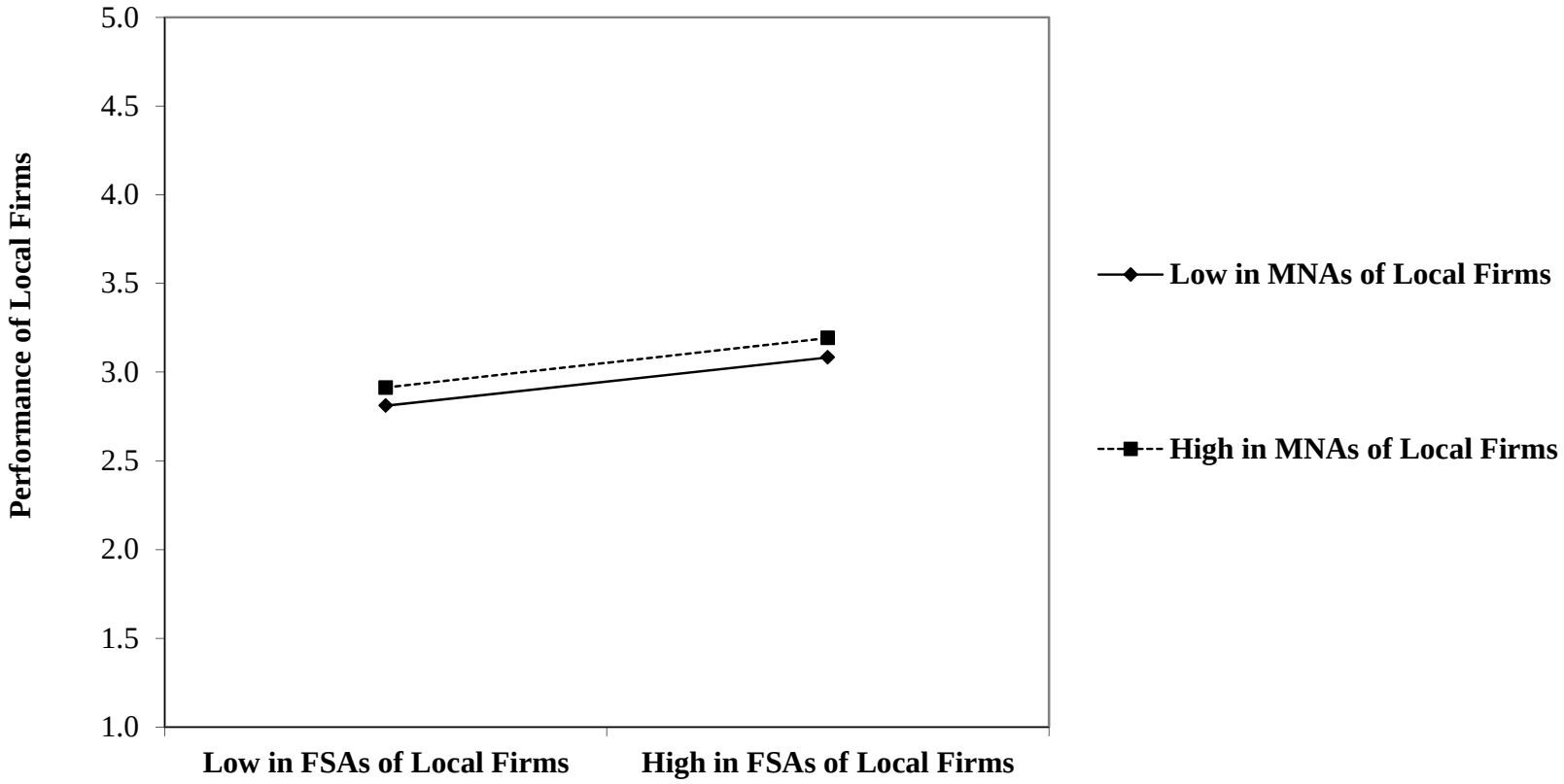

Fig. 3. Interaction effect between MNAs and FSAs of local firms on performance of local firms

Table 1
Independent and moderating variable constructs, sources and scale reliability.

Constructs and variable indicators	Variable sources	Cronbach's alpha	
		Local Chinese firm	Foreign firm
Firm-specific advantages		$\alpha = 0.80$	$\alpha = 0.82$
Brand name	Caves, 1996.		
Technology advancement	Helpman, 1984; Wernerfelt, 1984.		
R&D intensity	Morck and Yeung, 1992; Rugman, 1981.		
Knowledge acquisition and value creation	Rugman and Sukpanich, 2006		
Financial strength	Nachum, 2003.		
Firm size	Nachum, 2003.		
Marketing skills	Morck and Yeung, 1992		
Management skills	Nachum, 2003.		
Innovation ability and success	Caves, 1996.		
Location (China)- based advantages		$\alpha = 0.80$	$\alpha = 0.86$
Access to local information	Nachum, 2003.		
Connection to local markets	Fiegenbaum, Lavie, and Shoham, 2004.		
Ability to respond local market/customer needs	Sally, 2007.		
Product and service preference of local customers	Nachum, 2003.		
Reliance on local resources	Nachum, 2003.		
Local government support	Derkinderen, 1982.		
Multinationality advantages		$\alpha = 0.71$	$\alpha = 0.77$
Intensity of international business activity	Nachum, 2003.		
Knowledge of global market	Lemi, 2006.		
Access to global financial resources	Collins, 1990.		
Access to global HR resources	Ger, 1999.		
Global synergy	Meyer, 2004.		

Table 2
Descriptive statistics and correlations (n=185).

Constructs	Operational measures	Weighted Mean	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. Firm-specific advantage of local firms	Compound variable	23.721	23.584	2.351	1.000								
2. Location (China)-based advantage of local firms	Compound variable	23.559	25.114	2.173	.567***	1.000							
3. Firm-specific advantage of foreign firms	Compound variable	38.945	38.649	2.805	-.444***	-.484***	1.000						
4. Location (China)-based advantage of foreign firms	Compound variable	20.921	20.260	3.298	-.250**	-.341***	.470***	1.000					
5. Multi-nationality advantage of local firms	Compound variable	8.337	8.276	1.288	.416***	.489***	-,470	-.266***	1.000				
6. Multi-nationality Advantage of foreign firms	Compound variable	21.845	21.676	1.643	-.439***	-.398***	.591***	.520***	-.354	1.000			
7. Industrial sector	Dummy (Manufacturing, service)		0.640	0.482	.216**	.438***	-.420***	-.377***	.329***	-.402***	1.000		
8. State ownership	Dummy (State, no-state ownership)		0.730	0.445	.040	-.096	-.018	-.009	-.018	-.002	.048	1.000	
9. Age	No. of years since establishment		25.649	3.161	-.013	.068	-.185*	-.155*	.259***	-.102	-.023	.013	1.000

† p<.10; * p<.05; **p<.01; *** p<.001; (2-tailed).
Non-parametric Spearman Rank correlations are reported where nominal data are used.

Table 3
Advantages determining the competitive strength of foreign and local Chinese firms.

Control variables	Control variable	Advantages of local firms		Advantages of local and foreign firms								
	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	VIF
Control variables												
Industrial sector	0.444***	0.228***	0.229***	0.156*	0.127*	0.119†	0.120†	0.106†	0.110†	0.099	0.104†	1.487
State ownership	-0.041	0.008	0.001	-0.012	-0.012	-0.012	-0.010	-0.006	-0.008	-0.006	-0.008	1.043
Age	-0.069	-0.119	-0.118*	-0.148**	-0.161**	-0.175*	-0.174**	-0.162**	-0.167**	-0.176**	-0.178**	1.148
Independent variables												
L_FSAs		0.264***	0.268***	0.200**	0.197**	0.185**	0.187**	0.164*	0.146*	0.153*	0.138*	1.793
L_LBAs		0.268***	0.268***	0.236**	0.225**	0.209**	0.210**	0.230**	0.215**	0.215**	0.203**	1.929
F_FSAs				-0.332***	-0.287***	-0.273***	-0.268***	-0.234**	-0.293***	-0.221**	-0.281***	2.166
F_LBAs					-0.142*	-0.144*	-0.144*	-0.098	-0.080	-0.100	-0.082	1.538
Moderators												
L_MNAs		0.122†	0.126†			0.068	0.069			0.065	0.053	1.604
F_MNAs								-0.159*	-0.149*	-0.158*	-0.148*	1.933
Interaction terms												
L_FSAs × L_MNAs			0.068				0.016				0.002	1.096
F_FSAs × F_MNAs									-0.172**		- 0.170**	1.078
Model fit												
N	185	185	185	185	185	185	185	185	185	185	185	
R^2	0.203	0.449	0.453	0.509	0.523	0.526	0.527	0.537	0.564	0.539	0.566	
Adj-R^2	0.190	0.430	0.432	0.492	0.505	0.505	0.502	0.516	0.542	0.516	0.539	
F value	15.35***	24.16***	20.97***	30.73***	27.77***	24.44***	21.62***	25.50***	25.20***	22.78***	20.53***	

All coefficients are standardized
† p<.10; * p<.05; **p<.01; *** p<.001; (2-tailed).

Table 4
Split-sample validation of the stepwise estimation models.

Model components	Overall sample N=185	Sub-sample 1 N=93	Sub-sample 2 N=92
Independent variables (Main effect variables)			
Firm-specific advantage of local firms			
Beta coefficient	.161	Not entered	Not entered
t value	2.380*		
Location-based advantage of local firms			
Beta coefficient	.359	.405	.272
t value	4.045***	4.624***	3.060**
Firm-specific advantage of foreign firms			
Beta coefficient	-.241	-.253	-.331
t value	-3.432***	-2.675**	-3.261**
Multi-nationality advantage of foreign firms			
Beta coefficient	-.216	-.203	-.246
t value	-3.189**	-2.043*	-2.535**
Model Fit			
R^2	.494	.488	.483
Adj- R^2	.483	.471	.465
S. E. of the estimate	14.431	15.648	13.616

† p<.10; * p<.05; **p<.01; *** p<.001; (2-tailed).