

**Motives for Chinese Outward FDI: Firm Resources, Industry Dynamics, and
Government Policies**

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Motives for Outward FDI of Chinese Private Firms: Firm Resources, Industry Dynamics, and Government Policies

ABSTRACT Using recent survey data, this study examines the impact of firm resources, industry dynamics, and government policies on the outward FDI motives of Chinese firms, based on the integrated ‘strategy tripod’ framework. The results suggest that supportive government policies are important motivators for both strategic asset-seeking and market-seeking outward FDI. Firms’ technology-based competitive advantages and a high level of industry R&D intensity tend to motivate strategic asset-seeking outward FDI, whereas firm’s export experience and higher level of domestic industry competition tend to induce market-seeking outward FDI.

Keywords Chinese private firms; outward FDI motives; strategic asset-seeking outward FDI; market-seeking outward FDI.

Running title

Outward FDI Motives of Chinese Firms

INTRODUCTION

Outward foreign direct investment (outward FDI) from emerging economies has increased substantially in recent years (UNCTAD, 2006). A more thorough understanding of the special circumstances that surround this new breed of multinational enterprise from emerging economies (EE MNEs) can help to extend the existing MNE theories further (Luo & Tung, 2007). Recent theoretical studies highlight that a major difference between EE MNEs and MNEs from developed economies (DE MNEs) is that the former are driven by different motives (Mathews, 2006; Witt & Lewin, 2007). While DE MNEs are more likely to exploit their competitive advantage established at home (Dunning, 2001), EE MNEs need to balance asset exploitation and exploration in the process of internationalization and to use outward FDI as a springboard to acquire strategic resources (Luo & Tung, 2007; Makino, Lau, & Yeh, 2002).^[1] Yamakawa, Peng, and Deeds (2008) have developed a framework from the strategy tripod perspective that incorporates the direct impact of internal resources, industry dynamics, and institutional environments on outward FDI by EE MNEs. However, institutions may not only directly affect firms' outward FDI strategies, but also indirectly affect outward FDI decisions through interplay with other antecedents of internationalization. We extend the internationalization framework of EE MNEs (Yamakawa, Peng, & Deeds, 2008) by considering the indirect impact of industry and institutional factors on outward FDI through these factors' interaction with firm capabilities. In this study, we aim to contribute to a new understanding of EE MNEs, specifically the motives of outward FDI from China, using a systematically collected firm-level data set.

Existing empirical studies typically examine 'whether', 'where', or 'how' outward FDI activities are conducted (Buckley, Clegg, Cross, Liu, Voss, & Zheng, 2007; Cui & Jiang, 2009; Makino et al., 2002) without explicitly testing different motives for EE MNEs. Market-seeking and asset-seeking are two distinct but complementary motives behind EE

outward FDI. In this study, instead of inferring motives of EE MNEs from their location choices as in Makino et al. (2002), we directly examine the motives of Chinese MNEs and how they are contingent on firm, industry, and institutional factors.

Compared with the insightful theories of EE MNEs, empirical studies on EE MNEs are much less systematic and mostly based on case studies or national level data (Yamakawa et al., 2008). The lack of firm level empirical studies is partly due to the difficulty in accessing systematic data on EE MNEs. This lack limits our understanding of the validity of recently developed EE MNE theories. There are several exceptions. Yiu et al. (2007) investigate international venturing based on a sample of Chinese state-owned enterprises (SOEs), limited liability and shareholding firms, and private firms, while Cui & Jiang (2009) study the entry mode choice of newly internationalized Chinese SOEs from a strategic behaviour perspective. In the present study, we contribute to the literature by utilizing a survey of private firms in seven Chinese provinces to add fresh evidence on the motives of Chinese private firms' outward FDI.

In the following section we discuss our analytical framework and develop hypotheses. This is followed by a description of our data and methodology, a discussion of our findings, and a conclusion.

THEORETICAL BACKGROUND AND HYPOTHESES

Dunning's OLI paradigm (Dunning, 2001) argues that MNEs arise because they have developed competitive advantages at home (O-advantages), which can be transferred to specific countries to exploit location advantages (L-advantages) through foreign direct investment (I-advantages). Extending the OLI paradigm, Dunning & Lundan (2008) suggest that an institutional approach offers a promising way to advance our understanding of the different characters of contemporary MNEs. Building on the OLI paradigm, several insightful

theoretical perspectives, including the “springboard perspective” (Luo & Tung, 2007), the “linkage-leverage-learning perspective” (Mathews, 2006), and the “institutional escapism perspective” (Witt & Lewin, 2007), have recently been proposed in response to the rise of EE MNEs. These theories emphasize that to survive and thrive, EE MNEs must respond to a multitude of external forces, including the extra-institutional environment and business systems in which firms are embedded.

A single theoretical lens/approach, however, may be inadequate to explain the motives of EE MNEs due to complex and unstable external environments as well as the heterogeneous internal resources and capabilities of these firms (Peng, Wang, & Jiang, 2008). For example, the resource-based view has been criticized for making “little effort to establish appropriate contexts” (Priem & Butler, 2001, p.32), while the industry-based view has been challenged for ignoring histories and institutional backgrounds (Narayanan & Fahey, 2005). Integrating resource-based, industry-based, and institutional-based views, the integrated “strategy tripod” framework is an appropriate approach to examining the internationalization strategies of EE MNEs (Yamakawa et al., 2008). Adopting the strategy tripod framework, we conduct a study to investigate the motives of Chinese MNEs, and empirically test hypotheses derived from resource-based, industry-based, and institutional-based views using a survey of Chinese private firms. Figure 1 presents the research framework for this study.

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EE MNEs, especially those from China, have limited motivation to conduct cost reduction (efficiency-seeking) FDI and are more likely to engage in natural resource-seeking, strategic asset-seeking, and market-seeking FDI (Buckley, Cross, Tan, Voss, & Liu, 2008). Natural resource-seeking FDI, although important in outward FDI by EE MNEs, is mainly

conducted by large SOEs whose main role is to pursue objectives designated by their respective home governments (Luo & Tung, 2007). While existing studies of EE MNEs are mainly concentrated on large SOEs (Cui & Jiang, 2009; Morck, Yeung, & Zhao, 2008), this study focuses on examining the factors affecting the strategic asset-seeking and market-seeking motives for outward FDI by the much smaller-scale Chinese private firms.

Resource-based View and Outward FDI from Emerging Economies

The mainstream theoretical perspective within international business assumes that firms will internationalize on the basis of definable competitive advantages (Caves, 1971), and the eclectic OLI paradigm identifies ownership advantages as a major reason for the internationalization of DE MNEs (Dunning, 2001). Recently, the RBV has become an influential theoretical perspective in international business research, especially in the development of new theories of internationalization (Peng, 2001). International applications of the RBV extend the eclectic paradigm by specifying the nature of internal resources and capabilities. Similar to the eclectic paradigm, the RBV defines ownership advantages as firm-specific resources, such as superior proprietary resources or managerial capabilities that can be applied competitively in a foreign country (Barney, 1991). Different from the eclectic paradigm, international applications of the RBV attribute the success of MNEs not only to the exploitation of superior firm-specific resources, but also to the efficient and effective acquisition and integration of particular knowledge (Madhok, 1997).

Based on the RBV and a dynamic perspective, the linkage-leverage-learning (LLL) model proposed by Mathews (2006) sees internationalization as an effective way for EE MNEs to access the strategic resources that they lack. Strategic assets sought by EE MNEs mainly include technology, human capital, and brands, as these assets are critical if latecomer MNEs are to catch up with global giants (Luo & Tung, 2007). Compared with developed

economies, R&D investment in emerging economies is much lower, and there is a significant technological gap between emerging economies and developed countries (UNCTAD, 2005). As latecomers, EE MNEs may be motivated to seek strategic assets in developed economies to overcome their inherent ownership disadvantages (Li, 2007). In order to quickly catch up with industrial leaders, latecomer MNEs may use FDI as a means of tapping into innovation capabilities in the host country.

The ability to assimilate external knowledge is critical for organizational learning. In particular, absorptive capacity, which is largely a function of the level of prior related knowledge (Cohen & Levinthal, 1990), is important for both EE and DE MNEs to be successful in acquiring strategic assets. The learning perspective of internationalization theory argues that firms with higher levels of domestically developed, technology-based competitive advantages are capable of understanding and adapting to international markets (Vermeulen & Barkema, 2001). Chinese firms, like Lenovo and Haier, are well-known companies that have developed a strong domestic base of technological know-how that has enabled them to absorb technologies from international industry leaders. For strategic asset-seeking FDI to be successful, EE MNEs should possess related technological capabilities that are advanced enough to absorb superior technologies in the host countries. Thus, we hypothesize:

***Hypothesis 1a:** EE MNEs that have greater technology-based competitive advantages at home will be more likely to have a strategic asset-seeking outward FDI motive.*

The process model of internationalization suggests that domestic firms start internationalization with low commitment and with relatively less risky activities, such as exports. Exporting requires fewer organizational resources, provides greater flexibility for

managerial actions, and involves low business risks compared with other modes of entry, such as equity investment. As firms gain international experience through early exporting, they increase their international commitments gradually through licensing and joint ventures and, finally, FDI in the form of sales subsidiaries and manufacturing units (Johanson & Vahlne, 1977).

In reality, EE MNEs typically involve two stages of internationalization: the pre-MNE (pre-export, immature-export, and mature export) phases and the MNE (infant MNE, teenage MNE, and mature MNE) phases (Li, 2007). In the process of exporting, firms are able to establish linkages in international markets that are a critical starting point for FDI investors from emerging economies (Mathews, 2006). During the 1980s and early 1990s, much Chinese outward FDI took place to provide a local support function for domestic Chinese exporters, to help them access information, transportation, and financial services, and to help them surmount a variety of trade barriers. Since China's entry into the WTO in 2001, tariff barriers have been less serious, and non-tariff barriers, such as anti-dumping, have become more prevalent (Peng et al., 2008). To bypass these trade barriers, and to leverage internationalization know-how accumulated in the process of exporting, latecomers from emerging economies like China with more export experience are more likely to engage in outward FDI for the purpose of defensive market seeking (Buckley et al., 2007; Buckley et al., 2008). Thus, we expect a positive association between market-seeking outward FDI and the level of export experience of firms, and hypothesize:

***Hypothesis 1b:** EE MNEs with higher levels of export experience will be more likely to have a market-seeking outward FDI motive.*

Industry-based View and Outward FDI from Emerging Economies

The industry-based view stresses that the key principle of competitive strategy formulation is a firm's relationship to the industry environment in which the firm competes. The external environment – which includes the industry – exerts pressure to which a firm must adapt in order to survive and prosper, and industry dynamics play a critical role in determining a firm's strategic behaviour (Porter, 1980). Based on this rationale, industry factors have been considered as the primary determinants of a firm's internationalization in previous studies (Boter & Holmquist, 1996).

High industrial R&D intensity reveals potential for development of new products in an industry. To succeed in industries for which technological innovation is the key source of competitive advantage, internationalization is no longer a matter of choice, but of necessity (Spence, 2003). While firms in traditional manufacturing industries generally follow an incremental approach both domestically and internationally, firms in knowledge-intensive industries are more likely to have an international orientation from inception, and internationalize rapidly (Bell, Crick, & Young, 2004). Facing constraints on strategic asset development domestically, EE MNEs have strong incentives to acquire these assets abroad to overcome institutional and market constraints at home (Luo & Tung, 2007). To secure the competitive position established domestically and catch up with fast-developing technology, latecomer EE MNEs operating in high-tech industries emphasize learning from counterparts in developed economies and may be more motivated to engage in strategic asset-seeking outward FDI activities. Thus, we hypothesize:

***Hypothesis 2a:** EE MNEs in industries with higher levels of R&D intensity will be more likely to have a strategic asset-seeking outward FDI motive.*

The transition towards a market economy in China has created a very competitive environment for domestic private firms. On one hand, the economy is still tightly controlled by the government, and domestic private firms face more constraints for growth than SOEs (Child & Rodrigues, 2005). On the other hand, foreign-invested firms also exert high competitive pressures on domestic private firms (Buckley, Clegg, & Wang, 2002).

Facing severe competition domestically, DE MNEs may increase FDI to avoid home market competition (Wiersema & Bowen, 2008). For the same reason, some EE firms increase FDI not to exploit a competitive advantage that was developed in the domestic market, but to avoid a number of competitive threats in the industry environment, including cut-throat competition and limited room for growth, which it incurs if it operates exclusively in the domestic market (Boisot & Meyer, 2008). To seek further growth, EE firms operating in highly competitive industries have a stronger motivation to venture into overseas markets. Thus, we hypothesize:

***Hypothesis 2b:** EE MNEs in industries with higher levels of competition at home will be more likely to have a market-seeking outward FDI motive.*

Institution-based View and Outward FDI from Emerging Economies

Institutions significantly shape firms' strategies and behaviors in emerging economies (Peng et al., 2008). However, the extant literature on institutions and international business largely focuses on institutions in MNEs' host countries, and neglects institutions in MNEs' home countries (Luo & Tung, 2007). As the largest emerging economy, China has been transitioning from a centrally-planned to a market-based economy through liberalization and privatization, accompanied with institutional changes in political systems, legal frameworks, and market structures (Child & Tse, 2001). However, the economic behavior of Chinese firms

is still fundamentally shaped by government policies even after three decades of economic reform. The Chinese government provides strong incentives to enterprises that are in the process of investing abroad (Child & Rodrigues, 2005). With powerful support from the government, some strong Chinese enterprises have been rapidly modernizing and many of them have grown to be competitive on a worldwide scale, largely through aggressive international expansion (Zeng & Williamson, 2003).

Since the formal implementation of the “go global” strategy in 2000, the Chinese government has established a clear direction for the types of outward FDI it would like to encourage, and has been able to push firms to follow its global expansion strategies. For example, the so-called ‘Outbound Catalogue Guidance’, first issued in 2004 (Buckley et al, 2008), lists the government’s preferred host countries and industries, and attempts to induce Chinese firms to invest in these countries and industries by offering preferential access to capital, tax concessions, and other incentives. The guidance states that preferred outward FDI should carry benefits for the firm and China’s economy by: (i) promoting China’s exports of goods and services, (ii) enhancing the firms’ technological capacity and R&D activities, (iii) enabling firms to create and establish an international brand (Buckley et al., 2008).

Government promotion policies on outward FDI are not limited to China. The recent global survey suggests that most emerging and developing country governments now encourage local enterprises to go global (UNCTAD, 2006). On one hand, governments have issued numerous rules and regulations on outward FDI for the purpose of providing a stable and supportive institutional environment so that EE MNEs can acquire strategic assets abroad (Luo, Xue, & Han, 2010). On the other hand, governments have encouraged outward FDI projects that further promote export-led growth strategy of EEs (Buckley et al., 2008). We expect that EE MNEs have stronger outward FDI motives when they receive stronger support from home country governments. Thus, we hypothesize:

Hypothesis 3a: EE MNEs with higher levels of government support will be more likely to have a strategic asset-seeking outward FDI motive.

Hypothesis 3b: EE MNEs with higher levels of government support will be more likely to have a market-seeking outward FDI motive.

Moderation Effects

The hypotheses developed above emphasize separately the importance of internal capabilities, industry dynamics, and institutional factors in outward FDI from emerging economies. While scholars have begun to establish the importance of variations in the institutional and industrial characteristics across home and host countries with regard to the behaviors of MNEs, they have rarely looked beyond the task environment to explore interactions between institutional and industry environments, organizations, and strategic choices (Hitt, Tihanyi, Miller, & Connelly, 2006).

However, internationalization can be viewed as continuous input, with process, output, and feedback activity over time, whereby the external environment acts as a moderator on internationalization behavior (Kast & Rosenzweig, 1974). In other words, internal and external factors may be interrelated, in the sense that some factors may complement or reinforce others in the strategic choices made by firms. In line with this argument, Jones and Coviello (2005) developed a conceptual framework of entrepreneurial internationalization behavior as a cyclical process moderated by the external environment within which firms operate. Gao, Murray, Kotabe, & Lu (2010) also pointed out that the need to explore the interactions of resource-, industry-, and institution-based variables and examine how they jointly shape firms' internationalization strategies. However, there are limited empirical studies on the interaction of external environments and firms' internal factors as the

determinants of internationalization strategies. We develop a number of hypotheses on EE MNEs' internationalization motives, focusing on the interaction of these internal and external forces.

Operating in industries where technology advantages are critical for success, EE firms face more serious technology constraints at home than those in industries where technology advantages are less critical (Yamakawa et al., 2008). Hence these firms can use outward FDI as a springboard to aggressively acquire or buy strategic assets from advanced MNCs to compensate for their competitive weakness and to compete more effectively against global rivals in their home countries (Luo & Tung, 2007). For example, some Chinese firms operating in R&D intensive industries, such as Lenovo and ZTE, consider outward FDI as an effective way to obtain advanced technology, internationally recognized brands, and human capital (Liu & Buck, 2009). Thus, we hypothesize:

***Hypothesis 4a:** Industrial R&D intensity will positively moderate the relationship between EE MNEs' technology-based competitive advantage and their strategic asset-seeking outward FDI motive.*

Industry characteristics also may moderate the relationship between export experience and outward FDI motive by EE firms for two main reasons. First, in some industries, operating on a global scale and serving international markets are essential for survival and further growth. In such cases, industry characteristics affect firms' international activities such as export experience and outward FDI. Second, as seen above with regard to R&D intensity, the level of industry competition pushes firms to seek markets elsewhere. Evidence from existing studies indeed shows that the possibility of internationalization is likely to be moderated by industry instability and competition in domestic markets (Gao et al., 2010). The

stronger the competition in the domestic market, the greater the incentive is for firms to engage in both defensive and offensive market-seeking FDI (Buckley et al., 2008). Hence, we hypothesize:

***Hypothesis 4b:** Industry competition will positively moderate the relationship between EE MNEs' export experience and their market-seeking outward FDI motive.*

Henisz and Macher (2004) examine the joint impact of firm- and country-level factors on the location decisions of MNEs, and find that firms with more advanced technological capabilities are more likely to make investments in countries with greater technological sophistication but not in politically hazardous countries where they face greater expropriation hazards. Witt and Lewin (2007) take an institutional escapism view and argue that outward FDI by some EE MNEs are firms' escape response to misalignments between firm needs and home-country institutional conditions. Boisot and Meyer (2008) had a similar observation.

Different from the institutional escapism view, another line of study emphasizes that government support plays an important role in all internationalization stages of EE MNEs, given that corporations take government policies as an additional input in developing their international strategies (Aggarwal & Agmon, 1990; Luo, Xue, & Han, 2010). Consistent with export-led growth strategies pursued by governments in emerging economies, for example, export-seeking FDI is undertaken by EE MNEs to promote their exports in host markets (Lecraw, 1993). In another example, realizing the importance of technology for long-term growth, governments in emerging economies have formulated a series of policies as institutional support for the acquisition of advanced knowledge in foreign countries (UNCTAD, 2005). Hence, government policies can have a strong impact on

export-promotion and technology-acquiring outward FDI activities in the internationalization process of EE MNEs (Aggarwal & Agmon, 1990).

The Chinese government particularly emphasizes the role of outward FDI in promoting export and acquiring strategic assets abroad through various supportive policies (Luo, Xue, & Han, 2010). Increasing numbers of Chinese MNEs are seizing opportunities arising from deregulation and liberalization following China's new outward FDI promotion policies. To benefit from these policies, firms need to develop some ownership advantages rooted in the home country conditions in order to compete with established MNEs internationally (Aggarwal & Agmon, 1990). We argue that it is highly likely that private firms with some technology-based competitive advantages that have export experience are able to benefit from supportive government policies towards outward FDI.

Both the institutional escapism and the governmental promotion views argue that internationalization strategies result from the interaction between firms' needs and home-country institutional conditions. Therefore, we hypothesize interrelationships among technology-based competitive advantage, export experience, supportive government policies, and outward FDI motive as follows:

***Hypothesis 4c:** Supportive government policies will positively moderate the relationship between EE MNEs' having technology-based competitive advantages and their strategic asset-seeking outward FDI motive.*

***Hypothesis 4d:** Supportive government policies will positively moderate the relationship between EE MNEs' export experience and their market-seeking outward FDI motive.*

METHOD

Sample

The data used in our study were collected through a questionnaire survey jointly conducted by the Chinese Academy of Social Sciences (CASS) and All-China Federation of Industry and Commerce (ACFIC) in 2008. CASS is the largest government-funded research institute of social sciences, while ACFIC is the largest association of firms in China. The government background of CASS and ACFIC has both advantages and disadvantages when conducting the survey. On the positive side, cooperation with government agencies can help survey teams to gain 'legitimacy' and overcome some difficulties, such as a low response rate. In several recent studies on the outward FDI of Chinese firms, scholars chose to work with government agencies, including the Ministry of Commerce and the Statistics Bureau of China, to enlarge the sample size and to access a reasonable number of firms with outward FDI (Cui and Jiang, 2009; Yiu et al., 2007). On the negative side, involving government-related institutes may cause biased responses in surveys, especially with the questions about the role of government agencies. However, we would argue that the sponsorship of CASS and ACFIC may not cause serious biases towards favorable responses to the questions concerning the role of government agencies in outward FDI. First, CASS and ACFIC are public institutes instead of administrative authorities, and mainly play the role of facilitating communications between firms and administrative authorities.^[2] Second, both institutes are reputable and have extensive experience in conducting surveys and collaborating with international research institutes. Moreover, survey data collected by the two institutes have been widely used in previous studies (e.g., Bai, Lu, & Tao, 2006).

As outward FDI activities by Chinese SOEs mainly reflect the interests of the Chinese government (Morck et al., 2008), the survey focused on domestic private firms. We also limited the sample to firms with more than 5 million RMB annual sales in 2007, given that outward FDI activities are relatively rare among small Chinese firms. The survey focused on

manufacturing firms in order to control for fundamental differences between firms in manufacturing industries and other industries. According to official statistics, the top eight provinces, including Zhejiang, Jiangsu, Shandong, Fujian, Shanghai, Guangdong, Beijing, and Heilongjiang, accounted for 55.7 percent of Chinese outward FDI entities by the end of 2007 (MOFCOM, 2008). The survey covered Hebei province in addition to six of the above eight provinces, namely Zhejiang, Jiangsu, Fujian, Shandong, Beijing, and Shanghai.

In July 2008, questionnaires were sent to 1,200 firms randomly selected from domestic private firms registered in the seven provinces mentioned above. We received a total of 868 completed questionnaires (with a response rate of 72%).^[31] The possibility of non-response bias was checked by comparing the characteristics of the respondents with those of the original population sample. The calculated t-statistics for the number of employees and age of the firm were all statistically insignificant. After eliminating the questionnaires with missing values for key variables, 632 firms remained for analysis. The majority of the survey respondents are owners and/or managers of firms who are in a position to engage in high-order reflective thinking of motives of firms' strategic decisions such as outward FDI, and are suitable respondents for this survey. Only firms that had engaged in outward FDI or had been planning to conduct outward FDI were required to provide information on motives for outward FDI. A total of 198 firms out of 632 revealed the relevant information on their motives for outward FDI. To test our hypotheses on outward FDI motives, we focused on these 198 firms, whereas 632 firms were used in a robustness check of the propensity for outward FDI. We report the industrial distribution of the sample firms in the Appendix.

Dependent Variables

We measured Chinese firms' outward FDI motives directly by asking firms to evaluate the importance of strategic asset-seeking and market-seeking motives for outward FDI along a

five-point scale (1=not important, 5=very important). For the strategic-asset seeking motive, we used three items. The respondents were asked to assess the importance of outward FDI in terms of (1) obtaining advanced technologies, (2) acquiring high-quality brands, and (3) attracting high-end human resources. Three items measure the market-seeking motives. The respondents evaluated the importance of outward FDI: (1) to avoid market competition in the domestic market, (2) to enter new foreign markets, (3) to increase market share in host countries.

Independent Variables

Technology-based competitive advantage is measured by three items. We asked the respondents to evaluate whether or not (1) the firm has the capability to provide unique products and services, (2) the firm's products and technologies are not easily imitated by its competitors, and (3) the firm's customers cannot easily find alternative suppliers to switch to. These items capture the major characteristics of competitive advantages – valuable, rare, imperfectly imitable, and non-substitutability (Barney, 1991). The response takes the value of 1 if the answer is 'yes', and zero otherwise. We construct an ordinal measure that equals the sum of the three binary variables to reflect a firm's technology-based competitive advantage.

Export experience is measured as a ratio of a firm's export sales to its total sales. We take the average of the firm's exports to sales ratios for 2004–2006 for a more reliable proxy.

Industry R&D intensity is calculated from the Annual Census of Manufacturing Firms (ACMF) conducted by the Statistics Bureau of China. The ACMF data is considered to be the most reliable disaggregate data on Chinese manufacturing firms and is widely used (e.g., Chang & Xu, 2008). Industry R&D intensity is measured by the ratio of R&D expenditure to total sales of an industry in which a firm operates. We also use the average ratio during 2004–2006 for a reliable proxy.

Industry competition is calculated from the ACMF data for 2004–2006. Specifically, it is measured as one minus the Herfindahl index. As the Herfindahl Index ranges from $1/N$ to one, where N is the number of firms in the market, industry competition ranges from 0 to $(1-(1/N))$. We rescale the industry competition proxy by multiplying it by 100 so that a high value reflects a highly competitive industry.

At the Fifth Plenary of the 15th Central Committee of the Communist Party of China in 2000, the party announced a new strategy of encouraging Chinese companies to ‘step out’ into the global economy not only through exporting, but also through investing overseas (Luo, Xue, & Han, 2010). Changes in outward FDI policy have focused on five areas: creating incentives for outward investment; streamlining administrative procedures, including greater transparency of rules and decentralization of authority to local governments; easing capital controls; providing information and guidance on investment opportunities and reducing investment risks (Buckley et al., 2008; Luo et al., 2009). Accordingly, *supportive government policies* are measured by five items which assess the extent to which a firm can easily (1) access bank loans to facilitate outward FDI, (2) get investment insurance to facilitate outward FDI, (3) access ‘going abroad’ seeding funds for small-medium enterprises from the government, (4) get overseas investment tax reduction, and (5) get foreign currency to facilitate outward FDI. We asked the respondent to evaluate these items along a five-point scale (1=very difficult, 5= very easy). The average of the responses to the five items was used to measure this variable.

Control Variables

Six control variables, which were considered in prior research, are included in this study. *Firm size* is proxied as the natural logarithm transformation of the number of employees of a firm. *Firm age* is measured as the number of years since founding. We measure potential

slack assets of a firm using the firm's average *Debt-to-asset ratio* for 2004–2006 (Yiu et al., 2007). We also control the firm's past performance by including average *return on sales* in the period of 2004–2006. *Family ownership as majority* is a dummy variable, indicating whether the majority ownership in a firm is a family. It is included to control possible ownership advantages derived from social networks linked to family firms which can reduce inter-firm transaction costs in the process of internationalization (Erdener & Shapiro, 2005). *Risk-taking* measures top executives' attitudes towards risks in internationalization, and equals 1 if the answer to the question 'should firms rely on themselves to control risks in the process of internationalization' is yes, and zero otherwise. Including these variables in our empirical model allows us to control the internalized value of international expansion. This is critical for latecomers from emerging markets to overcome problems of market intelligence and uncertainty in the process of internationalization (Mathews, 2006). We also included industry and province dummies in the analyses.

Adequacy of the Measures: Reliability, Validity, and Common Method Variance

We assessed the reliability of three multi-item constructs, strategic asset-seeking motive, market-seeking motive, and supportive government policies, with Cronbach's alpha. All scales except market-seeking had reliabilities greater than the recommended 0.70 (see Table 1). The alpha for market-seeking is 0.62, which is generally acceptable for questionnaire scales (Van de Ven & Ferry, 1979). We conducted a confirmatory factor analysis to assess the convergent and discriminant validity of the multi-item constructs. As presented in Table 1, results of the confirmatory factor analysis indicated that the measurement model fits the data well ($\chi^2(30) = 80.63$; CFI = 0.91; NFI = 0.88; RMSEA = 0.07), thereby confirming the unidimensionality of each construct in the model (Anderson & Gerbing, 1988). Convergent validity is observed when the path coefficients from latent constructs to their corresponding manifest indicators are statistically significant (that is, $t > 2.0$; Anderson & Gerbing, 1988).

All items loaded significantly on their corresponding latent construct, with the lowest t-value being 5.16 ($p > 0.01$), thereby providing evidence of convergent validity. We assess the discriminant validity of the latent constructs with two alternative models. The first is a two-factor model that combines the two FDI motives into one factor and the supportive government policies as a second factor. The fit statistics of this model are [IFI=0.78, CFI=0.86, and RMSEA=0.07]. The second alternative model is a one-factor model with all items loading onto a single factor. The fit statistics for this model are [IFI=0.82, CFI=0.93, and RMSEA=0.06]. The chi-square difference between the alternative models is highly significant. These results are in support of discriminant validity (Anderson and Gerbing, 1988). In general, these results provide support for construct validity for the measures. Table 1 shows the factor structure for the three-factor baseline model.

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

Since we collected information on dependent and independent variables from the same respondents, we may have a common method bias problem, in which a bias in the source might contaminate all measures in the same direction. We test for this potential problem by conducting the Harman one-factor test (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This test loads all the measurement items into an exploratory factor analysis. The data would have a common methods bias problem if a single factor emerged that accounted for a large percentage of the variance in the resulting factors. The results show that the largest factor explained only 17.6% of the total variance. Hence, a common method bias is unlikely to be a major concern in our data.

Further, we take the mean-centering approach in our regressions (for hypotheses testing) to deal with potential multicollinearity. We check variance inflation factors (VIFs) for our variables, and find that the VIFs of all the variables are far below 10, the acceptable cut-off

point (Neter, Wasserman, & Kutner, 1996). Thus, the issue of multicollinearity is not a concern.

Analyses for Hypotheses Testing and Robustness Check

We followed standard practice in the literature (Yiu et al., 2007), and estimated OLS regressions with Huber-White's robust standard error (White, 1980) using strategic asset-seeking and market-seeking motives as the dependent variables to gain insights into conditions under which different motives for outward FDI occur.

As an additional check on the factors contributing to FDI, we examined if the factors contributing to firms' strategic asset-seeking and market-seeking motives for outward FDI also affect the probability of outward FDI. To do so, we constructed a dummy dependent variable that equals 1 if a firm had engaged in outward FDI, or had been planning to do so, and 0 otherwise. We used the total sample of 632 firms for this robustness test. We run a logit model including all the control and independent variables

Table 2 presents standard deviations, means, and correlations of the variables. As it is shown in Table 2, the sample firms have, on average, over 351 employees, and the average age of the firms is about 11 years. The export sales of the sample firms account for more than 60% of their total sales, and 78% of the firms have family majority ownership.

----- INSERT TABLE 2 ABOUT HERE -----

RESULTS

Although we have separate hypotheses on the strategic asset-seeking motive and the market-seeking motive, these two types of motives could be complementary in firms' outward FDI decisions, and do not necessarily have to be mutually exclusive (Buckley et al.,

2007; Luo & Tung, 2007; Makino et al., 2002). Hence, we include all the independent variables to verify the relative explanatory power of these hypothesized independent variables on both strategic asset-seeking and market-seeking motives. We report regression results for the strategic asset-seeking motive and the market-seeking motive in Columns 1 and 2 of Table 3, respectively.^[4]

----- INSERT TABLE 3 ABOUT HERE -----

Column 1 of Table 3 has the results for strategic asset-seeking motive. As shown, the coefficient of the firm's *Technology-based competitive advantage* is positive and significant (B=.18, p<.05). Thus, hypothesis 1a is supported. The results also reveal that *Industry R&D intensity* has a positive and significant impact on strategic asset-seeking motives (B=.58, p<.05) and support hypothesis 2a. Firms that have received more *Supportive government policies* have significantly higher strategic asset-seeking motives (B=.37, p<.01) when they conduct outward FDI, thus supporting hypothesis 3a. The positive and significant coefficient of *Technology-based competitive advantage * Industry R&D intensity* (B=.56, p<.05) suggests that firms which possess technology-based competitive advantage are more likely to be driven by strategic asset-seeking outward FDI motives when they operate in high R&D intensity industries. The result supports hypothesis 4a. Finally, the coefficient of *Technology-based competitive advantage * Supportive government policies* is positive and significant at the 10% level (B=.20, p<.10), suggesting that firms with technology-based competitive advantage are more likely to conduct strategic asset-seeking outward FDI when they receive more support from the government. Thus, hypothesis 4c is marginally supported.

Column 2 shows the results on market-seeking motive. The results suggest that *Export experience* (B=.41, p<.05) and *Industry competition* (B=.90, p<.05) are positively and significantly associated with market-seeking motives for outward FDI. Thus, hypotheses 1b and 2b are supported. The coefficient of *Supportive government policies* is positive and

significant at the 10% level ($B=.018$, $p<.10$). Thus, hypothesis 3b is weakly supported. The result of *Export experience * Industry competition* ($B=.20$, $p<.05$) support hypotheses 4b. The coefficient of *Export experience * Supportive government policies* is positive but insignificant. Thus, hypothesis 4d is not supported.

Results in Columns 1 and 2 of Table 3 also show that coefficients of hypothesized variables on the market-seeking motive are largely insignificant in explaining the strategic asset-seeking motive, while the coefficients of hypothesized variables on strategic asset-seeking motive are largely insignificant in explaining the market-seeking motive. To summarise, the finding confirms that the hypothesized independent variables on the strategic asset-seeking motive are useful in explaining the strategic asset-seeking motive, while the hypothesized independent variables on the market-seeking motive are useful in explaining the market-seeking motive, thus further supporting our hypotheses.

We report the results of the robustness check in Column 3 of Table 3. The coefficients of all the hypothesized independent variables are positive and mostly significant except those of industry R&D intensity and industry competition. The results indicate that all the factors that are hypothesized to be positively associated with strategic asset-seeking and market-seeking motives also positively affect firms' probability of engaging in outward FDI.

DISCUSSION

The findings suggest that technology-based competitive advantages derived from firms' internal resources and capabilities play a significant role in the outward FDI strategy of Chinese firms. It shows that domestic accumulation is still a key step towards outward FDI. The large domestic market has enabled Chinese firms to develop competitive advantages and this has provided a solid foundation for international expansion. To some extent, the highly competitive nature of business in the large Chinese market has served as a rigorous training

ground for Chinese companies involved in holding local rivals at bay while also competing with MNEs that operate in China. The survivors have emerged as fierce competitors excelling in efficiency, innovation, and risk management. Having built technology-based competitive advantages, Chinese firms have strong incentives to expand abroad. In this sense, traditional FDI theory is still relevant to latecomer Chinese MNEs. Establishing some form of technology-based competitive advantages in the domestic market is still important for the international expansion of these firms, or at least their motivation to do so.

We have found that the motives for outward FDI differ for industries that vary on R&D intensity. Firms in technology-intensive industries are more likely to conduct strategic asset-seeking FDI in order to obtain advanced technology, acquire internationally recognised brands, and attract human capital. The reason behind this motive is that outward FDI may allow latecomers that are not initially competitive in the world market to close the gap with leading companies through acquiring strategic assets and resources. Hence, outward FDI is not just an option for latecomers, but a strategic necessity to catch up with technological leaders. Our results show that firms in technology intensive sectors are more proactive in their desire to engage in organisational learning through outward FDI when they have established certain forms of technology-based competitive advantages at home. This suggests that absorptive capability is a necessary condition for these firms' motivation and potential ability to acquire advanced technology through outward FDI.

Our findings show that entering new markets and achieving further growth is also the motive behind China's outward FDI. Chinese firms realize that it is imperative to expand internationally as the domestic market has become part of a networked global economy. Outward FDI is an effective way of gaining market access and surpassing trade barriers. Our results indicate that the market-seeking motive is a dominant strategic consideration for firms in export-intensive sectors. We have also found that export experience encourages firms'

motivation to undertake market-seeking FDI, which is further influenced or ‘pushed’ to some extent, by domestic industry competition.

Our results show that government support affects the outward FDI motive of Chinese firms both directly and indirectly through its interaction with internal factors. The findings suggest that government support in China is more than background conditions, but is an active agent. The role of the institutional framework created by government in the internationalization strategies of EE firms should be taken into account when considering the determinants of outward FDI at the firm level.

Taken together, these findings suggest that a synthesis of the RBV, industry-based view and institution-based view offers a good understanding of the outward FDI intention of EE firms’ character. In particular, home-country government support, technology-based competitive advantages, industry dynamics, and international experiences are an integral part of the internationalization process which helps facilitate the strategic asset-seeking and market-seeking motives of latecomers from the emerging economies.

Limitations and future studies

The study has several limitations. First, our sample only covers some regions within a single country. Therefore, the findings from the study may have limited generalization to other emerging economies where institutional frameworks may be markedly different. Second, the survey was conducted jointly with government-affiliated institutes. Although the sponsorship of these institutes helped increase the response rate, it may also have caused some potential problems such as favourable opinions with regard to the role of the government in outward FDI. In future studies, surveys should be conducted independently by scholars or with the help from independent commercial survey companies. Third, we have only considered the impact of the institutional support of the home country on outward FDI due to data

availability. However, institutional constraints such as discrimination against private firms, government corruption and under-developed market supporting institutions in the home country may also be important forces affecting outward FDI from emerging economies. These constraining forces together with institutional support in the home country may jointly affect the outward FDI of EE MNEs (Luo, Xue, & Han, 2010). Further, institutions in host countries, e.g., well-developed legal infrastructure and highly protected private property rights may also have an impact on firms' outward FDI strategies. Important research is awaited on assessing the impact of other institutional frameworks, apart from supportive government policies, at home and in host countries. Future studies could examine how specific government supportive policies such as industry and FDI destination guidance may affect EE MNEs' decisions on industrial diversification and location choices in their outward FDI activities.

Finally, our results clearly show that the outward FDI motives of EE firms are jointly determined by multilevel factors including the macro-business environment of the home country, industry dynamics and a firm's capabilities. Future studies could extend the analysis by considering the role of both home and host countries in a firm's OFDI decisions and investigate how country-level factors interact with industry-level and firm-level factors by adopting multilevel analysis technique. The multilevel analysis may help to provide a complete picture of the outward FDI by EE firms.

Contributions

Our study offers a number of contributions to existing international business studies. First, we have adopted an integrated framework by embracing different perspectives, such as the RBV, industry-based view, and institution-based view to examine the motives for outward FDI by Chinese firms. Hence, we are able to consider a wide range of external and internal factors

that jointly affect firms' outward FDI motivation in the context of emerging economies. Second, our study is among the first to examine outward FDI from emerging markets based on firm level survey data. The survey data provide us with rich information on firms' strategic decisions, and the findings from the study can be generalized, and complement those based on case studies on EE MNEs (Child & Rodrigues, 2005; Liu & Buck, 2009). Furthermore, within the integrated framework, we have investigated the interrelationship between institutional, industry, and internal factors, and have provided robust evidence to show that outward FDI strategic motivation and propensity by Chinese firms are jointly affected by external and internal factors. The findings from the study call for more integration between different perspectives at firm, industry, and government levels to improve our understanding of the influence of these internal and external forces, and the mechanisms by which the influence is exerted.

Managerial Implications

Our findings also offer some policy and managerial implications. While it is important for policy-makers to continue providing supportive policies and improving the institutional environment to encourage Chinese firms to engage in outward FDI, political interests and financial support may induce EE firms to rush into outward FDI. It may also send a negative signal to host countries which may be cautious about the political motives of Chinese firms investing in their countries and may be concerned about the implications of the rise of Chinese MNEs in the world economy. Hence, policy-makers should realize the negative impact of direct state intervention on outward FDI. Too much state intervention may distort the internationalization process of EE firms that are built on state subsidies or cheap bank credits instead of developing their own technology and managerial capabilities. This may hamper the absorptive capabilities of EE firms when seeking strategic assets through outward FDI.

For managers of EE MNEs, our findings help them understand the essence of internationalization and the conditions necessary to conduct outward FDI. In particular, managers of EE firms should consider not only internal factors, but also institutional and industry factors when making outward FDI decisions. They should utilize government support and guidance when conducting outward FDI. The findings also suggest that EE firms need to possess certain competitive advantages to overcome the liability of foreignness. Technology-based competitive advantages represent the absorptive capability needed to seek strategic assets by undertaking outward FDI. Rushing into outward FDI without the necessary technological capability and exporting experience may result in a disappointing outcome.

CONCLUSION

Applying an integrated framework to firm-level survey data, this study provided some new insights on the strategic motives for outward FDI by Chinese private firms. As latecomers from an emerging economy, these firms accumulate technology-based competitive advantages and internationalization experiences to facilitate their outward FDI activities. In addition to these firm-level factors, our results highlight the importance of industrial and institutional factors which may become more important motivators of Chinese outward FDI in the future. The Chinese private firms' future outward FDI may be driven by both the push factors of extremely competitive and unfavourable domestic conditions and the pull factor of favourable government policies.

NOTES

The authors are grateful to Professors John Child, Anne S. Tsui, and two anonymous reviewers for their insightful comments. Jiangyong Lu acknowledges financial support from National Natural Science Foundation of China (70703017) and Guanghua Leadership Institute in Collaboration with Cisco.

- [1] We adopt the concept of internationalization as the process of increasing involvement in international operations by individual firms (Welsh & Luostarinen, 1988). There are many forms of internationalization, such as exporting, strategic alliances, and foreign direct investment. We mainly focus on outward FDI motive in this paper.
- [2] See an introduction to both institutes on <http://www.chinachamber.org.cn> and <http://www.cass.net.cn/>
- [3] The response rate is considerably higher than that of other surveys conducted in China by private institutes and researchers, but comparable to that of other surveys conducted by government agencies (Yiu et al, 2007). Another possible reason behind the high response rate is that the survey team only selected the most important choices for some questions when designing the questionnaire and made a trade-off between the length of the questionnaire and the scale of the survey. We thank a reviewer for pointing out this limitation.
- [4] We thank the editor for the suggestion of running full regressions including all independent variables. We also ran regressions of the strategic asset seeking motive and the market seeking motive on the hypothesized independent variables only. Results are similar to that in the full regressions.

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Figure 1: A Research Model of [provide a descriptive title]

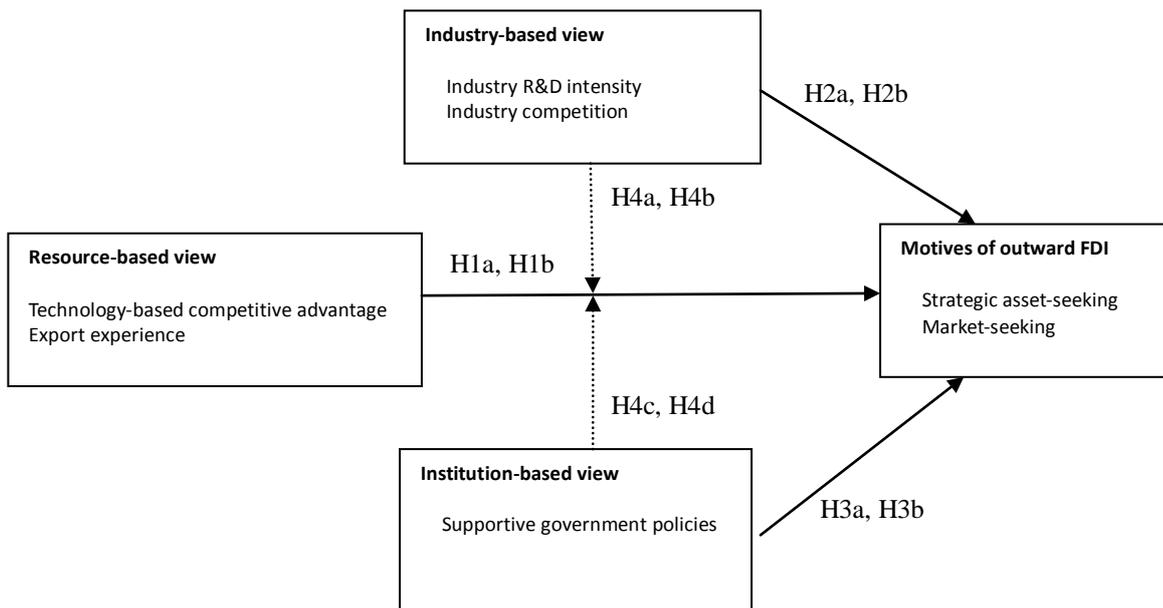


Table 1: Construct measurement and confirmatory factor analysis results

Construct	Operational Measures of Construct	Standardized Factor loadings	t-value
Motives of OFDI			
Strategic assets-seeking ($\alpha=0.76$)			
	To obtain advanced technologies	0.77	10.71
	To obtain high quality brandings	0.78	10.67
	To obtain high end human resources	0.63	9.41
Market-seeking ($\alpha=0.62$)			
	To increase market share in host countries	0.75	6.70
	To increase market share in the global market	0.76	7.37
	To avoid market competition in domestic market	0.48	6.74
Supportive government policies ($\alpha=0.72$)			
	Easy to access OFDI supportive bank loan	0.69	6.02
	Easy to access OFDI supportive issuance	0.58	6.14
	Easy to access OFDI supportive small-and-medium firms seeding fund	0.60	5.16
	Ease to get OFDI incoming tax deduction	0.58	6.68
	Easy to get foreign currency for OFDI	0.52	6.02

Model fit indices: $\chi^2(30) = 80.63$; $\chi^2/df = 2.68$ $P=0.00$ CFI=0.91; NFI=0.88; RMSEA=0.07

OFDI stands for Outward Foreign Direct Investment

Table 2: Descriptive statistics and correlations

	Mean	SD.	1	2	3	4	5	6	7	8	9	10	11	12
1 Strategic asset-seeking motive	0.23	1.00												
2 Market-seeking motive	0.11	1.00	0.66											
3 Technology-based competitive advantage	1.41	0.86	0.19	0.18										
4 Export experience	0.61	0.49	0.07	0.22	0.07									
5 Industry R&D intensity	0.40	0.32	0.18	0.19	0.06	0.04								
6 Industry competition	0.99	0.22	0.04	0.02	0.04	0.00	-0.51							
7 Supportive government policies	0.54	0.88	0.33	0.21	-0.08	0.27	0.17	-0.07						
8 Firm size (log of number of employees)	5.86	1.56	0.04	-0.02	-0.05	0.21	0.15	-0.03	0.27					
9 Firm age	11.43	7.66	0.05	-0.03	0.03	0.06	0.13	-0.03	0.13	0.37				
10 Return on Sales	0.08	0.09	0.03	0.12	0.09	0.09	0.05	0.02	0.02	0.18	0.09			
11 Liability asset ratio	0.61	0.49	0.03	0.03	-0.02	0.09	-0.01	-0.01	0.05	0.00	-0.03	-0.01		
12 Family has majority ownership	0.78	0.41	-0.06	0.01	-0.02	-0.03	-0.05	0.00	-0.05	-0.13	-0.14	-0.04	0.02	
13 Risk-taking in outward FDI	0.59	0.49	-0.08	-0.06	0.08	0.12	0.05	0.05	0.10	0.17	0.03	0.05	-0.03	-0.09

Note: All correlations $\geq |0.08|$ are significant at 0.05 level (two-tailed).

Table 3: Results on strategic asset-seeking motive, market-seeking motive, and OFDI

	Strategic asset seeking motives (1)	Market seeking motives (2)	OFDI dummy (3)
Constant	-89.09** (36.06)	-90.40** (37.36)	-152.07** (69.74)
<i>Controls</i>			
Firm size	-0.03 (0.05)	-0.08 (0.05)	0.13* (0.08)
Firm age	0.00 (0.01)	-0.01 (0.01)	-0.01 (0.02)
ROS	-0.65 (1.09)	1.44 (1.13)	-1.20 (1.31)
Liability asset ratio	-0.04 (0.11)	-0.08 (0.11)	0.04 (0.21)
Family ownership as majority	0.01 (0.15)	0.05 (0.16)	-0.18 (0.25)
Risk-taking in outward FDI	-0.13 (0.14)	-0.16 (0.14)	0.08 (0.22)
<i>Predictors</i>			
Technology-based competitive advantage (H1a)	0.18** (0.09)	0.12 (0.09)	0.28** (0.13)
Export experience (H1b)	0.03 (0.15)	0.41** (0.16)	0.44* (0.25)
Industry R&D intensity (H2a)	0.58** (0.23)	0.27 (0.24)	0.44 (0.41)
Industry competition (H2b)	0.39 (0.36)	0.90** (0.37)	0.51 (0.70)
Supportive government policies (H3a, H3b)	0.37*** (0.09)	0.18* (0.09)	0.27* (0.14)
Technology-based competitive advantage *	0.56** (0.24)	0.30 (0.25)	0.83** (0.39)
Export experience *	0.01 (0.01)	0.02** (0.01)	0.06*** (0.01)
Technology-based competitive advantage *	0.20* (0.11)	0.12 (0.11)	0.15 (0.17)
Export experience *	0.25 (0.18)	0.30 (0.19)	0.48* (0.27)
Industry and province dummies	included	included	included
Observations	198	198	632
R-squared	0.25	0.22	0.14
F value	3.94	3.28	
Log likelihood			-296.90
Chi-square			63.00

Note: Figures in the parenthesis are standard errors. ***p<0.01, **P<0.05, *p<0.10

Appendix Table: Industrial distribution of firms in the sample

Industry	Full sample	Sample of firms	Percentage of firms
		had outward FDI or had plan of outward FDI	had outward FDI or had plan of outward FDI
Petroleum Processing	5	3	60%
Stationery, Educational & Sports Goods	8	4	50%
Instruments, Meters, Cultural & Official Machinery	21	10	48%
Transportation Equipment Manufacturing	38	15	39%
Leather, Furs, Down & Related Products	13	5	38%
Machinery & Equipment Manufacturing	27	10	37%
Other Manufacturing Industries	52	19	37%
Electric Equipment & Machinery	44	16	36%
Medical & Pharmaceutical Products	15	5	33%
Metal Products	63	20	32%
Textile Products	133	42	32%
Raw Chemical Materials & Chemical Products	35	11	31%
Electronic & Telecommunications	32	10	31%
Timber Processing, Bamboo, Cane Products	23	7	30%
Printing & Record Pressing	4	1	25%
Smelting & Pressing of Ferrous Metals	22	5	23%
Non-metal Mineral Products	34	6	18%
Rubber & Plastic Products	19	3	16%
Food and Beverage Products	44	6	14%
Total	632	198	

Note: Industries in the table is sorted by descending order of the last column.