University of Huddersfield Repository

Zheng, Nan and Qu, Yi

What explains the performance of Chinese exporting firms?

Original Citation


This version is available at http://eprints.hud.ac.uk/22882/

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

http://eprints.hud.ac.uk/
What explains the performance of Chinese exporting firms?

Abstract

Drawing on the entry mode literature and the strategic tripod framework, we examine whether firm performance is influenced by its outward foreign direct investment (OFDI) mode, controlling other firm-, industry- and institution-specific factors. It is found that employing OFDI does not improve an exporting firm’s performance. This is not surprising as anecdotal evidence shows that many Chinese firms with OFDI have been making loss in the host country. This may indicate exporting firms employ OFDI to seek complementary and strategic resources/assets, not to improve immediate firm performance. Furthermore, firm performance is influenced by strategic assets, including technology-based capabilities (TBCs) and brands, at the firm level, industry entry barriers at the industry level and the home and host country institutional support at the country level.

Keywords: Performance, Exporting Firm, OFDI, Strategic Tripod Framework
1. Introduction

Entry mode is considered as an important determinant of firm performance (Brouthers, 2002; Brouthers, et al., 2003, 2008; Brouthers & Nakos, 2004; Chen & Hu, 2002; Shaver, 1988; Woodcock, et al., 1994). The rationale is that “firms will select the mode that provides the best return on investment” (Brouthers, 2002, p.207). The existing literature has investigated whether some investment modes provide better performance than others (e.g. Brouthers, 2002; Woodcock, et al., 1994). The entry modes under consideration in these studies are often joint ventures (JVs) and wholly-owned subsidiaries (WOSs). Few research considers the performance impact of exporting only versus a hybrid mode of exporting and outward foreign direct investment (OFDI). Given the increasing trend in OFDI, a question arises: Does an entry mode transformation by exporting firms to include OFDI lead to better firm performance? This research aims to fill this research gap. As part of this investigation, other factors influencing firm performance are accounted for by taking an integrative perspective at the firm, industry and country-level.

Exporting is often the first stage of internationalization in emerging market firms (EMFs). However, the continuous marketization and liberation in emerging markets motivate firms to undertake OFDI. Exporting helps firms to gain international experiences and to establish linkages in the international market (Mathews, 2006). Yiu et al., (2007) reveal that exporting firms can benefit from learning in foreign markets,
accumulating local knowledge, gaining legitimacy and developing local networks.
Furthermore, given the home country specific resources (CSRs) such as low labor
costs and low production costs, EMFs may benefit from economies of scale by
concentrating production at home and then exporting their products to foreign markets.
The learning-curve cost advantages suggest that the costs of production fall with the
cumulative volume of production, therefore firms moving along the learning-curve
can obtain cost advantages over rivals (Wei, et al., 2014). However, “exporting cannot
fulfil the need of upgrading their [EMFs’] capabilities” (Liang, et al., 2012,p.137).
OFDI offers firms better opportunities to learn and acquire resources from their
counterparts in DEs as, through OFDI, firms can be closer to the source of resources
and knowledge than through export. This can potentially improve EMF’s profitability
(Wei, et al., 2014). Thus, it is expected that exporting firms with OFDI perform better
than those solely focused on exporting.

The second objective of this paper is to make a conceptual contribution by linking
firm performance to variables emphasized in the strategic tripod framework, including
resource-based view (RBV), industry-based view (IBV) and institution theory (IT).
The determinants of firm performance have attracted much attention from strategy,
marketing, economics and human resources management literature. However, the
existing research lacks a comprehensive theoretical base (Aulakh, et al., 2000;
Morgan, et al., 2004). Most are based on RBV and/or contingency theory (Sousa, et
al., 2008). Following RBV, firms possess internal firm-specific resources and
capabilities and these are central in explaining firm performance (Amit & Schoemaker, 1993). The contingency theory emphasizes the external environmental factors influencing a firm’s strategy and performance because they impose pressures to which a firm must adapt in order to survive and prosper (Cavusgil & Zou, 1994). This group of literature illustrates that different industrial factors, e.g. industry entry barriers and competition, affect firm performance. However, for EMFs, the external environmental factors comprise not only the industrial factors but also the institutional environmental factors, given the strong influence of governments and the fundamental change of institutions in emerging economies (EEs) (Peng, et al., 2008). The integration of institutional theory, the RBV and IBV is therefore expected to enrich our understanding of firm performance.

This paper is organized as follows. Section 2 provides a literature review and develops hypotheses. Data and methodology are outlined in Section 3, followed by empirical results in Section 4. Sections 5 and 6 discuss the findings and implications and point out the limitations of the research and possible directions for future studies.

2. Literature Review and Hypothesis Development

2.1 Entry Mode and Firm Performance

Entry mode is one of the most important firm-level strategies (Pangarkar & Lim,
An exporting strategy is the most accessible internationalization strategy as it requires less fixed costs than many other entry modes such as M&As. Exporting helps EMFs to establish linkages in the international market (Mathews, 2006), to gain deep understanding of and competence in foreign markets (Gao, et al., 2008), to build relational assets and develop foreign market entry capability that helps to mitigate information asymmetry and uncertainty. The exporting experience and the partnership with foreign counterparts may help EMFs to benefit from the economies of scale/scope and move along the learning-curve. However, the learning and performance improvement benefits associated with exporting may diminish at times (Luo & Peng, 1999). Many foreign firms are reluctant to transfer their superior technologies, which they believe are crucial to their own competitive advantage, to an export partner (Rui & Yip, 2008). This limits the scope of EMF’s learning and development. EMFs therefore need to seek an alternative way, e.g. OFDI.

OFDI is “more likely to facilitate learning through extensive involvement in the international operation” (Liang, et al., 2012, p.137). Through OFDI, exporting firms can tap into the knowledge base of the host country, access a more extensive set of information and develop capacity for production, R&D and other functional activities. OFDI not only provides a fast access for EMFs to acquire intangible resources, such as advanced technologies, superior brands and management know-how, but also enables exporting firms to reposition themselves strategically close to those from DEs through capability building (Cardoza & Fornes, 2011; Deng, 2013; Williamson &
Raman, 2011). Furthermore, OFDI offers EMFs a local presence in a host country and gives EMFs opportunities to build up their external networks. According to network theory, relationships with partners within business networks are critical to the enhancement of capacities and capabilities (e.g. Chen, 2003; Gammelgaard, et al., 2012). OFDI allows EMFs to benefit from the host country partner’s network, to access valuable information (e.g. reach key local contacts, gain specific local knowledge and experiences), to obtain abundant experience in dealing with local officials, to have close relationships with customers and suppliers (Child & Rodrigues, 2005; Filatotchev, et al., 2007) and to seize more opportunities (e.g. provision of relevant information on local business opportunities). The network relationship provides performance boosting effects linked to improved resource development and enhanced learning and innovation capabilities (Gammelgaard, et al., 2012). This is consistent with the EMF’s motives in the internationalization process in which they engage in OFDI in order to acquire strategic assets and capabilities to improve their profitability, and to maximize global synergy (Wei, et al., 2014). Pittaway et al., (2004) suggest that network relationships with suppliers, customers and intermediaries are important determinants of firm performance. This is also echoed by Johanson and Vahlne (2009). Thus, we hypothesize:

H1: Exporting firms with OFDI perform better than those focusing solely on exporting.
2.2 Resource-based View (RBV)

The RBV is formally introduced by Jay Barney in 1991 whose work is widely regarded as the first comprehensive theoretical framework to formalize the resource-based literature (Newbert, 2007). Barney (1991) proposes that the RBV rests on two fundamental assumptions: (1) resources and capabilities are heterogeneously distributed among firms, and (2) resource immobility (resources being ‘sticky’) - resources cannot be transferred without substantial costs from one firm to another. These two assumptions “conjointly allow for differences in firm resource endowments to both exist and persist over time, thereby allowing for a resource-based competitive advantage” (Newbert, 2007, p.123). Firms would attain competitive advantage if they possess advantage-generating resources. The advantage-generating resources are derived from intangible assets and are characterized as valuable, rare, inimitable and non-substitutable (VRIN). Strategic assets have a stable and long-lasting nature and are potential causes of performance differences. Prasad et al. (2001) reveal that the possession of core competencies enable a firm to enjoy superior performance. This is consistent with the findings of Beleska-Spasova, et al. (2011) who also identify resources and competencies, including managerial, knowledge, planning and technology resources, have a positive direct effect on performance. Thus the resource heterogeneity explains performance differences across firms (Dhanaraj & Beamish, 2003). In the following we shall consider such resources as technology-based capability, brands and international experience.
Technology-based Capability

Technology-based capabilities (TBC) are “the roots of a firm’s sustainable competitive advantage” (Lee, et al., 2001, p.618). It has long been emphasized as one of the key strategic resources that enable the firm to construct performance differentials within industry (Tsai, 2004). The TBC, being rooted in routines and practices of the firm, are hard to replicate or imitate by competitors, due to their complex and tacit nature (Lee, et al., 2001; Makadok, 2001), therefore it endows a performance advantage (Tsai, 2004). The TBC is multifaceted, consisting of patents protected by law, technological knowledge, trade secrets, know-how engaged by R&D, and other valuable production skills (Hsieh & Tsai, 2007; Lee, et al., 2001). It has been argued that the possession of TBC can enhance firm performance in two ways. First, a firm can boost efficiency gains by pioneering process innovations or by redesigning products. Second, a firm can achieve differentiation by accelerating the pace of new product developments and thereby seizing more market opportunities (Lee, et al., 2001; Tsai, 2004).

The empirical evidence suggests that TBC can affect firm performance. For instance, Aw and Batra (1998) examine the linkages between TBC and firm efficiency in Taiwan’s manufacturing industry and conclude that TBC has a positive correlation with firm efficiency. Lee et al. (2001) show that TBC, as one of the most important internal capabilities, has a positive relationship with firm performance, based on data
from 137 Korean firms. Tsai (2004) uses a seven year panel dataset which includes 45 large manufacturing firms quoted on the Taiwan stock exchange and finds that TBC is an important determinant of firm performance. Similarly there is evidence that TBC leads to sales growth and improved operating profits (Schoenecker & Swanson, 2002) and enhances firm performance (Ortega, 2010). Therefore, we hypothesize:

H2: Firms possessing TBC achieve better performance than those without.

Brands

Brands is another widely considered important type of resource (Anand & Delios, 2002; Morgan & Rego, 2009; Park, et al., 2013; Wernerfelt, 1984). They are VRIN assets that are costly and time-consuming to build up (Brouthers & Xu, 2002). Brand recognition constitutes a firm’s competitive advantage and can significantly contribute to firm performance in number of ways.

Firstly, well-established brands are perceived as high quality in the minds of consumers. This allows firms to differentiate their products from competitors so as to attract more customers and build barriers against the competition (Morgan & Rego, 2009). Firms who possess superior brands may no longer need to compete exclusively on price (Brouthers & Xu, 2002). They can charge higher prices and attain price premiums (Anand & Delios, 2002) and thus obtain superior financial returns (Morgan
Secondly, high-quality brands are more responsive to marketing effects and these effects not only come from advertising and promotions but also the satisfied customers’ experiences (Srivastava, et al., 1998). Customers respond more quickly to new products for those brands with good reputations and are more likely to “try the brand, adopt the brand and begin to refer the brand to others sooner than otherwise” (Srivastava, et al., 1998, p10). As a result, such influences (e.g. earlier purchase and faster referrals) may not only provide a competitive edge for firms, but also lead to the acceleration of cash flows, which can be translated into higher firm performance (Rao, et al., 2004; Srivastava, et al., 1998).

Thirdly, well-recognized brands signify a deep and meaningful relationship with customers. It shows the willingness of customers to stay with and to sustain the relationship with the brands in the future (Park, et al., 2013; Srivastava, et al., 1998). Such brand commitment is recognized as the main driver for firm performance improvement (Srivastava, et al., 1998). On the one hand, the positive attitude and the loyalty of customers may enable firms to secure a large market share and can result in increased product sales and reduced customer price sensitivity (Zou, et al., 2003). Moreover, the switching costs render customers less likely to purchase from rivals and so create competitive barriers (Morgan & Rego, 2009; Srivastava, et al., 1998). Thus, the brand loyalty (i.e. relationship with channels and customers) and the switching
costs may influence the stability and the growth of firms’ revenues and profit over time (Park, et al., 2013). On the other hand, the superior relationship with customers may lead to lower average costs of sales, advertising and marketing. Therefore, firms who possess well-recognized brands can leveraged these brands to reduce some costs (Anand & Delios, 2002; Morgan & Rego, 2009; Srivastava, et al., 1998) and, in turn, firm performance may be enhanced. Thus, we hypothesize:

H3: Firms possessing brands achieve better performance than those without.

International Experience

From the perspective of RBV, international experience represents a firm-specific strategic resource (Barney, et al., 2001). International experience was built and accumulated through dealing with foreign clients, suppliers and competitors (Camisón & Villar-López, 2010). It is unique to a firm and is embedded within the organization, thus competitors cannot easily acquire, assimilate or apply it. Experience accumulation in foreign markets can help firms to develop new knowledge and capabilities, and this development can influence firm’s strategies and performance (Delios & Beamish, 2001; Gao, et al., 2008).

Compared to local firms, international firms are at a disadvantage when they expand into foreign markets. The liability of foreignness, in terms of lacking understanding of
the local market, can have a negative impact on firm performance (Luo & Peng, 1999). Organization learning is defined by Levitt and March (1988, p.320) as “encoding inferences from history into routines that guide behavior”. The close exposure to foreign markets through international business including both exporting and FDI leads to a greater level of learning, in terms of knowledge about the markets and knowledge about the technology (Love & Ganotakis, 2013). Thus international experience can be a prime source of knowledge (Gao, et al., 2008). The accumulated experience may enhance firms’ understanding about culture, institutions and market characteristics in the local markets. Therefore it gives firms the ability to accommodate local customers’ specific requirements (Cavusgil & Zou, 1994). The possession of such experience enables firms to absorb useful information of host countries so as to identify the changes necessary for products, that can lead to greater acceptance and sales (Brouthers & Xu, 2002), and consequently enhance firm performance.

Firms with accumulated international experience can also enlarge their knowledge base and develop new capabilities, thus reduce the range of competitive disadvantages (i.e. substantial risks and uncertainties) as compared to local firms (Gao, et al., 2008). As a result, for those firms who possess accumulated international experience, they may have greater ability to deal with uncertainties in host markets which, in turn, may enhance firm performance (Carlsson, et al., 2005; Delios & Beamish, 2001; Gao, et al., 2008). Furthermore, foreign firms build up new capabilities through the
experience accumulated so that they can overcome the disadvantages of foreignness and achieve better performance.

The empirical evidence confirms that international experience shapes firms’ performance significantly. For instance, Luo and Peng (1999) find that the intensity and diversity of host country experience is an important predictor of sub-unit performance, based on a survey of 108 MNE sub-units operating in China. Carlsson et al. (2005) reveal that there is a positive relationship between international experience and subsidiaries’ economic performance. Gao et al. (2008) indicate that entry-specific experience and exporting experience exhibit positive effects on subsidiary performance. Thus, we hypothesize:

H4: There is a positive relationship between international experience and firm performance.

2.3 Industry-based View (IBV)

The IBV emphasizes the importance of the industry environment in which a firm operates to firm performance. The industry conditions play a critical role in shaping a firm’s strategic behavior and performance (Porter, 1980). Below we will focus on industry R&D.
Industry R&D

Industry R&D reflects the technological context within which firms operate. The R&D intensity of an industry can affect firm performance in a number of ways. First of all, firms in high R&D intensive industry have an opportunity to benefit the technological spillovers within the industry and enhance their own technological capabilities (Blomström and Kokko, 1998; Cheung and Lin, 2004). Technological opportunities in an industry can affect firm performance through influencing firm’s technological capabilities (Kafouros and Buckley, 2008). With enhanced technological capabilities, a firm can achieve technological leadership, cost advantage and product differentiation, for example (Lofstrom, et al., 2013). The reduced costs, improved and differentiated products and new features and functions added to new products can all help firms attract consumers, generate more sales and enjoy high profitability.

Second, high R&D intensive industries are often characterized with more comprehensive networks comprising of such social-economic agencies as firms, R&D institutions, universities, industrial associations and governments (Chen, 2003). The interactions and linkages within such networks could facilitate the learning activities and stimulate the technological spillovers, which may in return improve firm performance as firms can learn from each other and acquire information, knowledge and know-how on how to develop products with lower costs but enhanced features.
and more returns (Gachino, 2006). Thus, we hypothesize:

H5: There is a positive relationship between high industry R&D and firm performance.

2.4 Institutional Theory

Firm performance can be a result of formal and informal constraints of a particular institutional framework in which a firm is embedded (Scott, 1995). Institutions set “the rules of the game” (North, 1990; Scott, 1995) resulting in significant regulatory pressures for firms. This shapes firm’s behavior and has performance consequences (Peng, et al., 2008; Wright, et al., 2005). It is recognized that institutional environments play an important role in supporting the effective functioning of market mechanisms and help firms and individuals engage in market transactions (Meyer, et al., 2009). A country’s institutions form the conditions for doing business there and determine the transaction costs of business activities.

The institutional environment has a profound effect on firm strategies and performance (Goldszmidt, et al., 2011). As firms are “deeply embedded in institutional environments, their practices are often either a direct reflection of, or response to, rules and beliefs built into their larger context” (Deng, 2009, p.74). Firm performance may be enhanced or diminished depending on the nature of a home
country’s institutional environment (Goldszmidt, et al., 2011; McGahan & Victer, 2010). Below we will differentiate home and host country institutions.

**Home Country Institutions**

In EEs, the institutional environment of the home country can determine the ability and willingness of firms to invest abroad (Buckley, et al., 2007). It is thought to have a strong impact on firm performance (Luo, et al., 2010; Wan & Hoskisson, 2003). The government intervention is one of the core elements of the institutional environment in EEs. The government plays a substantial role in as much as it defines, diffuses, or enforces prevailing norms and requirements of acceptable firm conduct (Oliver, 1991). For EEs, firms who are embedded in supportive institutional environments are more likely to benefit from differentially supportive polices and this could be reflected in firm performance. Also, supportive institutional environments help to gain or deepen new and existing capabilities so as to facilitate the development of competitive capabilities and to achieve better firm performance (Chan, et al., 2010). Therefore, it is expected that EE firms operating in a supportive home country’s institutional environment are more likely to achieve better performance. Thus, we hypothesize:

H6a: There is a positive relationship between a home country’s institutional supports and firm performance.
Institutions also include intermediary organizations. Professional associations can be seen as institutional actors that help shape the perceptions of managers and their responses to business opportunities (Nordqvist, et al., 2010). For instance, industry associations assist firms through knowledge building, knowledge deployments and standard setting (Nordqvist, et al., 2010). In firms’ internationalization, “links with domestic trade associations and professional bodies can provide intelligence on different markets and access to those markets for international operations” (Yiu, et al., 2007,p. 524). Therefore, firms operating in institutions with supportive industry associations and intermediary organizations are expected to achieve better firm performance. Thus, we hypothesis:

H6b: There is a positive relationship between a home country’s institutional supports at intermediary level and firm performance.

**Host Country Institutions**

Existing literature often considers the impact of host country institutional environment on firm performance (Brouthers, 2002). When firms expand into a host country characterized by weak or under-developed institutions, i.e. lack of reliable market information, an effective legal system or an efficient bureaucracy, this can make transactions costly for the firms doing business there (Chan, et al., 2008; Wu, 2013a, 2013b). Moreover, the costs of searching for relevant information in the host country
can be very high because of the inefficient intermediaries (North, 1990; Wu, 2013a). Additionally, the inconsistent and unpredictable legal enforcement in less developed institutions can result in improper behavior, such as a lack of a proficient legal system to ensure contract enforcement and to protect property rights (Wu, 2013a, 2013b). Firms must, therefore, commit substantial resources to deal with local governments and non-governmental organizations. As a result, the high transaction costs and market information costs leave firms with less incentive to develop new products, as the more resources they allocate to dealing with those unintended matters, the less resources they have to contribute to product innovation (Wu, 2013a, 2013b).

In contrast, Child, Chung et al. (2003, p.243) suggest that “firms operating under more favorable external circumstances have a better chance of prospering.” A host country with a transparent, predictable, sound and well-enforced institutional environment will certainly attract EMFs who are eager to avoid the institutional constraints and political hazards of the home country (Luo & Tung, 2007; Yamakawa, et al., 2008). As discussed above, a well-developed institutional environment has strong legislative enforcement to ensure the smooth operation of market transactions. Firms can also benefit from the advantages of well-developed institutions to access customer base and/or distribution channels, to learn sophisticated technologies, and to build up their own capabilities. These can then contribute to product innovation and firm performance (Wu, 2013a, 2013b). The extant research further suggests that laws and pressure from the government can play a significant role in increasing or reducing
firm capacity and effectiveness (Beamish, 1993; Cavusgil & Zou, 1994). Positive attitudes and favorable policies toward foreign investors result in firms needing to spend fewer resources to counter government-induced discontinuities and hence they exhibit better firm performance (Child & Markóczy, 1993). Therefore, firms operating under a supportive host government environment are expected to achieve better firm performance. Thus, we hypothesize:

H7: A supportive host country’s institutional environment is positively related to firm performance.

3. Data and Methodology

3.1 Sample and Data Collection

Data used in this paper is mainly from the questionnaire survey collected by the Chinese Academy of Social Sciences (CASS) and the All-China Federation of Industry and Commerce (ACFIC) in 2008. Data for industry variables are obtained from China Industry Economy Statistical Yearbook 2008. Both CASS and ACFIC are government agencies; the former is the largest government-funded research institute of social science and the latter is the largest association of firms in China. There are advantages and disadvantages associated with collecting data through cooperating with government agencies. However, CASS and ACFIC are public institutes and they
are playing an important role in facilitating communication between firms and administrative authorities; both are reputable, with extensive experience in conducting surveys and collaborating with international institutes. There are strong reasons to believe in the quality of the data collected by them. The survey focuses on private manufacturing firms with exporting activities and was conducted in the following Chinese provinces: Beijing, Chongqing, Fujian, Hebei, Jiangsu, Shanghai, Sichuan and Zhejiang, in July 2008. In the survey, firms were asked to provide certain information during the period from 2004 to 2007. A total of 1,200 questionnaires were sent to randomly selected POEs and 868 questionnaires were returned. For our study, 472 firms are included in the observation, and the data is sufficient data for us to employ a pooled cross-sectional analysis.

3.2 Variable Measurements

Two measures of firm performance are used: return on assets (ROA) and return on sales (ROS), both are widely used in the existing literature (e.g. Camisón & Villar-López, 2010; Gao, et al., 2008; Luo & Peng, 1999). ROA is the logarithm transformation of net income divided by total assets, adjusted by the producer price index. ROS is the logarithm transformation of net income divided by total sales, adjusted by the producer price index.

We include entry mode as an independent firm-level variable to reflect the impact of
firm-level strategy on performance. *Entry mode (EM)* corresponds to that used in Hypothesis 1. It is a dummy variable with 1 indicating exporting firms that engage in outward FDI and 0 otherwise.

TBC, brands and international experience correspond to Hypotheses 2-4. *TBC* is measured by three items. Firms were asked to evaluate whether or not: (1) they have the capacity to produce unique products and services; (2) their products and technologies cannot be easily imitated by their competitors; (3) their customers cannot easily switch to another supplier. Principal-component factor analysis is used to extract a factor to reflect a firm’s technological capability. *Brands* is measured by using the question in the questionnaire that whether the firm owns internationally registered brand names. The term *international experience (Exports_yr)* is measured as the number of years since the firm has started exporting. We include the firm-level control variables – Age and Motivation. *Age* is measured by the number of years since it has been founded, similar to Yiu, Lau et al. (2007). For *motivation (MO)*, the respondents were asked, on a five-point scale (1=not important, 5=very important), to assess the motive for the firms’ internationalization in terms of (1) local market seeking, (2) global market share and (3) avoiding domestic competition.

At the industry level, we consider the *industry R&D (Ind. R&D)* as an independent variable to test Hypothesis 5. The industry R&D is measured by the R&D expenditure of the industry in which firms operate.
At the country level, the impact of home and host country’s institutional environments corresponds to Hypotheses 6a, 6b and 7. To measure home country’s institutional environment, we take into account the support from both the home governments and the industry associations and intermediary organizations. The home country’s supportive government policies (Homegov), following Lu et al., (2011), are measured by five items that assess the extent to which a firm can easily (i) access bank loans, (ii) get investment insurance, (iii) access ‘going abroad’ seeding-funds for small-medium enterprises from the government, (iv) get overseas investment tax reduction, and (v) get foreign currency. The survey asked the respondents to evaluate these items on a 5-point scale (1=very difficult, 5=very easy). The principal-component factor analysis is used to extract a factor to reflect the home country’s government policies. We use firm’s perception to measure institutional supports from industry associations and intermediary organizations (Interm). Firms were asked whether or not, in their internationalization process, industry associations and intermediary organizations had provided relevant services, with 1 indicating yes and 0 otherwise. The subjectivity of perceptual measures can be an advantage because it directly reflects the impacts of the environment on the decision-making process (Santangelo & Meyer, 2011). To measure host country’s institutional environment (Hostgov) the respondents were asked, on a five-point scale (1=not important, 5=very important), to evaluate the importance of a host country’s policies for firm performance.
3.3 Non-response Bias Test and Common Method Variance (CMV)

To assess potential non-response bias, we compared the respondents and the original sample with respect to the number of employees and the age of the firm. The t statistics were statistically insignificant suggesting that there is no significant difference between these two groups. Thus non-response bias is unlikely to be a significant problem. Since the data was collected from the same respondents of an organization, which may create a CMV bias problem, resulting in a false internal consistency. Several methods of controlling for CMV are employed in this study (Podsakoff, et al., 2003; Podsakoff & Organ, 1986). First, the dependent, independent and control variables are not similar in content. Second, the dependent variables, ROA and ROS can be independently verified from other sources through calculation. Third, we tested this potential problem by conducting the Harmon’s factor test and all the measurement items are loaded into an exploratory factor analysis (Podsakoff, et al., 2003). The results show that the largest factor explains only 18.018% of the total variance, indicating that CMV is unlikely to be a major concern in this study.

4. Research Finding

4.1 Descriptive Statistics

Table 1 shows descriptive statistics and a correlation matrix for the main variables. All
correlation coefficients are low except for the one between age and international experience. We further checked the variance inflation factors (VIF) scores. The mean VIF is 1.21 with no single VIF score greater than 1.47 which is less than the threshold level of 10, suggesting that multicollinearity is not a serious issue.

4.2 Econometric Results

Table 2 presents the estimation results. Models 1 and 2 contain all variables that are related to hypotheses developed in Section 2. The $R^2$s are 0.120 and 0.158 respectively, which are expected for cross-sectional survey analysis and are comparable to results from other studies of Chinese firms’ internationalization using survey data, e.g. Duanmu (2012), Yiu, et al. (2007) and Lu, et al. (2011), and those using cross-sectional data, e.g. Wang, Hong et al.Wang, et al. (2012).

We can now turn to the results. For firm-level strategy, the coefficients on entry mode (EM) are positive and statistically insignificant. Thus, Hypothesis 1 is not supported. At the firm-level, the coefficients on TBC and Brands are positive and statistically significant, thus Hypotheses 2 and 3 are supported. For international experience (Exports_yr), the coefficients on models 1 and 2 show negative signs and are statistically insignificant. Thus, Hypothesis 4 is not supported. The coefficients on industry R&D appear to be positive and are statistically significant in both models, thus providing support for Hypothesis 5. At the country level, the coefficients for
*Homegov* show negative signs and are statistically significant in both models, thus contradicting to our Hypothesis 6a. For *Interm*, the coefficients are negative and statistically insignificant in both models, thus Hypothesis 6b is not supported. The coefficients for *Hostgov* are negative and are statistically significant in both models, Hypothesis 7 therefore contradicts to our predication and it is not supported.

### 4.3 Robustness Check

We use alternative measures for international experience and industry R&D to check the robustness of our results. For *international experience*, it is measured by the ratio of a firm’s exports to sales (e.g. Lu, et al., 2011; Wei, et al., 2014). The *industry R&D* is reflected by the total number of R&D personnel in the industry. The results are broadly consistent with those presented in Table 2, though sometimes the coefficients of entry mode become marginally significant.

### 5 Discussion

We conduct a multi-dimensional analysis of how entry mode, firm-level factors, industry conditions and institutional contexts determine firm performance. Firms adopt different entry mode strategies and it is expected that exporting firms with OFDI perform better than those not undertaking OFDI. However, our regression results are not in line with the theoretical prediction. This is not surprising as
anecdotal evidence shows that many Chinese firms with OFDI have been making losses in the host country (e.g. Deng, 2010). This may also because exporting firms employ OFDI to exploit complementary and strategic resources/assets, not to improve firm performance.

From the resource perspective, TBC and brands are important firm-specific resources and they have a positive impact on firm performance. The TBC has a complex and tacit nature, making it difficult to be imitated by competitive rivals. The findings of this study are consistent with the existing literature (e.g. Aw and Batra, 1998; Acha, 2000; Lee et al., 2001; Tsai, 2004; Ortega, 2010), confirming that firms with superior TBC enjoy better performance compared to those without. Furthermore, the possession of domestically developed TBC is an indication of having absorptive capacity in technological learning, which provides a basis for knowledge innovations and could lead to the upgrade of existing products through redesign/redevelopment. This can also help the firms target new markets and make profits. Our findings associated with brands are consistent with the theoretical prediction, revealing that firms with brands achieve better performance than those without. As discussed above, well-established brands put firms in a better position to compete with rivals because they are perceived as producing high quality products in the mind of consumers (Morgan & Rego, 2009), they are more responsive to the marketing effects (Srivastava, et al., 1998) and they have a deep and meaningful relationship with customers and channels (Park, et al., 2013; Srivastava, et al., 1998). These advantages
can help to attract more consumers, reduce price sensitivity, attain price premium, reduce advertising and sales costs and build up customers’ and channels’ loyalty, thus enhancing firm performance.

Empirical findings on international experience contradict theoretical expectation. The possible explanation is that the measure used may not fully capture the real contextual link to the international experience. For instance, firms’ international experience may lead to different levels of learning about foreign markets (Delios & Henisz, 2003), therefore it is important to move beyond the aggregate measure of international experience (Delios & Henisz, 2003; Gao, et al., 2008). Furthermore, the extent to which the depth and type of international experience can affect firm performance is unclear. Further studies may address this issue and can provide a new context by classifying different types of international experience and using more detailed measures to examine the impact of international experience.

R&D intensity of an industry positively affects firm performance. As a general policy, governments should build up national innovation system and make more R&D investment into important industries and support firms in R&D intensive industries to upgrade their technological capabilities and performance. Governments should encourage R&D and original innovations by both indigenous and foreign firms in order to enhance the R&D intensity of Chinese industries. Moreover, governments should help industries build up networks with government institutions and
R&D/educational institutions to enlarge the knowledge pool and promote information sharing (Chen, 2003). This is important as R&D intensive industries and firms can affect the national economy and global competitiveness of the country significantly as China aims to attract more FDI into these industries, benefit from technological spillovers, boost exports and develop indigenous knowledge and technological base (Gachino, 2006; Schaaper, 2009). This is also a compulsory step for China to become an innovative nation. For firms, engaging in R&D intensive product development is beneficial as the technological spillovers within the R&D intensive industries produced by both foreign firms and indigenous pioneers and the interactions of firms with the organizations outside the R&D intensive industries can significantly enhance firms’ capability of developing new products, promoting the features and improving returns of firms (Blomström and Kokko, 1998; Cheung and Lin, 2004). Therefore, firms should upgrade their R&D strategies and increase their R&D inputs including R&D expenditure and personnel in order to stay in R&D intensive industries and enjoy the technological spillovers. They should try to acquire information and knowledge through interacting with both foreign firms and indigenous pioneers, government institutions and educational institutions to enhance their knowledge and technological base, which may significantly improve the performance of their products and returns from investments (Gachino, 2006).

The literature has emphasized that firm performance may be positively or negatively affected by home country’s institutional environment (Goldszmidt, et al., 2011;
McGahan & Victer, 2010). Our findings indicate that a home country’s institutional support has a negative impact on firm performance. The possible explanation is that, despite being supportive and encouraging, some institutions in a home country may not be quite efficient. This is especially true for China. In order to boost economic growth and implement the ‘go global’ strategy, China has set up various formal institutions, aiming to provide support and assistance for firms (Dunning & Lundan, 2008). The setting up of these supportive institutions is one thing. Whether or not they can be efficiently and effectively implemented in practice is another thing. For example, the efficiency of law enforcement, the efficiency of financing firms, the complexity of government policies and the effectiveness of higher education can all somehow affect the level of firm performance as the above formal institutions of a home country are closely related to the costs, opportunities and incentives of business activities (Zhu et al., 2012). Thereby, a seemingly supportive home country’s institutions may be inefficient underneath, which may negatively affect firm performance.

In terms of a host country’s institutional environment, the findings also contradict to our theoretical predictions. The possible reasons may be because the measurement (survey question) is too broad, thus failing to reflect the intended context, that’s the relationship between specific policy or a series of host government policies and firm performance. Further studies may take this point into account.
Conclusion

This study explores a largely neglected issue related to factors affecting EMF performance. Adopting an integrated framework that combines the entry mode literature and strategic tripod framework, we empirically examined the determinants of firm performance using a unique dataset for Chinese POEs. Our findings have practical implications for managers and policy makers. First, exporting firms with FDI do not tend to have better firm performance than those not undertaking FDI. Exporting firms are encouraged to engage into FDI to acquire complementary and strategic resources, however, the utilization and integration of such acquired resources into EMFs require both time and efforts. Moreover, exporting firms are required to build up certain capabilities to make use of the acquired strategic resources from FDI and become capable enough to transform such resources into useable and adaptable forms. Therefore, managers should use effective strategic approaches to retain, manage and transform such resources into its own firm-specific competitive advantages so as to improve their firm performance. Second, it is clear that internal resources and capabilities are important for firms’ internationalization and significantly affect firms performance. In particular, TBC and brands are necessary conditions under which firms aim to achieve better performance. Third, R&D intensity of an industry positively affects firm performance. Governments should build up national innovation system and make more R&D investment into important industries and support firms in R&D intensive industries to upgrade their
technological capabilities and performance. Governments should encourage R&D and original innovations by both indigenous and foreign firms in order to enhance the R&D intensity of Chinese industries. Firms should upgrade their R&D strategies and increase their R&D inputs including R&D expenditure and personnel in order to stay in R&D intensive industries and enjoy the technological spillovers associated. Fourth, firm performance is not only driven by firm characteristics and industry conditions, but also affected by home and host country's institutional environments. Firm performance is determined by whether government policies, in both home and host nations, create favorable conditions. In other words transparent, predictable, sound and well-enforced rules, regulations and policies can enhance firm performance.

Our study has a few limitations. First, due to data availability, industry factors in the host countries are not included in the research design. In particular, the industry competition pressures of host countries should be incorporated, thus providing a more comprehensive view of how industry conditions, both at home and host countries, influence firm performance. Second, as discussed above, further research on international experience should be more specific and be linked to the context, so as to assess the relationship between different types of international experiences and firm performance. Third, our study focuses on POEs only, while, further research should compare and contrast SOEs and POEs and investigate to what extent the factors affect firm performance differently. Fourth, due to data availability, our study does not take into account the impact of export strategy on firm performance. The literature
emphasizes the importance of export strategy. For instance, Aaby and Slater (1989)’s “strategic export model” emphasizes that a firm’s competences and strategy have positive and significant impact on their performance. However, the empirical results are mixed. The research of Zou and Stan (1998), amongst others, suggests that any specific exporting strategy, including concentration or diversification, first mover or follower, tends to have an insignificant impact on firm performance. Further research may take into account this point to identify whether an appropriate export strategy can improve firm performance so as to add more values to the research.

Reference:


Table 1 - Descriptive Statistic

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>EM</th>
<th>TBC</th>
<th>Brands</th>
<th>Exports_yr</th>
<th>Ind. R&amp;D</th>
<th>Homegov</th>
<th>Interm</th>
<th>Hostgov</th>
<th>Age</th>
<th>MO</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM</td>
<td>0.1192</td>
<td>0.3241</td>
<td>0.1192</td>
<td>0.3241</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TBC</td>
<td>0.0041</td>
<td>0.9919</td>
<td>-0.0091</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brands</td>
<td>0.2649</td>
<td>0.4413</td>
<td>0.2107</td>
<td>-0.007</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports_yr</td>
<td>5.1195</td>
<td>6.8978</td>
<td>0.0933</td>
<td>-0.1047</td>
<td>0.2626</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ind. R&amp;D</td>
<td>8.9945</td>
<td>1.2487</td>
<td>-0.1969</td>
<td>0.0324</td>
<td>-0.0142</td>
<td>0.0689</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homegov</td>
<td>-0.0019</td>
<td>1.0099</td>
<td>-0.0574</td>
<td>0.1604</td>
<td>-0.0142</td>
<td>-0.0259</td>
<td>-0.0077</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interm</td>
<td>0.6470</td>
<td>0.4780</td>
<td>0.0546</td>
<td>0.0826</td>
<td>0.2094</td>
<td>0.0222</td>
<td>-0.0405</td>
<td>-0.0616</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostgov</td>
<td>3.4767</td>
<td>1.3151</td>
<td>-0.0397</td>
<td>0.0589</td>
<td>-0.0239</td>
<td>-0.0346</td>
<td>0.0476</td>
<td>0.2497</td>
<td>0.1374</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>8.7360</td>
<td>7.6428</td>
<td>0.0784</td>
<td>-0.1123</td>
<td>0.4298</td>
<td>0.5126</td>
<td>0.2332</td>
<td>0.0215</td>
<td>0.1236</td>
<td>0.0052</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>0.0083</td>
<td>0.8055</td>
<td>0.1717</td>
<td>0.1374</td>
<td>0.1029</td>
<td>0.0944</td>
<td>-0.0626</td>
<td>0.2011</td>
<td>-0.0807</td>
<td>0.2887</td>
<td>-0.0151</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 2 - Regression Results

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>ROS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM</td>
<td>0.083</td>
<td>0.164</td>
</tr>
<tr>
<td></td>
<td>[0.114]</td>
<td>[0.104]</td>
</tr>
<tr>
<td>TBC</td>
<td>0.154***</td>
<td>0.173***</td>
</tr>
<tr>
<td></td>
<td>[0.051]</td>
<td>[0.046]</td>
</tr>
<tr>
<td>Brands</td>
<td>0.305***</td>
<td>0.163***</td>
</tr>
<tr>
<td></td>
<td>[0.102]</td>
<td>[0.093]</td>
</tr>
<tr>
<td>Exports_yr</td>
<td>-0.008</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>[0.009]</td>
<td>[0.008]</td>
</tr>
<tr>
<td>Ind. R&amp;D</td>
<td>0.094**</td>
<td>0.161***</td>
</tr>
<tr>
<td></td>
<td>[0.044]</td>
<td>[0.040]</td>
</tr>
<tr>
<td>Homegov</td>
<td>-0.109**</td>
<td>-0.190***</td>
</tr>
<tr>
<td></td>
<td>[0.048]</td>
<td>[0.044]</td>
</tr>
<tr>
<td>Interm</td>
<td>-0.012</td>
<td>-0.108</td>
</tr>
<tr>
<td></td>
<td>[0.102]</td>
<td>[0.092]</td>
</tr>
<tr>
<td>Hostgov</td>
<td>-0.132***</td>
<td>-0.095**</td>
</tr>
<tr>
<td></td>
<td>[0.041]</td>
<td>[0.037]</td>
</tr>
<tr>
<td>Age</td>
<td>0.021***</td>
<td>0.023***</td>
</tr>
<tr>
<td></td>
<td>[0.008]</td>
<td>[0.007]</td>
</tr>
<tr>
<td>MO</td>
<td>0.064</td>
<td>0.120</td>
</tr>
<tr>
<td></td>
<td>[0.069]</td>
<td>[0.062]</td>
</tr>
<tr>
<td>N</td>
<td>472</td>
<td>472</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.120</td>
<td>0.158</td>
</tr>
</tbody>
</table>

Standard errors in brackets * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$