

**DETERMINANTS TO NATIONAL AND INTERNATIONAL EXPANSION OF SMEs FROM  
CHINA**

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### **ABSTRACT**

The paper aims at studying the national and international expansion of SMEs in emerging countries. The data was collected from 120 SMEs operating in Ningxia, China, and then analysed using multivariate regressions; the models used the firms' export intensity at the regional, national, and international level as dependent variables. Two models used the barriers to the national and international expansion (based on a previous work by Leonidou (2004)), and the other two models the characteristics of Chinese international companies as independent variables. The results show that 12 of the barriers defined by Leonidou are hindering the expansion of Ningxia's SMEs, that the ownership from the state does not play an important role in this expansion, and that the support from the state in the form of funds is helpful in the first stages of the expansion (regional level) and the funds from private sources are key to cross the country's boundaries.

## INTRODUCTION AND BACKGROUND

During the last two decades the Chinese society has experienced deep transformations and its economy has registered an average annual rate of 9% of GDP growth, period in which China has become a new economic power. The country shows an impressive growth in international trade and is now one of the largest recipients of foreign direct investment. In 2005, China's trade surplus reached \$101.8 billion, three times larger than that in the previous year and also attracted more than 44,000 projects and around US\$ 65,000 million in foreign direct investments.

This growth is closely related to the economic reforms and the adoption of a free enterprise system which have provided a basic institutional infrastructure to support a gradual transition from a government-controlled and central-planned economy to a market-driven one. In addition, the Chinese government has promoted economic decentralisation and Chinese companies are now allowed to do business internationally.

In particular, and following the experiences of other Asian countries such as Taiwan and South Korea, China has (i) progressively adopted an export-oriented development strategy, (ii) reduced import restrictions gradually, (iii) adopted a real exchange rate, (iv) got the macroeconomic fundamentals right, and (v) adopted an open door policy. It can be argued that these policies are responsible for the rapid entry of foreign companies, capital, technologies and best business practices (Cardoza, 1997).

Nevertheless, it is important to mention that “the Chinese Communist Party retain[s] full control of the country’s affairs and remain[s] firmly committed to many of socialism’s key tenets...State agencies provid[e] most of the country’s still-limited financial services.... Indeed, the state – and the Party – [are] central players in nearly all aspects of China’s economy, guiding a development trajectory often labelled as capitalism with social

characteristics” (Spar & Oi, 2006: p. 1). For example, “many of its MNEs remain in state hands, even though corporatised...which means that these firms still align their operations, whether at home or abroad, with the five-year plans and national imperatives” (Buckley, Clegg, Cross, Liu, Voss, & Zheng, 2007). In addition, “China’s developing capitalism is not solidly based on law, respect for property rights and free markets” (Blazquez-Lidoy, Rodriguez, & Santiso, 2006: p. 10).

Within this framework, some Chinese companies have started a process of outward internationalisation. In 2003, Wong and Chan (2003) found that the top 12 Chinese international companies controlled “over [us]\$30 billion in foreign assets with some 20,000 foreign employees and [us]\$33 billion in foreign sales”. Based on figures from 2006, Edwards (2007) added that China’s foreign exchange reserves at more than us\$1,000bn along with a continue “deregulation and integration to the global economy” can help Chinese companies to “gain new markets, technologies, and control over resources”. In 2007, the Chinese National Commission for Reform and Development said that the Government will encourage overseas investments in four main areas: “resources abroad, infrastructure, R&D, and services”(La Tercera, 2007).

In this context, the Chinese authorities, especially local governments, have stated that the development and internationalisation of strong small business enterprises (SMEs) is crucial for the country’s future economic development and competitiveness as SMEs are one of the main sources of entrepreneurship, job opportunities, technology diffusion, and fiscal income. SMEs international activities also allow continuous technological improvement, identification and adoption of international best practices, risk diversification, and wealth generation.

This structure of this paper follows. First, a review of the literature on the national and international expansion of Chinese firms is presented; followed by, second, an analysis of the

relevant literature on the barriers to the national and international expansion. Third, the aims, the methodology and the analysis of the data are explained; and fourth, the results of the analysis are presented. The paper finishes with a summary and discussions. This is an exploratory work that follows a similar experimental design to that used in recent papers (Faff & Marshall, 2005; Fornes, 2007).

### **THE NATIONAL AND INTERNATIONAL EXPANSION OF CHINESE COMPANIES**

Most of the works on the national and international expansion of Chinese companies are based on large companies. Studies on the expansion of Chinese SMEs are scarce. Nevertheless, and due to the pace of change in the Chinese economy, it could be argued that many of the now relatively large companies were small or medium-sized organisations only a few years ago. Examples of this rapid transformation worth mentioning are what Zeng and Williamson (2003: pp. 3-4) called “competitive networks”, a group of companies that “have taken on world markets by bringing together small, specialized companies that operate in close proximity”, and “technology up-starts”, firms exploiting technology developed by research institutes owned by the government. As a consequence, it would be relatively safe to say that some of the characteristics found in previous studies on China’s international companies may also be applicable, to some extent, to either small, medium, and large-sized firms.

The process of international expansion of Chinese firms has gone through three main stages: a first mainly experimental stage up to the 1990s, characterised by a strong supervision from the Government, followed by a second stage during the 1990s which saw a large increase in the number of Chinese subsidiaries abroad with little strategic focus and many of them reporting losses (Buckley, Clegg, Russell Cross, Voss, & Zheng, 2006; Cai, 1999; Quan, 2001; Warner, Ng, & Xu, 2004; Zhang & Van Den Bulcke, 1996). A third stage has started

recently as a “number of leading Chinese firms have begun to internationalise with a view to becoming global players in international markets” (Child & Rodrigues, 2005).

Child and Rodrigues (2005) identified three routes that Chinese companies are taking towards their internationalisation, “(i) the partnership route through original equipment manufacture (OEM) or joint venturing, (ii) the acquisition route, and (iii) the organic expansion route” (p. 389). The first route, although regarded as inward internationalisation, has been seen as a way to transfer knowledge from the international partner and eventually improve the Chinese firms’ competitiveness. The second route is supported by an international shopping spree of US\$2.85 billion in 2003, of around us\$5.55 billion in 2004, and us\$7 billion in 2005 (Business Week, 2004; Santiso, 2006). The third route is characterised by the “greenfield establishment of subsidiaries and facilities within targeted markets. It is initially aimed at securing differentiation advantages in terms, for example, of adjustment of local market needs and tastes”(p. 394).

Previous works have also suggested that Chinese firms operating overseas present unique characteristics. First, they tend to lean on ethnic and other similar networks for business opportunities, relations with local authorities, and management of labour (Brown, 1995; Lecraw, 1993; Yeung & Olds, 2000). In this context, Rauch and Trindade (2002) found that “ethnic Chinese networks have a quantitatively important impact on bilateral trade through mechanisms of market information and matching and referral services, in addition to their effect through community enforcement of sanctions that deter opportunistic behaviour” (p. 129). Boisot and Child (1996) also said that Chinese managers use these networks as a way of reducing transaction costs and exploring new business opportunities.

A second characteristic was described by Cai (1999) who said that the central and local governments encouraged and directed the outward FDI process up to the mid-1990s aimed

mainly at promoting exports and securing raw materials, although some state-owned companies also used their investments abroad to acquire technology and skills. This interplay between government intervention and the entrepreneurship spirit implicit in mainstream theory was studied by Zhang and Van Den Bulcke (1996) who claimed that the Chinese internationalisation process in the early 1990s was the result of a balance between “the influence of the governmental bureaucratic system” and the “development of a real entrepreneurial logic” (p. 161).

A third characteristic of Chinese international companies were presented by Nolan (2001) who argued that “the competitive capability of China’s large firms after two decades of reform is still painfully weak in relation to the global giants” (p. 187) mainly in the areas of R&D, marketing ability, development of brands, and the restrictions from the authorities. Nolan continued and suggested that this is probably the result of the government’s protection of the domestic market, advantageous funding conditions, distribution channels protection, and procurement from the government.

In summary, most of previous works have identified the following characteristics among Chinese companies with international operations: (i) a reliance on ethnic Chinese networks, (ii) a participation of the government and its influence in the decision-making, and (iii) a relatively weak competitive capabilities of Chinese firms.

### **BARRIERS HINDERING THE NATIONAL AND INTERNATIONAL EXPANSION OF SMEs**

Korth (1991) and Onkvisit & Shaw (1988) stated that the reasons for SMEs not crossing the boundaries can be found in problems in the host markets, in deficiencies in the home market, in a weak organisational structure, or in a flawed business model. In addition, Ward (1998) and Gallo & Garcia-Pont (1996) claimed that the situation in small family business is

aggravated as this kind of enterprises are less inclined to cross the boundaries mainly due to constrained capital (to fund both the family and the business growth), limited flexibility and change resistance of the leaders, diverse family aims and needs, and disputes among sibling successors. These reasons are claimed to be responsible for some companies' (i) negative attitudes towards exporting, (ii) scepticism about national and international expansion, (iii) and deteriorating performance (Leonidou & Katsikeas, 1996; Miesenböck, 1988).

Leonidou (2004) added that "a large number of small-sized manufacturers ... do not dare to cross [local and national] boundaries to sell their products and services, thus putting themselves at a major disadvantage vis-à-vis their competitors who have opted for a more global business perspective". This disadvantage can be explained by the relative difficulty of these small companies' to use idle capacity and exploit economies of scale, offset risks by operating in different markets, enhance the technological base, and attract skilled labour, mainly due to the fact that they are operating only in the local market (Czinkota & Ronkainen, 2001). Aldrich and Auster (1986) also said that domestic small firms lack the ability to control prices and have limited (if any) access to decision makers which increase their level of uncertainty in the external environment.

The literature on the national and international expansion of small business is vast and varied, and has been growing in recent times due to the increasing globalisation. Nevertheless, it is claimed that research on this area (i) has been isolated, fragmented, and scattered, (ii) provides only a partial examination of export barriers, and (iii) does not offer a detailed understanding of the specific nature and relative impact of each barrier (Leonidou, 1995). In order to overcome some of these weaknesses, Leonidou (2004) collected, consolidated, and integrated the results of previous works into a single set of barriers. In his paper, Leonidou (2004) compiled different studies in Europe and North America since the 1960s and found

that the factors hampering the international development of SMEs can be divided into internal and external.

The internal barriers are “associated with organizational resources/capabilities and company approach to export business” and can be broken down into Informational, Functional, and Marketing. On the other hand, the external barriers are those “stemming from the home and host environment within which the firm operates” and can be classified in Procedural, Governmental, Task, and Environmental (Leonidou, 2004: p. 281). This integrated model of internal and external barriers developed by Leonidou will be the main conceptual framework utilised in this paper.

### **AIMS, SAMPLE, AND METHODOLOGY**

Within this conceptual framework, the paper aims at analysing, first, the barriers that SMEs are facing to expand their operations nationally and internationally in one of the least developed regions in China. This exploratory study was deemed necessary as there are only a few works on Chinese SMEs outside the more developed cities/regions in the coast and also because this is one of the first works applying Leonidou’s set of barriers in an emerging economy. Second, the paper aims at studying the effects (if any) of the government’s participation in the capital of SMEs in Ningxia and also of the financial support received from the state (one of the main characteristics of Chinese international firms described in a previous section). It is expected that the results show positive effects; i.e., the participation of the government in the capital of the firms and its financial support will be instrumental in the national and international expansion of SMEs.

The definition of barriers used in this work is similar to that proposed by Leonidou (2004). Barriers to national and international expansion are “all those constraints that hinder the firm’s ability to initiate, to develop, or to sustain business operations” outside their local

market. The definition taken for SMEs is the one given by the National Bureau of Statistics of China and can be seen in Table 1. In this figure it is possible to see that for some activities the maximum number of employees is 3,000, well above the threshold set by the European Union, for example.

[Insert Table 1 around here]

The data was collected using a questionnaire based on the set of barriers presented by Leonidou (2004). The questionnaire contained different 5-point Likert-type scale questions designed to measure the perception and the degree of importance of the barriers examined. It was applied to 160 SMEs' senior managers and directors in the city of Yinchuan, the Ningxia Hui's Autonomous Region capital, in China's North West, between July 2006 and July 2007. The participants operate within similar idiosyncratic characteristics (managerial, organisational, and environmental) making the barriers operative (Barret & Wilkinson, 1985) and, as a consequence, a similar contextual view of the challenges faced by their firms can be expected.

Table 2 presents selected answers from the survey. In this figure it is possible to see that almost 45% of the SMEs in the sample are owned by the state, which is in line with the current situation of the Chinese economy as a whole (Spar & Oi, 2006). These companies operate mainly in manufacture (36%), construction (8%), and real estate (7%). Most of them were founded more than 10 years ago, and the great majority of their managers are men (71%) between 35 and 54 years old with university education. Although owned by the state, these companies show a relatively high active participation by members of the managers' family. Most of these SMEs have funded their operations using loans, mainly from state-owned banks, in the last two years.

[Insert Table 2 around here]

The data analysis is based on multivariate regression analysis following the two main aims described above. The first stage attempted to study the internal and external barriers that SMEs in the sample are facing using *export intensity* (the ratio of sales outside the companies' region of origin, Ningxia, to total sales) as dependent variable and the answers from the survey as independent variables. *Export intensity*, a well-established measure of expansion firm performance (Bonaccorsi, 1992; Calof, 1994), was taken at three different levels, regional, national, and international. This 3-level analysis was designed due to the specific characteristics of the Ningxia region, one of the poorest in China (with, a Gross Regional Product per head of around 30% of that of Shanghai, (National Bureau of Statistics of China, 2007). The relatively low economic development of Ningxia within China suggests that the region's companies are in an early stage in their expansion process and for this reason it would be worth studying the barriers to cross the region's boundaries at different levels. The independent variables were divided into internal and external following Leonidou's classification. The models can be seen in the equations below:

**Internal barriers:**

$$R_i; N_i; I_i = \alpha + \theta_1 \text{InfoSources}_i + \theta_2 \text{Data}_i + \theta_3 \text{Contacts}_i + \theta_4 \text{Time}_i + \theta_5 \text{Skills}_i + \theta_6 \text{Facilities}_i + \theta_7 \text{Finance}_i + \theta_8 \text{Product}_i + \theta_9 \text{Design}_i + \theta_{10} \text{Quality}_i + \theta_{11} \text{Labels}_i + \theta_{12} \text{Postsale}_i + \theta_{13} \text{Price}_i + \theta_{14} \text{CompPrice}_i + \theta_{15} \text{Credit}_i + \theta_{16} \text{Distribution}_i + \theta_{17} \text{DistAccess}_i + \theta_{18} \text{Representatives}_i + \theta_{19} \text{Control}_i + \theta_{20} \text{Supply}_i + \theta_{21} \text{Warehouses}_i + \theta_{22} \text{Transport}_i + \theta_{23} \text{Promotion}_i + \varepsilon_i \quad (\text{Equation 1})$$

**External barriers:**

$$R_i; N_i; I_i = \alpha + \theta_1 \text{Paperwork}_i + \theta_2 \text{Communication}_i + \theta_3 \text{Payment}_i + \theta_4 \text{Assistance}_i + \theta_5 \text{DomRegulations}_i + \theta_6 \text{Preferences}_i + \theta_7 \text{Competitiveness}_i + \theta_8 \text{EconEnvironment}_i + \theta_9 \text{ExchRate}_i + \theta_{10} \text{PolInstability}_i + \theta_{11} \text{HostRegulations}_i + \theta_{12} \text{Tariff\&NTB}_i + \theta_{13} \text{Familiarity}_i + \theta_{14} \text{Socio-cultural}_i + \theta_{15} \text{Verbal}_i + \varepsilon_i \quad (\text{Equation 2})$$

where  $R_i$ ,  $N_i$ , and  $I_i$  are the *export intensity* at the regional, national, and international level (respectively) of company  $i$ . The definition of the variables can be seen in Figure 1.

[Insert Figure 1 around here]

The second stage intended to see the effects (if any) of the influence of the government in the SMEs' expansion at three different levels, regional, national, and international. For this purpose, multivariate regressions with *export intensity* at the different levels as dependent variables, and the ownership of the SMEs and the funding sources in the last two years as independent variables were run. The models can be seen in Equation 3 and Equation 4.

### Ownership

$$R_i; N_i; I_i = \alpha + \theta_1 \text{Family}_i + \theta_2 \text{SpecialPartnerships}_i + \theta_3 \text{FinancialInstitutions}_i + \theta_4 \text{State}_i + \varepsilon_i$$

(Equation 3)

### Funding sources

$$R_i; N_i; I_i = \alpha + \theta_1 \text{Personal}_i + \theta_2 \text{State}_i + \theta_3 \text{Private}_i + \varepsilon_i \quad (\text{Equation 4})$$

where  $R_i$ ,  $N_i$ , and  $I_i$  are the *export intensity* at the regional, national, and international level (respectively) of company  $i$ . In Equation 3 the independent variables represent different ownership types (which are measured using the percentage of their stake in the company). *Special Partnerships* include Joint Ventures (JV), Original Equipment Manufacturing (OEM) agreements, and other partnership types with international companies.

In Equation 4, (i) *Personal* sources include the answers under the following headings Own Savings, Family, Second Mortgage, Credit Card, Loans from Friends, Inheritance, and Pension; (ii) *State* sources comprise Overdrafts, Subsidies, Leasing, Loan from Banks, and Subsidised Loans; and (iii) *Private* contains Venture Capital, Suppliers, Other Business, Previous Years' Profits, Private Investors, and Depreciation. In this model it is important to mention that the great majority of the banks in Ningxia are owned by the state (local or national).

## RESULTS

### Internal and External barriers models

Table 3 and Table 4 present the correlations matrixes for both the internal and external barriers models. These tables show the Kendall's  $\tau$  coefficient as the equi-distance in the Likert scales cannot be justified. In these tables it is possible to see that a relatively high correlation seem to exist between *Price* and *PostSale*, *Representatives* and *DistAccess*, and *Control* and *Representatives* for internal barriers; and between *Communication* and *Paperwork*, *Payment* and *Communication*, and *Tariff&NTB* and *HostRegulations* for external barriers. These relatively high correlations are, to a certain extent, expected due to the nature of the variables presented by Leonidou and the apparent closeness of the concepts measured. The variables were not drop from the model as it was considered that, even including the closeness of the concepts, the variables do not depart from their independence mainly due to the different contexts and purposes of the original data.

Equation 1 was calculated twice and the results can be seen Table 5. Panel A shows the results of the regressions using  $R_i$  as dependent variable. In the first regression (Reg 1) it is possible to see that there is some role for *Quality*, *Price*, *Credit* and *Supply*. The second regression (Reg 2) resulted in only *Price* and *Credit* presenting a statistical significance above 90%. Panel B contains the outcomes of the regressions using  $N_i$  as dependent variable, the first regression (Reg 1) shows that *Facilities*, *Design*, *Quality*, *Labels*, *PostSale*, and *Transport* have some impact on the national sales, then the second regression was run with these variables and the results show that *Labels* and *PostSale* present statistical significance above 90%. Finally, Equation 1 was run again in a similar way using  $I_i$  as a dependent variable (Panel C), the first regression showed that *Contacts*, *Time*, *Design*, *PostSale*, *Price*, *Credit*, *DistAccess* and *Representatives* have some impact, and then Reg 2 showed that only *Time*, *Design* and *DistAccess* present a statistical significance over 90%.

Table 6 presents the results of the external barriers model (Equation 2). Panel A shows the results of the regressions using  $R_i$  as dependent variable, in the first regression (Reg 1) it is possible to see that none of the variables seem to act as barriers to cross the boundaries of the region. Equation 2 was then calculated twice, Panel B contains the outcomes of the regressions using  $N_i$  as dependent variable where the first regression (Reg 1) shows that *Assistance*, *DomRegulations*, *Competitiveness*, *ExchRate*, and *PolInstability* have some impact on the national sales, then the second regression was run with these variables and the results show that *Assistance* and *ExchRate* present statistical significance above 90%. Finally, Equation 2 was run again in a similar way using  $I_i$  as a dependent variable (Panel C), the first regression showed that *Paperwork*, *Communication*, *Payment*, *Competitiveness*, and *ExchRate* have some impact, and then Reg 2 showed that only *Communication*, *Payment* and *ExchRate* present a statistical significance over 90%.

[Insert Tables 3, 4, 5, and 6 around here]

Figure 2 shows a summary of the barriers to national and international expansion faced by Ningxia's SMEs. In this Figure it is possible to see that SMEs from Ningxia face fewer barriers (31.5% of the total assuming an equal weighting) to their expansion than their Western counterparts. This finding was not expected as it was thought that companies from an emerging country would face more barriers than companies operating in more developed economies. Second, Ningxia's SMEs do not perceive *Finance* as a barrier to their expansion, a barrier mentioned widely in the literature on Western SMEs. This could be explained by the strong support from the government in terms of ownership and loans from state-owned banks (one of the characteristics of Chinese international firms identified in previous works). Finally, the evidence shows that there are different barriers to cross the region's and country's boundaries, making this is one of the first empirical works showing that different barriers apply to the regional, national, and international expansion.

[Insert Figure 2 around here]

### **Ownership and State Support models**

Table 7 presents the correlation matrix for the ownership model using the Pearson coefficient. In the table it is possible to see that a relatively high correlation seem to exist between *State* and *SpecialPartnerships*. For this reason, the latter was drop from the model. Table 8 shows the results of running Equation 3; Panel A, Panel B, and Panel C present the outcome with  $R_i$ ,  $N_i$ , and  $I_i$  as independent variables respectively. As can be seen, none of the ownership types seem to affect the regional, national and international expansion of the SMEs in the Ningxia region.

Table 9 presents the correlation matrix for the Funding Sources model using the Pearson coefficient where it is possible to see that no high correlation seems to exist among the variables. Table 10 shows the results of running Equation 4, Panel A with  $R_i$ , Panel B with  $N_i$ , and Panel C with  $I_i$  respectively. As can be seen, in the first stage of the expansion (regional level, Panel A) the support from the *State* presents a statistical significance above 90%, and the funding from *Private* sources play a significant role in the SMEs' international expansion (Panel C).

[Insert Tables 7, 8, 9, and 10 around here]

The results from these analyses suggest that the ownership by the state does not play a significant role in the SMEs' national and international expansion. However, the support from the state in the form of funding seems to be instrumental in the first stages of their (local and regional) expansion. In addition, the evidence shows that the support from private sources is relevant to cross the country's boundaries. These findings are in line with the conclusions from previous works (Cai, 1999; Child & Rodrigues, 2005; Zeng & Williamson, 2003; Zhang & Van Den Bulcke, 1996) and adds a new dimension by showing that different stages in the

expansion process are fuelled by the support of different sources. In other words, the first push is given by the financial help from the government, and the second one by the financial support from private sources. This private support is also usually linked to a transfer of the knowledge and skills needed to operate in international markets. On the other hand, the fact that the state ownership does not play a relevant role in the firms' expansion could be interpreted within the findings from Child and Rodrigues (2005) that Chinese state-owned companies' strategic position "could be weakened by the way they remain beholden to administrative approval and... a legacy of institutional dependence". The results obtained in this analysis are one of the first providing empirical evidence of the effects of the ownership by the state and its financial support in Chinese SMEs.

### **SUMMARY AND CONCLUSIONS**

This research work analysed the barriers to the internationalisation of SMEs in one of the least developed regions of China. The data was collected using a questionnaire based on Leonidou's (2004) work on the barriers to the international expansion of SMEs in Europe and North America. The exploratory study was based on multivariate regressions where the dependent variables were the export intensity (at three levels, regional, national, and international) of 120 SMEs from Ningxia and the independent variables were the answers from the questionnaire (internal and external barriers, ownership, and funding sources).

The results of the analysis present a situation where 7 internal and 5 external barriers are hindering the expansion of Ningxia's SMEs. These barriers can be grouped into four main areas, (i) Product, including *Price*, *Labels*, and *Design*; (ii) Operations and Logistics, including *PostSales* and *DistAccess*; (iii) Knowledge of International Finance, including *Credit*, *Payment*, and *ExchRate*; and finally (iv) Skills including *Assistance*, *Communication*, and *Time*. This grouping show that the barriers are related mainly to weak management skills and knowledge regardless the difference between internal and external. These findings

suggest that Ningxia's SMEs share this characteristic with other Chinese international companies as identified by previous works (Nolan, 2001; Rugman & Li, 2007).

The difficulty in the communication, labels and packaging, payment methods, and exchange rate hedging need to be addressed by governments and business associations by establishing specialised infrastructure offering value-added information services acting as an active interface between the international market and the local SMEs. In addition, companies, unions, and public and private institutions need to develop management training programmes on international business including studies on partnerships, joint ventures, marketing, payment methods, etc. These programmes should aim at filling the skills gap in the professional profile of entrepreneurs and managers.

It is also worth of notice that *Finance* does not seem to be a barrier to the national and international expansion as it is the case in most Western SMEs. This can be explained by the active role played by a resourceful Chinese government in funding the development of the country's SMEs; however, the question mark appears over the efficiency in the use of these resources and the possible perverse effects of maintaining them beyond the initial stages. This is an area for future research.

On the other hand, the analysis of the data collected in Ningxia show that ownership does not play a relevant role in the expansion of the region's SMEs. However, the support from the government in the form of funds seems to play an important role in the first stages of the firms' expansion. In addition, the study shows that support from private sources is relevant to cross the country's limits. These results seem to suggest that different types of support are needed at different stages in the SMEs' expansion process.

The results presented in this work aim at contributing to the literature on the national and international expansion of companies, especially SMEs from emerging economies. There are

also conclusions that can be used by policy makers and SMEs managers to improve the effectiveness of their policies and decisions. In this context, the findings presented in this paper are one of the first showing that different barriers apply to the different stages in the firms' expansion process, and also providing empirical evidence of the effects of the ownership by the state and its financial support in Chinese SMEs.

Finally, and more broadly, the national and international expansion of emerging countries's SMEs presents interesting routes for developing the IB agenda. In this sense, Buckley (2002) suggested that one of the potential areas for IB research in the future is the identification of trends towards and away from globalisation, to which Peng (2004) added that future studies need to have a focus on the factors affecting the success and failure of firms in international markets. From what this article has presented it is possible to argue that the barriers hindering the national and international expansion of SMEs in one of the least developed regions in China, along with the effects of the ownership of the Chinese government and its financial support in the country's SMEs, are affecting globalisation and as a consequence, the internationalisation of firms in ways which have yet to be understood.

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**TABLE 1: DEFINITION OF SMALL AND MEDIUM-SIZED ENTERPRISES**

	Employees	Sales	Total Assets
Industry	2,000	3,000	4,000
Construction	3,000	3,000	4,000
Wholesale	200	3,000	
Retail	500	1,000	
Transportation	3,000	3,000	
Postal Service	1,000	3,000	
Accommodation & Restaurant	800	3,000	

Source: (National Bureau of Statistics of China, 2007)

**TABLE 2: SELECTED ANSWERS FROM THE SURVEY**

Age of respondent		Gender of respondent		Studies of respondent		State-owned	Active Participation			Funding sources in the last two years				% of SMEs with sales in different markets				
35-44	45-54	M	F	UG	PG		Sons	Husband/wife	Father/mother	Loans from banks	Own savings	Previous years' profits	Subsidised loans	76-100% Domestic	76-100% Regional	76-100% National	51-75% RoW	76-100% RoW
49%	25%	71%	29%	86%	9%	45%	28%	24%	10%	32%	11%	9%	6%	28%	12%	8%	3%	2%
Profits during last year		Main Activity																
Decreased	Slightly decreased	Kept at same level	Slightly increased	Increased	Manufacture	Hotel/Rest	Retail	Wholesale	Professional Services	IT	Construction	Transportation	Real estate	Finance/insurance	Health/Education	Others	6-10	>10
14%	7%	9%	35%	34%	36%	3%	1%	6%	7%	1%	8%	3%	6%	7%	4%	19%	16%	67%

**FIGURE 1: DEFINITION OF VARIABLES (SCALE VARIABLES USING A 5-POINT LIKERT-TYPE SCALE)**

Internal Barriers		External Barriers	
InfoSources	The company has access to the relevant information sources to identify external markets for the company's products and ss	Paperwork	It is considered that the paperwork related to exports are complicated and costly
Data	The company has the relevant data to assess the possibilities that the international markets are offering	Communication	Communication difficulties affect the normal development of business abroad
Contacts	The company has difficulties to identify and contact potential customers in markets overseas	Payment	The payment collections make export activities more difficult
Time	The daily management of the company does not give enough time to think about exports	Assistance	The government offers adequate assistance and incentives to carry out export activities
Skills	There are persons in the company that have the right skills to manage export-related activities	DomRegulations	The regulations in place make it more difficult to capitalise on opportunities in international markets
Facilities	Limited production facilities do not allow the company to consider exports	Preferences	The different preferences, patterns, prices, and communication of customers in international markets make exports more difficult
Finance	The company has access to the necessary financial resources to fund an export-oriented plan	Competitiveness	The target international markets are perceived as highly competitive
Product	The current product portfolio is not adequate to serve the identified international markets	EconEnvironment	The deterioration of the countries' economic environment is an additional barrier to exports
Design	The design of our products is adjusted to the needs and tastes of customers in market overseas	ExchRate	Exchange rate variations represent an important risk for the company's exports
Quality	The products' quality standards meet the needs of customers in international markets	PolInstability	The political instability in external markets is seen as a barrier to export
Labels	The products' labels and packaging meet the requirements of the target markets	HostRegulations	The different regulations in external markets make it more difficult the access and operations
PostSale	The company has the means to offer an adequate post sale service to its customers overseas	Tariff&NTB	The tariff and non-tariff barriers in international markets restrict export activities
Price	The retail price of the company's products are adequate for the final consumers in international markets	Familiarity	The lack of familiarity with commercial practices abroad affect the company's operations
CompPrice	The company finds it difficult to meet the competitors' prices in the targeted international markets	Socio-cultural	The socio-cultural differences (religion, values, customs, attitudes, etc) are considered obstacles to export activities
Credit	It is difficult for the company to give credit to customers in international markets	Verbal	The differences in verbal and non-verbal language affect the activities carried out in external markets
Distribution	The company finds the distribution channels complex to serve international markets		
DistAccess	It is complex and costly to access the distribution channels to export the company's products		
Representatives	It is difficult to find reliable representatives abroad		
Control	It is difficult to exercise an effective control over the middlemen in international markets		
Supply	The company finds many difficulties in supplying adequately international markets		
Warehouses	The countries where the company exports to do not have adequate warehouse facilities		
Transport	The company considers that the transport and insurance costs related to exports are excessive		
Promotion	It is difficult to adjust the promotional activities to international markets		

**TABLE 3: CORRELATION MATRIX FOR THE INTERNAL BARRIERS MODEL**

	InfoSources	Data	Contacts	Time	Skills	Facilities	Finance	Product	Design	Quality	Labels	PostSale	Price	CompPrice	Credit	Distribution	DistAccess	Representatives	Control	Supply	Warehouses	Transport	Promotion	
InfoSources	1.000																							
Data	.273(**)	1.000																						
Contacts	0.012	-0.099	1.000																					
Time	-0.123	-.244(**)	.246(**)	1.000																				
Skills	.273(**)	.276(**)	-.192(*)	-.385(**)	1.000																			
Facilities	-0.042	-.179(*)	.185(*)	.336(**)	-.234(**)	1.000																		
Finance	0.049	0.116	0.025	0.034	0.089	.272(**)	1.000																	
Product	0.044	-.193(*)	-.252(**)	.217(**)	-0.139	.282(**)	0.056	1.000																
Design	.163(*)	.263(**)	-.0111	-.0119	.423(**)	-.0116	0.008	-0.086	1.000															
Quality	.160(*)	0.127	-.197(*)	-.227(**)	.429(**)	-0.085	0.044	0.022	.497(**)	1.000														
Labels	.221(**)	.239(**)	-.160(*)	-.195(*)	.419(**)	-.172(*)	0.090	-.230(**)	.225(**)	.282(**)	1.000													
PostSale	0.049	0.165	-.215(*)	-.233(*)	.471(**)	-0.136	0.076	-0.046	.460(**)	.376(**)	.498(**)	1.000												
Price	0.108	0.095	0.006	-0.132	.298(**)	-0.145	0.141	0.043	.266(**)	.297(**)	.284(**)	.600(**)	1.000											
CompPrice	-.196(*)	-.0015	0.150	.248(**)	-.238(**)	-.164(*)	0.147	0.066	-.243(**)	-.224(**)	-0.118	-.240(*)	-.189(*)	1.000										
Credit	-0.040	-0.111	0.124	.244(**)	-.312(**)	.244(**)	0.101	0.048	-.230(**)	-.305(**)	-.186(*)	-.384(**)	-.288(**)	.346(**)	1.000									
Distribution	-.156(*)	-.214(**)	.226(**)	.322(**)	-.307(**)	.321(**)	0.146	.333(**)	-0.139	-.200(**)	-.365(**)	-.290(**)	-0.016	.322(**)	-.262(**)	1.000								
DistAccess	-0.084	-.196(*)	.286(**)	.270(**)	-.308(**)	.235(**)	0.028	.271(**)	-.199(*)	-.160(*)	-.225(**)	-0.155	-0.100	.285(**)	-.296(**)	.453(**)	1.000							
Representatives	-0.111	-.0138	.192(*)	.334(**)	-.305(**)	0.130	-0.002	0.134	-0.101	-.158(*)	-.237(**)	-0.140	-0.078	.254(**)	-.259(**)	.337(**)	.538(**)	1.000						
Control	-0.108	-0.117	.292(**)	.225(**)	-.223(**)	0.027	0.035	.272(**)	-0.031	-0.099	-.180(*)	-0.088	0.010	.260(**)	.171(*)	.349(**)	.428(**)	.667(**)	1.000					
Supply	-0.004	-0.130	.215(**)	.226(**)	-.183(*)	0.075	0.023	.268(**)	-0.126	-0.093	-0.150	-.252(*)	0.016	.281(**)	-.280(**)	.381(**)	.402(**)	.388(**)	.478(**)	1.000				
Warehouses	0.048	-0.076	0.055	0.000	0.015	-0.017	0.018	-0.120	-0.008	-0.068	-0.050	-0.050	.214(**)	0.014	0.147	.180(*)	.207(**)	.195(*)	0.098	.292(**)	1.000			
Transport	0.098	-0.017	0.070	0.006	-0.089	-0.080	-0.116	0.118	0.096	0.037	-.189(*)	-0.144	0.053	0.075	0.117	.288(**)	.190(*)	.191(*)	-.200(*)	.360(**)	.345(**)	1.000		
Promotion	0.033	-.226(**)	0.088	0.105	-0.086	0.009	-0.108	0.152	0.020	-0.069	-0.010	0.005	0.091	0.134	0.149	.274(**)	.295(**)	.274(**)	.228(**)	.430(**)	.280(**)	.288(**)	1.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**TABLE 4: CORRELATION MATRIX FOR THE EXTERNAL BARRIERS MODEL**

	Paperwork	Communication	Payment	Assistance	DomRegulations	Preferences	Competitiveness	EconEnvironment	ExchRate	PolInstability	HostRegulations	Tariff&NTB	Familiarity	Socio-cultural	Verbal
Paperwork	1.000														
Communication	.502(**)	1.000													
Payment	.450(**)	.503(**)	1.000												
Assistance	0.151	0.065	0.046	1.000											
DomRegulations	0.133	0.028	.163(*)	0.155	1.000										
Preferences	.306(**)	.246(**)	.156(*)	0.136	.225(**)	1.000									
Competitiveness	-0.144	-0.091	-0.153	.246(*)	0.152	0.213	1.000								
EconEnvironment	.240(**)	.239(**)	.180(*)	0.107	.218(**)	0.110	0.213	1.000							
ExchRate	0.097	-0.002	0.118	0.046	.234(**)	.173(*)	.324(**)	.425(**)	1.000						
PolInstability	0.137	0.079	0.043	.208(**)	.180(*)	0.148	0.174	.344(**)	.410(**)	1.000					
HostRegulations	.308(**)	0.153	0.074	0.133	.254(**)	.196(*)	0.177	.290(**)	.302(**)	.480(**)	1.000				
Tariff&NTB	.162(*)	0.128	0.109	0.019	.252(**)	.232(**)	0.080	.315(**)	.295(**)	.279(**)	.530(**)	1.000			
Familiarity	.168(*)	0.133	0.145	0.130	.354(**)	.198(*)	.311(**)	.163(*)	.226(**)	.309(**)	.464(**)	.320(**)	1.000		
Socio-cultural	0.090	.193(*)	0.135	0.061	0.141	.167(*)	-0.020	.246(**)	.163(*)	.340(**)	.291(**)	.474(**)	.253(**)	1.000	
Verbal	.225(**)	.226(**)	.366(**)	.173(*)	.328(**)	.154(*)	-0.076	.266(**)	.204(**)	.256(**)	.240(**)	.326(**)	.227(**)	.366(**)	1.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**TABLE 5: RESULTS FROM A REGRESSION – INTERNAL BARRIERS MODEL**

	Panel A: dependent variable $R_i$				Panel B: dependent variable $N_i$				Panel C: dependent variable $I_i$			
	Reg 1		Reg 2		Reg 1		Reg 2		Reg 1		Reg 2	
	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$
a	-0.19	-0.38	-0.18		0.33	0.93	0.09		-0.08	-0.31	0.09	0.49
InfoSources	-0.04	-0.49			-0.01	-0.16			0.03	0.68		
Data	-0.01	-0.15			0.04	0.88			0.03	0.76		
Contacts	0.01	0.19			-0.04	-0.82			-0.04	-1.09	-0.03	-0.99
Time	0.04	0.74			-0.04	-0.89			0.04	1.24	0.05	1.99
Skills	0.02	0.30			-0.01	-0.22			-0.02	-0.47		
Facilities	0.00	0.06			0.05	1.20	0.01	0.17	0.02	0.52		
Finance	-0.03	-0.51			0.02	0.40			0.01	0.33		
Product	0.02	0.26			0.00	0.06			0.00	-0.01		
Design	-0.04	-0.58			0.05	0.98	0.05	1.29	-0.08	-1.89	-0.07	-2.69
Quality	0.08	1.18	0.04	0.12	-0.08	-1.60	-0.06	-1.33	-0.03	-0.71		
Labels	0.00	-0.01			0.07	1.43	0.09	2.32	0.00	0.09		
PostSale	-0.07	-0.47			-0.17	-1.54	-0.13	-2.62	0.09	1.11	0.06	1.28
Price	0.11	1.12	0.06	0.18	0.02	0.22			-0.07	-1.37	-0.05	-1.41
CompPrice	0.07	0.93			-0.01	-0.10			0.02	0.53		
Credit	0.08	1.14	0.10	0.28	-0.02	-0.32			-0.04	-0.94	-0.01	-0.33
Distribution	-0.07	-0.82			-0.04	-0.65			0.02	0.47		
DistAccess	0.00	0.02			-0.02	-0.42			0.07	1.53	0.09	2.73
Representatives	-0.02	-0.22			-0.03	-0.42			-0.07	-1.34	-0.04	-1.13
Control	0.03	0.29			0.05	0.66			0.03	0.65		
Supply	-0.10	-1.13	-0.05	-0.14	0.01	0.11			0.02	0.41		
Warehouses	0.03	0.37			0.04	0.70			0.01	0.31		
Transport	0.04	0.46			0.07	1.17	0.05	1.10	0.00	0.03		
Promotion	-0.02	-0.19			-0.04	-0.68			0.02	0.50		
$R^2$	0.18		0.08		0.34		0.20		0.44		0.35	

**TABLE 6: RESULTS FROM A REGRESSION – EXTERNAL MODEL**

External Barriers												
	Panel A: dependent variable R <sub>i</sub>				Panel B: dependent variable N <sub>i</sub>				Panel C: dependent variable I <sub>i</sub>			
	Reg 1		Reg 2		Reg 1		Reg 2		Reg 1		Reg 2	
	β	t	β	t	β	t	β	t	β	t	β	t
a	0.28	0.94			0.14	0.66	-0.01	-0.04	-0.06	-0.32	-0.06	-0.43
Paperwork	-0.04	-0.48			-0.01	-0.13			0.06	1.23	0.05	1.44
Communication	0.04	0.63			0.02	0.31			-0.07	-1.61	-0.08	-2.21
Payment	0.01	0.11			-0.04	-0.79			0.08	1.77	0.09	2.35
Assistance	0.03	0.42			-0.08	-1.68	-0.08	-2.07	0.00	0.05		
DomRegulations	0.01	0.11			0.07	1.19	0.04	0.87	0.03	0.64		
Preferences	0.03	0.50			0.00	0.04			-0.02	-0.67		
Competitiveness	-0.02	-0.25			-0.06	-1.06	-0.04	-1.00	0.05	1.07	0.05	1.50
EconEnvironment	-0.04	-0.58			0.03	0.57			0.00	0.08		
ExchRate	-0.02	-0.23			0.11	1.87	0.10	2.09	-0.07	-1.34	-0.07	-1.84
PolInstability	0.02	0.35			0.05	1.18	0.04	1.15	0.00	0.13		
HostRegulations	-0.05	-0.55			-0.01	-0.20			-0.01	-0.20		
Tariff&NTB	0.05	0.53			-0.01	-0.20			-0.01	-0.16		
Familiarity	0.02	0.27			-0.03	-0.46			0.01	0.24		
Socio-cultural	-0.01	-0.14			-0.03	-0.55			-0.02	-0.55		
Verbal	-0.04	-0.63			-0.01	-0.25			0.00	0.08		
R <sup>2</sup>	0.05				0.26		0.22		0.20		0.17	

**FIGURE 2: BARRIERS TO NATIONAL AND INTERNATIONAL EXPANSION**

Internal			External		
Regional	National	International	Regional	National	International
Price	Labels	Time		Assistance	Communication
Credit	PostSales	Design		ExchRate	Payment
		DistAccess			ExchRate

**TABLE 7: CORRELATION MATRIX FOR THE OWNERSHIP MODEL**

	Family	SpecialPartnerships	FinancialInstitutions	State
Family	1.000			
SpecialPartnerships	-0.063	1.000		
FinancialInstitutions	-0.053	-0.143	1.000	
State	-.320(**)	-.746(**)	-.365(**)	1.000

\*\* Correlation is significant at the 0.01 level (2-tailed).

**TABLE 8: RESULTS FROM A REGRESSION – OWNERSHIP MODEL**

Ownership												
	Panel A: dependent variable $R_i$				Panel B: dependent variable $N_i$				Panel C: dependent variable $I_i$			
	Reg 1		Reg 2		Reg 1		Reg 2		Reg 1		Reg 2	
	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$
a	0.21	2.81			0.15	2.20			0.07	1.42		
Family	0.11	0.56			0.03	0.18			0.13	1.01		
FinancialInstitutions	0.07	0.42			-0.04	-0.27			-0.07	-0.73		
State	0.05	0.59			-0.01	-0.12			0.02	0.32		
$R^2$	0.01				0.00				0.02			

**TABLE 9: CORRELATION MATRIX FOR THE FUNDING SOURCES MODEL**

	Personal	State	Private
Personal	1.00		
State	- 0.09	1.00	
Private	0.05	0.01	1.00

**TABLE 10: RESULTS FROM A REGRESSION – FUNDING SOURCES MODEL**

Funding Sources												
	Panel A: dependent variable $R_i$				Panel B: dependent variable $N_i$				Panel C: dependent variable $I_i$			
	Reg 1		Reg 2		Reg 1		Reg 2		Reg 1		Reg 2	
	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$
a	0.22	3.80			0.16	3.27			0.10	2.83		
Personal	-0.01	-0.16			0.00	-0.11			-0.03	-1.33		
State	0.08	1.88			-0.04	-1.15			0.02	0.73		
Private	-0.04	-1.07			0.01	0.17			-0.04	-1.68		
$R^2$	0.04				0.01				0.04			