



## WHAT MOTIVATES FIRMS FROM EMERGING ECONOMIES TO GO INTERNATIONALIZATION?

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**Abstract.** With advent of economic globalization, internationalization has become one of the most important strategies for firms to achieve sustainable growth. Based on the empirical research in the Yangtze River Delta region in China, the method of Correspondence Analysis was employed to study the motivations for going internationalization of Chinese enterprises. The main findings include: (1) the motivations for internationalization of enterprises depend on their scale, and large-sized enterprises are mainly motivated by the purpose of creating global brands and enhancing domestic reputation; (2) the ownership of enterprises has obvious influence on their motivations for going internationalization, and (3) enterprises in different industries also show different levels of motivation for internationalization.

**Keywords:** internationalization, manufacturing firms, motivation, China.

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**JEL Classification:** D22, F23, L21.

## 1. Introduction

With advent of economic globalization, going internationalization has become one of the most important strategies for many firms to achieve sustainable growth (Annavarjula, Beldona 2000; De Martino *et al.* 2006; Filatotchev, Piesse 2009; Grundey 2007; Lehrer *et al.* 2009; Miskinis, Reinbold 2010; Sapienza *et al.* 2006).

Since the implementation of the open policy in 1978, China has undergone a striking transformation in its economy, aiming at integration with the global economy (Bilgin *et al.* 2010; Liu *et al.* 2005, 2008). China has become a major exporter of manufactured goods in the world markets (Frost 2004; Buckley *et al.* 2007). With the increasing competition among local and foreign companies over the last decade, Chinese manufacturing firms have to seek expanding foreign markets. Additionally, many scholars, business experts, and governmental agencies in China have enthusiastically advised the Chinese manufacturing firms to go internationalization (Zeng *et al.* 2009a). Motivation for internationalization is different for different Chinese manufacturing firms. Although many studies have explored the internationalization of firms, there is a paucity of studies focused on the issue from the emerging economies' perspective (Aulakh *et al.* 2000; Zeng *et al.* 2010a). The contribution of this paper is to investigate the factors that motivate the Chinese firms to go internationalization multi-dimensionally, including their different scale, ownership and industrial sectors. It is hoped that this study will be of value and share the experience in China to improve firms' internationalization for other emerging economies around the world.

## 2. Research background

Undoubtedly the manufacturing industry has played an indispensable role in China. Since 1990s, the export from manufacturing has reached 75% of China's total foreign trade income (UNCTAD 2003). Besides, lots of foreign investments are clustered around the manufacturing sectors. According to the statistics published by U.N. Trading Conference, the total amount of global investment was up to 7.100 billion US dollars between 1980 and 2002, among which China apportioned 448 billion. In 2003, China, being the biggest country in absorbing foreign investment, attracted more than 60 billion US dollar of foreign investment (Zeng *et al.* 2009b).

In this study, a survey to study the motivation factors of going internationalization was conducted in the Yangtze River Delta region in China which includes Jiangsu, Zhejiang provinces and Shanghai, forming the Chinese largest economic zone with high levels of industrial development. The region, with only 1% China's territory and 6% population, creates 19.5% of China's GDP and attracts about half of all foreign investments in China (Zeng *et al.* 2010a). In 2001, the production value from manufacturing in the Yangtze River Delta apportioned up to 95.6% of all industrial production in the region, and 88.2% in China. Moreover, there are many important manufacturing bases in the region.

At present, the Yangtze River Delta region provides competitive advantages to labor-intensive industries as well as high-tech or capital-intensive manufacturing businesses (Zeng *et al.* 2010b), with bountiful accumulation of international experience. Hence, the region is worthy to be studied and the findings may help further complement existing streams of research.

### 3. Literature review

Motivations for internationalization of firms have drawn great interests from practitioners and researchers (Dunning 1977, 1992; Oviatt, McDougall 2005). Some research works attribute the motivation for internationalization of firms to realization of related advantages or resources (Bertolini, Giovannetti 2006; Ruzzier *et al.* 2006). The monopolized advantage theory (Hymer 1976) indicated that enterprises would launch foreign investment on the basis of having monopolized advantage compared with local companies. According to Dunning (1988), the internationalization of economic activity was determined by the realization of three types of advantages, including ownership advantages, internalization and location advantages (Arranz, De Rroye 2009). In terms of the small-scale technology theory (Wells 1977), enterprises in developing countries enjoy three kinds of advantages in internationalization, e.g. small-scale technology, national products and low-price products. It is recognized that the manufacturing industry in China adds another advantage: its relatively low labor costs compared with those of developed countries and other emerging economies (Cheng, Kwan 2000; Fung *et al.* 2002; Li 2007). More specifically, a firm may decide to increase its international activities when this strategic action is consistent with the resources and capabilities available to the firm (Barney 1991; Baird *et al.* 1994; Jack *et al.* 2008; Bello 2009; Mockaitis *et al.* 2007). In addition, it is generally agreed that internationalization of firms is driven by three factors, including the explosive growth of low-cost technology connecting people and locations, the steady dismantling of trade barriers and financial deregulation, and the widespread economic restructuring and liberalization (Acs *et al.* 2001; Gjellerup 2000).

Some research works explore the impact of learning-oriented factors in explaining a firm's motivations for international activities (Johanson, Mattsson 1993; Ogbuehi, Longfellow 1994; Autio *et al.* 2000). As Burpitt and Rondinelli (2000) indicated, firms were more likely to increase their exporting activities when they valued the amount of learning which results from international activities. By combining the learning theory and the new venture theory of internationalization to study the extent to which small and medium-sized companies would engage in international activities, De Clercq *et al.* (2005) suggested that intensive knowledge renewal and exploitation regarding foreign markets might increase their willingness of going internationalization in order to capitalize on the opportunities offered by further international expansion.

Moreover, some research works point out that internationalization of firms is motivated by some other factors, such as network positions and markets (Fletcher 2008; Liuhto, Jumpponen 2003). Based on the network perspective, Johanson and Mattsson (1993) indicated that the internationalization strategy of a firm could be influenced by the need to exploit established network positions. Buckley and Casson (1993) noted that internationalization of firms was driven by developing their own international markets.

Although many researchers have examined why firms engage in international activities (Johanson, Vahlne 1990; Berra *et al.* 1994; Calof, Viviers 1995; Crick *et al.* 2001), most of these studies on motivation for internationalization have focused on firms in the more advanced economies (Miskinis, Reinbold 2010). In fact, the motivation for internationalization of firms in emerging economies may be obviously different (Liuhto, Jumpponen 2003; Mockaitis *et al.* 2006; Zhou *et al.* 2007), which initiates this study.

## 4. Methodology

### 4.1. Correspondence analysis

Correspondence analysis (CA) is one of the multivariate statistical analysis methods developed on the basis of *R*-type and *Q*-type Factor Analysis (Shen *et al.* 2006). Although Factor Analysis is a standard technique for describing the relationship between variables in a low-dimensional space, it hardly analyzes the attributes and interrelationships of samples. Correspondence analysis can eliminate complicated mathematical calculations and sub-processes, visually classifying samples on the factor loading map, and also marking out major classifying parameters (major factors) and basis, hence providing a direct, simple, and convenient multivariate statistical method (Shen *et al.* 2006). Moreover, it could convert frequency tables into graphical displays in which rows and columns are depicted as points, and a map of these points can then be constructed so that the higher proportions associated with the various levels of rows and columns are close together on the map (Harcar, Spillan 2006). Although CA is not a substitute for quantitative study, it adds a fresh dimension to exploratory and evaluative research and provides a clear picture of quantitative data results (Whipple 1994). The steps in applying CA are described in detail below.

**Step 1:** It assumes that the variable *X* denotes the *n* samples and each sample has an original data matrix with *k* indicators.

$$X = \begin{pmatrix} x_{11} & \cdots & x_{1k} \\ \vdots & \ddots & \vdots \\ x_{n1} & \cdots & x_{nk} \end{pmatrix}. \tag{1}$$

Then, each element will be divided by the sum of all elements  $T = \sum_{i=1}^n \sum_{j=1}^k x_{ik}$ , and the following matrix is obtained:

$$P = (p_{ij}) = \frac{1}{T}(x_{ij}). \tag{2}$$

**Step 2:** The matrix is transformed and a new matrix is obtained as shown in equation (3):

$$Z = (z_{ij}), \quad z_{ij} = \frac{p_{ij} - p_{i\bullet} \cdot p_{\bullet j}}{\sqrt{p_{i\bullet} \cdot p_{\bullet j}}}, \quad p_{i\bullet} = \sum_{j=1}^k p_{ij}, \quad p_{\bullet j} = \sum_{i=1}^n p_{ij}. \tag{3}$$

**Step 3:** Component matrix of the *R*-factor is calculated. At first, the eigenvalue of  $A = Z'Z$  is calculated, and  $\lambda_1 \geq \lambda_2 \geq \cdots \geq \lambda_r, 0 \leq r \leq \min(n, k)$ . Next, the corresponding eigenvectors  $\mu_1, \mu_2, \dots, \mu_r$  are normalized and the former *m* eigenvalue and eigenvectors are extracted. Thus, the component matrix is obtained as shown in equation (4):

$$F = (\sqrt{\lambda_1} \mu_1, \dots, \sqrt{\lambda_m} \mu_m). \tag{4}$$

**Step 4:** Component matrix of the *Q*-factor is calculated. At first, the eigenvectors of  $B = ZZ'$  are calculated. Next, the eigenvectors  $v_i = Z\mu_i$  are normalized and the former *m*

eigenvalue and eigenvectors are extracted. Then, the component matrix is obtained as shown in equation (5):

$$G = (\sqrt{\lambda_1} v_1, \dots, \sqrt{\lambda_m} v_m). \quad (5)$$

**Step 5:** Indicator plots and sample plots are depicted in the plane axis of factors, of which the matrix  $F$  is the coordinates of indicators plots and matrix  $G$  is the coordinates of sample plots.

#### 4.2. Data collection

The data were gathered with the help of a questionnaire survey of manufacturing enterprises in the Yangtze River Delta region in China. In this study, 1100 questionnaires were distributed by either mail or delivered personally. A total of 649 questionnaires were completed and returned, of which 569 valid questionnaires were used for data analyses. The characteristics of the responded firms are shown in Table 1.

#### 4.3. The sample

The study is based on the data collected from 569 Chinese manufacturers, coming from 16 cities of the metropolitan region of Yangtze River Delta. A summary of the background of the respondents is shown in Table 1.

All the 569 manufacturing firms fall into five categories of ownership: 261 firms from private (46%), 130 firms from state-owned (23%), 95 firms from joint venture (17%), 68 firms from wholly foreign-owned enterprises (12%), and 15 firms from collective enterprises (2%).

The size of the responded firms is categorized according to their total assets, with 11% equal to or less than 10 million RMB yuan, 19% between 10 and 50 million, about 30% between 50 and 400 million, and about 40% greater than 400 million.

In the survey, the responding manufacturing firms include 71 firms (12.5%) producing leather, fur, feathers and apparel, 63 firms (11.1%) producing communication equipment, computers and other electronic equipment, 48 firms (8.4%) on electrical machinery and equipment manufacturing, 40 firms (7.0%) on transportation equipment manufacturing, 38 firms (6.7%) on chemical fibers, 19 firms (3.3%) on textiles and garments, shoes and hats.

In this paper, the internationalization process of Chinese manufacturing firms includes five modes, that is, (1) direct product exports; (2) integration with foreign-owned enterprises; (3) direct overseas investments (Arljukova 2008; Cheng, Kwan 2000; Frost 2004; Miskinis, Reinbold 2010; Ucal *et al.* 2010); (4) technology transfer to and cooperation with foreign-owned enterprises (Filatotchev, Piesse 2009; Zeng *et al.* 2009c); and (5) others. From the responded firms, four hundred and five firms (71%) claimed that they had only followed a single internationalization mode in their internationalization process.

**Table 1.** Characteristics of the responded firms

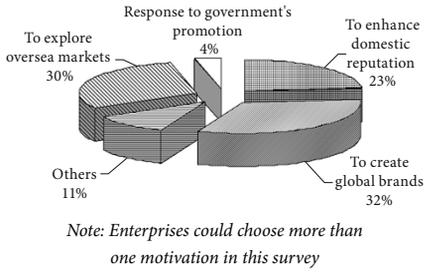
Classification / Number of enterprisers		Classification / Number of enterprisers		Classification / Number of enterprisers	
City		Ownership		Industry	
Shanghai	181	WFOEs	68	Food Processing, Food Manufacturing	19
Nanjing	16	JVs	95	Textile Industry, Garments and Other Fiber Products	71
Suzhou	24	SOEs	130	Leather, Furs, Down and Related Products	12
Wuxi	32	PEs	261	Timber Processing, Bamboo and Straw Products	7
Changzhou	24	CREs	15	Furniture Manufacturing	7
Nantong	33	Total	569	Papermaking and Paper Products	14
Taizhou	28			Printing and Record Medium Reproduction	7
Yangzhou	20	Number of employees		Cultural, Educational and Sports Goods	7
Zhenjiang	23			Petroleum Processing and Coking	10
Hangzhou	25	>2000	157	Raw Chemical Materials and Chemical Products	32
Huzhou	23	301–2000	203	Medical and Pharmaceutical Products	38
Jiaxing	28	50–300	172	Chemical Fiber	16
Ningbo	34	<50	37	Rubber Products, Plastic Products	16
Shaoxing	34	Total	569	Nonmetal Mineral Products, Metal Products	7
Taizhou	22			Smelting and Pressing of Ferrous Metals and Nonferrous Metals	14
Zhoushan	5	Total assets (Million Yuan)		Ordinary Machinery, Special Purpose Equipment	51
Others	17			Transport Equipment	40
Total	569	>400	229	Electric Equipment and Machinery	48
		50–400	170	Electronic and Telecommunications Equipment	63
		10–50	107	Instruments, Meters, Cultural and Office Machinery	17
		<10	63	Crafts and other industries	18
		Total	569	Others	55
				Total	569

## 5. Results and analysis

### 5.1. General analysis of motivations for internationalization

According to the survey on motivations for internationalization, the main motivations are found as follows:

- To explore oversea markets.
- Response to government's promotion.
- To enhance domestic reputation.
- To create global brands.



**Fig. 1.** General analysis of motivations for internationalization

as an important strategy for their long-term development. Twenty-three percent enterprises regard “To enhance domestic reputation” as their motivation for internationalization, meaning that these enterprises aim to strengthen their competencies and domestic reputation through internationalization. This motivation mainly results from “Admiration Effect”. Along with more and more foreign enterprises entering the Chinese market, Chinese consumers consider these enterprises bearing international connection as leaders of the industry (Zeng et al. 2009b). In addition, only 4% enterprises adopting the internationalization strategy are motivated by “Response to government’s promotion”, showing that the government’s support and encouragement are not the main driving force of internationalization for enterprises in the Yangtze River Delta region.

## 5.2. Comparative analysis of motivations for internationalization of enterprises in different scales

In this study, “Corresponding Analysis” is adopted to compare the differences in motivations for internationalization of enterprises under different scales. The results of relations between motivations for internationalization, grouped under five categories, and different enterprises scale, divided into four types, are shown in Table 2.

**Table 2.** Correspondence table of different enterprises scale and motivations for internationalization

Enterprises scale	Motivations for internationalization					Active Margin
	To explore overseas markets	Response to government's promotion	To enhance domestic reputation	To create global brands	Others	
<10 million	19	4	12	7	7	49
10–50 million	34	5	17	19	11	86
50–400 million	53	4	40	55	23	175
>400 million	59	8	61	100	18	246
Active Margin	165	21	130	181	59	556

The results of this survey indicate that 32% enterprises consider the motivation of internationalization is “to create global brands”, which shows that most of internationalization strategies of enterprises aim to strengthen the global competition ability by establishing their own global brands. Thirty percent enterprises going internationalization are aimed at “exploring overseas markets” (see Fig. 1).

The percentages of these two motivators add up to 62%, revealing that enterprises in the Yangtze River Delta region view “internationalization”

The results of corresponding analysis are shown in Table 3 and Figure 2.

Table 3 shows that the first two-dimensional eigenvalue accumulates to 97.7%, indicating that two dimensionalities can explain enough information of variables. Also Table 3 reveals that the value of *chi-square* test of correspondence analysis between enterprise scales and motivations for internationalization is 29.797 with a significant level of 0.003, indicating that there is a significant corresponding correlation between them. As shown in Figure 2, the motivations for internationalization of enterprises with total assets of more than 400 million RMB yuan, are “to create global brands” and “to enhance domestic reputation”; the motivation for enterprises with total assets of less than 10 million or between 10 and 50 million RMB is “to explore overseas markets”; while the medium-sized enterprises with assets between 50 and 400 million RMB have a vague motivation for internationalization, indicating that these enterprises are in the process of transition, from market pursuit to strategy purpose. Hence, the results of the analysis reveal that larger-scale enterprises have much clearer motivations in their internationalization strategies.

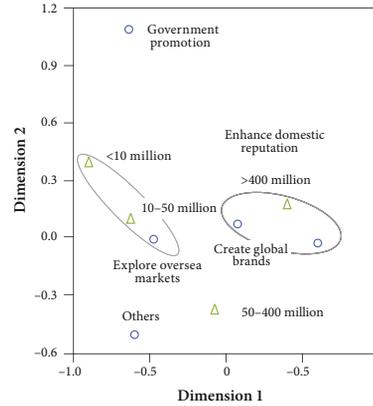


Fig. 2. Positioning maps of different enterprises scale and motivations for internationalization

Table 3. Chi-squared analysis and dimension inertia

Dimension	Inertia	Proportion of Inertia		Variable	Score in Dimension		Inertia	Dimension to Inertia of Point		
		Accounted for	Accumulated		1	2		1	2	Total
1	0.047	0.868	0.868	Motivations for internationalization						
2	0.006	0.109	0.977	To explore overseas markets	-0.433	-0.029	0.012	0.969	0.002	0.970
3	0.001	0.023	1.000	Response to government's promotion	-0.763	1.120	0.008	0.567	0.433	0.999
Chi-square test: 29.797; P-value = 0.003				To enhance domestic reputation	0.107	0.092	0.001	0.632	0.314	0.946
				To create global brands	0.574	-0.006	0.023	0.995	0.000	0.995
				Others	-0.514	-0.503	0.008	0.733	0.249	0.982
				Enterprises scale						
				<10 million	-0.906	0.395	0.017	0.910	0.061	0.972
				10-50 million	-0.618	0.083	0.014	0.943	0.006	0.949
				50-400 million	-0.052	-0.393	0.004	0.047	0.939	0.986
			>400 million	0.434	0.172	0.019	0.947	0.053	1.000	

### 5.3. Comparative analysis of motivations for internationalization of enterprises with different forms of ownership

“Corresponding Analysis” is again used to compare the differences in motivations for internationalization for firms of different forms of ownership. The results of relations between motivations for internationalization, grouped under five categories, and different enterprises ownerships, divided into five types, are presented in Table 4.

**Table 4.** Correspondence table of different enterprises ownerships and motivations for internationalization

Ownership	Motivations for internationalization					
	To explore overseas markets	Response to government's promotion	To enhance domestic reputation	To create global brands	Others	Active Margin
WFOEs	26	1	10	24	9	70
JVs	23	0	28	33	9	93
SOEs	34	12	32	49	11	138
PEs	75	5	57	74	30	241
CREs	7	3	3	1	0	14
Active Margin	165	21	130	181	59	556

The results of corresponding analysis are shown in Table 5 and Figure 3.

Table 5 shows all the corresponding indexes of motivations for internationalization of enterprises of different forms of ownership. From Table 5, it reveals that the indexes have four dimensionalities, and the accumulated eigenvalue of the first two dimensionalities is 90.5%, which is not large enough to explain most of the information of variables. Thus, three dimensions are employed with an accumulated eigenvalue of 98.8%, which can basically explain most of the information of variables. Moreover, Table 5 shows that the value of chi-square test of correspondence analysis between enterprise ownerships and motivations for internationalization is 43.788 with a level of significance of 0.001, revealing that there is a significant corresponding correlation between enterprise ownerships and motivations for internationalization.

As shown in Figure 3, Joint Ventures and Private Enterprises have relatively clearer motivations for internationalization. Joint Ventures for international operations mainly aim to enhance domestic reputation, and Private Enterprises mainly aim to explore overseas markets. While Wholly Foreign-Owned Enterprises have two major motivations for internationalization, including “To explore overseas markets” and “To create global brands”. The situation is a little complicated for State-Owned Enterprises. First, these enterprises are mainly encouraged by the government to launch the internationalization strategy; second, they are eager to create their global brands; finally, these enterprises are also partially influenced by the desire of “exploring overseas markets” and “enhancing domestic reputation”.

**Table 5.** Chi-squared analysis and dimension inertia

Dimension	Inertia	Proportion of Inertia		Variable	Score in Dimension			Inertia	Dimension to Inertia of Point			
		Accounted for Cumulative			1	2	3		1	2	3	Total
1	0.055	0.694	0.694	Motivations for internationalization								
2	0.017	0.211	0.905	To explore oversea markets	-0.069	0.484	-0.108	0.010	0.034	0.925	0.029	0.988
3	0.006	0.082	0.988	Response to government's promotion	-2.327	-0.170	0.214	0.048	0.993	0.003	0.003	0.999
4	0.001	0.012	1	To enhance domestic reputation	0.062	-0.379	-0.412	0.008	0.027	0.560	0.412	0.999
				To create global brands	0.148	-0.232	0.317	0.007	0.250	0.340	0.396	0.985
Chi-square test: 43.788				Others	0.430	0.256	0.160	0.006	0.716	0.140	0.034	0.890
P-value = 0.000				Ownerships								
				WFOEs	0.240	0.593	0.416	0.009	0.181	0.608	0.187	0.976
				JVs	0.410	-0.405	-0.282	0.012	0.571	0.308	0.093	0.972
				SOEs	-0.505	-0.354	0.273	0.020	0.729	0.198	0.073	1.000
				PEs	0.188	0.139	-0.115	0.005	0.654	0.196	0.084	0.935
				CREs	-2.180	0.835	-0.917	0.032	0.874	0.071	0.053	0.998

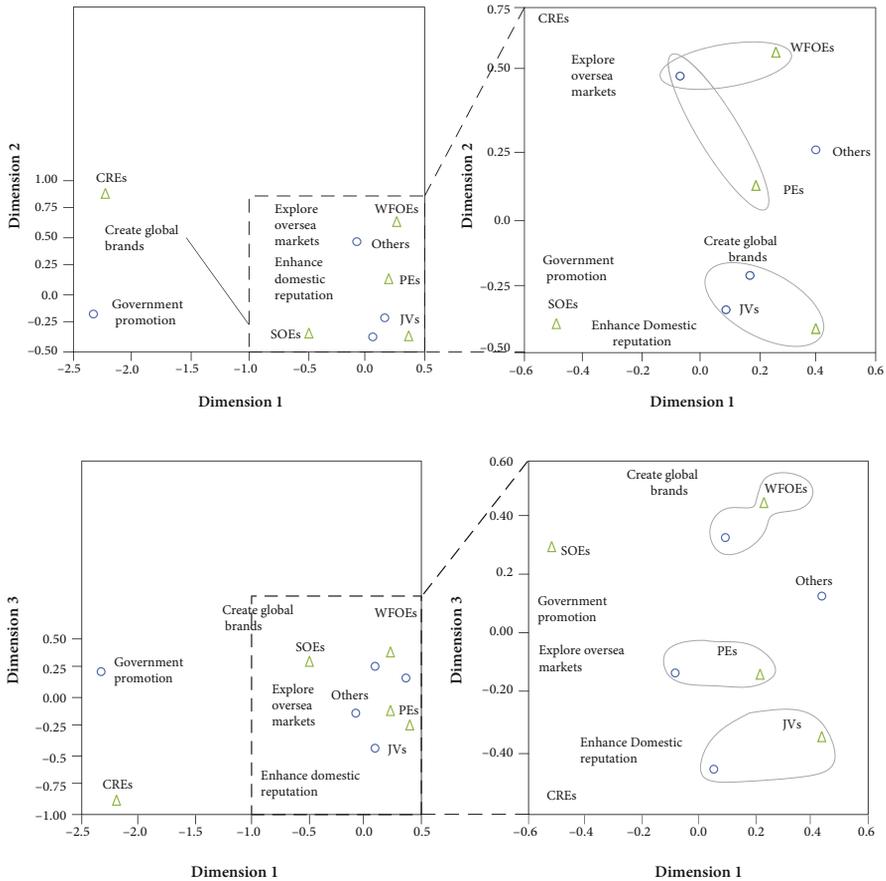


Fig. 3. Positioning maps of different enterprises ownerships and motivations for internationalization

**5.4. Comparative analysis of motivation for internationalization of enterprises in different industrial sectors**

To examine the motivations for internationalization of enterprises in different industrial sectors, the industries are grouped into 21 categories. The results of corresponding analysis are shown in Table 6.

Owing to the dispersion nature of the data, it is relatively complicated to analyze the motivations for enterprises of different industrial sectors. The total eigenvalue of the first three dimensionalities is just 87.3%, which is not large enough to explain most of the information. Thus, all the four dimensionalities are employed. The result shows that the four dimensionalities can explain all the information of variables (see Table 6). From Table 6, it shows that the value of *chi-square* test of correspondence analysis between enterprise ownerships and motivations for internationalization is 102.067, which are significant at a level of 0.05.

**Table 6.** Chi-squared analysis and dimension inertia

Dimension	Inertia	Proportion of Inertia		Variable	Score in Dimension				Inertia	Dimension to Inertia of Point				
		Accounted for	Cumulative		1	2	3	4		1	2	3	4	Total
1	0.076	0.381	0.381	Motivations for internationalization										
2	0.055	0.275	0.656	To explore overseas markets	-0.094	0.560	0.435	0.078	0.035	0.021	0.632	0.339	0.008	1.000
3	0.043	0.216	0.873	Response to government's promotion	-1.562	-1.211	0.940	-1.244	0.048	0.465	0.238	0.127	0.170	1.000
4	0.025	0.127	1.000	To enhance domestic reputation	0.014	-0.575	0.055	0.530	0.029	0.000	0.630	0.005	0.364	1.000
Chi-square test: 102.067				To create global brands	0.538	-0.073	-0.225	-0.344	0.036	0.722	0.011	0.096	0.171	1.000
P-value = 0.049					-0.988	0.328	-1.021	0.037	0.051	0.527	0.049	0.424	0.000	1.000

A correlation between different industrial sectors and motivations for internationalization is indicated in Table 7 and Figure 4.

From Table 7 and Figure 4, it reveals that some labor-sensitive industries such as textile industry, garments and other fiber products manufactures, aim to explore oversea markets to launch their internationalization strategy; while the high-tech industries including electronic and telecommunication equipment manufacturers focus on creating global brands; raw material manufacture industries, such as petroleum processing and coking industries, are mainly influenced by the government for going internationalization; and the chemical industry, such as raw chemical materials and chemical products, aims to create global brands or to enhance domestic reputation. Also, the results indicate that the motivation for internationalization in high-tech industries is mainly to create global brands. In labor-sensitive industry, it is mainly to explore oversea markets. In addition, as for energy industries, their internationalization strategies are mainly influenced by the government; while some industries' such as chemical fibre, rubber and instrument manufactures, internationalization strategy is mainly based on the interest of enhancing domestic reputation.

**Table 7.** Correspondence table of different industries and motivations for internationalization

Motivations for internationalization	Industries	
To explore oversea markets	I02 Textile Industry, Garments and Fiber Products	I04 Timber Processing, Bamboo and Straw Products
	I06 Papermaking and Paper Products	I11 Medical and Pharmaceutical Products
	I15 Smelting and Pressing of Ferrous Metals	I16 Ordinary Machinery, Special Purpose Equipment
	I21 Crafts and other industries	
To enhance domestic reputation	I07 Printing and Record Medium Reproduction	I13 Rubber Products and Plastic Products
	I12 Chemical Fiber	I20 Instruments, Cultural and Office Machinery
	I14 Nonmetal Mineral Products, Metal Products	
To create global brands	I01 Food Processing, Food Manufacturing	I18 Electric Equipment and Machinery
	I10 Raw Chemical Materials and Products	I17 Transport Equipment
	I08 Cultural, Educational and Sports Goods	I19 Electronic and Telecommunications Equipment
Response to government's promotion	I09 Petroleum Processing and Coking	
Others	I03 Leather, Furs, Down and Related Products	I05 Furniture Manufacturing

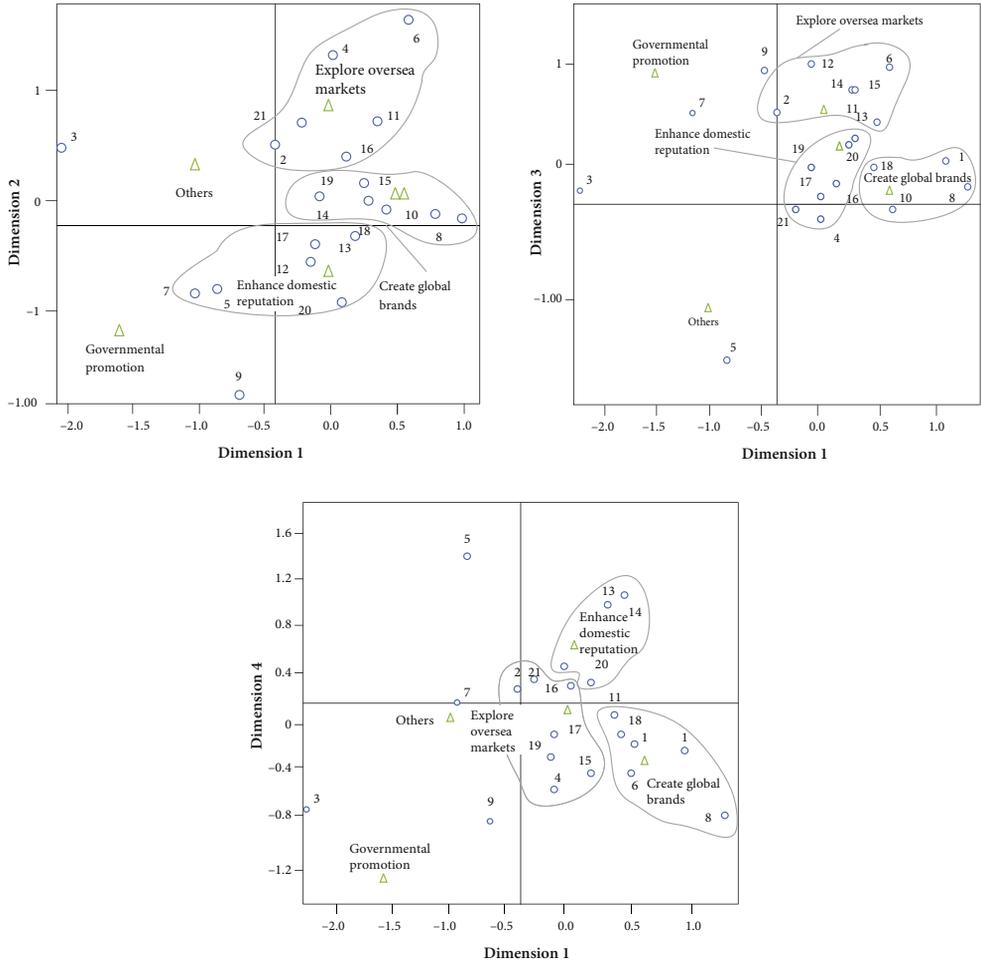


Fig. 4. Positioning maps of different industries and motivations for internationalization

**6. Conclusions**

Based on the empirical research in the Yangtze River Delta region in China, the method of Correspondence Analysis was employed to study the motivations for internationalization of enterprises. The main findings of this study can be concluded as follows:

1) Different motivations for internationalization of manufacturing firms in China

According to the survey, the motivations of internationalization for enterprises can be divided into four types: “To explore overseas markets”, “To create international brand”, “To enhance domestic reputation” and “Response to government’s promotion”. The strategies of “To explore overseas markets” and “To create international brand” are the most common motivators of internationalization for enterprises while “To enhance domestic reputation” is a special motivator found in developing countries.

For Chinese enterprises, they consider entering overseas markets especially those in developed countries as the index of success or a brand-name. This special motivator of “To enhance domestic reputation” is one of the main motivators for going internationalization for Chinese enterprises. However, there are only a few enterprises which go internationalization under the encouragement of the government, revealing the fact that it is the enterprises themselves that initiated the internationalization strategy, but not strongly influenced by the government, who just provides some related supports and assistance.

- 2) Motivations for internationalization of enterprises dependent on their scale  
Enterprises in different scales have different motivations for internationalization. The small ones aim to explore overseas markets by internationalization; medium ones aim to explore overseas markets, to create global brands and to enhance domestic reputation; while large enterprises are mainly motivated by the strategies of “To create global brands” and “To enhance domestic reputation”.
- 3) Influence of enterprise ownership on motivations for internationalization  
Enterprises of different ownership have different motivations for internationalization. Private Enterprises aim to explore overseas markets and Joint Ventures prefer to enhance domestic reputation via internationalization. While Wholly Foreign-Owned Enterprises aim to both explore overseas markets and create global brands, showing the diversification of motivations for internationalization. The motivations of internationalization of State-Owned Enterprises also diversify. Some aim to create global brands, while some are influenced by the interest of “To explore overseas markets”. They are also influenced by the government policies.
- 4) Different industrial sectors with different motivations for internationalization  
Enterprises in different industrial sectors have different motivations for internationalization. High-tech enterprises mainly aim to create global brands via internationalization. Labor-sensitive enterprises launch the internationalization strategy in the pursuit of “To explore overseas markets”. Enterprises in energy industries for internationalization are mainly encouraged by the government policies. While enterprises in industries such as chemical fiber, rubber, instrument manufactures, mainly aim to enhance domestic reputation by internationalization.

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## References

- Acs, Z. J.; Morck, R. K.; Yeung, B. 2001. Entrepreneurship, globalisation, and public policy, *Journal of International Management* 7(3): 235–251. [http://dx.doi.org/10.1016/S1075-4253\(01\)00046-1](http://dx.doi.org/10.1016/S1075-4253(01)00046-1)
- Annavarjula, M. G.; Beldona, S. 2000. Multinationality-performance relationship: a review and reconceptualization, *International Journal of Organizational Analysis* 8(1): 48–67. <http://dx.doi.org/10.1108/eb028910>
- Arljukova, I. 2008. Problems preventing air companies from efficient investment activities, *Technological and Economic Development of Economy* 14(3): 247–259. <http://dx.doi.org/10.3846/1392-8619.2008.14.247-259>
- Arranz, N.; De Roye, J. C. F. 2009. Internationalization process of Spanish small firms strategies, transactions and barriers, *International Small Business Journal* 27(4): 420–441. <http://dx.doi.org/10.1177/0266242609334968>
- Aulakh, P. S.; Kotabe, M.; Teeegen, H. 2000. Export strategies and performance of firms from emerging economies: evidence from Brazil Chile, and Mexico, *Academy of Management Journal* 43(3): 342–361. <http://dx.doi.org/10.2307/1556399>
- Autio, E.; Sapienza, H. J.; Almeida, J. G. 2000. Effects of age at entry, knowledge intensity, and limitability on international growth, *Academy of Management Journal* 43(5): 909–924. <http://dx.doi.org/10.2307/1556419>
- Baird, I. S.; Lyles, M. A.; Orris, J. B. 1994. The choice of international strategies by small businesses, *Journal of Small Business Management* 32(1): 48–59.
- Barney, J. B. 1991. Firm resources and sustained competitive advantage, *Journal of Management* 17: 99–120. <http://dx.doi.org/10.1177/014920639101700108>
- Bello, P. 2009. Internationalization of Cameroonian small and middle enterprises (SMEs): myth or reality?, *African Journal of Business Management* 3(2): 52–69.
- Berra, L.; Piatti, L.; Vitali, G. 1994. The internationalization process in the small and medium sized firms: a case study on the Italian clothing industry, *Small Business Economics* 7(1): 67–75. <http://dx.doi.org/10.1007/BF01074317>
- Bertolini, P.; Giovannetti, E. 2006. Industrial district and internationalization: the case of agri-food industry in Modena, Italy, *Entrepreneurship and Regional Development* 18(4): 279–304. <http://dx.doi.org/10.1080/08985620600613761>
- Bilgin, M. H.; Lau, C. K. M.; Tvaronaviciene, M. 2010. Is China integrated with her major trading partners: evidence on financial and real integration?, *Technological and Economic Development of Economy* 16(2): 173–187. <http://dx.doi.org/10.3846/tede.2010.11>
- Buckley, P. J.; Casson, M. 1993. A theory of international operations, in Buckley, P. J.; Ghauri, P. N. (Eds.). *The Internationalization of the Firm: a Reader*. London: Academic Press, 45–50.
- Buckley, P. J.; Wang, C.; Clegg, J. 2007. The impact of foreign ownership, local ownership and industry characteristics on spillover benefits from foreign direct investment in China, *International Business Review* 16(2): 142–158. <http://dx.doi.org/10.1016/j.ibusrev.2006.12.006>
- Burpitt, W. J.; Rondinelli, D. A. 2000. Small firms' motivations for exporting: to earn and learn?, *Journal of Small Business Management* 38(4): 1–14.
- Calof, J. L.; Viviers, W. 1995. Internationalization behavior of small and medium-sized South African enterprises, *Journal of Small Business Management* 33: 71–79.
- Cheng, L. K.; Kwan, Y. K. 2000. What are the determinants of location of foreign direct investment? The Chinese experience?, *Journal of International Economics* 51(2): 379–400. [http://dx.doi.org/10.1016/S0022-1996\(99\)00032-X](http://dx.doi.org/10.1016/S0022-1996(99)00032-X)
- Crick, D.; Chaudry, S.; Batstone, S. 2001. An investigation into the overseas expansion of small Asian-owned U. K. firms, *Small Business Economics* 16(2): 75–94. <http://dx.doi.org/10.1023/A:1011180017485>

- De Clercq, D.; Sapienza, H. J.; Crijns, H. 2005. The internationalization of small and medium-sized firms, *Small Business Economics* 24(4): 409–419. <http://dx.doi.org/10.1007/s11187-005-5333-x>
- De Martino, R.; Mc Hardy, R. D.; Zyglidopoulos, S. C. 2006. Balancing localization and globalization: exploring the impact of firm internationalization on a regional cluster, *Entrepreneurship and Regional Development* 18(1): 1–24. <http://dx.doi.org/10.1080/08985620500397648>
- Dunning, J. H. 1977. Trade, location of economic activity and the MNE: a search for an eclectic paradigm, in Wijkman, P. (Ed.). *The International Allocation of Economic Activity*. London: Macmillan, 396–415. <http://dx.doi.org/10.1057/palgrave.jibs.8490372>
- Dunning, J. H. 1988. The eclectic paradigm of international production: a restatement and some possible extension, *Journal of International Business Studies* 19(1): 1–31.
- Dunning, J. H. 1992. The global economy, domestic governance, strategies and transnational corporations: interactions and policy implications, *Transnational Corporations* 1(3): 7–45.
- Filatotchev, I.; Piesse, J. 2009. R & D, internationalization and growth of newly listed firms: European evidence, *Journal of International Business Studies* 40(8): 1260–1276. <http://dx.doi.org/10.1057/jibs.2009.18>
- Fletcher, R. 2008. The internationalization from a network perspective: a longitudinal study, *Industrial Marketing Management* 37(8): 953–964. <http://dx.doi.org/10.1016/j.indmarman.2007.09.008>
- Frost, S. 2004. Chinese outward direct investment in Southeast Asia: how big are the flows and what does it mean for the region?, *Pacific Review* 17(3): 323–340. <http://dx.doi.org/10.1080/0551274042000261489>
- Fung, K. C.; Lau, L. J.; Lee, J. 2002. *US Direct Investment in China*. Washington, DC: AEI Press.
- Gjellerup, P. 2000. SME support services in the face of globalization, *Concerted action seminar, Opening address, Conference Proceedings*, Danish Agency for Trade and Industry. Copenhagen, 16–28.
- Grundey, D. 2007. Internationalization of markets: the internationalization process of Danish companies in Lithuania, *Transformations in Business & Economics* 6(1): 85–108.
- Harcar, T.; Spillan, J. E. 2006. Exploring Latin American family decision-making using correspondence analysis, *Journal of World Business* 41(3): 221–232. <http://dx.doi.org/10.1016/j.jwb.2006.01.009>
- Hymer, S. H. 1976. *The International Operation of National Firms: a Study of Direct Foreign Investment*. Cambridge Mass: The MIT Press.
- Jack, R.; As-Saber, S.; Edwards, R.; Buckley, P. 2008. The role of service embeddedness in internationalization process of manufacturing firms, *International Business Review* 17(4): 442–452. <http://dx.doi.org/10.1016/j.ibusrev.2008.02.006>
- Johanson, J.; Mattsson, L.-G. 1993. Internationalization in industrial systems – a network approach, strategies in global competition, in Buckley, P. J.; Ghauri, P. N. (Eds.). *The Internationalization of the Firm: a Reader*. London: Academic Press, 303–322. <http://dx.doi.org/10.1108/02651339010137414>
- Johanson, J.; Vahlne, J. E. 1990. The mechanism of internationalization, *International Marketing Review* 7(4): 11–24.
- Lehrer, M.; Schlegelmilch, B. B.; Behnam, M. 2009. Competitive advantage from exposure to multiple national environments: the induced internationalisation of ‘born-multidomestic’ firms, *European Journal of International Management* 3(1): 92–110. <http://dx.doi.org/10.1504/EJIM.2009.022636>
- Li, L. 2007. Multinationality and performance: a synthetic review and research agenda, *International Journal of Management Reviews* 9(2): 117–139. <http://dx.doi.org/10.1111/j.1468-2370.2007.00205.x>
- Liu, X. H.; Buck, T.; Shu, C. 2005. Chinese economic development, the next stage: outward FDI?, *International Business Review* 14(1): 97–115. <http://dx.doi.org/10.1016/j.ibusrev.2004.12.003>
- Liu, X. M.; Xiao, W.; Huang, X. H. 2008. Bounded entrepreneurship and internationalisation of indigenous Chinese private-owned firms, *International Business Review* 17(4): 488–508. <http://dx.doi.org/10.1016/j.ibusrev.2008.02.014>

- Liuhto, K.; Jumpponen, J. 2003. The internationalization process of the largest Baltic corporations, *Journal of Business Economics and Management* 4(1): 21–35.
- Miskinis, A.; Reinbold, B. 2010. Investments of German MNEs into production networks in central European and Baltic states, *Technological and Economic Development of Economy* 16(4): 717–735. <http://dx.doi.org/10.3846/tede.2010.44>
- Mockaitis, A. I.; Giedraitis, V.; Vaiginienė, E. 2007. How active are Lithuanian manufacturing SMEs in international markets? Some preliminary findings, *Transformations in Business & Economics* 6(1): 109–121. <http://dx.doi.org/10.1016/j.ribaf.2005.02.001>
- Mockaitis, A. I.; Vaiginienė, E.; Giedraitis, V. 2006. The internationalization efforts of Lithuanian manufacturing firms—strategy or luck?, *Research in International Business and Finance* 20(1): 111–126.
- Ogbuehi, A. O.; Longfellow, T. A. 1994. Perceptions of U.S. manufacturing SMEs concerning exporting: a comparison based on export experience, *Journal of Small Business Management* 32(4): 37–47.
- Oviatt, B. M.; McDougall, P. P. 2005. The internationalization of entrepreneurship, *Journal of International Business Studies* 36(1): 2–8. <http://dx.doi.org/10.1057/palgrave.jibs.8400119>
- Ruzzier, M.; Hisrich, R. D.; Antoncic, B. 2006. SME internationalization research: past, present, and future, *Journal of Small Business and Enterprise Development* 13(4): 476–497. <http://dx.doi.org/10.1108/14626000610705705>
- Sapienza, H.; Autio, E.; Geogre, G.; Zahra, S. A. 2006. A capabilities perspective on the effects of early internationalization on firm survival and growth, *Academy of Management Review* 31(4): 914–933. <http://dx.doi.org/10.5465/AMR.2006.22527465>
- Shen, X. X.; Li, D. M.; Shen, C. 2006. Evaluating China's university library web sites using correspondence analysis, *Journal of the American Society for Information Science and Technology* 57(4): 493–500. <http://dx.doi.org/10.1002/asi.20288>
- Ucal, M.; Ozcan, K. M.; Bilgin, M. H.; Mungo, J. 2010. Relationship between financial crisis and foreign direct investment in developing countries using semiparametric regression approach, *Journal of Business Economics and Management* 11(1): 20–33. <http://dx.doi.org/10.3846/jbem.2010.02>
- United Nations Conference on Trade and Development (UNCTAD). 2003. *World Investment Report*. New York: United Nations.
- Wells, L. T. Jr. 1977. The internationalization of firms from developing countries, in Agmon, T.; Kindleberger, Ch. P. (Eds.). *Multinationals from Small Countries*. Cambridge: M. A., The M. I. T. Press, 133–156.
- Whipple, T. W. 1994. Mapping focus group data, *Marketing Research* 6(1): 16–21.
- Zeng, S. X.; Xie, X. M.; Tam, C. M. 2010b. Relationship between cooperation networks and innovation performance of SMEs, *Technovation* 30(3): 181–194. <http://dx.doi.org/10.1016/j.technovation.2009.08.003>
- Zeng, S. X.; Shen, Q.; Tam, C. M.; Wan, T. W. 2010a. Internationalization paths of Chinese firms: evidences from an emerging economy, *Journal of Business Economics and Management* 11(2): 297–315. <http://dx.doi.org/10.3846/jbem.2010.15>
- Zeng, S. X.; Wan, T. W.; Tam, V. W. Y. 2009a. Towards FDI and technology spillover: a case study in China, *Transformations in Business and Economics* 8(1): 50–62.
- Zeng, S. X.; Xie, X. M.; Tam, C. M.; Wan, T. W. 2009b. Relationships between business factors and performance in internationalization: an empirical study in China, *Management Decision* 47(2): 308–329. <http://dx.doi.org/10.1108/00251740910938939>
- Zeng, S. X.; Xie, X. M.; Tam, C. M.; Sun, P. M. 2009c. Identifying cultural difference in R & D project for performance improvement: a field study, *Journal of Business Economics and Management* 10(1): 61–70. <http://dx.doi.org/10.3846/1611-1699.2009.10.61-70>
- Zhou, L. X.; Wu, W. P.; Luo, X. M. 2007. Internationalization and the performance of born-global SMEs: the mediating role of social networks, *Journal of International Business Studies* 38(4): 673–690. <http://dx.doi.org/10.1057/palgrave.jibs.8400282>

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