

THE IMPACT OF THE NUMBER OF SERVICED REGIONAL MARKETS IN REDUCING THE PERCEPTION OF BARRIERS TO EXPORT: THE CASE OF CHINESE MANUFACTURING SMES

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—Abstract —

The purpose of this research is to explore the relative perceptions of Chinese manufacturing SME decision makers, who are involved in different numbers of overseas markets, towards selected barriers to export. This research investigates and compares the perceptions of Chinese SME decision makers who have experience of differing numbers of regional markets. Existing literature implies that experiential knowledge is a key regulator of resource commitment to foreign markets. The accumulation of experiential knowledge should be increased as enterprises operate in a greater number of diverse markets. Subsequently, it could be expected that this accumulation of experiential knowledge should be an enabling factor in overcoming or mitigating the barriers to internationalization and should thus reduce the perceptions of barriers. The research tests this proposition utilizing a self-administered questionnaire. It assesses the perception of difficulty of the selected barriers and then statistically analyses the differences in perception between respondents with experience in differing number of geographical regions. The research methodology adopted a quantitative approach and data was collected from 119 SME decision makers in China who were involved in exporting to different numbers of regional markets. The data was then subjected to statistical analysis using between-group tests of difference.

The findings highlight differences in perceptions of certain key barriers to internationalization based on the number of geographical export markets that SME manufacturers are actively involved in.

Keywords: Export, SME, China

JEL Classification: M16

Introduction

China's policy of reform and economic openness has unlocked unprecedented levels of growth and development (Tisdell, 2009). An abundant supply of cheap labour, the state's 'Go Global' policy (1999), accession to the WTO (2001), the opening up of new markets both at home and abroad, and the acquisition of new skills and technologies have all played a part. According to Enderwick (2009: p7), "China is now acknowledged as the world's workshop and India as the global back office". Exports from China to the rest of the world rose by approximately 152% between 2003 and 2008, although 2009 saw a slight decrease of 8% over the previous year (EU, 2010). These exports represented 7.9% of the world's exports in 2003, 12.2% in 2008 and 13.9% in 2009 (EU, 2010). However, despite the fact that Chinese SMEs accounted for 65.6% of Chinese industrial output value (Singh et al, 2010), Chinese SMEs only contributed a 40% share of manufactured exports (Cao et al, 2011). This, together with the fact that millions of Chinese SMEs have not yet entered the export market, highlights the potential for an increase in SME manufactured exports in the future.

The importance of a healthy and robust SME sector in helping sustain competitive advantage and economic development in both developed and newly industrialized countries has been highlighted by Wu et al (2008). According to Singh et al (2008), SMEs are considered as an engine for economic growth all over the world. The advantages of national and international expansion of small and medium sized organizations has been highlighted by Cardoza (1997), who pointed out that they play a key role in entrepreneurship, job creation, fiscal income, technology diffusion, risk diversification, identification and adoption of best international practices and wealth generation. These factors drive the local and national economies which in turn drive the global economy. It is for these reasons that governments play an active part in the development of the SME sector both domestically and internationally.

Literature Review

The importance of experiential knowledge in the internationalization process has been highlighted in a number of stages models and theories that have utilized a behavioural theory of the firm perspective, to internationalization and export. These have included the learning-based model by Johanson and Vahlne (Uppsala model 1977, 1990). The Uppsala Process Theory of Internationalization (PTI) has been one of the most influential organizational internationalization models to come out of the behavioural internationalization stream of literature. Despite criticisms (e.g. Oviatt and McDougall, 1994), it is still widely adopted and used as a basis for studying the internationalization process.

The PTI model describes a gradual stages development which is constrained by a lack of knowledge and resource. Experiential knowledge about foreign business environments influences the level of risk perceptions of enterprises when they make commitment decisions (Cavusgil, 1980; Johanson and Vahlne, 1977), and as such, foreign experiential knowledge is the key regulator to an increase in foreign commitment (Autio et al, 2000). Knowledge of foreign markets and operations is increased through the commitment to foreign markets. Growth is incremental and begins in markets that are similar to the home market in terms of language, culture and institutions, all of which affect the flow of information between the firm and the market (Johanson and Wiedersheim-Paul, 1975).

The impact of different languages, cultures and institutions is often considered in terms of “psychic distance” between the home country and potential international markets. Psychic distance was described by Johanson and Vahlne (1977) as the sum of factors that prevent the flow of information from and to the market. As organizations gain new experiential knowledge they are more able to develop into new markets which are less similar to those in which they currently operate. Entry into these new markets results in new experiential knowledge and so the cycle continues in a series of stages.

According to Eriksson et al. (1997, p.354) the accumulation of experiential knowledge is largely incremental and “Requires durable and repetitive interactions abroad”, and the number of countries in which an enterprise operates as well as the length of time the enterprise operates will affect the knowledge

accumulation (Autio et al, 2000; Eriksson et al, 2000; Zahra et al, 2000). As an organization accumulates experiential knowledge, the levels of risk perceptions and the associated uncertainties it faces in internationalising further afield, are all reduced.

Organizations that do not develop face only familiar opportunities and threats, and develop familiar routines based on past experience to deal with them. This leads to a lack of opportunity identification and the risk of new unidentified threats (Abrahamson and Fombrum, 1994; Levitt and March, 1988). Threats can include increased domestic competition from both resident and overseas competitors' (von Keller and Zhou, 2003). This underlines the importance of organizational development and the identification of new opportunities and new ways of doing things. It is for this reason that new enterprises are often considered to have the benefits of newness (Autio, 2000), whilst many older organizations face the risk of competency traps (Cohen and Levinthal, 1990).

Despite the rapid increase in the number of SMEs in China, which account for 98.9% of Chinese businesses and 65.6% of industrial output value in China (Singh et al., 2010), Chinese manufacturing SMEs only account for 40% of Chinese manufacturing exports (Cao et al 2011). These figures reflect the potential that Chinese SME manufacturing has to develop exports and bring about the benefits of increased internationalization and industrialization.

Research Aim

This research seeks to investigate the relationship between the perceptions of risk, and the number of markets into which firms export. Specifically, do firms that export to a greater number of foreign markets have lower perceptions of the difficulty in overcoming export barriers, through the greater general accumulation of experiential knowledge, as predicted?

The PTI model suggests that increased internationalization into new markets reduces the perceptions of risk in overcoming barriers to export, enabling increased internationalization to take place.

Barriers to Export

Export barriers can be considered to be all the attitudinal, structural, operational and other constraints that hinder the firm's ability to initiate, develop or sustain international operations (Leonidou, 1995a). Barriers to exporting can often be the cause of many enterprises' failures in foreign business ventures, which can result in financial losses, negative attitudes towards international involvement (Leonidou, 1995b) and a permanent withdrawal from a potentially important development route (Welsh and Weidersheim-Paul, 1980). It follows that removal or the minimization of these barriers or obstacles can contribute to greater export intensity and performance (Bilkey, 1978). The way in which any particular organization perceives or reacts to individual obstacles will be specific to the individual organization and will depend on a variety of factors including managerial, organizational and external forces (Leonidou, 1995a).

There has been considerable research into both the internal and external barriers that organizations face when exporting, including that by Leonidou (2004) and Tesfom and Lutz (2006). Internal barriers are often associated with organizational resources or the organization's approach to export marketing, whereas external barriers are associated with the external environment (Leonidou, 1995a).

The barriers adopted in this research are based largely on those described by Leonidou (2004) and by Tesfom and Lutz (2006), and have been identified from the literature as particularly relevant in the Chinese context. The barriers adopted within this study can be considered within five main groupings, which are financial barriers, knowledge barriers, network barriers, cultural and institutional barriers, and risk barriers. These are listed below.

Financial Barriers

- Cost of expansion
- Raising the required finance
- Foreign exchange transactions
- Identifying new market opportunities
- Obtaining and understanding relevant market information
- Dealing with unfamiliar procedures and documentation

Knowledge Barriers

Network Barriers

- Expanding without existing networks
- Finding appropriate distribution channels
- Finding reliable local representation

Cultural and Institutional Barriers

- Foreign customer attitudes
- Foreign business practices

- Language differences
- Tariff and export barriers
- Foreign rules and regulations

Risk Barriers

- Ability to compete with local competition
- Matching competitors' prices
- Expansion undermining the base operation

Methodology

The research was designed to measure the perceptions of SME manufacturing decision makers towards a range of selected barriers to export, and to establish the number of overseas markets in to which individual SMEs had previously exported their products. The data was collected from manufacturing SME decision makers in the Chinese province of Ningxia. The definition used for SMEs was that defined by the National Bureau of Statistics of China (2008). In Chinese industry, a small to medium sized enterprise is defined as one which has less than 2,000 employees, annual revenues of less than 300 million Yuan or with total assets under 400 million Yuan. The research produced a total of 119 completed responses and included SMEs with export experience to varying numbers of overseas markets. The data was divided into three categories, namely experience of export into one market, export into two markets and export into three or more markets. The sampling technique that was employed was a judgement form of convenience sampling and the respondents were all SME decision makers. Judgement sampling ensured that it was the SME decision makers that completed the questionnaires.

The research adopted a quantitative questionnaire approach which was based on the use of seven point likert scales to measure the relative perceptions of the selected barriers to export. The data was divided into three categories based on

whether the SMEs had previous experience of exporting into one, two, or three regional export markets.

The data collected was statistically analysed to check for normal distribution using the Shapiro-Wilk test for normality. This confirmed that the data was non-parametric in nature and this informed the subsequent selection of the statistical techniques which were adopted in this research.

The data was analysed using Mann-Whitney U tests to determine whether there was a statistically significance difference between the individual perceptions to barriers based on the number of previous export markets into which the SMEs had exported. Tests were conducted between groups of SMEs that had exported to one market and two markets and SMEs that had exported to one market and three or more markets.

In order to control for type one error, a Bonferroni adjustment was applied to the alpha values. As a result of this adjustment a stricter alpha level was adopted of 0.017. Finally, in order to provide an effect size statistic, the R value statistic was calculated, and then Cohen's (1988) effect size criteria were applied. Cohen's effect size criteria suggests a that .1 is a small effect, .3 is a medium sized effect and .5 and above is a large effect.

The results of the data analysis can be found in Table One and will be discussed in the following section.

Table One: Mann-Whitney U Test Results

Barrier	1 Market-2 Markets					1 Markets-3 Markets				
	Z	Sig.	Mean Rank		R	Z	Sig.	Mean Rank		R
			1 Market	2 Markets				1 Markets	3 Markets	
Cost of expansion	-1.108	.268	38.80	44.34	-	-1.330	.184	36.93	43.49	-
Raising the finance required	-3.834	.000*	50.70	31.84	-.423	-5.432	.000*	52.57	25.73	-.611
Foreign exchange transactions	-5.844	.000*	55.85	26.44	-.645	-6.080	.000*	54.10	24.00	-.684
Identifying new market opportunities	-2.053	.040	46.21	36.55	-	-3.659	.000*	48.15	30.74	-.412
Obtaining and understanding relevant market information	-3.234	.001*	49.05	33.58	-.357	-4.755	.000*	50.79	27.76	-.535
Dealing with unfamiliar procedures and documentation	-1.202	.229	38.69	44.45	-	-0.833	.405	38.14	42.11	-
Expanding without existing networks	-0.894	.371	43.60	39.30	-	-0.193	.847	39.58	40.47	-
Finding appropriate distribution channels	-3.641	.000*	49.89	32.69	-.402	-5.450	.000*	52.04	26.34	-.613
Finding reliable local representation	-3.446	.001*	49.64	32.95	-.381	-5.079	.000*	51.44	27.01	-.571
Foreign customer attitudes	-3.086	.002*	48.48	34.17	-.341	-6.310	.000*	54.21	23.86	-.710
Foreign business practices	-2.425	.015*	46.98	35.75	-.268	-4.781	.000*	50.43	28.16	-.538
Language differences	-2.841	.004*	47.93	34.75	-.314	-4.914	.000*	50.93	27.59	-.553
Tariff and export barriers	-1.391	.164	44.81	38.03	-	-2.088	.037	44.67	34.70	-
Foreign rules and regulations	-0.130	.896	41.81	41.18	-	-1.241	.251	42.77	36.85	-
Physical distance of export markets	-2.570	.010*	47.42	35.29	-.284	-4.544	.000*	50.20	28.42	-.511
Ability to compete with local competition	-2.812	.005*	47.94	34.74	-.311	-5.306	.000*	52.00	26.38	-.597
Matching competitors' prices in export markets	-1.248	.212	38.55	44.60	-	-0.286	.775	39.36	40.73	-
Expansion undermining the base operation	-0.808	.419	43.39	39.51	-	-0.529	.597	41.17	38.68	-

* Significant at the .05 alpha level, after consideration of Bonferroni adjustment .017 ($.05/3 = .017$)

Results and Discussions

The results of the data analysis will be considered in two ways. Firstly, in the way that the perception of the difficulty of individual barriers to export differs between SMEs with experience of one export market compared to those with experience of two export markets, and three or more export markets, respectively. Secondly consideration of those barriers which exhibit no statistical difference in perception even with experience of three or more markets.

A summary of the impact of the number of markets on the perception of difficulty of overcoming the individual barriers is shown in table two.

Table Two: The Impact of the Number or Markets on the Perception of Individual Barriers to Export

Impact \ Markets	Difference between 1 and 2 Markets	Difference between 1 and 3 or More Markets
High	1	10
Medium	7	1
Low	2	-
No Statistical Effect	8	7

It can be seen from the table above that increasing the number of export markets from one market to two markets has a statistically significant impact on the perception of ten of the individual selected barriers to export. The largest impact is on the 'Foreign exchange transaction' barrier, which suggests that the experience (experiential knowledge) gained from dealing with multiple markets does have an impact on the perception of difficulty and risk involved. Seven barriers exhibit a medium impact on the perception of difficulty which include the 'Raising the finance required', 'Obtaining and understanding relevant market information', 'Finding appropriate distribution channels', 'Finding reliable local

representation', 'Foreign customer attitudes', 'Foreign business practices', and the 'Ability to compete with local competition' barriers. The 'Physical distance of export market' barrier, exhibited a small difference in perception of difficulty between SMEs that had experience of exporting to two markets compared to those who exported to one. These results suggest that increased exposure to more than one international market results in a reduction in the perception of a range of the barriers to export.

When considering the difference between SMEs that exported to one market compared to those who had experience of exporting to three or more markets, the statistically significant differences are more pronounced. Ten of the barriers exhibit large differences and these include all of the barriers that showed a difference at the two market level, and in addition the 'Identifying new market opportunities' barrier exhibited a medium effect size effect. This is a particularly striking finding and seems to provide some support for the view that expansion into new markets results in the identification of new opportunities and new ways of doing things. Overall, the fact that ten of the barriers exhibit a large size effect in the reduction in the perception of difficulty and one exhibits a medium size effect, suggest that an increase in the number of export markets serviced to three or more markets results in the perception of less risk, through the accumulation of experiential knowledge, than either one or two markets.

Of the eighteen barriers that were selected for this research, seven of the barriers exhibited no difference in the perceptions, however many markets were serviced. These included the 'Cost of expansion', 'Dealing with unfamiliar procedures and documentation', 'Expanding without existing networks', 'Tariff and export barriers', 'Matching competitors' prices' and 'Expansion undermining the base operation' barriers. When entering a new market, previous experience of other markets may not necessarily help in overcoming some of the barriers. For example, new markets may have different customs, different institutional arrangements and a different range of tariffs and import barriers, all of which must be learned in relation to the new market. The 'Cost of expansion' barrier, may not be reduced depending on the location and requirements of market entry. Expansion undermining the base operation appears, from this research, to be an ever present risk and exhibits no reduction in the perception of difficulty, however many markets are serviced. Finally, the perception of difficulty in matching

competitors' prices in export markets does not appear to be reduced, despite an increase in the number of markets serviced. Although one might anticipate economies of scale, competitiveness is influenced by a number of external factors which include local competition and local pricing. Chinese exports are often based on low end production utilizing relatively inexpensive labour costs, which subsequently leads to a cost competitive advantage. However, this is not necessarily the case in all international markets.

Conclusion

This research has found that increasing the number of markets serviced from one to two, and even more from one to three or more, has a significant impact on the experiential knowledge and perception of difficulty and risk of overcoming many of the barriers to export and to operating in new markets.

This suggests that it is advantageous for individual manufacturing SMEs that have the resources and capabilities to develop exports into new markets. This will enable them to identify and maximise new international export opportunities and to take advantage of new technologies and new ways of doing things. On a macro level the advantages of increased internationalization include not only greater exports, but also technology diffusion, development of production processes and techniques and greater product competitiveness.

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