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The Internationalization of Chinese Entrepreneurial Firms

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THE INTERNATIONALIZATION OF CHINESE ENTREPRENEURIAL FIRMS

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INTERNATIONALIZATION OF CHINESE ENTREPRENEURIAL FIRMS

Abstract

This article uses the resource-based and internationalization theories to explain the export behavior of Chinese entrepreneurial firms. Based on multi-year data on Chinese firms from the Global Entrepreneurship Monitor (GEM), we show that contextualized resource-based theory can adequately explain some of the variation in export behavior among young Chinese firms. Exports by small Chinese firms are driven by the social and intellectual capital of the entrepreneur and their entrepreneurial proclivity, and the innovativeness/uniqueness of the product/offering.

Key Words: International Entrepreneurship, China, Resource-Based Theory, New International Ventures in Emerging Markets

INTRODUCTION

The last several decades of impressive economic growth in China have been accompanied by rapid growth in the export sector. This growth affected not only the giants – the dragon multinationals that are considered the new players in the 21st century (Matthews, 2006) – but also many new small and medium enterprises (SMEs) that went global by exporting as their initial mode of foreign entry. China's foreign direct investment is dominated by large, state-owned enterprises that benefit from a variety of promotional schemes (Alon, Fetscherin, & Gugler, 2012). Small firms have not had similar access to government aid and thus have had to rely on their entrepreneurial talent and contacts to expand overseas. Given their relative lack of resources and government support, the internationalization of small firms is different from that of large firms as it is based on exports rather than investments. Exports involve fewer risks and less control as compared to international investments. Exporting, associated with early internationalization, can be an initial mode of entry to new markets (Johanson & Vahlne, 1977). Chinese small firms proceed through several stages of internationalization, beginning with exporting (Jansson & Söderman, 2012). This article examines why some small Chinese ventures internationalize via exporting whereas others do not.

Boisot and Meyer (2008, p. 3) recently raised the following important question: "Do the current theories of internationalization offer us the right kind of guidance for dealing with the challenges posed by an internationalizing China? And if not, would we be better off seeking a more 'China-specific' theory to account for the Chinese case, or should we consider a comprehensive rethinking of our existing theories?" Alon and

McIntyre (2008), after surveying the globalization of Chinese enterprises in a variety of disciplines, have suggested that new or augmented theories may be needed to explain the Chinese case. China's unique institutional environment requires new approaches. In contrast, in criticizing Alon and McIntyre (2008), Rugman (2010), claims that traditional theories of firm internationalization provide sufficient explanatory power and thus there is no need for new theorizing. As an example, Rugman suggests that firm- and country-specific factors co-determine the international strategy of emerging market firms or developed country firms going global. Tsui (2004), in contrast, calls for indigenous theorizing about China. Alon, Child, Li, and McIntyre (2011, p. 193) write: "It is possible for research from a wide variety of settings to build on extant research and extend the theories and our understanding of business and management. As such, a call for uniquely Chinese theories is not warranted." Universal theories are preferred over particularized theories.

In this article, we attempt to use the traditional resource-based theory of the firm to explain the internationalization of Chinese SMEs. We acknowledge that China's institutional environment is somewhat unique (reviewed briefly below), but to the extent that the environment is different from others, do traditional theories have sufficient explanatory power? We attempt to augment the resource-based theory to adjust it to the unique Chinese institutional environment.

Whereas most empirical evidence on international entrepreneurship thus far is based on the developed markets of North America, Europe, and Australia (Zhou, 2007), our study examines how and why entrepreneurs and firms from emerging markets engage in internationalization. Based on both resource-based theory and internationalization

theories, we develop several hypotheses on international entrepreneurship in China and test them using data from the Global Entrepreneurship Monitor. Mathews (2006) proposed that resource-based theory is well suited to explain the Asian-based dragon multinationals because in this theory internationalization is dependent on the search for new resources and the exploitation of new relationships, rather than on the utilization of domestic assets that are exportable abroad, to develop globally competitive advantages in niche markets. Testing the boundaries of a theory in different contexts contributes to a transnational explanation that has both context-free and context-embedded elements (Peng, 2005).

CHINA'S INSTITUTIONAL ENVIRONMENT

China's institutional environment, characterized by low resource munificence and continuous economic liberalization, creates unique conditions for international ventures (Yiu, Lau, & Bruton, 2007). Moreover, Chinese demographic and geographic characteristics may also have an effect on the willingness of local SMEs to seek foreign supply and demand markets. Yeung (1997) states that "Any serious attempt to probe the processes of transnational operations by Chinese firms must take into account the nature and specificity of so-called 'Chinese business systems'."

Moreover, related to the unique characteristics of the Chinese environment, Yeung (1995) suggests that the "overseas Chinese networks of capital" are the predominant modes of business organization in Asia. This form of social and business organization for transnational production has spearheaded a rapid diffusion of economic activities and intra-regional foreign direct investment (FDI) flows among various Asian-

Pacific countries where the Chinese have significant economic influence. Yeung (1997) argues that the role of *guanxi*, or personal relationships, in these social and business networks is crucial in spearheading FDI from Hong Kong transnational corporations into the ASEAN region. Kao (1993, p. 32) points out that "cross-border investments alone are responsible for turning the de facto network of loose family relationships into today's Chinese commonwealth." Examples include China, Indonesia, Hong Kong, Malaysia, the Philippines, Singapore, Taiwan, and Thailand.

Boisot and Meyer (2008) claim that unlike when first entering foreign markets via FDI, whereby the primary concern typically is the liability of foreignness, global entrepreneurs in emerging markets, for instance small private Chinese SMEs that are not state-protected, may experience lower costs in the host country than in the home country. In particular, Boisot and Meyer explain that "administrative decentralization has led to feudalization of China's industrial structure and an economic fragmentation of the national economic space" (2008, p. 8). The majority of Chinese companies are under the control of local territorial units, each pursuing a local economic agenda, that protect "[their] own firms, whether state-owned, collective, and even private, through various anti-competitive measures (Boisot & Child, 1988). Wu (2005, p. 56) calls administratively decentralized China a "vassal economy" dominated by local protectionism.

It should be noted, however, that China has a long history of economic closure and it lacks an export culture. Alam and Pacher (2003) note that Australian SMEs that want to internationalize must cope with a number of barriers, such as the lack of an export culture, inadequate managerial expertise, inadequate use of information

technology, lack of support for innovation, lack of a well-defined industry policy, and inadequate relationships with overseas companies. Chinese companies are even less sophisticated and operate in an even more constrained environment. According to the Heritage Foundation's "Index of Economic Freedom" (Kane, O'Driscoll, & O'Grady, 2007), Australia ranks 3rd, whereas China ranks 119th, likely indicating more export barriers in China. The internationalization of Chinese companies has also been weakened by low R&D, limited marketing capability and brand development, and administrative constraints (Child & Rodrigues, 2005).

The current liberalization of the business environment in China might offer support for SME internationalization and entrepreneurship, and international business education may alleviate some of these problems in the future. Child and Rodrigues (2005) claim that the Chinese case is more consistent with the latecomer perspective than with analyses derived from the exploitation of firm-specific advantages by already strong companies. They note that whereas exporting from China is based primarily on the intrinsic advantage of low-cost labor, combined in some cases with modern production facilities that may have been developed with inward foreign investment, moves toward a higher level of internationalization will require overcoming the problems by seeking new assets.

After years of being on the receiving-end of inward foreign direct investment (Tse, Pan, & Au, 1997), Chinese firms are on the tipping point of explosive growth in terms of international activities (Child & Rodrigues, 2005). Chinese firms are being propelled by the government's "going global" policy, international competition, and the upgrading of the economic system. However, as Zhao and Zou (2002) note, although

China has become a major export powerhouse, Chinese firms still exhibit a low propensity to export. Jansson and Söderman (2012) suggest that Chinese private firms follow an evolutionary path toward international markets based on stages, from pre-exporting to indirect and experimental exporting motivated by differing pull/pull and internal drivers. Despite late and low internationalization, Chinese companies springboard international business by buying critical assets from mature MNEs to compensate for their competitive weaknesses, lack of strategic resources, and institutional and market constraints (Luo & Tung, 2007).

Given China's institutional uniqueness, our article evaluates whether traditional Western theories can adequately explain the internationalization of small Chinese firms.

LITERATURE REVIEW AND DEVELOPMENT OF THE HYPOTHESES

Internationalization Theories

Entrepreneurial firms that are new and active internationally face a "liability of newness" (Stinchcombe, 1965) in the home country and a "liability of foreignness" (Hymer, 1976; Zaheer, 1995; Zaheer & Mosakowski, 1997) in international markets. They have to develop routines in the home country and at the same time become acculturated to the business environment in the host country, thus balancing domestic and international learning simultaneously (Autio, Sapienza, & Almeida, 2000; Zheng & Khavul, 2005). The internationalization literature analyzing young firms consists of two contrasting perspectives. The first is the theory of the process of internationalization that views internationalization largely as an incremental process beginning relatively late in a

firm's life-cycle (Johanson & Vahlne, 1977, 1990). This theory focuses on explaining why firms delay entry into foreign markets and proceed slowly after they make an initial cross-border move. It views internationalization as a "natural" evolution in a firm's quest for survival or as a response to changing consumer demands and competitive forces (Sapienza, Autio, & Zahra, 2003). The current literature on the process of internationalization (e.g., Spulber, 2007) suggests that local companies beginning to internationalize will consider the strategic and managerial implications of the internationalization process in terms of competitive analysis, determination of added value, formulation of a competitive strategy, and organizational design.

In contrast, a second perspective, the new venture internationalization theory, depicts internationalization as a process that may occur with great rapidity commencing at firm inception (e.g., McDougall, Shane, & Oviatt, 1994; Oviatt & McDougall, 1997). The new venture internationalization theory contends that young firms often see themselves as highly competent and thus they "leap" to internationalize in order to pursue opportunities. This theory depicts early cross-border activities as a reflection of the capacity of these firms' top managers and as a strategic response to opportunities that are unseen by competitors (Sapienza, Autio, & Zahra, 2003). Whereas the new venture theory of internationalization, like the emerging theories of entrepreneurial opportunity recognition (Shane & Venkataraman, 2000), asserts that prior experiences affect choices, the theory of the process of internationalization only recognizes experience within the current venture (Sapienza et al., 2003).

Following Sapienza, Autio and Zahra (2003), we argue that what distinguishes between new ventures that internationalize and those that do not internationalize in the

theory of the process of internationalization is the gradual accumulation of foreign organizing knowledge that increases the firm's *awareness* of international opportunities, *ability* to pursue such opportunities, and *willingness* to make resource commitments to these activities (Shane & Venkataraman, 2000).

According to the new venture theory of internationalization, new ventures that internationalize are distinguished by their managers' special capacities and experiences that allow them to recognize opportunities that are unseen by others, i.e., their entrepreneurial knowledge (Penrose, 1959). As Sapienza et al. (2003) note, "The new venture view differs from the process theory of internationalization in regards to the critical assumption about experience. In the new venture international theory, new ventures internationalize their operations because their internationally experienced and globally-networked managers have unique knowledge and competencies that make entering foreign markets attractive" (McDougall et al., 1994).

This study does not reconcile the above debate regarding why firms are slow to export, nor does it explain why Chinese firms are slow to export. Rather, our intention is to differentiate between those firms that export versus those that do not and to explore the factors that contribute to their differences. We contend that beyond their differences, both theories emphasize the knowledge resources of the firm (as noted by Sapienza et al., 2003). We follow this line of thinking to argue that the knowledge resources of the firm, including the managers' human capital, prior experience, skills, and social contacts (that may serve as *guanxi*) contribute to the internationalization process of the firm.

Built largely on the resource-based and internationalization theories, this article divides the explanation for the differences in exporting behavior into four dimensions --

(1) Intellectual and Social Capital, (2) Entrepreneurial Proclivity, (3) Uniqueness of Offerings/Innovativeness, and (4) Scale of New Business. This study adds to the existing literature by examining the important question of the internationalization behavior of Chinese firms according to Western factors, intending to discover whether factors in the Western context are relevant to the Chinese context.

Examining Chinese firms, Lattemann, Alon, Chang, Fetscherin, and McIntyre (2012) offer a typology of internationalizing firms based on size and ownership. Our investigation looks at small private companies, whose global motivations, take-off processes, and paths to global markets may differ. Among these firms, the specific driver is their knowledge about international markets (Lattemann et al., 2012). Zhang, Ma, and Wang (2012) tie entrepreneurial orientation and social capital to internationalization.

(1) The Entrepreneur's Intellectual and Social Capital

The resource-based view is an influential perspective in international business research (Yamakawa, Peng, & Deeds, 2008). SME research embedded in this tradition informs our first hypothesis. Studies of international entrepreneurship have found a link between the personal characteristics of the entrepreneur and internationalization. Westhead, Wright, and Ucbasaran (2001), in a study of the internationalization of small and medium-sized entrepreneurial firms using resource-based theory, draw on a sample of 621 manufacturing, construction, and services businesses located in twelve contrasting environments in Great Britain. They find that the principal *human capital* (know-how and ability), industry, and business and environmental variables all impact export behavior. Their research offers three conclusions regarding the characteristics of the principal

founders: (1) Previous experience in selling goods or services abroad is a key influence in encouraging firms to expand overseas; (2) Businesses with *older principal founders*, with *more resources*, denser information, deeper *contact networks*, and considerable *management know-how* are significantly more likely to export; and (3) Businesses with principal founders who have more industry-specific knowledge are markedly more likely to go global. The authors suggest that a consideration of the characteristics of the principal founders, the businesses, and the external environments is important to understand a firm's propensity to internationalize.

With a particular focus on the Chinese business environment, the literature emphasizes the importance of social capital, known as *guanxi* in the Chinese context, and suggests that, like social capital, *guanxi* is critical to new business development and internationalization (e.g., Alon, 2003; Luo, 2007). Lin (1999) suggests that social capital is an investment in social relations by individuals through which they gain access to embedded resources to enhance the expected returns of instrumental or expressive actions. From this, three processes can be identified: (1) Investment in social capital, (2) Access to and mobilization of social capital, and (3) Returns of social capital. Zhang, Ma, and Wang (2012, p. 198) define social capital in the Chinese context as “actual and potential resources available to a firm through its network of relationships ... [that] play an important role in the firm internationalization,” and that suggest that these resources contribute to internationalization through (1) knowledge, (2) experience, and (3) referral trust.

Guanxi is closely related to the Western notion of social capital. Lin, Tao, and Liu (2006) emphasize that Chinese society is widely considered to be bundled by informal

interpersonal ties that exist in almost every aspect of social interaction. For example, in the Beijing Zhongguancun Science Park, a leading Chinese technology hub, entrepreneurs have transformed their informal interpersonal networks into both informal and formal inter-organizational ties for information sharing and input-output transactions, thus partly facilitating internationalization (Tan, 2006). Zhou, Wu, and Luo (2007) suggest that social networks in the form of *guanxi* mediate the relationship between inward and outward internationalization and firm performance by providing knowledge of foreign market opportunities, advice and experiential learning, and trust and solidarity.

Using the literature above, we offer

Hypothesis 1: An entrepreneur's intellectual and social capital will positively influence his/her likelihood to internationalize;

H1a The higher the education attainment of the entrepreneur, the more likely he/she will internationalize;

H1b The greater the business skills of the entrepreneur, the more likely he/she will internationalize;

H1c The larger the contact base of the entrepreneur, the greater the likelihood that he/she will internationalize.

(2) Entrepreneurial Proclivity

Given the liability of foreignness, the spatial distances, and the institutional barriers involved in internationalization, operating abroad is more costly than operating in the domestic market (Hymer, 1976). Therefore, firms require some competitive advantage to

compensate for the extra costs of relocating and operating abroad (Boisot & Meyer, 2008). However, entrepreneurial proclivity may serve as a catalyst for SMEs to go global, even though they face the same above-noted barriers.

Zhou (2007) develops a relationship between international entrepreneurial proclivity – defined as a firm’s predisposition to engage in cross-national entrepreneurial processes and activities that are characterized by *innovativeness, risk taking, and proactiveness* – and newly internationalized firms. Entrepreneurial orientation, characterized by risk taking, opportunity recognition, capabilities, and outlook, and coupled with intangible knowledge-based resources, may lead to an early leap into the global arena (Knight & Cavusgil, 2004; Oviatt & McDougall, 1994; Zhou, 2007).

An individual’s risk-avoidance preferences may be a significant barrier to the transition from potential (or latent) entrepreneurship to entrepreneurial activity, and may also be a significant factor in the decision to export. One of the obstacles to expanding overseas is the pervasive fear of failure among domestic SMEs. Inertia is another problem among domestic firms wishing to enter international markets because it blocks any change to routines that may be more appropriate to international environments. In recognition of this, internationalizing entrepreneurs try to avoid domestic path-dependence by establishing ventures and coordinating resources located in different countries and targeting customers in multiple geographic locations (McDougall, Shane, & Oviatt, 1994). Evidence from the developed and developing countries also suggests that opportunity-driven entrepreneurs are more likely to internationalize (Acs, Arenius, Hay, & Minniti, 2005). According to the GEM study, an average of about 50 percent of all start-ups in the world are expected to export, but in low-income countries, the ratio is

only about 33 percent. The GEM report suggests a relationship between necessity/opportunity entrepreneurship and internationalization. As the proportion of necessity entrepreneurship falls, the proportion of start-ups that are expected to export also declines (Acs et al., 2005, p. 34). As entrepreneurship research has shown, opportunity recognition is central to entrepreneurial processes and “perceived opportunity” measures are important to exporting behavior. Alvarez and Busenitz (2001) state that entrepreneurs have individual-specific resources that facilitate the recognition of new opportunities and the assembly of resources for new ventures. These resources include opportunity recognition, the ability to organize these resources into the firm, and the creation of heterogeneous outputs that are superior to those on the market.

Based on the previous literature, we therefore suggest

Hypothesis 2: An individual's entrepreneurial proclivity will positively influence his/her likelihood to internationalize;

H2a An entrepreneur's fear of failure will decrease his/her likelihood to internationalize;

H2b An entrepreneur's perception of opportunities will increase his/her likelihood to internationalize;

H2c In starting a business an opportunity-driven motivation, as opposed to a necessity-drive motivation, on the part of the founder will increase his/her likelihood to internationalize.

(3) The Entrepreneur's Unique Offerings/Innovativeness

Firms that enter foreign markets face a “liability of foreignness” that arises from the firm’s unfamiliarity with the local environment and a lack of legitimacy in the host market (Zaheer, 1995). Foreign companies can overcome this liability of foreignness by leveraging their core capabilities in the foreign market. One such dynamic capability is its “technological innovation capability” (Zheng & Khavul, 2005), allowing firms to specialize their offerings to customers based on innovative products, price, or services. Thus, firms with a strong technological innovative capability will enter international markets more rapidly than firms lacking such capabilities and will obtain a product advantage in the broader international market (Leiblein and Reuer, 2004). Bloodgood, Sapienza, and Almeida (1996), in an examination of the internationalization of 61 new ventures in the United States, show that internationalization is directly related to the use of *product differentiation* as a source of competitive advantage. Knight and Cavusgil (2004) propose that unique *product and technology advantages* contribute to the internationalization of young entrepreneurial firms. From these two studies we surmise that firms with new technology, new products/services, and/or little competition are more likely to internationalize.

Nevertheless, other studies have produced different results. Zheng (2004), in an examination of 146 Chinese companies operating in Beijing and Shanghai, looks at the effectiveness of the strategies of international entrepreneurial firms (IEFs). Their data show that the more innovative a company is, the more it must focus on its own geographical market to improve performance. Zheng also finds that the more innovative a firm is, the more likely it will benefit from using intermediaries and other modes of market entry rather than direct exports. A study of the Chinese case produces conclusions

that contradict those offered by Bloodgood, Sapienza, and Almeida (1996) as well as Knight and Cavusgil (2004).

However, Child and Rodrigues (2005) state that the internationalization process of Chinese firms demonstrates that their capacity for organizational learning, one of the most important of all competitive advantages, should not be underestimated.

We thus test the conventional wisdom.

Hypothesis 3: An entrepreneur's unique offerings/innovativeness (new technology, new products, new to the competition) will positively influence his/her likelihood to internationalize.

H3a Entrepreneurs employing new technology will be more likely internationalize;

H3b Entrepreneurs with new product/service offerings to customers will be more likely to internationalize

H3c Entrepreneurs facing little competition in the domestic market will be more likely to internationalize.

(4) Scale of the New Business

The relationship between firm size and export behavior has been extensively analyzed in the literature. Although the empirical findings have been mixed, a number of theoretical arguments, such as international marketing economies of scale, limited management, financial resources of small firms, and so forth, support this proposition (Bonaccorsi, 1992). There is a large body of theoretical literature espousing that internationalization requires appropriate resources (personnel, financial, etc.). Smaller firms have a resource disadvantage when compared to larger firms and therefore they may be unable to invest

in the hiring and training of international personnel (Calof, 1994). Dunning's eclectic theory of production (Dunning, 1988) is but one of many internationalization theories that postulate that resource scarcity limits the ability of smaller firms to reach more advanced stages of internationalization. In addition, smaller firms may be more risk-averse due to a lack of information and also because international mistakes have a relatively greater impact on smaller firms (Calof, 1994).

Using a large national database study (8,810 Italian companies) of size and export behavior, Bonaccorsi (1992) finds that firm size is positively associated with propensity to export and negatively associated with export intensity (export sales/total sales). These findings reveal that small Italian firms that are successfully involved in foreign trade are primarily in export sectors such as consumer durables. Calof (1994) expands the generalizability of certain aspects of Bonaccorsi's (1992) study by examining Canadian firms in a similar but larger database (14,072 firms).

Dhanaraj and Beamish (2003) apply resource-based theory to the study of export performance by comparing U.S. and Canadian small and medium exporters. They find *firm size and technological intensity* to be key predictors of the export strategy and the degree of internationalization. Studying the emerging market in India, Pradhan (2004) examines the international production activities of Indian firms. Firm-specific characteristics, such as age, size, R&D intensity, skill intensity, and export orientation, are found to be significant with respect to outward FDI.

Accordingly, we suggest:

Hypothesis 4: The size (measured in terms of employment) of an entrepreneur's company is positively related to his/her likelihood to internationalize.

DATA AND METHODS

Our dependent and independent variables are derived from the Global Entrepreneurship Monitor (GEM project). The GEM is a multi-country, multi-year study of entrepreneurship. The number of participating countries increased from 10 in 1999 to 43 in 2009. The study currently represents the most comprehensive and most up-to-date comparative research on entrepreneurship, based on samples from 2,000 to 15,000 randomly selected adults between the ages of 18 and 64 in each country. The purpose of the study is to measure country differences in entrepreneurial proclivity to determine whether systematic relationships exist among national entrepreneurship, economic growth, and other factors.

The GEM procedures are based on the same survey research methodology used to identify individuals active in new firm creation and ownership of existing firms across a wide range of countries (see Reynolds, Bosma, Autio, Hunt, De Bono, & Servai, 2005 for a detailed discussion of the GEM sampling and measurement procedures). We used the GEM samples of 3,000 Chinese respondents collected in 2002, 2400 Chinese respondents in 2006, and 3,608 Chinese respondents in 2009. A geographically stratified sampling procedure was used to locate households and respondents in China for face-to-face interviews (Reynolds et al., 2005). Examination of the 3,000 respondents in 2002 identified 482 ventures that participated in the 2002 GEM Chinese sample. Among these 482 Chinese ventures, 24 percent did not respond to the export activities questions (therefore, those 116 ventures were considered to have missing values). Of the remaining

366 ventures, 73 percent had no export activities. We thus compared the 27 percent exporting ventures to the 73 percent non-exporting ventures.

Examination of the 2,400 respondents in 2006 identified 715 ventures that participated in the 2006 GEM Chinese sample. Among these, 21.8 percent did not respond to the export activities questions (therefore 156 ventures were considered to have missing values). Of the remaining 559 ventures, 61.2 percent had no export activities. We compared the 38.8 percent exporting ventures to the 61.2 percent non-exporting ventures. Examination of the 3,608 respondents in 2009 identified 1,531 ventures that participated in the 2009 GEM Chinese sample. Of those, 91 percent had no export activities. We thus compared the 9 percent exporting ventures (139) to the 91 percent (1,392) non-exporting ventures.

Identical questionnaires for the 2002, 2006, and 2009 cycles included statements relating to individual involvement in entrepreneurial activities and attitudes toward entrepreneurship. For each question there were four possible responses: “yes,” “no,” “don’t know,” or “refused.”

Our dependent variable is *export behavior*. We have ten hypotheses and sub-hypotheses divided into four dimensions: intellectual and social capital of the entrepreneurs, entrepreneurial proclivity, unique offerings/innovativeness, and scale. The three control variables that were previously shown to have an impact on internationalization are also included.

Export activities are measured by the single measure: “What proportion of your customers normally live outside your country?” (1 = More than 90 percent, 2 = More than 75 percent, 3 = More than 50 percent, 4 = More than 25 percent, 5 = 25 percent or

less, 6 = None, 8= Don't know, and 9 = Refused). We coded the companies as domestic (0) or international (1), lending support for a logistical regression model.

It should be noted that exporting is used as a proxy indicator of internationalization. However, other entrepreneurial behaviors and activities might also indicate internationalization, such as a China-based firm serving as a resource base for a firm outside of China, FDI by Chinese firms, JVs, and so forth.

The first set of hypotheses includes intellectual and social capital variables. Entrepreneurial intellectual capital is measured by education level (1= some secondary, 2= secondary, 3= post-secondary, and 4= graduate) and by perceived business skills (0= do not have the knowledge, skill, or experience required to start a new business, 1= do have such knowledge, skill, and experience). Social capital is measured by "personally knowing someone who started a business in the past 2 years" (0= no, 1= yes). In our study we equate the concept of *guanxi*, as described by the Chinese as social capital, and use a variable of "contacts" to proxy for this concept. *Guanxi* can, for example, be explained by network theories (e.g., Granovetter, 2005). We acknowledge that cross-cultural conceptual equivalencies may be difficult to achieve.

The second set of hypotheses, on entrepreneurial proclivity, is obtained from questions relating to fear of failure: "Fear of failure would prevent you from starting a business" (0= no, 1= yes) and perceived opportunity. "In the next six months there will be good opportunities to start a business in the area where you live" (0= no, 1= yes). The third question relates to the motivation to start a business, either as an opportunity or as a necessity: "Are you involved in this start-up to take advantage of a business opportunity or because you have no better alternative?" (0= necessity, 1= opportunity).

The third set of hypotheses, on unique entrepreneurial offerings/innovativeness, is obtained from questions regarding the level of newness of the technology. The question is "Were the technologies or procedures required for this product or service generally more available than one year ago?" (1=yes, 2= no). The second question, relating to the level of newness of the products/services, is: "Will all, some, or none of your potential customers consider this product or service new and unfamiliar?" (1= new to all, 2= new to some, 3= no customers will consider this product new and unfamiliar). The third question, relating to the level of competition, asks: "Right now, are there many, few, or no other businesses offering the same products or services to your potential customers?" (1=many business competitors, 2=few business competitors, or 3= no business competitors).

The scale of business, relating to the fourth hypothesis, is obtained from an open-ended question: "Right now, how many people, not counting the owners but including exclusive subcontractors, are working for this business?"

Control Variables: Entrepreneur's Age and Gender, and Firm Age

In selected studies, the age and gender of the entrepreneur and the age of the business are shown to have an impact on internationalization (Glas, Hisrich, Vahčič, & Antončič, 1999; Treichal & Brouthers, 2004; Westhead, Wright, & Ucbasaran, 2001). Glas et al. (1999) examine the internationalization pattern of SMEs in Slovenia, a small transition economy, and assume that Slovenian SMEs would follow the patterns of internationalization found in the Western literature because over the last decade Slovenia has been reorienting in the direction of a Western-style market economy. They hypothesize that the extent of SME operations in foreign markets will grow with SME

maturity because the incremental internationalization of SMEs to a large extent is based on the owner-manager's *experience effects* on internationalization performance (Glas et al., 1999). Other research has produced contrasting results. For example, Alon (1999), in a study of the internationalization of retail franchising in the United States, finds that younger firms are more likely to internationalize in order to escape the competition and to rapidly increase their scale.

Gender is likely another key variable related to the intention to internationalize. Treichal and Brouthers (2004) find that firms with female entrepreneurs face unique barriers that may restrict their strategic choices. For example, women entrepreneurs face more difficulties (1) raising financial resources, (2) creating legitimacy, (3) obtaining access to different networks and support structures, and (4) in terms of national and cultural discrimination in international business dealings.

In this study, the control variables, including the age of the entrepreneur and the age of the business, are measured by open-ended questions "What was the first year the owners received wages, profits, or payments in-kind?" and gender (1= male, 2= female).

RESULTS

Using 2002, 2006, and 2009 data from the Global Entrepreneurship Monitor, we find significant growth in the percentage of Chinese SMEs that went global between 2002 and 2006, but a decline in the percentage in 2009, reflecting the global economic crisis.

Between 2002 and 2006 the percentage of exporting SMEs among the respondents grew from 27 percent to 38.8 percent. However, in the 2009 sample this

figure decreased to only 9 percent, likely due to the widespread global recession. Regarding the proportion of their export activities, among the 27 percent identified in 2002, about 21.3 percent had a small portion of customers in overseas market (25 percent or less), whereas only 6 percent had more than 25 percent of their entire business was involved in exports. In 2006, among the 38.8 percent exporting SMEs, about 33.1 percent still had a relatively small market share internationally (25 percent or less), whereas 5.6 percent had more than 25 percent of their entire business in exports. In 2009, among the 9 percent exporting SMEs, only 1.2 percent had significant operations in global markets (more than 25 percent) and the remaining 7.9 percent had only a small overseas footprint (25 percent or less in exports). We believe these data reflect the true nature of small and micro enterprises in China during this turbulent period.

We first demonstrate the characteristics of the exporting vs. non-exporting SMEs in each year, and then we examine the hypotheses by logistic regressions that include the samples of the three years.

Insert Table 1 and 2 about here

As Table 1 demonstrates, in each of the three years the size of the entrepreneur's company is positively related to his/her likelihood to export. Thus, the average number of employees in exporting firms is significantly higher than the average number of employees in non-exporting firms. (130.2 vs. 5.4 in 2009, 20.55 vs. 8.37 in 2006, and 16.86 vs. 6.34 in 2002)

In addition, in each of the three years the growth aspirations among the exporting entrepreneurs are significantly higher than among the non-exporting entrepreneurs. As the χ^2 comparison demonstrates, the educational levels of the exporting entrepreneurs tend to be significantly higher than those of the non-exporting entrepreneurs in each of the three years (see Table 2). The business skills of the exporting entrepreneurs tend to be significantly higher than those of the non-exporting entrepreneurs only in 2002 and 2006, but not in 2009 (Table 2).

As the χ^2 comparison demonstrates, the exporting and non-exporting entrepreneurs differ significantly in terms of their social capital in 2002 and 2009 but not in 2006. Significantly, in 2002 more non-exporting entrepreneurs, compared to exporting entrepreneurs, expressed a fear of failure, but in the 2006 and the 2009 samples there were no differences.

The entrepreneur's perception of opportunities tends to increase his/her likelihood to export. The differences between the exporting and non-exporting entrepreneurs are significant in the 2002 and 2009 samples but not in the 2006 sample. In each of the three years the founder's opportunity motivation is found to be positively related to his/her likelihood to export. In other words, significantly more exporting entrepreneurs are opportunity-oriented rather than necessity-oriented.

Entrepreneurs with new products/services are significantly more likely to export in all three years. Contrary to the expectation that entrepreneurs facing little competition in the domestic market will be more likely to export, in the 2002 and 2009 samples more non-exporting entrepreneurs asserted that they had no competitors.

Next, a logistic regression with export behavior as the dependent variable was performed for the entire integrative sample consisting of the three yearly samples (of the total of 2,725 respondents, 1,595 were included in the analysis after omitting the missing cases). The variable 'year' was added to the regression. The regression is presented in Table 3.

Insert Table 3 about here

In terms of intellectual and social capital, we confirm hypothesis H1a regarding the entrepreneur's education level but not H1b regarding the entrepreneur's business skills. In other words, we find that the entrepreneur's level of education positively affects a decision to export; however his/her level of business skills is not significant. H1c, expecting that the contact base of the entrepreneur will influence his/her export activities, is not supported.

In terms of the second dimension, entrepreneurial proclivity, fear of failure is significant and opportunity-driven motivations are strongly significant, but perceptions of opportunities are not significant. Thus, H2a and H2c are confirmed whereas H2b is rejected. These results provide partial support for Zhou's (2007) conclusion, which states that entrepreneurial proclivity positively influences internationalization.

We find some interesting results with respect to the entrepreneur's unique offerings/innovativeness. New technology is likely to support global pursuits. However, products/services that are new to customers also appear to significantly support global pursuits. Furthermore, contrary to our expectation that entrepreneurs facing little

competition in the domestic market will be more likely to export, the results show that exporting ventures have significantly more competitors in the domestic market. Thus, H3a and H3b are supported and H3c is significant but contrary to our expectation.

As for the scale of the new business, as predicted, employment is positive and significant. International entrepreneurs have more employees than purely domestic entrepreneurs. Seen through the lens of resource-based theory, having more employees provides more unique permutations of resources and skills that are difficult to imitate, providing a platform for international business. Thus, H4 is supported.

Obviously, the year variable is also likely to influence global pursuits, suggesting that each of the years, 2002, 2006, and 2009, provided different opportunity structures for Chinese entrepreneurs. Finally, none of the three control variables – age and gender of the entrepreneur and age of the business – appears significant in the regression.

CONCLUSIONS

In our study of the internationalization of Chinese entrepreneurs in SMEs, we suggest that the factors that distinguish exporting Chinese SMEs from those that do not export are human and social capital variables (the entrepreneur's education and skills and the entrepreneur's contact base), the entrepreneur's entrepreneurial proclivity (fear of failure, perception of opportunities, and opportunity-driven motivations), the entrepreneur's unique offerings/innovativeness (employing new technology and new products/services, and facing little competition in the domestic market), the scale of the new business (measured in terms of employment) and the control variables (the entrepreneur's age and gender and the age of the business).

The results of our model confirm most of our hypotheses, suggesting that the relevant patterns of pursuing internationalization and export activities by Chinese SMEs are not different from the patterns previously identified in Western contexts. The observation that different patterns of behavior by Chinese SMEs is not verified by our results refers to Boisot and Meyer (2008, p. 3), and may be related to the recent debates among social science researchers regarding whether or not existing theories, which are primarily developed in mature Western economies, are capable of explaining the economic miracles in Chinese societies and whether new theories based on the Chinese experience need to be developed (Alon, Child, Li, & McIntyre, 2011, p. 192). The similarity between the significant factors of exporting Chinese SMEs and non-Chinese exporting SMEs may suggest that there are basic economic patterns of SMEs engaging in globalization efforts that are beyond sociological, cultural, political, and national idiosyncrasies. Our findings are consistent with, and can be explained by, resource-based theory and the theory of the process of internationalization, regardless of the unique Chinese strategic trends and market atmosphere during the last decade.

Resource-based theory can adequately explain at least in part why some new firms in China decide to explore foreign markets. According to our study, a Chinese entrepreneur's individual characteristics (especially his/her education) serve as basic firm resources that might encourage motivations, professional tools, and improvements in foreign language skills, and thus are significant characteristics of exporting SMEs. Our research supports findings by Westhead, Wright, and Ucbasaran (2001) and Alvarez and Busenitz (2001) that, in general, find that an entrepreneur's individual characteristics, and, specifically, his/her educational and business skills, are positively related to export

expectations. This explanation is supported by our finding that shows that exporting SMEs are characterized by opportunity-driven behavior rather than by necessity.

Entrepreneurial proclivity and the size of the organization influence global aspirations more than the newness of the technology, but the newness of the products still does have an impact.

As for the theory of the process of internationalization, our sample is consistent with this perspective. Most SMEs in our 2002, 2006, and 2009 samples probably moved slowly into global markets, with about 25 percent of their customers in foreign markets (in contrast to born-global companies). This finding is consistent with the fact that most Chinese SMEs are basically production, services, or commodities companies, not high-tech start-ups. This is supported by the fact that although there is a significant difference in size between exporting and non-exporting companies, in fact the size differences are very small and there are no significant differences in their age. Moreover, this growth process is accompanied by a high motivation for growth among the founders of the exporting SMEs, in comparison to the motivation for growth among the founders of the non-exporting SMEs in each of the three years. These findings might indicate a slow, incremental evolutionary process in the direction of global operations, as described by the process theory of internationalization.

The examination of the hypotheses by logistic regression shows education, opportunity motivation, fear of failure, competition, innovativeness, and size of business in terms of number of employees as well the specific year, are the variables that exert an influence on the exporting behavior of Chinese SMEs. Overall, the results lend support for most of our hypotheses. Exporting Chinese SMEs are larger than non-exporting

Chinese SMEs in terms of the number of their employees. Moreover, exporting SMEs have more innovative assets than their non-exporting counterparts, whether in the products they offer to their customers or their technology, and they feel that there is, or they are more aware of, more competition in the local market.

In terms of the founder's entrepreneurial proclivity, the results confirm that opportunity-driven individuals as opposed to necessity-driven individuals are more likely to engage in globalization efforts. Confirming our expectation, an entrepreneur's fear of failure decreases his/her likelihood to internationalize. As to the human capital resources, individuals owning exporting SMEs tend to have higher level of education relative to those owning non-exporting SMEs. Business skills were not found to necessarily characterize the founders of exporting SMEs, nor were their contacts with entrepreneurs. In contrast to our expectation that entrepreneurs facing little competition in the domestic market will be more likely to export, more non-exporting entrepreneurs asserted that they had no competitors.

DISCUSSION AND FUTURE RESEARCH

The international business literature is replete with studies on internationalization and the levels of the firm, industry, and/or country. But few studies examine internationalization from the perspective of the individual entrepreneur. This study will hopefully spur additional research on individual-level determinants of internationalization, export behavior, as well as other modes of entry. Different typologies of internationalizing firms may require different sets of competencies and success factors. A multinational challenger from the emerging economies may require a

more nuanced set of competencies at a higher level than those present in an OEM, for example. Born-global firms, for example, may require a leader who has studied in multiple countries and is able to bridge more than one country in his/her creative capacity. Future research may focus on the differing resources and skills required for various international, entrepreneurial configurations.

China is a developing economy with limited SME international exposure. This is due to its late internationalization and its policy preferences for large firms. According to the Global Entrepreneurship Monitor study (Acs et al., 2005), about 50 percent of worldwide start-ups are expected to engage in exports. However, the corresponding percentage of international entrepreneurs in the emerging markets is much smaller, and in some countries, such as India, it is negligible. The impressive growth of the Chinese market and the growing number of local competitors within China, together with government support for going global and the increasing amount of Chinese FDI around the world during the last few years, are clearly revealed in the growing number of exporting SMEs between 2002 and 2006.

Despite the emerging trend of outward foreign direct investment, there have been few empirical studies on the internationalization of Chinese firms and entrepreneurs. In particular, there are few studies of the decision-making processes among nascent international entrepreneurs who begin operations in mainland China. Although this study is a good first step in the right direction, many research gaps still exist and there is a need for additional research on the internationalization of Chinese entrepreneurs and firms. Many studies on Chinese internationalization thus far have focused either on large firms (Matthews, 2006) or environmental (external) factors (Buckley, Clegg, Cross, Liu, Voss,

& Zheng, 2007). Our study, focusing on Chinese entrepreneurship in small and medium enterprises, complements the work by Buckley et al. (2007) by examining the *internal* factors and by focusing on the exports rather than the associated investments to determine why some Chinese companies “go global” whereas others do not. Our study focusing on the exporting behavior of small firms and the current and evolving institutional environment does not nullify the explanatory power of the resource-based and internationalization theories. The principals of these firms act much like their counterparts in the West with respect to export determinants.

Recently, Yamakawa, Peng, and Deeds (2008, p. 71) have suggested that whereas some new ventures may be “pushed” to internationalize by the harsh regulatory environment in the emerging economies, they may also be “pulled” by the relatively more-friendly institutional frameworks in the developed countries. Thus, many new mainland Chinese ventures are interested in listing in Hong Kong and the United States. Oviatt and McDougall (1994, p. 49) have coined the term “international new venture” (INV) to refer to “a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries.” According to Oviatt and McDougall, accelerated internationalization, defined as increased involvement outside the firm’s home base, is a feature of the new global competitive reality.

Few Chinese firms are born global, but the few that exist may merit in-depth case studies. Our research on Chinese entrepreneurship finds many cases to support the argument that new technology is one of the driving factors behind the internationalization of Chinese entrepreneurship. For example, largely by focusing on the development of

high-tech and environmentally-friendly products was Zheng Shengtao able to grow his small family-owned workshop into a regional powerhouse encompassing integrated manufacturing and foreign trade (Huang, 2009). Zhang Yue, who developed a straight-burning absorptive air-conditioning system, co-founded, along with his brother Zhang Jian, Broad Air. Concentrating on high quality and low prices, they have contributed to an improvement in the image of Chinese products in overseas markets, as their products have already been sold to more than thirty countries, including the U.S., Germany, Spain, and France (Sun & Yang, 2009). Deng Zhonghan, armed with a PhD in electrical engineering from UC Berkeley, co-founded Vimicro Corp. and successfully developed the first grand-scale integration chipset in China, which has since being adopted by Microsoft, Sony, and Samsung (Zhang, 2011). Zhao Yang is another success story of a Chinese entrepreneur in the pursuit of innovative business development. A graduate of Peking University and Princeton, Zhao launched MEMSIC Semiconductor in Wuxi New District in 1999. Under his leadership, MEMSIC has grown from fewer than ten employees to a leading company in the development, manufacturing, and marketing of semiconductor chips, and its products are now exported worldwide (Bai, 2011).

Future research should examine whether context-specific influences in other countries alter the relationships between individual and organizational variables and internationalization. Multi-country studies of international entrepreneurship can directly test for institutional and cultural factors. Additionally, the variable measures can be improved. Rather than simply looking for contacts, future researchers may examine international contacts; rather than simply examining education, future researchers may examine international education; and rather than merely focusing exports, future

researchers may look at different entry modes to include imports, joint ventures, foreign investments, licensing, and so forth

Furthermore, much work is still needed in China to better understand which entrepreneurs seek to export and why. Future studies of individual entrepreneurs, on the one hand, and national-level macro studies of global entrepreneurship, on the other, will allow both the depth and breadth required to expand our understanding in this area.

Taken together, the unique characteristics of the Chinese economy and its sociological and cultural structure, as well as the going-global policy of the Chinese government and Chinese market behavior, may help to explain the behavior of Chinese SMEs.

The fact that the internationalization and resource-based theories can adequately explain the internationalization of small, private firms in China does not mean that we should abandon the search for new theories, the application of new theories, or the development of indigenous theories. As noted by Lattemann et al. (2012), large, state-owned companies may have entirely different motivations to internationalization and therefore traditional Western-based theories may be less able to explain their international motivations.

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Table 1. T-tests Comparing Exporting vs. Non-exporting Chinese firms, 2002, 2006, and 2009

	Non-exporting	Exporting	T	Non-exporting	Exporting	T	Non-exporting	Exporting	T
	2002			2006			2009		
Business size	6.34 s.d.= 12.21 N=193	16.86 s.d.= 28.86 N=67	-4.18***	8.37 s.d.=19.15 N=255	20.55 s.d.=34.43 N=145	-4.54***	9.9 s.d.=158.6 N=1043	130.2 s.d.=550.9 N=119	5.4***
Growth aspirations for 5 years	14.72 s.d.44.75 N=178	73.2 s.d.=178.1 N=70	-4.07**	32.07 s.d.=95 N=223	55.26 s.d.=110 N=142	-2.11**	5.2 s.d.=158.6 N=1392	50.8 s.d.=550.9 N=139	2.88***
Business age	4.6 s.d.=3.9 N=215	3.97 s.d.=3.5 N=71	1.17	4.8 s.d.=4.7 N=281	4.38 s.d.=4.37 N=170	0.97	5.2 s.d.=6.1 N=1031	5.6 s.d.=6.1 N=116	0.81
Demographics									
Age of the entrepreneur	38.4 s.d.=10.46 N=267	34.6 s.d.=9.7 N=99	3.14**	36.49 s.d.=10 N=342	32.33 s.d.=9.9 N=217	4.73	38.5 s.d.=10.8 N=1392	38.0 s.d.=10.2 N=139	-0.53

Table 2. Comparing the Characteristics of Exporting vs. Non-exporting Chinese Firms, 2002, 2006, and 2009 (χ^2)

	Non-exporting	Exporting	Non-exporting	Exporting	Non-exporting	Exporting
	2002		2006		2009	
Gender						
Male	57.7	68.7	55.4	67.3	51	56.8
Female	42.3	31.3	43.6	32.7	49	43.2
Total	100	100	100	100	100	100
N2002=366	(267)	(99)	(347)	(217)	(1392)	(139)
N2006=559						
N2009=1531						
	3.66 P=0.03		6.54 P=.00		1.72 P=0.19	
Education						
None					14.9	3.6
Some secondary	60.2	25.0	47.7	26.3	35.3	28.8
Secondary	27.4	34.4	34.8	37.8	33.2	38.8
Post secondary	12.4	40.6	5.0	3.7	16.6	28.1
Graduate			12.6	32.3	0.1	0.7
Total	100	100	100	100	100	100
N(2002)=357	(296)	(96)	(342)	(217)	(1392)	(139)
N(2006)=559						
N(2009)=1531						
	46.5 P=0.00		41.7 P=0.00		27.8 P=0.00	
Business skills						
No business skills	31.6	14.9	35.1	23.0	49	40.3

With business skills	68.4	85.1	64.9	77.0	51	59.7
Total	100	100	100	100	100	100
N(2002)=357	(263)	(94)	(328)	(209)	(1392)	(139)
N(2006)=559						
N(2009)=1531						
χ^2	9.7		8.83		3.84	
P	P=0.00		P=0.00		P=0.50	
Contacts with entrepreneurs						
Does not know and entrepreneurs	20.7	12.1	24.7	20.3	31.8	22.3
Knows entrepreneurs	79.3	87.9	75.3	79.7	62.8	77.7
Total	100	100	100	100	100	100
N(2002)=365	(266)	(99)	(332)	(212)	(1392)	(139)
N(2006)=544						
N(2009)=1531						
χ^2	3.5		1.42		5.36	
P	0.03		P=0.25		P=0.02	
Fear of Failure						
No fear of failure	71.0	82.7	71.3	72.6	62.6	66.9
Has fear of failure	29.0	17.3	28.4	27.4	37.4	33.1
Total	100	100	100	100	100	100
N(2002)= 353	(255)	(98)	(317)	(212)	(1392)	(139)
N(2006)=529						
N(2009)=1531						
χ^2	5.0		.11		0.99	
P	P=0.01		P=0.73		P=0.32	

Innovation						
New, longer than 5 years			47.4	44.1	4	8.6
New, between 1-5 years	97.8	91.9	23.8	33.2	13.6	26.6
New, less than one year	2.2	8.1	28.8	22.7	82.3	64.7
Total N(2006)=545 N(2002)=366	100 (267)	100 (99)	100 (323)	100 (211)	100 (1392)	100 (139)
χ^2 P	6.68 P=0.01		6.10 P=0.05		25.22 P=0.00	
Not new to customers	81.3	58.6	55.8	38.1	54.6	21.6
New to some	13.5	30.3	34.9	52.4	33.8	60.4
New to all	5.2	11.1	9.3	9.5	11.6	18
Total N2002=366 N2006=545 N(2009)=1531	100 (267)	100 (99)	100 (335)	100 (210)	100 (1392)	100 (139)
χ^2 P	19.9 P=0.00		17.7 P=0.00		55.6 P=0.00	
Opportunity perceptions						
No good opportunity	63.7	41.6	53.4	47.4	75.2	66.9
Yes	36.3	58.4	46.6	52.6	24.8	33.1
Total	100 (245)	100 (89)	100 (296)	100 (192)	100 (1392)	100 (139)
χ^2	13.07		1.66		4.59	

P	P=0.00		P=0.11		P=0.03	
Necessity-oriented	53.8	25.3	49.9	35.1	74.7	48.2
Opportunity-oriented	46.2	74.7	50.1	64.9	25.3	51.8
Total	100	100	100	100	100	100
N(2002)=363	(264)	(99)	(337)	(211)	(1392)	(139)
N(2006)=548						
N(2009)=1531						
χ^2	23.6		11.49		44.38	
P	P=0.00		P=0.01		P=0.00	
Competition						
Many competitors	71.9	80.8	71.9	80.8	52.6	77
Some competitors	20.6	16.2	20.6	16.2	21.4	23
No competitors	7.5	3.0	7.5	3.0	26	0
Total	100	100	100	100	100	100
N(2002)=366	(267)	(99)	(267)	(99)	(1392)	(139)
N(2006)=555						
N(2009)=1531						
χ^2	3.78		1.60		50.0	
P	P=0.05		P=0.44		P=0.00	

Table 3: Logistic Regression: International Entrepreneurship in the China Model
 Dependent Variable: Export Expectations (valid N=1595)

Variable	Expected Sign	B	Wald	Exp(B)
Education	+	0.41***	42.96	1.50
Skills	+	0.15	1.32	1.16
Entrepreneurial contacts	+	0.09	0.37	1.09
Fear of failure	--	0.26*	3.79	1.29
Perceived opportunity	+	0.06	0.27	1.06
Opportunity-driven	+	0.62***	26.04	1.86
New technology	+	0.19**	3.86	1.21
New to customers	+	0.517***	34.05	1.66
Competition	+	0.98***	86.42	2.67
Employment	+	0.001**	5.31	1.00
Year dummy 1	+/-	0.26***	1.87	1.29
Year dummy 2	+/-	-0.82***	16.55	0.44
Age of entrepreneur	+/-	-0.01	3.30	0.99
Age of business	+	0.01	1.40	1.00
Gender	+	-0.07	0.29	0.93
Constant		-4.31***	87.23	0.01

One-tailed tests conducted for directional hypotheses; two-tailed tests conducted for two of the control variables since no hypothesized relationship is given.