Full Length Research Paper

Investigating the driving forces of the formation of Chinese born global firms

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The traditional internationalization process theory posits that firms expand to overseas market after solid domestic firms’ experience. However, from the 1980s, we witnessed a breed of young entrepreneurial firms, which took on internationalization early in their evolution. They are called ‘Born Globals’. This study presents an integrative conceptual framework and identifies the underlying driving forces of the formation of Chinese born global firms. Specifically, this paper employs a quantitative survey research method to examine the driving force of the formation of Chinese born global firms. It traces the phenomenon to market level driving forces, company level factors, together with entrepreneur or manager level antecedents that triggered the formation of Chinese born global firms. It applies logistic regression analysis to explore and identify different driving forces. The main findings are threefold: firstly, stronger host country customer demand and stagnated domestic market growth lead to the formation of born global firms. Secondly, more international business trip experience, conference experience and relevant industry experience of founder or high level managers give rise to greater possibility of the occurrence of born global firms. Thirdly, the more globally committed the firms are to overseas market, the more likely for them to become born global firms.

Key words: China, born global firms, driving forces, small to medium-sized enterprises, entrepreneurship.

INTRODUCTION

According to the traditional viewpoint of internationalization described in the Uppsala internationalization model, firms have the ability to go into global market, to survive and even thrive only after accumulating market experience in domestic market (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977). However, in contrast to this increased internationalization process, the recent 20 to 30 years witness the rise of a new class of start-ups that span international borders right at birth. These breeds of start-ups are called born global firms (Hedlund and Kverneland, 1985; Rialp et al., 2005) or international new ventures or born internationals. Born global firms are business organizations of any size or with experience or resources that, from inception, can participate actively in cross-border trade. They seek to derive significant competitive advantage from the use of resources and the sale of outputs to multiple countries (Oviatt and McDougall, 1994; Knight and Cavusgil, 1996; Fan and Phan, 2007; Cavusgil and Knight, 2015). This born global
phenomenon approach triggered empirical and conceptual studies that make up the overwhelming majority of extant born-global literature (Knight and Cavusgil, 1996; Madsen and Servais, 1997; Bell et al., 2001; Moen and Servais, 2002; Knight et al., 2004; Knight and Cavusgil, 2004; Gabrielsson, 2005; Rialp et al., 2005a, b; Freeman et al., 2006, 2010; Lopez et al., 2009; Madsen, 2013; Paul and Gupta, 2014; Cavusgil and Knight, 2015; Falahat et al., 2018). Born-global firms are becoming predominant and this phenomenon continues to evolve.

The choice of entry mode decision of born global firms could be attributed to multiple factors. Researchers will naturally raise the question why these born global firms have the drive to go global so fast. The decision for firms to initiate exporting quickly must be triggered by some antecedents or forces. Although there are a number of studies and a growing body of literature on born global firms, the past research has mostly concentrated on BG phenomenon in small, open developed economies like Sweden, Finland (Nummela et al., 2014), Danish, Isreal (Gabrielsson et al., 2008; Nummela et al., 2014), Belgian (Sleuwaegen and Onkelinx, 2014), Ireland (Nummela et al., 2014), where firms suffer from domestic market stagnation and also on large developed economies like UK, New Zealand or Australia (Chetty and Campbell-Hunt, 2004; Knight and Cavusgil, 2004). The Born Global phenomenon of developing economies, especially emerging and transitioning economies which just opened to foreign world like China is not investigated.

China appears to be a more and more important emerging market. The investigation of the exporting stimuli of Chinese exporters is interesting and important, which will largely augment the export marketing knowledge. The question whether there are born global firms in China, and what drives their formation has not been sufficiently handled. Furthermore, due to the explorative nature of the studies, majority of them on born global firms have always relied on qualitative study methodology, such as longitudinal case analysis, multiple comparative case studies; no research has addressed this emerging phenomenon with application of quantitative survey method. The examination of the antecedents of the formation of born globals remains fragmented (Knight and Liesch, 2016). Some identified internal antecedents alone such as knowledge and international commitment (Cannone and Ughetto, 2014), international entrepreneurial culture like risk, international motivation, proactiveness (Gabrielsson et al., 2014). While, other studies have explored the role played by external antecedents such as market demand and market size, rather than adopting a broader analysis that incorporates both internal and external influences together. This means there is still no comprehensive framework that has determined the formation of born global firms.

As a response to the above limitations, the current study attempts to give insight into the antecedents of the internationalization of Chinese born global companies. Specifically, the current study seeks to answer the question: what factors drive firms to choose fast internationalization process and therefore give rise to the birth of the new born global firms? This paper answers it by exploring the following detailed research questions:

RQ1: What market level environments cultivate these start-ups?
RQ2: What organizational cultures lead to born globals’ early adoption of globalization?
RQ3: What managers’ characteristics nurture their expansion into overseas at birth?

The answer to these questions helps to better understand the new traits of these new emerging firms, provides significant managerial guidelines as what factors to improve in order to foster the firms to internationalize early, and provides necessary support in different ways to help them step up into international market place and achieve superior performance. To the best of our knowledge, this is one of the earliest studies evaluating the formation mechanism of born global firms using quantitative survey method from emerging economies-China in the international arena. In particular, the current study aims to contribute to born global literature by building a systematic theoretical framework to investigate the driving forces of Chinese born global firms drawing upon IO (Industry Organization) theory and RBV (Resource Based View) theory. The current study creatively builds up two by two matrix using export speed and export intensity as two dimensions to classify Chinese exporters into born global firms and conventional firms. In particular, we define the threshold of export speed as ‘the time span between firms’ birth and first time export is less than three years’, and define export intensity as ‘export sales ratio out of firms’ total sales’. Therefore, firms which meet the ‘speed and intensity’ two criteria at the same time are born global firms, that is, firms who realize an export sales taking more than 30 percent of total sales within three years of their inception are implementing an accelerated internationalization, hence are born global firms.

Our analysis demonstrates that the decision by firms to internationalize early or not is firstly determined by domestic and foreign market conditions. Second, we find that managers’ characteristics to a very large extent help predict a firm’s choice between fast or incremental internationalization paths. Third, the results provide strong evidence that firms that are committed more to global market are more likely to become born globals. The rest of the paper is organized along the following lines. In the second section, we review past literature, develop conceptual framework and the theoretical background; propose the hypothesis of born global firms. In the third section, we introduce data collection process and born global selection procedure. In the fourth section which is
empirical study part, we propose the model setup, present empirical results and discuss its managerial relevance. Finally, we review research findings, raise managerial implication of the study and discuss research limitations.

LITERATURE REVIEW AND HYPOTHESIS

Conceptualization

Two streams of economic drivers for internationalization can be traced to firms’ external factors and internal characteristics (Zou and Cavusgil, 1996, 2002). For example, in Zou (1994)’s study on the driving forces of firms’ internationalization strategy, the external and internal conditions of firms act as antecedents. Freeman et al. (2006) also reported that internal and external factors are the driving forces for firms to expand to overseas market. This paper uses this classification to examine the driving forces of Chinese born globals. For external factors, we consider domestic and foreign market environment; for internal factors, we consider managers’ characteristics and organizational characteristics. Figure 1 shows the integrated conceptual framework.

Driving forces of born global formation

External drivers- the IO theory

The Industrial Organization Theory (IO Theory) states that firms’ actions are determined by the external environments they are exposed to. External environments largely have impact on the speed and span of firms’ internationalization. From the perspective of direction of influencing power, there are two broad external factors: the pull force from foreign market and the push force from internal market (Knight, 1997). Demand in overseas market is one key dimension of pull force from foreign market. The strong demand of foreign manufacturers for Chinese firms’ products and service forms a pull power that fosters Chinese firms’ overseas business activities. As noted in past studies, increasingly rising global demand acts as key element that encourages the export of companies (Oviatt and McDougall, 1995; Rialp et al., 2005). Also, on the other hand, the improved overseas market conditions strengthen firms’ interest and commitment to international
boundaries (Rhee and Cheng, 2002). A push from domestic market is characterized by limited market potential or stagnated development. The restrained home market pushes firms to switch to seek foreign market opportunities. As noted by Caves (1982), the reason firms quit domestic market for overseas expansion is largely driven by the saturated home market, slim chance to diversify business units, downturn investment return. In contrast, there is large market waiting to be exploited. Aaby and Slater (1989), McNaughton (2000), Johnson (2004) and Chen et al. (2011) found that adverse domestic market conditions will stimulate enterprises to pursue export business.

In Moen (2002)'s empirical examination on Norwegian SME, he confirms the same statement. Born global firms perceive export market to be more attractive than home market; this stimulates an accelerated internationalization process. In addition, born global firms perceive saturation out of home market, which reversely urges the enterprises to slowly develop the domestic market, and actively expand export business. Gerschewski et al. (2015) also state that the external environment has been considered primarily in terms of factors that facilitate the development of born globals (Madsen and Servais 1997). Market attractiveness- both domestic and export- has also has great weight as triggers; home market unattractiveness and export market attractiveness are significantly higher for born globals than for other exporters.

Hence, we anticipate that in Chinese market:

**H1:** All other things being equal, the larger the demand and the higher the growth rate of foreign market, the more likely will a new venture choose to go international at inception.

**H2:** All other things being equal, the smaller the demand and the lower the growth rate of domestic market, the more likely will a new venture choose to go international at inception.

**Internal drivers- the RBV theory**

The resource-based view (RBV) (Penrose and Penrose, 2009; Rumelt, 1984; Teece and Pisano, 1994; Wernerfelt, 1984) offers perspective to understand why some firms initiate foreign market entry early while others pursue an incremental approach. Recent research highlights the importance of studying the role of resources and capabilities of the BG firms (Laanti et al., 2007; Jones and Coviello, 2005; Knight and Cavusgil, 2004; Moen and Servais, 2002). Consistent with this, we analyze key enabling resources and capabilities that facilitate the firms' internationalization process in their early years. According to Bloodgood et al. (1996), the capability for small-medium sized firms to enter overseas market is closely linked to their accumulated tangible and intangible resources. The more important, inimitable, irreplaceable resource accumulated, the more firms are likely to be more competitive; therefore more prone to pursue fast internationalization. These intangible resources include firms’ knowledge, skill, managing experience, organizational culture, globalization orientation etc. (Wernerfelt, 1984). To a large extent they determine firms' choice between gradual or accelerated globalization.

**Managers**

A rising number of studies explore the relationship between firms’ globalization and managers’ characteristics, a key intangible asset of firms (Cavusgil, 1980; Aaby and Slater, 1989; Zou and Stan, 1998; Westhead et al., 2001). McDougall et al. (1994) stated that the critical factor that makes born global firms to start internationalization right after their establishment is because they possess founders or managerial teams which have special internationalization capability and experience. This enables firms to be willing to and be able to co-align resources to achieve competitive advantage at early state of birth. Many studies have found this statement to be right (Andersson and Wictor, 2003; Crick and Jones, 2000; Crick and Spence, 2005; Sharma and Blomstermo, 2003). Jolly et al. (1992), Madsen and Servais (1997), and Knight and Cavusgil (2004) found that managers of born global firms relatively have more foreign experience than conventional firms. These managers therefore do not perceive domestic market as the single stage for firms to grow and thrive; they instead consider global market as an extended marketplace to draw firms' future, perceive abroad as larger market possibilities. Prior experience and knowledge shorten the psychic distance between firm and its target market; this furthermore decreases uncertainty and risk of operating abroad. In the study by Madsen and Servais (1997), evidence shows managers with rich foreign experience like to operate firms in international competition environment more. When we look at the components of international experience, it consists of multiple forms, used to live abroad, work abroad, receive education abroad. All these contribute to the fast internationalization. In Chen et al. (2009a)'s case study on four Chinese born global firms, they found one case firm, a high technology firm globalized fast because its founder and managers were educated abroad and had worked in the same industry in foreign country. These two forms of international experiences gave them solid business network and familiarity with foreign market environment. In Bloodgood et al. (1996)'s study on American SME, the findings indicate that firms have higher tendency to become born global if their top level managers have more global work experience in the past. Chen et al. (2009b) also
discovered in their case study that an electronic-electric company they conducted interview with started exporting within the first few years of birth because the managers had many chances of undertaking business trips; he attended any international expo and exhibition and got to know many business partners abroad. This made the managers to seek overseas’ opportunities. Besides various forms of international experience, work experience in the same industry also plays an important role (Madsen and Servais, 1997). Past work experience of the managers facilitates further development of the new firm and brings together more business opportunities and industry knowledge (Crick and Jones, 2000; Sharma and Blomstermo, 2003). Based on the above argument, we therefore propose the hypotheses that:

H3: All other things being equal, the more overseas education managers of a new venture receive, the more likely it will choose to go international at inception.

H4: All other things being equal, the more overseas work experience managers of a new venture have, the more likely it will choose to go international at inception.

H5: All other things being equal, the more overseas business trips managers of a new venture undertake, the more likely it will choose to go international at inception.

H6: All other things being equal, the more work experience in the same industry managers of a new venture have, the more likely it will choose to go international at inception.

Organizational culture and orientation

In RBV theory, organizational culture and orientation is another important intangible asset. It presses firms to conquer their limitation and shortage, and to start fast global operation (Young et al., 2003). In the current study, we particularly concentrate on four organizational cultures or orientations to examine the driving forces of Chinese born global firms; they are risk taking ability, proactiveness, international vision and commitment. When firms choose to leave the moist soil of domestic market and foray into a complex and volatile international market, they often need great courage. Entrepreneurial orientation is a construct that best measures this courage and spirit. Entrepreneurial orientation describes a scenario that firms leap fast toward international market driven by unique entrepreneurial competence or vision (Autio et al., 2000; Knight and Cavusgil, 2004; Jiang et al., 2018). Many researchers pointed out that born global firms have very ample entrepreneurial orientation, which drives firms to recognize foreign opportunity and exploit foreign market aggressively (Covin and Slevin, 1989; Dess et al., 1997; Knight and Cavusgil 2004; Ruokonen and Saarenketo, 2009; Su and Wang, 2018; Covin and Wales, 2019). Strong entrepreneurial orientation supports the dynamic investigations and proactive attitude to seek opportunities in a foreign market (Aziz and Hameed, 2019). Entrepreneurial orientation consists of two dimensions: risk taking ability and proactiveness (Kuivalainen et al., 2007). These two provide us a window to understand how firms conquer fierce competition and face volatile environment.

Risk taking is the degree at which firms are still willing to endure risks and pursue opportunity in the face of making risky decision, or firms insisting in investing their resources despite the possibility of them falling (Miller and Friesen, 1982). Studies have found that most born global firms are very aggressive and risk seeking rather than risk averse or conservative firms (Oviatt and McDougall, 1997; McDougall and Oviatt, 2000). Proactiveness refers to an attitude to focus on potential opportunities, seek first move advantage and take advantageous position (Lumpkin and Dess, 1996; Kuivalainen et al., 2007). Born global firms are more proactive than conventional firms. Consequently, we hypothesize that:

H7: All other things being equal, the more risk taking a new venture is, the more it is likely to choose to go international at inception.

H8: All other things being equal, the more proactive a new venture is, the more it is likely to choose to go international at inception.

Global orientation portrays an organizational orientation that a firm’s focus on global opportunities actively increases its commitment to exploit foreign market. Consistent with Knight (1997)’s study, we particularly consider two sub constructs: the international vision and commitment to foreign market. International vision is firms perceiving foreign market as not different from domestic one (Knight, 1997; Moen and Servais, 2002). The stronger a firm’s international vision, the more it is prone to actively look for overseas opportunities. This urges firms to increase speed to internationalize. It therefore make firms more likely to become born global firms (Hu and Chen, 2007). Based on this discussion, we hypothesize that:

H9: All other things being equal, the stronger the international vision of a new venture, the more it is likely to choose to go international at inception.

Commitment denotes firms’ investment of their financial and human resources in international market. Stronger commitment reflects a more determined attitude toward opening international business (Aaby and Slater, 1989; Cavusgil and Nevin, 1981) and an ambition. The more resources firms involve in foreign market, the more they will likely begin foreign operation. We therefore hypothesize that:

H10: All other things being equal, the more committed a
new venture is to international market, the more it is likely to choose to go international at inception.

METHODOLOGY

Data collection and sample

Procedure

We examine the hypotheses using Chinese exporting manufacturers. Respondents in the study are the export marketing managers, senior executives of the export department or even owners of the firms. These managers are directly involved in the daily exporting business of their companies; they are familiar with exporting strategy and their firms' export performance. In order to increase generalizability, the sampling frame is a cross-section of companies in 37 industries. We obtain the data through mail surveys to Chinese export manufacturers. Firms are identified from a popular commerce website Alibaba and the Directory of Foreign Economic and Trade Enterprises of China, a large database collected by Ministry of Commerce of the People's Republic of China.

We tested the content validity and clarity of measures using in-depth interviews with 12 export marketing managers. We modified a few items based on their feedback. We searched the yellow page of Alibaba and collected the company’s information of various industries such as chemistry, electronics, automobile, fabric so on. Altogether, 800 Chinese exporting firms were collected. An invitation email and phone call were sent first specifying that respondents should be expert in export of the firms. We invited them to participate in the survey. After receiving feedback that shows willingness to participate, a cover letter and questionnaire were mailed to the export marketing managers, followed by a reminder note and copy of the questionnaire. Survey was sent to 800 Chinese exporting manufacturers. After deleting undeliverable copies and incomplete copies, we eliminated 41 sample firms which are trading firms or foreign owned companies; finally 155 questionnaires were usable, yielding a response rate of 19.4%.

A comparison between the responding and non-responding firms using MANOVA indicated that in terms of key firms’ characteristics, there were no significant differences between the early and late respondents. This shows that non-response bias is not a major concern. In order to double check our sample’s representativeness, we compare our samples with manufacturing census database from National Bureau of Statistics of China. The result shows a good representativeness of our sample for the whole Chinese exporting companies nationwide.

The sample distribution is as follows: regarding scale of firm, 38.6% of our sample have scale of less than 100 employees, 32.7% firms have a 100-500 employees scale, 11.8% has 500-1000 employees, 12.6% has 1000-5000 employees, 3.4% has more than 5000 employees. The distribution of firm’s sales within the recent one year is: 37.7% of firms have sales less than 20 million, 14.2% have sales between 20 to 50 million, 11.32% firms enjoy sales between 50 to 100 million, 12.26% between 100 to 500 million, and 24.53% with more than 500 million. The distribution of export ratio out of total sales within the recent one year is: 8.11% of firms have export ratio less than 10%, 18% has ratio between 10 to 30%, 12.6% of firms stay between 30 to 50%, 9.9% of firms with 50 to 70%, leaving 51.4% firms larger than 70%.

Born globals filter

From the 155 usable samples, we filter out the BG firms based on the speed-intensity 2 by 2 matrix proposed by Chen et al. (2009a): Firms initiate export business within 3 years of their establishment and export takes no less than 30% of total sales revenue. Using this matrix criterion, it yields 79 BG firms, leaving 76 conventional firms.

Measurement

Most of the constructs were adopted from past literature. We translate them into Chinese and make some necessary modification. In order to verify the accuracy of scale translation, we conducted back-translation from Chinese to English. All multiple-items measurements used in the study apply 7 point scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). The questionnaire has three parts. The first part measures market conditions of external and internal environments using 4 items. Part two investigates managers’ information by asking a multi-item construct. Part three examines 4 constructs composed of 9 items about organizational culture. We had control for industry using year of birth, international experience, firm size, state of ownership. In order to generalize, industry is not narrowed to a particular one; we use industry dummy to control industry effect. The one item international experience measures exporter’s experience in the international market. Firm size is measured with one item scale regarding the number of employees in the firm. Ownership is measured by presenting respondents different types of firm ownership to choose. Next we introduced the measurement of each construct and item. Measurement of external environments comes from the literature (Zou and Stan, 1998; Cavusgil and Zou, 1994; Aaby and Slater, 1989).

Domestic market and foreign market

We adopt measures of domestic and foreign market from previous literature (Zou and Stan, 1998; Cavusgil and Zou, 1994; Aaby and Slater, 1989). We ask respondents the market growth rate and market demand in domestic and foreign market, respectively.

Prior experience of managers

We asked the respondents the following: if they received education abroad; used to work abroad; used to have business trips abroad; used to work in other firms in the same industry.

Entrepreneurial orientation

We used the measurement of Knight (1997), Moen and Servais (2002) and Knight and Cavusgil (2004).

Risk taking ability

It was measured with two items: managers prefer mature products and service to new developed ones; managers like firms to develop in a gradual manner.

Proactiveness

This is measured with the following two items which describe the degree to which firms have proactive orientation or culture: firm has an organizational culture to actively develop international market; we are willing to take risks and make bold decisions in international business.
Table 1. Pearson’s correlation matrix for variables.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
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<tbody>
<tr>
<td>1</td>
<td>Foreign market demand</td>
<td>1</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Foreign market growth rate</td>
<td>0.21</td>
<td>1</td>
<td></td>
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<td></td>
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<tr>
<td>3</td>
<td>Domestic market demand</td>
<td>0.18</td>
<td>0.11</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>4</td>
<td>Domestic market growth rate</td>
<td>0.08</td>
<td>-0.14</td>
<td>-0.14</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>5</td>
<td>Education managers received abroad</td>
<td>-0.04</td>
<td>-0.01</td>
<td>0.04</td>
<td>0.0009</td>
<td>1</td>
<td></td>
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<td></td>
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<tr>
<td>6</td>
<td>Managers’ working experience abroad</td>
<td>0.07</td>
<td>-0.08</td>
<td>-0.04</td>
<td>0.0065</td>
<td>0.04</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>Managers’ business trips abroad</td>
<td>0.16</td>
<td>0.05</td>
<td>-0.09</td>
<td>0.03</td>
<td>-0.16</td>
<td>-0.02</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>8</td>
<td>Managers’ working experience in same industry</td>
<td>0.08</td>
<td>0.18</td>
<td>0.03</td>
<td>0.10</td>
<td>-0.21</td>
<td>-0.27</td>
<td>-0.44</td>
<td>1</td>
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<tr>
<td>9</td>
<td>Risk taking ability</td>
<td>0.07</td>
<td>0.07</td>
<td>0.12</td>
<td>0.02</td>
<td>-0.08</td>
<td>-0.01</td>
<td>0.12</td>
<td>0.09</td>
<td>1</td>
<td></td>
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<tr>
<td>10</td>
<td>Proactiveness</td>
<td>0.04</td>
<td>0.21</td>
<td>0.05</td>
<td>0.12</td>
<td>-0.01</td>
<td>-0.02</td>
<td>0.09</td>
<td>0.11</td>
<td>0.30</td>
<td>1</td>
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<tr>
<td>11</td>
<td>International vision</td>
<td>0.17</td>
<td>0.20</td>
<td>0.10</td>
<td>0.03</td>
<td>-0.06</td>
<td>-0.11</td>
<td>0.12</td>
<td>0.16</td>
<td>0.29</td>
<td>0.66</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Commitment</td>
<td>0.16</td>
<td>0.20</td>
<td>0.02</td>
<td>-0.07</td>
<td>-0.02</td>
<td>0.11</td>
<td>0.01</td>
<td>0.11</td>
<td>0.28</td>
<td>0.59</td>
<td>0.47</td>
<td>1</td>
</tr>
</tbody>
</table>

**International vision**

We measure this construct using three items: we see the world as our firm’s marketplace; it is our firm’s mission to exploit international market; conduciveness of our firm’s culture for actively exploring opportunities abroad.

**Commitment**

We ask respondents how they agree on the following statement: we commit sufficient financial resource into international market; we commit sufficient human resources into international market.

**REGRESSION ANALYSIS**

**Validity and reliability**

Reliabilities for multiple itemed scales are presented in Table 2. The estimated reliabilities for the constructs were high, all surpassing 0.72. We present construct means, standard deviations, and correlations in Table 1. We apply full-information maximum-likelihood techniques in LISREL 8.8 (Jöreskog and Sörbom 2006) to assess model fit, factor loadings, measurement errors and correlations of and between each construct. The overall minimum fit function chi-square for this model is 40.71 (P=0.0061). The comparative fit index (CFI) and the incremental fit index (IFI) is 0.99, and the non-normed fit index (NNFI) is 0.97. The root mean square error of approximation (RMSEA) is 0.073, implying a satisfactory fit of the model. For convergence validity, factor loadings and measurement errors are in acceptable ranges which provide evidence of convergent validity. For discriminant validity among the constructs, based on Fornell and Larcker (1981), every pair of latent factors passes this test, hence shows good discriminant validity.

**Model setup**

We propose a regression model to examine the main questions of this paper. A binary logit model was used because the dependent variable, status of the Chinese firms, born global or conventional global, is dichotomously defined; the dependent variable takes on the value 1 if firms are born globals, and 0 if firms are conventional globals.

For the independent variable, since the inquiry probes into what factors drive firms to be born global, we explore three groups of underlying mechanism, external factors including domestic and foreign market as the first group, managers and organizational culture or orientation as the second group of drivers. We also control for firms’ demographic information.

Hence, the proposed model is specified as:

\[
P(BG)_i = \alpha + \beta_1HSTDEM + \beta_2HSTGRH + \beta_3HMDDEM + \beta_4HMGRH + \beta_5MGR + \beta_6PRAT + \beta_7VISION + \beta_8CMTT + \epsilon
\]
Table 2. Measurement of constructs, factor loadings and reliability.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Measurement</th>
<th>Factor loadings</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrepreneurship orientation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk taking ability</td>
<td>Managers prefer mature products and service to new developed ones</td>
<td>0.67</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>Managers like firms to develop in a gradual manner.</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>Firm has an organizational culture to actively develop international market</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td></td>
<td>We are willing to take risks and make bold decisions in international business.</td>
<td>0.66</td>
<td></td>
</tr>
<tr>
<td><strong>Globalization orientation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International vision</td>
<td>We see the world as our firms' marketplace</td>
<td>0.76</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>It's firms' mission to exploit international market</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conduciveness of our firm's culture for actively exploring opportunities abroad</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>We commit sufficient financial resource into international market</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>We commit sufficient human resources into international market</td>
<td>0.88</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Where \( i \) indexes for firm \( i \), the four variables in the first row are external market environment; they are presented by host market demand (HSTDEM), host market growth (HSTGRH), home market demand (HMEDEM) and home market growth (HMEGRH). Four MGR variables (MGR1 to MGR4) in the second row relate to managers' prior international experience: they are foreign education, foreign working experience, business trips abroad, and work experience in the same industry. Organizational variables are represented by ability to take on risk (RISK), firms' proactiveness (PRAT) (RISK and PRAT constitute entrepreneurship orientation concept), international vision (VISION) and commitment to foreign market (CMTT) (VISION and CMTT constitute the globalization orientation concept). B constitutes the globalization orientation conception, take on risk, business trip abroad impact on the formation of born global firms.

According to previous literature, since on the right hand side, each row of variables is unit of firm, manager, organization, therefore we apply multi-level data analysis (Cohen and Cohen, 1983; Kuivalainen et al., 2007) to examine the antecedents of the formation of Chinese born global firms. The stepwise method of multi-level analysis helps to enhance the prediction power of the model.

**Estimation results**

The parameter estimates for the model appear in Table 3. As more variables are put into the regression, there is an improvement of model fit. The first groups of variables are external driving components. H1 predicted that faster foreign market growth and larger foreign market demand increased probability for firms to become born global firms. Results show no impact of foreign market growth, and show a moderate influence of foreign market demand (\( \beta \) (sult. \( p<0.1 \)). Therefore H1 is partially supportive. H2 is similar to H1: strong support for domestic market increase rate is found (\( \beta \) (sult. \( p<0.01 \)). This shows that the faster the domestic market increases, the more firms will have benign business conditions and more opportunities in home market. This decreases firms' tendency to seek overseas market chance, hence prohibit an accelerated internationalization. This finding is consistent with the statement in IO theory, that external market environments largely determine the structure and strategic choice of firms. The findings show that it is the domestic and foreign markets that foster and guide the Chinese firms to choose or not choose fast globalization at early stage. This has become a pioneer in global market. On one hand, fascinating foreign demand attracts Chinese firms to open up new opportunities; on the other hand, stagnated growth in home market disappoints firms, and indirectly forces them to seek market opportunities abroad. The push and pull together builds external driving forces that make firms to change from conventional firms to born globals.
Table 3. Regression coefficient estimates.

<table>
<thead>
<tr>
<th>Dependent variable (born global or conventional global)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.16</td>
<td>1.26</td>
<td>0.83</td>
<td>-0.13</td>
<td>0.67</td>
<td>1.29</td>
</tr>
<tr>
<td><strong>External drivers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign market growth rate</td>
<td>-0.11</td>
<td>-0.17</td>
<td>-0.35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign market demand</td>
<td>0.21*</td>
<td>0.27*</td>
<td>0.22*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic market growth rate</td>
<td>-0.25**</td>
<td>-0.29***</td>
<td>-0.32***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic market demand</td>
<td>-0.02</td>
<td>-0.04</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Internal drivers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education received abroad</td>
<td>-0.24</td>
<td>0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working experience abroad</td>
<td>0.71</td>
<td>0.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business trips abroad</td>
<td>0.92*</td>
<td>1.17*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working experience in same industry</td>
<td>0.79*</td>
<td>1.06**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Organization culture and orientation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk taking ability</td>
<td>-0.20</td>
<td>-0.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>-0.46</td>
<td>-0.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>0.53*</td>
<td>0.61*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International vision</td>
<td>0.22</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time of birth</td>
<td>-0.05**</td>
<td>-0.05**</td>
<td>-0.05**</td>
<td>-0.05**</td>
<td>-0.06**</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>-0.0001</td>
<td>-0.0001</td>
<td>-0.0001</td>
<td>-0.0001</td>
<td>-0.0001</td>
<td>-0.00005</td>
</tr>
<tr>
<td>Industry</td>
<td>-0.01**</td>
<td>-0.01**</td>
<td>-0.01**</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01*</td>
</tr>
<tr>
<td>Experience</td>
<td>0.37**</td>
<td>0.35**</td>
<td>0.38**</td>
<td>0.30**</td>
<td>0.33**</td>
<td>0.32*</td>
</tr>
<tr>
<td>Ownership</td>
<td>-0.20**</td>
<td>-0.14*</td>
<td>-0.15</td>
<td>-0.15</td>
<td>-0.18*</td>
<td>-0.10</td>
</tr>
<tr>
<td>Log-likelihood (LL)</td>
<td>-94.01</td>
<td>-91.24</td>
<td>-88.89</td>
<td>-82.65</td>
<td>-90.15</td>
<td>-71.21</td>
</tr>
</tbody>
</table>

P value appears in bracket. ***, **, * Statistically significance at 0.01 0.05, 0.10 respectively.

H1 and H2 are therefore partially supported. For the second group of influencing components, the internal drivers were manager and organizational culture/orientation. Examination of managers’ prior experience demonstrates no significant effect of prior foreign education received (β (igni, p>0.1) and work experience abroad (β (broa, p>0.1); so H3 and H4 are not supported. As can be observed, comparatively, business trips abroad (β (1.17, p<0.1) and work experience in the same industry (β (rklin, p<0.05) play a more important role in predicting firms to go abroad early and intensively. H5 and H6 are supported, accordingly.

For H5, it provides evidence that if managers are more exposed to foreign business environment by attending business conference, trainings etc., they tend to learn more about frontier trend of foreign market, strong demand of foreign customers, and also build up more international network and know rich source of business partners. These produce strong pull strength to drive firms abroad; it dramatically shortens preparation time span and drive Chinese firms to accelerate their speed to enter foreign market. For H6, finding demonstrates a key role played by managers’ past work experience in same industry (β(n1.06, p<0.05). Therefore H6 is supported. This result suggests that managers’ previous work experience in other companies in the same industry endows them with better knowledge of the market. The managers may take advantage of past know-hows and the perceived risk is largely decreased as well. Meanwhile, rich network relationship obtained through prior work experience in the industry reduces barrier for firms to enter global market, which subsequently accelerates firms’ internationalization process.

Although a number of past literature have proved the significant role played by foreign education and foreign work experience (Athanassiou and Nigh, 2002; Kundu and Katz, 2003), our study, on the other hand, did not find this effect (H3, H4). Nowadays in China, different
Table 4. Summary of hypothesis.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Hypothesis</th>
<th>Empirical results</th>
<th>Support or not</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The larger the demand and the higher the growth rate of foreign market, a new venture is more likely to choose to go international at inception</td>
<td>The larger foreign demand is, firms are more likely to be BG</td>
<td>Partially support</td>
</tr>
<tr>
<td>2</td>
<td>The smaller the demand and the lower the growth rate of domestic market, a new venture is more likely to choose to go international at inception</td>
<td>The smaller the domestic market growth rate, firms are more likely to be BG.</td>
<td>Partially support</td>
</tr>
<tr>
<td>3</td>
<td>The more overseas education managers receive, a new venture is more likely to choose to go international at inception</td>
<td>Not significant</td>
<td>Not supported</td>
</tr>
<tr>
<td>4</td>
<td>The more overseas working experience managers have, a new venture is more likely to choose to go international at inception</td>
<td>Not significant</td>
<td>Not supported</td>
</tr>
<tr>
<td>5</td>
<td>The more overseas business trips managers take, a new venture is more likely to choose to go international at inception</td>
<td>Consistent with hypothesis</td>
<td>Supported</td>
</tr>
<tr>
<td>6</td>
<td>The more working experience in the same industry managers have, a new venture is more likely to choose to go international at inception</td>
<td>Consistent with hypothesis</td>
<td>Supported</td>
</tr>
<tr>
<td>7</td>
<td>The more risk taking a new venture is, it is more likely to choose to go international at inception</td>
<td>Not significant</td>
<td>Not supported</td>
</tr>
<tr>
<td>8</td>
<td>The more proactive a new venture is, it is more likely to choose to go international at inception</td>
<td>Not significant</td>
<td>Not supported</td>
</tr>
<tr>
<td>9</td>
<td>The stronger the international vision, a new venture is more likely to choose to go international at inception</td>
<td>Not significant</td>
<td>Not supported</td>
</tr>
<tr>
<td>10</td>
<td>The more committed a new venture is to international market, it is more likely to choose to go international at inception</td>
<td>Consistent with hypothesis</td>
<td>Supported</td>
</tr>
</tbody>
</table>

from western countries in the literature where it is very common for people to pursue educational degrees abroad, most entrepreneurs in China are born and raised in their home country; people who receive education abroad and even have worked abroad are still very few. Rather, in current China’s reality, the most influential factor that pushes managers to have international vision is business trips and prior work experience in the industry (H5, H6). For organizational culture and orientation level of internal driving forces, H7, H8 and H9 predicted the role of risk taking, proactiveness and international vision in born globals’ formation. As shown in the results, the three coefficients are insignificant, suggesting no influence on firms’ fast internationalization. Hence, H7, H8 and H9 were not supported. It may be because there is no large difference between Chinese firms in their level of organizational culture or orientation. The decision for firms to take a quick globalization approach is more driven by external market environment and managers’ characteristics. In H10, we anticipated that the more committed a firm is to global market, the more it is likely to become a born global. The test for H10 shows a significant result (β = 0.05), indicating commitment is a driver that presses firms to seek opportunities beyond their boundary at early stage. H10 is supported. This finding is consistent with results presented by Western scholars, which show that if a firm plans to employ a fast internationalization approach, it needs to have sufficient financial resources and human capital involved in overseas boundary. Table 4 summarizes the hypothesis testing results in the paper.

**DISCUSSION**

There has been a growing body of literature investigating the phenomenon of born global firms; however, there has been lack of research on the underlying mechanism why Chinese born globals seek fast internationalization using an integrated framework. To fill this gap, we targeted Chinese firms, applied an external–internal-drivers research framework to examine their driving forces, and to understand why they adopt accelerated manner. To the best of our knowledge, our study is the first attempt to empirically test the driving forces of born global firms under China context using a survey method. The study adds value to the previous research by raising an integrated conceptual framework. We adopt three groups of drivers to examine the mechanism, namely external environment (domestic market and foreign market), managers’ characteristics, and organizational culture/orientation. Our investigation also extends previous work by introducing ‘speed-intensity’ 2 by 2 matrix to classify firms into either born global firms or conventional firms. We demonstrate that, both external and internal market environments have an impact on the
formation of born global firms. As external conditions, expanding overseas’ demand and stagnated domestic market growth push for an early internationalization to seek more possibilities. As internal conditions, more business trips expose managers to global mindset; work experience in same industry prepares managers with rich business network and knowledge about the market, which in turn push their entry into foreign market. Meanwhile, the more committed firms are the more tendencies for them to become born global because foreign competition always requires abundant financial support and a well-trained team.

This study has important theoretical and managerial implications. From theoretical perspective, our study is the first to examine the driving forces of born global firms with a systematic framework. Our findings advanced the understanding of born global phenomenon by targeting the emerging developing economy-China. From managerial standpoint, the study found the direction and magnitude of the impact of each driving force on born global formation, identified factors that mostly press firms to step into foreign boundary right after birth in the context of Chinese market environment. This adds value to the management of Chinese firms. For example, results show business trips of managers abroad play a major role; this suggests that when managers of a firm do have overseas’ experience or receive education abroad, their understanding of foreign market will be enhanced. By attending more global expo or conferences, they will learn more about the socio-culture, economics difference between China and target foreign country, and understand keen interest and tastes of foreign customers.

To sum up the four hypotheses on managers, the results demonstrate that firms either possess a born prior experience/knowledge (exante) before their establishment like experience in same industry, or they should accumulate richer and richer knowledge after their birth (ex post) like participating more in international conferences or expos. The entire prior or post knowledge is a learning process. It happens either before or after birth. If firms find they own abundant prior experience, they can aggressively march to outside world, accelerate the pace of internationalization; if firms lack prior experience, they can learn while doing the new business, expose themselves more frequently to international occasions to know more about overseas market, or recruit employees with rich international experience. With respect to organizational culture/orientation, results indicate that if firms plan to take a fast internationalization approach, they need to invest more financial and human resources into global market to guarantee the success of fast internationalization.

**Conclusion**

According to the traditional viewpoint of internationalization described in the Uppsala internationalization model, firms have the competence to go global, survive and even thrive only after accumulating market experience in domestic market. However, in contrast to this incremental internationalization process, the recent 20 to 30 years witness the rise of a new class of start-ups that span international borders right at birth. These breeds of start-ups are called born global firms, international new ventures or born internationals. The Chinese market has also witnessed the emergence and booming of born global firms. The current study answered the question that what factors drive firms to choose fast internationalization process and therefore give rise to the birth of the new breed born global firms. This study specifically identified external market level factors, organizational level factors and managers’ traits level factors underlying the internationalization of Chinese born globals from inception. At the market condition level, the study found that stronger host country customer demand together with the stagnated domestic market growth mutually lead to the formation of born global firms. The resource-based perspective states that firms’ foundational resources are particularly important in business environments because they offer a stable basic for strategy development. Knowledge possessed by Chinese born globals turns to be a key resource. At the management team level, the research revealed that managers in Chinese born globals can gain ex post experience by attending more international conferences, taking more international business trips, and having founder or high level managers with relevant industry experience. This leads to the occurrence of born global firms. At the organizational level, the findings imply that international entrepreneurial commitment is especially important to these firms and drive them to go international. The more commited the Chinese born globals are, the more likely they are to become born global firms. The above findings not only help us better understand new traits of these new emerging firms, but also provide significant managerial guidelines as what factors to improve in order to foster firms to internationalize early, and how to provide necessary support in different ways to help them step up into international market place and achieve superior performance.

**CONFLICT OF INTERESTS**

The author has not declared any conflict of interest.

**REFERENCES**


Madsen TK (2013). Early and rapidly internationalizing ventures:


