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International entrepreneurial firms in Chile: an exploratory profile

ABSTRACT

The internationalization of new small and medium-sized enterprises is a challenge for many developing countries, especially those with open economies and small internal markets like Chile. This study, in an exploratory way, analyzes some of the factors that determine how new ventures are oriented to international markets from their early-stages. This paper develops a model that integrates variables related to firm characteristics like industrial sector, competitiveness, and size of the firm with a degree of internationalization. The empirical analysis uses data from the *Global Entrepreneurship Monitor's* (GEM) adult population survey carried out in Chile during the period 2007-2013 (n=4,208). An ordinal logit regression model was used to test the hypotheses. Descriptive results show that 12.8% of Chilean entrepreneurs in the sample have a relatively high tendency towards internationalization and that the factors related to competitiveness are significant in respect to this tendency. The size of the firm and the propensity to create employment are also significant. Practical implications are discussed.

Key words: Early internationalization; industrial sector; size; competitiveness; Chile; *Global Entrepreneurship Monitor*.

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1. Introduction

Internationalization and globalization have been two of the most important economic events of the last decades. According to a report from the United Nations Economic Commission for Latin America and the Caribbean, there has been an intense movement towards the internationalization of Latin American companies during the last few years (CEPAL, 2011). Free trade agreements have contributed to this growth, generating opportunities which some Latin American countries have fully exploited (Dominguez & Brenes, 1997; Carneiro & Brenes, 2014). Studies have demonstrated the ability of SMEs to create jobs, improve income distribution, introduce greater innovation in the markets and generate more competitiveness (Andersson & Wiktor, 2003). The internationalization activity of SMEs leads to increased competition, economic growth, job creation and improvement in the trade balance, in addition to other benefits through the multiplier effect (Shih & Wickramasekera, 2011). Although small businesses are an important source of growth and job creation, they appear to be underrepresented in the international economy in relation to their contribution to the national and local economies (OECD, 2005). Many SMEs have advanced in their internationalization process and many countries are adopting specific policies and programs to enhance the potential of these businesses, thereby promoting their inclusion in global markets. Both the public and private sectors are playing an important role in helping SMEs to become more active in international trade (Czinkota, 2002; OECD, 2005).

In Latin America, is a growing trend to provide incentives for the internationalization of SMEs (Milesi & Aggio, 2008). Internationalization could be a key factor for competitiveness and development in many small and restricted markets in Latin America and also in the larger economies of the region (Acs & Amorós, 2008). However, competing abroad is not without its challenges for Latin American companies. The vast majority are small which restricts their ability to exploit economies of scale and limits the amount of resources available for expansion, access to world-class talent and the ability to

leverage their brands in global markets (Carneiro & Brenes, 2014). Furthermore, the region displays two very different pictures with regard to large internal market economies, such as Brazil and Mexico, which contrast with small export oriented economies, such as Colombia and Chile (Amorós & Bosma, 2014). However, few studies have analyzed this process from the point of vision business trends and new internationalization (Moori-Koenig et al 2005; Alvarez, 2002; Estrada et al., 2006; Milesi & Aggio, 2008; Dimitratos et al., 2014). For this reason, the general objective in this study is to analyze the behaviour of new small firms that internationalize early in emerging economies using Chile as the case study. Chile is an interesting case because it is a small open economy with 22 trade agreements with 60 countries that represent 85% of World GDP (ProChile, 2014) and is one of the economies with the highest level of development in Latin America

Previous research on Chile shows that most new firms do not have an orientation towards selling their products or services to international markets (Amorós et al., 2010). Although the same report shows that about 39% of early stage startups have a certain degree of orientation to foreign markets, it is still necessary to consolidate the international approach of entrepreneurs. Dimitratos et al. (2014), based on a survey of the activities of 116 internationalized Chilean SMEs, suggests that the propensity towards networking with national and international partners and risk taking increases the probability that the company will become international. Moreover, these research results show that most international business transactions of small Chilean companies occur in South America, coinciding with other findings that support this view (Felzensztein et al., 2015). A study of Chilean export SMEs in psychic distance (Geldres, Etchebarne & Bustos, 2011) concludes that small businesses mainly export to nearby countries psychologically, while large companies trade with distant markets (López, Kundu & Ciravegna, 2009). Small businesses prefer to export to countries whose attitudes, norms and cultural values relate to their own.

Additionally, the export basket of most Latin American countries is based on natural resources. The CEPAL study (2013) identifies that SMEs in Chile (and the rest of Latin America) are at a great

disadvantage in relation to big business, is the SME sector and specifically some new companies that are gaining in relevance in the internationalization process with respect to the idea of 'bucking' the trend within a local market highly dependent on the export of natural resources (Acs & Amorós, 2008, Dimitratos et al., 2014). In the case of Chile, two companies export more than 70% of total annual exports (Codelco and Escondida, both belong to the copper mining sector). This is normal in the region but, on average, the high concentration of exports of Latin American firms is 66% (CEPAL, 2013). The same report states: export enterprises in Chile are equivalent to 0.8% of the total number of companies in the country, which follows a similar trend in the region, where on average only 1% to 2% of companies are exporters, with the exception of Costa Rica with 4%. There was a steady growth in the number of exporting firms from 2002 to 2011. In the case of Chile, the rate was 26%. The study also shows a high level of rotation (permanent export, new markets, export activity) of over 35% while 20% of companies are permanent exporters (5-7 years exporting continuously). The Latin American average is 30% and despite the small number of exporting firms in this sector it is critical for domestic GDP and job creation.

On the other hand, the information provided by the Global Entrepreneurship Monitor (GEM) is of great interest when analyzing the results of the internationalization of SMEs in Latin American countries. The GEM methodology allows for the calculation of a variable that represents a good approximation of business export orientation (Reynolds et al., 2005). This indicator, which will be used in this study, is measured by the percentage of customers that an entrepreneur has abroad.

In this context it is interesting to analyze in more detail the characteristics of firms that start the process of internationalization. Therefore, this research focuses on two main objectives: the first is to characterize the internationalized start-ups and second, to test an explanatory model that incorporates variables related to the company and the entrepreneur with the trend towards an internationalization environment. After this introduction, the paper is organized as follows. The next section reviews some relevant literature related to international entrepreneurship. This is followed by a description of the relevant variables and their corresponding hypotheses. Next is explained the methodology and the main

results. Finally conclusion includes discussion and implications .

2. Literature review and hypotheses development

This research belongs to a growing field of study that brings together entrepreneurial and international businesses, which has been defined as *international entrepreneurship*. In the international business field, the concept of international entrepreneurship has been defined, by McDougall and Oviatt (2000, pp. 903), as “a combination of innovating, proactive, and risk seeker conduct, that crosses the local borders and tries to create value in the organizations” and also as a wide organizational process, included in the organizational culture of the firm, that looks at generating value through the exploiting of opportunities in the internal market (Dimitratos & Plakoyiannaki, 2003). Therefore, this field of study helps to identify companies that are born for the international markets or *born global*. Under these concepts the *entrepreneurship* theory can also be used to analyze the international behaviour of a firm (Andersson, 2000). The classic author Schumpeter (1934) remarks that the internationalization of companies is an example of a strategic change that may be defined as an entrepreneurial act.

The theory of resources and capabilities (Barney, 1991) has helped the study and definition of the resources that entrepreneurs can influence. The capabilities and resources theory that has been present in the strategic management area since the 1980's is a good theoretical framework to study the behaviour of new internationalized companies (Wernerfelt, 1984; Barney 1986, 1991). This theory argues that the resources, abilities, and competences of the firm facilitate the development of sustainable competitive advantages. The theory, based on resources, mainly indicates that differences in stockpiled organizational resources are an important determinant of the company strategy and its performance. These higher order resources have been defined as the assets, capabilities, information, knowledge, and technology, controlled by the company. These resources allow firms to conceive and implement strategies that provide effectiveness and efficiency, and in the specific case of the SMEs gain competitive advantage in different markets (Porter, 1991; Wernerfelt, 1984). In the international business field, the abilities and

resources theory helps explain how the possession of higher management orientations, and other similar factors, when adopting certain strategies can work as important advantages for the SMEs that decide to enter into the international markets (Knight, 2001). These companies cannot afford to compete with bigger and tangible resources. They can only compete with intangible resources, namely the ability to do more with less (Peng & Luo, 2000). Current studies (Autio, George & Alexy, 2011) indicate that repeated and intense situational uncertainty, as caused by internationalization, accelerated this learning process in start-ups and expedited the adaptation to market environments. Organizational factors, resource viability, and shared experiences were important determinants of the variability in capability development.

The size of a company has also been a predominant factor in the study of internationalization processes, which have been traditionally oriented to large multinationals that cross borders over extended periods of time. In general, these traditional theories have not considered the transformation process from a small or medium-sized local enterprise into a multinational enterprise (Oviatt & McDougall, 1994). However, during the last few years a lot of research has been developed around new internationalization tendencies, a phenomenon that has been observed in the global market. In the case of the *born global* companies (which are born for internationalization), what has generated debates are: the applicability of the traditional internationalization theories, new model proposals and the joining of certain fields of study such as entrepreneurship and international businesses (Räisänen, 2003). With regard to entrepreneurship in emerging economies, empirical evidence shows that market transitions have been facilitating the creation of many start-ups (Peng, 2001) and consequently firms that have early international operations. From this literature review it has been possible to detect a set of issues influencing early internationalization and set out the hypotheses introduced below.

2.1. Depending variable: exporting intensity as a measure of Internationalization

The percentage of customers living out-side of the country, is the proxy for the degree of internationalization of new ventures and the dependent variable. Generally, this measurement corresponds to the foreign sales rate divided by the total sales in a determined period, and it has been used in research

since the early 1980's until now (Cavusgil, 1984; Moini, 1995; Preece et al., 1998; Robertson & Chetty, 2000; Zahra & Garvis, 2000; Dimitratos et al., 2004). According to Madsen (1989), exporting intensity takes into account the exporting potential of the firm. This internationalization measurement has been closely related to other internationalization activity measurements of *new ventures* (McDougall, 1989), reflecting the extent that exportations have contributed to the success of firms (Moini, 1995). Also the "speed" of internationalization is relevant to the understanding of the early internationalization processes of the new firms (Lautanen, 2000; Harveston et al., 2000). However, it is necessary to point out that the exporting intensity measurement has limitations in the case of *new ventures*, which frequently have to be in business for several years in order to develop an extensive exportation schedule.

2.2. *Industrial Sector*

Several researchers have already pointed out that the international markets are more and more homogeneous in terms of customer's preference (Hedlund & Kverneland 1985). A study by Oviatt and McDougall (1994) suggests that the present markets and the global nature of demand constitute one of the main forces that encourage the formation of companies that internationalize faster from their birth. The industrial sector is a variable that is related to company internationalization, being considered in many cases as a control variable. The type of industry in which a company is involved, may affect the performance of the firm abroad (Erramilli, 1990; Dimitratos et al., 2004). The features of an industry play a meaningful role in a company's development in the external market; it has even been argued that the characteristics of the industry are more important than the company in its early internationalization (Boter & Holmquist, 1996). Although the service industry has become a driving force in the global economy and represents one of the most dynamic sectors of international trade (Ripollès, Blesa & Moing, 2010 ; Rubalcaba, 2013) in Latin America there is a combination of strong global service sectors with larger commodity and raw material industries. In the main, the manufacturing sectors continue to represent a significant part of international trade and many "Multi-latinas" (public and private) are intensive exporters of goods generally related to the natural resources sectors. In this context, a study on Chile

(Iacavone, Mattoo & Zahler, 2011) notes that service industry firms have on average a much lower propensity to export than manufacturing enterprises. Even though services are gaining presence and are dominated by SMES, manufacturing firms continue to have more prevalence in international markets. In consequence the following hypothesis is stated:

H1: Companies in transformation sectors (manufacturing) are more prone to early internationalization.

2.3 Firm international competitiveness readiness

At the firm level, competitiveness is described by a set of several aspects: profit increase, productivity, cost reduction, value added, market share, export activities, innovation, quality products, among others. Currently, this concept is relevant because achieving this goal continues to be a challenge for virtually all companies. Firms can reach competitiveness if they are able to manage a set of distinctive resources and capabilities (Barney, 1991). If we consider a firm within a specific environment, this ability to manage these resources is conditioned by environmental factors: institutions, education, market conditions, infrastructure, access to financial resources, etc. So, a mix of internal and external factors promotes competitiveness within the firm. The GEM Report has determined innovation and technology as two internal factors in young firms that promote competitiveness.

New firms can use their innovation expertise and flexibility to foster international expansion and performance (Lu et al. 2009; Baum, Schwens & Kabst, 2011). Companies can develop two types of innovation: the innovation of products that will allow them to offer better products than their competitors and process innovations that will allow them to reduce production costs and compete with better prices. Bloogood et al. (1997) states that the adoption of a differentiated product strategy by *new ventures* is positively related to the extent of their internationalization. However, the same study rejects the thesis that states that the greater the innovation of the *new ventures*, the greater the extent of the internationalization. A case study of 10 Finnish firms (Autio et al., 2011), suggests that “their heterogeneous experiences during internationalization may render international start-ups more innovative and proactive than their

domestic-focused counterparts. That is, such firms may be more innovative because they have internationalized, rather than becoming internationalized because they possessed innovative capabilities". In these terms, technology and the ability to innovate constitute essential factors to take on the challenges of globalization. The abilities and resources theory states that different organizational stockpiled resources are an important determinant of strategy and company performance (Barney, 1991). These resources include assets, capabilities, information, knowledge and technology, which are controlled by the company and allow them to conceive and implement strategies that provide effectiveness and efficiency and obtain competitive advantages in different markets (Porter, 1991; Wernerfelt, 1984). On the other hand, one of the features of distinctive capabilities are their inimitability, with them being a unique combination of technology, routine and skills (Camisón, 2002). In the field of internationalization processes, technology doubtlessly plays a remarkable role as a differentiation factor (Oviatt & McDougall, 1997). Knight, (2001) suggests that technology acquisition has an effect on the strategic competencies of the firm and on international development. Products and services derived from the use of new technologies could be related to early internationalization (Autio, Sapienza & Almeida, 2000; Yiu, Lau & Bruton, 2007).

At the environmental level, the GEM Report has defined competition and opportunities as the external factors in young firms that promote competitiveness in international business. Related to competitive environment, at the moment of entering the international market, the environment in which the company is to be found plays an important role. From the strategic management literature, Yeoh (1994) distinguishes three environment categories:

- a) Dynamism (uncertainty), characterized by how fast things change and industrial innovation, the same as the uncertainty or lack of foresight shown in the actions of their competitors and of their clients (Miller et al. 1988).
- b) Hostility (threat) presented by the nature and intensity of the competition, changes and multiple improvements in the firm's industry (Covin & Slevin, 1989; Miller & Friesen, 1978) and,

c) Heterogeneity (variations) of the firm's markets that require diversity in the production marketing orientation.

Specifically the concept of hostility refers to or characterizes the environments with uncertain stages in the industry: intense competition, an overwhelming and challenging business atmosphere, and a relative lack of exploitable opportunities (Covin & Slevin, 1989). Several internationalization researches have studied the atmosphere hostility variable as a factor that affects the internationalization processes (Dimitratos et al. 2004; Zahra & Bogner, 1999; Robertson & Chetty, 2000; Balabanis & Katsikea, 2003). Due to a number of internal factors firms are pushed into exporting as they face a declining demand in their domestic market or they encounter increasing competition from larger firms within their domestic market or an increasing number of rivals offering similar products (Westhead et al., 2002). Meanwhile, the external factor of 'opportunities', which also encourages firms into exporting, describes a set of possibilities for doing business in the global economy. This situation has been described as market opportunity detection (Jantunen et al. 2005; Etemad, 2004).

In summary, firm competitiveness has to be described through looking at both internal and external factors, with those factors which help the firm to compete in a competitive world being the most important. Also, companies that operate in a dynamic international environment are forced to adapt and innovate much faster than usual. Based on the degree of innovation, competitive environment, opportunities and use of technology as a proxy of competitiveness the next hypothesis is stated:

H2: The greater the competitiveness of the new venture, the greater the tendency to early internationalization.

2.4. The relative size of the new venture

Historically, international business activities seemed to be the exclusive territory of large companies, as in the case of the multinationals. However, this seems to be no longer the case, due to the growing insertion of SMEs in the global markets (McDougall & Oviatt, 2000). Bloogood et al. (1997) analyze the importance of strategies and structural characteristics (international experience, innovation,

size and competitive advantage) in terms of internationalized high technology firms. The results show that the size of *new ventures* is positively related to the extent of internationalization. Results suggest that product differentiation research and the size of the company are strongly related to the internationalization of *new ventures*. Zahra and Bogner (1999) point out those larger new ventures employ more resources for research and development support and introduce more new products than smaller companies. The limitations of resources for small companies, together with the need to reach scale economies, are some of the reasons why SMEs have a lower tendency towards internationalization (Andersson et al., 2004).

The number of employees and sales describes firm size. The relevance of the level of sales depends on the local economy. Whereas, the size of new ventures and “born global”, less than 50 employees is within the SMEs category, is considered as a key resource in their international expansion. Initiating the export process in SMEs, in some cases, involves having or attracting specialized human resources. According to Nabi (2010), human resources practice is part of basic order capability. This part is described as the recruiting of the right people, their updating and the control of their performance as well as managers being exposed to international experience. All these aspects correspond to a set of conditions found in large internationalized firms. Nevertheless this capability is scarcely developed in export SMEs. Initiating the export process in an SME, in some cases, involves having or attracting specialized human resources. Initially, the export process is located in the sales department or, in some cases it is the entrepreneur that develops export activity. Then, in many but not all firms, a Foreign Trade area is created. This area concentrates the human resources involved directly with export activities and export capabilities development (Kirpalani & Macintosh, 1980). In this research, business partners or owners and jobs to be created over the next 5 years, as a way of describing how a firm employing more human resources is able to reach more markets, describe the actual and potential size of the firm (relative size). With this framework, the hypothesis is:

H3: The greater the relative size of the company (present and future), the greater is the tendency towards early internationalization.

2.5. Additional explanatory factors: age and Educational Level

Educational level has traditionally been proposed as one of the factors that promotes the internationalization of firms. The Psychic distance concept defined by Johanson and Vahlne (1977), considered as factors those things that disrupt the flow of information between the firm and the market: differences in language, culture, political systems and level of education. Additionally, numerous empirical studies confirm the relationship between educational level export intensity and other performance measures (Ibeh & Young, 2001; Autio & Sapienza, 2000). Brooks and Rosson (1982) consider the type and level of education to be an important factor contributing to internationalization (Shih & Wickramasekera, 2011). Higher educated individuals show more interest in the firm's internationalization (Garnier, 1982, cited in Karami et al., 2006). Ibeh, (2003) provides evidence that firms in developing countries with high levels of entrepreneurial orientation are more likely to have managers with a high (graduate) educational level. Regarding age, the literature suggests that it has an inverse effect on the export performance of firms. This is based on the presumption that young people are more open and have a cosmopolitan mindset (Brooks & Rosson, 1982) which makes internationalization more favorable to them (Moon & Lee, 1990). Numerous studies have analyzed the effect of age on international performance (Obben & Magagula, 2003; Nakos et al., 1998).

In this context, the learning orientation of the Owner/CEO of an SME should be noted. For example, learning facilitates the acquisition of the knowledge needed for rapid internationalization (Weerawardena et al., 2007). The CEO leads the development of specific learning capabilities within the firm that allow it to develop knowledge and, as a consequence, internationalize through leveraging the knowledge used to develop the niche product (Weerawardena et al., 2007). The learning theory adopts the view that firms may be active learners and can constructively obtain and use intelligence on foreign markets to their advantage (Voudouris, Dimitratos & Salavou, 2011). Innovations may also stem from learning interactions with both organizational and environmental sources (Bhuiyan, Bulent & Simon, 2005).

3. Methodology

This research used the Chilean GEM database for the years 2007-2013. From the original sample¹ was selected those classified as early stages entrepreneurs, which refers to those people that were either starting a business or are owners and managers of a new business that is no more than 3.5 years old. The sample of these entrepreneurs corresponds to 4,208 individuals. This allows for a punctual analysis of those entrepreneurs in the early stages and who are able to own a born global company or a company of fast internationalization. For this purpose, the internationalization degree of these entrepreneurs by means of the percentage of direct sales they achieve in the foreign markets was identified. The ones that sell more than 25% of their products or services to foreign markets are considered as entrepreneurs with a high tendency to fast internationalization. In the sample, 39.2% declared that they didn't have any international orientation, 48% stated that they had between 1-25% of their consumers outside of the country and 12.79% claimed they had more than 25% of their consumers outside of the country. For the specific case of *international competitiveness readiness* was calculated an arithmetic sum of different variables related to competitiveness and innovation. Table 1 details all the analyzed variables and their respective measurement specifications

---Table 1 here ---

Considering that the dependent variable is a non-continuous variable, for the estimations an ordinal regression model was used. The ordinal regression allows us to shape the dependency of an ordinal-polytomous answer (Mc Cullagh, 1980), in this case the exportation degree, over a group of independent predictor variables, that can also be categorical or continuous (co-variable).

¹ The total sample included 37.560 individuals that were interviewed following a strict research protocol determined by the GEM Consortium (Reynolds at al., 2005). For more references about global results from GEM see www.gemconsortium.org

4. Results and discussion

Table 2 below, summarizes the general descriptive statistics of the used variables.

---Table 2 ---

Table 3 shows the probability estimations of the ordinal logit regression model. Some categorical variables have one value as a point of reference. Therefore, this needs to be taken into account for the correct interpretation of the data. Thus, it is not estimated in the model because it is redundant.

With regards to the *industrial sector*, was observed that none of the industrial sectors are significant, even manufacturing and consumer oriented sectors have negative signs. Consequently, for this sample H1 is rejected. These results could be related to the heterogeneity of the analyzed firms, a strong prevalence of consumer-oriented activities (See table 2) and to the fact that many export-oriented firms are combining services-to-consumer in their portfolios. Services have been more crucial for the development of Latin America and Caribbean countries, providing strong economic dynamism and creating resources for the creation of labor and welfare (Rubalcaba, 2013). Further analyses using specific types of business activities could give better explanations.

The proxy variable of *international competitiveness readiness*, is significant and with a positive sign. Many early entrepreneurs in Chile expressed that they have relatively innovative products and services, even though the degree of technology and research and development that new firms have in developing countries is low when compared with developed ones (Aulakh, Kotabe & Teege, 2000; Bruton, Ahlstrom & Obloj, 2008). Innovation is growing more slowly in Latin America than in OECD countries. In Latin America, investment in research and development (R&D) grew from an average of 0.5% of gross domestic product (GDP) in 2004 to 0.63% in 2009, while in OECD countries it grew from 2.2% to 2.4% during the same period. In a context of low R&D investment, resulting from the private sector being primarily specialized in natural resources or low-technology manufacturing, together with an adverse regulatory framework for business creation, it is not surprising that fewer technological start-ups

are created in Latin America than in OECD countries (OECD, 2013). In some cases, the empirical evidence, using GEM data, showed that very few entrepreneurs declared the use of new technologies (Amorós & Bosma, 2014). Meanwhile, the Chilean sample showed a greater degree of international competitiveness readiness that includes a certain degree of technological use and development which is related to the propensity towards more internationalization. Therefore H2 is not rejected.

Being a dynamic enterprise through the tendency to generate employment is significant and positive on the probability of internationalization. In relation to the *relative size* of the company, both the number of partners and the number of employees is significant and positive. Hence, H3 is not rejected.

The control variables, with regards to the characteristics of the entrepreneur, show that age and **the** squared term of age are not significant even with age having a negative sign. This is interpreted as the younger the entrepreneur, the lower the tendency to internationalize. In relation to gender, females (compared with males) are less prone to the internationalization of their enterprises and to *education level* (both significant and positive). This is interpreted as: the lower the degree of education, the less the tendency to internationalize. The control *years* (not reported to simplify the table of results) are positive and significant with respect to the base year (2007).

---Table 3 here ---

5. Conclusions

Despite the exploratory nature of this research, the present study provides additional empirical evidence about the internationalization process of new ventures in Latin America. This study validates findings related to international entrepreneurship giving quantitative empirical support to theories that state firm's capabilities are significantly related to internationalization (Autio et al., 2011). Second, the results contribute to the literature on international entrepreneurship by addressing calls for extending empirical research on international entrepreneurship beyond developed countries (Kiss et al., 2012)

specifically on the under-represented Latin America region (Amorós et al., 2014; Dimitratos et al., 2014). Using Chile as a case study has proven very interesting due to its characteristic of a small but interconnected and competitive economy, with a relative big sample of entrepreneurs, which enabled us put emphasis on some firm-level characteristics such as industrial sector, competitiveness readiness and relative size which complements the theoretical discussions of previous works on Latin America (López et al., 2009; Amorós et al., 2014; Felzensztein et al., 2015).

Regarding the hypotheses, the first one was related to the industrial sectors. The H1 argument stated that firms in the manufacturing sectors must have a greater tendency towards internationalization. The results do not corroborate this hypothesis. This result is similar to prior research that shows that early internationalization is not necessarily linked to high-tech sectors (Rialp et al., 2005) and this is more evident in Latin America (Amorós et al., 2014). Even though this result suggests that the industrial sector is not prevalent, is important to highlight the relevance of understanding better the heterogeneity of new firms and their internationalization processes. Many firms in Latin America (independent of their size) continue to be involved directly or indirectly in the natural resources based industrial sectors. These companies demand a wide range of products and services, which can be, supplied locally (Cuero et al., 2014). This situation has promoted the development of numerous companies, which are extractive, manufacturing, consumer oriented, or professional services. In the case of this research, the sample is composed of a set of highly internationalized companies from these sectors. According to the hypotheses validation, belonging to the manufacturing sector does not represent an influence on internationalization. This result shows that a company's ability to become internationalized depends on its resources and capabilities (Ibeh & Weehler, 2005), and also because, new firms are combining different strategies to operate in international markets (Brenes et al., 2014; Dimitratos et al., 2014). This is independent of the industrial sector to which the company belongs. In Chile, this situation is a consequence of the lack of successful public policies oriented towards the promotion of internationalization in some specific sector (Muñoz-Gomá, 2007). Generally, Latin American countries are not focusing their SMEs towards a

specific sector that could be more internationally successful (CEPAL, 2013). In spite of this, there are some successful recent endeavors, for example in Colombia, in both the tourism sector and hand made products, although this does not represent an emergence of a new trend in the region. The second hypothesis was concerned with competitiveness readiness. The results found strong support for the idea that a combination of some firm capabilities related to innovativeness in product-services, the use of technology and business opportunity recognition has an impact on the degree of internationalization (Knight & Cavusgil, 2004). For Latin American firms it could be very relevant to develop more competitive products and services (innovation) and the use of technology could also help them to be more competitive and in consequence be more connected to international markets (Brenes et al., 2014; Ciravegna et al., 2014). Finally, the third hypothesis is related to the relative size of the firm (actual and future) and the degree of internationalization. The results support for this statement. The level of commitment, which a company shows through its internationalization process, represented by their expectations for an increase in the number of employees (potential jobs), is coherent with a proportional increase of international customers in the future. This is explained by a basic concept of internationalization, which sees it as one way in which firms grow. Probably this result is also related to the firms' capabilities and, in the specific case of the sample, to firms that have more resources (Dimitratos et al., 2014), including human capital (owners and employees) which could improve their internationalization processes.

This exploratory study also gives some practical implications. Many Latin American firms continue being very conservative in their approach to internationalization giving priority to the local markets (Brenes et al., 2014). For instance, while more entrepreneurs in Chile showed a high tendency to internationalize compared with other Latin America countries, these entrepreneurship were not very competitive, in terms of innovation (technological and business models), given the low use of new technologies (Amorós & Bosma, 2014; Amorós et al., 2014). This is linked to the fact that many new firms in Latin America, including Chile, are focused on commerce or services to the final consumer,

activities that are not usually sophisticated and have little added value. This can also explain why the hypothesis related to the industrial sector does not corroborate, given the high prevalence of commercial activities and therefore, that these sectors would also be prone to the exportation. Additionally many of them are self-employment initiatives both of which decrease the tendency towards fast internationalization in the early stages (Amorós & Bosma, 2014). Everything that has been mentioned previously represents a challenge since, in order to be able to expedite the internationalization process in Latin America, more sophisticated entrepreneurships would be required, both competitively and technologically, and at the same time with a growth capacity. At a public policy level, a way of encouraging the development of this type of enterprise is to support more dynamic sectors independent of the industrial sector. If the average of entrepreneurs in the region has a relatively low degree of competitiveness, many “traditional sectors” could also be dynamic with the correct incentives (Felzensztein, et al., 2010). Likewise, particularly in countries with a limited internal market, such as Chile, the fast internationalization of new ventures can be a very important factor for the development of SMEs. These SMEs can eventually be converted into consolidated companies that generate more employment and raise the “standard” of innovation and development.

5.1. Limitations and future research

As with every research, this work presents areas for improvement, since it is just a starting approach using data on entrepreneurs. First, this research excludes additional organizational and environmental variables as it only emphasizes the use of a proxy of international competitiveness readiness to predict the likelihood of a firm becoming an early stage international new business. This is also a limitation of GEM Data. Further investigations may incorporate some specific variables, for example more detailed types of activities or other variables related to firm performance. Other potential analyses could include interactions between the independent variables and further investigation on the cause-and-effect relationship of the merits of the investigated variables. Some particularities of the

entrepreneurs can moderate the competitiveness of the firm or the industrial sector and also, activities can moderate some relationships. Concerning these interactions, longitudinal studies involving case examinations of early internationalized firms would be very helpful. Additionally the Chilean setting for this research can face the generalizability of the findings of this study. The investigation of international entrepreneurship and early internationalization of new firms in different countries may seek to extrapolate the findings of this research in other countrywide settings. Finally, future research can analyze some different patterns of international new ventures like born global, micro-multinational (Dimitratos et al., 2014) among others.

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Table 1: The Description of Variables from GEM Data

Dependent Variable			
	Variable	Question	Measurement
	<i>Internationalization</i>	What proportion of your customers are from outside your country?	1. None 2. Between 1% and 25% 3. Between 26% and 75% 4. 76% or more
Independent Variables			
	Variables	Question	Measurement
<i>Firm international competitiveness readiness</i> (Arithmetic sum of these variables, 4 to 10)	Innovation	How many of your potential customers consider your product or service as new and innovative?	1. All 2. Some 3. None
	Competition	At the moment, are there many, few or no businesses offering the same services and / or products to potential customers?	1. Many competitors 2. Few competitors 3. No competitors
	Technology	How long has the technology or procedures necessary to produce the product or service of your business been available?	1. Less than a year 2. Between one and five years 3. More than five years
	Opportunities	In the next 6 months, do you think there will be good opportunities to start new businesses where you live?	1. Yes 0. No.
<i>Industrial sector</i>		Four standard categories that are derived from a group of activities under their Standard Industrial Classification (SIC) Code.	1. Extractive, agriculture, fishing and related. 2. Manufacturing (processing) and wholesale trade 3. Trading activities to the final consumer (retail) and personal services. 4. Professional and business services
<i>Relative size of the new venture</i>	Owners	Business partners or owners	Number of Partners
	Employees	Current Employees	Number of Employees
	Potential jobs	Jobs to be created over the next 5 years	Number of Employees
Control Variables			
<i>Age and educational level</i>	Education	GEM Education categories	Non or Basic Primary; Secondary (not finished); Secondary; Post secondary; Graduate
	Age		
	Age ²		
	Sex		Male=0; Female=1

Table 2: Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
Internationalization	1.80	0.76	1	4
Extractive	0.03	0.16	0	1
Manufacturing	0.16	0.37	0	1
Consumer oriented	0.40	0.49	0	1
Professional services	0.12	0.32	0	1
Competitiveness readiness	6.73	1.38	4	10
Employees	2.06	7.72	0	215
Potential jobs	10.46	55.93	-1	2000
Owners	1.84	1.38	1	10
Secondary (not finished)	0.10	0.30	0	1
Secondary	0.42	0.49	0	1
Post secondary	0.35	0.48	0	1
Graduate	0.08	0.27	0	1
Female	0.46	0.50	0	1
Age	39.50	13.16	18	99

Table 3: Estimates of Ordinal Logit Regression Model

Variable	Category	Coef.	Error typ.	Z	Sig.	Confidence Interval 95%	
						Lower Limit	Upper Limit
<i>Industrial Sector</i>	Extractive	0.205	0.329	0.620	0.532	-0.439	0.850
	Manufacturing	-0.381	0.246	-1.550	0.121	-0.863	0.101
	Consumer oriented	-0.213	0.243	-0.880	0.381	-0.689	0.263
	Professional services	0.056	0.255	0.220	0.827	-0.443	0.555
<i>International Competitiveness readiness</i>		0.163	0.023	7.110	0.000	0.118	0.208
<i>Relative size of the International New Venture</i>	Employees	0.014	0.003	4.810	0.000	0.008	0.020
	Potential jobs	0.003	0.001	2.420	0.016	0.001	0.006
	Owners	0.085	0.023	3.670	0.000	0.039	0.130
	Education	Secondary (not finished)	0.370	0.167	2.220	0.026	0.044
	Secondary	0.381	0.141	2.710	0.007	0.105	0.656
	Post secondary	0.530	0.143	3.700	0.000	0.249	0.811
	Graduate	0.728	0.189	3.850	0.000	0.358	1.099
	Basic ^a						
Sex	Female	-0.200	0.063	-3.170	0.002	-0.325	-0.076
	Male ^a						
Age		-0.012	0.013	-0.990	0.321	-0.037	0.012
<i>Age</i> ²		0.000	0.000	0.950	0.342	0.000	0.000
<i>N</i>		4208					
Wald Chi ²		545.36			0.000		
Pseudo <i>R</i> ²		0.0642					

Includes years of the survey application as controls, shown to simplify the table. Significant in bold.

a. This parameter is set to zero because it is redundant