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Christian A. Cancino Freddy C. Coronado

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# Exploring the determinants of born-global firms in Chile

Christian A. Cancino and Freddy C. Coronado

*Department of Management Control and Information Systems,  
Faculty of Economics and Business, University of Chile, Santiago, Chile*

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## Abstract

**Purpose** – Although much has been studied about the characteristics of born-global firms in developed countries, studies about developing economies are far and few between and most tend to be exploratory. The paper aims to discuss these issues.

**Design/methodology/approach** – This paper studies how Chilean born-global firms behave and examine five distinct factors as compared to enterprises that gradually internationalize. A logistic regression model was applied to a sample of 115 small- and mid-sized enterprises (SMEs) that presented a growing and non-occasional internationalization to study the change in the probability that a young Chilean exporter will be classified as born-global.

**Findings** – The results show that a foreign capital network, an economic development agencies (EDAs) network, the cultural distance from the countries receiving the exports, the localization of the SME in the capital city, and the company's size are factors that significantly increase the probability that a young Chilean exporter will be classified as born-global. In contrast with the high technology content of the born-global companies that has been reported in developed countries, the technology level was not relevant in how quickly the Chilean SMEs internationalized.

**Originality/value** – New public policy proposals may be inferred from the results of this paper. For example, the EDAs may increase their effort in promoting internationalization, particularly in geographical regions by taking into account the characteristics of each city and its entrepreneurs. This could help diminish the positive effect of location (i.e. perverse effect of centralization) presented in this study.

**Keywords** SMEs, Chile, Born globals, Internationalization, Network contacts

**Paper type** Research paper

## Resumen

**Propósito** – Si bien se ha estudiado bastante sobre las características de las empresas globalizadas desde que empiezan (born globals, o BG) en países desarrollados, para las economías en desarrollo son muy pocos los trabajos existentes, teniendo la mayoría un carácter exploratorio.

**Diseño/metodología** – Este trabajo estudia el comportamiento de empresas que desde el principio nacen globalizadas (BG) en Chile y examina cinco factores distintivos con respecto a las empresas de internacionalización gradual. Se utiliza un modelo de regresión logística sobre 115 PYMES que presentan una creciente y no ocasional internacionalización para estudiar el cambio en la probabilidad de que una joven empresa Chilena exportadora sea clasificada como BG.

**Resultados** – Los resultados indican que las redes con capitales internacionales, las redes con Agencias de Desarrollo Económico (ADE), la distancia cultural de los países receptores de la exportaciones, la ubicación de las PYMES en la ciudad capital, y el tamaño de la empresa son factores que significativamente aumentan la probabilidad de que joven empresa Chilena exportadora sea clasificada como que nació globalizada (BG). Contrario al alto contenido tecnológico de las empresas BG que ha sido documentado en países desarrollados, el nivel tecnológico no es un factor relevante para explicar la rapidez con que una PYME chilena se internacionaliza.

**Implicancias prácticas** – Las ADE Chilenas podrían aumentar su esfuerzo para promocionar la internacionalización, particularmente en regiones geográficas, tomando en cuenta las características de cada ciudad y sus emprendedores. Esto podría ayudar a disminuir el efecto positivo de la ubicación (efecto perverso de la centralización) presentado en este estudio.

**Originalidad/valor** – A partir de los resultados de este trabajo podrían elaborarse nuevas propuestas de política pública.



## Introduction

One of the characteristics of small- and mid-sized enterprises (SMEs) when they engage in international trade these days is their rapid growth strategy and positioning in markets other than the domestic market. According to Madsen and Servais (1997), firms displaying this type of behavior are called born-global, international new ventures, global start-ups, high technology start-ups or instant internationals, among other designations. All of these businesses stand out for having started to export to diverse international markets as from day one or soon thereafter (Laanti *et al.*, 2007). In this paper, we will refer to these firms as born-global firms.

The born-global focus is novel because it seems to be an alternative to the traditional form of SME internationalization (Johanson and Vahlne, 1977, 1990). Traditionally, enterprises gradually internationalized by incrementally allocating more resources as they became more familiar with the business and with foreign markets.

According to Andersen (1993), born-global firms and gradually internationalizing businesses differ insofar as the basis for their internationalization. For example, first, prior experience of the born-global firm founders and their understanding of the target export market are key to deciding when to export (Harveston *et al.*, 2001), second, born-global firms focus on rapid internationalization because they have a larger network of contacts both in the private and the government sectors (Crick and Jones, 2000; Hermel and Khayat, 2011), third, literature states that born-global firms are usually involved in more technology sectors (Crick and Spence, 2005), and fourth, born-global firms try to avoid a risky dependence on the domestic market – few suppliers, fewer customers, etc. – by creating an international outlook for distant markets in particular (Autio *et al.*, 2000).

Although much has been studied of the characteristics of born-global firms in developed countries (Chetty and Campbell-Hunt, 2004; Crick and Spence, 2005; McKinsey and Co., 1993), studies of developing economies are few and far between and most tend to be exploratory. These include studies on Colombia (Escandón, 2009), on Chile (Amorós *et al.*, 2012; Cancino and La Paz, 2010), on Brazil (Dib *et al.*, 2010), to name a few.

The general objectives of this paper are to understand how born-global firms behave in Chile and to examine the distinctive factors as compared to enterprises that internationalize gradually. This is particularly important when analyzing an economy where most entrepreneurs show no tendency to sell their products and services to customers in other countries (Amorós *et al.*, 2010). This is strange as empirical evidence shows that entrepreneurship in countries with small domestic markets, like Chile, have an international orientation. Nonetheless, recent reports by the Global Entrepreneurship Monitor indicate a growth in the percentage of entrepreneurship in initial stages that have at least one customer abroad (Amorós and Poblete, 2011). This undoubtedly attracts those interested in understanding the particular features of internationally oriented companies.

There are four specific objectives in this paper. First, to investigate whether Chilean born-global firms are involved only in more technological sectors or whether they are also players in sectors classified as low-tech. Second, to understand how networking with government economic development agencies (EDAs) and with the private sector influences the internationalization of born-global entrepreneurship. Third, to identify the scope of the internationalization of born-global firms in terms of cultural distance; and fourth, to study whether the location of the SME in a metropolitan area has an impact on the probability of becoming born-global.

Using a database of 1,500 exporting SMEs of the Pymexporta Program from ProChile (Agency for the Economic Development, which promotes entrepreneurial internationalization) and of the Production Development Corporation (CORFO), a sample of 115 SMEs was defined that presented a growing, non-occasional trend in their exports-to-total sales ratios. Using the criteria of Knight and Cavusgil (1996) to classify companies as born-global, 46 in the sample were classified as born-global and 69 as gradually internationalizing. A logistic regression model was applied to the sample of 115 exporting SMEs and the probability was evaluated of a young export company being classified as born-global on the basis of six variables:

- (1) networking with companies abroad;
- (2) networking with government agencies providing export support;
- (3) the technology level of the company's sector of business;
- (4) the cultural distances with the countries receiving the exports;
- (5) the location of the SME in the capital city; and
- (6) company size.

The results of our work are mixed. On the one hand, the Chilean born-global entrepreneurs exhibit behavior in common with those in developed countries, where network contacts are considered to be a determining factor in an early and rapid internationalization (Crick and Spence, 2005; Freeman *et al.*, 2010). Chilean born-global firms also look for culturally distant markets, distinguishing them mainly by language and distance in kilometers that must be traveled. They focus their efforts on entering the economies in Asia, North America and Europe, where there are more consumers and a larger-scale production and distribution to those markets can be used as an advantage.

On the other hand, the results of this work show that there are important differences in terms of the influence of the technology sector in which the company engages. In the case of Chilean born-global firms, we found that the technology level was not relevant in how quickly they internationalized. In fact, for many companies, their business was linked to the extraction and cultivation of natural resources, a common element in less economically developed countries. This contradicts the common element of a high technology content for the born-global companies that is seen in developed countries. Another element pertaining to Latin American economies and that is interesting to analyze is the higher concentration of commercial activity in the capital cities. This is repeated in the case of the companies analyzed, i.e., a young Chilean exporting SME that sets up a commercial or administrative office in the capital has a greater probability of becoming a born-global firm, regardless of whether its productive operations are located in regions.

In order to fully understand the determinants in born-global entrepreneurs, one must, without doubt, study other equally important attributes not discussed in this paper. The attitude of the entrepreneur himself is certainly a determinant factor in the rapid internationalization of a company. It would be interesting to continue exploring the characteristics of born-global firms in developing countries like those in Latin America as it would be easier to design and apply public policies that foster a rapid involvement of SMEs in the international arena.

The rest of this paper is structured as follows. Section 2 provides a review of the literature on born-global firms and explains the hypotheses of the study. Section 3 discusses the methodology used. Section 4 presents the results of the model and, finally, Section 5 provides the conclusions of our work.

## Literature review

The strategies most often used by SMEs to internationalize are direct foreign investment, exports or licenses, among others (Wolff and Pett, 2000). A pattern of entrepreneurial internationalization is defined in terms of the time that elapses between the foundation of the company and the moment when it makes its first export. Obviously, there are at least two distinguishable patterns of internationalization. First, companies that gradually internationalize (Johanson and Vahlne, 1977, 1990), characterized by a time lapse of many years to internationalize between the foundation of the company and its first export. And second, companies that internationalize quickly, or born-global firms (McDougall *et al.*, 1994; Madsen and Servais, 1997), which begin to export from day one or soon thereafter.

### *Gradual internationalization strategy*

A theory arose in the 1970s that addressed situations seen in the internationalization not only of multinationals but also of smaller businesses. Called the Uppsala Model in the literature, this approach used assumptions different from the traditional internationalization theories: Theory of Industrial Organization, Theory of Internationalization and Dunning's Eclectic Theory (Alonso, 1994). Yet the fundamental variable in the analysis is the knowledge and information impacting the behavior of each company in entering foreign markets, not just the magnitude of its resources in competing. The behavior of SMEs in international trade is better explained from this perspective. The Uppsala Model explains why companies generally begin an internationalization process at a later stage in their development and why that process takes place gradually (Johanson and Vahlne, 1977).

This model suggests that a company targets culturally close markets in beginning its internationalization, i.e., markets that have a similar language, political system, trade practices, etc. The start of an international expansion will thus entail little risk and be implemented mainly through indirect exports to similar markets, which allows the company to improve its understanding of the foreign markets. According to Denis and Depelteau (1985), companies doing business internationally possess a great understanding of foreign markets as a result of years of operating in those economies. That understanding helps them to commit more resources to international trade. In this virtuous circle of foreign market understanding and resource commitment, a dynamic is generated whereby the firm becomes gradually engaged, represented by the Uppsala Model (Blankenburg-Holm, 1995).

### *Accelerated internationalization strategy*

The gradual approach to internationalization is a good explanation for the behavior of a large number of entrepreneurships that decide to first enter their domestic market, and gain a better understanding of the characteristics and operations of the business, before undertaking any internationalization. However, the gradual approach does not always prove to be the right explanation for the pattern of internationalization of all companies. At this time, there is debate between the supporters of a gradual approach to internationalization and supporters of the accelerated approach. There are many papers demonstrating, in particular, the appearance of new companies that view internationalization as a process that can begin from day one and can take place at great speed (Jones, 1999; Madsen *et al.*, 2000; McDougall *et al.*, 2003; Moen, 2002; Sapienza *et al.*, 2003; Servais and Rasmussen, 2000).

Crick and Spence (2005), for example, say that small yet technologically innovative businesses often exhibit speedy internationalization. Having significant economic resources is no longer the most important factor to them. Instead, it is important to possess competencies, abilities and experience, as well as network contacts, in order to do business internationally right from the start.

According to Zhou (2007), for early internationalizing firms, the knowledge about foreign markets comes from the ongoing search for entrepreneurial opportunities beyond national borders, rather than the gradual accumulation of experience by participating in foreign markets. This means that the mechanism allowing young exporters to emerge is no longer based on knowledge gained from years of experience in each market, but rather on emphasizing identifying and exploring business opportunities (Oviatt and McDougall, 2005; Zahra, 2005).

Table I presents a summary, albeit not complete yet illustrative, of some causal factors in the rapid internationalization of the SMEs studied in literature.

Table I identifies how the combination of factors linked to the entrepreneur himself, to his network contacts, to the strategic focus defining how each entrepreneurship acts, among others, has an influence on the greater speed in the patterns of SME internationalization.

The foregoing is particularly important in analyzing the context of Chile as its economy has demonstrated, in recent years, that Chilean entrepreneurs are starting to orient their businesses toward foreign markets in earlier stages (Amorós and Poblete, 2011). Although Chile's exports, which surpass 80 billion dollars annually,

Dimension	Attributes of the accelerated internationalization approach (born-global firms)	
Characteristics of the founder	The founder's vision of developing business globally right from the start.	Coviello and Munro (1997), Oviatt and McDougall (2005), Autio and Sapienza (2000), McDougall <i>et al.</i> (2003).
	The founder has worked for companies abroad or for local companies with an international focus, which helps him undertake international business with a perception of less risk.	McKinsey and Co. (1993), Madsen and Servais (1997), Andersen (1993), Sharma and Blomstermo (2003), Chetty and Campbell-Hunt (2004)
Organizational capacity	The company learns quickly about the characteristics of the export markets.	Chetty and Campbell-Hunt (2004), Rialp <i>et al.</i> (2005)
	The company has unique intangible assets that allow for a rapid internationalization (such as government and private networks)	McKinsey and Co. (1993), Knight and Cavusgil (1996), Madsen and Servais (1997)
Strategic focus	The companies do business in production sectors with a high technology level	Coviello and Munro (1997), Roberts and Senturia (1996), Jones (1999), Autio and Sapienza (2000), Burgel and Murray (2000).
	The geographic distances are not perceived as barriers to the company's international expansion.	Madsen and Servais (1997), Kuivalainen <i>et al.</i> (2007), Laanti <i>et al.</i> (2007)
	The company aims to position itself in specific market niches	McKinsey and Co. (1993), Knight and Cavusgil (1996), Madsen and Servais (1997)

**Table I.**  
Causal factors in rapid internationalization

**Source:** Cancino and La Paz (2010)

come mainly from large companies exporting copper, farming and livestock, forest and fish products, a growth has also been seen in the number of new companies declaring that they have an internationalization strategy in place since day one.

Some of the dimensions shown in Table 1 are investigated in this paper, particularly in relation to organizational capacity and strategic focus. The variables to be analyzed are: foreign capital network; EDA network; cultural distances between the countries to which exports are sent and the home country; the technology level of the industry to which the entrepreneurship belongs; the location of the company; and, finally, company size.

The network theory underscores the impact of networking in entrepreneurship growth and internationalization (Johanson and Mattsson, 1988; Johanson and Vahlne, 1990). This paper will study two types of network contacts that seem to be fundamental to born-global companies.

*Foreign capital network.* When an entrepreneur maintains a relationship with people or companies that do not do business in Chile but rather in other international markets, an intangible asset can be identified that could boost the speedy take-off of a new organization. There is an implicit transfer of knowledge and experience in international markets in raising foreign capital. This type of contribution is known as smart capital in which as well as capital, the necessary know-how to support decision-making is also transferred. The network between an entrepreneur and other international companies is a fundamental asset in managing SMEs:

*H1.* Participation of foreign capital increases the probability of a Chilean exporting SME being a born-global firm.

*EDA network.* When an entrepreneur wishes to develop his network contacts, he does so not only in the private sector, but also among all public sources of support to production development. The particular importance of a government network to SMEs is a well-known fact in the literature, especially since many countries set up a good number of EDAs to boost enterprise creation, entry to new markets, the development of innovative products and carrying out research and development (R&D), among other elements (Coviello and Munro, 1997; Moen and Servais, 2002). There are at least 50 EDAs in Chile (Corfo, Sercotec, ProChile, etc.), all of which aim to expand entrepreneurship in the country:

*H2.* Taking part in the EDA network increases the probability of a Chilean exporting SME being a born-global firm.

But it is not just government and private networking that are important for rapid internationalization. For Johanson and Vahlne (1990), the geographic and cultural distance between the markets could condition the export behavior of SMEs, taking into account the risks implicit in cross-border business.

*Cultural distance.* According to Andersen (1993), the gradual approach to internationalization means that SMEs begin exporting to similar markets, ideally neighboring markets, in the early stages of development. A notable and differentiating aspect of born-global firms is that they do not decide where they will export based on smaller existing cultural distances (Laanti *et al.*, 2007). Born-global firms base their decision regarding their target markets on the profitability expected from each and they manage to position themselves in those markets because of the international

experience that the entrepreneurs themselves or their network contacts have. In the case of Chile, the SMEs know that their products will not attain the highest value on the domestic market or in neighboring countries, all with a cultural proximity or similar development. The return is greater when they can position themselves in culturally distant markets like Asia, Europe and even North America. That is why we should expect Chilean born-global firms to export mainly to culturally distant markets:

- H3.* The cultural distance from its target markets increases the probability of a Chilean exporting SME being a born-global firm.

Another element that is analyzed to a great extent in the literature on born-global firms bears a relationship to the features of the product or service marketed abroad (Bell, 1995; Oviatt and McDougall, 1994). Provided it is innovative, knowledge-intensive or can be rated highly technological, it will be easier to enter international markets and take a competitive position.

*Technology level.* Complementary to the vision of the entrepreneur, his network contacts, and the choice of export markets, the technology level of the product sold is also a stimulus to a rapid internationalization (Zahra *et al.*, 2000). Innovative entrepreneurs undertake activities that aim to create new technologies that will result in increasing their competitiveness compared to companies doing business in the same market or in creating new business opportunities for themselves in other markets (Fonfria, 1997). Thus, investment in R&D and technology development inside companies are key factors in explaining a substantial part of their internationalization strategy (Molero, 1998):

- H4.* The technology level of the industry in which the company does business increases the probability of a Chilean exporting SME being a born-global firm.

*Location.* According to Bonilla and Cancino (2011), a company's best results depend materially on how it relates to its environment since the context in which it sets up operations either facilitates or restricts strategic decisions. For Acs and Armington (2004); Belso-Martínez (2005), there are differences in the levels of entrepreneurial activity depending on the city where the company sets up business. It is indisputable that Latin American economies exhibit a high concentration of production and commerce in their capital cities, which are yardsticks for employment, prosperity and growth opportunities for families. For that same reason, EDAs usually publicize their activities and support networking much more in capital cities. According to Amorós *et al.* (2013), experts and promoters of new entrepreneurship in peripheral cities perceive that their regions are in a worse position to gain access to funding than their peers in capital cities. It is common for metropolitan regions to be where most international trade fairs are held and where more network contacts can be developed. Consequently, we believe that the location of the commercial or administrative office of an exporting SME in the country's capital city could boost its exports:

- H5.* Establishing offices in the country's capital city increases the probability of a Chilean exporting SME being a born-global firm.

Finally, company size has always been one of the variables that must be included in a study about foreign trade.



*Size.* According to Fonfría (1997), there is a positive relationship between the size of a company and its export performance. Larger companies are better able to expand resources and absorb risks than smaller ones. Consistently, Erramilli and Rao (1993) argue that the larger the company, the greater its bargaining power and, hence, the greater its probability of success in terms of exports:

*H6.* Firm size increases the probability that a Chilean exporting SME will be a born-global firm.

### Data and research method

A logistic regression model was used to test the above hypotheses and to study the change in the probability that a young Chilean exporter will be classified as born-global. The information used in this study was taken from the databases of the Pymexporta Program from ProChile and the Production Development Corporation (CORFO).

Nearly 1,500 exporting SMEs were analyzed in these databases, some of which only export occasionally. Therefore, the initial sample was filtered to study those that had defined an internationalization strategy, either as a born-global firm or a gradually internationalizing one. Only the companies that had been operative for more than three years since start-up and were exporting regularly were left in the sample. This narrowed it down to 115 exporting SMEs. By applying the criteria of Knight and Cavusgil (1996), who classified companies as born-global if they began to export within three years after start-up and exported more than 25 percent of sales, 46 of the 115 exporting SMEs were classified as born-global and 69 as gradually internationalizing.

For our case, the dependent variable born global indicates the probability that a recently created SME will be defined as born-global. The closer the value is to 1, the higher the probability of being defined as born-global. According to information from the aforementioned databases, following are the independent variables and their operationalization.

Foreign capital network: is defined as a dichotomous variable that adopts the value of 1 if there is any international origin in part of the SME's capital and 0 if the capital is comprised of solely Chilean money.

EDA network: is defined as a dichotomous variable that has a value of 1 if the firm has funding support from government agencies furthering SME export development and 0 if they do not.

Cultural distance: is defined as the percentage of culturally distant customer countries compared to all countries to which an SME exports. Based on language difference (Luostarinen, 1980), we classified as culturally proximate countries those where the official language is Spanish or Portuguese. Countries where other languages are spoken were classified as culturally distant. The greater the cultural distance, the closer the indicator's value is to 1.

Technology level: is defined as a dichotomous variable that uses a value of 1 if the company participates in technology sectors rated high-technology or medium-high-technology by the OECD and 0 if they are rated medium-low or low. We used the rating of CIU-v3.

Location: is defined as a dichotomous variable that adopts the value of 1 when the SME sets up commercial and administrative operations in Santiago, Chile (Metropolitan Region) and 0 when it is in any of the other 14 regions of the nation.

Size: is defined as a categorical variable that indicates the number of employees in each exporting SME. The value of the variable is 1, 2 or 3 depending on whether the number of employees is in the range of 1 to 9, 10 to 49 and 50 to 250, respectively.

In Table II, Panel A below, we present the descriptive statistics of the sample. Table II, Panel B also shows the matrix of correlations between the model variables. A direct relationship to the probability of being born-global can be seen in most of the variables. The exception is size, which presents the opposite relationship.

### Results of the model

On the basis of the results shown in Table III, Panel A, there are three variables that have statistically significant values. They are the EDA network, cultural distance and location. An increase in the values of these variables will increase the probability that a company be classified as born-global.

#### Variable

##### Panel A: descriptive statistics

	Mean	SD	Min.	Max.	<i>n</i>
1. Born-global firm	0.400	0.492	0	1	115
2. Foreign capital network	0.243	0.431	0	1	115
3. Economic development agency network	0.470	0.501	0	1	115
4. Cultural distance	0.570	0.399	0	1	115
5. Technology level	0.078	0.270	0	1	115
6. Localization	0.600	0.492	0	1	115
7. Size	1.617	0.812	1	3	115

##### Panel B: matrix of correlations

	1	2	3	4	5	6	7
1. Born-global firm	1.000						
2. Foreign capital network	0.240	1.000					
3. Economic development agency network	0.263	0.359	1.000				
4. Cultural distance	0.327	-0.043	-0.052	1.000			
5. Technology level	0.026	0.061	-0.015	-0.212	1.000		
6. Localization	0.087	0.215	0.235	-0.396	0.106	1.000	
7. Size	-0.009	0.043	0.079	-0.095	-0.142	0.031	1.000

**Notes:** The sample in this study was comprised of 115 exporting SMEs that had been operative for more than 3 years since start-up and were exporting regularly. Born-global is defined as a dichotomous variable that adopts the value of 1 if the firm began exporting within three years after start-up and exported more than 25% of sales, and a value of 0 in all other cases (gradual internationalization). Foreign capital network is defined as a dichotomous variable that adopts the value of 1 if there is any international origin in part of the SME's capital and 0 if capital is comprised of solely Chilean money. Economic development agency network is defined as a dichotomous variable that has a value of 1 if the firm has support from government agencies furthering SME export development and 0 if they do not. Cultural distance is defined as the percentage of culturally distant customer countries (official language other than Spanish and Portuguese) compared to all countries to which an SME exports. Technology level is defined as a dichotomous variable that uses a value of 1 if the company participates in technology sectors rated high-technology or medium-high-technology by the OECD and 0 if they are rated medium-low or low. Localization is defined as a dichotomous variable that adopts the value of 1 when the SME sets up commercial and administrative operations in Santiago, Chile (Metropolitan Region) and 0 when it is in any of the other 14 regions of the nation. Size is defined as a categorical variable that indicates the number of employees in each exporting SME. The value of the variable is 1, 2 or 3 depending on whether the number of employees is in the range of 1 to 9, 10 to 49 and 50 to 250, respectively

**Table II.**  
Sample statistics

Variables	Coefficient	<i>p</i> -value	95% Confidence Interval	
<i>Panel A: Logistical Regression Model of Born-Global Dependent Variable</i>				
Foreign capital network	0.849	0.126	-0.238	1.935
Economic development agency network	1.119	0.021**	0.168	2.070
Cultural distance	3.207	0.000***	1.688	4.726
Technology level	1.044	0.229	-0.657	2.746
Localization	1.027	0.054*	-0.020	2.076
Size 2	-0.421	0.493	-1.624	0.781
Size 3	0.242	0.672	-0.879	1.364
Constant	-3.792	0.000***	-5.455	-2.129
Pseudo $R^2$	0.217			
Log likelihood	-60.589			
LR $\chi^2$	33.610			
Prob. > $\chi^2$	0.000			
<i>N</i>	115			
<i>Panel B: Marginal Effects on the Born-Global Dependent Variable</i>				
Foreign capital network	0.150	0.113	-0.036	0.336
Economic development agency network	0.198	0.012**	0.044	0.352
Cultural distance	0.567	0.000***	0.380	0.755
Technology level	0.185	0.219	-0.110	0.479
Localization	0.182	0.040**	0.008	0.356
Size 2	-0.072	0.480	-0.273	0.128
Size 3	0.044	0.673	-0.159	0.246

**Notes:** The sample in this study was comprised of 115 exporting SMEs that had been operative for more than 3 years since start-up and were exporting regularly. Born-global is defined as a dichotomous variable that adopts the value of 1 if the firm began exporting within three years after start-up and exported more than 25% of sales, and a value of 0 in all other cases (gradual internationalization). Foreign capital network is defined as a dichotomous variable that adopts the value of 1 if there is any international origin in part of the SME's capital and 0 if capital is comprised of solely Chilean money. Economic development agency network is defined as a dichotomous variable that has a value of 1 if the firm has support from government agencies furthering SME export development and 0 if they do not. Cultural distance is defined as the percentage of culturally distant customer countries (official language other than Spanish and Portuguese) compared to all countries to which an SME exports. Technology level is defined as a dichotomous variable that uses a value of 1 if the company participates in technology sectors rated high-technology or medium-high-technology by the OECD and 0 if they are rated medium-low or low. Localization is defined as a dichotomous variable that adopts the value of 1 when the SME sets up commercial and administrative operations in Santiago, Chile (Metropolitan Region) and 0 when it is in any of the other 14 regions of the nation. Size 2 is defined as a dichotomous variable that has a value of 1 when the number of employees in the company is in the range of 10 to 49 and 0 in other cases. Size 3 is defined as a dichotomous variable that has a value of 1 when the number of employees in the company is in the range of 50 to 250 and 0 in other cases. \*Significant at 10% level; \*\*Significant at 5% level; and \*\*\*Significant at 1% level

**Table III.**  
Results

Table III, Panel B, presents the calculation of the initial differences or marginal effects. As we can see, the magnitude of the impact of the variables differs. According to the results, the factor that becomes most relevant in explaining the dependent variable is the cultural distance from customer countries, followed by the variable of the EDA network, then by the location variable, which refers to the location of commercial and administrative branches in the country's capital.

The importance of the cultural distance to rapid internationalization can be observed in the fact that the markets most attractive to Chilean exporters are generally those

that are geographically and culturally distant, like Asia, Europe and North America. All these markets – mostly belonging to developed economies – demand all sorts of products made from natural resources that those countries do not produce in bulk and which are the products most developed by Chilean exporters. SMEs that follow a gradual internationalization strategy start in culturally close markets, but Chilean born-global firms think global and aim for psychologically distant markets. The difference in style between both types of companies is evident. Born-global firms are willing to assume a higher cost in attaining internationalization in distant countries, while gradually internationalizing firms start in less risky markets, like Latin America.

Regarding the EDA network variable, being connected to different EDAs allows a firm to obtain new competitive resources that have a positive impact on the rapid internationalization of a SME. In fact, the majority of Chile's government programs provide economic benefits to new entrepreneurs, as well as administrative and business management support. We can see that the greater commitment of a born-global firm to exporting does not necessarily come just from securing funding from government enterprises, but also from acquiring new know-how, network contacts or information on markets other than the domestic one. This combined financial-non-financial capital received by the company is called smart capital in literature (La Paz *et al.*, 2012). At this time, the EDA network is providing financial aid for companies to attend international fairs and markets, to use translators in international affairs, to meet with foreign distributors and potential foreign customers, etc., all of which constitute actions that aim to commit an entrepreneur to doing business abroad. This government aid could signify the success or failure of a new business idea.

As could be expected, with respect to location, the location of the commercial and administrative offices of a business in the nation's capital is, both for Chile and for other Latin American economies, an important factor in raising the probability that an exporting SME acquire the know-how and resources for speedy export development in new markets. The business environment is a key variable for Chilean born-global firms, more so since government programs supporting entrepreneurs are promoted and publicized with greater vigor in the capital through a higher number of seminars, more direct access to asking questions, processing the required forms and taking any type of action that develops the firm's relational capital. Establishing an office in the capital city will facilitate access to funding and to the smart capital that all firms need.

The other parameters associated with the variables did not prove to be statistically significant. Most noteworthy were the results of the technology level variable since it contradicts the results for more developed economies where born-global firms stand out for engaging in more high-tech industries. We believe that it could be related to the fact that organizations in Chile are still focusing their production and trade on the exploitation of natural resources with a low added value, so Chilean born-global firms behave, in relation to the types of products that they export, in the same way as their peers that internationalize gradually.

### Conclusions

This paper has presented a study of the factors that explain the development of Chilean SMEs in international markets. Basically, the results show similarities and differences between born-global firms in developing economies and born-global firms in developed economies.

Of the main similarities, the relevance of taking advantage of the EDA network supporting the entry of entrepreneurs to international markets can be underscored.

The more proactive companies are in searching for network contacts, the easier it will be for them to obtain resources to do business internationally. For example, it would be appropriate to increase aid so that Chilean entrepreneurs could attend international trade fairs, where they could generate leads, promote their products and evaluate the changes that are required so that the demand for their products increases. Not only will they find potential buyers at such fairs, but also investors who become enthusiastic about the business and validate each entrepreneur's idea. The importance of promoting programs in support of rapid internationalization does not relate just to cash contributions, but also to smart capital by which knowledge of foreign markets, information on possible international customers, and distributors are transferred and experience is transmitted that all new companies need when embarking on doing business abroad.

A public policy proposal in this respect that could be inferred from the results of this paper is that our entrepreneurs should be encouraged to target and enter the markets that are the most culturally distant. Geographically and culturally distant markets are attractive settings in which Chile's products can be positioned. Therefore, EDAs should particularly promote exports to distant markets and provide support in the form of translation services, information on particular customs, laws and ways of doing business. We believe that the free-trade agreements signed by Chile with different countries around the globe have been a great help in making product transfer greater and more fluid, especially the agreements with countries in North America, Asia and Europe. These institutional relations make trading easier and, in turn, the flow of capital between companies more dynamic. We can say that free-trade agreements may in some way have helped to reduce the cultural distance between countries as they set down rules of the game that are known to all players.

As to the differences found between Chilean born-global firms and their counterparts in developed countries, there is no significant influence by the technology content of the export product on the speed at which the firm begins to export. This is clearly different from what was generally found in the studies on born-global firms in developed countries where, save a few exceptions (McAuley, 1999; Wickramasekera and Bond, 2004), born-global firms are seen to be members of high-tech sectors. In Chile, as in many Latin American countries, there is a heavy dependence on exporting natural resource products, which limits the necessary investment in another type of industry, especially industries that are research-and-development-intensive (R&D). This creates a risky medium-term dependency on the volatility of commodity prices in international markets. Although it is a positive fact that new entrepreneurships with the characteristics of born-global firms are being started up every day in the country, it is at least questionable whether they will develop and promote themselves if there is no progress in building up their ability to compete on international markets, either through innovation or investment in R&D, so as to reduce the existing dependency on natural resources which is now prevalent.

One last point important to take into account is the impact of establishing an administrative or commercial branch of the company in the country's capital, which is a determining factor in the speedy decision to export. The concentration of business in the capitals of Latin American countries has, without doubt, a positive impact on promoting the population's entrepreneurial capacity, especially if different alternatives, tools and government programs supporting the development of businesses with a high impact on our economies can be publicized. Although this is positive in terms of finding an explanation for the speed of a firm's internationalization, it has adverse consequences on the public view that we must hold of the entrepreneurial capacity in

our economies. If the location of a firm's branch in the capital city is the reason for its export success, or at least for the speed at which it decides to export, entrepreneurs and entrepreneurs from other regions face a serious problem and their possibilities of having access to fresh resources, both tangible and intangible, will shrink if they are not in the capital. Government programs and entrepreneurial opportunities must be promoted across all of a country's regions, without any discrimination or distinction that limits the scope of firms' internationalization. One obvious public policy proposal that we could develop is to publicize and promote programs supporting internationalization – particularly at regional level – that takes into account the characteristics of each city and its entrepreneurs. Centralization, thus, has a perverse effect on the internationalization of our companies.

The results obtained in this work may be limited by the particular ways in which the variables were measured. And our results cannot be transferred to just any economy. The results analyzed for Chile could surely also be applied to economies where the driving export force is based on commodities and on products with a low added value, like Latin American economies. Finally, more in-depth analysis is required to better understand the determinants of born-global firms in the Chilean economy that would provide additional information on the personal characteristics of entrepreneurs, who have proven to be key to the speed of a firm's internationalization.

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**About the author**

Christian A. Cancino is an Assistant Professor of Management Control Systems at the School of Economics and Business at the University of Chile. He works in the design and implementation of corporate performance management systems. Dr Cancino holds a DBA (Doctor in Business Administration) from the Autonomous University of Madrid and a BA in Business Administration and a BA in Management Control Engineering from the University of Chile. Assistant Professor Christian A. Cancino is the corresponding author and can be contacted at: [cancino@fen.uchile.cl](mailto:cancino@fen.uchile.cl)

Freddy C. Coronado is an Assistant Professor of Management Control Systems at the School of Economics and Business of the University of Chile. Professor Coronado holds a PhD in Business Administration from the Michigan State University and a BA in Management Control Engineering from the University of Chile. His research interests are in management control systems, corporate social responsibility and higher education.