

# “A financial analysis of born-global firms: evidence from Spain”

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## SECTION 2. Management in firms and organizations

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### A financial analysis of born-global firms: evidence from Spain

#### Abstract

From the beginning of the 1970s to the present day, significant changes have taken place in the competitive and organizational behavior of small and medium-sized companies (SMEs). Recently, some of these factors have applied more intensively, and this has given rise to growth in the number of new companies that undertake overseas operations almost immediately (known as born globals).

The phenomenon of early internationalization is relatively recent, so there are still many aspects that need to be studied. The objective of this study is to contribute to the scarce empirical literature existing in Spain on this topic, by providing evidence on the possible differences in character of the born-global firms compared with the rest of exporting companies. To this end, the focus of the study is on the analysis of variables such as the size and sector of activity of these companies, and their principal economic and financial magnitudes.

A sample of 1,324 Spanish SMEs that were exporting in 2007 was surveyed; of this total approximately 12% identified themselves as having adopted early internationalization.

The results obtained indicate that the born-global firms are, on average, smaller; they are classified mostly to the services sector; and they are much more leveraged than the rest of Spanish SMEs that export.

**Keywords:** financial analysis, born-global firms, early internationalizing firms, SME.

**JEL Classification:** G32, F23.

#### Introduction

From the beginning of the 1970s to the present day, significant changes have taken place in the competitive and organizational behavior of small and medium-sized companies (SMEs). The successive changes occurring in the structure of markets, the unstoppable process of globalization, and the intensity of technological revolution figure in the literature as some of the most relevant explanatory factors for these changes (Guisado, 2002).

Despite many explanations for the international behavior of companies, the decade of the 1970s passed without producing a theoretical structure capable of responding to the heterogeneity of situations observed in the process of company internationalization.

It is in this context that the gradualist contributions of the Scandinavian School have emerged. From a microeconomic approach, and taking the company as the starting point, the so-called Stage Theory of Internationalization has been put forward by several authors belonging to the Uppsala School of Internationalization (Johanson and Wiedersheim, 1975; Johanson and Vahlne, 1977; Johanson and Vahlne, 1990; Vahlne and Nordström, 1993). These authors proposed that the process of internationalization of the company can be seen as a gradual and progressive commitment of the company to external or overseas markets.

As its essential hypothesis, the model postulates that the company commences international operations when its size is still small; it then expands these operations, following the lines of a growth strategy, and is drawn towards the markets that are "psychologically" closest to its home market (Johanson and Vahlne, 1990). In other words, the model of gradual internationalization proposes that a company first gets established in its domestic market, and later steadily turns its attention towards external markets, slowly committing its resources to the development of export activities. First, it undertakes irregular exporting. Later it exports more regularly via representatives (agents or distributors). Once the company has gained more knowledge of the external market, it sets up sales subsidiaries in selected foreign countries. Finally, it decides to commit substantial amounts of resources to international activities by establishing its own production operations in appropriate countries.

Subsequent research (Luostarinen, 1979; Juul and Walters, 1987; Swdenborg, 1982) revealed a high degree of consistency, at least during the 1970s, for this model of slow internationalization, in stages, guided by the knowledge and experience of foreign markets accumulated by the company.

In its time, this series of contributions constituted a rupture with the assumptions previously accepted. They involved a description of the phases that take place in the processes of internationalization based

on the experience acquired of how foreign markets operate, and based on the availability of resources for penetrating those markets.

In addition, the graduality and contemplation of the time factor give the Scandinavian approach a certain dynamicity. However, the excessive specificity with which many authors enumerated the various different steps that the business has to take, one after the other, in its international expansion, led to one of the criticisms continuously made of the model: its determinism (Reid, 1983).

Beginning in the mid-1990s several studies appeared, stating that the gradual model is not representative of how some exporting companies really act (Oviatt and McDougall, 1994; Madsen and Servais, 1997). Empirical research has identified an increasing number of firms which certainly do not follow the traditional stages pattern in their internationalization process. In contrast, they aim at international markets or maybe even the global market right from their inception (Chang and Grub, 1992, for Taiwan; Varaldo, 1987, for Italy; Knight and Cavusgil, 1996, for various European nations; and Pla and Cobos, 2002; Belso, 2003, for Spain).

The policies of such companies do not appear to be affected by the cultural distances that serve as important factors in the model of gradual internationalization. In other words, in the case of early internationalizing companies, the strategic choice of the particular export markets to exploit does not seem to be ruled or guided by the concept of cultural or "psychic distance" (Hallén and Wiedersheim-Paul, 1979; Kogut and Singh, 1988; Jones and Coviello, 2005)<sup>1</sup>.

The set of companies that internationalize at an accelerated rate has been defined, in the literature, under a series of concepts: born-global is one of the terms most frequently employed (Rennie 1993; Knight and Cavusgil, 1996; Madsen and Servais, 1997)<sup>2</sup>.

Knight and Cavusgil (1996) conceptualize born-global firms as being "small, [usually] technology-oriented companies that operate in international markets from the earliest days of their establishment". For McDougall, Shane and Oviatt (1994) and Oviatt and McDou-

gall (1994), such a company is "a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries".

The born-global companies can be differentiated by their efficient utilization of certain resources, such as the knowledge of the founding entrepreneur (Oviatt and McDougall, 2000), his or her network of contacts (Crick and Jones, 2000), and the corporate interconnections with public and private agents (Simoes and Dominginhos, 2001), among others. According to Johanson and Mattson (1988), four large groups of networks contribute to the acceleration of the internationalization process: suppliers, competitors, customers, and financial institutions and other entities. For example, the networks of suppliers, generated sometimes by contacts made as a consequence of purchases in other countries, can give rise to a network of relationships capable of promoting the initiation or the acceleration of the international operations of the company (Reichel, 1988; Welch and Loustarinen, 1993).

The relatively recent character of the phenomenon of early internationalization means that it remains a prolific topic for new research; however, the studies carried out in the Spanish market are still scarce. The studies by Pla and Cobos (2002), Belso (2003) and Arias and Rodríguez (2008) are among the more notable.

The objective of the study presented here is to contribute to the scarce empirical literature existing in Spain, and to provide evidence on the possible differential character of Spanish born globals compared with the rest of exporting SMEs. We have, therefore, focused on the analysis of variables such as company size, the sector of activity, and the principal economic and financial magnitudes of these companies.

The paper is structured as follows. Section 1 presents the sample and methodology employed in the empirical research. Section 2 reports the analysis made of the effects of company size, sector of activity and time, on the born-global companies identified. The study of the economic and financial structure of these companies is presented in Section 3; and the main conclusions are summarized in the final section.

## 1. Methodological aspects

The companies on which the empirical study has been based are located in the Region of Andalusia, situated in the south of Spain, which ranked fifth in terms of export volume among Spain's 17 Autonomous Regions, in 2009, with 9.1% of the national total. Therefore, the results obtained in this study can be extrapolated fairly reliably to Spain as a whole.

The primary source of information utilized was the SABI (*Sistema de Análisis de Balances Ibéricos*)

<sup>1</sup> The concept of distance implies that the greater the differences in language, consumer behavior, cultural standards, legal framework or purchasing power, for example, the greater the difficulties in communication between the parties (Stöttinger and Schlegelmilch, 1998).

<sup>2</sup> Other terms frequently employed in previous studies to denote companies characterized by a process of early internationalization are: Global Start-up (Oviatt and McDougall, 1994); International New Venture (McDougall, Shane and Oviatt, 1994); Instant Internationals (Fillis, 2001); High Technology Start-ups (Jolly, Alahuhta and Jeannet, 1992); Born International (Kundu and Katz, 2003); Innate Exporters (Ganitsky, 1989); and Early Internationalizing Firms (Rialp, Rialp and Knight, 2005; Schwens and Kabst, 2009), among others.

database<sup>1</sup>; in addition to providing the financial statements of the companies, the database records whether the firm has undertaken any export activity.

This latter variable is essential, given that the born-global companies are usually identified on the basis of the conjunction of two quantitative-type rules<sup>2</sup>: i) The number of years after the creation of the firm, when it commenced exporting; and ii) the amount or volume of the exports (see Table 1).

Table 1. Definitions of early internationalization

Time before starting export (after foundation):	Volume of exports exceeding:			
	Not specified	25%	50%	75% or more
Immediately	Oviatt & McDougall (1994)		Luostarinen & Gabrielsson (2006)	
≤ 1 year	Brush (1992) Schwens & Kabst (2009)			
≤ 2 years				Chetty & Campbell-Hunt (2004)
≤ 3 years		Belso (2003) Cavusgil & Knight (1997) Harveston et al. (2001) Servais et al. (2007) Shrader (1996)		
≤ 6 years	Autio et al. (2000) Cabrol & Nlemvo (2009)	Knight & Cavusgil (1996) Loane & Bell (2006) Shrader et al. (2000) Zahra et al. (2000)		
≤ 10 years		Burgel & Murray (2000)		

Source: Authors' own compilation.

<sup>1</sup> <http://www.bvdep.com/en/SABI.html>

<sup>2</sup> Some authors find that such definitions, of quantitative character, are insufficient. For Gabrielsson et al. (2008), certain characteristics of qualitative nature are those that best define an early internationalizing firm: i) companies, of small and medium-size, with a global vision at inception; ii) with unique products that have a broad potential international market; iii) that are independent, not a spin-off from a large, already existing international company; and iv) that must have demonstrated their capacity for accelerated internationalization, i.e. their international activities featured both precocity and speed. Similarly, according to Knight and Cavusgil (1996), for a company to be characterized as a born-global, it must not only meet the requirements of volume and the year of starting to export, referred to already, but also the following: i) it must have fewer than 500 employees and annual invoicing of less than 100 million dollars; and ii) it must possess the latest technology; and iii) it must develop products for international markets.

Despite the absence of a unanimous criterion in the existing literature on exactly what is understood by early internationalization, in the study presented here, we have opted to consider as born-global, or early internationalizing any company that exports in its first six years of life (independently of the volume exported).

The inability to establish a criterion with respect to the volume of exports is necessarily conditioned by the use of the SABI database, which indicates only if the company in question has exported in any particular year, not the amount or proportion of output exported. This resource has also been utilized in diverse previous studies (Autio et al., 2000; Brush, 1992; Cabrol and Nlemvo, 2009; Oviatt and McDougall, 1994 and, more recently, Schwens and Kabst, 2009).

The size of the exporting company has also been controlled since, in the majority of previous studies, the concept of early internationalization appears to have been linked to the SME (Aspelund and Moen, 2001; Bell et al., 2003; Jones, 1999; Larimo, 2001; Madsen et al., 2000; McDougall et al., 2003; Moen, 2002; Rennie, 1993; Servais and Rasmussen, 2000). In line with earlier studies, the number of employees has been taken as a proxy variable for the company size.

In summary, the criteria that have been utilized to identify the early internationalizing companies of the sample are the following: i) companies with fewer than 250 employees; ii) created in the period from 2002 to 2007; and iii) with some degree of exporting activity in the year 2007. Two additional criteria of operative nature have been added to the criteria of definition: iv) companies with positive shareholders' equity; and v) with all the necessary data available.

The total number of born-global companies identified is 155, compared with a total of 1,159 other exporting SMEs that are not considered born-global (created before 2002). In short, our sample is comprised of 1,324 SMEs that were exporting in 2007, of which approximately 12% are identified as early internationalizing companies.

The study here presented was conducted in two stages. In the first stage, once the SMEs with early international activity had been identified, an analysis was made of the influence of certain factors, in particular, the "size effect" (the dimension of the company), the "sector effect" (the activity sector to which the SME is classified), and the "time effect" (year of creation of the company)<sup>3</sup>.

<sup>3</sup> There are certainly many other qualitative factors that can influence the internationalization of an SME; these are, however, difficult to identify in the database utilized. Therefore, these other factors have not been considered in this study.

In the second stage, an analysis was made of the economic and financial situation of the companies that comprise the whole sample (born-globals versus exporters), based on the accounting information available in 2007. Specifically, different ratios relating to the economic and financial structure of the sample have been studied and the performance has been analyzed, comparing the results for the young SMEs of Andalusia with the rest of the exporting SMEs.

## 2. Analysis of the effects of company size, sector of activity and time

**2.1. Effect of size.** The first characteristic of the companies of the sample to be studied is their size. For grouping companies in function of size, the criteria deriving from the Recommendation 2003/361/EC of the European Commission, which established a new definition of SMEs, have been taken into account. Thus, we distinguish between micro, small and medium-sized companies. The characteristics that define each of these groups, in terms of number of employees, turnover and assets, are the following:

- i. Medium-sized enterprises, with a number of employees ranging from 50 to 249 and which have either an annual turnover not exceeding EUR 50 million, or an annual balance sheet total not exceeding EUR 43 million.
- ii. Small enterprises, which employ between 10 and 50 persons, and whose annual turnover or annual balance sheet total are less than EUR 10 million.
- iii. Micro-enterprises, which employ fewer than 10 persons and whose annual turnover or annual balance sheet total do not exceed EUR 2 million.

The distribution by size grouping of the 155 companies of the sample, bearing in mind that the fundamental criterion employed is the number of employees, is the following: of the total companies, 64% are micro-enterprises (99 companies), 28% are small (43 companies) and 8% are medium-sized (13 companies). All the above are detailed in Table 2.

Table 2. Distribution by size of the early internationalizing companies

Enterprise category	Firms	Percentage
Micro	99	64%
Small	43	28%
Medium-sized	13	8%
Total	155	100%

Although the percentages of each group of companies faithfully reflect the company reality of Spain as a whole, in which smaller companies have a ma-

majority presence, the surprising finding is that micro enterprises are the largest group among those that are early exporters. This seems to indicate that size has not been a limitation for initiating export activity; rather, very small size may have had a positive influence, possibly because small companies are more dynamic when embarking on internationalization projects.

**2.2. Effect of activity sector.** A second defining factor of born-global companies is their sector of activity. In this respect, those companies with a technological differentiation (higher proportion of total resources dedicated to investment and development, or a perception of greater novelty in their products and productive processes) usually opt for strategies of immediate international implementation (Jolly et al., 1992; Coviello and Munro, 1997).

In fact, a significant number of authors in the existing literature link the concept of born-global to the sectors of more advanced technology (Autio and Sapienza, 2000; Autio et al., 2000; Bell, 1995; Burgel and Murray, 2000; Coviello and Munro, 1995; Jones, 1999; Knight and Cavusgil, 1996; McDougall and Oviatt, 1996; Roberts and Senturia, 1996; Zahra et al., 2000; Zahra, Matherne and Carleton, 2003).

However, currently, there are increasingly more authors who broaden the notion of early internationalization to several sectors, including some that do not have much of a technological base (Bell et al., 2001; McDougall et al., 2003; Moen, 2002; Rennie, 1993; Servais and Rasmussen, 2000; Shrader et al., 2000; Wickramasekera and Bamberly, 2001).

The activity sector corresponding to the companies of the sample has been identified on the basis of the CNAE code of 4 digits provided by the SABI database; each company has been classified as belonging to one of 16 sectors, as defined by the OECD (see Table 3).

The aggregate sector with the earliest exporting companies is the services sector, followed by manufacturing, with 67% and 25% of the total companies of the sample, respectively. The primary sector, as expected, occupies the third and residual place, accounting for only 8% of the companies.

Examining the more detailed categories of sector, it can be seen that the sector that accounts for the most "early internationalization" activity is that of Sales and Repair, since 49% of the companies of the sample are classified to this sector. On the other hand, there is no other sector that accounts for more than 10% of the early exporting companies of Andalusia.

Table 3. Distribution by activity sector of the born-global firms

Sectors	Firms	Percentage
<i>Primary sector</i>	13	8%
S1 — Agriculture, livestock, game, forestry, and fishing	13	8%
<i>Manufacturing sector</i>	38	25%
S3 — Food products	3	2%
S4 — Textile industry, wood industry	13	8%
S5 — Petroleum, chemical products, rubber and plastic materials	8	5%
S6 — Metal products	5	3%
S7 — Office machinery, computers, radio, TV and communications equipment	7	5%
S8 — Vehicles and other transport equipment	2	1%
<i>Services sector</i>	104	67%
S10 — Construction	2	1%
S11 — Sales and repair	76	49%
S13 — Transport and communication	10	6%
S16 — Other services	16	10%
Total	155	100%

Furthermore, the sample does not include any companies belonging to the following sectors: Extractive industries, Electricity, Gas and Water, Hotels and Restaurants, Financial and Property activities. Considering the types of activity undertaken in those sectors, and that the sample selected corresponds exclusively to exporting companies, this finding is not surprising, since these activities are usually carried out in the company's local market.

The companies belonging to sectors of advanced technology sectors (which, according to the National Institute of Statistics, are: S5 – Petroleum, Chemical products, Rubber and plastic materials; S6 – Metal products; S7 – Office machinery, computers, radio, TV and communications equipment; S8 – Vehicles and other transport equipment; and S13 – Transport and communication) represent 20% of the total companies in the sample analyzed.

To complete the analysis, the early internationalizing companies are compared with the rest of the exporting SMEs of Andalusia that make up our sample. Although, in both cases, the ranking of sectors by importance is the same, in that the majority sector in both groups is that of services, and the minority sector is primary production, their relative importance differs. Whereas almost two thirds of the born-global exporters belong to the services sector (67%), the small exporting companies of Andalusia that operate in this sector represent 56% of the total, while manufacturing accounts for a higher proportion, at 38%.

**2.3. Effect of company age.** The information presented in Table 4 shows that born-global companies that begin exporting in the three first years after their creation do not account for more than

29% of the total sample. This suggests that most early internationalizing companies need a minimum number of years in order to establish their business and acquire organizational experience before initiating the process of internationalization via exports.

Table 4. Distribution by year of foundation of the early internationalizing firms

Year of creation	Firms	Percentage
2002	41	26%
2003	44	28%
2004	25	16%
2005	25	16%
2006	16	10%
2007	4	3%
Total	155	100%

### 3. Study of the asset and financial structure

**3.1. Asset structure.** For the analysis of the asset structure, a series of ratios are obtained that have been associated, directly or indirectly, with the process of company internationalization. These ratios are:

- (1) Fixed assets/Total assets: the relationship between fixed assets and total assets.
- (2) Intangible assets/Total assets: the relationship between the intangible assets and total assets.
- (3) Working capital/Total assets: the relationship between the working capital (that is, the difference between current assets and current liabilities) and total assets.

Table 5 gives the mean value and the standard deviation of the three ratios obtained for the two groups of companies considered: the early internationalizing companies and the exporting SMEs of more than six years of age.

Table 5. Asset structure ratios

	(1) Fixed assets/ Total assets	(2) Intangible assets/Total assets	(3) Working capital/Total assets
<b>Born globals</b>			
Average	27.49%	4.77%	7.61%
Standard deviation	0.2576	0.1001	0.2305
Number of observations	155	155	155
<b>Other exporting SMEs</b>			
Mean	35.91%	3.76%	13.03%
Standard deviation	0.2342	0.0776	0.2633
Number of observations	1,159	1,159	1,159

Spanish early internationalizing companies are generally not capital-intensive firms, given that their fixed assets as a percentage of total assets do not exceed an average value of 27%.

This finding is not so strange in respect of SMEs, in which the investments in fixed assets are normally less than in large companies, as a result of the significant barriers to entry in many sectors that require large investments in fixed assets for the performance of the activity. However, this value is less than that found for the rest of the exporting SMEs, in which fixed assets represent, on average, 36% of the total investments of these companies. Both values are also slightly lower than the average rate of the Spanish SMEs (exporting or not), where 40% of total assets are fixed (Maroto, 2008).

A second asset structure ratio of interest that has been analyzed is that which expresses the relationship between the intangible assets and the total assets of the company. In the literature some authors state that the companies that internationalize early in their life usually present a high degree of technological differentiation from others (a large volume of resources dedicated to investment in R&D, and/or a perception of more technological novelty in their products and productive processes) (Jolly et al., 1992; Coviello and Munro, 1997). In fact, Knight and Cavusgil (1996) consider this to be a defining characteristic of born-global companies.

In order to measure the degree of technological differentiation, the ratio of intangible fixed assets to total assets has been employed as a *proxy* variable for the expenditure on R&D.

In general, the early internationalizing companies present low values of this ratio, less than 4.5%, but this percentage is higher than that found for the rest of the exporting SMEs (3.7%) and the average value of the Spanish SMEs, just over 3% according to Maroto (2008).

Lastly, the average value of the ratio relating the company's working capital to its total assets is 7% in the set of born-global companies; this would indicate that most of the companies of the sample present positive current assets and they are higher than current liabilities. Although this situation is usually fairly normal in the majority of companies, it is also true that sometimes young SMEs have problems in obtaining financing for their operations, which would be reflected in a negative value for this ratio.

This does not appear to be the case in the young SMEs of Andalusia with international activity; if this value is compared with that presented by the exporting SMEs of more than six years of age, it can be seen that the balance sheet of these latter companies is more consolidated (the proportion of current assets financed with long-term resources – working capital – is 13% of total assets).

Finally, Table 6 presents the results of the three ratios considered, broken down by company size and activity sector, as identified in the preceding section.

These data demonstrate that the proportion of total assets accounted for by the fixed assets increases with company size, but the values are not very different: 26% for the micro, 27% for the small, and 34%, a rather higher proportion, for the medium-sized companies. Considering the activity sector, no appreciable differences are found in this ratio between the three aggregate sectors considered; the ratio presents very similar average values, between 26% and 28%.

With respect to the second ratio analyzed, intangible assets to total assets, a positive relationship is seen between the company size and the value of this ratio, which shows an increase from 3% in the micro-enterprises to almost 6% in the medium-sized companies. From the perspective of the activity sector, the differences are more significant: companies in the primary sector are those that invest most proportionally in intangible assets, at 6% of the total assets, followed by companies of the services sector, which invest 5%, and those in the manufacturing sector, much less, at 1%.

Lastly, on analyzing ratio (3), working capital to total assets, considering the size factor, it can be seen that the value of this ratio is similar for both the micro and small companies but is somewhat higher in the companies of medium size. By activity, it can be seen that the sector with the lowest proportion of working capital is the services sector, with 6%, against 9% in the primary and manufacturing sectors; this would be normal according to the operating cycles typical of each kind of activity.

Table 6. Asset structure ratios of the born-global firms, based on different criteria

	(1) Fixed assets/ Total assets	(2) Intangible assets/ Total assets	(3) Working capital/ Total assets
<b>Enterprise category</b>			
<i>Micro</i>			
Mean	26.77%	3.79%	7.61%
Standard deviation	0.2672	0.0825	0.2378
Number of observations	99	99	99
<i>Small</i>			
Mean	27.93%	6.36%	7.74%
Standard deviation	0.2435	0.1183	0.2408
Number of observations	43	43	43
<i>Medium-sized</i>			
Mean	34.16%	5.51%	9.17%
Standard deviation	0.2272	0.1280	0.1801
Number of observations	13	13	13
<b>Sectors</b>			
<i>Primary</i>			
Average	27.67%	6.30%	9.28%
Standard deviation	0.2628	0.1093	0.2706
Number of companies	13	13	13
<i>Manufacturing</i>			
Average	26.42%	1.75%	9.93%
Standard deviation	0.2539	0.0289	0.2546
Number of companies	38	38	38
<i>Services</i>			
Average	27.83%	5.60%	6.61%
Standard deviation	0.2581	0.1118	0.2150
Number of companies	104	104	104

**3.2. Financial structure.** In a similar way to what is described in the preceding section, the financial or capital structure of these companies is analyzed based on a series of ratios. These ratios are:

- (4) Debt Ratio: this compares a company's total liabilities to its total assets.
- (5) Long-Term Debt Ratio: the relationship between long-term liabilities and total assets.
- (6) Short-Term Debt Ratio: the relationship between current liabilities and total assets.

While ratio (4) illustrates how the total resources of the company are distributed, the other two, (5) and (6), are indicative of the degree of maturity of the external resources. The greater the proportion of shareholders' equity of a company, the more secure the company will be. Similarly, the greater the proportion of long-term liabilities to short-term liabilities, the lower the risk.

Table 7 gives the values of the ratios considered, both for the early internationalizing companies and for those exporting SMEs older than six years since their founding.

Table 7. Ratios of financial structure

	(4) Debt ratio	(5) Long-term debt ratio	(6) Short-term debt ratio
<b>Born globals</b>			
Mean	81.02%	16.13%	64.90%
Standard deviation	0.1636	0.1806	0.2246
Number of observations	155	155	155
<b>Other exporting SMEs</b>			
Mean	65.79%	14.73%	51.06%
Standard deviation	0.2329	0.1661	0.2306
Number of observations	1,159	1,159	1,159

As can be confirmed, the early internationalizing companies present a much higher percentage of debt than shareholders' equity in their capital structure, reflected by the ratio expressing the proportion of total resources represented by total liabilities, which reaches the relatively high average value of 81%.

If we compare this level of indebtedness with that of all the SMEs of Andalusia, we can conclude that the born globals of Andalusia present a very high average level of indebtedness, greater than the average of the region's SMEs, in which 70-75% of the total resources are liabilities (see Maroto, 2008 and Ramírez, 2009). This difference is further accentuated when compared with the rest of the exporting SMEs, whose level of indebtedness does not exceed 65.8% of the total resources.

This greater level of indebtedness of the born-global firms may be due to several reasons. Firstly, the very fact of being in the first years of life means that these companies have not yet had time to generate resources from their operations on a stable basis, and so have not been able to increase their own resources. Secondly, once the SMEs have exhausted the financial contribution of the founders, they find it difficult to obtain additional resources from new shareholders, given that formulas such as venture capital or the alternative stock market are not yet widely available in Spain; this, therefore, obliges the SMEs to resort to external financing.

A second aspect to note on analyzing the financial structure of the born-global companies is that the indebtedness is concentrated on the short term, representing 65% of the total resources and 80% of the total liabilities. This high percentage of short-term external resources (e.g., accounts payable, accrued expenses, short-term bank loans, etc.) means that these companies may be taking on a high risk in respect of the financing of their operations.

The proportion of short-term financing is higher than the average values of the Spanish SME according to previous studies (Maroto, 2008 and Ramírez, 2009)<sup>1</sup>.

<sup>1</sup> According to Maroto (2008), approximately 70% of total liabilities of Spanish micro enterprises during the 2002-2006 period were short-term liabilities. This percentage was 75% for the small companies and 60% for the medium-sized enterprises. Similar results were obtained in the case of the Andalusian firms.

Finally, Table 8 presents the results of three financial ratios considered, broken down by company size and activity sector.

Table 8. Financial structure ratios of the born-global firms, based on different criteria

	(4) Debt ratio	(5) Long-term debt ratio	(6) Short-term debt ratio
<b>Enterprise category</b>			
<i>Micro</i>			
Mean	80.15%	14.53%	65.62%
Standard deviation	0.1781	0.1810	0.2324
Number of observations	99	99	99
<i>Small</i>			
Mean	82.49%	18.15%	64.34%
Standard deviation	0.1568	0.1821	0.2250
Number of observations	43	43	43
<i>Medium-sized</i>			
Mean	78.61%	21.94%	56.67%
Standard deviation	0.1270	0.1632	0.1572
Number of observations	13	13	13
<b>Sectors</b>			
<i>Primary</i>			
Mean	82.06%	19.01%	63.05%
Standard deviation	0.1199	0.1628	0.1884
Number of observations	13	13	13
<i>Manufacturing</i>			
Mean	80.40%	16.76%	63.64%
Standard deviation	0.1808	0.2168	0.2308
Number of observations	38	38	38
<i>Services</i>			
Mean	81.11%	15.55%	65.56%
Standard deviation	0.1621	0.1682	0.2264
Number of observations	104	104	104

The detailed analysis of the debt ratio (4) according to size and sector of activity does not reveal significant differences between the different groups; from this it appears that the pattern of high indebtedness is a characteristic common to all the born-global SMEs.

With respect to the maturity of the debt (ratios (5) and (6)), it is the micro enterprises and the small companies that present a higher percentage of short-term debt, at 65%, compared with 56% for the medium-sized companies. In this respect, they conform to a classic financial rule: the greater the company size, the lower the proportion of short-term external resources. However, no significant differences in the degree of maturity of the debt of the companies can be appreciated on the basis of their sector of activity.

**3.3. Analysis of the performance.** In order to study the profitability, two classic ratios are examined:

(7) Return on assets (ROA): this measures how effectively a company has generated earnings with its available assets. It is calculated by dividing a company's annual earning before interest and taxes (EBIT) by its total assets; ROA is presented as a percentage.

(8) Return on equity (ROE): many analysts consider ROE the single most important financial ratio applying to stockholders, and the best measure of performance by a firm's management. Return on equity is calculated by dividing net income after taxes by owners' equity.

Table 9 shows the average value of the profitability ratios calculated for the whole sample.

Table 9. Ratios of performance

	(7) ROA	(8) ROE
<b>Born globals</b>		
Mean	5.34%	25.24%
Standard deviation	0.1214	0.8127
Number of observations	155	155
<b>Other exporting SMEs</b>		
Mean	4.19%	9.78%
Standard deviation	0.1236	0.8811
Number of observations	1,159	1,159

The early internationalizing firms present an average return on assets of 5.3%. This rate of return is not very far below that obtained by all Spanish SMEs (see Maroto, 2008 and Ramírez, 2009). Therefore, the born-global firms of Andalusia, despite their young age, achieve rates of return on assets similar to the rest of the SMEs. If compared only with the exporting SMEs, their performance looks better since, in the case of the latter, the average return on assets is 4.1%.

With respect to the performance of the shareholders' equity (ROE), the average value found for this parameter is 25% for the born globals of Andalusia. The very considerable difference existing between the ROE and the ROA is due, among other reasons, to the high financial leverage that these companies present (remember that 81% of their total resources are external). This ratio for the born globals is very different from the average value for the exporting SMEs that are older (10%), which coincides with the average ROE of Spanish SMEs (Maroto, 2008). However, it must be stated that the standard deviation around the average, in the two groups considered, is very high.

Table 10 gives the profitability ratios considered, differentiating them according to size of the company and its sector of activity.

Table 10. Ratios of performance of the born-global firms, based on different criteria

	(7) ROA	(8) ROE
<b>Enterprise category</b>		
<i>Micro</i>		
Mean	5.92%	37.07%
Standard deviation	0.1344	0.7297
Number of observations	99	99
<i>Small</i>		
Mean	5.38%	11.53%
Standard deviation	0.0684	0.5792
Number of observations	43	43
<i>Medium-sized</i>		
Mean	1.92%	-29.76%
Standard deviation	0.1495	1.4324
Number of observations	13	13
<b>Sectors</b>		
<i>Primary</i>		
Mean	7.93%	29.38%
Standard deviation	0.0983	0.2124
Number of observations	13	13
<i>Manufacturing</i>		
Mean	6.78%	33.80%
Standard deviation	0.1101	0.5779
Number of observations	38	38
<i>Services</i>		
Mean	4.51%	21.78%
Standard deviation	0.1268	0.9204
Number of observations	104	104

With respect to the return on assets (ratio (7), ROA), it can be seen that it is the smallest companies that present higher values: whereas the micro enterprises and the small companies present average returns of 6% and 5.3%, respectively, the medium-sized companies achieve earnings of only 2%. This result seems to suggest that the born-global firms of smaller size show greater dynamism that enables them to earn an acceptable return in their first years of life. Considering the breakdown by sector of activity, companies in the primary and manufacturing sectors present higher rates of return than the average, at 8% and 6.7%, respectively. The return on assets of companies in the services sector barely reaches 4.5%.

On the other hand, the analysis of the return on equity (ratio (8), ROE) on the basis of the size of the company, demonstrates wide disparity in the ratios: whereas the micro enterprises present a return on equity much higher than the average (37%), the small companies hardly reach 11%, and the medium-sized companies actually show negative values (-29%). It is surprising that it is the micro enterprises that manage to achieve the highest returns on the resources provided by their shareholders. However, this negative relationship between company

size and the return has already been seen when the return on assets was considered, although now this difference is even more striking. With respect to the activity sector, no significant differences are seen in the ROE. The only notable finding is that the primary and manufacturing sectors present higher than average rates of return.

## Conclusions

The study presented here was conducted in two stages.

In the first stage, once the SMEs with early international activity had been identified, an analysis was made of the influence of certain factors, in particular, the "size effect" (the dimension of the company), the "sector effect" (the activity sector to which the SME is classified), and the "time effect" (year of creation of the company).

The conclusions obtained from this first analysis are the following:

i. The size (measured by the number of employees) has not been a limitation for initiating export activity: to the contrary, small size has had a positive influence, probably because the micro and small companies act with greater dynamism in embarking on early internationalization projects.

ii. Two thirds of the born-global companies are classified to the services sector (67%), whereas in the rest of the exporting SMEs, this proportion is lower, at 56%. At the more detailed level considered, the sector that shows most early internationalization activity is that categorized as Sales and Repair, since 49% of the born-global companies identified report that they belong to this general activity sector. The companies belonging to advanced technology sectors account for only 20% of the total. This finding, also reported in other recent studies, demonstrates that the process of early internationalization is by no means currently exclusive to the technology sectors.

iii. With regard to the age of the early internationalizing companies, those that begin to export in the three first years after their creation do not account for more than 29% of the total sampled. This seems to indicate that most early internationalizing companies need a minimum number of years to get established in their business and acquire organizational experience before initiating the process of internationalization via exporting.

In the second stage, an analysis was made of the economic and financial situation of the companies that comprise the whole sample (born globals versus other exporting SMEs), based on the accounting information available in 2007. Specifically, several different ratios relating to the asset and financial

structure of the sample have been studied, and the profitability of these companies has also been analyzed; the results for the born-global enterprises have been compared with those for the rest of the exporting SMEs and in some cases, with the collection of Spanish firms, according to previous studies (Maroto, 2008 and Ramírez, 2009). The main conclusions obtained from the research are:

iv. In general, the early internationalizing companies are not very intensive users of capital, given that their fixed assets as a percentage of total assets do not exceed an average value of 27%. This value is lower than that presented by the rest of the exporting SMEs, whose fixed assets on average represent 36% of the total capital of these companies.

v. The born-global firms present low values of R&D ratio, less than 4.5%. However, this percentage is higher than that found for the rest of the exporting SMEs (3.7%) and the average value of the Spanish SME, just over 3% according to Maroto (2008). This finding is consistent with what has been reported in some of the existing literature, where it is stated that the early internationalizing companies usually present a high degree of technological differentiation.

vi. The average value of the ratio relating the company's current assets to its total assets is 7% in the set of born-global companies; this would indicate

that most of the companies of the sample present a positive level of current assets. When this value is compared with that presented by the exporting SMEs of more than 6 years since their founding, it can be seen that the balance sheet of these latter companies is more consolidated (the proportion of current assets financed with long-term resources – working capital – is 13% of total assets).

vii. The born-global companies present a very high average level of indebtedness (80%), greater than the average for all the SMEs of Andalusia. This difference is further accentuated when compared only with the rest of the exporting SMEs, whose level of indebtedness does not exceed 65.8% of the total resources. Moreover, this indebtedness is concentrated in the short term, representing 80% of the total liabilities.

Finally, the rates of return on assets (5.3%) of the born-global companies of the sample are similar to those earned by the rest of the SMEs. With respect to the return on equity (ROE), the average value found for this parameter is 25%. The very considerable difference existing between the ROE and the ROA is due, among other reasons, to the high financial leverage that these companies present. The ROE of the born globals is very different from the average value for the older exporting SMEs and for the Spanish SMEs as a whole (10% in both cases).

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### References

1. Arias Sandoval, A., Rodríguez Castellanos, A. (2008). Internacionalización de las PYME Jóvenes Españolas. Un Análisis Empírico de los Efectos Temporal, Espacial, Sectorial y de Tamaño. In *Creación, supervivencia, crecimiento e internacionalización de las PYME jóvenes en España: 1995-2006*. Dirección General de Política de la PYME, 120-151.
2. Aspelund, A., Moen, O. (2001). A generation perspective on small firm internationalisation: from traditional exporters and flexible specialists to born globals, *Reassessing the internationalisation of the firm*, 11, 195-223.
3. Autio, E., Sapienza, H.J. (2000). Comparing Process and Born Global Perspectives in the International Growth of Technology-based New Firms. *Frontiers of Entrepreneurship Research*, Center for Entrepreneurial Studies, Babson College, 413-424.
4. Autio, E., Sapienza, H.J., Almeida, J.G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43, 909-924.
5. Bell, J. (1995). The internationalisation of small computer software firms, *European Journal of Marketing*, 29, 8, 60-74.
6. Bell, J., McNaughton, R., Young, S. (2001). Born-again global firms: An extension to the 'born global' phenomenon. *Journal of International Management*, 7 (3), 173-189.
7. Bell, J., McNaughton, R., Young, S., Crick D. (2003). Towards an integrative model of small firm internationalization, *Journal of International Entrepreneurship*, 1, 339-362.
8. Belso Martínez, J.A. (2003). Un análisis del proceso de internacionalización de las pequeñas y medianas empresas en la Comunidad Valenciana: modelo gradual versus acelerado. *Revista Valenciana de Economía y Hacienda*, (8): 191-209.
9. Brush, C. (1992). *Factors motivating small firms to internationalize: The effect of firm age*. Unpublished doctoral dissertation, Boston University.
10. Burgel, O., Murray, G.C. (2000). The international market entry choices of start-up companies in high-technology industries. *Journal of International Marketing*, 8 (2), 33-62.
11. Cabrol, M., Nlemvo, F. (2009). The internationalisation of French new ventures: The case of the Rhone-Alps region. *European Management Journal*, 27 (4), 255-267.

12. Cavusgil, S., Knight, G. (1997). *Explaining an emerging phenomenon for international marketing: global orientation and the born-global firm*. Working Paper, Michigan State University.
13. Chang, T., Grubb, P. (1992). Competitive strategies of taiwanese PC firms in their internationalisation process. *Journal of Global Marketing*, 6 (3), 5-27.
14. Chetty, S., Campbell-Hunt, C. (2004). A strategic approach to internationalization: A traditional versus a born-global approach. *Journal of International Marketing*, 12 (1), 57-81.
15. Coviello, N.E., Munro, H.J. (1995). Growing the entrepreneurial firm: Networking for international market development. *European Journal of Marketing*, 29 (7), 49-61.
16. Coviello, N., Munro, H. (1997). Network relationships and the internationalisation of small software firms, *International Business Review*, 6 (4), 361-386.
17. Crick, D., Jones, M. (2000). Small High-Technology Firms and International High-Technology Markets. *Journal of International Marketing*, 8 (2), 63-85.
18. Fillis, I. (2001). Small Firm Internationalisation: An Investigative Survey and Future Research Directions, *Management Decision*, 39 (9), 767-783.
19. Gabrielsson, M., Kirpalani, V. H. M., Dimitratos, P., Solberg, C. A., Zucchella, A. (2008). Born Globals: Propositions to help advance the theory. *International Business Review*, 17 (4), 385-401.
20. Ganitsky, J. (1989). Strategies for innate and adoptive exporters: Lessons from Israel's case. *International Marketing Review*, 6 (5), 50-65.
21. Guisado, M. (2002). *Internacionalización de la empresa. Estrategias de entrada en los mercados extranjeros*. Ed. Pirámide, Madrid.
22. Hallén, L., Wiedersheim-Paul, F. (1979). Psychic distance and buyer-seller interaction. *Organisasjon, Marked og Samfunn*, 16 (5).
23. Harveston, P., Kedia, B., Davis, P., Van Scotter, J. (2001). Synoptic versus incremental internationalisation: an examination of born global and gradual globalizing firms. *Frontiers of Entrepreneurship Research*, Babson Park, Wellesley (Mass).
24. Johanson, J., Mattson, L. (1988). International marketing and internationalisation processes—some perspectives on current and future research. Paper presented in the *Conference on Research Developments in International Marketing*, University of Manchester Institute of Science and Technology, September.
25. Johanson, J., Vahlne, J. (1977). The internationalisation process of the firm – a model of knowledge development an increasing foreign market commitments. *Journal of International Business Studies*, 8, 23-32.
26. Johanson, J., Vahlne, J. (1990). The mechanism of internationalisation. *International Marketing Review*, 7 (4), 11-24.
27. Johanson, J., Wiedersheim, P. (1975): The internationalisation of the firm -four Swedish cases. *Journal of Management Studies*, October, 305-322.
28. Jolly, V., Alahuhta, M., Jeannet, J. (1992). Challenging the incumbents: how high technology start-ups compete globally. *Journal of Strategic Change*, 1, 71-82.
29. Jones, V.M. (1999). The internationalization of small high-technology firms. *Journal of International Marketing*, 7 (4), 15-41.
30. Jones, M.V., Coviello, N.E. (2005). Internationalisation: Conceptualising an entrepreneurial process of behaviour in time. *Journal of International Business Studies*, 36, 284-303.
31. Juul, M., Walters, P.G. (1987). The Internationalisation of Norwegian Firms-A Study of the U.K. Experience. *Management International Review*, 27, 58-66.
32. Knight, G., Cavusgil, S. (1996). The born global firm: a challenge to traditional internationalisation theory. *Advances in International Marketing*, 8, 11-26.
33. Kogut, B., Singh, H. (1988). Entering the United States by joint ventures: Competitive rivalry and industry structure. In F. J. Contractor & P. Lorange (Eds.), *Cooperative Strategies in International Business* (pp. 241-251). Lexington: Lexington Books.
34. Kundu, S.K., Katz, J.A. (2003). Born-Internationals SMEs: BI-Level Impacts of Resources and Intentions. *Small Business Economics*, 20, 25-47.
35. Larimo, J. (2001). Internationalization of SMEs-two case studies of Finnish born global firms, Paper presented at the *CIMaR Annual Conference* in Sydney, Australia, 20th November, 2001 pp. 1-21.
36. Loane, S., Bell, J. (2006). Rapid internationalisation among entrepreneurial firms in Australia, Canada, Ireland and New Zealand: An extension to the network approach. *International Marketing Review*, 23 (5), 467-485.
37. Luostarinen, R. (1979). *Internationalization of the firm*. Doctoral thesis, Marketing Department, International Marketing, Helsinki School of Economics, Series A, 30.
38. Luostarinen, R., Gabrielsson, M. (2006). Globalization and marketing strategies of born globals in SMOPECs. *Thunderbird International Business Review*, 48 (6), 773-801.
39. Madsen, T., Rasmussen, E.S., Servais, P. (2000). Differences and similarities between born globals and types of exporters. *Advances in International Marketing*, 10: 247-265.
40. Madsen, T., Servais, P. (1997). The internationalisation of born globals: an evolutionary process?. *International Business Review*, 6 (6), 251-277.
41. Maroto Acín, J.A. (2008). Las PYME españolas con forma societaria. Estructura económico-financiera y Resultados (Ejercicios 2002-2005 y avance 2006). Ministerio de Industria, Turismo y Comercio.

42. McDougall, P.P., Oviatt, B.M. (1996). New venture internationalization, strategic change, and performance: A follow-up study. *Journal of Business Venturing*, 11: 23-40.
43. McDougall, P.P., Oviatt, B.M., Shrader, R.C. (2003). A comparison of international and domestic new ventures. *Journal of International Entrepreneurship*, 1 (1), 59-82.
44. McDougall, P.P., Shane, S., Oviatt, B.M. (1994). Explaining the formation of international new ventures. *Journal of Business Venturing*, 9 (6): 469-487.
45. Moen, O. (2002). The born globals-a new generation of small European exporters. *International Marketing Review*, 19: 156-175.
46. Oviatt, B., McDougall, P. (1994). Toward a theory of International New Ventures. *Journal of International Business Studies*, 25 (1), 45-64.
47. Oviatt, B., McDougall, P. (2000). International entrepreneurship: The Intersection of two Research Paths. *Academy of Management Journal*, 43 (5), 902-906.
48. Pla, J., Cobos, A. (2002). La aceleración del proceso de internacionalización de la empresa: el caso de las new ventures españolas. *Información Comercial Española*, 802, 9-22.
49. Ramírez Herrera, Luis M. (2009). *Factores determinantes de la estructura financiera de la pequeña y mediana empresa: el caso de la Comunidad Autónoma Andaluza*. Doctoral dissertation, University of Seville.
50. Reichel, J. (1988). The internationalisation of importing companies. *European Journal of Marketing*, 22 (10), 31-40.
51. Reid, S. (1983). Firm internationalisation, transaction costs and strategic choice, *International Marketing Review*, 1 (2), 44-56.
52. Rennie, M.W. (1993). Global competitiveness: Born global. *The McKinsey Quarterly*, 4, 45-52.
53. Rialp, A., Rialp, J., & Knight, G.A. (2005). The Phenomenon of early internationalizing firms: What do we know after a decade (1993-2003) of scientific inquiry?. *International Business Review*, 14, 147-166.
54. Roberts, E.B., Senturia, T.A. (1996). Globalizing the emerging high-technology company. *Industrial Marketing Management*, 25, 491-506.
55. Schwens, C., Kabst, R. (2009). How early opposed to late internationalizers learn: Experience of others and paradigms of interpretation. *International Business Review*, 18, 509-522
56. Servais, P., Madsen, T.K., Rasmussen, E.S. (2007). Small manufacturing firm's involvement in international e-business activities. *Advances in International Marketing*, 17, 297-317.
57. Servais, P., Rasmussen, E.S. (2000). Different Types of International New Ventures, paper presented at the *Academy of International Business (AIB) Annual Meeting* (November), Phoenix, AZ., USA, 1-27.
58. Shrader, R.C. (1996). *Influences on and performance implications of internationalization by publicly-owned new ventures: A risk taking perspective*. Doctoral dissertation, Georgia State University, Atlanta.
59. Shrader, R.C., Oviatt, B.M., McDougall, P.P. (2000). How new ventures exploit trade-offs among international risk factors: Lessons for the accelerated internationalization of the 21st century. *Academy of Management Journal*, 43 (6), 1227-1247.
60. Simoes, V., Dominginhos, P. (2001). Portuguese Born Globals: An Exploratory Study. 27th EIBA Conference at ESCP-EAP- Paris, France, December 13-15, 2001. *Alliances and Confrontations: Globalization and the Logics of Trading Blocs*. Workshop Paper.
61. Stottinger, B., Schlegelmilch, B. (1998). Explaining export development through psychic distance: enlightening or elusive. *International Marketing Review*, 15 (5), 357-372.
62. Swdenborg, B. (1982). *The Multinational Operations of Swedish Firms*. Estocolmo, Almqvist and Wiksell.
63. Vahlne, J., Nordström, K. (1993). The internationalisation process: impact of competition and experience. *International Trade Journal*, 7 (5), 529-548.
64. Varaldo, R. (1987). The internationalisation of the small-and-medium-sized Italian manufacturing firms. In Rosson, P and Reis, S (eds): *Managing export entry and expansion*. Nueva York.
65. Welch, L., Loustarinen, R. (1993). Inward-Outward connections in internationalisation. *Scandinavian International Business Review*, 2 (4), 44-56.
66. Wickramasekera, R., Bamberry, G. (2001). *Born globals within the Australian wine industry: An exploratory study*. Working-Paper No. 1/01. Charles Sturt University, Wagga Wagga.
67. Zahra, S.A., Ireland, R.D., Hitt, M.A. (2000). International Expansion by New Venture Firms: International Diversity, Mode of Market Entry, Technological Learning, and Performance. *Academy of Management Journal*, 43 (5): 925-950.
68. Zahra, S.A., Matherne, B.P., Carleton, J.M. (2003). Technological resource leveraging and the internationalisation of new ventures. *Journal of International Entrepreneurship*, 1 (2), 163-186.