Family firms' resources and the timing of the export development process

Mª Katiuska Cabrera-Suárez

University of Las Palmas de Gran Canaria

E-mail: Kcabrera@dede.ulpgc.es

Arístides Olivares-Mesa

University of Las Palmas de Gran Canaria

E-mail: @dede.ulpgc.es

Abstract

The goal of this work is to analyze whether certain resources related to human, social and financial capital influence the speed of the export development process of family firms. We use event history analysis applied to a sample of Spanish manufacturing family firms. The results show that only the variables related to social capital have a significant effect on the timing of this process. Concretely, the relationships with foreign suppliers, the agreements with retailers and wholesalers and the development of technological collaborations are related to and early entry of family firms into the initial phase of the export development process. Moreover, the alliances with retailers and wholesalers have also a significant accelerating effect in the entry into the advanced phase of the process.

Resumen

El objetivo del presente trabajo es analizar si determinados recursos humanos, sociales y financieros influyen en la velocidad del proceso exportador de las empresas familiares. La metodología empleada es el análisis de supervivencia, aplicado a una muestra de empresas familiares manufactureras españolas. Los resultados muestran que sólo las variables relacionadas con el capital social tienen un efecto significativo sobre el calendario del proceso. En concreto, las relaciones con los proveedores extranjeros, los acuerdos con minoristas y mayoristas y el desarrollo de colaboraciones tecnológicas se relacionan con una entrada temprana en la fase inicial del proceso exportador. Además, las alianzas con minoristas y mayoristas tienen también un significativo efecto acelerador en la entrada en la fase avanzada del proceso.

1. Introduction

One aspect of strategic behaviour that is considered of great importance in relation to the growing process of businesses is internationalization. However, in examining international expansion, researchers have mainly studied large corporations and new ventures but not family business (Yeung, 2000; Zahra, 2003; Zahra & Sharma, 2004). Thus, the understanding of the international operations of family firms is unsatisfactory since the globalization of these organizations remains a remote topic in family business studies and international business studies (Yeung, 2000).

Concretely, the issue of the timing of international entry is one scarcely researched even though it is going to affect the success and failure of FFs' internationalization process (Zahra, 2003). Also, the scarce research that has been developed seems to support the idea that being a family firms is negatively related to internationalization (Fernández & Nieto, 2005; Okoroafo, 1999; Zahra, 2003), and that family business initiate their internationalization processes later in the business life cycle in comparison with non-family firms (Gallo & García-Pont, 1996; Olivares & Cabrera, 2006). Anyway, there are family firms that do involve themselves in an internationalization strategy. Therefore, a relevant research issue is the analysis of the factors that influence family firms' speed of internationalization.

The literature on internationalization describes this process as a result of the accumulation and exploitation of firms' resources and knowledge (Eriksson, Majkgard & Sharma, 2000; Westhead, Wright & Ucbasaran, 2001; 2004). Therefore, the differences between the internationalization processes of different firms will depend on the differences in their resources and capabilities bases. Particularly, the speed of entry in foreign markets depends, to a great extent, on the bundle of resources and capabilities of the firms, and that can be developed through managers' experience and their participating in networks (Reuber & Fisher, 1997; Etemad & Lee, 2003). In this sense, it has been argued that family firms have a unique configuration of their bundles of resources and capabilities, and that uniqueness is the base to explain the particularities in their competitive behaviour (Cabrera, de Sáá & García, 2001; Dyer, 2006; Habbershon & Williams, 1999; Sirmon & Hitt, 2003; Tokarcyk, Hansen, Green & Down, 2007).

Therefore, the objective of this work is to analyze whether certain resources related to human, social and financial capital, which have been associated to the family nature of the business, influence the speed of the export development process of this type of firms. With this aim, the paper is organized in the following way. In the next section we present a review of the general literature about internationalization that describes this process basically as one of accumulation and use of resources. The following section is developed in order to support the statement of three hypotheses regarding the influence that different kinds of resources will have in the speed of the exporting process of family

businesses. Then, the methodology of the empirical study is set out. We use event history analysis in the research. This methodology allows us to explain the dynamics of the firm's decision to move in the internationalization process and the speed at which the firm moves between stages. The final section includes a discussion of the main results and the conclusions drawn from the study.

2. Internationalization and the export development process

Since the 1960s, the study of the factors that have an impact on the internationalization process of the firms has been one of the main research topics in the field of international business. Different approaches have been proposed, but the sequential approach can be considered as a dominant paradigm for studying the internationalization process of firms.

Although the sequential approach is based on the classical ideas presented by Vernon (1966) and Buckley and Casson (1976), it reaches its maturity through two parallel research trends developed at the end of the 1970s and the beginning of the 1980s: (1) The Uppsala school (Johanson &Vahlne, 1977; Johanson & Wiedershein-Paul, 1975) and (2) the innovation school (Bilkey & Tesar, 1977; Cavusgil, 1982; Czinkota, 1982). Both approaches agree in the fact that internationalization is an evolutionary process in which the firm develops progressive levels of commitment to international markets, as it moves ahead through a series of sequential stages, by making cumulative decisions (Root, 1987). It is ultimately a learning process, and one that is not always rational (Andersen, 1993; Eriksson, Johanson, Majkgard & Sharma, 1997; Eriksson et al., 2000).

According to this approach, internationalization can be described as a step-by-step process, integrated by several stages. In their original paper, Johanson and Wiedershein-Paul (1975) considered four stages in the process of entering in a new foreign market —non-regular exports, exports through independent agents, creation of a sales subsidiary and creation of a production subsidiary—. In the internationalization process of a firm, export activities constitute a particular case that, according to this view, is usually characterized as a sequential process, in which it is also possible to differentiate several stages. Leonidas and Katsikeas (1996) offer a summary of the main stage-models proposed about the export development process. These models consider a different number of stages, but all of them share the same sequential view of the export development process. Despite differences among the various models as to the number, nature and content of the stages, it can be concluded that the export development process comprises three broad phases: a) the pre-engagement phase, that includes firms selling their goods solely in the domestic market; that is, those firms involved in the domestic market and not interested in exporting, and those that exported in the past but no longer do so; b) the initial phase, where firms are involved in sporadic export activity and can be classified as having the potential to increase their overseas involvement and as being unable to cope with the demands of exporting, leading to marginal export behaviour or withdrawal from selling abroad altogether; and finally c) the advanced phase, where firms are regular exporters with extensive

overseas experience, and frequently consider more committed forms of international business (Leonidou & Katsikeas, 1996).

The dominant process models of internationalization claim explicit intellectual descent from Penrose (1959), using her resource (or knowledge) accumulation-business expansion framework as the basis from which to analyze international growth. In these models, internationalization is depicted as a learning, incremental process of knowledge accumulation (Johanson & Vahlne, 1990; Eriksson, Johanson, et al., 1997; Eriksson et al., 2000). The focus of the process theory being on explaining how the internationalization process enfolds, the theory does not say much about how the process actually gets initiated. Thus, in the field of International Management most work has focused on the study of certain dimensions of the process to become a global enterprise (e.g. the decision regarding the mode of entry), while other dimensions have yet to be explored. One of these under-explored questions is the age of firms at entry into international markets. This way, a new research stream oriented to explain the behavior of the international new ventures has appeared with the name of International Entrepreneurship (Oviatt & McDougall, 1994). This new approach has developed considerably in the last decade (Rialp, Rialp, Urbano & Vaillant, 2005), at the same time improving its delimitation. Oviatt and McDougall (2005) state that International Entrepreneurship addresses the identification, establishment, evaluation and exploitation of opportunities beyond national borders. According to Zahra and George (2002), a big part of the research developed from this new approach has focused in analyzing the issue of speed of internationalization. However, the majority of these works have been limited to the study of the length of time that elapsed between the year the venture was created and the year of its first foreign sales.

Both approaches (sequential and international entrepreneurship) focus their attention on different aspects of the internationalization process (way of entry versus speed of entry), but they are not opposite approaches. Both emphasize the role of knowledge (as a resource) and learning (as a capacity) in the development of the internationalization process of the firm. Thus, the two theories are actually quite similar to each other, insofar as they both acknowledge the path-dependent nature of firm development, and that path dependency is induced by experiential learning (Autio & Sapienza, 2000; Sharma & Blomstermo, 2003).

Therefore, both approaches highlight the role of company's history as determining in the developing of a bundle of resources and capacities that would affect the speed of the internationalization process (Eriksson et al., 2000).

3. Family firms, resources and the export development process

Families are thought to influence firm performance primarily through family goals and relationships and family resources or assets (Dyer, 2006). The bundle of resources and capabilities

that are distinctive to a firm as a result of family involvement is called as the "familiness" of the firm (Cabrera et al., 2001; Chrisman, Chua & Steier, 2003; Habbershon & Williams, 1999; Graves & Thomas, 2006; Sirmon & Hitt, 2003).

Family ownership and involvement affects these firms' objectives, structures and cultures so they can play an important role either fostering or restraining the development of their international process (Gallo & Sveen, 1991). This way, the process of managing and developing the resources needed to engage in international activities will be affected by the family's aspirations and values that could impose important non-economic goals or constraints on it (Chrisman et al., 2003), and it is subject to unique psychodynamics influences that non-family firms do not experience (Kellermans, 2005).

Concretely, family firms have been described as having certain specific features in relation to human, social and financial capital (Dyer, 2006; Sirmon & Hitt, 2003)

3.1. Human capital and the export development process

Human capital resources include the training, experience, judgment, intelligence, relationships, and insights of individual managers and workers in a firm (Barney, 1991). The education, training and experience of employees determine the skills available to the firm (Grant, 2002). Several studies indicate a positive relationship between the main decision makers' capacities and internationalization (Cavusgil & Naor, 1987; Graves & Thomas, 2006; Reuber and Fisher, 1997; Simpson & Kujawa, 1974 cited in Davis & Harveston, 2000; Westhead et al., 2001).

Family firms have been associated to positive attributes related to their human capital such as extraordinary commitment, warm, friendly and intimate relationships, and the potential for deep firm specific tacit knowledge (Cabrera et al., 2001). However, there are also negative aspects, such as the limited pool of potential recruits family firms have, the troubles attracting and retaining highly qualified managers, and the possibility of hiring suboptimal employees due to nepotism (Dyer, 1986; Sirmon & Hitt, 2003). Family business tend to have a more local culture which drives them to operate the business locally and employ managers without international experience (Gallo & García-Pont, 1996). In fact, Graves and Thomas (2006) concluded that managerial capabilities of family firms lag behind that of non-family firms as they grow internationally. Characteristics of the management systems of the family firms such as paternalism, nepotism and personalism tend to foster organizational rigidity, a shortage of able and competent top managers and make it difficult to institutionalize formal organizational structures and clearly defined lines of authority (Yeung, 2000). These aspects have been considered to be associated with problems for the family firms to develop an internationalization process, given that this process usually needs changes in the organizational structure and professional management systems that favour decentralization of the decision-making process (Abetti

& Phan, 2004; Fernández & Nieto, 2005; Gallo & Sveen, 1991; Graves &Thomas, 2006; Menéndez, 2005). Therefore, the following hypothesis can be stated:

Hypothesis 1: The resources related to human capital do not have a significant accelerating influence on the speed of the export development process of family firms.

2.2. Social capital and the export development process

Social capital resources are also considered to have an specific significance for family firms. It involves relationships between individuals or between organizations that constitute networks, and that can provide with different resources and knowledge (Dyer, 2006; Sirmon & Hitt, 2003; Steier, 2001). Networks can increase the venture's foreign market penetration by helping to identified areas where changes in the venture's product are desirable, reducing uncertainty and increasing their awareness concerning potential threats and opportunities in their industry or market (Westhead et al., 2001, 2004; Zahra, Matherne & Carleton, 2003). Research shows that international collaborative relationships and network ties are positively associated with international growth among entrepreneurial companies (Autio, Sapienza & Almeida, 2000; Etemad & Lee, 2003; Sharma & Blomstermo, 2003). Bell (1995), in a cross-national study of the export behaviour of small computer software firms in Finland, Ireland and Norway, found evidence that contact with foreign suppliers to obtain hardware, local software distribution rights or production licences led to export initiation. Fernández and Nieto (2005) also found that stable cooperation with other companies (e.g. wholesaler or retailers) favours internationalization of family firms.

Families may have some unique advantages in developing social capital between the family and firm stakeholders (e.g. customers, suppliers), given that they typically have the ability to cultivate and nurture long-standing relationships based on commitment, goodwill and trustworthiness (Cabrera et al., 2001; Dyer, 2006; Habbershon & Williams, 1999). In this sense, Graves and Thomas (2006) found that despite the family firms in their study had less managerial capabilities when compared to non-family firms, they were still able to achieve a high degree of internationalization. One possible explanation the authors provide is that the negative consequences associated with limited managerial capabilities were compensated by the unique capabilities of family firms, such as their ability to build mutually beneficial, long term, and international business relationships. This way, family features such as altruism, trust and long-term commitment to the business can constitute a special culture pattern common to family firms all over the world that could facilitate international contacts and collaboration (Gallo & Sveen, 1991; Okoroafo, 1999; Swinth & Vinton, 1993).

Therefore, the following hypothesis can be stated:

Hypothesis 2: The resources related to social capital and networks have a significant accelerating influence on the speed of the export development process of family firms.

2.3. Financial capital and the export development process

Finally, financial behaviour and the availability of financial capital are also factors that can differentiate family firms (Dyer, 2006; Sirmon & Hitt, 2003). Even though family firms may have some advantages in terms of the so called "patient capital" (Sirmon & Hitt, 2003), the fact that the family wealth is mainly concentrated on the business makes the families prone to be risk-averse and reluctant to lose control of the business (Blanco, Quevedo & Castrillo, 2007). This way, founders of family business may avoid international expansion because it requires major resource commitment, and other family members might also resist internationalization fearing the loss of their inheritance (Westhead et al., 2004; Zahra, 2003).

Also, family firms have other features that may limit their capacity to get financial resources. These firms may have problems to accesss to the traditional equity or debt markets that are available to many nonfamily firms (Menéndez, 2005; Mishra & McConaughy, 1999; Sirmon & Hitt, 2003).They prefer family and internal equity financing, but this can obstructs the firm`s capitalization because family members's contributions to capital are likely to be smaller than those of other potential shareholders (Blanco et al., 2007). The scarcity of financial resources may cause companies to have fewer market servicing options, and fewer opportunities to invest in manufacturing facilities and to create economies of scale, or invest in R&D activities that can foster innovation. These restrictions may not allow, or discourage the firms from, entry to foreign markets (Benito & Welch, 1994; Deardoff, 1984; Moen, 1999; Zahra et al., 2003).

Based on the ideas above, it can be followed that family firms are less likely to base their internationalization process on the competitive advantages derived from having plenty of financial resources. Therefore, the following hypothesis can be stated:

Hypothesis 3: The resources related to financial capital do not have a significant accelerating influence on the speed of the export development process of family firms.

3. Methodology

3.1. Database

The database to investigate the timing of the export development process of the family firms was obtained from the Survey of Business Strategies (henceforth SBS) that has been carried out annually by the Spanish Ministry of Science and Technology since 1990 with the goal of obtaining

data about the strategic behaviour of manufacturing firms. We used the last available data corresponding to the year 2002. This database includes the entire population of Spanish manufacturing firms with more than 200 employees (538 observations) and a representative sample of firms with less than 200 employees (1170 observations) selected by stratified random sampling.

Among other questions, the firms must indicate if they have exported in 2002. This information allowed us to classify firms in two groups: exporters and non-exporters. Moreover, the firms are asked to indicate the way of accessing foreign markets in that year, among the following five options: (1) own channel -or sales subsidiary-; (2) parent company in a foreign country -foreign-owned firms-; (3) export intermediary located in Spain; (4) export collaborative agreement –exporters association, industrial agreement or export consortium-; and (5) others.

Taking into account that the purpose of this paper is analyzing the export development process of the Spanish family firms, we decided to exclude all foreign-owned firms, that is, those that exported through a parent company located in a foreign country (point 2 of the above paragraph) and also those who were participated by a foreign firm.

Regarding entry modes, if firm answers 'yes' to option 1 (own channel), irrespective of it answers positively to any other option, we consider it is in the advanced phase of the export development process; if it answers 'no' to option 1 and 'yes' to options 3 (export intermediary located in Spain) or 4 (export collaborative agreement) we consider it is in the initial phase.

The identification of the family firms is made on the basis of the following survey question: "Does the firm have family owners as managers?" Thus, the firm is classified as a family firm if it answers "yes" to this question because it is assumed that the fact that a firm has family owners acting as managers implies a certain level of family influence on the dynamics of the firm. This influence is the origin of the complex system of relationships that characterizes family firms and distinguishes them from non-family ones (Astrachan, Klein & Smyrnios, 2002; Chua, Chrisman & Sharma, 1999; Dyer, 2003).

This way, our sample includes data on 118 non-exporter family firms, 79 family firms in the initial phase of the export process and 107 firms in the advanced phase. Therefore, the sample size is 304 useful observations.

3.2. Method of Analysis

Although researchers agree that the export development process is highly dynamic and time-dependent, paradoxically, almost all models are static in nature (Leonidou & Katsikeas, 1996). This is a concern given that internationalization is considered to be a process occurring over time, and cross-sectional data ultimately limits the depth of our understanding of that process (Coviello & McAuley, 1999). The models fail to explain the dynamics of the firm's decision to move from one export stage to

another, as well as the variations that take place across a large number of variables affecting, or affected by, this transition (Strandskov, 1994). Another time-related issue is the speed at which the firm moves within and between stages. This factor has been ignored by almost all models although variations in technological intensity, product life cycles, research and development costs, and other factors can affect a firm's progress along the internationalization path (Young, 1987).

The event history analysis is a method that permits us to explain the dynamics of the firm's decision to move in the internationalization process and the speed at which the firm moves between stages. This method of analysis has been widely used for studying the international expansion strategy of firms (e.g. Benito & Gripsrud, 1992; Chang, 1995; Chang & Rosenzweig, 1998; Gaba, Pan & Ungson, 2002; Luo, 1998; Tan & Vertinsky, 1996) and the influence of culture in the foreign market entry timing (Mitra & Golder, 2002).

This method is well suited to our data set because it can handle the right and left censored cases. This can be useful in situations where we do not know the exact moment of the firms' entry in the different phases of the export development process as is the case for our database. Since we have assumed a sequential process with three phases (pre-engagement phase, where firms do not export; initial phase, where firms export via agent; and advanced phase, where firms export via sales subsidiary) two entries can be studied. The first is the entry into the initial phase, and the second is the entry into the advanced phase. Such situations are better illustrated in Figure 1.

For example, suppose *E1* is the year when firms begin exporting via agent and *E2* is the year when firms begin exporting via sales subsidiary. In 2002, firm#1 does not export, firm#2 exports via agent and firm#3 exports via sales subsidiary. When we study transition from non-exporting to exporting, firm#1, that was born in 1992 and thus is 10 years old, is still in the pre-engagement phase, so year *E1* is unknown because transition will take place in the future. The only thing we know is that the duration of the pre-engagement phase will be *greater than* 10 years. Non-exporter firms are right-censored observations when we study the first entry. Firm#2 and firm#3 are exporter firms. They were born in 1982 and 1972, thus they are 20 and 30 years old in 2002, respectively. However, in both cases, the year of exports beginning (year *E1*) is unknown because of lack of information in the survey. The only thing we know is that the duration of the pre-engagement phase is *less than* 20 years for firm#2 and *less than* 30 years for firm#3. These firms are left-censored observations when we study the first entry.
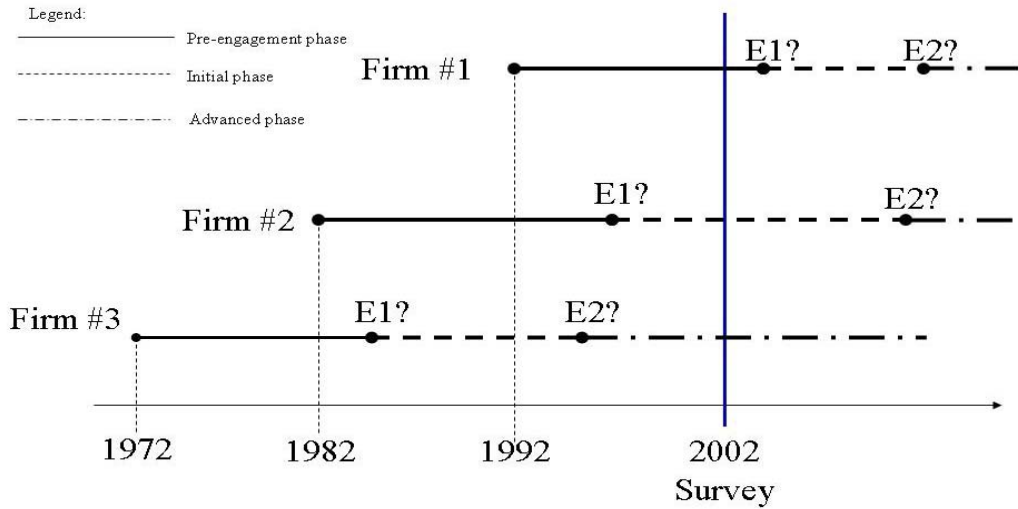
When we study the second entry, non-exporter firms (like firm#1) plus firms in the initial phase (like firm#2) have not entered the advanced phase, so they are right-censored observations. Companies like firm#3 are already in the advanced phase of the export development process, but year of entry into such phase (year *E2*) is unknown, so we also encounter the issue of left censoring in the data.

Event history analysis, as we said earlier, can handle the right and left censored cases. In both cases, the time of censoring is the firm's age t_i. They differ in how the information is incorporated into the likelihood function. For right-censored cases, such information is incorporated into the estimation using their survival function values at the firm's age, $S(t_i)$, that is, the probability that transition will occur at some time *beyond* the firm's age, $P(T > t_i)$. Information for left-censored cases is incorporated using their cumulative distribution function values at the firm's age, $F(t_i)$, that is, the probability that transition occurred at some time *before* the firm's age, $P(T \leq t_i)$. If the sample is composed of *RC* right censored observations and *LC* left censored observations, then the likelihood function *L* is the joint probability of *RC* firms exporting beyond its age and *LC* firms exporting before its age.

$$L = \prod_{i \in RC} P(T > t_i) \prod_{i \in LC} P(T \leq t_i) = \prod_{i \in RC} S(t_i) \prod_{i \in LC} F(t_i)$$

And the natural logarithm of the likelihood function is

$$\ln L = \sum_{i \in RC} \ln S(t_i) + \sum_{i \in LC} \ln F(t_i)$$

A specification of the distribution for the survival time is required. We use the generalized Gamma distribution, which is a three-parameter distribution that is particularly flexible. The survival function for this distribution is

$$S(t)=1-\Gamma_I[(t/\sigma)^\lambda;\delta]$$

where $\Gamma_I(x;y)$ denotes the incomplete gamma function and λ, σ and δ are the parameters of the distribution. In the proportional hazard models, like this one, covariates affect the λ parameter in the following way:

$$\lambda=exp(-\beta_0-\beta'X_i)$$

where X_i is the vector of covariates associated with the ith firm and β is the vector of coefficients associated with each independent variable. A positive (negative) coefficient implies that the covariate exercises a positive (negative) influence on waiting time. Thus, a unit increase in the covariate is interpreted as a firm delaying (hastening) entry into a more advanced phase in the export development process. Once the survival function is specified, estimation proceeds by maximizing the log-likelihood for the censored data. We use the LIFEREG procedure from SAS release 8.0 in our analyses. β_0, σ and δ are referred to as INTERCEPT, SCALE and SHAPE by the LIFEREG procedure.

Dependent Variable

The dependent measure is the duration (in years) that a firm waited before making the first export via agent (initial phase) or via sales subsidiary (advanced phase). This duration is the difference between the time of entry to international markets (year of entry) and the foundation of the firm (year of birth). For those firms that had not made international transactions at the date of the survey (year 2002), the dependent measure is the age of the firm and the firm is considered as a right censored observation. For those firms that had made exports, but the date of the beginning of exports is unknown, the dependent measure is the age of the firm and the company is considered as a left censored observation.

Independent Variables

We have classified the independent variables into three groups, each of them comprising the variables related to the categories of resources described in the theoretical section.

Human Capital Resources

Three variables have been used as a measure of the level of resources related to human capital in the family firms.

Expenditures in formation (FORMEXP): Ratio of expenditures in workers' formation to total employees of the firm.

Average wage (AVERWAGE): Ratio of expenditures in personnel to total employees of the firm

University degree (UNIVDEGR): Ratio of employees with a university degree to total employees of the firm

Social Capital Resources

Three variables related to social capital resources and networks haven been included in the study.

Contact with foreign suppliers (IMPINT): Ratio of import expenditures to the purchases of the firm.

Alliances (ALLIANC): Dummy variable that indicates if the firm has agreements with retailers or wholesalers.

Collaborations (COLLABOR): The firm can make the following collaborations: a) Collaboration with universities and/or technological centres; b) Technological collaboration with customers; c) Technological collaboration with suppliers; d) Technological collaboration with competitors; e) Agreements for technological cooperation; f) Participation in firms that developed technological innovation. This variable runs from 0 (if none collaboration is made) to 6 (if all six collaborations are made).

Financial Capital Resources

Two variables have been used to measure the resources related to financial capital.
Joint ownership (JOINTOWN): Greatest percentage of other companies participation in the capital of the firm. This variable has been included because the existence of another company as a shareholder of the family firm can affect its availability of financial resources (Fernández & Nieto, 2005).
Debt ratio (DEBT): Ratio of debt to total assets of the firm

Control Variables

Company size (EMPLOY). We input the number of employees into the model to control the effects of firm size. This control is needed because size is going to affect the capacity of a firm to absorb the high costs and risks involved in international expansion (Buckley & Casson, 1976). Larger manufacturers are widely considered to possess greater human resources, enjoy higher levels of economies of scale and perceive lower levels of risk in foreign markets and operations (Katsikeas, Piercy & Ioannides, 1996; Koch, 2001).

Industry: We control for industry characteristics that could affect the speed of the export development process by including the following dummy variables:

INDUST_1: Manufacture of basic metals and fabricated metal products

INDUST_2: Manufacture of non-metallic mineral products

INDUST_3: Manufacture of chemicals and chemical products

INDUST_4: Manufacture of machinery and equipment

INDUST_5: Manufacture of electric and optimal equipment

INDUST_6: Manufacture of transport equipment

INDUST_7: Manufacture of food products; beverages and tobacco

INDUST_8: Manufacture of leather and leather products

INDUST_9: Manufacture of pulp, paper and paper products, publishing and printing

INDUST_10: Manufacture of wood and wood products

INDUST_11: Other manufacturing (e.g. furniture, jewellery, musical instruments, sports goods, toys)

4. Results

Table 1 summarizes the descriptive statistics and the correlation between variables. The average family firm in our sample has 68 employees and expends 55.1 euros/year in the formation of each worker. The average wage of the employees is 22,210 euros/year and 8.2% of its workers have a university degree. The average firm imports 4.5% of its purchases; 6.6% of the firm's capital belong to other company; its debt is 59% of total assets, and makes less than one collaboration. Only 23% of the firms of our sample have agreements with retailers or wholesalers.

The magnitudes of the correlations between variables are not strong enough to demonstrate a serious threat of multicollinearity.

Table 1. Descriptive statistics and correlation matrix											
	Mean	St. dev	1	2	3	4	5	6	7	8	9
1.FORM_EXP	55.1	434.0	1								
2.AVERWAGE	22210	9314	0.37	1							
3.UNIVDEGR	8.22	11.3	0.12	0.31	1						
4. IMP_INT	4.48	8.77	0.02	0.09	0.07	1					
5.ALLIANC	0.23	------	-.03	0.07	0.05	0.05	1				
6.COLLABOR	0.37	0.83	0.09	0.23	0.21	0.19	0.08	1			
7.JOINTOWN	6.56	22.3	0.03	0.23	0.13	0.02	-.03	0.09	1		
8. DEBT	0.59	0.24	0.06	-.17	-.02	0.09	0.07	0.23	-.10	1	
9.EMPLOY	68.2	137.6	0.04	0.29	0.10	0.07	0.05	0.21	0.33	-.11	1

Table 2 shows the influence of the independent variables on the timing of entry into the initial and advanced phases of the export development process of family firms. The results in this table suggest that any of the variables related to human capital (expenditures in formation, average wage, and percentage of employees with a university degree) have a statistically significant effect on the speed of entry into any of the phases of the export development process, this way supporting Hypothesis 1. In relation to the variables related to social capital, the results show that the contact with foreign suppliers, the alliances with retailers or wholesalers and the collaborations developed by the firms have a significant accelerating effect on the entry into the initial phase of the export development process.

Also, the alliances have a significant accelerating effect on the entry of the advanced phase of the process. Therefore, these results support Hypothesis 2. Finally, the variables related to financial capital (other companies' participation in capital and debt ratio) do not show any significant effect on the speed on entry into the two phases of the export development process. This way, Hypothesis 3 is also supported by the results.

Table 2. Factors affecting the timing of entry into initial and advanced phases of the export development process for family firms.

Event History Analysis: Generalized Gamma Distribution. 2002

		Initial phase		Advanced phase	
		Coefficient	χ^2	Coefficient	χ^2
	INTERCEPT	+4.619***	94.16	+3.926***	272.33
Human capital	FORMEXP	-0.000	0.00	+0.000	0.47
	AVERWAGE	-0.000	0.41	+0.000	0.10
	UNIVDEGR	-0.002	0.02	-0.002	0.18
Social capital	IMPINT	-0.016*	3.17	-0.000	0.00
	ALLIANC	-0.473**	3.96	-0.238*	3.23
	COLLABOR	-0.366**	4.75	-0.096	1.55
Financial capital	JOINTOWN	-0.001	0.09	-0.002	0.83
	DEBT	-0.518	1.13	-0.220	0.69
Control variables					
Company Size	EMPLOY	-0.002*	3.39	-0.000	0.54
Industry[a]	INDUSTR_5			+0.571*	3.09
	INDUSTR_6	-1.699***	7.79	-0.961***	7.79
	INDUSTR_7			+0.371**	3.91
	INDUSTR_11	-1.541**	6.45		
Gamma Scale parameter		0.473		0.181	
Gamma Shape parameter		3.087		3.007	
Log-likelihood		-166.42		-191.33	
Right censored observations		118		197	
Left censored observations		186		107	
Total number of observations		304			

NOTE: Negative coefficients indicate early entry

[a]Only significance coefficients have been showed. Industry of reference is INDUSTR_1

*** $p<0.01$; **$p<0.05$; *$p<0.10$

Regarding the control variables, Table 2 shows that the company size has a significant accelerating effect only for the entry into the initial phase of the exporting. Also, the results suggest that operating in the manufacture of electrical and optical equipment sector (industry 5) and in the manufacture of food, beverages and tobacco sector (industry 7) have a significant delaying effect on the entry into the advanced phase, while operating in the manufacture of transport equipment sector (industry 6) has a significant accelerating influence on the entry into the two phases, and being in the other manufactures sector (industry 11) accelerates the entry into the initial phase.

5. Discussion

The focus of this paper is the study of the factors affecting the speed of the exporting process of the Spanish manufacturing family firms. To this end, we postulate that this process can be divided into three broad phases: the pre-engagement phase (firm does not export), the initial phase (firm exports indirectly exerting little or no control over the marketing of the product) and the advanced phase (firm exports directly through sales branches or subsidiaries). Therefore, we analyze the factors that could affect the timing of entry of family firms into the two phases (initial and advanced) implying some form of involvement of family firms to the exporting activity.

The review of the literature on internationalization allowed for the description of this process as one that is affected by the pool of resources and capacities of the firms. In this sense, the literature on family firms suggests that there are three resources categories that can present differences between family and non-family firms and that are related to the human, social and financial capital of the firms. In turn, the general literature on internationalization suggests that those three categories of resources should have an accelerating influence on the export development process. However, given the special nature of the family companies and the previous evidence about the internationalization process of these firms, our hypotheses stated that only the resources associated to social capital would have a significant effect on the speed of entry of the family firms in each of the phases of the exporting process.

The results obtained support the proposed hypotheses, given that neither the variables related to human capital nor the ones related to financial capital have any significant effect on the speed of the export development process of the family firms in our sample. Only the variables related to social capital have a significant effect on the timing of this process. Concretely, the relationships developed by the family firms with foreign suppliers, the agreements with retailers and wholesalers and the development of a wide range of technological collaborations are related to and early entry of family firms into the initial phase of the export development process where firms export via agents. Moreover, the alliances with retailers and wholesalers have also a significant accelerating effect in the entry of the family firms into the advanced phase where firms export with their own commercial channels.

This evidence suggests, in line with previous research (e.g. Fernández & Nieto, 2005; Westhead et al., 2001; 2004), that the involvement of the family firms in networks of relationships with different stakeholders can provide them with certain resources and knowledge that can be useful to entry foreign markets. This result is in line with previous research in the internationalization field which suggests that collaboration through networks is used as a way to accelerate the learning process needed to expand internationally (Etemad & Lee, 2003). Networks are sources of new knowledge and learning, faster to acquire than experiential learning (Eriksson et al., 1997).

However, it is even more remarkable the fact that only the resources related to networks have a significant accelerating influence on the exporting process of family firms, with the resources related to human and financial capital having no significant influence at all. This result is also in line with previous evidence related to that family firms have a particular ability to develop relationships that can be the base for competitive advantage (Cabrera et al., 2001; Habbershon & Williams, 1999), and can compensate the scarcity of other important resources and capacities in their internationalization strategy (Gallo & Sveen, 1991; Graves & Thomas, 2006; Okoroafo, 1999). Moreover, even though family firms had the human and financial resources needed to engage in international activities, it is possible that they decide to entry international markets on the bases of the resources provided by their network of relationships. This can be due to family firms' special cultural characteristics related to the need for control and trust and that may condition many of their strategic decisions (e.g. Gallo, Tapies & Cappuyins, 2004; Zahra, 2003).

Consultants and non-family managers should take these results into account when they try to orientate family firms' internationalization strategy. Thus, the evidence obtained can help to understand why family firms are sometimes reluctant to approach international markets even though they seem to have the appropriate profile to do it in terms of size, products, personnel, and so on. Operating in foreign markets could be perceived by family managers as a risky activity that could change the usual way of doing businesses. Then, maybe the key question is to help to develop a good network of contacts that could provide the knowledge and confidence to go into the international arena.

6. Limitations and implications for future research

The use of the SBS allows for a high number of interviewed firms, but limits the information gathering to the questions included in the survey that may not be the best ones to capture the essence of the factors under study. Also, the data used did not allow for details about the ownership, management and degree of family implication of the firms in the study. Therefore, future research should address how the family nature of the company, specifically in relation to generational evolution and cultural and governance patterns could affect the international strategy of family firms. In this sense, the results of this study seem to support the idea that the decisions on internationalization process have certain psychological constraints for family firms that could be overcome on the bases of their network of relationships that seems to be a major export stimulus than having a qualified human capital or even the availability of financial resources.

Therefore, aspects such as the family's financial and psychological links with the business, the patterns of governance structures and others related to the complex system of interrelationships between family and firm could help to explain better the decision to move into the international arena.

Alternative methods of data gathering, such as specific surveys or interviews, could be useful for this purpose.

Another limitation of the study is related to the lack of information about the age of transition between phases. This raises one important technical problem that involves estimation procedure and, as it has been shown previously in this work, a solution can be found in the context of the doubly censored models of duration. However, it is acknowledged that left censoring can be a problem unless cases are negligibly small (Tuma and Hannan, 1984). Future surveys should include dates of transitions and more specific questions to address the different factors that would let us make a more accurate estimation.

Also, our results should be considered with caution because they can be generalized only to the Spanish population of manufacturing family firms. It would be of great interest to develop future research in order to know if the results obtained here in relation to the resources on which family firms base their international process are the same in industries different from the manufacturing ones and in other geographical areas.

Finally, the availability of data from the SBS is limited to the year 2002. This means that we have been unable to extend the analysis to the last five years where several factors (e.g. technological advance) may have affected the conditions in which firms reach the international business arena. The adoption of a longitudinal perspective in future research could help to clarify the evolution of family firms in their internationalization process.

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