

Kiel

# **Working Papers**



Family Firm Internationalization: Influence of Familiness on the Spanish Firm Export Activity

by Fernando Merino, Joaquín Monreal-Pérez, and Gregorio Sánchez-Marín

**No. 1770** | April 2012

Web: www.ifw-kiel.de

Kiel Working Paper No. 1770 | April 2012

## Family Firm Internationalization: Influence of Familiness on the Spanish Firm Export Activity\*

Fernando Merino<sup>a</sup>, Joaquín Monreal-Pérez<sup>b</sup>, and Gregorio Sánchez-Marín<sup>c</sup>

#### **Abstract**

This paper studies the determinants of the export activity of family SMEs, disentangling the three main dimensions that comprise the concept of familiness: power, experience, and culture. The results, using the F-PEC scale over a sample of 500 Spanish SMEs, show that this approach identifies the determinants that explain the export activity of family SMEs better than a simple dichotomous approach. Specifically, we find that the expertise transmitted from different generations and the family culture orientation to the firm positively affect the international activities of family SMEs; however, the composition of the firm control-management does not have any significant influence on internationalization.

**Keywords:** Family SMEs, export activity, Familiness, Spanish firms, F-PEC scale

**JEL**: D22, M16

Fernando Merino<sup>a</sup> Joaquín Monreal-Pérez<sup>b</sup> Gregorio Sánchez-Marín<sup>c</sup>

> **Corresponding author:** Kiel Institute for the World

University of Murcia Economy & University of Facultad de Economía y Murcia Empresa, Campus de Espinardo, Facultad de Economía y

30110 Espinardo, Murcia Empresa, Campus del Espinardo, 30110 Espinardo, Murcia 30110 Espinardo, Murcia (Spain).

Email: fmerino@um.es. (Spain).

Email: jomonreal@um.es Tel: (+34) 868 888 776

University of Murcia Facultad de Economía y

Empresa, Campus de Espinardo,

(Spain).

The responsibility for the contents of the working papers rests with the author, not the Institute. Since working papers are of a preliminary nature, it may be useful to contact the author of a particular working paper about results or caveats before referring to, or quoting, a paper. Any comments on working papers should be sent directly to the author.

Coverphoto: uni\_com on photocase.com

This version: 25 May 2012

<sup>\*</sup> Financial support provided by the Ministry of Innovation and Science through Project CSO2010-17761 is gratefully acknowledged. The authors are very grateful to Aoife Hanley for her valuable support.

#### Introduction

Traditionally, SMEs' internationalization process has been restrained by shortages both in long-term financial assets and in intangible assets, such as managerial skills, attitudes of their managing directors, human capital, innovation and technological capabilities, and marketing capabilities such as knowledge or information about foreign markets and business opportunities (Dhanaraj and Beamish 2003; Leonidou 2004; Ruzzier, Hisrich, and Antoncic 2006). Consequently, the most common forms of SMEs' internationalization are based on a low-commitment perspective focused on exporting (Mittelstaedt, Harben, and Ward 2003), which offers greater flexibility of management actions, entails fewer businesses, and requires fewer resources to be committed than other ways of entering foreign markets (Leonidou 2004; Leonidou, Katsikeas, Palihawadana, and Spyropoulou 2007).

However, even facing a new competitive dynamic in that their survival depends on their capacity to grow internationally, many SMEs either find exporting difficult or directly abandon the activity. One explanation frequently offered in the literature relates to the family nature of the firms (Fernández and Nieto 2005; Gallo and Pont 1996; Okoroafo 1999), although there is no sound consensus among empirical studies on whether family firms' nature restrains or facilitates export activity. There is evidence to the contrary. Namely, Kontinen and Ojala (2011a) find that the small size and flexibility of management teams in family firms allow them to react quickly to new international opportunities. Moreover, Gomez-Mejia, Makri, and Larraza-Quintanta (2010) conclude that family firms exhibit lower levels of internationalization than non-family firms due to their concern with preserving the family control of the business.

These contradictory results may be caused by a definition problem. Defining 'family firm' has become one big challenge for researchers, since a number of different and non-coincident definitions coexist (Astrachan, Klein, and Smyrnios 2002; Klein, Astrachan, and

Smyrnios 2005). Some definitions focus on the content of the family firm (on ownership and/or on the management of the firm), while other measures are concerned with the generational succession within the firm. Finally, the majority of studies define the family firm from a comparative perspective, by means of differentiating it from the non-family firm.

The approach of Astrachan, Klein, and Smyrnios (2002), based on the concept of familiness, seems adequate since it captures key characteristics of this measure and it is well established in the literature (Ayranci 2010; Jaskiewicz, Gonzalez, Menendez, and Schiereck 2005; Klein, Astrachan, and Smyrnios 2005). The important elements that configure the characterization of a company as a family firm, the familiness – composition of the firm control–management, expertise transmitted from different sources, long-term orientation culture, etc. (Rutherford, Kuratko, and Holt 2008) – deeply affect the international activities of the firm, since its internationalization implies additional risks, requires additional resources, and engages the firm in a different culture network (Casillas and Acedo 2005; Zahra 2003).

Considering all the above arguments, this paper aims to analyze, using a sample of 500 Spanish firms, how family SMEs face the challenge of internationalization through export activities from a familiness perspective. The contributions of this paper are several. First, we demonstrate that the dichotomy family/non-family is not enough to capture the specific advantages and disadvantages that family SMEs face when exporting. Second, we introduce the concept of familiness, measuring the influence of the three dimensions – power, experience, and culture – through the export activity of family SMEs. Third, we add new evidence of these links from a "family non-exporting" firm context: the Spanish one. Spanish SMEs are fundamentally family firms (Fernández and Nieto 2005). In comparison with the EU and the US, the weight of family firms in the Spanish economy is huge, representing 70 percent of the Gross Domestic Product (GDP) (65 percent and 50 percent of the GDP in the European Union and the United States, respectively) and more than 80 percent of Spanish

SMEs are considered as family businesses (Strategic Research Center 2009) and, theoretically, more reluctant to undertake internationalization. Moreover, Spanish SMEs are characterized by a reduced international competitive capacity (Arteaga-Ortiz and Fernández-Ortiz 2010), caused by the low investment in innovation and limited productivity as a consequence of large internal growth mainly based on the building and services sectors (Madrid-Guijarro, Garcia, and Van Auken 2009).

This paper is structured as follows. First, we present a review of the literature dealing with the internationalization of family firms, especially from the familiness dimensions' (power, experience, and culture) point of view. This review concludes with the development of proposed hypotheses for this work. This is followed by an explanation of the empirical methodology employed. An exposition of the results of the analysis follows, and the paper finishes with the presentation of conclusions and a discussion of the main results.

## **Literature Review and Hypotheses**

## **Family Firms and Internationalization**

From a traditional agency perspective, family principals prefer to engage in global markets because they offer advantages in terms of risk diversification and lower the firm's financial dependence on the revenues generated in a single domestic context. The international business literature (Collins 1990; Fatemi 1984; Kim, Hwang, and Burgers 1993) notes that internationalization can (1) reduce earnings uncertainty by spreading the investment risk across several countries; (2) better manage systematic and unsystematic risk by increasing the number of business opportunities and operations; and (3) reduce the firm's dependence on particular suppliers, distributors, and customers. All these risk-reduction benefits should be highly attractive to a family firm given that internationalized businesses enjoy lower total risk than those that limit their operations to a domestic or regional area (Anderson and Reeb 2003).

However, the empirical evidence runs contrary to the economic rationale when it comes to the international operations choices made by family firms, especially when the relationships concern small and medium-sized family firms. Therefore, Gomez-Mejia, Makri, and Larraza-Quintana (2010) find that, according to any of the international indicators (volume and percentage of total sales, number of global regions, and diversity of the cultures in which firms operate), family firms exhibit lower levels of internationalization than non-family firms. Family SMEs have traditionally operated in domestic markets due to the substantial and long-term presence of families in firms and their concern with preserving the family control in order to pass the business to future generations (Arosa, Iturralde, and Maseda 2010; Wang 2006). Therefore, internationalization becomes a doubled-edge sword for a family business: it allows the risk to be spread across geographic segments but also carries a higher risk of losing wealth (McConaughy, Matthews, and Fialko 2001).

The explanations for these findings may lie in a wealth preservation logic (Gomez-Mejia, Makri, and Larraza-Quintana 2010), offering several reasons why internationalization – including export activity – can be limited in family SMEs. For example, Gallo and Pont (1996) reveal several factors that restrain family SMEs' internationalization: strategic factors (firm orientation to the national market and lack of resources), family issues (lack of preparation or family attitude), and individual factors (resistance coming from the family top managers). Fernández and Nieto (2005) stress additional factors that dissuade family SMEs from internationalization (lack of either foreign contacts or export experience, knowledge about foreign markets, time, as well as adequate personnel), configuring a negative attitude towards export activities by family firms.

Conversely, Claver, Rienda, and Quer (2007) show that family SMEs follow the propositions laid down by the Uppsala model and that the age, size, and generation of the family firm significantly influence the establishment of international, strategic alliances. Kontinen and Ojala (2011a), in an exploratory case study based on eight family-owned SMEs,

find that the firms mainly recognized international opportunities by establishing new formal ties rather than by using existing informal or family ties. Their findings also indicate that due to the small size and the flexibility of the management team in family SMEs, these firms were able to react quickly to new international opportunities. In a similar way, Basly (2007) finds that the conservatism of family SMEs does not negatively influence the level of internationalization knowledge of the firms. However, neither of those investigations demonstrates the relationship between the international recognition or knowledge and the subsequent export activity of the firm. Menéndez-Requejo (2005) does not find predetermined limits or advantages in the foreign growth of family SMEs, concluding that size and second family generations are the main determinants of internationalization. Graves and Thomas (2006) summarize these results by stating that in spite of the flexible managerial capabilities of family SMEs, they lag behind their non-family counterparts as they expand internationally.

As a whole, as Kontinen and Ojala (2010) conclude in their in-depth revision of family business internationalization studies, the internationalization of family SMEs appears to differ in many ways from that of non-family ones. We can summarize four main factors restraining the internationalization of family SMEs according to the literature review. First, international operations demand more external funding, which dilutes family holdings and transfers power to non-family parties like banks and venture capitalists. These outsiders are then likely to claim a say in the firm's affairs, something the family would rather avoid (Fernández and Nieto 2005, 2006). Second, the family can exercise more influence by capitalizing on its expertise and knowledge in the domestic market rather than venturing into international markets where it has less experience (Graves and Thomas 2006). Third, internationalization is associated with increased information-processing demands and information asymmetries, both of which might require outside managerial talent, leading to a loss of family control and less ability by family principals (Gallo and Pont 1996). Lastly, internationalization requires increasing ties with foreign stakeholders, resources, and institutions, which also makes the

family more dependent on human and relational capital outside the family circle (Kontinen and Ojala 2011b).

In short, family SMEs appear to pursue long-term internationalization plans, while avoiding taking quick and risky decisions and fearing a loss of control as a consequence of their internationalization activity. They are more careful about their network of partners and agents and apply more conservative strategies since they avoid risky undertakings and decisions which threaten the family desire for continuity of the firm. Thus, the majority of studies, adopting a comparative perspective based on differentiating family from non-family firms, massively conclude – and we expect it in hypothesis 1 – that non-family SMEs develop more international activities (including exporting) than family ones.

H1: SMEs that classify themselves as non-family ones export more than self-classified family SMEs.

## **Familiness and Export Activity**

The resource-based view (RBV) of the firm (Barney 1991; Makadok 2003) is the original theoretical basis for the familiness construct. A broad overview of the RBV suggests that unique bundles of resources and capabilities serve as a source of competitive advantage for the firm (Habbershon and Williams 1999). Family firms can be viewed as a unique combination of two sets of rules, values, and expectations: that of the family and that of the business (Gersick, Davis, McCollom, Hampton, and Lansberg 1997). Family firms share certain characteristics that render them unique in terms of patterns of ownership, governance, and succession (Chua, Chrisman, and Sharma 1999; Steier 2003).

The path-dependent phenomena associated with a firm's unique historical conditions create imperfectly imitable resources, such as the family's value-based organizational culture, family assets (perhaps long-standing), or the firm's reputation. Phenomena such as deeply embedded informal and formal decision-making processes in family management are an

expression of the socially complex resources found in family firms (Habbershon and Williams 1999). For example, when firms undergo generational transitions, the slow but significant resource changes include information and experience, management style, and stakeholder relationships. In all these cases, the familiness of the firm changes, resulting in a change in the performance resources and capabilities of the company.

The term familiness can be described as the idiosyncratic firm-level bundle of resources and capabilities resulting from the systems' interactions (Habbershon, Williams, and MacMillan 2003). Chrisman, Chua, and Sharma (2005) express the concept as the resources and capabilities related to family involvement and interactions. Stafford, Duncan, Dane, and Winter (1999) take the underlying idea one step further by integrating family and business systems on the same level sharing the available resources and constraints This familiness approach, based on the belief that family involvement must be directed toward behaviors that produce certain distinctiveness, has the peculiarity of being theoretical in nature and based on the RBV: family firms exist because of the reciprocal economic and non-economic value created through the combination of family and business systems. Furthermore, a family's vision and intention for transgenerational sustainability may lead to the institutionalization of the perceived value of the combined family and business systems, suggesting that cooperation in itself may create utilities for members of a family business and shape their behaviors and decisions (Rutherford, Kuratko, and Holt 2008).

Thus, familiness has been proposed, on the one hand, as a source of competitive advantage, generating firm wealth and value creation, and, on the other hand, as a factor of significance influence in the management of the firm (Pearson, Carr, and Shaw 2008). According to this second notion, Astrachan, Klein, and Smyrnios (2002) propose that the extent to which a firm is a family business should be determined by the way in which family involvement – defined by power, experience, and culture – is used to influence the business. These three dimensions shape the F-PEC, an index of family influence that enables

comparisons across businesses concerning levels of family involvement and their effects on performance as well as other business behaviors (Klein, Astrachan, and Smyrnios 2005). Power refers to dominance exercised through financing the business (for example, shares held by the family) and through leading and/or controlling the business through management and/or governance participation by the family. Experience refers to the collective experience that the family brings into the business. Culture refers to values and commitment, which are seen in the overlap of business and family values.

Taking into account this global definition of familiness, it is crucial to focus on it to appreciate fully how the family is likely to have a considerable impact on the firm's international activities. Owing to the particularities of family businesses, there may be differences in exporting activities due to the adoption of significantly different strategies (Rutherford, Kuratko, and Holt 2008; Zahra 2003). Two firms with the same extent of family involvement in terms of "traditional" governance (ownership and management of the family in the business) may not both have the same family business international orientation if either lacks the intention, vision, and/or behavior that constitutes the essence of a family business (Casillas and Acedo 2005; Zahra 2003).

Several studies have acknowledged these relationships. Kontinen (2011) recognizes that there is a significant influence of familiness on the internationalization of family SMEs. She points out that familiness can be positive or negative in terms of internationalization, depending on the degree of involvement of the family in the international expansion. Relative to this, Casillas and Acedo (2005) corroborate the mediating influence exerted by the family involvement on a company in the context of the firm's internationalization. Also, Zahra (2003) examines the impact of familiness on firm performance in the international arena, finding a significant association between the degree of familiness and the export activity of firms. Thus, it clear that familiness can significantly explain family SMEs' export activity in a better way through its three dimensions, which should exert influence in different ways on the

firm's export behavior. The power, experience, and cultural dimensions and their relationship with the firm internationalization are explained next.

#### Power

A family can influence a business via the extent and quality of its ownership, governance, and management involvement (Astrachan, Klein, and Smyrnios 2002; Klein, Astrachan, and Smyrnios 2005). This dimension assesses the degree of overall influence or dominance, either in the hands of family members or in those appointed by the family. These authors state that this level of influence via ownership, management, and governance is viewed as interchangeable and additive. Accordingly, they argue that the greater is the percentage of family members in each of these three functions (or non-family members, but appointed by family members), the greater is the influence in terms of the power of the family on the firm.

How can the above-mentioned aspects through which the family may exert power on the firm explain SMEs' internationalization? Although there are no studies directly examining the power dimension's effect on exporting, we find some studies allowing inferences to be made. For example, regarding the participation of the family in the firm ownership, the general evidence concludes that ownership by outside (non-family) shareholders is seen as a positive indicator of internationalization. This evidence is clarified by Sciascia, Mazzola, Astrachan, and Pieper (2012), who state that internationalization is maximized when there is a moderate level of family ownership in the firm. Also, Fernández and Nieto (2006) point out that ownership by non-family corporate shareholders is a positive indicator for the scale of family SMEs' internationalization. Finally, George, Wiklund, and Zahra (2005) find that as the institutional investor ownership increases, the scale of SMEs' internationalization is augmented and the top management team's risk aversion decreases. All these pieces of evidence suggest that firms with a family majority shareholder will be more conservative in terms of international activities.

Gallo and Pont (1996) indicate in their study that restricting factors in family SMEs' internationalization include, among others, the resistance of the management team towards internationalization, which can be augmented as the increment of the intra-firm power in terms of the presence of family members in the management or governance of the firm. On similar lines, Naldi and Nordquist (2008) agree that the extent to which family firms are closely governed, (when most of the top managers are family members) influences the firm's internationalization negatively. These authors argue that external board members enhance firm internationalization, since opening up the governance structure to non-family members inserts the firm into an international network facilitating international links and the possibility to obtain additional resources for internationalization.

From a power dimension view, Carney (2005) identifies three characteristics, namely parsimony, personalism, and particularism characterizing governance method of family firms. Parsimony refers to the propensity of family firms to manage resources carefully, due to the fact that the family owns these resources. This might indicate for instance excessive caution and slow progress towards internationalization (Kontinen and Ojala 2010). Personalism and particularism come from the intertwining of ownership and control, all held within one family. Compared with non-family firms, this concentration of power frees family firms from the need to account for their actions to other internal and external stakeholders, giving them the discretion to make decisions on their own. Hence, family firms can proceed with internationalization in a slower and more conservative way than, for instance, non-family firms involving venture capital (Kontinen and Ojala 2010).

When we consider these arguments collectively, we can infer a negative effect of the power dimension of familiness (ownership, governance, and management's family influence on the business) on family SMEs' export activity.

H2: The influence of the power dimension of the familiness on the SME restrains its export activity.

### Experience

The experience dimension relates to succession and to the number of family members contributing to the business (Klein, Astrachan, and Smyrnios 2005). As Astrachan, Klein, and Smyrnios (2002) argue, the level of experience gained from the succession process reaches its maximum at the shift from the first to the second generation. Second and subsequent generations of ownership add proportionally less value to this process. Therefore, the generation of the family owners has a non-linear relationship with the family character. In that way, regarding the experience dimension in the internationalization activities, Casillas, Moreno, and Acedo (2010) clarify that previous generations contribute proportionately more to the family firm's knowledge capital, while successive generations proportionately more to the family firm's future strategies, such as engaging in export activities.

The results by Fernández and Nieto (2005) underline the importance of family generational issues when understanding the international activities of firms. They conclude that the second and the third generation are more likely than the founding generation to start exporting in family SMEs. Menéndez-Requejo (2005) also finds that successive generations in family SMEs have a positive influence on the internationalization of family firms in Spain. Moreover, in the context of large US family firms, Okoroafo (1999) concludes that if a family firm does not become involved in international business in the first or second generation, it is unlikely to do so in the third generation.

Graves and Thomas (2008) point out that, although most family SMEs internationalize according to the Uppsala model, some internationalize rapidly when being managed by young generations. Broadly speaking, the entry onto the scene of new generations is seen as having a positive influence on internationalization, although generational changes sometimes have no influence or else has a negative influence on internationalization. Thus, in view of these arguments, we can infer a positive effect of the experience dimension of familiness (the number of family members contributing to the business) on family SMEs' export activity.

H3: The influence of the experience dimension of the familiness on the SME intensifies its export activity.

#### Culture

Family business culture is formed by the values rooted in an organization. Values demonstrate what the family and its business regard as important. According to Astrachan, Klein, and Smyrnios (2002), the cultural dimension can be approached from two perspectives: first, it considers the extent to which family and business overlap; second, it includes the family's commitment to the business. In light of this view, families that are highly committed to the business are highly likely to have a substantial impact on the business (Klein, Astrachan, and Smyrnios 2005).

Successful family firms tend to have the family's values and culture deeply embedded into their business strategies, policies, and practices (Ward 1998). Building shared values within the family raises the possibility of consensus in business decision-making, and, in order to develop international activities, Kontinen and Ojala (2010) remark that family firms' specific advantages include a high level of trust, strong values, and commitment. The long-term commitment of family SMEs can help to reassure potential partners and investors of the continuity of the process, and the high level of trust inside the firm can enhance the formation of outside network ties. Furthermore, family firms' managers ought to minimize obstacles towards internationalization, such as the different cultures or values of the international market consumers.

Empirically, Svinth and Vinton (1993) demonstrate that the likelihood of success for an international joint venture increases when both partners are family-owned businesses. The authors' results indicate that joint ventures between family firms are more likely to succeed than those between family firms and non-family firms. This is explained by shared values, including trust, loyalty, and continuation of the family. Thus, family firms share values and goals that enable them to bridge international barriers more effectively. In a case study, Tsang

(2001) underlines the importance of cultural dimensions in the internationalization of Chinese family firms. He finds that the full transplantation of the family culture to the different family international business and/or operations facilitates the success of the internationalization process. By this process, the firm manages to cultivate a family atmosphere and a sense of belonging among its different managers and employees over several international subsidiaries.

Recently, studies have linked the cultural dimension concept to what Danes, Stafford, Haynes, and Amarapurka (2009) refer to as "family social capital." These authors label the values embodied in the owner family as family human capital, which, once these values are transmitted to the firm, is transformed into family social capital. The degree to which the family decides to share its values with the firm is important, since the method of effective transfer from family human capital to social capital determines the family firm's success. Family social capital refers to the shared vision and purpose, as well as the unique language, stories, and culture that are commonly known and understood, allowing shared communication and integration of ideas (Pearson, Carr, and Shaw 2008). On the same lines, Lindstrand, Melen, and Rovira Nordman (2011) conclude that the use of social capital can contribute to rapid internationalization. Their results not only show that all dimensions of social capital affect the acquisition of foreign market knowledge, but also that the usefulness of individuals' social capital frequently changes during an SMEs' internationalization.

In short, in spite of the spread and scarcity of studies linking the cultural dimension and internationalization, the empirical evidence agrees that those family firms whose family values overlap with the firm will develop more intense international activity. Thus, we can infer a positive effect of the cultural dimension of familiness on family SMEs' export activity.

H4: The influence of the cultural dimension of familiness on the SME intensifies its export activity.

## Methodology

#### **Data**

In order to test empirically the hypotheses raised in the previous section, we collected data from both family and non-family Spanish SMEs. The initial population, extracted from the OSIRIS database (from Bureau Van Dyck Electronic Publishing), consisted of a total of 5,113 family and non-family firms with between 25 and 249 employees from all the manufacturing industries in Spain. A telephone survey was conducted on this sample between February 28 and March 1, 2011, obtaining information from 500 firms, representing a return rate of 9.78 percent, which is close to the rate attained by similar studies. In the final sample, 200 firms can be considered as small organizations (between 25 and 49 employees) and 300 fit into the medium-size class (between 50 and 249 employees). One of the questions directly addressed whether the firm comprised family firm or not, with family firms representing 56.4 percent of the sample. Finally, it should be noted that the survey was addressed to the CEO due to the higher likelihood that a person in this position possessed a global view of the firm's activities.

## Variables' measurement

Export activity. Exporting is measured in two ways: firstly, a firm's export propensity, which is a categorical variable indicating whether the firm exported during the period considered. Secondly, export intensity which measures the percentage of total sales that go abroad (exports). Both variables are used in the majority of studies dealing with the export orientation of the firm (Katsikeas, Leonidou, and Morgan 2000). Among the international modes of entry, export activity is the most popular for the firm, especially for family firms (Fernández and Nieto 2005; Okoroafo 1999), since it requires fewer resource commitments (in comparison with foreign investments) and therefore implies fewer risks.

Family firm. The family characteristics of the firm are captured by two alternative measures. The first one is the variable FAM, which is a dummy variable capturing the firm's own categorization of itself as a family-firm (FAM=1) or non-family (FAM=0) firm. The second one responds to the F-PEC scale (Astrachan, Klein, and Smyrnios 2002) with the aim of measuring some of the characteristics of family firms related to the familiness concept. The original F-PEC scale was adapted to the characteristics of Spanish SMEs in order to get the three variables (power, experience, and culture). Astrachan, Klein, and Smyrnios (2002) argue that the F-PEC provides an appropriate measure of the familiness of a firm based on a continuous scale evaluating the degree of influence of the family on the business on a continuum. Then, the degree of familiness is captured by the sum of three subscales' scores (see appendix): the first one measures the *power dimension* (question one, items one to three); the second measures the experience dimension (question one, items four to six); and the third measures the *cultural dimension* (question two, items one to eight).

Table 1: Reliability and validity of F-PEC scale of familiness

Variable/Items	$\lambda_{c.e}(t)$	$R^2$	Reliability <sup>a</sup>
Power dimension			
Think in the main owner (and his/her family) of your firm and answer:  1. Proportion of share ownership held	0.994 (15.206)	0.988	ρ <sub>c</sub> =0.84 AVE=0.73
3.Pproportion of executive positions occupied by family members	0.687 (20.139)	0.471	α=0.80
Experience dimension			
Which family generation the family?			$\rho_c = 0.78$
4. Owns the company	0.806 (9.433)	0.652	AVE=0,63 α=0.78
6. Manages the company	0.787 (14.471)	0.616	u 0.76
Cultural dimension			
The family owner  2. Shares similar values to the business	0.959 (14.546)	0.918	
3. Is proud of the business	0.987 (65.566)	0.974	$\rho_{c} = 0.98$
4. Cares about the fate of the business	0.992 (68.457)	0.984	AVE=0.88
5. Understands and supports decisions regarding the future of the business	0.988 (66.320)	0.977	α=0.98
7. Is really affected by the conflicts that occur in the firm	0.763 (24.787)	0.582	
8. With his/ her family values helps to generate a good atmosphere in the firm	0.923 (43.401)	0.852	
Confirmatory Factor Analysis (CFA) goodness of fit: $\chi^2(32)=126,24$ (p=0.000), NFI=0.984, NNFI=0.983, CFI=0.98	8, IFI=0.988, MFI	=0.911,	

GFI = 0.952, AGFI=0.917, RMSEA=0.03

ρ<sub>c</sub>: Composite reliability; AVE: Average variance extracted; α: Cronbach's Alpha.

A confirmatory factor analysis (CFA) was run using the maximum likelihood method to evaluate the reliability and validity of the F-PEC scale (see table one). Previously, items two and six of the power and experience dimensions and items two and eight of the culture dimension have been respectively eliminated, because they do not present enough factor loadings in the exploratory factor analysis. Having refined the F-PEC scale, as shown in table one, the CFA results indicate that each of the items loaded on its corresponding factor, with significant lambda parameters higher than 0.6. With regard to the consistency of each factor, the results indicate appropriate levels of average variance extracted (AVE) as well as composite reliability values. The convergent validity of the scale was confirmed through the value of each of the items (such as the minimum must be greater than 0.5) and its significance (t > 1.96). Also, the discriminant validity was confirmed by calculating the confidence interval for each pair of factors (+/- two times the standard error) and checking that none of them contains the value one. This allows us to state that the three dimensions of familiness are adequately represented through the F-PEC scale. Finally, the adjustment of the model indicators pointed out that the power, experience, and cultural dimensions converge in a single latent factor, the familiness. As shown in table one, the various parameters are the values suggested in the literature – NFI, NNFI, IFC, IFI, MFI, GFI, and AGFI higher than 0.9 and RMSEA lower than 0.08 (Hair, Black, Babin, and Anderson 2010). All these results allow us to validate the internal consistency, multidimensionality, and validity of the F-PEC scale of familiness.

Control variables. The empirical model that relates the export activity to the family character of firms needs to take into account other firm characteristics that affect the export activity. The set of control variables includes the firm *size* (through the log of the number of

employees), the age of the firm, its productivity, which is measured with the Malquist index, 1 and a set of dummy variables to collect the firm industry technology intensity. Firm size is relevant to firm exports to the extent to which there are some fixed costs (a large part of them with a sunk character), so larger firms are more prone to export and to do so to a greater extent (Roberts and Tybout 1997). The age of the firm is a proxy for the accumulated experience and knowledge that can be necessary to serve foreign markets, which tend to be more complex than the home market. Concerning the firm productivity, there is a large amount of literature that establishes both theoretically and empirically that more productive firms have an advantage in engaging in international activities (see Helpman, Melitz, and Yeaple 2004; Hayakawa, Machikita, and Kimura 2010). Finally, one must account for the industry's technological sophistication when considering the firm's international strategy (Hagedoorn and Narula 1996; Stoian, Rialp, and Rialp 2011). In accordance with these studies, we controlled for the industry's technological intensity (ITI) by employing several dummy variables (one for high-tech, another for medium-tech, and other for low-tech industries) that indicate whether the firm belongs to an industry with higher/equal/lesser R+D expenditure than the average one of the whole sample.

The empirical models are estimated using a dependent variable that is both binary (yes/no export) as well as being left-censored (obviously there are no values for the export/sales ratio below zero). Accordingly, the econometric models need to take account of these characteristics. The first case (whether the firm exports or not) is estimated using a probit model, while the second one (the export sales ratio) applies the tobit specification, which is appropriate for this case.

\_

The Malquist index is calculated through  $\ln(TFP_i) = \left(y_i - \overline{\ln(y_i)}\right) - \frac{1}{2}\sum_j (s_{i,j} - \overline{s_j}) \cdot (\ln(x_{i,j}) - \overline{\ln(x_j)})$ , where  $y_i$  is the output of firm i (i=1,...N),  $s_{i,j}$  is the weight of each input j (in the i-th firm), and  $x_{i,j}$  is the amount of j-th input, the terms with a bar being the average for all the firms in each sector. See Caves, Christensen, and Diewert (1982) for details.

## Results

Table 2 presents the descriptive statistics of the variables to be used in the econometric analysis. As we can see, the values of the correlation coefficients are below 0.56, which is the maximum value recommended for the test of multicollinearity (Leiblein, Reuer, and Dalsace 2002). Therefore, it can be presumed that the impact of these correlations can be evaluated using a test for inflation of variance that, effectively, attain maximum VIFs of circa 1.16.<sup>2</sup> These levels are considerably lower than 10, a level that suggests that the results are not biased by multicollinearity (Baum 2006).

Table 2: Means, standard deviations and correlations

	Obs	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Export propensity	458	.70	.46											
2. Export intensity	500	22.76	28.31	.56*										
3. Size	500	4.14	.71	.25*	.29*									
4. Age	500	22.75	16.04	04	12*	09*								
5.Productivity	490	06	1.41	08	09*	08	.21*							
6.Low ITI	500	.41	.49	.00	.03	.03	.01	05						
7. Medium ITI	500	.57	.49	00	02	03	01	.05	96*					
8. High ITI	500	.02	.14	.00	05	01	.00	.02	12*	17*				
9.Family	500	.56	.50	02	08*	21*	00	11*	05	.05	.01			
10. Power <sup>1</sup>	173	222.98	65.41	09	07	27*	.18*	.05	$.04^{5}$	03	04	_2		
11. Experience <sup>1</sup>	214	3.52	1.42	.13	.02	11	.21*	08	$.07^{5}$	04	08	_2	.16	
12. Culture <sup>1</sup>	282	35.66	4.31	.14*	.09	.09	.08	.00	.105	.06	11	_2	.06	.05

\*p<0.05

Only those firm self-considered as Family firms answered to the questions required to build this F-PEC dimension.

Table 3: Export activity of the firm according to its family status

	Family	Non-family	Chi <sup>2</sup>
Export propensity <sup>1</sup>	71.10%	68.79%	0.31 (0.58)
Export intensity <sup>2</sup>	20.92	25.31	6.25 (0.01)

<sup>&</sup>lt;sup>2</sup>This value cannot be calculated because only for those firms self-considered as Family firms (fam=1), this F-PEC dimension is estimated. Therefore, the variable "fam" is constant.

<sup>&</sup>lt;sup>2</sup> Maximum variance inflation factor (VIF) for each variable (there is one different VIF for every model): size=1.16; age=1.14; productivity=1.07; low ITI=(dropped from every regression because of multicollinearity); medium ITI=1.06; high ITI=1.03; family self-consideration=1.07; power=1.14; experience=1.12; culture=1.06.

<sup>1</sup>Proportion of exporters.

<sup>2</sup>Mean value.

As a departure point for the analysis, an ANOVA was conducted to test the average values of the firm's export activity (EP and EI) in firms which considered themselves to be family firms, as compared with those that classified themselves as non-family firms. As can be seen in Table 3, we found that being a family firm does not significantly change the likelihood of becoming an exporter, but it does reduce the export intensity of the firm. This negative effect of being a family firm on the firm export intensity is consistent with the findings of previous studies dealing with Spanish family firms (for example, Fernández and Nieto 2005).

A first glimpse of the differences in the three dimensions of the F-PEC scale is presented in Figure 1. Here, the average values for exporters and non-exporters are presented (rescaled for presentation purposes). As we can see, exporters exhibit larger values in the cultural and especially the experience dimensions, while their average value is lower for the power dimension. It must be noted that this first approach with just the average values of the two sets of firms is in accordance with H2, H3, and H4.

Average values of the 3 F-PEC dimensions

according international activities

Power

Culture Experience

No exporters

In tables 4 and 5, we report the econometric models that show the effect of the familiar character on the export activity of firms. In both tables, the first model characterizes firms on the basis of the direct question about whether the firm has a family firm character or not and the second one collects the results of characterizing firms on the basis of the discussed F-PEC scale, allowing us to test H2 to H4.

Table 4: Effect of the familiness dimensions on the export propensity of the firm

	Model 1a (n=490)	Model 2a (n=134)
Constant	-1.49*** (0.00)	0.96 (0.52)
Family Firm self-classification	0.08 (0.55)	
Power		-0.00 (0.70)
Experience		0.22** (0.04)
Culture		0.05* (0.10)
Sizeb	0.50*** (0.00)	0.63*** (0.00)
Age	-0.00 (0.91)	-0.00 (0.69)
Productivity	-0.06 (0.17)	-0.04 (0.70)
Low Industry Technology Intensity	-0.09 (0.83)	-5.66*** (0.00)
Medium Industry Technology Intensity	-0.07 (0.88)	-5.22*** (0.00)
R2	0.06	0.15
Log-likelihood	-283.85	-67.29
Wald chi2	34.30*** (0.00)	23.34*** (0.00)

<sup>\*\*\*</sup> P<0.01; \*\* P<0.05; \*P<0.1

(p-value in brackets)

It can be seen that the family self-characterization is insufficient to capture any difference between family and non-family businesses that can affect the export behavior of these firms, given that in both specifications the estimated coefficient of the dummy variable is not significant. Thus, the empirical evidence does not suggest that non-family (based on self-classification) SMEs export more than family firms, as proposed in H1.

As it was argued previously, the concept of familiness is poorly captured if we confine ourselves to a binary variable. Indeed, the conceptualization of the family firm's main

<sup>&</sup>lt;sup>a</sup> Export Propensity as dependent variable (*probit* regression)
<sup>b</sup> Size is taken as natural logarithm.

characteristics will provide a clearer image of how them face exports. Empirical model two in tables four and five incorporates the three dimensions of the F-PEC scale. In both the probit and the tobit regressions, model two provides a different conclusion from the first model. Familiness is important for being an exporter, but only when its characteristics are reported separately and not if they are established through a dichotomous characterization.

The results of the tobit models confirm that the two dimensions are positively and significantly linked to the export activity of family SMEs. Experience and culture have a clear positive effect: the knowledge that the experience dimension captures and those values linked to the cultural characteristics of the F-PEC scale seem to be facilitating factors when exporting. In this sense, we may say that in the sample of Spanish SMEs we find support for both H3 and H4. Regarding to the power dimension, its lack of statistical significance implies that those firms in which the owner family exerts tighter control (in terms of the F-PEC scale) do not show statistically significant export activity. This result suggests a lack of support for H2, indicating that control is not relevant, or that it may be exerted beyond the exclusive participation of the family in the equity and governance board.

Regarding the control variables, two results can be underlined. First, size is shown to exert a positive impact in both measures of the export activity, which demonstrates that larger firms can afford the high costs of exporting to a greater extent. On the other hand, the technological intensity of the industry seems to be important, as suggested by Hagedoorn and Narula (1996) or by Stoian, Rialp, and Rialp (2011). Firms in industries with lower technological intensity are less present in international markets (as can be seen in model two, table four), but once they enter international markets, they attain similar levels of sales. So, for these firms it it is their perception of fixed entry costs that limits their entrance to the international markets.

Table 5: Effect of the familiness dimensions on the export intensity of the firm

	Model 1 <sup>a</sup> (n=490)	Model 2 <sup>a</sup> (n=134)
Constant	-0.35 (0.21)	-1.00 (0.14)
Family Firm self-classification	0.03 (0.65)	
Power		-0.00 (0.69)
Experience		0.08** (0.04)
Culture		0.02* (0.09)
Size <sup>b</sup>	0.23*** (0.00)	0.22*** (0.00)
Age	-0.00 (0.91)	-0.00 (0.80)
Productivity	-0.03 (0.16)	-0.01 (0.80)
Low Industry Technology Intensity	-0.02 (0.94)	-0.45 (0.27)
Medium Industry Technology Intensity	-0.01 (0.95)	-0.32 (0.42)
$\mathbb{R}^2$	0.03	0.08
Log-likelihood	-471.33	-118.21
Wald chi <sup>2</sup>	33.48*** (0.00)	21.56*** (0.01)

<sup>\*\*\*</sup> P<0.01; \*\* P<0.05; \*P<0.1

### **Discussion and Conclusions**

The literature review (Kontinen and Ojala 2010) reveals that the majority of studies examining the internationalization of family firms employs a family vs. non-family comparison based almost exclusively on family ownership and management. This could be a simplistic and therefore problematic characterization (Astrachan, Klein, and Smyrnios 2002) for approaching the study of export behavior in family SMEs. According to Rutherford, Kuratko, and Holt (2008), the familiness approach allows researchers to study family involvement as discrete factors, which, in turn, facilitates the examination of how the three dimensions of familiness – power, experience, and culture – should influence the firm export behavior.

Based on these arguments, this paper analyzes the determinants of internationalization of family SMEs, disentangling the influence of familiness on export activity through the use of the F-PEC scale. Based on a sample of 500 Spanish SMEs, the results effectively confirm that this approach better identifies the family factors influencing – positively or negatively – the

<sup>(</sup>p-value in brackets)

<sup>&</sup>lt;sup>a</sup>Export Intensity as dependent variable (*tobit* regression)

<sup>&</sup>lt;sup>b</sup> Size is taken as natural logarithm.

export activity of family SMEs. Specifically, a great proportion of our hypotheses are confirmed, generally indicating that expertise from different generations and the links of family—business culture positively affect the export activities of family SMEs. Conversely, factors related to family ownership and management do not have any significant influence on internationalization.

The lack of significance (in any direction) of the family self-classification of the firm for either its export propensity or its export intensity goes against the most common findings from a number of studies (for example, Fernández and Nieto 2005 or Okoroafo 1999). This result suggests that measuring the family character of a firm with one single and dichotomous variable may be insufficient, especially as the impact of the family character on firms' internationalization is based on some of their peculiarities in opposite directions. Thus, we suggest the use of a wider perspective, disentangling those factors that characterize a family firm to determine their relationship with the firm's international activities. In so doing, we propose using the well-established F-PEC scale originally proposed by Astrachan, Klein, and Smyrnios (2002). Specifically, the following elements should be considered.

Regarding the power dimension, it is important to take into account that, since this dimension measures the overall influence of the family within the firm, the negative value of its coefficient confirms the view of Gomez-Mejia, Makri, and Larraza-Quintanta (2010) that family firms are less internationalized than their non-family counterparts. This may be due to their concern with preserving the family control to ensure the continuity of the firm (Arosa, Iturralde, and Maseda 2010; Wang 2006) and therefore their tendency to avoid the risks associated with foreign expansion (McConaughy, Matthews, and Fialko 2001). Nevertheless, the power dimension shows no significant effect on either of the measures of export activity. The explanation for this finding may be that none of the restraining factors stressed by Gallo and Pont (1996) refer to the (influence) power in terms of the family involvement in the ownership or governance/management of the firm, but to other factors, such as the family

attitude, the preparation of its members, or the lack of resources from which the family firm suffers. This suggests that the power dimension is not so important when explaining the family firm export activity.

The empirical analysis has shown that the experience dimension is positively related to both the export propensity and the export intensity of the firm, as suggested by the second hypothesis. This result is in line with the study by Fernández and Nieto (2005) in a double sense: firstly, when underlining the importance of which generation is running the firm and secondly, when they argue that the second and third generations are more prone than the founding one to start exporting in family SMEs. In particular, the positive effect of this dimension agrees with the finding by Casillas, Moreno, and Acedo (2010), who point out that the following generations to the founding one are more prone to participate in strategies for engaging in export activities. In the same vein, Menéndez-Requejo (2005) finds that, within the Spanish context, new generations in family SMEs favor family firm internationalization.

Finally, regarding a firm's culture, the positive effect of this dimension confirms that those firms performing successfully share some values with the family (Ward 1998). In this sense, Kontinen and Ojala (2010) underline two important advantages of the family firm – strong values and a high long-term commitment level – that favor engaging in international networks and inspiring trust. Obviously, these two elements make the firm internationalization process easier. For Tsang (2001), the identification of the family culture with that of the firm makes each employee identify more closely with the organization and therefore to its main performance indicators, among which the firm export activity stands out.

Moreover, the effect of this overlap means that the families governing the family firms within our sample have the required family human capital and, moreover, the willpower and the knowledge needed to transform this capital into family social capital. However, the consideration from Fernández and Nieto (2005) needs to be taken into account: since the disparate values within the family make it impossible to transfer family to social capital and

therefore worsens the decision-making process in several strategic fields, such as the internationalization one, our findings show the non-contradiction between the values of the family managing the family firms of the sample.

In short, we can conclude the following: first, measuring the firm's familiness applying the F-PEC scale developed by Astrachan, Klein, and Smyrnios (2002) better explains the peculiarities of the family firm. This is because it incorporates the key determinants of family influence within the firm— power, experience, and culture. Secondly, among these dimensions, culture and, to a greater extent, experience exert a high impact on the export activity of the family firm. Therefore, in line with the theoretical predictions, those firms run by new generations (more prone to risky ventures such as internationalization than the founding generation) and sharing the same values as the family, show more intense export activity than those managed by older generations and/or whose values differ from those of the family.

## *Implications*

Regarding this paper's contribution to the research field, we have tried to overcome the restrictiveness caused by using a single definition of 'family firm' by using the F-PEC scale created by Astrachan, Klein, and Smyrnios (2002). This richer consideration of family firms allows us to identify separately three important and different dimensions when studying the family firm, while tapping more appropriately into the characteristics of the family firm. Moreover, the F-PEC scale is suitable since it provides reliable and replicable results (Astrachan, Klein, and Smyrnios 2002), as well as comparable findings among different family firms (Naldi and Nordquist 2008).

Moreover, family firms' managers can use these findings to promote favorable conditions for the internationalization of the firm. According to our results, managers from the family should assure those ideal conditions that favour handing over to the next generation, since the

experience dimension was shown to be one main determinant of the export propensity of the family firm. Besides, the overlap between the family values and those of the family firm appeared to be key determinants of exporting. Nevertheless, confrontation and lack of will when transferring the values from the family to the firm should be avoided since they would prevent family human capital from being turned into social capital.

## Limitations and future research

Some limitations of this study should be mentioned. In the first place, firms' export activity is affected by many variables that cannot be easily controlled, meaning that the results of this study, like those of other investigations, should be treated with caution. Another factor that limits the generalization of these results is that the study focuses on the manufacturing sector.

Thus, at least three future lines of research suggest themselves: first, carrying out a longitudinal study that considers the time evolution in the characterization of both the firm familiness and the export activity. It would allow a better explanation of the causal effect within the variables considered; second, analyzing the role that the family firm dimensions play when considering other international activities beyond exporting, such as foreign investments or international licenses; and third, as Naldi and Nordquist (2008) point out, given the general heterogeneity of the family firm population, we would like to encourage the use of the F-PEC scale to compare the internationalization of different kinds of family firms.

## References

- Anderson, C. R., and M. D. Reeb (2003). "Founding-family ownership and firm performance: evidence from the S&P 500," *Journal of Finance*, 58, 1301-1328.
- Arosa, B., T. Iturralde, and A. Maseda (2010). "Ownership structure and firm performance in non-listed firms: Evidence from Spain," *Journal of Family Business Strategy*, 1, 88-96.
- Arteaga-Ortiz, J., and R. Fernández-Ortiz (2010). "Why don't we use the same export barrier measurement scale? An empirical analysis in small and medium-sized enterprises," *Journal of Small Business Management*, 48, 395-420.
- Ayranci, E. (2010). "Family involvement in and institutionalization of family businesses: A research," *Business and Economic Horizons*, 3(3), 83-104.
- Astrachan, J. H., S. B. Klein, and K. X. Smyrnios (2002). "The F-PEC scale of family influence: A proposal for solving the family business definition problem," *Family Business Review*, 15, 44-58.
- Baum, C. F. (2006). An introduction to modern econometrics using Stata. Texas: Stata Press.
- Barney, J. B. (1991). "Firm resources and sustained competitive advantage," *Journal of Management*, 17, 99–120.
- Basly, S. (2007). "The internationalization of family SME: An organizational learning and knowledge development perspective," *Baltic Journal of Management*, 2, 154-180.
- Carney, M. (2005). "Corporate governance and competitive advantage in family-controlled firms," *Entrepreneurship Theory and Practice*, 29, 249-265.
- Casillas, J. C., and F. J. Acedo (2005). "Internationalisation of Spanish family SMEs: an analysis of family involvement," *International Journal of Globalisation and Small Business*, 1, 134-151.
- Casillas, J. C., A. M. Moreno, and F. J. Acedo (2010). "Internationalization of family businesses: a theoretical model base on international entrepreneurship perspective," *Global Management Journal*, 2(2), 18-35.

- Caves, R., L. R. Christensen, and E. Diewert (1982). "Multilateral comparisons of output, input and productivity using superlative index numbers," *Economic Journal*, 92, 73-86.
- Chrisman, J. J., J. H. Chua, and P. Sharma (2005). "Trends and directions in the development of a strategic management theory of the family firm," *Entrepreneurship Theory and Practice*, 29, 555–575.
- Chua, J. H., J. J. Chrisman, and P. Sharma (1999). "Defining the family business by behavior," *Entrepreneurship Theory and Practice*, 23, 19–39.
- Claver, E., L. Rienda, and D. Quer (2007). "The internationalization process in family firms: choice of market entry strategies," *Journal of General Management*, 33, 1-14.
- Collins, J. (1990). "A market performance comparison of U.S. firms active in domestic, developed and developing countries," *Journal of International Business Studies*, 21, 271-287.
- Danes, S. M., K. Stafford, G. Haynes, and S. S. Amarapurkar (2009). "Family capital of family firms. Bridging human, social and financial capital," *Family Business Review*, 22, 199-215.
- Dhanaraj, C., and P. W. Beamish (2003). "A resource-based approach to the study of export performance," *Journal of Small Business Management*, 41, 242-262.
- Fatemi, A. (1984). "Shareholder benefits from corporate international diversification," *Journal of Finance*, 39, 1325-1345.
- Fernández, Z., and M. J. Nieto (2005). "International strategy of small and medium-sized family business: some influential factors," *Family Business Review*, 18, 77-89.
- Fernández, Z., and M. J. Nieto (2006). "Impact of ownership on the international involvement of SMEs," *Journal of International Business Studies*, 37(3), 340-351.
- Gallo, M. A., and C. Pont (1996). "Important factors in family business internationalization," *Family Business Review*, 9, 45-59.

- Gersick, K. E., J. A. Davis, M. McCollom Hampton, and I. Lansberg (1997). *Generation to generation: Life cycles of the family business*. Boston, MA: Harvard Business School Press.
- George, G., J. Wiklund, and S. A. Zahra (2005). "Ownership and the internationalization of small firms," *Journal of Management*, 31, 210–233.
- Gomez-Mejia, L. R., M. Makri, and M. Larraza-Quintana (2010). "Diversification decisions in family-controlled firms," *Journal of Management Studies*, 47, 223-252.
- Graves, C., and J. Thomas (2006). "Internationalization of Australian family businesses: A managerial capabilities perspective," *Family Business Review*, 19, 207–224
- Graves, C., and J. Thomas (2008). "Determinants of the internationalization pathways of family firms: An examination of family influence," *Family Business Review*, 21, 151-167.
- Habbershon, T., and M. Williams (1999). "A resource-based framework for assessing the strategic advantages of family firms," *Family Business Review*, 12, 1–25.
- Habbershon, T., M. Williams, and I. MacMillan (2003). "A unified systems perspective of family firm performance," *Journal of Business Venturing*, 18, 451–465.
- Hagedoorn, J., and R. Narula (1996). "Choosing Organizational Modes of Strategic Technology Partnering: International and Sectoral Differences," *Journal of International Business Studies*, 27(2), 265-284.
- Hayakawa, L., T. Machikita, and F. Kimura (2010). "Globalization and productivity A survey of firm-level analysis," *Journal of Economic Surveys*, 1-23.
- Helpman, E., M. Melitz, and S. Yeaple (2004). "Export versus FDI with heterogeneous firms," *American Economic Review*, 94, 300-316.
- Jaskiewicz, P., V. Gonzalez, S. Menendez, and D. Schiereck (2005). "Long-run IPO performance analysis of German and Spanish family-owned businesses," *Family Business Review*, 18, 179-202.

- Katsikeas, C. S., L. C. Leonidou, and N. A. Morgan (2000). "Firm-level export performance assessment: Review, evaluation, and development," *Journal of the Academy of Marketing Science*, 28(4), 493-511.
- Kim, W. C., P. Hwang, and W. Burgers (1993). "Multinationals' diversification and the risk-return trade-off," *Strategic Management Journal*, 14, 275-286.
- Klein, S. B., J. H. Astrachan, and K. X. Smyrnios (2005). "The F-PEC scale of family influence: Construction, validation, and further implication for theory," *Entrepreneurship Theory and Practice*, 29, 321–339.
- Kontinen, T., and A. Ojala (2010). "The internationalization of family businesses: A review of extant research," *Journal of Family Business Strategy*, 1, 97-107.
- Kontinen, T. (2011) *Internationalization pathways of family SMEs*. Doctoral Dissertation. University of Jyväskylä, Finland.
- Kontinen, T., and A. Ojala (2011a). "International opportunity recognition among small and medium-sized family firms," *Journal of Small Business Management*, 49, 490–514.
- Kontinen, T., and A. Ojala (2011b). "Network ties in the international opportunity recognition of family SMEs," *International Business Review*, 20, 440-453.
- Leiblein, M. J., J. J. Reuer, and F. Dalsace (2002). "Do make or buy decisions matter? The influence of organizational governance on technological performance," *Strategic Management Journal*, 23, 817-833.
- Leonidou, L. C. (2004). "An analysis of the barriers hindering small business export development," *Journal of Small Business Management*, 42, 229-302.
- Leonidou, L. C., C. S. Katsikeas, D. Palihawadana, and S. Spyropoulou (2007). "An analytical review of the factors stimulating smaller firms to export," *International Marketing Review*, 24, 735-770.

- Lindstrand, A., S. Melen, and E. Rovira Nordman (2011). "Turning social capital into business: a study of internationalization of biotech SMEs," *International Business Review*, 20, 194-212.
- Madrid-Guijarro, A., D. Garcia, H. Van Auken (2009). "Barriers to innovation among Spanish manufacturing SMEs," *Journal of Small Business Management*, 47, 465-488.
- Makadok, R. (2003). "Doing the right thing and knowing the right thing to do: Why the whole is greater than the sum of the parts," *Strategic Management Journal*, 24, 1043–1055
- McConaughy, D., C. Matthews, and A. Fialko (2001). "Founding family controlled firms: Performance, risk, and value," *Journal of Small Business Management*, 39, 31–49.
- Menéndez-Requejo, S. (2005). "Growth and internationalization of family businesses," International Journal of Globalisation and Small Business, 1, 122-133.
- Mittelstaedt, J. D., G. N. Harben, and W. Ward (2003). "How small is too small? Firm size as a barrier to exporting from the United States," *Journal of Small Business Management*, 41, 68-84.
- Naldi, L., and M. Nordquvist (2008). "Family firms venturing into international markets: A resource dependence perspective," *Frontiers of Entrepreneurship Research*, 28(14), 1-18.
- Okoroafo, S. C. (1999). "Internationalization of family businesses: evidence from Northwest Ohio, USA," *Family Business Review*, 12, 147-158.
- Pearson, A. W., J. C. Carr, and J. C. Shaw (2008). "Toward a theory of familiness: A social capital perspective," *Entrepreneurship Theory and Practice*, 32, 949-969.
- Roberts, M., and J. Tybout (1997). What Makes Exports Boom, Washington DC: The World Bank.
- Rutherford, M. W., D. F. Kuratko, and D. T. Holt (2008). "Examining the link between "familiness" and performance: Can the F-PEC untangle the family business theory jungle?," *Entrepreneurship Theory and Practice*, 32, 1089-1109

- Ruzzier, M., R. D. Hisrich, and B. Antoncic (2006). "SME internationalization research: past, present and future," *Journal of Small Business and Enterprise Development*, 13, 476-497.
- Sciascia, S., P. Mazzola, J. H. Astrachan, and T. Pieper (2012). "The role of family ownership in international entrepreneurship: Exploring nonlinear effects," *Small Business Economics*, 38, 15-31.
- Stafford, K., K. A. Duncan, S. Dane, and M. Winter (1999). "A research model of sustainable family businesses," *Family Business Review*, 12, 197-208.
- Steier, L. (2003). "Variants of agency contracts in family financed ventures as a continuum of familial altruistic and market rationalities," *Journal of Business Venturing*, 18, 597–618.
- Strategic Research Center (2009). *La pyme familiar española y su internacionalización*.

  Barcelona: EAE Business School.
- Stoian, M. C., A. Rialp, and J. Rialp (2011). "Export performance under the microscope: A glance trough Spanish lenses," *International Business Review*, 20(2), 117-135.
- Svinth, R. L., and K. L. Vinton (1993). "Do family-owned businesses have a strategic advantage in international joint ventures?," *Family Business Review*, 6, 19-30.
- Tsang, E. W. K. (2001). "Internationalizing the family firm: a case study of a Chinese family business," *Journal of Small Business Management*, 39, 88-94.
- Wang, D. (2006). "Founding family ownership and earnings quality," *Journal of Accounting Research*, 44, 619-656.
- Ward, J. L. (1998). "Growing the family business: special challenges and best practices," *Family Business Review*, 10, 323-337.
- Zahra, S. (2003). "International expansion of U.S. manufacturing family businesses: The effect of ownership and involvement," *Journal of Business Venturing*, 18, 495–512.

## APPENDIX: F-PEC scale adaptation

Please, think in the main owner (and his/her family) of your firm and answer:

1. Proportion of share ownership held by:
Family of main ownerpercent Others non-family ownerspercent
2. Does the business have a governance board?
No Yes What proportion of its members are familiar?percent
3. What proportion of executive positions are occupied by family members?percent
4. Which generation owns the company?
Founder Other: Which one?
5. Which generation manages the company?
Founder Other: Which one?
6. How many family members participate actively in the business?members
Please, rate the following assertions. Family owner (1: completely disagree; 5:
completely agree):
1. Has influence on the business
2. Shares similar values with the business
3. Is proud of the business
4. Is care about the fate of the business
5. Understands and supports decisions regarding the future of the business
6. Knows differentiate the business aspects from those of the family
7. Is really affected by the conflicts that occur in the firm
8. With its family values helps to generate a good atmosphere in the firm