THE INTERNATIONALIZATION OF SMALL AND MEDIUM-SIZED ENTERPRISES: THE EFFECT OF FAMILY MANAGEMENT, HUMAN CAPITAL AND FOREIGN OWNERSHIP[*]

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Abstract

This paper focuses on factors affecting the internationalization of SMEs. Based on both international business and family business literatures, we develop three hypotheses that relate the internationalization of SMEs' to family management, human capital, and presence of foreign shareholders. Relying on data from a large sample of Italian manufacturing SMEs, we find that involvement of the owning family in management negatively influences export propensity but, once the choice to go international has been made, the degree of internationalization of the firm is not significantly different with respect to the composition of the management team. Our results also show that the level of human capital and the presence of foreign shareholders in the SME positively influence both export propensity and export intensity. Size and age of the firm as well as industry characteristics are included in the empirical analysis as control variables.

JEL Classification: L21, M16

Key words: internationalization, SMEs, export, family-based management

1. Introduction

The debate on factors affecting the international development of small and medium-sized enterprises (SMEs) is very lively and research in this field is attracting growing interest (Depperu, 1993; Coviello and McAuley, 1999; Zucchella and Maccarini, 1999; Lu and Beamish, 2001). Relatively few studies, however, have analysed how the family nature of the firm influences its process of internationalization (Gallo and Sveen, 1991; Gallo and Pont, 1996; Okoroafo, 1999; Zahra, 2003). The question if and to what extent the family aspect of the firm has an effect on internationalization decisions and, therefore, if internationalization of family businesses differs significantly compared to non family businesses is still debatable. Moreover, although literature on family businesses has widely recognised the managerial complexity of family firms and the peculiarity of their strategic behaviours (Corbetta, 1995; Montemerlo, 2000), research in this field still requires considerable development, particularly in terms of empirical investigation.[1]

This paper aims to bridge this gap in the studies, through an empirical investigation of the internationalization of SMEs, with particular attention to analysis of the influence that the family management, human capital, and foreign ownership have on international development. This topic appears to be particularly relevant in Italy, where small and medium-sized family businesses are predominant. In this country, more than in others, the competitiveness of firms and, particularly, the sustainability of their competitive advantages at an international level is closely linked with the sustainability of family business system.

This work does not aim to investigate problems associated with the definition of family business. However, a brief reference to literature is useful to clarify the perspective adopted in the study. To this end, two factors must be stressed. Firstly, the focus of analysis

[1] A recent review (Sharma, 2004), based on 217 articles published in specialized journals, shows that research on family businesses has been enriched with theoretical models and more refined conceptualizations, but at the same time there is a growing need to carry out empirical research to test the models. The prevalence of theoretical rather than empirical works had already been pointed out in a previous analysis of literature on family business (Sharma *et al.*, 1997). Regarding the contents of research, Chrisman *et al.* (2003) classify 190 articles, published between 1996 and 2003 and point out that family business research deals with several subjects, amongst which internationalization takes up little room (about 3%, 6 articles).

is on the family nature of management, not on ownership. The only element of the ownership structure that is taken into consideration is the presence of foreign shareholders. On the other hand, data on the composition of the capital do not necessarily allow a precise definition of a business as *family*. It may be the case, for example, that a business is managed by several members of the same family, but the entrepreneur is the only shareholder. Such a business is undoubtedly *family*, but there simply has not been a transfer of shares to members of the family, who may already be working there.

Secondly, bearing in mind the difficulties in defining unambiguously a family business, it was decided not to adopt a dichotomic approach, based on the clear distinction between a *family* business and a *non family* business. It was preferred, instead, to focus on the family *vs*. non family nature of management, evaluated as a continuous variable, on the basis of a greater or lesser involvement of the business-owning family.

2. Literature review and hypotheses

2.1 Drivers and limits of international growth of SMEs

Drawing on different perspectives of analysis, international business literature stresses the role of factors both internal and external to the business as drivers of firm internationalization. Economic studies, such as those based on Dunning's eclectic paradigm (1981) and internalization theory (Rugman, 1981), have contributed, in particular, to explaining decisions related to Foreign Direct Investments (FDI) by large multinational enterprises, already at an advanced stage of the process of international development.

Another stream of literature focuses on the internationalization process. In this field, the *stage theory*, which is the dominant paradigm, suggests that the international activity of a firm increases gradually as it acquires knowledge and experience (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977). A firm evolves from a low level of international activities and commitment to higher levels, through stages which are assumedly one-way.

The incremental nature of the process is considered not only as a shift from “soft” internationalization (indirect exports) to more committed, riskier modes, also in terms of choice of foreign markets: the firm gradually expands from nearer markets to those further

away. According to the stage theory*,* market knowledge is the key factor that influences the time and direction of international development. Only experience can reduce the uncertainty associated with international expansion and, therefore, remove the principal obstacle to it (Leonidou and Katsikeas, 1996). Internationalization is perceived, here, as an incremental process based on learning.

Studies on *international new ventures* (Oviatt and McDougall, 1994; McDougall *et al.,* 1994; Reuber and Fischer, 1997) have extended this approach. Changes in the international environment (improvements in transport and communications, greater mobility of human capital, the increasing homogeneity of many markets) have made doing international business easier, enabling firms to pursue more diverse growth trajectories than in the past. There is an increasing empirical evidence of businesses which take on an international orientation right from the first phases of their existence, particularly in high tech sectors. In these sectors, heavy investments in research and development can be adequately rewarded if innovation is exploited quickly on an international scale. While the stage theory emphasises the importance of knowledge of the market as a driver of international development, in literature on international new ventures technological knowledge is fundamental.

Several contributions to internationalization studies are based on *network theory* (Coviello, 2006). The relationships play a key role in the process of international development, providing access to technological, productive or market resources (Johanson and Vahlne, 2003). Therefore, relational capital (Caroli and Lipparini, 2002), that is the resources and mutual benefits incorporated in a relationship between two or more parties (Dyer and Singh, 1998; Hitt *et al*., 2006), constitute important factors which guide international expansion. Small businesses, in particular, can leverage on relations to overcome limitations deriving from their size or lack of experience.

In the analysis of factors guiding the internationalization process, several studies rely on *resource-based* literature (Bloodgood *et al*., 1996; Dhanaraj and Beamish, 2003). In this perspective the set of *firm-specific* resources and competencies (Wernerfelt, 1984) is the basis of the strategic behaviour of a firm and, therefore, of internationalization choices, which can be interpreted as the mode of exploitation of these resources and competencies

on a broader scale. In particular, the characteristics of management assume a central role (Sapienza *et al*., 2006): managerial competencies are fundamental in order to reap the opportunities for development abroad, manage processes and relationships in new contexts, and create routines which facilitate the undertaking of international operations (Westhead *et al*., 2001; Hitt *et al*., 2006; Sapienza *et al*., 2006).

2.2 Family management and international development

The *family business* is a rather fragmented field of studies, which has several areas of research and for which it is difficult to unambiguously define the object of investigation (Zahra and Sharma, 2004).

On the basis of a review of over 250 papers, Chua *et al*. (1999) identify twenty-one definitions of family business. Some of these deal more with the ownership aspect (Barnes and Hershon, 1976; Lansberg *et al*., 1988), other definitions underline that in a family business either ownership or management are in the hands of one or more families; others define as a family business one which has both these factors; for others the accent is on the issue of entrepreneurial succession.[2] *Governance* of the firm is a further factor in relation to which involvement of the family can be evaluated. The family nature of the business is reflected, in fact, also in the composition and functioning of the board of directors.

In the Italian literature, several studies have analysed the strategic, organizational and managerial peculiarities of family businesses (Boldizzoni, 1988; Corbetta, 1995, 2005; Montermerlo, 2000, Compagno, 2003). Schillaci (1990) underlines that a family business is such because in it entrepreneurial activity is identified in one family (or families) for one or more generations. The influence of the family on the business derives from the ownership of all or part of the capital and is exercised through the cover of managerial roles by some members of the same family. Focusing on management as well as ownership, Demattè and Corbetta (1993) define as family businesses those in which the capital and strategic

[2] Chua *et al.* (1999, p. 25), provide a broad definition of family business which includes the various elements aforementioned: *"The family business is a business governed and/or managed with the intention to shape and the vision of the business held by a dominant coalition and controlled by members of the same family or a small number of families in a manner that is potentially sustainable across the generations of the family or families"*.

decisions are controlled by one family or a few interconnected families.

Involvement of the family in ownership and/or management is the key factor around which definitions of family business revolve. However, this is not enough to unambiguously define a firm as a family business. One can point out, in fact, that a precise definition of family business would require identification of threshold values, in terms of quota of ownership of the family or number of managers belonging to the family. For example, on the basis of different levels of involvement of the family in ownership and management, Sharma (2002) identifies several categories of family businesses. Similarly, Corbetta (1995) describes different types of business depending on the combination of three variables: ownership type; the presence of family members in the board and top management team of the firm; the number of personnel.

In brief, the family nature of the business can be defined from different respects, with a wide variation of family involvement.[3]

In this paper the focus of analysis is on the family nature of management, not on ownership. Bearing in mind the aforementioned difficulties in defining unambiguously a family business, it was decided not to adopt a dichotomic approach, based on the clear distinction between a *family-managed* business and a *non family-managed* business. It was preferred, instead, to treat family management as a continuous variable, on the basis of a greater or lesser involvement of the business-owning family.

Several studies have focused on analysis of the influence that the demographic characteristics of management, in terms of age, level of education, professional background, etc, have on firm performance (Haleblian and Finkelstein, 1993; Smith *et al.*, 1994) and on strategic choices (Wiersema and Bantel, 1992), including decisions on internationalization (Sambharya, 1996; Athanassiou and Nigh, 1999; Tihanyi *et al.*, 2000).

[3] It is difficult to generate a real cumulative effect of knowledge from research on family business for two reasons (Chua *et al.*, 1999): on one hand, the validity of results must be evaluated taking into account the definition of family business given; on the other, it should be pointed out that although family businesses are common in many countries (Sharma, 2004), the results of studies carried out in different contexts are not easily comparable, since the homogeneity of the types of business considered is debatable. On this subject, for example, Corbetta and Montemerlo (1999) point out that there are significant differences in the ownership and governance structures of Italian and American family businesses.

The assumption of these studies is that the characteristics of management reflect on the perceptions and manner in which strategic decisions are made. Moving from this basic assumption, we can argue that the specific characteristics of a family business, i.e. its particular organizational culture and its managerial practices, founded on symbioses between the family and the business, are intangible factors that have to be considered in the analysis of internationalization processes, in as much as they influence the way in which a firm defines and pursues its strategies (Corbetta and Montemerlo, 1999; Zahra, 2003).

From a study by Ensley and Pearson (2005) it emerges that family based managerial teams have greater cohesion and shared strategic vision and, at the same time, fewer conflicts compared to non family managerial teams. It has been shown that the organizational culture of family businesses is stabler (Kets de Vries, 1993) and they tend to pursue defensive strategies, which promote efficiency and conservative behaviours (Chrisman *et al*., 2005), while non family businesses, with no “parental” control of management, are more likely to introduce innovations and explore new fields (Sánchez-Peinado *et al.*, 2006).

One of the important and controversial questions in studies on family business is whether family businesses are different from non family businesses in terms of entrepreneurship and risk propensity.[4] In literature studies predominantly describe family businesses as structures with less propensity for risk compared to other types of business, more inert, tending towards conservatism, resistant to change (Kets de Vries, 1993; Sharma *et al*., 1997) and, as such, not very entrepreneurial.

This aversion to risk may prevent entrepreneurial opportunities being seized aggressively and be the reason for failure to pursue international growth strategies. Some studies support this view. For example, Gallo and Garcia Pont (1996) indicate how the focus on domestic markets is one of the factors that limit the internationalization propensity of family businesses. Okoroafo (1999) underlines that family businesses do not regularly monitor the global market and do not systematically evaluate the international context when making strategic choices. In a recent study, Graves and Thomas (2003) show that family

[4] For a review of literature on entrepreneurial orientation and risk taking in family businesses see Naldi *et al.* (2007).

businesses have less access to managerial resources than non family businesses and this gap increases as the level of internationalization grows. In a very recent study on Spanish SMEs, Fernandez and Nieto (2006) find a negative relationship between family firms and export intensity. In brief, the predominance of a strategic orientation mainly focused on conservative behaviours and continuity and the priority objective to maintain independence and control of the family business turn into a lower propensity to seek opportunities for expansion abroad. For these reasons, the degree of internationalization of family businesses is expected to be lower than for other types of business.

Other analyses support contrasting results. Some research describes family businesses as examples of organizations with high entrepreneurship, in which ownership and family management support risk taking (Aldrich and Cliff, 2003; Zahra, 2005). Based on a study of 490 US manufacturers, Zahra (2003) observes that family ownership of a business and its systems of governance, with involvement of family members in management, positively correlates with internationalization, both as a percentage of foreign sales and as number of countries in which a firm operates. Results suggest that involvement of the family might increase the risk propensity in internationalization decision making. Zahra (2003) explains that these results are due to altruism which is typical of family businesses: if internationalization is considered important for the long term development of the business, owner managers pursue this strategy even tough the perceived risks are high. Further, involvement of family members in management reduces the risk of opportunistic behaviour, favours identification of managers with the organization and allows a greater appreciation of the benefits and risks associated to internationalization.

Overall, studies highlight that the family nature of a business is not an uninfluential factor in the process of internationalization. Although research offers debatable results, the theory that tends to prevail is that the family nature of a business is reflected in a marked focus on defence of existing market positions rather than on international growth.

In one of the first studies on the internationalization of family businesses, Gallo and Sveen (1991) suggest that the family nature of a business can be threatened by increased internationalization, because this may modify the nature of the firm, and consequently its objectives, strategies and culture. In particular, managing an international business requires

high profile managerial resources, whose entry into the business may conflict with the desire to maintain family control.

If, on one hand, in family SMEs the technical-industrial and commercial knowledge basis is sometimes very high, on the other it is often the case that there is a shortfall of managerial expertise. The need to expand the business generates a process of delegation and makes it necessary to involve external managers to complete the firm's portfolio of managerial competencies. However, entrepreneurs are often reluctant to make changes in the organizational structure and systems of management which favour decentralization of the decision making process and the recruitment of qualified professionals. Owners and family members tend to postpone this process for a number of reasons: the fear of losing control of the business, the belief that family members will have difficulties adapting to a new model of relationship between the family and the firm or even the conviction that professionalisation is an excessive overhead cost which is unnecessary (Sharma *et al.*, 1997).

A consequence of this behaviour is a slowing down of the process of "managerialization". This process requires a profound change in organization and systems of governance and control[5]. It is necessary to delegate and set up a high profile management team in order to effectively face the challenge of expansion into foreign markets. For these reasons the family nature of a business may be the reason for limited exploitation of development potential in foreign markets. Consequently, the following hypothesis can be formulated:

Hypothesis 1: The family nature of management is negatively related to the internationalization of SMEs.

2.3 The role of human capital

With an increasing commitment in foreign markets, the number of people inside the firm involved in managing international activities also increases (contact with clients and suppliers, management of commercial and productive subsidiaries, etc.). There emerges,

[5] For an analysis of the evolution of family businesses governance structures on the basis of involvement of managers external to the owning family see Gubitta and Giannecchini (2002).

consequently, the need to access qualified personnel with the necessary competencies to successfully manage a process of international growth. In fact, the lack of specialized human resources can be one of the main obstacles to foreign development as well as to technological innovation (Mohnen and Röller, 2005).

The knowledge and abilities of personnel are directly related to their education (Hambrick and Mason, 1984). Tihanyi *et al*. (2000) indicate that there is a positive relationship between the level of education and experience of the top management team and internationalization. A higher level of education is associated with greater knowledge, useful for the management of complex decision making processes, as well as for analysis of the international environment and the ability to effectively respond to it. Further, apart from technical competencies acquired, a higher education can create the opportunity to know new contexts and to have contact with different people and, therefore, tends to favour a greater propensity for change (Wiersema and Bantel, 1992; Tihanyi *et al*., 2000). These factors are important in managing the challenges of international development and understanding different ways of doing business. Furthermore, the role of human capital supports being competitive also in terms of technological change and innovation. A recent work by Piva and Vivarelli (2007) shows how, in a sample of Italian manufacturing firms, human capital turns out to significantly and positively influence firm's R&D decision.

If, on one hand, when the SME is developing in the international market, the role of the entrepreneur in defining strategies and orientating the paths of growth is still of great importance (Lamb and Liesch, 2002; Knight, 2001), on the other hand, it emerges even stronger the need for organizational development and new competencies and roles inside the firm.[6] In a resource-based scenario, a firm's resources and competencies its determine paths of development. In particular, the pursuance of strategies of international development of SMEs brings the role of human capital into the foreground (Caroli and Lipparini, 2002).

Hypothesis 2: Human capital is positively related to the internationalization of SMEs.

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[6] See Piva *et al*. (2005) for an empirical analysis on the relationship between organizational/technological change and skills in Italy.

2.4 Foreign ownership and internationalization

The impact of ownership structure on corporate strategy and firm performance has been largely investigated by management literature (e.g. Amihud and Lev, 1981; Lane *et al.*, 1998; Thomsen and Pedersen, 2000). Ownership structure has been analysed in terms of both concentration and identity of the owners (companies, banks, institutional investors, executives). For example, Tihanyi et al. (2003) find a significant relationship between institutional ownership by professional investment funds and pension funds and international diversification in a sample of large US firms. George at al. (2005) show that shareholders such venture capitalists, bank and institutional investors, in general, positively affect the scale of international activities of SMEs. Similarly Fernandez and Nieto (2006) provide empirical support to the hypothesis that a corporate blockholder encourages an SME to expand internationally.

The analysis of the relationship between ownership structure and internationalization is not within the scope of this paper. However, we are interested in exploring the effect of a specific ownership characteristic – the presence of foreign shareholders – on the SME internationalization.

The internationalization of a firm does not only take place in *real* terms - sales, production and resources located abroad - but it can take place also on the *financial* side, or rather, from the point of view of the type of investor to which a firm is addressed. It has been shown that the two aspects respond to different logics and do not necessarily correlate (Hassel *et al*., 2003). However, financial internationalization indicates wider knowledge of the international environment and may be emblematic of a greater opening up also in the way a firm perceives its market (Fernandez and Nieto, 2006). Consequently, the following hypothesis can be formulated:

Hypothesis 3: The presence of foreign shareholders is positively related to the internationalization of SMEs.

The research hypotheses are presented in figure 1.

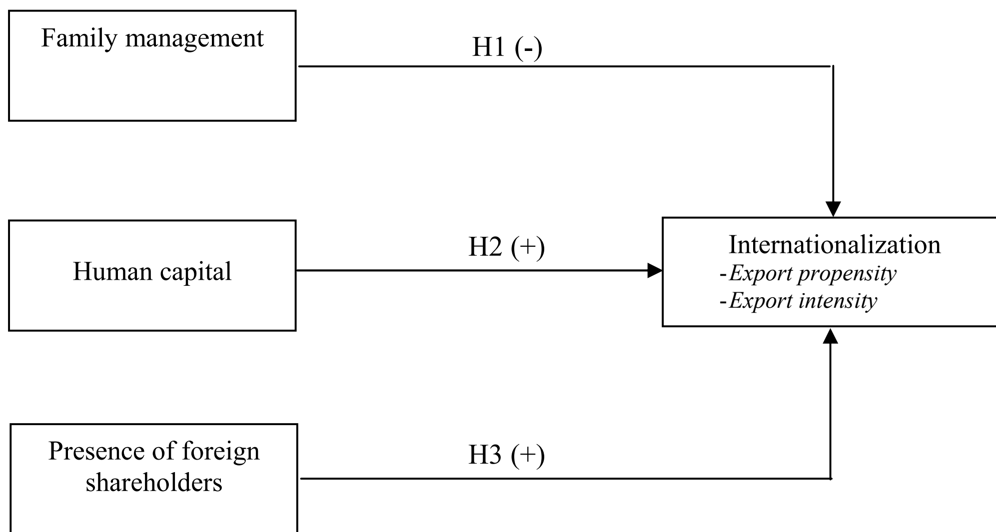

Fig. 1 The effect of family management, human capital and foreign ownership on the internationalization of SMEs: the model

3. Methodology

3.1 Sample and data sources

Empirical analysis was carried out on a representative sample of 1,324 small and medium-sized Italian manufacturing firms, with a number of employees between 11 and 250. The choice of 250 as the upper limit for the sample complies with widely accepted definitions of SME (Recommendation of the European Commission, May 6th 2003). Data are for the year 2003 and the source is the survey "*Indagine sulle imprese manufatturiere*", which is carried out every three years by the research department of *Capitalia* (a large Italian bank), *Osservatorio sulle Piccole e Medie Imprese*.[7]

[7] The sample is stratified and randomly selected: homogenous groups of firms are identified on the basis of 5 different size categories, 4 industries defined according to Pavitt's (1984) taxonomy and 2 regions (North and Centre-South of Italy). Data collection included both quantitative data, drawn from the annual reports, and qualitative information obtained through the submission of a questionnaire, made of six sections: a) general information on activity, sector, ownership, b) employment; c) innovation and investments; d) internationalization; e) market and competition; f) finance and relationships with banks.

3.2 Variables

Dependent variable

Internationalization is the dependent variable of the study. In particular, two variables are considered: export propensity and export intensity. Export propensity is evaluated using a dummy variable, introduced to distinguish domestic firms from firms which also operate in the international market. The value of this variable is 0 if the firm only serves the Italian market, 1 if the firm has some sales abroad.

Secondly, regarding the subsample of 1,058 international firms, the degree of internationalization is measured as the ratio between export sales and total sales (*export intensity*). This ratio is the measurement most widely adopted in literature on the internationalization of SMEs as such firms mainly choose export as an entry mode into foreign markets (Fernandez and Nieto, 2006).

Independent variables

Family management. Involvement of the family in management is measured by the number of family members who cover managerial roles (Chua *et al*., 1999). In the analysis this number is calculated not as an absolute, but rather a relative value, as the ratio between the number of managers belonging to the owning family and the total number of managers. The ratio also indicates to what extent the firm has recourse to managers outside the family. The value of the variable varies, therefore, between 0 (if the firm has only professional managers, not belonging to the owning family) and 1 (the management of the firm is entirely constituted of family members).

Human capital. The human capital of the firm is measured by the ratio between the number of graduate employees and the total number of employees.

Foreign ownership. The presence of foreign shareholders in the SME is measured through a dummy variable, which is 1 if a foreigner is one of the largest four shareholders, otherwise 0.

Control variables

Size. Firm size is considered a proxy of the total resources available to the firm for

processes of internationalization. The total number of employees is used as a measure of size, as in other studies on SMEs (Dhanaraj and Beamish, 2003; Fernandez and Nieto, 2006; Mittelstaedt *et al*., 2003). The predicted sign of this variable is positive, even tough studies on the relationship between firm size and internationalization have shown that small size does not constitute *per se* a barrier to exports and that, despite having fewer resources, SMEs can successfully enter foreign markets and reach a high level of exports (Bonaccorsi, 1992; Calof 1993).

Age. Studies on internationalization have shown that experience is a key factor in international development (Johanson and Vahlne, 1977). The age of the firm, measured in this study by the difference between the year in which analysis took place (2003) and the year the firm was founded, is a proxy of the experience, since it is assumed that firms which have operated for a greater number of years have accumulated greater experience and knowledge.

Industry. Analysis also takes into account sector characteristics: 2-digit Ateco dummies have been included.

More formally, the model of the relationships between SMEs' internationalization and the above variables takes the following form:

$$INT = \beta_0 + \beta_1 FamilyMan. + \beta_2 HumanCap. + \beta 3 ForeignOwn. + \beta 4 Age + \beta 5 Size + SectoralDummies + \varepsilon$$

where INT represents alternatively export propensity and export intensity.

4. Results and discussion

Table 1 shows the descriptive statistics and the correlations between the variables included in the analysis. Table 2 indicates the estimates carried out with the probit method, used to test the model in which the dependent variable is export propensity, or rather the probability of the firm being an exporter or not, while table 3 shows the results of regression, in which the dependent variable is the ratio between foreign sales and total sales. The different number of observations in the two models is because analysis on export

Table 1 Descriptive statistics and correlation matrix

	Variables	***Mean***	***S.D.***	***1.***	***2.***	***3.***	***4.***	***5.***
1.	Export intensity	0.40	0.28	1				
2.	Family management	0.26	0.41	-0.04	1			
3.	Presence foreign shareholders	0.10	0.30	0.09	- 0.14	1		
4.	Human capital	0.07	0.08	0.08	- 0.14	0.09	1	
5.	Age	29.05	19.84	- 0.03	0.07	- 0.06	- 0.04	1
6.	Size	79.78	53.2	0.14	- 0.24	0.05	0.03	0.12

N = 1,058 (only international businesses are referred to, where export propensity is 1, and not the total number of firms included in the analysis – 1,324)

Table 2 Probit estimates: Dependent variable = propensity to export

Independent variables		
Family management	-0.21**	(2.13)
Presence of foreign shareholders	0.29*	(1.68)
Human capital	1.14**	(2.08)
Age	0.004*	(1.80)
Size	0.004***	(4.05)
19 two-digit sectoral dummies	Included	
Constant	0.39	(0.99)
Number of observations	1,324	
LR χ^2	115.19***	
Log-likelihood	-606.60	

Note: Z-statistics in brackets: *p < 0.1; **p < 0.05; ***p < 0.01

Table 3 Regression results: Dependent variable = foreign sales/total sales

Independent variables		
Family Management	0.01	(0.47)
Presence of foreign shareholders	0.06**	(2.01)
Human capital	0.24**	(2.35)
Age	-0.0005	(-1.08)
Size	0.0007***	(4.22)
19 two-digit sectoral dummies	Included	
Constant	0.27***	(3.33)
Number of observations	1,058	
R^2	0.11	

Notes:
- t-statistics in brackets: *p < 0.1; **p < 0.05; ***p < 0.01;
- the test for the presence of heteroskedasticity has been rejected.

propensity was carried out on the entire sample of 1,324 firms, while the analysis on the degree of internationalization only involved international firms. The difference – 266 – is the number of domestic firms.

Because our theoretical model hypothesizes that the causal relationship runs from all

the explanatory variables to internationalization of SMEs, we estimated a lagged relationship in addition to a simultaneous one. Specifically, we explored 1- and 2-year lags of our independent variables and found that the results remained consistent. This evidence is not surprising if we consider that the independent variables are persistent over time. As example, the correlation between the values 2003 and 2002 of the variable family management is 0.99. We report the result for the simultaneous model because it is associated with the highest number of observations.

The results partially support hypothesis 1: involvement of family members in management of the business negatively influences the export propensity ($p < 0.05$). In other words, the presence of managers from outside the family is positively associated with the firm's choice to enter international markets. Family involvement can turn into a constraint to internationalization. This result is consistent with the view that family-managed firms are characterized by a greater focus on domestic markets (Gallo and Garcia Pont, 1996).

The family is generally considered as much a resource as a restriction for the business (Montemerlo, 2005). This study shows that when internationalization is concerned the constraints associated to family involvement outweigh the advantages. The desire to maintain direct control of all critical roles within the family and a general tendency towards closure to external human capital is a critical restriction. Faced with the necessity of managerial development, the owning family may not respond adequately, being reluctant to delegate authority and power to professional managers. This attitude can lead to failure to pursue opportunities for international development. Not only the lack of management competencies, but also a greater risk aversion and focus on conservatism could be an explanation for the greater focus on domestic markets in firms where family-based management prevails (Kets de Vries, 1993; Sharma *et al*., 1997).

However, the nature of management (family *vs.* outside the family) does not significantly affect export intensity. This means that the nature of management influences the decision to enter foreign markets, but once the choice to go international has been made, the degree of internationalization of the firm is not significantly different due to the composition of the management team. Other studies have found a negative relationship between family firms and export intensity (e.g. Fernandez and Nieto, 2006). This difference in the results is not surprising as it can be ascribed to a different focus of the analysis. In this work we focus on family involvement in terms of management rather than ownership.

In addition, family business presents distinctive features in each country. Therefore, the empirical evidence in different contexts are not easily comparable.

Hypothesis 2 about the influence of human capital is confirmed: the number of graduates, in relation to the total number of employees, positively and significantly influences both export propensity ($p < 0.10$) and export intensity ($p < 0.05$). These results support the view according to which not only financial or technical resources, but also human resources play a fundamental role in the internationalization strategies of a firm (Esposito, 2003).

The analysis also confirms the third hypothesis: the presence of foreign shareholders positively influences internationalization. Export intensity is greater in businesses that are internationalized financially ($p < 0.05$). The significance of the foreign ownership variable is lower in the first model (table 2), in which the impact on propensity to export is evaluated ($p < 0.1$).

With respect to control variables, size positively influences both export propensity and export intensity ($p < 0.01$), while the age of the firm has a positive effect on the decision to export ($p < 0.1$), but it is not significant in explaining the degree of internationalization. This last result is, at least partially, in line with more recent literature and, in particular, studies on international new ventures (McDougall *et al.*, 1994), which have indicated that international development is irrelevant to the stage of development and, therefore, the age of the firm, and that young firms too can have an international orientation.[8]

5. Conclusion and directions for future research

Analysis of factors which favour or limit the internationalization of SMEs is a relevant subject of study. In this work, through an empirical investigation of a sample of over 1,000 Italian SMEs, some of the key factors which influence the propensity to export and the export intensity in SMEs are identified. Management competencies and human resource skills play a significant role if opportunities for international development are to

[8] R&D intensity, measured as ratio between R&D expenditure and sales was initially included in the analysis as a control variable. This ratio is considered as a proxy of a firm's technological resources and innovation (Franko, 1989) and is largely used in international business research as a measure of a firm's intangible assets (Lu and Beamish, 2004). However, this variable has been dropped from the final model as it was highly correlated with human capital and, therefore, brought about a problem of multicollinearity.

be fully exploited.

From the study emerges an important implication as well as a challenge for the management of SMEs, which is the need to strengthen their organization with greater professionalisation of management and more highly qualified personnel in order to develop in international markets. If, on one hand, family culture can constitute a strength of a firm by the contribution it offers in terms of long term orientation and the appreciation of values such as commitment, cohesion, sense of duty and devotion to work, on the other hand opening up to professional managers, outside the owning family, is fundamental to enhance the internal competencies to respond effectively to the challenges of international competition.

Previous studies on the internationalization of both family businesses and SMEs point out that the findings might be country-specific (Lu and Beamish, 2001; Zahra, 2003) and underline that more research is needed on different national environments. Moreover, a recent review of family business literature (Sharma, 2004) emphasizes the need for further empirical investigation in this field. Our paper provides a contribution to literature on SMEs and internationalization, by responding to both these research suggestions: Italian industrial system is predominantly constituted by family SMEs and, therefore, represents a relevant setting for research about both SMEs and family businesses.

Secondly, previous research on internationalization of SMEs has mainly used dummy variables to catch the family nature of the firm (e.g. Fernandez and Nieto, 2006). Taking into account the difficulties in defining unambiguously a family business, in this study it was decided not to adopt a dichotomic approach, based on the clear distinction between a "family" business and a "non family" business. In particular, this paper shifts the focus from family ownership and control to family management, evaluated as a continuous variable, on the basis of a greater or lesser involvement of the business-owning family.

The analysis undertaken has some limitations which are, at the same time, stimuli for possible research developments.

The first limitation is that the family nature of a firm is only analysed from a managerial point of view. Regarding ownership, only the presence of foreign shareholders is considered. In order to investigate if and to what extent the family nature of the firm, evaluated not only in terms of management, influences internationalization, an in-depth study of the ownership structure would be necessary.

Secondly, this paper does not consider the relational activity of firms, while today it is stressed that internationalization is increasingly connected to the capacity of the firm to activate and manage relations. In current competitive contexts internationalization is no longer only expressed in terms of sales and resources located abroad, but also alliances and network relationships of the firm (and the entrepreneur). There is a move away from a perspective that analyses internationalization by looking at the amount of resources located abroad, to one that stresses the importance of networks and relations as factors which a firm can exploit to bridge its own resources and competencies gap and grow in international markets.

Finally, relying only on export intensity as a measure of degree of internationalization leaves out the multiplicity of factors connected to international expansion of a firm. Analysis should therefore adopt multiple indicators which are not limited only to the internationalization in terms of export sales.

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