

Alma Mater Studiorum Università di Bologna
Archivio istituzionale della ricerca

Firms' ownership and internationalisation: is it context that really matters?

This is the final peer-reviewed author's accepted manuscript (postprint) of the following publication:

Published Version:

Majocchi, A., Odorici, V., Presutti, M. (2016). Firms' ownership and internationalisation: is it context that really matters?. EUROPEAN JOURNAL OF INTERNATIONAL MANAGEMENT, 10, 202-222 [10.1504/EJIM.2016.074472].

Availability:

This version is available at: <https://hdl.handle.net/11585/541244> since: 2016-06-09

Published:

DOI: <http://doi.org/10.1504/EJIM.2016.074472>

Terms of use:

Some rights reserved. The terms and conditions for the reuse of this version of the manuscript are specified in the publishing policy. For all terms of use and more information see the publisher's website.

This item was downloaded from IRIS Università di Bologna (<https://cris.unibo.it/>).
When citing, please refer to the published version.

(Article begins on next page)

This is the final peer-reviewed accepted manuscript of:

Majocchi, A., Odorici, V., & Presutti, M. (2016). Firm ownership and internationalisation: is it context that really matters?. *European Journal of International Management*, 10(2), 202-220.

The final published version is available online at:
<https://doi.org/10.1504/EJIM.2016.074472>

Rights / License:

The terms and conditions for the reuse of this version of the manuscript are specified in the publishing policy. For all terms of use and more information see the publisher's website.

This item was downloaded from IRIS Università di Bologna (<https://cris.unibo.it/>)

When citing, please refer to the published version.

FIRMS OWNERSHIP AND INTERNATIONALIZATION: IS IT CONTEXT THAT REALLY MATTERS?

ABSTRACT

This paper considers the potential role played by different kinds of shareholders in the firms' international level, distinguishing the firms quoted in the UK from those listed in the countries of Continental Europe (France, Germany, Italy, Poland and Spain). Our results confirm that different kinds of ownerships affect the overall level of a firm's internationalization. Family ownership has a negative impact on foreign sales in the UK but not in Continental Europe, while Bank ownership has a negative impact on the scope of FDI in Continental Europe but no impact whatsoever in the UK. Institutional investors positively impact the scope of both foreign sales and FDI in the UK, while in Continental Europe they have a negative impact on foreign sales. These different results contribute to explaining why previous studies that have focused on just one country or a single measurement of internationalization have come up with such contrasting results.

Keywords: Internationalization, corporate governance, family ownership, shareholders, bank ownership, institutional investors, agency theory, market knowledge, foreign sales, foreign direct investments.

1. INTRODUCTION

The role that corporate governance plays in influencing firm strategies has been at center stage ever since the pioneering article of Jensen and Meckling (1976). However it is just recently that some scholars have also addressed the specific question of the relationship between corporate governance features and firms' international strategies (Filatotchev et al., 2007; Fernández and Nieto, 2006; Majocchi and Strange, 2012; Teti and Perrini, 2013; Lobue, 2009). According to these studies, different types of shareholders will have different perceptions about the level of the risks and rewards associated with different firm strategies. This happens because different owners have typically different time horizons, goals and interests (Thomsen and Pedersen, 2000; Aguilera and Jackson, 2003). Moreover, different owners will select different board members and managers, affecting, through this channel, firm resource endowment and therefore firm strategies (Shrader and Simon, 1997). However, so far the findings about the

relationship between ownership type and internationalization have been, at the very least, contrasting. The aim of this research is to answer an overriding research question: What is the impact of ownership type on firm internationalization? Our empirical study uses a large database of European listed firms extracted from the Bureau van Dijk's Osiris database. We consider the potential role played by different kinds of owners on a firm's international level, distinguishing between firms quoted in the UK and those listed in countries of Continental Europe (France, Germany, Italy, Poland and Spain). To further contribute to this debate, our conceptual framework regards internationalization as a multidimensional notion, encompassing both the scope and the scale of export activity and the scope of FDI. The structure of the paper is as follows. In the next section we review the extant literature on corporate governance and its effects on internationalization, and formulate our research hypotheses. The section 3 contains methodological information. We present and discuss the regression results in section 4. The final section describes the main limitations of the paper, suggesting avenues for further research.

2. THEORY AND HYPOTHESIS DEVELOPMENT

Most of the literature about corporate governance has adopted an agency theory framework, focusing on the degree of ownership concentration versus dispersion as the main explanation of the principal/agent relationship (Denis et al., 2002). The agency theory tends to overlook the diverse identities of the owners (Aguilera and Jackson, 2003), and the study of the influence of corporate governance on diversification strategies is no exception. Thus, limited attention has been given to the fact that various types of owners possess different points of view, risk aversion attitudes and time horizons, and consequently they can promote different strategies in the firms they control (Thomsen and Pedersen, 2000; Desender, et al. 2013).

A growing number of more recent studies has investigated whether and how the identity of the owners affects a firm's international strategies. All these studies conclude that an owner's identity is an important, but neglected, variable that affects internationalization (George et al., 2005; Oesterle et al., 2013; Majocchi and Strange, 2012; Fernández and Nieto, 2006). However, most of these empirical studies have been conducted in an empirical setting limited to one country, ignoring that corporate governance systems vary considerably from nation to nation. We specifically address the gap in the previous empirical studies investigating if and how different corporate governance systems affect the role played by ownership in shaping international strategies.

The literature (La Porta et al., 1999) historically differentiates two different models of capitalism: (1) the Anglo-American model, which is market-oriented and characterized by a strong influence of institutional investors, with an emphasis on shareholder-value; and (2) the German model, dominated by a logic of cooperation and partnership, which results in close relationships between industrial firms, banks, and social partners.

The first model is mainly identified with the United Kingdom and the United States- and the second with the countries of Continental Europe. Even if De Jong (1997) has established some distinctions between the German-speaking and the Latin countries (France, Spain and Italy) - with the latter system characterised by a higher degree of direct ownership concentration and with prominent shareholders that are mainly private, families or the State - Continental Europe shares some common characteristics that differentiate it from the UK and the US (Enriques and Volpin, 2007). Aguilera and Jackson (2003) differentiate corporate governance systems according to three dimensions. The first one is the nature of capital providers interests, whether financial or strategic; the second is the degree of commitment or liquidity of capital stakes; and the third is the exercise of control through debt or equity. Using these three criteria the main features that distinguish the corporate systems of Continental Europe from the Anglo-Saxon

system are the strategic and long-lasting interest that many stakeholders have and the very weak level of control by external capital markets. In Continental Europe the weakness of external financial market control leads firms to be less influenced in their decision-making from direct market pressures (Teti and Perrini, 2013). On the other hand, indirect market pressures, such as those linked to interest rate policies adopted by banks, government policy and labor representatives may significantly influence a firm's decision-making. Thomas and Waring (1999) argued that the main characteristics of the European system are that most of the firms' external capital comes from bank through commercial loans, that union representatives are formally included in the decision making processes being part of the board of directors as in Germany or because they have to be compulsory and that relations with governments are generally friendly and cooperative. As a consequence, in Europe all the main stakeholders tend to have long-term and stable relationships with the firms (Eckert & Mayrhofer, 2002). On the contrary the role of labor, banks and government is more limited in the Anglo-Saxon system. In the U.S. government plays a dominant role in basic research that fosters the applied research developed by firms. Overall this literature suggests that the same type of owner could have different effects on company strategies and performance, according to his/her relationship with the firm and according to the institutional environment..

Among the different types of shareholders, family owners have attracted increasing attention but until now this has yielded mixed results (Majocchi and Strange, 2012). The studies that have found a positive relationship between family ownership and internationalization are relatively few and mostly based on the assumption of altruism (Zahra, 2003). According to this view, the long-term view that is typical of family firms combines the desire to pass on the firm to descendants with a lengthening of the investment payoff time horizons. This owners' long-term view makes it possible to realize investments that are necessary for entering foreign

markets and assuming the higher risks associated with international expansion (Anderson and Reeb, 2003). Therefore, family firms will tend to have higher level of multinationality.

However, so far the large majority of studies on this topic show that family firms are reluctant to internationalize, compared to non-family firms (Fernández and Nieto, 2006; Gomez-Mejia et al., 2010). This position is based on the idea that since internationalization is realized through foreign investments then it is a risky strategy, and family owners show a general aversion to risk (Majocchi & Presutti, 2009). This argument stresses the negative effects that the combination of ownership and control generate with respect to the international growth of family firms. Gomez-Mejia (2010) argues that family firms behave differently from non-family firms because owners are driven by a desire to maintain control over the firm and by a higher risk aversion stemming from the concentration of family wealth in a single company. Consequently, in a family firm the managers appointed by the owners must strive to fulfill economic goals along with the maintenance of what is called socio-emotional wealth (SEW). Gomez-Mejia and colleagues (2010, p. 223) define SEW as “the ability to exercise authority, the enjoyment of personal control, ‘clan membership’ , a sense of belonging, affection and intimacy as well as an active role in the family dynasty...”. When economic goals collide for any reason with the maintenance of SEW, then the latter objective prevails, driving family firms towards different paths compared to non-family firms. In this respect internationalization strategies are deeply affected. Owners of family firms tend to manage companies on behalf of family interest rather than for the benefit of the firm, compromising the firm’s growth at the expense of other shareholders. This attitude is reinforced by the strong focus on wealth preservation, with the goal of leaving the firm to descendants (James, 1999). Also the collection of capital required by internationalization through issuing more debt increases financial risk while enlarging the equity base dilutes the family’s control over their firm. We suggest that the fear of losing control over the wealth concentrated in the firm still remains a strong argument

when listed firms face an external capital market which imposes strong control over their decisions and results as in the UK system. Thus the possibility of losing control of a firm by family owners is more concrete when there is a system with property rights predominantly protecting minority shareholders, making it possible to maintain control over the firm through liquidity, and a market based financial system that encourages equity finance (Panunzi, Burkart and Shleifer, 2003). Overall the effect of family ownership on internationalization will be different according to the kind of corporate governance system of the home country. In the UK where there is a strong minority shareholders protections family firms will tend to be less international since these strategies will put at risk the family predominance. In following these arguments, we posit a negative relationship between family ownership and internationalization in the UK, and therefore our first hypothesis is:

H1.a: UK' firms with a family as first shareholder will negatively impact the level of internationalization.

In contrast to the Continental Europe, where the property rights regulations predominantly favor large shareholders and capital tends to pursue strategic interests toward the firm and to exercise control via commitment (Aguilera and Jackson, 2003), we posit a positive relationship between family ownership and internationalization:

H1.b: Continental Europe's firms with a family as first shareholder will positively impact the level of internationalization.

Similar differences exist with regard to the role of banks. While in the UK commercial banks typically supply only capital in the form of debt and are not involved in setting firm strategy, in Germany and the rest of Europe a monitoring role over firm management is typically played by banks, since banking institutions generally are important stakeholders in their client capital (Mayrhofer, 2004). Therefore, banks in the Anglo-American system have a marginal role in shaping firm strategies, while a more active role is played by banks in Continental Europe (Witcher and Chau, 2012; Aguilera and Jackson, 2003). This kind of bank, defined as a universal bank, not only supplies short-term financing but also long-term capital, even in the form of equity, and typically contributes to shaping company policies by placing a representative on the firm's board (Hall and Soskice, 2001; La Porta et al. 1998).

The effects of bank ownership on international firm strategies are twofold. On the one hand, when a bank invests in a firm's shares, the overall bank portfolio become typically more risky. This is so because equity is a riskier investment than debt, but also because the combination of loans and equity assets issued to the same client increases the concentration of risk. Thus banks will tend to influence firm policies by compensating the additional risk generated by investments in the firm, with more conservative policies that lead to a lower level of internationalization (Reeb, Kwok and Baek, 1998). On the other hand, when firms grow internationally, they typically become more visible, and in turn this process facilitates the issue of liabilities in general and equity in particular, allowing the bank to decrease its stake in the firm's equity capital (Mansi and Reeb, 2002). In the case of Continental Europe, where the size and the role of equity market is much more limited, this latter effect tends to be less strong with the result that banks prevent firms from adopting risk strategies. Consequently, we expect no relationship of bank ownership and internationalization in the UK, where the bank's role in determining firm strategies is limited, but a negative relationship in Continental Europe.

This leads us to posit two different hypotheses for the UK and Continental European firms:

H2.a: Firms listed in the UK with a bank as first shareholder will have no impact on the level of internationalization.

H2.b: Firms listed in Continental Europe with a bank as first shareholder will negatively impact the level of internationalization.

The limited role of banks in the Anglo-Saxon model is counterbalanced by the crucial role played by direct financial markets. In the UK firms tend to have a broad shareholder base with both private and financial institutional investors, such as private equity institutions or pension funds. These institutions play a leading role in financing the firms, but their role is also relevant in terms of management monitoring. Given the significant stake these investors have in companies' capital, they tend to strictly supervise managers' behavior (Hitt and Gimeno, 2001). Today, institutional investors are a significant player in the UK markets and they have an increasing influence on corporate strategic decisions thanks to increased activism (David et al., 2001). Tihanyi et al., (2003) have shown that this role of external monitor played by institutional investors promotes good governance, consequently improving the firm's overall financial performance, but also its international growth. Institutional investors are financial intermediaries with a deep knowledge of international markets and with a large number of connections to institutional networks in overseas markets. The monitoring and supervising by institutional investors of the firms in which they have an equity stake have two positive effects on internationalization. On the one hand, the participation of institutional investors promotes the transfer to the firms of their international market knowledge and of their international web

connections (Filatotchev et al., 2008). Additionally, close supervision by institutional investors tends to promote the appointment to the firm's top management position of well well-trained international managers. Control is exercised through the market, and if these managers do not perform well, investors push for a management turnover. This threat provides a strong incentive for managers to pursue growth strategies (Brossard, Lavigne, and Sakinc, 2013). This happens also because institutional investors tend to select firms with good growth and an internationalization perspective, since the investment they have made will pay off if the market value of the equity investments increases. We believe that these effects are similar in both in the UK and in Continental Europe, even if we expect the effect to be stronger in the Anglo-Saxon context due to the larger and more significant presence of such investors.

So our last hypothesis is:

H3: Firms listed in the UK and Continental Europe with institutional investors as first shareholders will positively impact the level of internationalization.

3. METHODOLOGY AND METHODS

3.1 The sample

The sample we collected offers a representative view of the firms listed in the main European markets. We include the UK stock exchange, which is not only the largest market by capitalisation but is also the best example of the Anglo-Saxon corporate governance system in Europe. We then include France, Germany, Spain and Italy to cover the main markets of Continental Europe, and we add the Polish market as a fast-growing transition economy of

Central and Eastern Europe. Since we were mainly interested in firms' internationalization strategies, we do not include small countries in our analysis because of the natural orientation of local firms to present higher level of international activity, given the relatively small size of the domestic market. The list of the firms and the main data were extracted from the Osiris database of Bureau Van Dijk Electronic Publishing. The only exception is the geographical distribution of turnover, which was manually extracted from firms' annual reports. All data refer to the year 2008. We include in our analysis all manufacturing firms listed in the 6 above-mentioned markets, with the exception of services. Our final database is made up of 1315 firms, 453 in the UK, 341 in Germany, 300 in France, 121 in Italy, 51 in Spain and 49 in Poland. The descriptive statistics of the sample are reported in Table 1, and the sample industry distribution is reported in Table 3.

 Insert table 1 about here

3.2 Dependent variables

Our dependent variable, the level of a firm's internationalization, is measured with different proxies. The measurement of the firms' international activity is not an easy issue since many different measurements have been used in past researches and none of them is flawless (Rugman and Oh, 2011). A possible solution would have been to build a composite index but as Rugman and Oh, (2011, page. 204) state this just further confuses the matter since the composite indexes are less transparent than the simple ones and just add up the different single measurements' defects. Therefore, we use three different measures of multinationality that complement each other. The first two measurements are based on the scale and scope of foreign

sales, while the third variable gauges just the scope of direct foreign investments. In order to measure the scale of sales in foreign markets we use the ratio of foreign sales to total sales (*FSTS*) (Katsikeas et al., 2000; Ning et al., 2013). This is a variable which is commonly used in studies on firm internationalization because it is a simple measurement that makes it possible to identify the percentage of international activities in terms of turnover. However, this measurement does not account for the geographical distribution of sales Rugman and Verbeke (2004). A firm exporting 90% of its sales in 10 countries, and a firm with the same percentage of sales in just one foreign market will show the same level of *FSTS*, that is the same scale, while they have a different internationalization scope. In order to address this issue, we use a complementary measure of internationalization, using foreign sales. Since most of the firms in our sample report in their annual accounts detailed information about the geographical distribution of their turnover, we collect these data manually. We then classify all the firms' foreign sales into six areas: the domestic market and five additional regions, which coincide with the main continents: Europe, America, Africa and Asia, plus a residual region named the 'Rest of the World', which comprises both Oceania and all undefined data. For this classification we compute an entropy measurement, using Jacquemin and Berry's (1979) diversification index. This index, first developed to quantify the degree of product diversification, has lately been used also to measure international diversification (Kim, 1989; Hitt et al., 1997). We compute this variable (*Entropy*) in the following way:

$$\text{Entropy} = \sum_{j=1}^6 x_j \ln \left(\frac{1}{x_j} \right)$$

The subscript j ranges from 1 to 6, defining one of the six geographical areas, and x_j is the percentage of sales realized in the market j . The entropy measurement equals 0 when firms have all their sales concentrated in one area, while it increases up to a maximum of 1.79 for firms

with exactly the same share of sales in each of the six geographical areas. In our sample the average value of the entropy measurement is 0.73, with a minimum value of 0 and a maximum value of 1.64.

In gauging the scale of FDI activities, we did not have access to detailed information about the amount of foreign assets for most of the companies in our sample. Therefore, we could not measure the percentage of foreign assets on total assets which would have been a more precise measurement of foreign investment activities (Almodovar and Rugman, 2014; Rugman, Yip and Jayaratne, 2008). Consequently, we measured just the scope of direct foreign investment using the number of foreign countries in which a company had at least a wholly-owned subsidiary, and we name the variable (*Subsidiaries*). This proxy implicitly assumes investments to be of equal size but at least gives a rough measure of the breath of foreign activity and has been used in previous studies as a proxy of firms' foreign investments (Lu and Beamish, 2004, Morck and Yeung, 1991; Tallman and Li, 1996). The average number of countries in the sample is 6.11 (s.d. is equal to 11.20), with a minimum value of 0 and a maximum value of 126.

The three measurements gauge different aspects of the firms' internationalization process. Consequently, the correlation ratios among the three measurements are relatively low, with the highest value being the correlation ratio between FTST and the Entropy measurement, which is equal to 0.6 and the other ratios lower than 0.45.

3.3 Independent variables

In order to test our hypotheses, we first defined the ownership variables. From the Osiris database we selected the nature of the first ultimate shareholder by identifying three main categories: families and individuals (*Family*), banks (*Bank*) and institutional investors (*Inst Inv*). In the Osiris database families and banks are considered as a single separate shareholder typology, so we did not have any classification issue. However, in the database a specific

category “institutional investor” is missing. Therefore, we had to aggregate five different types of shareholders. The five categories included under the label “institutional investor” are the following: insurance company, venture capital and hedge fund, financial company and mutual and pension fund. The three variables are dummy variables that equal one when the first shareholder is respectively a private, a bank, or when the most important ultimate owner is classified in one of the above-mentioned categories. In table 2 the distribution of the three owner types is reported on the two different regions: the UK and Continental Europe

Insert table 2 about here

3.4 Control variables

Following previous empirical works (Hitt et al., 2006) we include a number of control variables. Our controls are: size (*Size*) measured by the natural logarithm of employees (Verwaal and Donkers, 2002), age (*Age*) (Presutti et al. 2011), measured as the number of years from foundation and the debt-to-equity ratio (*Leverage*) (Kochhar, 1996). Transaction cost based theories of internationalization (Hennart, 1982; Buckley and Casson, 1976) identify intangible assets as a potential determinant of a firm’s international activities. Therefore, we also include in our model two variables in order to check for the intangible intensity of the firm. The first variable is a stock measurement and is the ratio of intangible assets over total assets (*Intangible intensity*), while the second control variable is a flow measure, extracted from the firm’s income statement, and is the ratio of R&D costs over total sales (*R&D Intensity*) (Nachum and Zaheer, 2005). Prior research suggests that board characteristics are an important determinant of a firm’s international strategies (Herrmann and Datta, 2005; Majocchi and Strange, 2012). To check for board features we include the ratio of foreign directors over the

total number of board members (*Foreign board*). Finally, we include a series of industry dummies.

Insert table 3 about here

3.5 The model

We ran three different regressions for each of the different measurements of internationalization described above: the foreign sales scale (*FSTS*), the foreign sales scope measurement (*Entropy*) and the direct foreign investment scope (*Subsidiaries*). Because of missing data in our foreign sales variables, the size of the regression samples with foreign sales intensity and with the entropy measurement as a dependent variable are smaller than the sample with the number of countries with subsidiaries. However, the results of the regressions run using these three variables are in our view relevant. The three regressions produce different results in some key coefficients. These results confirm that we are not just replicating regression by using different dependent variables but that the three models specify the determinants of different internationalization phenomena.

Since all three dependent variables are left-censored, we adopted a Tobit methodology (Greene, 2000). Tobit methodology is nonlinear and therefore the coefficients produced by our estimations do not measure the direct effect on the dependent variable, but since they maintain the significance and the sign of the marginal effects, we can rely on our coefficients in order to test our hypotheses, which mainly concern the sign of the coefficients (Bowen and Wiersema, 2004).

We ran three Tobit maximum likelihood estimates on the different measurements of internationalization for two different samples. The first sample includes a total of 862 firms from Germany, France, Italy, Poland and Spain. This sample is used to test our hypotheses on Continental Europe. The second sample is made with 453 firms and includes only UK-listed firms.

4. RESULTS

Table 1 reports the descriptive statistics and the correlations for the variables used in our models. The correlation between the continuous variables is negligible, suggesting that multicollinearity is not an issue. Table 2 reports the distribution of firms in the 2 samples according to the category of the main owner. Our numbers confirm previous findings (Faccio and Lang; 2002), namely that family firms are more common in Continental Europe rather than in the UK, while institutional investors are more common in the UK. Table 3 shows the industry distribution of our sample, using NACE 2-digits codes.

The regression results are reported in table 4 and 5. Table 4 reports our results for the UK sample, while Table 5 reports the results for the sample on Continental Europe. In each table the 2 regressions that have FSTS and entropy as a dependent variable show relatively high values for the overall indexes of goodness of fit (*Pseudo-R2*), suggesting that the overall specification of the model is good. The *Pseudo-R2* for the third model with the number of countries shows a lower but still satisfactory level of goodness of fit.

Insert table 4 and 5 about here

The first hypothesis, H1.a, predicts that family ownership impacts negatively on the internationalization level in the UK. The results in Table 4 show that the hypothesis is only partially confirmed. The coefficient is significant and negative only in model 1, suggesting that family ownership is a negative determinant of the scale of internationalization, while it is not significant in terms of the scope of foreign sales and of FDI. The results of the second hypothesis, H1.b, where we suggest a positive impact of family ownership on the internationalization level of firms in Continental Europe, are positive as expected but not significant, as reported in Table 5.

Our third hypothesis, H2.a, refers to firms listed in the UK and predicts no effects of bank ownership on the internationalization level. The regression results for the sub-sample are reported in Table 4 and are not significant. In Table 5, where results of regression on the Continental Europe sub-sample are reported, we can state that bank ownership negatively affects the level of internationalization in terms of the scope of direct foreign investments, while the coefficients of the bank ownership variable are not significant. Thus these results do not fully confirm our hypotheses but suggest that the analysis of the motives behind the negative relationship between bank ownership and internationalization is correct. We argue that bank-owned firms tend to be more risk-averse due to the peculiar nature of the owners, who are suppliers of both debt and equity capital. Since FDIs are the more risky mode among all possible entry modes in a foreign market, we expected a stronger and larger negative relationship between ownership and internationalization when the dependent variable is the number of countries with a subsidiary. From this point of view the statistical significance at a 5% level of confidence confirms this view.

With regard to our last hypothesis, H3, where we suggest that the firms from the UK and Continental Europe with institutional investors have a positive impact on their internationalization level, the regression results obtained in the UK sample (Table 4) show some

interesting differences from the results obtained for the Continental Europe sample (Table 5). The hypothesis H3 is confirmed both with regard to our entropy measurement and to our measurement of direct foreign investments in the UK sub-sample, where institutional investors ownership seems to promote growth through direct investments and a more balanced distribution of region-wide sales. Their role in promoting a balanced internationalization is confirmed by our results. In the Continental European sub-sample the impact of the institutional investor owner on the scale of foreign sales is weakly negative, but only with regard to the variable FSTS, while for the other two variables the coefficients are not significant. These results confirm the marginal role still played by institutional investors in the European context.

Regarding control variables, we find a consistently positive coefficient of the variable size. This result confirms, once again, the positive relationship between resources and internationalization (Dhanaraj and Beamish, 2003). Regarding a firm's intangible resources, we find some interesting results. Those of the ratio of "intangible assets" over "total assets" (*Intangible intensity*) and of the ratio of R&D on sales (*R&D Intensity*) are not consistent over the three models. The share of intangible assets on total assets positively affects all three measurements of internationalization in Continental Europe, while for the UK firms the relationships are not significant. The R&D intensity has been typically considered as a channel through which firms generate innovation that lead either to better export performance (Cassiman and Golovko, 2011) or to a higher level of FDI (Buckley and Casson, 1976). Our results are generally not significant, suggesting a weak relationship between the variable and internationalization levels. The only significant coefficient is the one in the UK model, when the dependent variable is entropy. In this model the negative sign of the coefficient suggests that firms with higher R&D intensity level have a higher concentration of their foreign sales. Overall, these results confirm the view (Hennart, 2009) that a high level of R&D intensity is not a sufficient condition for high level of internationalization.

The coefficients of the variable measuring the percentage of foreign board members (*Foreign board*) are always positive and statistically significant for both FSTS and the countries with subsidiary variables. The results suggest that foreign directors are not only a sign of the firm commitment to pursue internationalization but also an additional resource that can promote internationalization, as stated by recent literature (Tihanyi et al., 2000). Directors can bring to the firm specific knowledge regarding foreign markets or develop new relationships with overseas clients, thus facilitating the firm's overall internationalization. Finally, the significance of the coefficient of the variable "*Leverage*" is not significant in all cases but one, suggesting that the ratio of debt-to-equity is not a crucial factor in determining the level of a firm's internationalization.

5. DISCUSSION AND CONCLUSIONS

Our empirical analysis only partially supports our propositions, since not all the hypotheses are confirmed for both contexts and for all our measurements of internationalization. We find a negative relationship between family ownership and export intensity, and between bank ownership and the number of countries with subsidiaries for the firms of Continental Europe. Overall, these findings confirm the view that family ownership is generally detrimental to export levels (Fernandez and Nieto 2006; Thomas and Graves, 2005). However, it should be borne in mind that our analysis does not include strategy variables in the model. So we could not verify if this general relationship hold for all family firms or just for family firms that do not follow specific global strategies. Surely, this point it is worth to be further investigated. While the relationship between family ownership and internationalization has been intensively debated the effects of banks ownership on the international footprint of firms has been much less investigated (****). Our findings suggest that there is a relationship and that firms with bank as a first owner tend to concentrate their investments activities in a smaller number of

countries. This relationship holds for the number of countries with a subsidiary but does not hold for the entropy measurement that is based on the export data. These seemingly contrasting results are the consequence of the different risk profile of these two different entry modes (export and foreign direct investments). While expansion through export is considered as a strategy adding low additional risk to the overall firm's risk portfolio, the contrary holds for FDI. Investments in foreign countries with their high level of fixed costs are considerably more risky than export which mainly increases just variable costs. Banks in Continental Europe tend not to promote internationalization strategies realized through foreign direct investments and this explains our result of a negative relationship between bank ownership and the number of countries with foreign subsidiaries in this context.

The opposite results hold for UK institutional investors. Our hypothesis that in the UK institutional investors' ownership promotes internationalization mainly through direct investments is also confirmed by data. Our interpretation of these results is based on the fact that for institutional investors growth is a fundamental variable to evaluate the success of the firms in which they have invested in. Firms that show high level of growth on international markets are more easily listed on international stock exchanges allowing institutional investors to successfully liquidate their investments. The positive relationship found in our analysis between institutional investors' ownership and foreign investments seems to confirm this view. These results offer three main contributions to the literature: first, to the theory of internationalization second, to the empirical analysis of this concept; and third, to the role that corporate governance systems play on it.

In the classical theory of internationalization (Buckley and Casson, 1976; Hennart, 1982), ownership characteristics have typically played a very limited role. However, management literature has proven that ownership is a determinant of a firm's overall strategy. Since internationalization is a possible and increasingly important strategic option that firms can

follow, we have built on recent literature that has investigated the role of ownership on internationalization (see, for example, Tihanyi et al., 2000; Tihanyi et al., 2003; Lien et al., 2005, Fernández and Nieto, 2006; Filatotchev et al., 2007). Our research has considered the potential role played by different kinds of shareholders on a firm's international level, and our results seem to confirm the view that ownership affects internationalization levels. From a theoretical standpoint our empirical findings suggest that internationalization theories should include also corporate governance variables. Different owners have different risk attitudes, and their valuation of internationalization strategies can be very different. Additionally, we have shown that different owners can bring the firm different resources (Carrillo, 2007; Rogers et al., 2008). Therefore, it may well be that similar firms, in the same industry sector but with different owners, will have different degrees of internationalization. More generally, our findings confirm the view (Desender et al 2013) that strategy variables depend by contingencies related to the ownership of the firm. The second contribution concerns the empirical definition of the internationalization concept. Some of the past literature has analyzed the concept interchangeably, using different measurements. However, our results show that, as highlighted by the TC literature, the governance methods of international transactions are very dissimilar, as are the conditions that promote investments rather than export different. Our findings confirm that any analysis of the internationalization determinants should carefully specify which of the different aspects of the concept it is addressing. This means that the concept of internationalization is by itself too broad unless scholars clearly define which of the different aspect of this strategy they consider. The determinants of export and FDIs are clearly different and the two concepts cannot be considered interchangeably.

Finally, our results empirically validate, with regard to internationalization strategies, the point made by Aguilera and Jackson (2003). According to these authors: (pg: 448) “*corporate governance is shaped by its institutional embeddedness..*”; and therefore: “*firms must adapt to*

multiple features of their environment". We found clear evidence that similar owners affect a firm's internationalization levels to a different degree in the Anglo-American and European contexts. These findings help to explain why previous studies have obtained mixed results when using samples located in different institutional contexts. The role that different types of owners play on a firm's international level should always be analyzed by controlling for the specific corporate governance characteristics of the country. The role played by financial institutions, banks and institutional investors clearly illustrates this point. We find that, in the European context, bank ownership has a negative effect on the level of foreign investments, while we find that in an Anglo-American context, a different kind of financial institution, i.e. institutional investors, promotes international growth through direct foreign investments (Tihanyi et al., 2003).

Overall, our paper offers a strong support for the view that internationalization strategies should also be examined in the light of both the specific owner characteristics and the institutional context which the firm occupies.

Given these results we are aware that this study has also limitations.

First, we consider the corporate governance system and the institutional context of Continental Europe as homogenous. This is not clearly the case since there are also national differences within Europe (Mayrhofer, 2004). We focus our study on the similarities but we are aware that there are also national differences within Continental Europe that are worth to be explored. This is one of the possible avenues for future research suggested by our results. Additionally, given the large amount of work needed to manually collect the distribution of sales for European firms we could only rely on a cross-section analysis and not use a panel data. A longitudinal sample would allow future scholars to explore also the evolution of the institutional contexts and the effects of this evolution on firms' internationalization strategies. The reference to a specific year i.e. 2008 also do not allow us to include in our analysis and consider the more recent

evolution in national governance system such as the decreased role of banks in Germany or the evolution of State ownership in France.

Finally, given the data at hand we could not control for different firms' strategies. Since internationalization levels depend also by the firms' choice it is clear that a further specification of our model should have included variables measuring firms' strategies.

Given these limitations, we think that exploring the implications of our approach is a promising avenue to further develop our knowledge of the determinants of firms internationalization.

REFERENCES

- Aguilera, R., and Jackson, G. (2003) 'The cross-national diversity of corporate governance: Dimensions and determinants', *Academy of Management Review*, Vol. 28, No. 3, pp. 447-465.
- Almodóvar, P. and Rugman, A. M. (2014), 'The M Curve and the Performance of Spanish International New Ventures', *British Journal of Management*, Vol. 25, No. S1, pp. S6–S23.
- Anderson, R. C., and Reeb, D. M. (2003) 'Founding-family ownership, corporate diversification, and firm leverage', *Journal of Law & Economics*, Vol. 46, No. 2, pp. 653-84.
- Becht, M., & Rodl, A. (1999) 'Blockholding in Europe: An international comparison.', *European Economic Review*, Vol. 43, No. 1, pp. 10-49.
- Bowen, H. P. and Wiersema, M.F. (2004) 'Data analysis with discrete and censored dependent variables and truncated samples' in Bergh, D. and Ketchen, D. (Eds.), *Research Methodology in Strategy and Management*, Elsevier, Oxford, UK, pp. 87-134.
- Brossard, O., S. Lavigne, and M.E. Sakinc, (2013), 'Ownership structures and R&D in Europe: the good institutional investors, the bad and ugly impatient shareholders', *Industrial And Corporate Change*, Vol. 22, No. 4, Special Issue, pp. 1031-1068.
- Buckley, P. J. and Casson, M. (1976) *The future of the multinational enterprise*, 2nd ed., The Macmillan Press, London, UK.
- Carrillo, E. F. P. (2007) 'Corporate governance; shareholders' interests and other stakeholders' interests', *Corporate Ownership & Control*, Vol. 4, No. 4, pp. 96-102.
- Cassiman, B., and Golovko, E. (2011) 'Innovation and internationalization through exports' *Journal of International Business Studies*, Vol. 42, No. 1, pp. 56-75.
- Daily, C. M., Dalton, D. R., and Cannella Jr, A. A. (2003) 'Corporate governance: Decades of dialogue and data', *Academy of Management Review*, Vol. 28, No. 3, pp. 371-82.
- David, P., Hitt, M. A., and Gimeno, J. (2001) 'The influence of activism by institutional investors on R&D', *Academy of Management Journal*, Vol. 44, No. 1, pp. 144-157.
- Demsetz, H. (1983) 'The Structure of Ownership and the Theory of the Firm' *Journal of Law & Economics*, Vol. 26, No. 2, pp. 375-390.
- De Jong, H.W. (1997). The Governance Structure and Performance of Large European Corporations. *The Journal of Management and Governance*, Vol 1, No. 1, pp. 5-27.
- Denis, D. J., Denis, D. K., and Yost, K. (2002) 'Global diversification, industrial diversification, and firm value', *The Journal of Finance*, Vol. 57, No. 5, pp. 1951-1979.

- Desender, K. A.; Aguilera, R. V.; Crespi, R.; Garcia-Cestona, M. (2013) 'When does ownership matter? Board characteristics and behavior', *Strategic Management Journal*, Vol. 34, No. 7, pp. 823-842.
- Dhanaraj, C., and Beamish, P. W. (2003) 'A Resource-Based Approach to the Study of Export Performance', *Journal of Small Business Management*, Vol. 41, No. 3, pp. 242-261.
- Eckert, St. & Mayrhofer, U. (2002). Corporate Governance Changes and their Implications for Internationalisation - Towards an Empirically Grounded Framework. *Proceedings of 28th Annual EIBA Conference*, Athens.
- Enriques, L. & Volpin, P. 2007. Corporate governance reforms in continental Europe. *Journal of Economic Perspectives*, 21(1): 117-40.
- Faccio, M., and Lang, L. H. P. (2002) 'The ultimate ownership of Western European corporations', *Journal of Financial Economics*, Vol. 65, No. 3, pp. 365-95.
- Fernández, Z., and Nieto, M. J. (2006) 'Impact of ownership on the international involvement of SMEs', *Journal of International Business Studies*, Vol. 37, No. 3, pp. 340-351.
- Filatotchev, I., Strange, R., Piesse, J., and Lien, Y-C. (2007) 'FDI by firms from newly industrialized economies in emerging markets: corporate governance, entry mode and location', *Journal of International Business Studies*, Vol. 38, No. 4, 556-572.
- Filatotchev, I., Stephan, J., and Jindra, B. (2008) 'Ownership structure, strategic controls and export intensity of foreign-invested firms in transition economies', *Journal of International Business Studies*, Vol. 38, No. 4, pp. 556-572.
- George, G., Wiklund, J., and Zahra, S. A. (2005) 'Ownership and the internationalization of small firms', *Journal of Management*, Vol. 31, No. 2, pp. 210-233.
- Greene, W.A. (2000). *Econometric Analysis*, 4th ed., Prentice Hall, Upper Saddle River, NJ.
- Gomez-Mejia L. R. Makri M., and Larraza Kintana M. (2010) 'Diversification decisions in family-controlled firms', *Journal of Management Studies*, Vol. 47, No. 2, pp. 223-251.
- Hall, P. A. and D. Soskice (2001), *Varieties of capitalism: The institutional foundations of comparative advantage*, Oxford University Press, Oxford.
- Hennart J.F. (1982). *A Theory of Multinational Enterprise*. The University of Michigan Press, Ann Arbor.
- Hennart, J. F. (2009) 'Down with MNE-centric theories! Market entry and expansion as the bundling of MNE and local assets' *Journal of International Business Studies*, Vol. 40, No9, pp. 1432-1454.
- Herrmann, P., and Datta, D. K. (2005) 'Relationships between top management team characteristics and international diversification: An empirical investigation', *British Journal of Management*, Vol. 16, No. 1, pp. 69-78.

- Hitt, M. A., Hoskisson, R. E., and Kim, H. (1997) 'International Diversification: Effects on innovation and firm performance in product-diversified firms', *Academy of Management Journal*, Vol. 40, No. 4, pp. 767-798.
- Hitt, M. A., Tihanyi, L., Miller, T., and Connelly, B. (2006) 'International diversification: antecedents, outcomes and moderators', *Journal of Management*, Vol. 32, No. 6, pp. 831-867.
- Jacquemin, A. P., and Berry, C. H. (1979) 'Entropy measure of diversification and corporate growth', *The Journal of Industrial Economics*, Vol. 27, No. 4, pp. 359-369.
- James, H. (1999) 'Owner as manager, extended horizons and the family firm', *International Journal of the Economics of Business*, Vol. 6, No. 1, pp. 41-55.
- Jensen, M. C., and Meckling, W. (1976) 'Theory of the firm: Managerial behaviour, agency costs, and capital structure', *Journal of financial economics*, Vol. 3, No. 4, pp. 305-360.
- Katsikeas, C. S., Leonidou, L. C., and Morgan, N. A. (2000) 'Firm-level export performance assessment: review, evaluation and development', *Journal of the Academy of Marketing Science*, Vol. 28, No. 4, pp. 493-511.
- Kim, W. C. (1989) 'Developing a global diversification measure', *Management Science*, Vol. 35, No. 3, pp. 376-383.
- Kochhar, R. (1996) 'Explaining firm capital structure: the role of agency theory vs. transaction cost economics', *Strategic Management Journal*, Vol. 17, No. 9, pp. 713-728.
- La Porta, R., Lopez-de-Silanes, F., and Shleifer, A. (1999) 'Corporate ownership around the world', *Journal of Finance*, Vol. 54, No. 2, pp. 471-518.
- Lien, Y-C., Piesse, J., Strange, R., and Filatotchev, I. (2005) 'The role of corporate governance in FDI decisions: evidence from Taiwan', *International Business Review*, Vol. 14, No. 6, pp. 739-73.
- LoBue, R., (2009) 'Is accounting at odds with corporate governance?', *European Journal of International Management*, Vol. 3, No. 1, pp. 21-41
- Lu, J.W. and P.W. Beamish, (2004) 'International diversification and firm performance: The S-Curve hypothesis', *Academy Of Management Journal*, Vol. 47, No. 4, pp. 598-609.
- Majocchi, A., and Strange, R. (2012) 'International Diversification: the Impact of Ownership Structure, the Market for Corporate Control, and Board Independence', *Management International Review*, Vol. 52, No. 6, pp. 879-900.
- Majocchi, A., and Presutti, M. (2009). 'Industrial clusters, entrepreneurial culture and the social environment: The effects on FDI distribution', *International Business Review*, Vol. 18 No. 1, pp. 76-88.
- Mansi, S.A. and Reeb, D.M. (2002) '[Corporate international activity and debt financing](#)', *Journal Of International Business Studies*, Vol. 33, No. 1, pp. 129-147

- Mayrhofer, U. (2004). 'The influence of national origin and uncertainty on the choice between cooperation and merger-acquisition: An analysis of French and German firms' *International Business Review*, Vol. 13 No. 1, pp. 83-99.
- Morck, R., and Yeung, B. (1991). Why investors value multinationality. *Journal of Business*, 64(2), 165–187.
- Nachum, L., and Zaheer, S. (2005). The persistence of distance? The impact of technology on MNE motivations for foreign investment., 26(8), 747-767. *Strategic Management Journal*
- Ning, L., Wang, Y., Cao, W., and Zhou, Z. (2013). Does external technology acquisition determine export performance? Evidence from Chinese manufacturing firms, *International Business Review*, vol. 22(6), 1079-1091.
- Oesterle, M., Richta, H. N., and Fish, J. H. (2013). The influence of ownership structure on internationalization. *International Business Review*, 22(1), 187-201.
- Panunzi F., M. Burkart and A. Shleifer, (2003), Family Firms, *Journal of Finance*, Vol. 58, No. 5, pp. 2173-2207.
- Pedersen, T., and Thomsen, S. (1997) 'European Patterns of Corporate Ownership: A Twelve-Country Study', *Journal of International Business Studies*, Vol. 28, No. 4, pp. 759-778.
- Presutti, M.; Boari, C., and Majocchi, A. (2011). 'The Importance of Proximity for the Start-Ups' Knowledge Acquisition and Exploitation', *Journal of Small Business Management*, Vol. 49, No. 3, pp. 361-389.
- Reeb, D.N., C.C.Y. Kwok and H.Y. Baek (1998) 'Systematic risk of the multinational corporation', *Journal of International Business Studies*, Vol. 29 No.2, pp. 263-279.
- Rogers, P., Ribeiro, K. C. S., and Securato, J. R. (2008) 'Corporate governance stock market and economic growth in Brazil', *Corporate Ownership & Control*, Vol. 5, No. 1, pp. 222-237.
- Rugman, A. M., and Verbeke, A. (2004) 'A perspective on regional and global strategies of multinational enterprises', *Journal of International Business Studies*, Vol. 35, No. 1, pp. 3-18.
- Rugman, A. M. and C. H. Oh (2011) 'Methodological issues in the measurement of multinationality of US firms', *Multinational Business Review*, Vol. 19, No. 3, pp. 202 – 212.
- Rugman, A.; Yip, G. and S. Jayaratne, (2008) 'A note on return on foreign assets and foreign presence for UK multinationals', *British Journal Of Management*, Vol.: 19, No. 2, pp. 162-170.
- Sciascia, S., Mazzola, P., Astrachan, J. H., and Pieper, T. M. (2012) The role of family ownership in international entrepreneurship: exploring nonlinear effects', *Small Business Economics*, Vol. 38, No. 1, pp. 15-31.
- Shrader, R. C., and Simon, M. (1997) 'Corporate versus independent new ventures: Resource, strategy, and performance differences', *Journal of Business Venturing*, Vol. 12, No. 1, pp. 47-66.

- Sirmon, David G., Arregle, J.-L.; Hitt, M. A., Webb, J. (2008) 'The Role of Family Influence in Firms' Strategic Responses to Threat of Imitation', *Entrepreneurship Theory And Practice*, Vol. 32, No. 6, pp. 979-998.
- Tallman, S., and Li, J. (1996) 'Effects of international diversity and product diversity on the performance of multinational firms', *Academy of Management Journal*, Vol. 39, No. 1, pp. 179–196.
- Teti, E., and Perrini, F. (2013) 'The role of institutional investors on the governance of SMEs: evidence from an Italian perspective', *European Journal of International Management*, Vol. 7, No. 3, pp. 350-368.
- Thomas, J. & Graves, C. (2005) Internationalisation of the Family Firm: The Contribution of an Entrepreneurial Orientation, *Journal of Business and Entrepreneurship*, Vol. 17, No. 2, pp. 91-113.
- Thomas, LG; Waring, G. (1999) 'Competing capitalisms: Capital investment in American, German, and Japanese firms' *Strategic Management Journal*, Vol. 20, No. 8, pp. 729-748.
- Thomsen, S., and Pedersen, T. (2000) 'Ownership structure and economic performance in the largest European companies', *Strategic Management Journal*, Vol. 21, No. 6, pp. 689-705.
- Tihanyi, L., Ellstrand, A. E., Daily, C. M., and Dalton, D. R. (2000) 'Composition of the top management team and firm international diversification', *Journal of Management*, Vol. 26, No. 6, pp. 1157-1177.
- Tihanyi, L., Johnson, R. A., Hoskisson, R. E., and Hitt, M. A. (2003) 'Institutional ownership differences and international diversification: The effects of boards of directors and technological opportunity', *Academy of Management Journal*, Vol. 46, No. 2, pp. 195-211.
- Verwaal, E., and Donkers, B. (2002) 'Firm size and Export Intensity: Solving an Empirical Puzzle', *Journal of International Business Studies*, Vol. 33, No. 3, pp. 603–613.
- Witcher B. J. and V. S. Chau (2012) 'Varieties of Capitalism and Strategic Management: Managing Performance in Multinationals after the Global Financial Crisis', *British Journal of Management*, Vol. 23, No. S1, pp. S58–S73.
- Zahra, S. A. (2003), 'International expansion of U.S. manufacturing family businesses: The effect of ownership and involvement', *Journal of Business Venturing*, Vol. 18, No. 4, pp. 495-512.

Table 1 – Descriptive statistics and correlation between continuous variables

	Average	SD	Age	Size_log	Intangible intensity	Leverage	R&D Intensity	Foreign board
Age	52.656	57.920	1					
Size (log)	5.503	3.063	0.223***	1				
Intangible intensity(%)	15.8	18.9	-0.130***	0.166***	1			
Leverage	.381	1.371	-0.001	0.121***	0.076***	1		
R&D Intensity (%)	1.372	28.628	-0.038	-0.031	-0.020	-0.013	1	
Foreign board	.062	.154	-0.064**	0.028	0.065**	-0.018	0.014	1

Table 2 – Ownership types distribution

VARIABLES	UK	Continental Europe
Family Firms	99	195
Banks	70	44
Institutional Investors	207	146
Other industrials	54	316
Public entities	14	141
Others	9	20
Total firms	453	862

Table 3 – Industry distribution

Nace 2-digit code	Description of Nace code	Freq.	Percent.
10	Manufacture of food products	74	5.63
11	Manufacture of beverages	50	3.80
12	Manufacture of tobacco products	2	0.15
13	Manufacture of textiles	42	3.19
14	Manufacture of wearing apparel	54	4.11
15	Manufacture of leather and related products	13	0.99
16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	16	1.22
17	Manufacture of paper and paper products	32	2.43
18	Printing and reproduction of recorded media	14	1.06
19	Manufacture of coke and refined petroleum products	12	0.91
20	Manufacture of chemicals and chemical products	85	6.46
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	109	8.29
22	Manufacture of rubber and plastic products	37	2.81
23	Manufacture of other non-metallic mineral products	57	4.33
24	Manufacture of basic metals	81	6.16
25	Manufacture of fabricated metal products, except machinery and equipment	51	3.88
26	Manufacture of computer, electronic and optical products	227	17.26
27	Manufacture of electrical equipment	65	4.94
28	Manufacture of machinery and equipment n.e.c.	129	9.81
29	Manufacture of motor vehicles, trailers and semi-trailers	44	3.35
30	Manufacture of other transport equipment	41	3.12
31	Manufacture of furniture	17	1.29
32	Other manufacturing	63	4.79
Tot.		1315	100

Table 4 – Tobit regression results for the UK sample[†]

VARIABLES	FSTS	Entropy	<i>Subsidiaries</i>
Age	-0.000 (0.000)	0.002*** (0.001)	0.036*** (0.010)
Size	0.033*** (0.008)	0.074*** (0.011)	1.749*** (0.199)
Intangible intensity	0.054 (0.086)	0.120 (0.115)	0.711 (2.000)
Leverage	-0.023 (0.028)	-0.032 (0.035)	0.139 (0.666)
R&D Intensity	0.001 (0.001)	-0.014* (0.008)	-0.049 (0.089)
Foreign board	0.494*** (0.107)	0.147 (0.139)	11.175*** (2.394)
Family	-0.181*** (0.065)	-0.042 (0.084)	1.323 (1.550)
Bank	0.006 (0.069)	0.114 (0.088)	2.236 (1.629)
Inst Inv	0.010 (0.057)	0.161** (0.074)	3.406** (1.328)
Constant	0.456*** (0.076)	0.227** (0.099)	-12.627*** (1.864)
Uncensored Obs.	351	313	286
Left-censored obs	55	76	167
LR chi ² (30)	141.58	184.60	297.23
Pseudo R-squared	0.2595	0.2572	0.1186

[†] = industry dummies included but not reported in the table

Table 5 – Tobit regression results for Continental Europe ° †

VARIABLES	FSTS	Entropy	Subsidiaries
Age	0.000 (0.000)	0.000 (0.000)	0.030*** (0.008)
Size	0.030*** (0.005)	0.085*** (0.007)	2.590*** (0.157)
Intangible intensity	0.344*** (0.091)	0.458*** (0.124)	21.154*** (3.126)
Leverage	0.012* (0.007)	0.001 (0.011)	0.068 (0.262)
ReD_intensity	-0.043 (0.036)	-0.031 (0.039)	0.503 (0.510)
Foreign board	0.275*** (0.100)	0.030 (0.137)	9.446*** (3.312)
Family	0.008 (0.031)	0.012 (0.042)	0.972 (1.050)
Bank	-0.015 (0.058)	-0.090 (0.078)	-4.140** (1.975)
Inst Inv	-0.090*** (0.034)	-0.053 (0.046)	-0.039 (1.152)
Constant	0.309*** (0.043)	0.280*** (0.059)	-13.990*** (1.392)
Uncensored Obs.	660	638	620
Left-censored obs	97	105	242
LR chi ² (31)	165.39	276.10	485.41
Pseudo R-squared	0.2140	0.2205	0.0881

° France, Germany, Italy, Poland and Spain)

† = industry dummies included but not reported in the table

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1