Family Firms’ Proclivity to Export: The Influence of Corporate Governance

ABSTRACT

A notable by-product of globalization has been the international expansion of family-owned business. While the academic literature is replete with studies on the family firm, the relationship between export behavior, family control and board composition is absent. Drawing upon a large database from Colombian firms (33,249 firms in the period of 2008 to 2013), one may derive insights into factors that impact the export behavior of family firms in the Latin American context. This study confirms an endogenous relation between corporate governance in terms of board composition (specifically the presence of independent members) and export behavior in family firms. Firms with a higher participation of independent board members are more likely to exhibit higher levels of exports. Moreover, the introduction of independent members on the board can be expected to boost export behavior; and this in turn will encourage an increase of independent members on the board of private firms.

Keywords: exports; family business; corporate governance

Track: Entrepreneurship and Family Business
Family Firms’ Proclivity to Export: The Influence of Boards of Directors

1. Introduction

Scholars have studied family firms' internationalization process and the determinants that trigger that process (Claver, Rienda, & Quer, 2009; Fernández & Nieto, 2005; Gallo & García-Pont, 1996; Graves & Thomas, 2004, 2006; Segaro, 2010; Thomas & Graves, 2005); however there's still a dearth of research on how family ownership and management changes affect these firms' propensity to become exporters, especially in the context of emerging economies.

Although the investigation of family firms' internationalization has gained momentum in the literature, scholars have recently pointed out that research on the role of the board of directors on family firms' international activity is still needed (Mitter, Duller, Feldbauer-Durstmüller, & Kraus, 2014).

Thus, the objective of this research is to study the relationship between board characteristics and export behavior. Specifically we analyze how family firms increase the quality of their boards to access international markets, noting that at the same time high export activity in family firms generates improvements in the quality of the boards. We focus on two dimensions of export behavior: export density (exports amount), and export intensity (export/total sales ratio) (Aaby & Slater, 1989; Bonaccorsi, 1992; Calof, 1994; Miesenbock, 1988), and analyze the influence of outside board members on these dimensions in the Colombian context.

Literature review

1.1. Family firms and internationalization process

The investigation of how family firms are created and managed has drawn attention of many scholars since the early nineteenth century until today (Bertrand & Schoar, 2006). Family controlled firms are the most prevalent business type in the world and have been studied with regard to their internal capabilities such as stewardship, risk management, organizational culture as well as internationalization and performance (González, Guzmán, Pombo, & Trujillo, 2013; Mitter et al., 2014; Schulze, Lubatkin, & Dino, 2003; Zahra, 2003).

Although family involvement in management can generate positive performance (Anderson & Reeb, 2003; Kim & Gao, 2013), family firms are strongly grounded on culturally-based patterns of behavior which can lead them to inefficient decision-making (Bertrand & Schoar, 2006). With regards to international business, there's still a lack of consensus on how family firms develop

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1 This paper is based on original research previously conducted by the author with colleagues from Colombia.
their internationalization. On the one hand, past research has pointed out that family businesses have a higher entrepreneurial drive which can lead to internationalization (Tsao & Lien, 2013). Studies have also found that family ownership can positively influence firms’ degree of internationalization (Simon, 1996; Zahra, 2003) based on the argument that family firms possess unique intangible assets and capabilities that help them in their international ventures. Such intangible assets have been cited in the literature as the family members' commitment and dedication to the firm (also called “familiness”) increase opportunity recognition (Aldrich & Cliff, 2003) and stewardship which are related to increased market orientation and entrepreneurship (Mitter, Duller, Feldbauer-Durstmüller, & Kraus, 2014).

Emerging market firms have largely relied on family control and business groups to sustain performance and survive, where in fact one of the main arguments for the formation of family firms is that it helps against local market imperfections and weak institutions (Bertrand, Johnson, Samphantharak, & Schoar, 2008).

Although there are examples of family firms from emerging economies that are largely internationalized, the average family-controlled firms from emerging markets are still poorly developed internationally (Bhaumik, Driffield, & Pal, 2010). Considering that firms from emerging markets are embedded in a context of weak institutions such as property rights and contract enforcement, expanding internationally also incurs dealing with new laws and regulations (Khanna & Palepu, 2000). Thus, in addition to the risk-aversion and centralization characteristics of family firms that restrain them from pursuing internationalization, the underdeveloped local institutional context (Hoskisson, Wright, Filatotchev, & Peng, 2013) can also be an additional hurdle to family firms' international development. In sum, emerging market firms possessing family-inherent agency positions will be less willing to pursue international activities. This hypothesis is tested using two forms of export behavior, the firm's export density (total amount of foreign sales) and export intensity (foreign sales over total sales ratio), since this joint analysis can provide a more comprehensive perspective of the overall export behavior of firms.

Hypothesis 1. Family controlled firms are less likely to (a) have higher export density, and (b) to develop greater export intensity.

1.2. The role of independent directors in a firm’s internationalization

Examining the corporate governance of firms, the presence of independent directors on the board can have significant impacts on these firms' strategic decision (Sanders & Carpenter, 1998). Independent directors can use their managerial expertise from other areas and bring valuable tacit knowledge to the firm (Sanchez-Bueno & Usero, 2014). Thus, agency
Theorists have argued that the presence of independent directors on the board is a key characteristic of good corporate governance (Bhagat & Black, 2002; Fama & Jensen, 1983).

**Hypothesis 2.** Firms with independent directors are more likely to (a) have high export density and (b) to develop greater export intensity.

**Hypothesis 2c.** The larger the participation of independent directors on the firm board, the higher export density.

In this context, the presence of independent directors can be very beneficial to the family firm due to the knowledge and expertise provided by these managers, which in turn can positively influence family firms' export behavior. Particularly in family firms from emerging markets, the presence of independent directors can have a substantial positive impact on the strategic decision-making capabilities of these firms (Hillman, Cannella, & Paetzold, 2000; Peng, 2004). Independent directors are less subject to family influences and are more willing to cast themselves into decisions that go against poor and ill-conceived initiatives (McDonald, Westphal, & Graebner, 2008). Scholars have noted also that although family board members are usually less prone to invest abroad, the presence of independent directors can create an influx of new knowledge about internationalization that will attenuate the avoidance of international business (Calabrò et al., 2012)

**Hypothesis 3.** The presence of independent directors on family firms' boards positively moderates the negative impact of family control on firms' export density.

Next, data collection and methodological procedures are explained, followed by the analysis of results, discussion and concluding remarks. Fig. 1 illustrates the relationships hypothesized in our conceptual model.

![Conceptual model](image)

2. Method
2.1. Data description

Information about export behavior and board of directors' characteristics of Colombian firms comes from the Corporate Governance Survey and the data base of the Superintendencia de Sociedades from 2008 to 2013. The sample is composed of 33,249 firms of which 5123 are exporters and 14,770 are family firms. A total of 14,844 firms possess boards of directors and 7553 firms have independent board members.

Dependent variables

Two dimensions of export behavior are examined: the first is export density (exp_dens) that indicates whether a firm is an exporter and is estimated as the natural log of the sum of one plus total foreign sales, used by Lien, Piesse, Strange, and Filatotchev (2005). Export intensity is estimated as the ratio of export sales to total sales (Export ratio) and the natural log of the sum of one plus the ratio of export sales to total sales (Lien, Piesse, Strange, & Filatotchev, 2005; Sullivan, 1994; Zahra, 2003). Finally, export asset turnover (Export turnover) is used, estimated as the natural log of one plus the ratio of total foreign sales divided by total assets (inspired in Shoham, 1998; Sousa, 2004) in order to run a robustness check for the first hypothesis following parsimony principles.

2.2. Independent variables

As the export behavior in family firms is the main concern, the research uses an independent variable called “family” which is a dummy variable that indicates whether a firm has the economic and/or financial control and/or management of the company, exercised by people connected to each other.

To gauge robustness and take into account whether the family has control inside the board, another variable is used - “no_family_board”, meaning that the family does not have control of the decisions instituted by the board. This variable takes into account whether the board of directors makes decisions independently, especially when the origin of the firm is family-based (Villalonga & Amit, 2006).

The second main objective of this paper is to analyze the interrelationship between a family firm having independent members on its board of directors and the export behavior of that firm. Considering the important effects of board independence on firm performance (Hermalin & Weisbach, 1991), measures were selected based on firms' board of directors' information.

2.3. Control variables
Four control variables are included to ensure the validity of the relation between the explanatory variables and dependent variables. The first control variable is a dummy variable named “foreign” that indicates whether a foreign entity has any ownership on the firm, which in turn can be associated with export activities (Lien, Piesse, Strange, & Filatotchev, 2005). Scholars have argued that export behavior is related to the size of the firm (Bausch & Krist, 2007; Dunning, 1993). In some studies, the number of employees was used as the measure for size (Bilkey & Tesar, 1977; Cavusgil & Naor, 1987), while in others the sales level of the firm was used (Hester, 1985; Holden, 1986). Cavusgil (1984) found that when firm size was measured by number of employees, no relationship was found with export behavior, but a significant relationship was found when size was measured by annual sales. With this observation in mind, the study employs a control variable named “size” measured as a natural log of annual sales.

Lastly, the research controls for the ratio between long-term financial debt to total assets, or “leverage” and the number of years since firm creation (“firm_age”), which also can influence firms' export behavior (Villalonga & Amit, 2006).

2.4. Instrumental variables

To test the existence of reverse causality between independence of the board members and export behavior, instrumental variables are included that are determinants of the presence of independent members in the board but not correlated with export behavior of the firm, so we can reduce endogeneity problems related to the presence of independent directors.

The first instrumental variable is “conflict_int_board”, a dummy variable that takes into account if the firm has mechanisms to disclose possible board director conflict of interest. The rationale here is that the magnitude of exports is not correlated with the existence of this kind of mechanism on the board of directors. However, the board using this kind of instrument is more likely to engage independent members, so one may expect boards with rigorous systems to disclose conflicts of interest will have higher numbers of independent board members.

The second instrumental variable, “board_size”, is measured as the natural log of total members in the board of directors (Boone, Field, Karpoff, & Raheja, 2007). In this case, larger boards of directors will have more independent members, and also noted is an orthogonal relationship between the size of board and export behavior.

The third instrument is labeled “expert”, which is a dummy variable that captures whether the election of the members of the board takes into account the expertise, qualifications and professional reputation of the candidate. Here firms that take into account the expertise of the members before selecting them, have a higher number of independent members on their board. However, this condition is not correlated with the export behavior in the sample.

2.5. Estimation
The objective of this research is to measure how board independence and family ownership interact to promote export behavior. The research study employed a panel regression with the main unit of observation being the firm-year. In each regression model a test is applied to establish the significance of variables that control temporal and spatial effects. The results indicate the significance of temporal effects. We use the Hausman Specification Test to establish if unseen characteristics are fixed or random. Test results indicate fixed effects and the model used is described in the following equation:

\[
\text{Export behavior}_{it} = \beta_0 + \beta_1 \text{family}_{it} + \beta_2 \text{Board independence}_{it} + \beta_3 \text{Control}_{it} + \epsilon_{it}
\]

2.6. Analysis of results and discussion

This section shows the results from the empirical analysis and discuss its implications. Starting by comparing the two dimensions of export behavior mentioned above between family and non-family firms, and between family firms with and without independent boards in Colombia. Then the study cites how the engagement of qualified independent boards members and family ownership interact to promote exports. Finally, the research addresses the study's main concern: the two-way relation between the engagement of qualified independent board members and exports in family firms. Table 2 shows the correlation matrix between all the variables of the model.

2.7. Export behavior and family business

Table 3 (model 1) presents the estimates from the panel data regression. The main explanatory variable is “family”. The interpretation of this coefficient is that on average the family firm has a lower export density (63.4%). This result confirms Hypothesis 1(a). Regarding the main control variables of foreign, size and leverage, these are positive and significant.

Model 3 tests the Hypothesis 1(b), using the second dimension of export behavior, the export intensity. In this case we are comparing the export intensity between family firms and non-family firms. The estimate of \(\beta_1\) is negative and significant, and its magnitude implies export intensity on average to be lower in family firms relative to non-family firms.

For a robustness check of the study's conclusion the research uses as a measure of export behavior the export asset turnover, estimated as the natural log of one plus the ratio of total foreign sales divided by total assets (inspired in Shoham, 1998; Sousa, 1998).
The result is presented in model (5). Again, the results are consistent and the estimate of $\beta_1$ is negative and significant, indicating that the asset export turnover on average is lower in family firms relative to non-family firms.

2.8. **Export behavior, family firms and independence of the board**

Next, in Table 4, the study addresses the second hypothesis of this study: the moderating effect of the presence of independent board members on the relation between family ownership and export behavior. In model (1) the endogenous variable export density shows a positive association with the presence of independent members on the board of directors (“d_indep_dir”). The coefficient of 1.363 implies that firms with independent members in the board have 2.9 times more foreign sales on average than firms without independent members on their boards. This confirms Hypothesis 2(a). Next, the Hypothesis 2(b) is tested using as the dependent variable export intensity as shown in Table 4, model (5). The beta associated to the variable “d_indep_dir” is positive and significant at the 1% level. This means that export intensity on average is higher among firms with independent members in the board, thus confirming Hypothesis 2(b).

In model (2) the study tests the relation between export density and the percentage of independent board members. The results confirm a positive and significant relation between export density and independent members on the board, which means that firms with a higher percentage of independent members on their boards of directors are more likely to have a higher level of export behavior, thus confirming Hypothesis 2c.

Lastly, Hypothesis 3 tests whether the contribution of independent board members to export behavior remains for family firms. One finds the marginal effect of having independent members on the board remains positive and significant also in the case of family firms. This result suggests that independent members on the board of family firms are able to encourage export behavior, supporting Hypothesis 3.

Next, the study examines additional sensibility issues related to the importance of independent board members to family firms' export behavior. Model (6) in Table 4 includes two new variables for these purposes. The first one is named “Family_ind_q1” and denotes family firms in the lowest quartile in the share of independent directors on the board, and “Family_ind_q3” denotes family firms in the highest quartile. The results show a bigger negative coefficient (significance at 1% level) for the lowest quartile in comparison to the coefficient associated with the highest quartile. This means that independent board members are more important to the export behavior of family firms, reducing the negative effect of family firm ownership. This result can be seen as a robustness check that supports Hypothesis 3.

The last conclusion is confirmed in model (7), Table 4. A new variable “Family*m_ind_total” is included representing family firms with 100% of independent members on the board. The coefficient associated with this variable is positive, indicating that total
independent boards have a direct relationship with export behavior in the case of family firms. However, this result was not significant statistically. This weak relationship could be reflecting the fact that sometimes independent board members do not have decision power or real influence in the strategy of the firm. In this case, independent members would be used to accomplish a legal requirement or as discrentional advisors without the necessary empowerment to address the main decisions, specifically in family owned firms.

2.9 Export behavior and independent members on the board: simultaneous effects on family firms

A simultaneous equation approach is employed to test the simultaneity between export behavior and the independent members of the board in family firms. The system of equations is organized as follows:

\[
\text{Export behavior}_{it} = \alpha_0 + \beta_1 \text{Indep\_dir}_{it} + \beta_2 \text{family}_{it} + \beta_3 \text{Foreign}_{it} + \beta_4 \text{Size}_{it} + \beta_5 \text{Leverage}_{it} + \epsilon_{it}
\]

\[
\text{Indep\_dir}_{it} = \gamma_0 + \delta_1 \text{Conflict\_int\_board}_{it} + \delta_2 \text{board\_total\_memy}_{it} + \delta_3 \text{Expert}_{it} + \delta_4 + \eta_{it}
\]

Table 5 reports regression results obtained using a 2SLS procedure.

As a preliminary step, the study analyzed the significance of having independent members on the board to encourage the export density and the significance of higher export density to explain higher numbers of independent board members. Table 5 model (1) reports the results of a panel data regression using “Indep\_dir” as an explanatory variable of export density. The results indicate a positive relation with significance at the 5% level, which leads us to conclude that the greater number of independent members of the board the higher export density. Model (2) contains the results of regressing “indep\_dir” as a dependent variable in function of its instrumental variables and export density. All the instrumental variables are positive and significant at the 1% level (“Board\_size”, and “Expert”), and at the 5% level (“Conflict\_int\_board”). Export density (“Exp\_dens”) is positive and significant at the 1% level as well. This indicates that all instrumental variables and export density are related to the existence of a higher number of independent members in the board.

The study results confirm that export behavior and independence of the board interact with each other. On this basis one may conclude that a virtuous cycle can be seen as ongoing in this country. Thus, the introduction of independent members on the board can be expected to improve export behavior, which in turn can be expected to encourage an increase of independent members in the board composition of private firms.

Our results suggest that Colombian family firms are generally more risk averse to international expansion compared to non-family business, thus confirming previous research's theoretical arguments regarding family firms' risk avoidance and
agency conflicts stemming from family board members that act passively and are only interested in their own economic welfare (Gomez-Mejia, Makri, & Kintana, 2010; Lubatkin, Schulze, Ling, & Dino, 2005).

The research results are also in line with prior research from developed countries (Graves & Thomas, 2008; Mitter, Duller, Feldbauer-Durstmüller, & Kraus, 2014) and reveal that emerging market family firms can leverage their exports through the increase of independent board members. The study also adds to the family firms’ literature confirming an endogenous relationship between board composition (specifically the presence of independent members) and export behavior. Therefore, the research provides a unique insight towards the understanding of how family firms evolve over time, their exports activity, and the important factors that can influence their behavior. This fulfills an important research gap raised by past studies on family firms’ international activity (Mitter, Duller, Feldbauer-Durstmüller, & Kraus, 2014).

2.10. Conclusions, limitations and future research

Results of the research study reveal that family ownership has on average lower levels of export behavior. This conclusion was confirmed using two dimensions for export behavior (export intensity, export density) as well as different statistical specifications and empirical models. Comparisons between non-family and family firms, the test of alternative measures for export behavior (export asset turnover) and the use of control variables also reinforce our conclusions. Although older firms show higher levels of export behavior, this behavior is lesser in the case of family firms. On average, a family firm has a lower export density and lower export intensity than a non-family one.

This conclusion has strong implications for public policy in emerging countries and managerial practice. Specifically in the Colombia, several free trade agreements have been signed by the nation in the last several years. Taking into account the large share that family businesses contribute to GDP, one of the main challenges that Colombian policy makers have is to design a framework and develop programs that encourage family firms to export. Thus, national strategies recommended by the literature to support the internationalization of family firms encompass policies oriented to increase the institutional quality, enhance the competitiveness levels, create channels to promote international partnerships, promote ways to more easily access capital, and structure effective technical activities to aid family firms that seek to export or expand existing exports (Mitter, Duller, Feldbauer-Durstmüller, & Kraus, 2014, Herrera-Echeverri, Haar, & Benavides, 2014). Yet, managers and business owners can utilize our findings as an informative resource regarding improvements of corporate governance and its relationship with increased firm exports. Therefore, one of the measures that a family firm can take to meet the challenge of globalization is to create and empower a board of independent directors with the skills and knowledge required to lead the firm on the road towards reaping international opportunities.

Finally, a virtuous cycle was detected empirically in Colombia family firms: the introduction of independent members on the board can be expected to boost export behavior, which in turn can be expected to encourage the increase of independent members to
the board of private firms. This last result is consistent with the Hermelin and Weisbach (2003) who argue that boards of directors are endogenously-determined institutions.

In terms of limitations, the relatively short time period of our sample limited the length of the analysis in this study and, in so doing, limited the number of variables that could be included in the model. By extending the number of countries and studying them for a longer time period greater accuracy of our results could be achieved.

Future research may wish to focus on why some kinds of family enterprises are more likely to exhibit greater levels of export behavior in developing countries than others and why some board characteristics are more likely to encourage export behavior in family firms. While the study examined the effects of independent (non-family) board members, follow-on research may wish to account for characteristics like gender, stability, longevity or networking impact export behavior in family firms of emerging countries and whether the effects change depending upon the business sector.

References


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**Table 1**

Summary statistics.

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**Table 4**

Export behavior, family firms and independence of the board.

Panel Data specification is used in all models. Dependent variable Exp.dens defined as the natural log of the sum of one plus total foreign sales is used in models (1) to (4) and (6) and (7). In model (5) the dependent variable is exp.int estimated as the natural log of the sum of one plus the ratio of export sales to total sales. d_indep_dir indicates whether the firm has or not independent members on the board. Family equals one when the firm has the economic and/or financial control and/or management of the company is exercised by people connected with family ties. Foreign indicates whether a foreign has share in the property of the firm. Size is the natural log of annual sales. Leverage is the ratio between long term financial debts to total assets. perc_ind_dir is the ratio of total outside independent members divided by total member of the board. No_fameny_board indicates whether the board may not form the majority decision-making people connected with family ties. Family_ind_q1 indicates family firms in the lowest quartile of share of independent directors in the board. Family_ind_q3 indicates family firms in the highest quartile of share of independent directors in the board. "Family&m_ind_total" represents family firms with 100% of independent members in the board. Each regression includes year dummies and fixed effects. Numbers in parentheses are heteroskedasticity adjusted standard errors. Levels of significance are indicated by: ***, **, *, and * for 1%, 5%, and 10%, respectively.
Table 5
Export Behavior and independent members in the board: Simultaneous effect in family firms.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Exp. dens</th>
<th>(2) Indep. dir</th>
<th>(3) First-stage</th>
<th>(4) 2SLS Second-stage</th>
<th>(5) GMM Second-stage</th>
<th>(6) First-stage</th>
<th>(7) GMM Second-stage</th>
<th>(8) First-stage</th>
<th>(9) GMM Second-stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>-1.520***</td>
<td>-0.2068***</td>
<td>-1.231***</td>
<td>-1.2258***</td>
<td>0.2154***</td>
<td>-1.276***</td>
<td>-0.2082***</td>
<td>-1.226***</td>
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<td></td>
<td>(0.1840)</td>
<td>(0.0135)</td>
<td>(0.1980)</td>
<td>(0.1984)</td>
<td>(0.01345)</td>
<td>(0.1980)</td>
<td>(0.0135)</td>
<td>(0.1980)</td>
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<tr>
<td>Family</td>
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<td></td>
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<tr>
<td>Indep. dir</td>
<td>0.407**</td>
<td></td>
<td>1.2520**</td>
<td>1.6013***</td>
<td>1.3750***</td>
<td>1.5760***</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>(0.1500)</td>
<td></td>
<td>(0.3170)</td>
<td>(0.3173)</td>
<td>(0.3210)</td>
<td>(0.3180)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Foreign</td>
<td>3.1580***</td>
<td>0.0842***</td>
<td>3.0990***</td>
<td>2.9912***</td>
<td>0.0882***</td>
<td>3.0190***</td>
<td>0.0853***</td>
<td>2.9960***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.3540)</td>
<td>(0.0246)</td>
<td>(0.3460)</td>
<td>(0.3466)</td>
<td>(0.0245)</td>
<td>(0.3460)</td>
<td>(0.0246)</td>
<td>(0.3470)</td>
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<tr>
<td>Size</td>
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<td>0.0089</td>
<td>0.9000***</td>
<td>0.9012***</td>
<td>0.0101***</td>
<td>0.9050***</td>
<td>0.0092***</td>
<td>0.9030***</td>
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<tr>
<td></td>
<td>(0.0421)</td>
<td>(0.0031)**</td>
<td>(0.0427)</td>
<td>(0.0430)</td>
<td>(0.0031)</td>
<td>(0.0429)</td>
<td>(0.0031)</td>
<td>(0.0430)</td>
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<tr>
<td>Leverage</td>
<td>0.867</td>
<td>0.0667**</td>
<td>0.993</td>
<td>0.6177</td>
<td>0.608**</td>
<td>0.601</td>
<td>0.668**</td>
<td>0.6252</td>
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<tr>
<td></td>
<td>(0.4910)</td>
<td>(0.0341)</td>
<td>(0.5000)</td>
<td>(0.5008)</td>
<td>(0.0342)</td>
<td>(0.5000)</td>
<td>(0.0341)</td>
<td>(0.5010)</td>
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<tr>
<td>Exp. dens</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict_int_board</td>
<td>0.0442**</td>
<td>0.0268*</td>
<td></td>
<td></td>
<td>0.0390***</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(0.0049)</td>
<td>(0.0148)</td>
<td></td>
<td></td>
<td>(0.0146)</td>
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<td>Board_size</td>
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<td>0.1087***</td>
<td></td>
<td></td>
<td>0.1091***</td>
<td>0.1088***</td>
<td>0.1088***</td>
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<tr>
<td></td>
<td>(0.0030)</td>
<td>(0.0030)</td>
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<td>(0.0030)</td>
<td>(0.0030)</td>
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<td>Expert had</td>
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<td>0.1182***</td>
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<td></td>
<td>0.1245***</td>
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<tr>
<td></td>
<td>(0.0233)</td>
<td>(0.0234)</td>
<td></td>
<td></td>
<td>(0.0231)</td>
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<tr>
<td>Constant</td>
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<td>0.460***</td>
<td>-9.948***</td>
<td>-10.1287***</td>
<td>0.5489***</td>
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<td>0.4801***</td>
<td>-10.942</td>
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<tr>
<td></td>
<td>(0.6820)</td>
<td>(0.0279)</td>
<td>(0.7230)</td>
<td>(0.7261)</td>
<td>(0.0525)</td>
<td>(0.7280)</td>
<td>(0.0541)</td>
<td>(0.7260)</td>
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<td>Time dummies</td>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<td>R-squared</td>
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<td>0.252</td>
<td>0.2842</td>
<td>0.129</td>
<td>0.1281</td>
<td>0.2798</td>
<td>0.131</td>
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<td>Firms</td>
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<td>3.935</td>
<td>3.935</td>
<td>3.935</td>
<td>3.935</td>
<td>3.935</td>
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</tr>
</tbody>
</table>

The dependent variable Exp. dens is the natural log of the sum of one plus total foreign sales. Indep. dir is the natural log of one plus the number of independent directors. Family equals one when the firm has the economic and/or financial control and/or management of the company is exercised by people connected with family ties. Foreign indicate whether a foreign has share in the property of the firm. Size is the natural log of annual sales. Leverage is the ratio between long term financial debts to total assets. Conflict_int_board is a dummy variable that take into account the existence of mechanism to disclose possible board director's conflict of interest. Board_size is the number of members of the board. Expert equals one when the election of the members of the boards take into account the expertise, qualification and high professional reputation. The instruments used are Conflict_int_board, Board_size and Expert. Each regression includes year dummies. Numbers in parentheses are robust standard errors. Levels of significance are indicated by ***, **, * for 1%, 5% and 10%, respectively.