Boards of directors in SMEs: An empirical evidence of board task performance

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This paper seeks to provide a better understanding of what makes boards effective. We analyse the relationships between board demography and company performance and between working structures and board tasks in small and medium-sized enterprises (SMEs). We test our hypotheses on a sample of 307 Spanish SMEs. The main empirical result is the negative impact that the proportion of outside directors and the board size have on firm performance. We also find a negative impact of outsiders’ presence and a positive impact of director tenure on the board’s service role. Our analysis of the role of board control highlights the negative relationship between this variable and CEO tenure.

Introduction

The debate about the efficiency of corporate governance mechanisms has focused on corporate boards of directors (De Andrés, Azofra & Lopez, 2005), specifically on the relationship between board demographic characteristics and company performance (Minichilli, Zattoni & Zona, 2009). Literature on corporate governance has primarily applied agency theory to explore the impact of several directors’ demographic attributes on firm performance (Aguilera, Filatotchev, & Jackson, 2008). Previous studies implicitly assume that demographic variables are more significant than behavioural or process variables because they are directly observable and hence serve as more reliable and valid measures (Pfeffer, 1973). Nevertheless, related empirical evidence is ambiguous about the relationship between board demographic and firm performance (Minichilli, Zattoni & Zona, 2009). The contribution of boards to firm success may not always reach its full potential (Gabrielsson & Winlund, 2000). Many researches argue that the effective functioning of boards can have effects on the firm performance (Zahara & Pearce 1989). Some boards do not perform well, due, for example, to poor structures or processes, inappropriate composition, or CEO domination (Zahara & Pearce 1989; Baixauli-Soler & Sanchez-Marín, 2015).

Hence, it might be interesting to analyse the board’s working structures and processes and their effect on performance. Scholars have argued that the use of demographic variables in the presence of complex group dynamics, as in boardroom decision-making, cannot predict board or firm performance (e.g. Daily, Dalton & Cannella, 2003; Johnson, Daily & Ellstrand, 1996).

In this sense, despite management scholars’ increasing attention to boards of directors, scant evidence on the antecedents of board task performance has emerged (Gabrielsson & Winlund 2000; Minichilli, Zattoni & Zona, 2009). Following Forbes & Milliken (1999), we considered board task performance as the board’s ability to perform its control and service tasks effectively. The antecedents of board task performance relate to organizing and conducting board meetings and reflecting board work periodically. This represents the degree to which the boards fulfill their control and service roles.

Most research on corporate governance and boards has focused, theoretically and empirically, on large corporations (Daily, Dalton & Cannella, 2003; Gabrielsson & Huse, 2004). However, researchers and managers also acknowledge the importance of well-functioning boards of directors to small and medium sized private firms, as good governance practices seem to create firm value, improve company structures, and enhance (financial) results and continuity (Zahra & Pearce, 1989; Johannisson & Huse, 2000). Small firms represent a unique setting with regard to board tasks and functioning (Pugliese & Wenstøp, 2007).

Based on these observations, the aim of this study is to analyse the direct links between board demographic variables (i.e. composition, size, activity, and leadership) and firm performance, and to empirically test the impact of the board working structures and processes on board task performance of small and medium-sized enterprises (SMEs). Our main empirical finding is the negative impact of the proportion of outside directors and the board size on firm performance. Furthermore, our analysis of the antecedents of board task

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performance reveals the negative impact of the presence of outsiders, and the positive impact of director tenure, on the board service role. The analysis of the board’s control role highlights the negative relationship between this variable and CEO tenure.

This paper contributes to the literature on boards of directors in several ways. Firstly, it enhances our understanding of what makes boards effective. In this sense, our empirical examination moves beyond board demographic characteristics to consider outcome variables besides corporate financial performance. This purpose was pursued through an empirical test of the impact of several board characteristics on board performance. Secondly, recent studies point out that contextual perspectives are needed to assess the relationship between corporate governance and firm performance, to demonstrate that, in some contexts, certain board designs may be recommended, but, in other contexts, other designs may be more suitable (Minichilli, Zattoni, Nielsen, & Huse, 2012; García-Ramos & García-Ollalla, 2014). In keeping with those studies, we focus our analysis on Spanish SMEs. As mentioned, most studies on boards of directors are limited to large listed firms and, with few exceptions, this type of analysis has been conducted on SMEs. Moreover, as Basco & Voordeckers (2015) point out, Spain provides an interesting laboratory for examining these firms because formal institutions such as the weak legal system in protecting minority shareholders, informal institutions such as the high overlap between family and business and high levels of ownership concentration (La Porta, López-de-Silanes, & Shleifer, 1999; Arosa, Iturralde & Maseda, 2010; Gupta & Levenburg, 2010; Sánchez-Marín, Baixauli-Soler & Lucas-Perez, 2011) may affect the board of directors. Moreover, this paper also considers the formal working structures that operate to maximize board performance. The authors link this process to the need for an effective and clearly defined working style on the board (Demb & Neubauer 1992). The authors explore the antecedents of board task performance by testing hypotheses on existing formal board structures and board member involvement.

The rest of this paper is organized as follows. Section 2 describes the theoretical basis and presents the hypotheses to be tested. Section 3 outlines the data and analytical procedures used in this empirical study. Section 4 presents and discusses the main results. Section 5 closes with the conclusions, implications for management theory and practice, and limitations of this research.

**Theoretical background and hypotheses**

**Board characteristics and firm performance**

Corporate governance and its link to firm value have become increasingly interesting to scholars in recent years. Much attention has been paid to board characteristics and their impact on firm performance. One of the most plausible explanations is based on the agency and resource dependency theories (Minichilli, Zattoni & Zona, 2009).

This paper focuses on the link between firm value and several corporate governance issues. The most common measures of board demography have been board size, the ratio of inside/outside directors, and CEO duality (Gabrielson & Winlund 2000). We also examine the effect of another important board dimension – the intensity of board activity (Brick & Chidambaran, 2010).

**Board composition**

In the context of corporate governance, agency theory implies that adequate monitoring mechanisms must be established to protect shareholders from management’s self-interest. Outside directors are supposed to be guardians of shareholder interests via monitoring. Therefore, a high proportion of outside directors on a board could improve performance through their monitoring role (Fama & Jensen, 1983; Shleifer & Vishny, 1997).

Several other theoretical perspectives have been used to explain the roles and composition of corporate boards. According to resource dependence theory, outsiders may be seen as a link between the firm and its environment and may help managers achieve organizational goals (Zahra & Pearce, 1989; Johnson, Daily & Ellstrand 1996). These directors are knowledgeable, powerful people who utilize their personal networks to improve the firm’s legitimacy and reputation and to increase the stock of resources it controls (Pfeffer, 1973; Pfeffer & Salancik, 1978). Access to external financing resources is a critical growth factor for SMEs, which tend to have fewer alternatives for managing their resource dependencies (Pfeffer & Salancik, 1978). Therefore, the resource dependence role of the board may become more important in these firms (Pfeffer 1973; Daily & Dalton, 1993). Outside directors can thus be an effective mean of overcoming the human resource limitations that often plague small firms (Huse, 1990; Daily & Dalton, 1993). Outside directors increase supervision, offer independent decision-making, and increase professional knowledge about the business. Accordingly, we present the following hypothesis:

**H1:** In SMEs, the proportion of outside directors is positively associated with firm performance.

**Size of the board**

One of the most frequently analysed variables in studies of corporate governance is the size of the board. The effect of board size on firm performance is not clear (Bennedsen, Kongsted & Nielsen 2008; Barroso, Villegas & Pérez-Calero, 2010). A board of directors with many links to the external environment will improve the access of the company to various resources, thus improving corporate governance and firm performance. Some empirical evidence has suggested that increased board size may positively affect firm performance (Forbes & Milliken, 1999; Van den Bergh & Levrnu, 2004; García-Ramos & García-Ollalla, 2014). Proponents of this view argue that a larger board will produce a greater depth of knowledge and, therefore, improve the quality of the strategic decisions that impact performance.
On the other hand, while a board’s abilities can increase as more directors are added, the benefits can be outweighed by the costs of poorer communication, coordination and, decision-making associated with larger groups (Cheng, 2008). According to Jensen (1993), large corporate boards may be less efficient due to difficulties in solving the agency problem among members. Yermack (1996) shows that small boards of directors are more effective and the firms with small boards achieve higher market value. For instance, some authors find an inverse relationship between firm value and board size (Yermack, 1996).

Taking into account these arguments and following De Andrés & Rodríguez (2009) and García-Ramos & García Olalla (2011a), we propose that the effect of board size on firm performance can be seen as a trade-off between benefits and drawbacks. Therefore, the expected relationship between board size and firm performance will be non-linear. We thus propose the following hypothesis:

**H2: In SMEs, the relationship between board size and firm performance is an inverted U-shape.**

**Board activity**

Board activity is an important aspect of the internal structure of boards. Jackling & Johl (2009) measure board activity as the frequency of board meetings, which helps indicate whether the board of directors is active or passive. The frequency of board meetings can also offer information on the importance of the board, since a greater number of meetings implies that more information is provided to the members and that more issues are decided. Board meetings are the most common venue for discussing and exchanging ideas to monitor managers (Conger, Finegold & Lawler, 1998). Therefore, the more frequent the meetings are, the more detailed the control over managers and the greater the shareholder wealth. Lipton & Lorsch (1992) suggest that a greater frequency of meetings is positively associated with performance. Similarly, Conger, Finegold & Lawler. (1998) point out that board meeting time is an important resource for improving board effectiveness. Based on these arguments, we propose the third hypothesis:

**H3: In SMEs, the board activity (in terms of meeting frequency) is positively associated with firm performance.**

**Board leadership**

Another aspect to consider when analysing board structure is the duality of the chairperson and chief executive roles. The debate is whether the firm’s CEO should serve simultaneously as the chairperson of the board or whether these roles should be separately held (Daily & Dalton 2011). In fact, this debate has been prevalent in literature on boards of directors for some time (Braun & Sharma, 2007).

The CEO duality discussion has been developed in the large firm context (Machold, Huse, Minichilli & Nordqvist, 2011), where monitoring and control tasks of the board have been prioritized (Rechner & Dalton, 1991). The agency-theoretic arguments for the separation of CEO/chairperson roles are disputed. Fama and Jensen (1983) suggest that CEO duality violates the principle of separation of decision-management and decision-control and hinders the board’s ability to perform its monitoring functions. The chairman performs important control functions, so it is often suggested that a separate person apart from the CEO should occupy this position. However, non-duality also has its costs (Faleye, 2007). According to Brickley, Coles & Jarrell (1997), prominent among these is information sharing costs between the CEO and a nonexecutive chairman. Naturally, CEOs have unique, firm-specific information about production and competitive conditions. Theoretically, stewardship theory contests both the assumptions and prediction of agency theory and proposes instead CEO/chair duality (Davis, Shoorman, & Donaldson, 1997). Empirically, there is no conclusive evidence of any systematic relationship between CEO/ chairperson leadership structure and firm performance (Machold, Huse, Minichilli & Nordqvist, 2011). Nonetheless, the consensus among shareholder activists, institutional investors, and regulators appears to be that the CEO should not also serve as board chairman (Faleye, 2007).

Small firms differ from large ones in several important ways: their more concentrated ownership structures make CEO duality a much more common phenomenon in the small business setting (Machold, Huse, Minichilli & Nordqvist, 2011). Thus, in this context, the CEO and board chairperson positions are usually held by one person, a practice that has drawn much criticism from the agency theory perspective (Pugliese & Wenstop, 2007). Arguments in favour of CEO duality can be found in the literature (Cabrera-Suárez & Matin-Santana 2015). If the chief executive behaves as a steward, CEO satisfaction is tied to that of the other stakeholders in the firm, which means that the decision-making capacity in this person will be positive for the firm (Chen & Hsu, 2009). In this way, duality will be an advantage insofar as it would provide the firm with a clear focus and unity of command at the highest management levels (Braun & Sharma, 2007). Accordingly, we propose the fourth hypothesis:

**H4: In SMEs, the separation between the CEO and the chairperson is negatively associated with firm performance.**

**Antecedents of board task**

Taking into account that there is scant evidence on the antecedents of board task performance (Minichilli, Zattoni & Zona, 2009), we explore the effects of the board working style as antecedents on board task performance. Following Forbes & Mälkiä (1999), we considered board task performance as the board’s ability to perform its control and service tasks effectively.

Control entails the supervision of management and the protection of shareholders (Fama & Jensen 1983). The board exercises control over managers so that they act in a manner that best protects shareholder interests (Fama & Jensen 1983;
According to agency theory, rooted in economics and finance, agents are opportunistic and strongly motivated to profit from the information asymmetry between them and their principals (Jensen & Meckling, 1976). To accomplish control tasks, board members should scrutinize top executives’ behaviors and actively monitor firm performance to satisfy both shareholders’ and stakeholders’ expectations (Hillman & Dalziel, 2003). Therefore, the board’s control task is viewed as an internal control mechanism aimed at mitigating these moral hazard problems (Fama & Jensen, 1983). Following this premise, agency scholars believe that the primary task of boards of directors is to safeguard shareholders’ interests from management misappropriation (Shleifer & Vishny, 1997). As such, board control is increasingly considered as a primary measure of boards’ effectiveness, and thus it is subject to severe public scrutiny (Minichilli, Zattoni, Nielsen & Huse 2012).

The board’s service task refers to its ability to participate actively in the formulation of strategy and provide advice and counsel to the CEO and other top managers (Forbes & Milliken, 1999), and to control inter-organizational dependencies and act as a strategic resource for securing critical firm resources (Pfeffer, 1973; Pfeffer & Salancik, 1978). The service role highlights the fact that the directors’ knowledge, skills, and experiences can support and complement the management of the firm (Zahra & Pearce, 1989). Through the provision of advice and counsel, the board of directors can complement the management team’s knowledge base (Gabrielson & Huse, 2005). According to the resource dependence theory (Daily & Dalton, 1993; Pfeffer, 1973; Pfeffer & Salancik, 1978), boards of directors perform a service task and are supposed to bring multiple types of resources to the firm. This service role has been considered to be of critical importance in small firms where internal competence can be scarce in many cases (Forbes & Milliken, 1999).

**Board composition**

According to the rationale behind the control role, outsiders have an obligation to ensure that management operates in the interests of shareholders. This obligation is fulfilled through the board’s scrutiny, evaluation, and regulation of the actions of top management (Hillman & Dalziel, 2003). This task consists mainly of monitoring the firm’s corporate financial performance (Minichilli, Zattoni & Zona, 2009). Boards with a majority of outside directors are believed to be more effective in the control role because these directors may be less susceptible to the CEO’s influence (Johnson, Daily & Ellstrand, 1996).

The service role and the board of directors, especially the outside directors, may be considered as a bundle of strategic resources to be used by and within the small firm. They can provide timely advice and counsel to the CEO and management in areas where knowledge is limited or lacking (Gabrielsson & Huse, 2005).

It has been argued that the board needs to be independent and free from the self-interest bias in order to fulfill its responsibilities effectively (Baysinger & Butler, 1985; Demb & Neubauer, 1992). An independent board can introduce a broader set of considerations involving stakeholder interests, public responsibilities, and relevant industry trends. In the same way, independent boards may be better informed and thus better able to support management with advice and information (Gabrielsson & Winlund, 2000). Accordingly, we propose the following hypothesis:

**H5:** In SMEs, the proportion of outside directors is positively associated with board control and service roles.

**Meeting preparation**

In addition to board activity, the importance of good preparation before meetings is often emphasized in research on board practices (Gallo, 2001). However, the effects are seldom studied (Gabrielsson & Winlund, 2000). Some evidence suggests that the association between meeting frequency and firm performance is more complex than previously reported (Vafeas, 1999). It would be interesting to include questions related to the quality of meetings, such as the extent to which they are used for routine tasks rather than substantive issues (Jackling & Johl, 2009). As stated in Gallo (2001), the degree to which a board may be considered active partially depends on how far in advance directors receive the agenda and the information needed to properly prepare for the meeting. Otherwise, meetings can become purely informative, where the president will state the points of the day, and the directors may barely discuss the information if they have not had time to analyse it. Without proper preparation, valuable time can be spent on discussions about figures rather than facts (Huse, 1995).

It has been argued that directors must be prepared for the meetings as well as involved and committed during them if they are to perform both the control and service roles (Gabrielsson & Winlund, 2000). Hence, well-prepared and committed directors should assist not only in controlling the development of the business but also in helping and supporting the management when facing uncertainty (Huse, 1995). We thus propose the following hypothesis:

**H6:** In SMEs, the meeting preparation is positively associated with board control and service roles.

**Involvement**

The level of board involvement is connected to the directors’ and CEO’s use of knowledge and skills, measured by their training and the CEO’s and directors’ length of tenure.

Board members will have different kinds of knowledge and skills due to their different backgrounds and experiences (Gabrielsson & Winlund, 2000).
Use of knowledge and skills refers to “the board’s ability to tap the knowledge and skills available to it and then apply them to its tasks” (Forbes & Milliken, 1999: 495). Directors must actively use their knowledge and skills during meetings, which is another hallmark of involvement (Huse, 1998; Forbes & Milliken, 1999). Their knowledge and skills can be measured by the directors’ job training; therefore, better training may be related to stronger knowledge. Increased board expertise can enhance the directors’ involvement in decisions and make the board more active (Gabrielsson & Winlund, 2000). A director’s knowledge and skills is recognized as an attribute in the board’s work (Zahra & Pearce, 1990). The level of involvement is connected to a director’s use of knowledge and skills (Gabrielsson & Winlund, 2000).

**H7a: In SMEs, the use of knowledge and skills is positively associated with the board’s control and service roles.**

The second aspect to consider is CEO and director tenure. The resource-based view (Barney, 1991; Hillman, Cannella & Paetzold, 2000) suggests that board members are firm resources and should be regarded as being of greater or lesser value according to their competence, knowledge, and experience (Barney, 1991). Board member’s level of knowledge about the firm would increase with tenure (Barroso, Villegas & Pérez-Calero, 2011). Long tenure on a board brings several benefits (Kaczmarek, Kimino, & Pye, 2011). Longer CEO or director tenure could suggest a long-term commitment to the firm. Longer tenures facilitate lengthy investment time horizons and provide investment incentives and stewardship (Le Breton Miller & Miller, 2006). Longer tenures may thus be related to a better service role, given the increased firm knowledge the CEO and directors would provide.

However, negative aspects can also appear (Barroso, Villegas & Pérez-Calero, 2011). Some studies suggest that long tenures are associated with a higher resistance to change (Musteen, Barker & Baeten, 2006). Golden & Zajac (2001) point out that extended tenures of board members are associated with greater rigidity and can result in a commitment to existing practices and procedures, as directors distance themselves from new ideas. Moreover, according to Vafeas (2003), board members who serve longer and have greater experience are more likely to form friendships and are less likely to supervise management, weakening their control role. Rotation facilitates the appearance of new people at the helm and therefore different attitudes and views. Based on all the above, the following hypothesis are proposed:

**H7b: In SMEs, the tenure of board members is positively associated with the board’s service roles.**

**H7c: In SMEs, the tenure of board members is negatively associated with the board’s control roles.**

**Empirical research: method, data, and analysis**

**Population and sample**

We conducted this study on Spanish firms included in the SABI (Iberian Balance Sheet Analysis System) database for 2006. The Spanish context was chosen because Spain is a representative Continental European country whose legal system was developed within the tradition of French civil law (Baixauli-Soler & Sanchez-Marín, 2015). Due to its lower protection of shareholder interests, both the ownership concentration and the proportion of family controlling shareholders tend to be higher in countries with this type of legal system than in countries whose legal systems originate from common law or Scandinavian or German civil law (La Porta, López-de-Silanes, & Shleifer, 1999; Gupta & Levenburg, 2010; García-Ramos & García-Ollalla, 2014). These characteristics affect the way firms behave and compete and, specifically, they affect the board of directors (Basco & Voordeckers, 2015). In this regard, organizations such as the Spanish Family Firm Institute have developed some recommendations aimed at achieving the good corporate governance of family businesses, giving special attention to non-listed firms (Quintana, 2012).

We imposed certain restrictions on the group of selected companies in order to obtain a sample that is representative of the population. We eliminated companies affected by special situations such as insolvency, winding-up, liquidation or zero activity, and we eliminated listed companies and firms with more than 50 employees. The resultant sample comprised 2,958 non-listed Spanish firms.

A questionnaire was used to obtain information that would be unavailable or difficult to acquire for non-listed firms. Questionnaire data were collected through telephone interviews, which ensured a high response rate, while financial reports were obtained from the SABI database. We reduced the potential response bias by, first, protecting the respondents’ anonymity by assuring them of the confidentiality of their responses in the cover letter to the survey (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). Second, a non-response analysis revealed no statistically significant differences between respondents and non-respondents with regard to industry branch. Third, we created a pre-test to fine-tune the questionnaire and prepared a presentation letter emphasizing the need for research on boards of directors and the increasing interest in the topic. Of the initial 2,958 non-listed Spanish firms, 307 responded to the questionnaire.

**Data**

**Dependent variables**

Firm profitability, measured as return on assets (ROA), was used as a dependant variable. The ROA measures the capacity
of a firm’s assets to generate profits and is considered to be a key factor in determining the firm’s future investments. Therefore, it is used as an indicator of firm profitability. The ROA has been defined as earnings before interest and taxes (EBIT) between total assets and does not take into account the firm’s financial performance (Anderson & Reeb, 2003). The EBIT is a traditional measurement that does not include capital costs but only the operating margin and operating income.

Service (SERVICE) and control (CONTROL) roles were measured as a dummy variable that takes the value of 1 if it is considered an important role of the board and 0 otherwise.

Independent variables

Board composition, representing the composition of the board (OUTSIDERS), was calculated as the percentage of external directors on the board (Anderson & Reeb, 2003; Barontini & Caprio, 2006). This variable measures the board’s monitoring capacity in order to analyse its influence on firm profitability.

Board size (BOARDSIZE) was measured using the number of members of the board of directors (Anderson & Reeb, 2003; Jackling & Johl, 2009).

Board activity (MEET) was measured as the number of board meetings held in a reporting year (García-Ramos & García-Olalla, 2011b).

Leadership (DUALITY) was measured as a dummy variable that takes the value of 1 if the chairperson and CEO are the same person and 0 otherwise (Braun & Sharma, 2007).

Knowledge (KNOWLEDGE) was measured as a dummy variable that takes the value of 1 if the CEO has studied in a university and 0 otherwise.

CEO tenure (CTENURE) and directors’ tenure (DTENURE) was measured as the average number of years of tenure. Tenure can take three values: 1 if the tenure is less than 4.5 years, 2 if the tenure is between 4.5 and ten years, and 3 if the tenure is longer than ten years.

Meeting preparation (PREPARATION) was measured as a dummy variable that takes the value 1 if the directors are given notice and information regarding the meeting at least one week in advance and 0 otherwise.

Control variables

Firm size (SIZE) was measured using the natural logarithm of total assets (Anderson & Reeb, 2003; Barontini & Caprio, 2006; Wang, 2006).

Growth opportunities (GROWTHOP), following Scherr and Hulburt (2001), were calculated as Sales0/Sales-1.

Borrowing level (LEV) was measured as the quotient of total debt and total assets (Wang, 2006).

Firm age (AGE) was measured as the natural logarithm of the number of years since the establishment of the firm.

Method

We applied two methods. First, four cross-sectional ordinary least-square (OLS) regression models were used to test the first four hypotheses, the direct links between board demographic variables and firm performance. Second, we implemented two logit regressions to test the impact of the board’s working structures and processes on board task performance, service and control tasks. To test for multicollinearity, the VIF was calculated for each independent variable. The results (not shown) indicate that all the independent variables had VIF values of less than 10.

Results

Table 1: Descriptive statistics of sample firms. Data of database

<table>
<thead>
<tr>
<th>Number of observations</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA (%)</td>
<td>4.46</td>
<td>7.68</td>
</tr>
<tr>
<td>GROWTHOP (%)</td>
<td>4.56</td>
<td>4.62</td>
</tr>
<tr>
<td>LEV %</td>
<td>61.39</td>
<td>17.79</td>
</tr>
<tr>
<td>SIZE</td>
<td>43,493.66</td>
<td>110,363.20</td>
</tr>
<tr>
<td>AGE</td>
<td>38.28</td>
<td>24.41</td>
</tr>
</tbody>
</table>

Table 1 and 2 presents the general characteristics of these firms. Among the functions of the Board, 53% of the firms considered that the service is an important role of the board, while decreasing by 42% in the monitoring role.

The significant proportion of outside directors on the boards should be noted. In 66% of the firms, the percentage of outside directors on the board was less than 50%. The data show that the size of most of the boards was less 6 members (77.24%). The proportion of firms in which the chairperson and CEO are the same person is 58.90%.

In our first regression, we examined the influence of outside directors on firm performance. As noted in Table III (column I), the overall model is significant. Contrary to expectations, our results show a negative significant relationship (β = -0.26) between outsiders and firm performance. Thus, Hypothesis 1 was not supported. We analysed the effect of board size on firm performance in columns II and III. As shown in column II, as the coefficients of board size and its square are not significant (β1 = -0.04 and β2 = 0.01), the expected non-linear relationship between the two variables is rejected. However, the results in column III show a negative and significant relationship between board size and firm performance (β1 = -0.02). In column IV, we analysed the combined effect of all variables. For board activity, we analysed the relationship between the board’s activity (measured by the number of meetings per year) and firm performance. We hypothesized a positive relationship between the two variables. However, the results do not show a significant relationship between the frequency of board meetings and firm performance. Although the sign of the
coefficient is positive, as we expected ($\beta_1 = 0.01$), its lack of significance does not allow us to accept Hypothesis 3.

With regard to leadership structure, we analysed the relationship between board leadership and firm performance.

Table 2: Descriptive statistics of sample firms. Data of Questionnaire

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERVICE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>296</td>
<td>53.2%</td>
</tr>
<tr>
<td>Not Important</td>
<td>184</td>
<td>46.8%</td>
</tr>
<tr>
<td>CONTROLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>116</td>
<td>42.1%</td>
</tr>
<tr>
<td>Not Important</td>
<td>165</td>
<td>57.9%</td>
</tr>
<tr>
<td>OUTSIDERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-25 percent</td>
<td>159</td>
<td>51.8%</td>
</tr>
<tr>
<td>26-50 percent</td>
<td>42</td>
<td>13.8%</td>
</tr>
<tr>
<td>51-75 percent</td>
<td>46</td>
<td>15.1%</td>
</tr>
<tr>
<td>76-100 percent</td>
<td>60</td>
<td>19.3%</td>
</tr>
<tr>
<td>DUALITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Duality</td>
<td>126</td>
<td>41.1%</td>
</tr>
<tr>
<td>Yes duality</td>
<td>181</td>
<td>58.9%</td>
</tr>
<tr>
<td>MEET</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td>83</td>
<td>27.02%</td>
</tr>
<tr>
<td>3-4</td>
<td>99</td>
<td>32.27%</td>
</tr>
<tr>
<td>More than 4</td>
<td>125</td>
<td>40.71%</td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 or less than 4 members</td>
<td>134</td>
<td>43.7%</td>
</tr>
<tr>
<td>5 or 6 members</td>
<td>100</td>
<td>32.5%</td>
</tr>
<tr>
<td>7 or 8 members</td>
<td>38</td>
<td>12.5%</td>
</tr>
<tr>
<td>9 or 10 members</td>
<td>22</td>
<td>7.1%</td>
</tr>
<tr>
<td>More than 10 members</td>
<td>13</td>
<td>4.3%</td>
</tr>
<tr>
<td>DTENURE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 4.5 years</td>
<td>35</td>
<td>11.1%</td>
</tr>
<tr>
<td>Between 5.5 and 10 years</td>
<td>37</td>
<td>22.3%</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>206</td>
<td>66.6%</td>
</tr>
<tr>
<td>CENURE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 4.5 years</td>
<td>70</td>
<td>22.7%</td>
</tr>
<tr>
<td>Between 5.5 and 10 years</td>
<td>108</td>
<td>35.2%</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>138</td>
<td>44.9%</td>
</tr>
<tr>
<td>KNOWLEDGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PREPARATION</td>
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<td></td>
</tr>
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Table 3: Multiple regression

<table>
<thead>
<tr>
<th></th>
<th>ROA I</th>
<th>ROA II</th>
<th>ROA III</th>
<th>ROA IV</th>
<th>ROA V</th>
<th>ROA VI</th>
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</thead>
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<tr>
<td>Constant</td>
<td>0.09</td>
<td>0.11</td>
<td>0.910</td>
<td>0.05</td>
<td>0.31</td>
<td>0.33</td>
</tr>
<tr>
<td>OUTSIDERS</td>
<td>-0.26**</td>
<td>-0.03**</td>
<td>-0.89**</td>
<td>0.14</td>
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<td></td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td>-0.04</td>
<td>-0.02**</td>
<td>-0.02**</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BOARDSIZE2</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>MEET</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.67***</td>
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<td>DUALITY</td>
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<td>-0.38</td>
<td>-0.55</td>
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<tr>
<td>KNOWLEDGE</td>
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<td>0.28*</td>
<td>0.06</td>
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<tr>
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<td></td>
<td>-0.52</td>
<td>-1.23</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CTENURE</td>
<td></td>
<td>0.08</td>
<td>-0.96**</td>
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<tr>
<td>PREPARATION</td>
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<td>-0.52</td>
<td>-1.23</td>
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<tr>
<td>GROWTHOP</td>
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<td>-0.27***</td>
<td>0.27***</td>
<td>-0.26***</td>
<td>0.71</td>
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<tr>
<td>LEV</td>
<td>-0.10***</td>
<td>-0.11***</td>
<td>-0.11***</td>
<td>-0.11***</td>
<td>0.132</td>
<td>-0.26</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.01**</td>
<td>0.01**</td>
<td>0.01**</td>
<td>0.01**</td>
<td>-0.01</td>
<td>0.05</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.14*</td>
<td>-0.13**</td>
<td>-0.01*</td>
<td>-0.01***</td>
<td>-0.23</td>
<td>0.276</td>
</tr>
<tr>
<td>F value</td>
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<td>3.28</td>
<td>3.60</td>
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<tr>
<td>R2</td>
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<td>0.11</td>
<td>0.11</td>
<td>0.15</td>
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</tr>
<tr>
<td>$\chi^2$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17.98</td>
<td>21.39</td>
</tr>
</tbody>
</table>

***, ** and * indicate significance at the 1%, 5% and 10% levels.
Concerning board roles, column V depicts the relationship among board composition, preparation for the meeting, involvement, and board roles. For service role and board independence, our results show a significant negative relationship (β = -0.89). Thus, Hypothesis 5 was not supported. The presence of outsiders on the board is negatively associated with the board’s service role. With respect to Hypothesis 6, the relationship is negative and not significant. Thus, Hypothesis 6 was not supported.

Hypothesis 7b was supported. The relationship between directors’ tenure and service role was positive and significant (β = 0.28). There was also a positive and significant relationship (β = 0.67) between CEO duality and the board’s service role.

Concerning the board’s control role (column VI), the only variable with a significant impact was CEO tenure. Hypothesis 7c was supported. We find a negative relationship between these variables (β = -0.96). Longer tenures appear to have a negative impact on the control role.

Discussion

This study analyses the direct links between board demographic variables (i.e. composition, size, activity, and leadership) and firm performance, and empirically tests the impact of the boards’ working structures and processes on board task performance of small and medium-sized enterprises (SMEs). We identified three antecedents of board task performance: board composition, meeting preparation, and involvement. To test our hypotheses, we used a sample of 307 anonymous Spanish SMEs.

Our main empirical result is the negative impact of the proportion of outside directors and board size on firm performance. The presence of outside directors does not improve firm performance. Despite the greater monitoring, advising, and networking capacities attributed to outside directors, the sample firms showed a significant presence of inside directors, an aspect that may be related to the directors’ greater firm knowledge. The presence of inside directors seems to have a positive impact on strategic planning decisions.

This result is consistent with studies indicating that firms with a majority of outside directors have poorer performance (Yermack, 1996; Agrawal & Knoeber, 1996). These results appear to contradict the assumption that outside directors have an important monitoring, advising and networking function. In fact, these results justify the presence of inside directors on boards. Many reasons are offered for the negative relationship between the presence of outside directors and performance. Hermelin & Weisbach (1991) suggest that both inside and outside directors may fail to represent shareholders’ interests properly—thus, that it cannot be assumed that outsiders perform their duty better than insiders. Similarly, inside directors offer advice and convey knowledge to the CEO concerning the firm’s day-to-day operations. The presence of insiders on the board makes it easier for the other directors to view them as potential top executives, since they can assess their skills by seeing their performance on the board (Baghat & Black, 2000). Moreover, each type of director has a specific role on the board (Baysinger & Butler, 1985). Inside directors have greater firm knowledge than outsiders (Raheja, 2005), who are often unfamiliar with the working of the firm. Although outsiders’ independence makes them react quicker in a crisis, they have a greater chance of making mistakes as a result of their lack of knowledge.

Our study also shows the negative effect of board size on the performance of SMEs, indicating that the benefits of better monitoring capacity associated with larger boards are outweighed by the disadvantages of poorer coordination, flexibility, and communication. This result supports those of prior studies (Yermack, 1996; De Andrés, Azofa & Lopez, 2005) and confirms that small boards are better at improving firm performance. As indicated by Jensen (1993), the benefits of an increase in board size in our sample seem to be outweighed by the problems of poorer coordination, communication, and flexibility associated with larger boards. Our results contrast with the earlier work of scholars such as García-Ramos & García Olalla (2014), Nicholson & Kiel (2007), and Van den Berghe & Levrau (2004), who found that increasing the number of directors improved firm performance.

Regarding board activity, we analysed the relationship between the board’s activity (measured by the number of meetings per year) and firm performance. The results do not show any significant relationship between the frequency of board meetings and firm performance. One possible reason for this finding is the more complex relationship between these two variables or the possibility of a lag effect, which would result in boards responding to poor performance by increasing board activity, in turn affecting the following year’s performance (Vafeas, 1999).

It might be interesting to analyse other aspects, such as how far in advance the directors receive the agenda and the information needed to properly prepare for the meetings, which might indicate whether the directors have had sufficient time to analyse the material and prepare for the meetings. Otherwise, these meetings can become purely informative. As the chairperson sets out the points of the day, the directors can hardly participate or understand his or her views if they have not had time to consider the information received. Most firms in the sample provided the information needed to prepare for the meeting just under one week before the meeting. The sample firms could therefore have had passive boards.

Regarding leadership structure, we analysed the relationship between the board’s leadership and firm performance. The findings show that, for the firms in our sample, leadership structure is not related to firm performance, consistent with the prior findings of Vafeas & Theodorou (1998) and Jackling & Johl (2009) and contrary to that of Coles, McWilliams & Sen (2001).
We also analysed the relationship among board composition, preparation of the meeting, involvement, and board roles. We found a negative impact of the presence of outsiders on the board service role and a positive impact of director tenure on the board service role. The negative relationship between board independence and the service role can be explained by recalling that insider directorship has better firm knowledge, and their experience can improve firm performance and is thus more important for the service role. The positive impact of directors tenure on the board service role may indicate that longer tenures may be related to a better service role due to the directors’ increased firm knowledge. The SMEs in our sample show that director tenure has a positive effect on firm performance, suggesting that longer director tenures are associated with higher resistance to change.

It is also important to note the CEO duality effect (when the CEO is also the board chairperson); the person will make his or her knowledge available to directors, thereby allowing them to play their advisory role more effectively (García-Olalla & García-Ramos, 2010). Surprisingly, the director preparation variable is not significant. This result appears to contradict the findings of Gabrielson & Winlund (2000), who note that preparation is an important factor in explaining board task performance.

If we analyse the board’s control role, the only variable that has a significant impact is CEO tenure. Longer tenures seem to negatively impact the control role, suggesting that extended tenures are associated with greater rigidity and friendships, which could weaken monitoring. Our findings are consistent with other studies (Musteen, Barker & Baeten, 2006) and suggest that long tenures are associated with a higher resistance to change.

This paper contributes to opening the “black box” of the board directors. Firstly, our empirical examination moves beyond board demographic characteristics to consider our outcome variables besides corporate financial performance. This purpose was pursued through an empirical test of the impact of several board characteristics on board’s performance. As mentioned, most existing studies have been limited to large listed firms, and, with few exceptions, this type of analysis has been conducted on SMEs. Spain provides an interesting laboratory for examining these firms because this country features high ownership concentration. Because formal institutions such as the weak legal system in protecting minority shareholders, informal institutions such as the high overlap between family and business and high levels of ownership concentration may affect the board of directors. This article also considers the formal working structures that maximize board performance. The authors link this to the rationale for an effective and clearly defined working style for boards (Demb & Neubauer 1992). In order to explore the antecedents of board task performance, the authors test hypotheses concerning the existing formal board structures and board member involvement.

By testing the relationship between boards of directors’ variables and firm performance, our study sheds light on SME governance. The results should be of interest to SMEs and their advisors. The findings show that outsiders do not add value to the firm, perhaps due to the criteria used by boards to appoint directors. The selection of outsiders is important because they are supposed to add professionalism to the board. Therefore, outside directors must be selected carefully in order to ensure they are adequately qualified. Outsiders must have skills, experience at other firms, knowledge of corporate management, and economic independence from their compensation. Interestingly, consultants recommend that firms have a well-balanced equilibrium between outside and inside directors because of the important and concrete roles they play (Maseda, Iturralde & Arosa 2015).

Our study also points out that it would be beneficial to include information on the CEO and directors’ tenures if rotation is relatively common and frequent. Rotation indicates how efficient the board is. For instance, establishing relatively short tenures should help to increase the monitoring capacity of this governance body because rotation facilitates the appointment of new people to positions of responsibility; therefore, attitudes and views will be more pluralistic and diverse.

This research does have some limitations. First, our data are cross-sectional; therefore, we cannot clearly infer causality. Only a panel data sample will allow for the testing and complementing of our findings. Second, our data’s exclusivity to Spain limits the generalizability of our findings. Due to its lower protection of shareholder interests (developed within the tradition of French civil law), both the ownership concentration and the proportion of family controlling shareholders tend to be higher. These characteristics affect the way firms behave and compete and, specifically, they affect the board of directors.

References


Quintana, J. 2012. Guía práctica para el buen gobierno de las empresas familiares. Barcelona: Instituto de la Empresa Familiar España


