

THE RELATIONSHIP BETWEEN THE BOARD OF DIRECTORS AND THE PERFORMANCE.**ANALISYS OF FAMILY AND NON FAMILY FIRMS IN ITALY****Dra. Patricia Bachiller**

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Abstract

This paper analyses how board composition can affect not only the financial, but also the social performance of Italian family and non-family firms. Results confirm an improvement in firm profitability when its board dimension decreased or its number of independent directors increased. As for social aspects, performance depends on the effectiveness and efficiency of the Board's decision-making process, as well as on the corporate culture and the individual culture of directors. The role of the Board may be important in shaping corporate culture and thus the sensitivity and awareness of the corporate socio-political dimension of management, if it is acknowledged at a leadership role level.

Keywords: corporate governance; performance; family firms; Italy

Resumen

Este trabajo analiza cómo afecta la composición del Consejo de administración al rendimiento financiero y social de empresas familiares y no familiares italianas. Los resultados confirman una mejora en la rentabilidad de la empresa cuando el tamaño del Consejo disminuye o el número de directores independientes aumenta. En cuanto a aspectos sociales, el rendimiento depende de la efectividad del proceso de toma de decisiones del Consejo, tanto como de la cultura corporativa y la cultura individual de los directores. El papel del Consejo es importante para dar forma a la sensibilidad y conciencia de la dimensión política y social de la empresa, si se reconoce su papel de liderazgo.

1. Introduction

A corporate governance system should provide proper incentives for both the Board and Management to pursue objectives that are in line with the interests of the firm and its shareholders. Factors of corporate governance can be split into two groups: internal and external mechanisms. Internal governance mechanisms include ownership concentration, board composition, executive compensation, top management replacement, the monitoring of executive decisions and the protection of outside investors. External governance mechanisms refer to the effectiveness of a stock market in controlling corporations so that a firm may be purchased when it is underperforming. Creating a satisfactory corporate governance system generally involves changing a nation's corporate and securities laws to strengthen the listing and disclosure requirements for its stock exchanges (Meggison, 2005).

A central topic of corporate governance discussion is the Board of Directors, which represents a mechanism aimed at the control and direction of companies. Menon and Umapathy (1987) assert that board function is to supervise the activities of the firm, evaluate the managers and analyse whether the inputs have been used efficiently. To understand the importance of the Board on business success, many theoretical perspectives (in literature) have been formulated. They highlight the significance the Board has in solving different organizational problems. Thus, numerous researchers have tried to understand its contribution to the improvement of performance.

In the international context, a certain type of firm – the family firm - assumes particular relevance for the important role it plays in the economic system. In the Italian context, moreover, this type of firm assumes great importance in terms of GDP produced (80%), number of firms (90%) and job creation (75%) (Zocchi, 2004). They have specific characteristics that derive from the strong link that exists between family and firm, in which the Board has a crucial role in balancing family and firm interests (Lane & *al.*, 2006).

This paper analyses how board composition can affect the performance of the firm. To this purpose, a multidimensional approach of firm performance - the traditional financial dimension, as well as the social dimension - were considered. The emergence of the socio-economic model led

firms to accept social responsibility beyond that of shareholder value maximization (Carroll, 1979; Freeman, 1984).

An empirical study was carried out on the Italian firms included in the FTSE MIB Index 40, that is the 40 most liquid and capitalised Italian firms. To evaluate their performance, our research considered two financial and social measures. On the one hand, are ROA and ROE. On the other hand, social performance is measured by the social ratings elaborated by the Agenzia Europea degli Investimenti and the AccountAbility.

This study adds new evidence to previous literature as it empirically tests not only financial performance, but also the social performance of the firms analyzed. Previous empirical research has investigated the influence of the board on financial performance. Instead, in this study, the social and financial aspects were considered as two dimensions of firm performance with the same relevance.

This paper is organised as follows. In the next Section, the conceptual framework is presented. Section 3 contains previous literature about the relationship between the Board and company performance. Section 4 describes the data and methodology employed. Section 5 shows the empirical research results, and the final section discusses the results and presents the main conclusions of the study.

2. Conceptual framework

Firm performance is a multidimensional concept. Over time, this concept has changed and methods used for its measurement have been developed. This concept is strongly linked to a firm's conception, its vision, its idea of success, its goals and finally to its strategy. As a mechanical system, the main purpose of a firm is to obtain profits for its shareholders (Ackoff, 1981: 25). Consequently, it considers only one dimension of performance and focuses only on financial aspects. However, different visions imply different goals, different concepts of business success and different strategic orientations. The link between strategy and performance measurement systems has been extensively covered in the literature (Kaplan and Norton, 1996). In this sense, a

performance management process should be linked to vision, business objectives, strategic goals, critical success factors, critical task action plans and performance measures (Bitici *et al.*, 1997).

One of the first theoretical frameworks used to define and measure performance is the Pyramid Dupont model, which has a hierarchical structure based on financial measures (Kennerley and Neely, 2002). The use of financial measures has long been dominant both in theory and practice. Since the eighties, however, the traditional measurement systems have been subjected to numerous criticisms that highlight their limits. Johnson and Kaplan (1987) showed that traditional systems were designed in relation to business environments significantly different than those that the firm faced in the present. Among other aspects, traditional system's short-term orientation, its ties to the past, its lack of attention to intangibles and its non-correlation with corporate strategy have all been criticized (Kaplan and Norton, 1992). Many authors have therefore highlighted the need for a multidimensional approach to measure performance, integrating financial and non-financial dimensions (Chenhall, 2005). The multidimensionality of performance can be appreciated from many points of view: stakeholders, management and the period covered by the determinants of performance and the organizational units considered (Giovannoni, 2008: 65).

The multidimensionality of performance derives directly from the multi-dimensionality of the firm, and it should propose a real integration of different perspectives rather than a hierarchy of linked objectives. Therefore, when speaking about firm performance, one must consider the firm as a whole unit.

In literature, the multidimensionality of the firm is established in reference to the various aspects that characterize its life: responsibility profiles, interests involved, expectations of various stakeholders, objectives pursued, effects of business decisions and performance obtained (Carroll, 1979 and 1991; Elkington, 1998; Catturi, 2003).

Catturi (2003) summarized the different dimensions that characterize firms utilizing the concept of a 'three-dimensional organism'¹. According to this perspective, every firm has an *economic* dimension related to the production process, a *socio-community* dimension which regards the 'firm community' and a *socio-political* dimension that refers to the institutional and natural environment in which the firm exists.

The firm can be seen from the perspective of the owner (economic dimension) or the perspective of different stakeholders and society in general (socio-community dimension and socio-political dimension). However, the different dimensions are not considered following a hierarchical logic. The firm should instead try to achieve the objectives for each of these dimensions (Catturi, 2003). That is, firm performance must reflect results in each of the areas that characterize the firm.

This approach allows us to identify two types of performances: financial performance (the economic dimension) and social performance (the socio-community and socio-political dimensions). Financial performance considers the firm result achieved from the owner perspective. Although there is no uniformity about how one should express financial performance, it is usually associated with profitability or, more generally, with shareholder value creation.

Although the terms used to define financial performance are different and are not theoretically coincident, they refer to a firm's capacity to obtain a positive shareholder result (usually expressed in monetary terms).

The concept of social performance is less unequivocal and has been defined using different conceptual frameworks (Carroll 1979 and 1991; Wartick and Cochran, 1985; Wood, 1991; Clarkson, 1995; Johnson, 2001). Wood (1991), based on the previous studies of Carroll (1979) and Wartick and Cochran (1985), identified principles of corporate social responsibility, process of responsiveness and outcomes of firm behaviour as determinants of social performance, which is then defined as 'a business organization's configuration of principles of social responsibility, process of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm's societal relationships'. Clarkson (1995) emphasized the importance of stakeholders, stressing that a firm does not have a relationship with society in general but with its stakeholders. In this sense, social performance can be assessed in terms of a firm's capacity to fulfil stakeholder requests. Finally, the social audit approach concerns the internal and external measurement processes (related to social screening used for ethical funding) for identifying the social impact of an organization (Johnson, 2001).

3. The Board and performance

3.1. Board characteristics and firm performance

Assuming that a board presence is fundamental for a company, many studies have tried to understand the influence a Board has on company performance. These researchers referred to the 'financial' aspect of company performance, probably because it can be measured more easily and objectively. In particular, they tried to analyze how financial performance changes when there is a different board structure, usually defined according to two characteristics: size and composition.

Regarding size, many studies have shown that large boards are generally less effective than smaller ones, emphasizing a negative correlation between board size and company performance (Jensen, 1993; Lipton & Lorsch, 1992). When a board has many directors, it is more possible that some of them take the attitude of a 'free ride' and do not participate in the others' activities. Boards are in fact organized by collective decision-making. When their dimension increases, agency problems (such as 'free-riding') also increase, and boards become more of a symbol rather than an effective part of the organization (Thomsen, 2008). Yermack (1996) also tried to empirically verify this negative correlation, using a sample of large U.S. corporations and analyzing the relationship between their board size and Tobin's Q ratio² performance measure. With a similar approach, Eisenberg *et al.* (1998) proved the negative correlation of the two variables on a sample of small and mid-size Finnish companies. However, other studies have obtained different results. For example, Beiner *et al.* (2004) supported the idea that board size and firm performance are not correlated, while Coles *et al.* (2008) showed that the two variables had a positive relationship in complex organizations, as a higher number of directors corresponded to a higher level of company performance. Likewise, Bozec & Dia (2007) supported this positive correlation arguing that a large number of directors can help a company reduce environmental uncertainties through their different professional qualities.

As to board composition, the most relevant aspect is represented by board mixture (the number of insider/outsider directors). Following Weisbach's classification scheme (1988), a director can be defined as an insider when he works for the company on a full-time basis. Normally, his activity cannot be considered independent of the CEO, since his career is strongly linked to the

CEO's success. Outside directors are not employees of the firm, and they do not have extensive dealings with the company, aside from their directorship. Thus, they are independent of the CEO. They are usually prominent personalities in other industries or are CEOs of other companies. Finally, the Board includes another category of directors, *affiliated* or *grey directors*. Like outsiders, they are not full-time employees of the company, but they have a long-standing relationship with the company, for example, as consultants. Vander Bauwhede (2009) finds a positive relationship between the compliance with international best practices concerning board structure and operating performance. This author carries out a model using ratings indicative of the election of members of the company's bodies and composition of the board, among others.

Board directors can be also classified as executive, non-executive and independent, and non-executive but non independent (Bosch, 1995). The first play an important role in day-to-day management of the company in functions in which they have specific, in-depth knowledge (finance, marketing, etc.). They are full-time employees with well-defined responsibilities, but they do not have the ability to control the CEO as they are his subordinates. Non-executive and independent directors are assigned only if they 'demonstrate an independence of mind, independence of knowledge sources and independence of income' (McCabe and Nowak, 2008). They cannot be a substantial shareholder, a significant supplier or a professional advisor of the company. Finally, non-executive and non independent directors are those non-executive directors having any form of contractual relationship with the company (such as major shareholder). Thus, they cannot be considered independent (Baysinger, Butler, 1985).

Among these categories of directors, regulators usually define a minimum number of outsiders allowed on a corporate board, based on the assumption that independent directors can better act in the interest of shareholders, more effectively resolving agency problems (Harris & Raviv, 2008: 1798). In this sense, as noted by Adam and Feirrer (2003), board composition of outsiders and insiders depends on which of the two can better control a board's decisions (based on the strength of the specific information each has). In general, a higher number of outsiders can have a negative effect (due to the 'free-ride' problem); however, they also provide more expertise on a company's strategic direction. Thus, the optimal number of outsiders is balanced by two

effects. Empirical studies on the insider-outsider ratio suggest that removing inside and affiliated directors can be harmful for the company, as they play the important role of providing industry-specific knowledge (Fama & Jensen, 1983; Baysinger & Hoskisson, 1990). Moreover, regarding decision-making, outsiders are usually less informed on the company situation than insiders, since they are part-time employees and sit on different boards.

So, investigating the potential relationship between number of outsiders and company performance, different results have been found. While some studies found a negative correlation between these variables (Agrawal & Knoeber, 1996; Bhagat & Black, 1999), others supported the idea of a positive correlation between the variables (Rosenstein & Wyatt, 1990; Dahya & McConnell, 2007). However, a large number of these studies suggest that board independence has no statistically significant effect on company financial performance (Hermalin & Weisbach, 1991; Drakos & Bekiris, 2010).

In contrast, there are few studies available to support a relationship between a Board of Directors and corporate social performance (CSP). In particular, the relationship between board size and CSP has rarely been studied, although some researchers have analyzed this topic in reference to the independence of the directors. Since the Board is responsible for monitoring management, it has to ensure that management's actions are implemented correctly and in tune with the needs of multiple stakeholders. On this point, these studies demonstrate a positive correlation between board independence and CSP, as companies with a higher percentage of independent directors are usually more responsible and sensitive to the different stakeholders' interests (Wang & Dewhirst, 1992; Ibrahim & Angelidis, 1995), normally registering better social performance ratings than companies with a larger number of insiders (Coffey & Wang, 1998; Johnson & Greening, 1999).

The relationship between board characteristics and the financial/social performance of a company has also rarely been investigated. This article represents a further step in this direction, trying to study the connection existing between a Board of Directors and financial and non-financial performance. In particular, the first hypothesis is:

- H1: *a board's size, its level of independence and its percentage of executives affect not only the financial, but also the social aspects of a company's performance.*

3.2. The board in family firms

Considerations about the role and function of a board and the assumptions made about the influence that board structure has on firm performance need further investigation, particularly for a special class of firms, family firms.

The family firm assumes significant importance in many countries around the world, in terms of GDP, number of firms and job creation (IFERA, 2003). Although there are many definitions of 'family business', the literature is fairly unanimous in considering family ownership (control of the firm) and family involvement in management as the main elements that characterize it (Dyer, 1986). The most important element of complexity that characterizes this type of firm is the strong intermingling that exists between company and family. The family becomes a sort of privileged stakeholder which has a strong influence on management, governance, objectives, strategies and culture of the firm (Neubauer and Lank, 1998). Family welfare and firm survival are so interrelated that, it is difficult to distinguish the boundary between them.

Some characteristics of family businesses are associated, often in a contradictory way, with financial and social performance. The strong sense of unity and belonging which is present more often in these types of firms can be interpreted either as a source of sustainable competitive advantage or as a possible cause of negative phenomena, such as nepotism, which can damage the corporate reputation (Kets de Vries, 1993). From the perspective of social performance, family businesses often pay serious attention to their immediate environment, but they are much less concerned about social issues that do not directly affect their context of reference (Gallo, 2004). These two opposing perspectives can be identified: the former claims that the family firms have a natural propensity toward higher standards of ethical and social behaviour, while the latter, in contrast, argues that the orientation of these firms is to give precedence to the good of the family, rather than to the more general social welfare (Deniz and Cabrera, 2005).

Several researches have studied the mechanisms of governance in family firms (Neubauer and Lank, 1998; Corbetta and Montemerlo, 1999; Lane *et. al.*, 2006). In particular, the role of the Board is crucial because it connects property (family) and firm and balances both entities (Lane *et. al.*, 2006).

The previously identified characteristics of the Board maintain their relevance in relation to family firms. It is suggested that for family firms, the size of the Board should be small (Neubauer and Lank, 1998); however, there are authors who state that a too small board may not have the level of competency required (Moore, 2000). While Huse (1994) supports the importance of finding balance between independence and interdependence in family firms, the independent status of directors is sometimes considered less important in family businesses (Lane *et. al.*, 2006). In addition to these common elements, however, there are other ones that characterize only this type of firm.

As noted, the element that most characterizes a family firm is the presence of the family, which also affects the relationship between the Board and performance. Thus, the qualitative feature that seems most useful to analyze is 'family independence' or, looking at the same phenomenon from another perspective, 'family representation', that is, the dependence of the Board on family influence.

Several indicators can be identified to determine family independence. The most used is the number or percentage of seats held by family members. While the presence of family members on the Board could lead to greater conflict with possible non-family shareholders or other stakeholder categories, causing adverse effects in terms of financial performance (Filatotchev *et. al.*, 2005), the presence of non-family members could lead to an increase of external relationships which may lead to the use of additional and various types of resources (Filatotchev and Bishop, 2002). The presence of non-family members creates a greater openness which can be positively linked to improved social performance, due to the increased ability to consider social issues not directly related to owner family interests. The presence of family members on the Board, however, could also be related to positive effects on performance. The sense of membership may lead to benefits in terms of motivation, emotional involvement and commitment of family members in management.

The values of solidarity often present in very cohesive families may facilitate a greater propensity towards social issues leading to good social performance.

Beyond the presence of family members on the Board, another indicator of family independence is the percentage of family members among the executives. A high percentage may be evidence of nepotism, which means a possible lack of professional competence with adverse consequences, especially on financial performance (Sciascia and Mazzola, 2008). In general, the use of external managers can provide family firms with greater rationality and objectivity (Schein, 1983). Dyer (1989) argues, however, that outsiders have greater difficulty in understanding the human issues in an organization and have an excessive focus on the short-term. Hall and Nordqvist (2008) also argue that possession of formal and cultural competencies is more important than whether or not someone is a family member.

When considering family independence, another factor that should be taken into consideration is whether or not the Chairman or CEO is a family member. Many empirical studies have shown that the presence of a CEO family member is positively linked with performance when the CEO is the firm founder, while it has a negative effect when he is one of the successors (Villalonga and Amit, 2006; Sraer and Thesman, 2007). This is usually explained by the fact that the founders are self-selected to be better than average in terms of business ability (Thomsen, 2008). The relationship between the presence of a Chairman or CEO family member and social performance has not been studied enough; thus, it is not possible to comment on this relationship.

Finally, another variable to consider is the number of family generations on the Board. The presence of multiple generations on the Board could have two different explanations. On the one hand, it could be a demonstration of careful 'generation change' planning and an important sign of continuity for family involvement in the firm. This could be the manifestation of a firm vision as a 'good' to preserve and transmit to succeeding generations. On the other hand, however, the presence of several generations could only signal a formal renewal that does not exist in substance, or signal an attempt to maintain family balance and not the firm. The two different approaches can potentially have different effects in terms of social and financial performance.

Based on the above, one could assume that the peculiarities of a family business should lead to a board functioning differently in a family firm than in a non-family firm. Assuming that for this type of firm the key characteristic is the presence of familiars, one can hypothesize that:

- H2: *the size of the Board, the percentage of executives and the independence of the Board differently affect the performance of family and non-family firms;*

- H3: *the performance of family firms is related to 'family independence' (or 'family representation').*

4. Methodology

4.1 Sample

The sample is comprised of Italian firms quoted on the S&P/MIB 40 stock market index of Borsa Italiana (the Italian national stock exchange). It should be noted that in June of 2009, the index changed its name from the FTSE MIB Index to the S&P/MIB 40 Index, which includes the 40 most liquid and capitalised Italian companies. The index maintains sector weights of the Italian stock market.

From this list of companies, financial firms and those that did not have social ratings were excluded. With these restrictions, the final sample was comprised of 26 companies, using 2008 information.

Family and non-family firms were distinguished in order to analyse the significant differences between the Boards in the two types of firms. To identify the family firms, two criteria were followed: a family owning at least 30% of the capital of the company and at least one family member on the Board. Both criteria reflect the two characteristics that the doctrine uses to identify family firms: ownership (with a high enough percentage to ensure control) and family involvement in management and strategic direction. The threshold of 30% is significant in the Italian context because it is associated with the legal obligation to launch a takeover bid on the entire capital by a person who reaches this ownership percentage. That is, the law considers this threshold sufficient to allow for control of the firm, and if a family holds 30% of the shares, it will control the firm. To avoid uncertainty in defining control of the firm, the research set as a condition that the family had

to have twice the number of shares as the second largest shareholder. The presence of at least one family member on the Board should signify that the family does not view the company as a mere financial investment, but that it is involved in firm management. Considering this distinction, the sample includes 12 family firms and 14 non-family firms.

4.2 Variables and measures

Variables were defined to achieve the goals of the empirical research.

The research focused on the social and financial performance of the companies. One financial performance measure was considered: profitability. In a private ownership context, the acquiring firm seeks economic gains from the purchase (Uhlenbruck and De Castro, 1998). Thus, the organisational changes that are needed to improve performance are expected to have consequences, mainly, on profitability. Hodge (2000) showed that only a few performance indicators were common across studies and, among these, profitability was the most frequently used. In this study, profitability was measured using return on assets (ROA), which is calculated as earnings before taxes to total assets, and using return on equity (ROE), that is the earnings before taxes to equity. The ROA variable is mainly used in studies on private companies (Hodge, 2000). An advantage of using the ROA is that it measures the efficiency of the asset independently of a firm's financial structure. Instead, the ROE variable was used because it represents the most evident and simple method to compare two or more companies and to evaluate management's capacity to create value for the ownership. The ROE historical analysis of a firm is an important and objective reference for making the crucial decision of whether or not to invest in a firm. The financial data of these firms was been obtained from the Amadeus Bureau van Dijk Electronic Publishing database.

As for social performance, several methods of evaluation can be carried out (Griffin and Mahon, 1997): reputation ratings (ex.: Fortune Index) or survey; ratings issued by specialized organizations; indices or evaluations developed from information supplied by companies (ex.: content analysis of social reports); quantitative measurements and case study methodologies. To overcome the limitations present in each of these methodologies, more evaluations should be used

(Griffin and Mahon, 1997). Two social ratings were chosen for measuring social performance in an attempt to reduce the subjectivity of the evaluation without limiting the reliability³.

The choice to use social ratings does not guarantee absolute objectivity, but it ensures that the criteria established by rating agencies, when they act with methodological rigor and transparency, are applied uniformly. The AEI Standard Ethics Rating and Accountability Rating were chosen as the social variables, because they have two different approaches to social performance, which may limit the subjectivity of the criteria chosen by the two agencies.

To examine how the structure of the Board affects performance, Board characteristics considered to be significant were identified. With the purpose of verifying if a larger board is more or less effective than a smaller one, board dimension was analyzed, expressed as the number of directors on the Board. The research identified how many directors were executive, that is, whether directors have an effective role in the day-to-day management of the firm. This variable was expressed as a percentage of the board dimension (size of the Board). Finally, to define board composition, the presence of independent directors was used. According to the self-discipline code of the Italian quoted companies, a director can be considered independent when:

- he does not have extensive dealings or any form of contractual relationship with the firm (or with its controlled firms or with its management) aside from their directorship;
- he is not a shareholder of the firm in which he is a director;
- he is not a familiar of any firm executive.

According to this definition, an executive director cannot be considered independent, but not all non-executive directors are independent. This is the reason why board composition was defined as a third variable (presence of independent directors), expressed as a percentage of the board dimension.

To provide a more in-depth analysis of the family firms, other important characteristics were identified. 'Family independence' was evaluated by a number of variables in order to analyze its tendency in the sample firms..

The first is the *number of familiars* present on the Board. This was defined using all the directors having the surname of the family owner. This assumption has probably led the

researchers to underestimate this number. Subsequently, it was verified if the board president and/or the CEO were family members. Also considered were how many *executive directors* of the Board were family members, as well as how many *family generations* were included on the Board (using degree of kinship between family members of the Board).

4.3. Method

In order to test the hypotheses, multivariate linear equations were created for the sample firms, where the dependent variable included one of the financial performance indicators (ROA and ROE) and one of the social performance indicators (AEI Score and Accountability Score). The independent variables (Dimension, Executive and Independent) were proxies for the hypotheses to be tested. Consequently, the following equations were created using an MCO regression for every dependent variable:

$$\text{ROA}_i / \text{ROE}_i / \text{AEI Score}_i / \text{Accountability Score}_i = \beta_0 + \beta_1 \text{Dimension}_i + \beta_2 \text{Executive}_i + \beta_3 \text{Independent}_i + e_i$$

Where

ROA = Earnings before taxes / Total net assets

ROE = Earnings before taxes / Total equity

AEI Score = Social rating elaborated by Agenzia Europea degli Investimenti

Accountability Score = Social rating elaborated by AccountAbility

Dimension = number of members on the Board

Executive = Number of executive members / Total members on the Board

Independent = Number of independent members / Total members on the Board

The equations developed divided the sample into family and non-family firms in order to draw more relevant conclusions.

Complementary analysis

Furthermore, a multivariate regression analysis was applied (using the Ordinary Least Squares estimation algorithm with forward stepwise estimation) to more deeply understand the determinants of the Board (for family firms) that influence social and financial performance. This

estimation procedure only chose variables to be included in the regression model: those that allowed for the best fit in statistical terms. Variables were added to the model one by one. At each step, the independent variable that passed the entry requirements⁴, and had a higher correlation (in absolute value) with the dependent variable, was selected for inclusion in the model. The selection of variables was concluded when no more variables passed the entry requirements. If all the variables were included, the estimated model would be as follows:

$$ROA_i = a_0 + \beta_1 \text{ Number of board familiars}_i + \beta_2 \text{ President family}_i + \beta_3 \text{ Number of executive familiars}_i + \beta_4 \text{ CEO family}_i + \beta_5 \text{ Number of generations}_i + u_i$$

5. Results

Table 1 presents regressions for the total sample, the family firms sample and the non-family firms sample. As one can see, the four indicators of the dependent variable were: ROA, ROE, AEI Score and Accountability score. That is, two variables representative of financial performance and two representative of social performance.

As can be seen in the first line of Table 1, the results in the total sample showed a negative and significant coefficient for Dimension, which means that this variable was inversely correlated with the dependent variable, that is, the larger the size of the Board, the lower the ROA. However, the coefficient for Independent was positive and significant, so the introduction of independent members on the Board increased profitability. Looking at type of company, one can see different behaviour between sub-samples. On the one hand, similar to the regression for the total sample, there was an inverse relation between Dimension and ROA. On the other hand, the variables for the family firms were not significant, so we cannot assert that characteristics of the Board influence ROA. Other factors may be significant for family firm profitability.

In the ROE equation, the coefficient of Dimension was significant and negative for the total sample, as was been found for the ROA regressions. However, the variable Independent was not significant. Once again, the family firm equation had no significant variables, but the non-family firm equation had the same results as the total sample. That is, non-family firms had a marked

influence on total sample results: however the size and the number of independent members of the Board were not relevant variables to explain family firm performance.

The relation between dimension and profitability (ROA and ROE) was supported in the theory, which suggests that a higher number of members on the Board does not lead to better company performance.

As for social performance, the AEI Score was inversely correlated with the Dimension and directly correlated with the Independent variable. That is, companies with larger boards had lower AEI scores and those with more independent members had higher AEI scores. The non-family sub-group showed the same behaviour as the total sample but with regard to the family firms, all board characteristics analyzed were not related to the AEI Score.

In the regression indicative of the Accountability Score, variables were not significant. However, if the sample was separated, one found that in the family firms the Dimension of the Board was positively related to this social score and the number of executives was negatively related. These results are interesting because this is the only regression for family firms that showed significant variables. Firms with a larger board and less executive members were more aware of social performance.

[Insert Table 1 about here]

Table 2 shows the results for the family sample. It should not be surprising that only one variable was significant in every equation, as there were twelve family firms and the more variables introduced into a model, the less degrees of freedom the model has. As for the four models, the F-value and the R^2 values indicate that there was no misspecification error.

With respect to the ROA equation, the determinant variable was number of family members. The positive sign indicates that the higher the number of familiars on the Board, the higher the ROA of the firm.

In the ROE regression, the number of generations on the Board was positively related with ROE. That is, the higher the number of generations that have been a part of the firm, the higher the ROE.

The variable number of generations also influences the AEI and Accountability scores. In both cases, the firms with a higher number of generations on the Board achieved better social performance.

In short, the variables that influenced financial performance are the number of family members and generations on the Board; for social performance only the number of generations influenced performance. The other Board characteristics had no influence on social and financial performance.

[Insert Table 2 about here]

6. Discussion and conclusions

The Board of Directors is a central institution of company governance, whose main objective is its control. Therefore, the aim of this paper was to investigate the link between board composition and performance. The multidimensionality of the concept of performance leads one to consider financial and social performance.

The results confirmed an improvement in firm profitability when its board dimension decreased or its number of independent directors increased. This is probably related to the fact that a higher number of directors can generate a 'free-ride' situation, but an increase in the number of outsiders can lead the Board to better act in the interest of shareholders, improving the value of their investment. Therefore, size is an important variable for corporate performance; however, in reference to social aspects, it should not be overestimated. Social performance depends on the effectiveness and efficiency of the Board's decision-making process, as well as on the corporate culture and the individual culture of directors. The role of the Board, in general, and that of administrators, in particular, may be important in shaping corporate culture and thus the sensitivity and awareness of the corporate socio-political dimension of management, if it is acknowledged at a leadership role level.

The analysis found no-relationship between financial and social performance and number of executives. One reason may be that it is not important how many directors have an effective role in

the day-to-day management of the firm, but only that each executive should have a specific and in-depth knowledge of the particular aspect of the business he is involved in.

The impact of variables on performance is different in family and non-family firms. This means that the findings on the total sample can not be generalized for family firms. In particular, financial performance was not affected by any of the variables analyzed. As for social performance, in family firms, the Accountability Score, in contrast with other empirical evidence, had a positive correlation with board size and a negative correlation with the percentage of executives. In other words, for family firms, a larger board seems to give more attention not only to family interests, but also to the position of all stakeholder categories involved. In the sample, at least one family member was always present on the Boards. It is likely that the larger the Board, the more difficult it is for its actions to be influenced by the family interests present on the Board.

For the family sub-sample, the executive variable was significant. Results showed a negative relationship between social performance, as measured by the Accountability Score, and the number of board executives; that is, fewer executive directors led to better social performance. This result was related to the assumption that when fewer directors have an effective role in the day-to-day management of the firm, they have to act with more responsibility towards all the stakeholders. In family firms, the excessive presence of executives could lead to a predominant focus on the technical aspects of management, rather than the social ones.

The empirical analysis showed a correlation between strong family involvement and performance. Both the number of family members and the number of generations on the Board were evidence of an active participation by the family in the firm. The number of familiars was positively related to ROA. Thus, one can state that the presence of more familiar directors improves firm profitability, most likely because they have a direct interest in value creation of the firm. Particularly interesting is the positive correlation found between the number of generations on the Board and performance (both financial and social). This can be explained because the presence of several generations creates a plurality of visions, ideas, skills and experience and helps to avoid excessive centralization of power. The presence of several generations is thus associated not to a nepotistic approach aimed at maintaining balance between interests unrelated

to firm events, but to the creation of a strong sense of belonging that can have a positive effect on performance.

The research results showed that the 'diversity' of family firms makes generalizing difficult for these types of firms. Every family firm is characterized by a strong uniqueness, due to factors such as: the dynamics that characterize each family, how the family considers its firm, the planning and implementation of generational succession. The effect of board characteristics examined appears to be dominated by specific factors present in this type of firm.

Mechanisms that link the structure of board and social performance are still not fully evident. It would also be desirable to analyze the correlations that exist between the individual characteristics of managers (experience, skills, culture, values, etc.) and performance. Moreover, subsequent empirical research could extend the analysis to include other cultural and institutional contexts in which to compare the results obtained by our investigation.

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Table 1: Multivariate regression results

Dependent	Independents				F-value	R ²	R ² corrected
	Constant	Dimension	Executive	Independent			
ROA Total sample p-value	14,037*** 0,003	-1,347*** 0,006	1,030 0,175	1,094* 0,080	3,159 0,045	0,301	0,206
ROA Family firms p-value	15,212* 0,089	-1,511 0,146	1,721 0,225	1,032 0,455	0,993 0,444	0,271	-0,002
ROA Non family firms p-value	18,913*** 0,004	-1,416* 0,010	-1,034 0,364	0,944 0,144	4,182 0,037	0,556	0,423
ROE Total sample p-value	39,543*** 0,001	-2,094* 0,054	0,278 0,874	0,886 0,534	1,755 0,185	0,193	0,083
ROE Family firms p-value	30,269* 0,070	0,030 0,987	-1,464 0,560	-0,495 0,843	0,213 0,885	0,074	-0,273
ROE Non family firms p-value	57,886*** 0,001	-3,364** 0,016	-3,306 0,273	0,902 0,577	3,904 0,044	0,539	0,401
Score AEI Total sample p-value	1,840*** 0,001	-0,125** 0,026	-0,017 0,837	0,181** 0,015	3,529 0,034	0,346	0,248
Score AEI Family firms p-value	1,170 0,161	0,027 0,795	-0,135 0,287	0,004 0,975	0,570 0,652	0,196	-0,148
Score AEI Non family firms p-value	1,819** 0,045	-0,159** 0,046	0,093 0,590	0,224** 0,034	2,595 0,117	0,464	0,285
Score Acc. Total sample p-value	0,886** 0,024	0,023 0,556	-0,084 0,203	0,056 0,292	1,754 0,185	0,193	0,083
Score Acc. Family firms p-value	-0,249 0,531	0,138** 0,016	-0,168** 0,029	0,033 0,617	7,413 0,011	0,735	0,636
Score Acc. Non family firms p-value	1,418** 0,032	-0,028 0,584	-0,026 0,839	0,058 0,409	0,336 0,800	0,092	-0,181

* Statistically significant at the 10% level.

** Statistically significant at the 5% level.

*** Statistically significant at the 1% level

Note: The regressions were run with ROI as the dependent variable; the coefficients were not significant. This may indicate that ROI is more related to Management than to the Board.

Table 2: Standardised regression coefficients and statistical significance.

Model		<i>Beta</i>	F-value	R ²	R ² corrected
ROA	Number of family members	1.807** (0.038)	5.934 (0.038)	0.397	0.330
ROE	Number of generations on the board	0.887*** (0.000)	36.775 (0.000)	0.786	0.765
AEI Score	Number of generations on the board	0.901*** (0.000)	42.975 (0.000)	0.811	0.792
Acc. Score	Number of generations on the board	0.813*** (0.000)	19.560 (0.001)	0.662	0.668

The p-value in brackets

* Statistically significant at the 10% level.

** Statistically significant at the 5% level.

*** Statistically significant at the 1% level

¹ Organismic vision spread in the years following World War I (Ackoff, 1981) and still finds advocates in different cultural contexts (Landier, 1987; De Geus, 1997).

² Developed by James Tobin (1969), this ratio compares two different valuations of the same physical asset: the market value of a company's stock and the equity book value of the same company. It can be used to reflect the 'value added' of intangible factors such as reputation or governance.

³ Reputation ratings (such as the Fortune Index) or surveys of managers, financial analysts, directors and students come from respondents perceptions, often very different, and they suffer from excessive subjectivity. The information provided by firms, like those in a social report, could be unreliable because of lack of knowledge of the criteria for inclusion and omission of information. Moreover, the scales constructed on the basis of this information to qualitatively assess social performance could be affected by the objectives of the researcher. The quantitative measurements (such as corporate philanthropy, amount of pollutant emissions, etc.) are only indirect and unreliable indicators of overall social performance, and they may be applied only for a limited sample of firms.

⁴ The 'significance criteria' was used as the entry requirement. According to these criteria, only the variables that contributed significantly to the model fit were included in the regression model. The individual contribution of a variable to the model fit was established by testing, from the partial correlation coefficients, the hypothesis of independence between that variable and the dependent variable. The significance criteria applied was that the introduced variable was significant at the 5% level (10% for the probability of taking the variable out of the model). Likewise, the increase in the R² value as a result of including the variable in the model had to be statistically different from zero.