## РАЗДЕЛ 1 НАУЧНЫЕ ИССЛЕДОВАНИЯ И КОНЦЕПЦИИ

# SECTION 1 ACADEMIC INVESTIGATIONS & CONCEPTS

## BOARD CONFIGURATION AND PERFORMANCE IN GREECE: AN EMPIRICAL INVESTIGATION

## Dimitrios N. Koufopoulos\*, Maria-Elisavet N. Balta\*\*

#### Abstract

This study is an attempt to shed light on board configuration-board size, leadership structure, CEO dependence/independence alongside with firm's performance relying on financial ratios, namely ROE, ROCE and profit margin. Data were gathered from annual reports and proxy statement of 316 Greek organisations quoted in the Athens Stock Exchange, shortly after the financial crisis of 1999. This period the Greek Capital market was upgraded to a mature market status. Findings from this research suggest that neither board leadership structure nor CEO dependence/independence showed any significant effects on firm's financial performance.

Keywords: corporate board, board size, composition, firm performance

\* Brunel Business School, Brunel University, Uxbridge, Middlesex UB8 3PH, UK Tel: (01895) 265250, Fax: (01895) 269775, E-mail: Dimitrios.Koufopoulos@brunel.ac.uk \*\* Brunel Business School, Brunel University, Uxbridge,Middlesex UB8 3PH, UK Tel: (01895) 267116, Fax: (01895) 203149, E-mail: Maria.Balta@brunel.ac.uk

## Introduction

In the last few years, corporate governance has received a great deal of attention among academics and business practitioners (Keasey, Thompson and Wright, 1999; Lazarri et al, 2001). The term "corporate governance" can be interpreted by different point of views. Some authors, such as Shleifer and Vishny (1997:2), define corporate governance as "the ways in which suppliers of finance to corporations assure themselves of getting a return of investment" emphasizing economic return, security and control. Donaldson (1990:376) defined corporate governance as the "structure whereby managers at the organisation apex are controlled through the board of directors, its associated structures, executive initiative, and other schemes of monitoring and bonding" thereby narrowing the scope to the Board of Directors and their associated structures. Other authors, such as Kaplan and Norton (2000), analyse corporate governance from the political point of view focused on general shareholder participation, defining corporate governance as the connection between directors, managers, employees, shareholders; customers, creditors and suppliers to the corporation and to one another.

A significant increase in research has been documented in recent years regarding corporate



governance which partly may have been triggered by a series of major corporate scandals; both in the U.S (i.e. Enron, Tyco, and WorldCom) and in Continental Europe (i.e. Parmalat). They have revealed the inefficiency of monitoring the top management, which lead to substantial loss for stakeholders (e.g. Petra, 2005; Rose, 2005; Sussland, 2005; Parker, 2005; Lavelle, 2002).

In Greece, corporate governance has been a topic of increased interest in the boardrooms due to structural backwardness, the crisis of the Athens Stock Exchange and the international pressures toward a more market-based and shareholder-oriented model of governance. During the period 1997–2000, the Greek economy was characterised by its attempt to readjust its macroeconomic indicators and achieve the criteria to become the 12<sup>th</sup> member of the "EURO Zone" in 1999, that is, achieving Economic and Monetary integration in the European Union; an accomplishment that was realised on the 1st January 2001. By the end of 2000, the Greek economy had transformed into a "modern" economy with an updated structure and strong dynamism (ASE, 2001). Athens Stock Exchange experienced a six-fold increase and it grew faster than any other capital market in the developed world and it has increased the number of listed companies (approximately 350 companies with combined market capitalisation 10.5 billion euros). However, in the third semester of 1999, the ASE has suffered losses that on the average accounted for almost 70 per cent of its peak value. Since then, the Hellenic Capital Market Commission (HCMC) and Athens Stock Exchange attempt to implement some rules and regulations in order to protect investors, to guarantee the normal operation and liquidity of the capital market and to enhance the efficiency of trading (Tsipouri and Xanthakis, 2004). The first step toward the formation of a comprehensive framework on corporate governance has been the publication of the "Principles of Corporate Governance in Greece (Committee on Corporate Governance in Greece, 1999), which contains the following seven main categories: the rights and obligations of shareholders, the equitable treatment of shareholders, the role of stakeholders in corporate governance, transparency, disclosure of information and auditing, the board of directors, the non-executive members of the board of directors and executive management (Mertzanis, 2001).

Regulatory reforms in USA such as Sarbanes-Oxley Act (2002), in Europe (OECD Principles on Corporate Governance, 2004), and more specifically in the United Kingdom (i.e. Cadbury, 1992; Greenbury, 1995; Hampel, 1998; Turnbull, 1999; Higgs, 2003) and in Greece (Principles of Corporate Governance in Greece, 1999) are pushing companies to re-think issues regarding governance structures alongside firm's performance. Consumer activists, corporate shareholders but also government regulators have advanced proposals to reform corporate boards, notably their structure and process in order to demonstrate a sound corporate governance policy and practice.

Boards of directors are viewed as the link between the people who provide capital (the shareholders) and the people who use the capital to create value (Kostyuk, 2005). The board exists primarily in order to hire, fire, monitor, compensate management and vote on important decisions in an effort to maximise the value of shareholder (e.g. Fistenberg and Malkier, 1994; Salmon, 1993; Denis and McConnell, 2003; Becht et. al., 2003). According to Iskander and Chambrou (2000) the board of directors is the centre of the internal system of corporate governance and, in this scope, has the responsibility to assure long-term viability of the firm and to provide oversight of management. Bhojraj and Sengupta (2003) assert that the boards have the of monitoring management fiduciary duty performance and protecting shareholders interests. Other roles of the board is the institutional role, strategy role, disciplinary role, figurehead role, ethical role, auditing role, class hegemony role (e.g., Hung, 1998; Zahra and Pearce, 1989)

The study attempts to explore the relationship of board configuration with organisational performance. Thus, the paper initially discusses issues regarding board size, leadership structure and CEO dependence/ independence as well as their performance implications. It proceeds with investigating their relationship based on 316 organizations listed in the Athens Stock Exchange (ASE). Finally, recommendations and suggestions for future research are discussed.

## **Literature Review**

Within the Corporate Governance literature an issue of great importance concerns with configuring the Board; which means to deal with issues regarding board size, leadership structure and CEO dependence/ independence. Board of directors are assumed to influence the strategic direction and performance of the corporations they govern (Beekun, Stedham and Young, 1998). Board structure aims at formulating specific strategies by aligning the interests of management and suppliers of capital. Board structure has been a topic of increased attention in the disciplines of economics (Jensen and Meckling, 1976), finance (Fama, 1980), sociology (Useem, 1984) and strategic management (Boyd, 1995). There have been developed numerous corporate governance theories (agency theory, stewardship theory, resource dependence theory and stakeholder theory), which will be briefly discussed.

Agency theory has been a dominant approach in the economic and finance literature (Fama and Jensen, 1983) and describes the relationship between two parties with conflicting interests: the agent and the principal (Jensen and Meckling, 1976). For agency theorists, the role of the board is to ratify and monitor the decisions of top management team (Fama and Jensen, 1983). Agency theory is concerned with aligning the interests of owners and managers and it is based on the assumption that there is an inherent conflict between the interests of firm's owners and its managers (Fama and Jensen, 1983; Fama, 1980; Jensen and Meckling, 1976). The agency theory underlines the importance of monitoring and governance function of boards (Pearce and Zahra, 1992: Zahra and Pearce, 1989) and the need for establishment mechanisms in order to protect shareholders from management's conflict of interest (Fama and Jensen, 1983). It finally, suggests that boards should have a majority of outside and independent director and that the position of Chairman and CEO should be separate (Daily and Dalton, 1994a).

In contrast to agency theory, stewardship theory suggests that there is no conflict of interest between managers and owners and a successful organisation requires a structure that allows the coordination of both parts (Donaldson, 1990; Donaldson and Davis, 1991, 1994). Stewardship theorists argue that executives serve both their own but also their shareholders' interests (Lane, Cannella and Lubatkin, 1998). They contend that superior corporate performance is associated with majority of inside directors because, first, they ensure more effective and efficient decision- making and second, they contribute to maximise profits for shareholders (Kiel and Nicholson, 2003).

Resource dependency theory proposes that corporate board is a mechanism for managing external dependencies (Pfeffer and Salancik, 1978), reducing environmental uncertainty (Pfeffer, 1972) and the environmental interdependency (Williamson, 1984). It, also views outside directors as a critical link to the external environment (Pfeffer and Salancik, 1978). This perspective advocates appointing representatives of significant external constituencies as outside board members. This is considered as a strategy for managing organizations' environmental relationships. Outside directors can provide access to valued resources and information (e.g., Bazerman and Schoorman, 1983; Pfeffer and Salancik, 1978; Stearns and Mizruchi, 1993). For instance, outside directors who are also executives of financial institutions may contribute in securing favourable lines for credit (e.g., Stearns and Mizruchi, 1993).

Finally, stakeholder theories encompass all the important consistencies of the firm in its governance mechanisms and stress their fundamental importance. Clarkson (1994) in defining stakeholder theory states that: "Firm is a system of stakeholders operating within the larger system of the host society that provides the necessary legal and market infrastructure for the firm's activities. The purpose of the firm is to create wealth for its stakeholders by converting their stakes into goods and services". Since the stakeholders (i.e. employees, owners, investors, customers, government, community) of the firm provide the essential inputs and infrastructure in order to be achieved, it follows that they should be included in the government centres that are responsible for the firm's fate. Their inclusion, however, in the corporate governance mechanisms should be limited to the extent that their interests are threatened because they usually lack the managerial knowledge and long-term experience to take strategic decisions.

In this light, the size of the board, its leadership structure and its independence is of great significance. In order to structure our study, we have developed a model -shown in Figure1-, which seeks to examine characteristics organisational (size, industry, ownership, year of incorporation and the number of the years that the company is listed at the Athens Stock Exchange as well as how board characteristics such as (size, leadership structure, CEO dependence/ independence) influence the organisational performance in terms of return on equity (ROE), return on capital employed (ROCE) and profit margin in a study carried out in Greece.

## Figure 1

Board Size is a major element of board structure (Daily and Dalton, 1992) and board reform (Chaganti, Mahajan and Sharma, 1985). Board size can be ranged from very small (5 or 6) to very large (30 plus) (Chaganti, Mahajan, Sharma, 1985). Early studies have found that the average size of the board is between 12 and 14 and remains the same over the past 50 year (e.g., Conference Board, 1962, 1967; Gordon, 1945). As board size increases both expertise and critical resources for the organisation are enhanced (Pfeffer, 1973). Larger boards, also, prevent the CEO from taking actions that might not be in shareholders interests such as golden parachutes contracts (Singh and Harianto, 1989). Finally, larger boards may be associated with higher levels of firm performance (e.g. Alexander, Fennell and Halpern, 1993; Goodstein, Gautam and Boeker, 1994; Mintzberg, 1983). In a study conducted by Chaganti, Mahajan and Sharma (1985), it was found that non-failed firms tended to have larger boards than the failed firms. However, increased board size inhibits the board's ability to initiate strategic actions (Goodstein, Gauten and Boeker, 1994). Large groups are more difficult to coordinate and more likely to develop potential interactions among group members (O'Reilly, Caldwell and Barnett, 1989).

On the contrary, a smaller board has the ability to adopt and exercise a controlling role (Chaganti, Mahajan and Sharma, 1985). Also, smaller group size increases participation and social cohesion (Muth and Donaldson, 1998) that might contribute to organisational performance (Evans and Dion, 1991). Yermack (1996) found that board smallness was associated with higher market evaluations as well as higher returns on assets, sales over assets, and return on sales (ROS). Since, there is not clear empirical evidence, we formulate the following proposition: *Proposition 1:* Board size is unrelated with the firm's performance in terms of: a) Return on Capital Employed (ROCE), b) Return on Equity (ROE) and c) Profit Margin

Leadership Structure or CEO Duality: An important parameter of corporate governance is the existence of CEO duality. CEO duality occurs when the same person holds both the CEO and Chairperson's positions in a corporation (Rechner and Dalton, 1991). The CEO is a full-time position and has responsibility for the day-to-day running of the office as well as setting, and implementing corporate strategy and mainly, the performance of the company. On the contrary, the position of the Chairman is usually a part-time position and the main duties are to ensure the effectiveness of the board and the evaluation of the performance of the executives (Weir and Laing, 2001). In serving simultaneously as CEO and Chairperson, a CEO will likely have greater stature and influence among board members (Harrison, Torres and Kukalis, 1988) and thus hampering the board's independent monitoring capacity (Beatty and Zajac, 1994).

Agency theorists assume that boards of directors strive to protect shareholders' interest (Fama and Jensen, 1983) and thus suggest a negative relationship between CEO duality and firm performance (Finkelstein and D'Aveni, 1994; Rechner and Dalton, 1989; Donaldson and Davis, 1991). Therefore, they support the idea that the separation of the jobs/roles of CEO and Chairperson will improve organizational performance, because the board of directors can better monitor the CEO (Harris and Helfat, 1998).

The separation of the functions of the CEO and the Chairman of the board has been commonly suggested by practitioners and shareholder rights activists as an important condition for avoiding the conflict interest between the corporate constituencies and the management as well as for improving the board governance (e.g., OECD, 2004; Monks and Minow, 2001; Baysinger and Hoskisson, 1990). However, Berg and Smith (1978) reported a negative relationship between duality and ROI and no correlation between ROE or stock price and firm's performance. A complementary study of the same firms found that CEO duality is negatively related to ROE, ROI and profit margin (Rechner and Dalton, 1991). Additionally, Pi and Timme (1993) found a negative effect of duality to performance.

In contrast to agency theory, the leadership perspective suggests that firm will perform better if one person holds both titles, because the executive will have more power to make critical decisions (Harris and Helfat, 1998). Furthermore, steward theorists argue that if one person holds both positions, the performance might be improved, as any internal and external ambiguity regarding responsibility for organizational outcomes is being minimized (Finkelstein and D'Aveni, 1994; Donaldson, 1990). It also proposes that CEO duality would facilitate effective action by the CEO and consequently improves the organisational performance under specific circumstances (Boyd, 1995). Pfeffer and Salancik (1978) argue that a single leader can respond to external events and facilitate the decision- making process. Harrison, Torres and Kukalis (1988) suggest that CEO duality facilitates the replacement of CEO in poorly performing companies. Additional, Worrell and Nemee (1997) and Dahya et. al. (1996) reported that the consolidation of CEO and chair positions is positively related to shareholders return. Finally, vigilant boards tend to favor CEO duality when performance is poor, because there is no threat of CEO entrenchment in poorly performing firms.

The approaches that have been developed with respect to CEO duality have concluded to inconsistent results and there is no clear direction and magnitude of CEO duality-board vigilance and firm performance (Daily and Dalton, 1992, 1993; Dalton et. al., 1998; Rechner and Dalton, 1989). Based on the above inconclusive arguments, the following proposition is put forward:

*Proposition 2:* Dual or separate leadership structure will be uncorrelated with firm's performance in terms of: a) Return on Capital Employed (ROCE), b) Return on Equity (ROE) and c) Profit Margin

CEO Dependence/Independence: While, there has been a tendency towards the separation of the positions of CEO and Chairman based on the need for independence between management and board of directors, there is no considerable body of empirical research, which examines the extent to which the separate board structure provided the well needed independence. It may be the case, that even in those instances that a separate leadership structured has been adopted -and as such, two persons have the positions of Chairman and CEO respectively- affiliation between these two individuals may distort their relationship and as result the function of the boar. Affiliated Directors -in our case Chairpersons- who are potentially influenced by the CEO vis-à-vis personal, professional, and/or economic relationships may be less effective monitors of firm management (Bainbridge, 1993; Baysigner & Butler, 1985; Daily & Dalton, 1994a, 1994b).

Most of the research has been discussing the importance and effect of independent vs. depended boards primarily at the membership level; not at the Chairpersons-CEOs. Thus agency advocated suggest that affiliated directors tend to protect or enhance their business relationship with the firm and are considered to be less objective and less effective monitors of management than independent directors (Anderson and Reeb, 2003). Daily et al. (1998) proposed that affiliate directors develop conflicts of interests due to their relationship with the firm. Although, there is no study, which empirically examines the extent to which the separate board chairperson is more independent than the joint chairperson, empirical findings demonstrate that outside independent directors on the board improves firm's performance (Barnhart, Marr and Rosenstein, 1994; Daily and Dalton, 1992; Schellenger, Wood and Tashakori, 1989) In summary, agency theory suggests a negative impact of affiliated directors on firm performance.

On the contrary, stewardship theory suggests that affiliated directors or Chairpersons may feel aligned with company's future performance because of their long-term employment and the close working relationship with the CEO. Thus, it may be argued that a separate but affiliated board structure tends to develop trust and empowerment and provide ease of communication needed for effective functioning (Muth and Donaldson, 1998).

Some scholars argue (e.g., Jensen and Meckling, 1976; Kesner et. al, 1986) the board of directors should be independent of management. They suggest that the board should be composed mainly of independent outsiders and should have an independent outsider as Chairman (Donaldson and Davis, 1994). Thus, the following proposition is developed:

*Proposition 3:* The greater the degree of independence between CEO and Chairman the higher the firm's performance will be in terms of a) Return on Capital Employed (ROCE), b) Return on Equity (ROE) and c) Profit Margin

## Research Methodology Sampling

Our aim was to carry out an empirical investigation of the Greek corporate governance practices and, therefore, our data were collected from the 354 listed companies in the Athens Stock Exchange (www.ase.gr). Quoted companies are classified into 53 economic activity related sectors, which fall into the following twelve categories: primary production, manufacturing industries, public services, retailers, hotels-restaurants, transport and communication, financial-accounting services, real estate and commerce activities, health and social care, general services, constructions and transitional category. Table 1 shows the turnover for each industry. Thirty-eight of these companies were not included in our sample, because the negotiation of their shares was interrupted due to various reasons (e.g. bankruptcy, transitional category, missing or incomplete data). Therefore, our actual sample consisted of 316 Greek companies.

## Table 1

We have chosen companies quoted in the Athens Stock Exchange (ASE), because are the sole official market of shares trading in the Greek capital market. The ASE has been considered as a steady stream of regulatory measures over the last few years dictated by its developed market status- as of May 31, 2001and it aims at enhancing the overall transparency obligations of issuers whose securities are listed in the ASE. It provides information about the way trading is conducted in ASE, the brokerage members companies of the ASE, the IPO and rights issues requirements, the obligations of listed companies and other issues concerning the products and the ASE market (ASE, 2001). Furthermore, listed companies are required to provide information regarding the background of their directors and their financial figures (Phan, Lee and Lau, 2003). Finally, secondary data on both the financial figures and the directors of those companies came from their proxy statements and annual reports.

## Measurements

The independent variables that have been analysed are: board size, leadership structure and CEO dependence/independence. In addition, organisational size, ownership, industry, age of the organisation and the number of years that the firms are listed in the Athens Stock Exchange were used as control variables.

The board size was measured by counting the absolute number of directors that are listed in the annual report. Board leadership structure is a binary variable coded as "0" for those employing the joint structure and "1" for those firms employing the separate board structure. CEO/Chairman dependence/ independence was measured by using three values: "0" for CEO duality, "1" for CEO /Chairman separate but affiliated (i.e. CEO-Chairman dependence) and, finally, "2" for CEO/Chairman separate and independent (i.e. CEO unrelated to the Chairman).

Our dependent variableorganisational performance- was captured by three ratios: Return on Capital Employed (ROCE), Return on Equity (ROE) and Profit Margin. Return on Capital Employed (ROCE) was calculated by the sum of pre tax profit and financial expenses divided by total liabilities. Return on Equity (ROE) was measured by the ratio for net income divided by average stockholder's equity. Finally, profit margin was calculated by the ratio of net income divided by turnover (Meigs, Bettner and Whittington, 1998). All performance data were derived mostly from the ASE Market's database for the two consecutive years (2001-2002).

Regarding the control variables, the size of the organisation was operationalised by the total number of employees employed by the organisation. The literature has included a variety of measurements regarding organisational size such as: natural logarithm of sales volume, number of employees, net assets (Scott, 2003).

Firm's ownership was distinguished between pure Greek private companies, public companies, and foreign subsidiaries. The industry was classified according to the following twelve categories provided by the ASE: primary production, manufacturing industries, public services, retailers, hotels-restaurants, transport and communication, financial-accounting services, real estate and commerce activities, health and social care, general services, constructions and



transitional category. Organisational Age was available from the Athens Stock Exchange and was defined as the number of years elapsed since an organisation was incorporated (e.g., Ang, Colwm and Lin, 1999). Finally, the number of the years that the company is listed was gauged by calculating the number of years elapsed since the company listed in the ASE.

## Statistical Analysis

Descriptive statistics and correlations analysis were used firstly to portray the data and secondly to explore the existing relationships between our independent and dependent variables.

## **Research Findings**

The study aimed at providing both an account of the corporate governance practices in Greece and tests a number of propositions. Thus, first descriptive results will be presented followed by proposition testing through correlation analysis.

Board Size: As it can be seen in Diagram 1, the average board size of our sample was 7; the majority of Greek companies have boards consist from either 7 (29%) or 5 (27%) directors respectively. In United States, in similar studies, the average board size of 334 US hospitals was 10.26 (Goodstein, Gautam and Boeker, 1994); of 92 US restructuring firms was 11.28 (Johnson, Hoskisson and Hitt, 1993); of 139 US companies, consist (69) manufacturing and (70) services companies the average board size was 13.23 (Pearce and Zahra, 1991); of 111 US firms making 128 acquisitions was 12.1 (Byrd, Hickman, 1992); of 1251 organizations was 12.2 (Rosenstein and Wyatt, 1990); of 53 greenmail-paying firms was 11 (Kosnik, 1987); of 120 industrial corporations was 10 (Ocasio, 1994) and of 6800 general hospitals was 12.9 (Judge and Zeithaml, 1992). As such, it can be said that the average size of U.S boardroom was 11; which is significantly higher than the Greek boards.

In addition, in Europe, the average board size of 331 UK firms was 7.6 (O'Sullivan and Diacon, 1998); in 43 mutual insurance firms the average board size was 10 while in 86 proprietary firms was 7.5 (O'Sullivan and Diacon, 1999). Of 446 Danish listed companies was 5.2 (Rose, 2005) and of 53 listed companies in Ukraine was about 8 to 10 (Kostyuk, 2005). Based on the above, it seems that European companies use smaller boards than American corporations.

Finding from other contexts offer various results; for example the average board size of 212 companies in Singapore was 7.4 (Wan and Ong, 2005); of 104 Australian manufacturing listed companies was 7.36; of 35 Israeli firms was 16.7 (Chitayat, 1984); of 169 Japanese manufacturing listed firms was 27.62 (Bonn, Yoshikawa and Phan, 2004) and of 112 public sector firms in New Zealand was 5.85 (Cahan, Chua and Nyamoki, 2005). Finally, interesting finding regarding U.S failed and non-failed firms, conducted by Chaganti, Mahajan and Sharma (1985), found that the board size of failed firms ranged from two to twenty and for non-failed ranged from six to twenty-five. The results indicate that well-performing firms have larger board size.

### Diagram 1

*CEO Duality:* As Diagram 2 depicts, there is nearly a balance between firms that they have chosen the separation of the CEOs and Chairman positions and those that have not. More particularly, 51.6% of Greek firms have adopted the CEO/Chairman duality approach; the same person serves two positions, while 48.4% have the separate approach; two individuals serve the positions of CEO and Chairman.

In a recent study contact in Singapore Wan and Ong (2005) found that 30 percent of the respondents' boards have Chairman-CEO duality. The following studies report that separation of the two top jobs as follows.

25.4% of 331 UK (O'Sullivan and Wong, 1998); of 480 UK firms 62 % (Brown, 1997), of 50 large Japanese firms 88.9%, of 50 large UK firms 70% and of 50 US industrial corporations, 18.4% (Daily and Johnson, 1997); of the Fortune 500 firms 58 of them have partial non-duality (Baliga and Moyer, 1996), of 261 US firms 18.4% (Sundaramurthy, Mahoney and Mahoney, 1997); of 193 US corporations 52% (Boyd, 1994). Finally, in a study by Daily and Dalton (1995) in 50 bankrupt and 50 non-bankrupt firms, it was illustrated that 54.3% of bankrupt and 51.1% of nonbankrupt firms have different CEO and Chairman. In general, the findings illustrate that organisations both in U.S and in Europe tend to rely on the separate leadership structure model.

#### Diagram 2

CEO Dependence/Independence: A closer look at the Diagram 2 and the findings depicted in Diagram 3, give us a slight different picture regarding the dependence-independence dichotomy of the Chairman-CEO's position. Investigating those firms -48% - that the positions of Chairman and CEO are hold by different persons we found that a significant proportion -34%- are somewhat affiliated; in other words there are either family members or have former employment ties. To summarize our findings from the preceding section we can say that only 32% of the firms in the ASE have adopted the "purely" independent structure, while 16% of the firms have embraced the independent but affiliated mode and finally the 51% of the Greek listed firms the CEO duality structure. Similarly, it was established that only 24 % of 320 quoted UK firms have independent boards (Weir and Laing, 2001) and in 20% of 365 of the largest U.S quoted corporations chairpersons were somehow related with the CEO and only 12.22% of



these firms, had a joint CEO/Chairperson structure (Daily and Dalton, 1997).

#### **Diagram 3**

*Firm Performance:* The corporate performance of 316 Greek organisations has been captured by objective measurements. Three indicators measured performance: return on capital employed (ROCE), return on equity (ROE) and profit margin. It was found that the majority of Greek firms (67%) have ROCE between 1 to 10%, and 45% of firms have their ROE ranged from 1 to 10%. 23 % of the sample have enjoyed profit margin between 11 to 20 %, and 31% from 21 to 30%, as it is shown by Diagrams 4, 5, 6.

## Diagram 4 Diagram 5

## **Diagram 6**

*Organisational Size:* as it can be seen from Diagram 7 the minimum number of staff employed by the organization is 2, the maximum is 15921 and the average is 541. In similar studies, it was found that the average firm size of 486 small manufacturing firms was 78.89 (Daily and Dollinger, 1992) and of 446 listed Danish firms was 3273 employees (Rose, 2005).

#### Diagram 7

*Ownership:* According to our findings, most of Greek organisations (84.8%) are classified as pure Greek private companies, followed by foreign subsidiaries (9.8%) and by public foreign (5.45%), as it can be seen from Diagram 8.

#### **Diagram 8**

*Industry:* Diagram 9 demonstrates that the vast majority (34%) of 316 Greek firms were manufacturing followed by 20% retailing and 12% rental and informatics. In studies conducted in Singapore, it was found that 40 percent of 212 listed companies in Singapore were manufacturing and 60 percent were financial services (Wan and Ong, 2005) and in Cyprus 48% of 44 listed companies were financial services, 18.55% were manufacturing and construction, 10.5% were tourism, 4.5% were transportation and distribution, 2% were retail and 7% were other industrial categories (Aloneftis, 1999).

## Diagram 9

*Organisational Age:* The empirical findings of our study demonstrate that the average age of 315 Greek organisations was approximately 34; while, most of the organizations (39%) were 21-40 years old and 35% were between one to twenty years old, as it can been seen from Diagram 10. In a study of family and

professionally managed firms, Daily and Dollinger (1992) found that the average organisational age was 41.72 years and of 67 firms consisted of 43 publicly traded and 24 privately traded was 10.42 years (Boeker and Goodstein, 1993). In addition, the average firm age of 104 manufacturing Australian firms was 43.44 and of 169 Japanese manufacturing firms was 63.73 (Bonn, Yoshikawa and Phan, 2004).

## **Diagram 10**

Number of Years listed in the Athens Stock Exchange: Diagram 11 indicates that the average number of years listed in the ASE was 13; however, the majority (80%) of Greek firms were quoted the last twenty years on Athens Stock Exchange and 10% of them in the last 40 years.

## Diagram 11

### **Proposition Testing**

Table 2 reports the correlations between the dependent and independent variables. The first Proposition aimed at examining the relationship between the board composition and the company's performance in terms of return on capital employed, return on equity and profit margin. Statistical analysis of this hypothesis failed to produce any significant evidence of association between these variables. However, it was found that statistical association between return on equity and board size exist by using Spearman's correlation. The interpretation of the association is that as board size increases, return on equity increases as well.

The second proposition- that attempted to explore the relationship between the CEO duality and performance of the firm in terms of return on capital employed, return on equity and profit margin failed to provide any significant statistical association. The data didn't support any relationship between CEO duality/separation and organisational performance.

The last proposition suggested an association between CEO dependence/independence and organisational performance in terms of return on capital employed, return on equity and profit margin. The results suggested that there is a not significant relationship between the dependence or independence of the CEO and the performance of the company.

#### Table 2

#### **Conclusion and Discussion**

Numerous corporate collapses and scandals have spurred recent changes, and boards are required to take a more active role in monitoring, evaluating and improving the performance of the CEO and consequently, the firm's performance. Boards are asked to evaluate and improve their own performance and therefore, the corporate governance practices of



the companies they govern. This study identifies a number of board characteristics that the literature advocates their significance on organizational effectiveness.

This study attempts to investigate the internal corporate governance structure among 316 Greek listed companies from data gathered in 2002. The three topics of interest were: board size, CEO duality, CEO-Chairman dependence/independence. These key variables were of increased interest, because they are considered important for determining board effectiveness, for creating long-term shareholder value and for protecting the interests of the shareholders.

The results of this study with respect to firm's performance of Greek listed firms inform the current debate about corporate governance. It was found that most Greek companies (29%), similar to many European companies, have average board size of seven members. There is a balance between Greek firms that they have chosen the separation of the CEOs and Chairman Positions and those that have not. More specifically, 51.6% of Greek firms have adopted CEO duality, while 48.4% tend to choose separate Chairman and CEO. In the situation of non-duality, it was found that 66% of that Chairman-CEO were completely independent and 34%- are somewhat affiliated.

Three hypotheses regarding board size, CEO duality, CEO dependence/independence were tested in relation to firm performance with respect to return of capital employed, return on equity and profit margin. Findings from the research suggest that neither board leadership structure nor CEO dependence/ independence showed any strong significant effects to firm's performance. Similar studies conducted by other scholars (e.g., Daily and Dalton, 1992; Molz, 1988) found that separating the board of CEO and Chairman does not result in improved firm performance. However, a positive association was found between board size and return on equity by using Spearman's correlation analysis. This indicates that the size of the board is positively related with firm's return on equity.

Several limitations in our research can be identified and as such findings and conclusions presented in this paper must be interpreted cautiously. First, firm's performance was measured within a twoyear period and not in time series of three or five consecutive years. The performance of the Greek listed companies might have been influenced by external factors (e.g., economic recession, bankruptcy). Second, our study didn't provide specific results in industry level (e.g. financial services, construction) and it might lead to unsubstantiated generalisations of our findings. Lastly, organizational size may be an important moderating variable of the Board-financial performance relationship.

Future research can attempt examining the relationship explored in this study by using different samples in terms of specific economic sectors (e.g., manufacturing or services), by incorporating more indicators of financial performance or in terms of different organizational sizes (small-medium-large firms, family firms) should provide additional insights. In addition, an interesting examination could be between well performing and poor performing firms. Examining and comparing findings with other Balkan and European countries (e.g., Spain, Portugal) as well as United States can move the research in corporate governance further. More findings in the area of corporate governance will increase the insight of researchers in additional elements and factors that influence the discipline in the years to come.

#### References

- Alexander, J. A., Fennel, M. L. and Halpern, M. T. (1993), "Leadership Instability in Hospitals: The Influence of Board –CEO Relations and Organizational Growth and Decline", Administrative Science Quarterly, Vol. 38, No. 1, pp. 74-99
- Aloneftis, A. P. (1999), "The Role of Non-Executive Directors in Cyprus Public Companies and their Subsidiaries", Corporate Governance: An International Review, Vol. 7, No. 4, pp. 338-345
- Anderson, R. C. and Reeb, D. M. (2004), "Board Composition: Balancing Family Influence in S&P 500 Firms", Administrative Science Quarterly, Vol. 49, No. 2, pp. 209-237
- Ang, J. S., Colwm, R. A. and Lin, J. (1999), "Agency Costs and Ownership Structure", Journal of Finance, Vol. 55, No. 1, pp. 478-517
- Athens Stock Exchange: 125 Years (1876-2001): A Commemorative Historical Album (2001): Athens Stock Exchange Publications http://www.ase.gr/ content/gr/about/Publications/125 Years/pdf
- Bainbridge, S. M. (1993), "Independent Directors and the ALI Corporate Governance Project", George Washington Law Review, Vol. 61, pp.1034-1083
- Baliga, R. A. and Moyer, C. R. (1996), "CEO Duality and Firm Performance: What's the Fuss?", Strategic Management Journal, Vol. 17, No. 1, pp. 41-43
- Barnhart, S., Marr, M. and Rosenstein, S. (1994), "Firm Performance and Board Composition: Some New Evidence", Managerial and Decision Economics, Vol. 15, No. 4, pp. 329-40
- D. Baysinger, B. D. and Butler, H. N. (1985), "Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition". Journal of Law, Economics, and Organization, Vol. 1, No.1, pp.101-124
- Baysinger, B. D. and Hoskisson, R.E. (1990), "The Composition of Boards of Directors and Strategic Control: Effects on Corporate Strategy", Academy of Management Review, Vol. 15, No. 1, pp. 72-87
- Bazerman, M. H. and Schoorman, F. D. (1983), "A Limited Rationality Model of Interlocking Directorates: An Individual Organizational, and Societal Decision", Academy of Management Review, Vol. 8, No. 2, pp. 206-217
- Beatty, R., P. and Zajac, E., J. (1994), "Managerial Incentives, Monitoring, and Risk Bearing: A Study of Executive Compensation, Ownership, and Board Structure in Initial Public Offerings", Administrative Science Quarterly, Vol. 39, No. 2, pp. 313-336

VIRTUS NTERPRESS®

- Becht, M., Bolton, P. and Roel, A. (2002), Corporate Governance and Control, Cambridge: National Bureau of Economic Research, Inc.
- Beekun, R. and Young, G. J. (1998), "Board Characteristics, Managerial Controls and Corporate Strategy: A Study of U.S Hospitals", Journal of Management, Vol. 24, No. 1, pp. 3-19
- Berg, S. V and Smith, S. K. (1978), "CEO and Board Chairman: A Quantitative Study and Board vs. Unitary Board Leadership" Directors &Boards, Vol. 3, pp. 34-39
- Bhojraj, S. and Sengupta, P. (2003), "Effects of Corporate Governance on Bond Ratingsand Yelds: The Role of Institutional Investors and Outside Directors", Journal of Business, Vol. 76, No. 3, pp. 455-475
- Boeker, W. and Goodstein, J. (1993), "The Performance and Successor Choice: The Moderating Effects of Governance and Ownership", Academy of Management Journal, Vol. 36, No. 1, pp. 172-186
- Bonn, I., Yoskikawa, T. and Phan, P.H (2004), "Effects of Board Structure on Firm Performance between Japan and Australia, Asian Business and Management, Vol. 3, pp. 105-125
- Boyd, B. K. (1994), "Board Control and CEO Compensation", Strategic Management Journal, Vol. 15, No. 5, pp. 335-344
- Boyd, B. K. (1995), "CEO Duality and Firm Performance: A Contingency Model", Strategic Management Journal, Vol. 16, No. 5, pp. 301-312
- Brown, P.M. (1997), "The Effectiveness of UK Independent Directors", Corporate Governance: An International Review, Vol. 5, No. 4, pp. 232-235
- Byrd, J. J. and Hickman, K. A. (1992), "Do Outside Directors Monitor Manager", Journal of Financial Economics, Vol. 32, No. 2, pp. 195-221
- Cadbury, Sir A. (1992), The Financial Aspects of Corporate Governance: Report of the Committee on the Financial Aspects of Corporate Governance, Gee Publishing, London
- Cahan, S.F., Chua, F. and Nyamori, R. O. (2005), "Board Structure and Executive Compensation in the Public Sector: New Zealand Evidence", Financial Accountability and Management, Vol. 21, No. 4, pp. 437-465
- Chaganti, R.S., Mahajan, V. and Sharma, S. (1985), "Corporate Board Size, Composition and Corporate Failures in Retailing Industry" Journal of Management Studies, Vol. 22, No. 4, pp. 400-417
- Chitayat, G. (1984), Working Relationships between the Chairman of the Board of Directors and the CEO", Management International Review, Vol. 24, No. 1, pp.65-70
- Clarkson, M. B. E., (1994), A Risk Based Model of Stakeholder Theory, The Centre for Corporate Social Performance & Ethics, University of Toronto
- Committee on Corporate Governance in Greece (1999), Principles on Corporate Governance in Greece: Recommendations for its Competitive Transformation, Hellenic Capital Market Commission, Athens
- 29. Conference Board (1962), Corporate Directorship Practices, Studies in Business Policy. New York: Conference Board
- Conference Board (1967), Corporate Directorship Practices, Studies in Business Policy. New York: Conference Board
- Dahya, J., Lonie, A. A. and Power, D. M. (1996), "The Case for Separating the Roles of Chairman and CEO: An Analysis of Stock market and Accounting Data",

Corporate Governance: An International Review, Vol. 4, Vol.2, pp.71-77

- Daily, C. and Dollinger, M. J. (1992), "An Empirical Examination of Ownership Structure in Family and Professionally Managed Firms", Family Business Review, Vol. V, No. 2, pp. 117-136
- Daily, C. M. and Dalton, D. R. (1992), "The Relationship between Governance Structure and Corporate Performance in Entrepreneurial Firms", Journal of Business Venturing, Vol. 7, No. 5, pp. 375-386
- Daily, C. M. and Dalton, D. R. (1994a), "Bankruptcy and Corporate Governance: The Impact of Board Composition and Structure", Academy of Management Journal, Vol. 37, pp. 1603-1617
- Daily, C. M. and Dalton, D. R. (1994b), "Corporate Governance and Bankrupt Firm: An Empirical Assessment", Strategic Management Journal, Vol. 15, No. 8, pp. 643-654
- Daily, C. M. and Dalton, D. R. (1995), "CEO Director Turnover in Failing Firms: An Illusion of Change?", Strategic Management Journal, Vol. 16, No. 5, pp. 393-400
- Daily, C. M. and Dalton, D. R. (1997), "Separate, but not Independent: Board Leadership Structure in Large Corporations", Corporate Governance: An International Review, Vol. 5, No. 3, pp. 126-136
- Dalton, D. R. Daily, C. M., Ellstrand, A. E., Johnson, J. L. (1998), "Meta-Analytic Reviews of Board Composition, Leadership Structure, and Financial Performance", Strategic Management Journal, Vol. 19, No. 3, pp. 269-90
- Denis, D. K. and McConnell, John, J. (2003), "The International Corporate Governance", Journal of Financial and Quantitative Analysis, Vol. 38, No. 1, pp. 1-36
- Donaldson, Lex (1990), "The Ethereal Hand: Organizational Economics and Management Theory", Academy of Management, Vol. 15, No. 3, pp. 369-381
- Donalson, L. and Davis, J. H. (1991), "Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns", Australian Journal of Management, Vol. 16, pp. 49-64
- 42. Donaldson, L. and Davis, J. H. (1994), "Boards and Company Performance-Research Challenges the Conventional Wisdom", Corporate Governance: An International Review, Vol. 2, No. 3, pp. 151-160
- Evans, C.R. and Dion, K. L. (1991), "Group Cohesion and Performance: A Meta-Analysis", Small Group Research, Vol. 22, pp. 175-186
- 44. Fama, Eugene, F. (1980), "Agency Problem and the Theory of the Firm", Journal of Political Economy, Vol. 88, No.2, pp. 288- 307
- 45. Fama, E. F and Jensen, M. C. (1983) "Separation of Ownership and Control", Journal of Law and Economics, Vol. 26, pp. 301-325
- Finkelstein, S. and D'Aveni, R. (1994), "CEO Duality as a Double-Edged Sword: How Board of Directors Balance Entrenchment Avoidance and Unity of Command", Academy of Management Journal, Vol. 37, No. 5, pp. 1079-1108
- Fistenberg, P.B. and Malkier, B. G. (1994), "The 21<sup>st</sup> Century Boardroom: Who Will Be in Charge?", MIT Sloan Management Review, Vol. 36, No. 1, pp. 27-35
- Goodstein, J. Gautam, K. and Boeker, W. (1994), "The Effects of Board Size and Diversity on Strategic Change", Strategic Management Journal, Vol. 15, No. 3, pp. 241-250



- Gordon, R. A. (1945), Business Leadership in the Large Corporation. Washington, D.C.: Brooking Institutions
- 50. Greenbury, R. (1995), Directors' Remuneration: Report of a Study Group chaired by Sir Richard Greenbury, Gee Publishing, London: Gee & Company
- 51. Hampel, Sir R. (1998), Committee on Corporate Governance: Final Report. London: Gee & Company
- Harris, D. and Helfat, C. E. (1998), "CEO Duality, Succession, Capabilities and Agency Theory: Commentary and Research Agenda", Strategic Management Journal, Vol. 19, No, 9, pp.901-904
- 53. Harrison, J. R., Torres, D. L. and Kukalis, S. (1988), "The Changing of the Guard: Turnover and structural change in the top management positions", Administrative Science Quarterly, Vol. 33, No. 2, pp. 211-232.
- 54. Higgs, D. (2003), Review of the Role and Effectiveness of Non-Executive Directors, The Stationary Office, London
- Hung, H. (1998), "A Typology of the Theories of the Roles of Governing Boards", Corporate Governance: An International Review, Vol. 6, No. 2, pp. 101-111
- Iskander, M. R. and Chambou, N. (2000), Corporate Governance: A Framework for Implementation. Washington: The World Bank Group
- Jensen, M. C and Meckling, W. H (1976), "Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure", Journal of Financial Economics, Vol. 3, No.4, pp. 305-360
- Johnson, R. A, Hoskisson, R. E and Hitt, M. A (1993), "Board of Director Involvement in Restructuring: The effects of board versus managerial control and characteristics", Strategic Management Journal, Vol. 14 (special summer issue), pp. 33-50.
- Judge, William, Q. and Zeithaml, Carl, P. (1992), "Institutional and Strategic Choice Perspectives on Board Involvement in the Strategic Decision Process", Academy of Management Journal, Vol. 35, No. 4, pp. 766-794
- Kaplan, R. S. and Norton, D. P. (2000), The Strategy Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment, Harvard University Press, Cambridge
- Keasey, K., Thompson, S., and Wright, M. (Eds) (1999), Corporate Governance. 4 Volumes Cheltenham: Elgar
- Kesner, Idalene, F., Victor, Bart and Lamont, Bruce, T. (1986), "Board Composition and the Commission of Illegal Acts: An Investigation of Fortune 500 Companies", Academy of Management Journal, Vol. 29, No. 4, pp.789-799
- Kiel, Geoffrey, C. and Nicholson, Gavin, J. (2005), "Evaluating Boards and Directors", Corporate Governance: An International Review, Vol. 13, No. 5, pp. 613-631
- 64. Kosnik, R. D (1987), "Greenmail: A study of board performance in corporate governance", Administrative Science Quarterly, Vol. 32, No. 2, pp. 163-185.
- Kostyuk, A. N. (2005), "The Kostyuk Report: Corporate Board Practices in Ukraine", Corporate Board: Role, Duties & Composition, Vol. 1, No.1, pp. 18-37
- 66. Lane, Peter, J., Cannella, Albert, A. and Lubatkin, Michael, H. (1998), "Agency Problems as Antecedents to Unrelated Mergers and Diversification: Amihud and Lev Reconsidered", Strategic Management Journal, Vol. 19, No. 6, pp. 555-578

- Lavelle, L. (2002), Enron: How Governance Rules Failed, Business Week, Vol.21, No. 3766, pp. 28-29
- 68. Meigs, R. F., Bettner, M. and Whittington, R. (1998), Financial Accounting, London: McGraw Hill
- Mertzanis, H. V. (2005), "Principles of Corporate Governance in Greece", Corporate Governance: An International Review, Vol. 9, No. 2, pp. 89-100
- Mintzberg, H. (1983), Power in and around Organizations. Prentice-Hall, Englewoods Cliffs, NJ
- Molz, R. (1988), "Managerial Domination of Board of Directors and Financial Performance", Journal of Business Research, Vol. 16, pp. 235-49
- 72. Monks, R. A.G. and Minow, N. (2001), Corporate Governance, 2<sup>nd</sup> Edition, Oxford: Blackwell
- Muth, M. M. and Donaldson, L. (1998), "Stewardship Theory and Board Structure: A Contingency Approach", Corporate Governance: An International Review, Vol. 6, No.1, pp. 5-28
- OECD, (2004), OECD Principles of Corporate Governance, Business Sector Advisory Group on Corporate Ira Millstein Chairman Paris: Organization for Economic-Co-operation and Development
- O'Reilly, C., Caldwell, D. F. and Barnett, W. P. (1989), "Work Group Demography, Social Integration, and Turnover", Administrative Science Quarterly, Vol. 34, No. 1, pp. 21-37
- O'Sullivan, N. and Diacon, S.R. (1999), "Internal and External Governance Mechanisms: Evidence from the UK Insurance Industry", Corporate Governance: An International Review, Vol. 7, No. 4, pp. 363-373
- 77. O'Sullivan, N. and Wong, P. (1998), "The Impact of Board Composition and Ownership on the Nature and Outcome of UK Takeovers", Corporate Governance: An International Review, Vol. 6, No. 2, pp. 92-99
- Ocasio, W. (1994), "Political Dynamics and the Circulation of Power: CEO Succession in U.S Industrial Corporations, 1960-1990", Administrative Science Quarterly, Vol. 39, No. 2, pp. 285-312
- 79. Parker, A. (2005), "The Man Who Put Auditing First Accounting Regulation: William McDonough, Outgoing Chairman of the Watchdog Set Up in the Aftermath of the U.S Corporate Scandals", Financial Times, December 1, 2005, Thursday, No. 1053, p. 17
- Petra, S. T. (2005), "Do Outside Independent Directors Strengthen Corporate Boards", Corporate Governance: An International Review, Vol. 5, No. 1, pp. 55-64
- Pearce, J. A. and Zahra, S. A. (1991), "The Relative Power of CEOs and Board of Directors: Associations with Corporate Performance", Strategic Management Journal, Vol. 12, No. 2, pp. 135-153
- Pearce, J. A. and Zahra, S. (1992), "Board Composition from Strategic Contingency Perspective", Journal of Management Studies, Vol. 29, No. 4, pp. 411-438
- Phan, P. H., Lee, S. H. and Lau, S C. (2003), "The Performance of Interlocking Directorates: The Case of Singapore", Journal of Managerial Issues, Vol. XV, No. 3, pp. 338-352
- Pfeffer, J. (1972), "Size and Composition of Corporate Boards of Directors: The Organisation and its Environment", Administrative Science Quarterly, Vol. 17, No. 2, pp. 349-364
- Pfeffer, J. (1973), "Size, Composition and Function on Hospital Board of Directors: A study of Organization-Environmental Linkage" Administrative Science Quarterly, Vol. 18, No. 3, pp. 349-356

VIRTUS NTERPRESS®

- Pfeffer, J. and Salancik, G.R. (1978), The External Control of Organizations: A Resource Dependence Perspective. New York: Harper & Row
- Pi, L. and Timme, S. G. (1993), "Corporate Control and Bank and Bank Efficiency", Journal of Banking and Finance, Vol. 17, No. 2/3, pp. 515-530
- Rechner, P. L. and Dalton, D. R. (1989), The Impact of CEOs as Board Chairperson on Corporate Performance: Evidence vs. Rhetoric", Academy of Management Executive, Vol. 3, No. 2, pp. 141-143.
- Rechner, P.L. and Dalton, D.R. (1991), "CEO Duality and Organizational Performance: A longitudinal analysis", Strategic Management Journal, Vol. 12, No. 2, pp.155-160
- Rose, C. (2005), "The Composition of Semi-Two-Tier Corporate Boards and Firm Performance", Corporate Governance: An International Review, Vol. 13, No. 5, pp. 691-701
- Rosenstein, S. and Wyatt, J. (1990), "Outside Directors, Board Independence and Shareholder Wealth", Journal of Financial Economics, Vol.26, No. 2, pp.175-192
- Salmon, W. (1993), "Crisis Prevention: How to Gear up your Board", Harvard Business Review, Vol. 71, No. 1, pp. 68-76
- Sarbanes-Oxley Act (2002), One Hundred Seventh Congress of the United States of America, Washington D.C
- Schellenger, M., Wood, D. and Tashakori, A. (1989), "Board of Directors Composition, Shareholder Wealth and Dividend Policy", Journal of Management, Vol. 15, No. 3, pp. 457-67
- Scott, W. R. (2003), Organizations: Rational, Natural, and Open Systems (5<sup>th</sup> edirion), Englewood Cliffs, N. J.: Prentice Hall
- Sighn, H. and Harianto, F. (1989), "Management Board Relationships, Takeover Risk, and the Adoption of Golden Parachutes", Academy of Management Journal, Vol. 32, No. 1, pp. 7-24
- Stearns, L. B. and Mizruchi, M., S. (1993), "Board Composition and Corporate Financing: The Impact of Financial Institution Representation on Borrowing",

Academy of Management Journal, Vol. 36, No. 3, pp. 603-618

- Sundaramurthy, C., Mahoney, J.M. and Mahoney, J.T. (1997), "Board Structure, Antitakeover Provisions, and Stakeholder Wealth", Strategic Management Journal, Vol. 18, No. 3, pp. 231-245
- Sussland, W.A. (2005), "The Board of Directors: A Referee or a Coach?", Corporate Governance: An International Journal of Business in Society, Vol. 5, No. 1, pp. 65-72
- 100. Tsipouri, L. and Xanthakis, M. (2004), "Can Corporate Governance be Rated? Ideas Based on the Greek Experience", Corporate Governance: An International Review, Vol.12, No.1, pp.16-28
- 101. Turnbull, S. (1999), Internal Control: Guidance for Directors on the Combined Code. Institute of Chartered Accountants in England and Wales
- 102. Useem, M (1984), "Corporate Social and Political Action", California Management Review, Vol. 26, No. 2, pp. 141-154
- 103. Wan, D. and Ong, C.H. (2005), "Board Structure, Process and Performance: Evidence from Public-Listed Companies in Singapore", Corporate Governance: An International Review, Vol. 13, No. 2, pp. 277-290
- 104. Weir, C. and Laing, D. (2001), "Governance Structures, Director Independence and Corporate Performance in the U.K", European Business Review, Vol. 13, No. 2, pp. 86-94
- Williamson, O. (1984), "Corporate Governance", Yale Law Journal, Vol. 93, pp. 1197-1229
- 106. Worrell, D. I., Nemee, C. and Davidson, W. N. (1997), "One Hat too Many: Key Executive Plurality and Shareholder Wealth", Strategic Management Journal, Vol. 18, No. 6, pp. 499-507
- 107. Yermack, D. (1996), "Higher Market Valuation of Companies with a Small Board of Directors", Journal of Financial Economics, Vol. 40, No. 2, pp. 185-211
- 108. Zahra, S. A. and Pearce, J. A. (1989), "Board of Directors and Corporate Financial Performance: A Review and Integration Model", Journal of Management, Vol. 15, No. 2, pp. 291-344

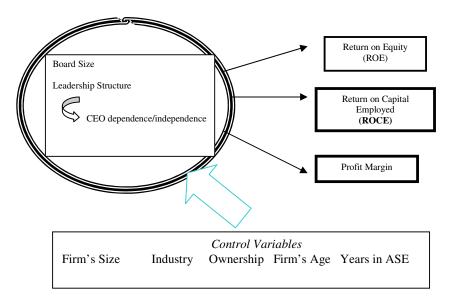
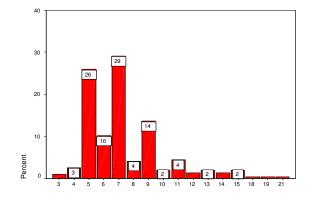


Figure 1. The Research Model

VIRTUS

Industry Sectors	Number of Sales for the Year 2001		
Primary Production	€52,927,552		
Manufacturing Industries	€3,785,799,221		
Public Services	€46,743,980		
Retailers	€1,315,718,522		
Hotels-Restaurants	€26,702,700		
Transport and Communication	€1,157,506,074		
Financial-Accounting Services	€3,369,079,396		
Real Estate and Commerce Activities	€110,035,205		
Health and Social Care	€36,519,585		
General Services	€438,141,806		
Constructions	€353,002,537		
Transitional Category	€84,831,388		



**Diagram 1.** Board Size (N=316,  $\bar{x}$  =7.35, SD= 2.68)

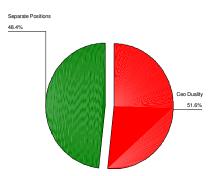


Diagram 2. CEO Duality (N=316)

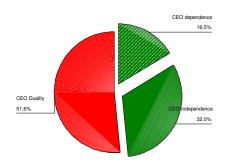
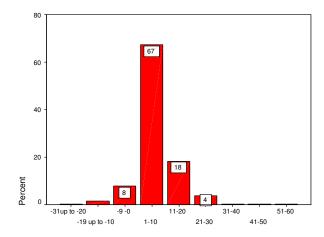
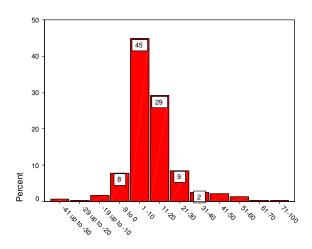


Diagram 3. CEO Dependence/Independence (N=316)

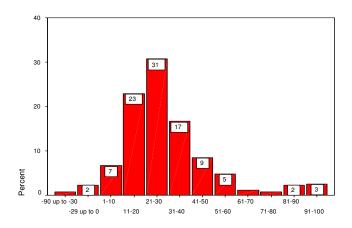
VIRTUS



**Diagram 4.** Performance Measurements-ROCE (Return on Capital Employed) (N=316, x = 7.34, SD=7.9)

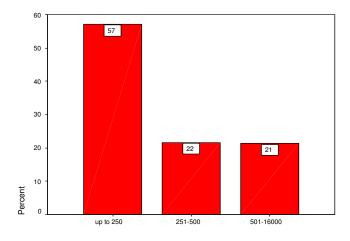


**Diagram 5.** Performance Measurements-ROE (Return on Equity) (N=316,  $\bar{x}$ =11.64, SD=15.33)



**Diagram 6.** Performance Measurements-Profit Margin (N=301, *x*=29.64, SD=21.77)





**Diagram 7.** Organisational Size (N=306, x = 541, SD=1275)

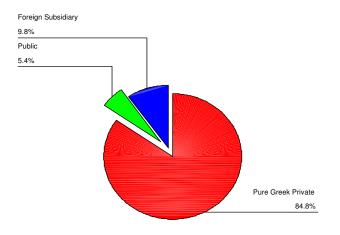


Diagram 8. Ownership (N=316)

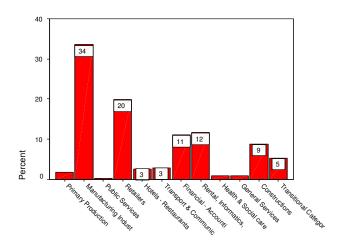
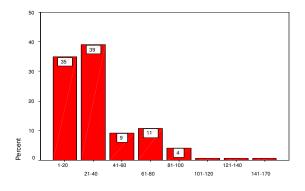
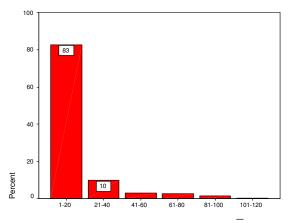


Diagram 9. Industry (N=316)





**Diagram 10.** Organisational Age (N=315, *x* =33.92, SD=25.96)



**Diagram 11.** Number of Years listed in the ASE (N=307, x = 13.10, SD=18.25)

Table 2. Correlation Matrix for Corporate Governance Characteristics and Organisational Performance

Independent	Board Size	CEO Duality	CEO Dependence/ Independence
Return on Capital Employed (ROCE)	051	.009	021
Return on Equity (ROE)	.075 <sup>1</sup>	.036	.029
Profit Margin	025	.015	.025

\*Correlation is significant at the 0.05 level

\*\*Correlations is significant at the 0.01 level

<sup>1</sup>Correlation at .124<sup>\*</sup> Spearman's Analysis

Measurements:

Board Size: "0" for small (1-10 board members), "1" for large (11-21 board members)

CEO Duality: "0" for joint leadership structure, "1" for separate leadership structure

CEO/Chairman dependence/independence:

"0" for CEO duality

"1" for CEO/Chairman separate but affiliated,

"2" for CEO/Chairman separate and independent

VIRTUS NTERPRESS®