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CONTRIBUTIONS TO BOOKS

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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

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CORPORATE GOVERNANCE AND PERFORMANCE: THE RELATIONSHIP BETWEEN BOARD CHARACTERISTICS AND FINANCIAL PERFORMANCE AMONG COMPANIES LISTED ON THE NAIROBI SECURITIES EXCHANGE

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ABSTRACT

This study sought to investigate the relationship between board characteristics and financial performance for the companies listed at the Nairobi securities Exchange (NSE). Financial performance was measured by Tobin's Q, ROE, EPS, and DPS while the Board Characteristics considered were board independence (i.e. outsider dominated boards), board quality (i.e. board expertise and educational background) and the board diversity (i.e. the ethnic/racial, gender and age balance.) The data was analyzed using correlation and regression analysis to determine the level and type of association between the firms performance measures and the various corporate governance variables. The findings showed that only Board independence (BI) and Gender diversity had an effect on firms' performances. Board independence had a negative correlation with ROE in the agricultural sector, while gender balance had a positive correlation with DPS and EPS for companies in the commercial and industrial sectors. Board quality had no significant impact on any of the performance variables.

KEYWORDS

Corporate Governance, board characteristics, corporate performance, Tobin Q and regression analysis.

INTRODUCTION

Corporate governance refers to the establishment of an appropriate legal, economic and institutional environment that allows companies to thrive as institutions for advancing long-term shareholder value and maximum human-centered development while remaining conscious of their other responsibilities to stakeholders, the environment and the society in general. The recent financial scandals, especially in the US (Enron, Tyco, WorldCom, etc.) as well as other parts of the world e.g. Parmalat in Europe, and Satyam in India have all revealed how the presence of insufficient monitoring of management may lead to substantial loss for society. In response to this need for more effective monitoring of corporate management, many governments have put in place institutional and legal structures to regulate the governance of public companies. (Finegold et al, 2003).

The Kenyan government, likewise, instituted the Capital Markets Authority (CMA) in August 2000 as part of its institutional and legal framework in regulating the governance of public companies. In May 2002, in consultations with the various stakeholders like the Nairobi Securities Exchange, the listed companies and the Private Sector Corporate Governance Trust, the authority issued guidelines on Corporate Governance Practices by public listed companies in Kenya in order to enhance corporate governance practices by such companies (Kenya Gazette, 2002). Shortly before that, the Private Sector Corporate Governance Trust had also issued a code of best practice for corporate governance in Kenya. This code and the issued guidelines were expected to be complementary as stated by CMA in the gazette notice. While the corporate boards are expected to establish relevant committees including the audit committees and receive a competitive remuneration package which should be linked to performance, there should be more disclosures on their remunerations and no director should hold directorship in more than 5 listed companies, also there must be a clear separation of the role and responsibilities of the chairman and the chief executive. They also require that the board composition should be balanced, that is, the board should have at least one third of independent and non-executive directors with diverse skills and expertise. Independence requires that the individuals have "no material relationship with the company" – that is, they are not recent employees, family members nor part of interlocking directorship. These guidelines are very similar to those in the developed world especially in the UK and the USA i.e. NYSE and NASDAQ Listing Rules (NASDAQ, 2009).

The essence of having a board of directors is meant to ensure that shareholders interest is taken care of and guarded against the possible malfeasance and opportunism by the appointed agents or managers through effective monitoring mechanisms. This is often referred to as the agency problem and has led to the formulation of a number of rules and policies touching on the composition of the board of directors. It is not clear, however, whether these rules have served to advance the shareholders' interest. Recent theoretical and empirical literature on board composition and performance give mixed results on the relationship between these guidelines and firm performance (Finegold, et al., 2007). An approach that emphasizes the performance value of the board is, therefore, necessary and as new practices and structures are introduced and the composition of boards change as a result of reforms or other forces affecting boards, it is important to test whether these have an impact on firm performance. This would help to re-structure or re-align the policies, standards and other frameworks so as to achieve not only effective monitoring but also optimal performance. This study, therefore, sought to establish the relationship between the board characteristics (as largely recommended by the Capital Markets Authority and elsewhere) and the firm's financial performance, among companies listed on the Nairobi Securities Exchange.

The purpose of this study was to determine the relationship between corporate governance, as indicated by the board composition and/or characteristics and firm's financial performance. To achieve this, the study sought to establish the relationship between firms' board independence, quality, and diversity, and their impact on financial performance among companies listed on the Nairobi Stock Exchange.

THE MODEL SPECIFICATION

Company Performance (P) = f(Firm size, Debt ratio, Growth, board independence, board quality and board diversity) + ϵ ; Where P is performance represented by: (i) Tobin's Q (Q), (ii) Return on Equity (ROE), (iii) Earnings Per Share (EPS) or (iv) Dividends Per Share (DPS)

This was further expanded into four equations as shown below:

$$Q = \alpha + \beta_1 \text{FSIZE} + \beta_2 \text{DEBT} + \beta_3 \text{GR} + \beta_4 \text{BI} + \beta_5 \text{BQ} + \beta_6 \text{BD} + \epsilon \dots\dots 1$$

$$\text{ROE} = \alpha + \beta_1 \text{FSIZE} + \beta_2 \text{DEBT} + \beta_3 \text{GR} + \beta_4 \text{BI} + \beta_5 \text{BQ} + \beta_6 \text{BD} + \epsilon \dots\dots 2$$

$$\text{EPS} = \alpha + \beta_1 \text{FSIZE} + \beta_2 \text{DEBT} + \beta_3 \text{GR} + \beta_4 \text{BI} + \beta_5 \text{BQ} + \beta_6 \text{BD} + \epsilon \dots\dots 3$$

$$\text{DPS} = \alpha + \beta_1 \text{FSIZE} + \beta_2 \text{DEBT} + \beta_3 \text{GR} + \beta_4 \text{BI} + \beta_5 \text{BQ} + \beta_6 \text{BD} + \epsilon \dots\dots 4$$

Where Q, ROE, EPS and DPS represent the various performance variables, α represents the intercept, β the regression coefficients, and ϵ the error term. The Corporate Governance variables were represented by BI, BQ and BD and are specified as: Board Independence (BI), which was calculated as the percentage of outside directors on the board as is the practice (Hsueh-En, 2010), Board quality (BQ) was calculated as the percentage of directors who had been consultants in any law or financial firm, who were affiliated with any financial institution for at least five years, or had an MBA degree (Hsue-En 2010), Board Diversity (BD), was determined through the representation of ethnic, gender and age differences of boards of directors. The level of diversity for each of the three areas was determined through ratios. That is, the gender ratio (level of dominance of one gender over another), the ethnicity ratio (the level of dominance by one ethnic group or race) and the age disparity (level of dominance by one age set. Two age sets were defined as those below 40 years and those above 40 years) were calculated for each firm.

The dependent variables were the various company performance metrics, i.e. Tobin's Q, Return on Equity (ROE), Earnings per Share (EPS) and Dividends per Share (DPS) and were computed as: Tobin's Q as the sum of the market value of equity, the book value of preferred stock and the book value of total debt divided by the book value of the firm's assets. (Hsueh-En, 2010), Return on Equity (ROE) was calculated by dividing the earnings before extraordinary income and preferred dividend in a financial year t by the average of book values of common equity at the beginning and at the end of financial year t (Haslam, et al 2010), Earnings per Share (EPS) was calculated as the net profit or loss, less preference share dividends, divided by the weighted average number of shares outstanding during a period. In most cases, the figures were taken as presented in the final audited financial statements. Dividends per Share (DPS) was calculated by dividing the annual dividends paid by the number of shares outstanding. Also like EPS, most of the figures were taken as presented in the final audited financial statements. The control variables considered for their theoretical validity included: FSIZE, given as the natural logarithm of total assets and was included as a proxy for the size of the firm effect; DEBT, given as the ratio of total debt to total assets; Growth (GR), given as the growth of the net income being a proxy of the growth of the firm effect

LITERATURE REVIEW

A number of theories have influenced and shaped the corporate governance concept as we know it today. These are mainly: the agency theory, stakeholder theory, stewardship theory, resource dependency theory, transactions cost theory and the political theory. A number of ethics related theories have also had significant influence on corporate governance. In reviewing the literature, these together with the research theme, formed the basis.

In Agency theory, shareholders who are the owners or principals of the company, hires the agents to perform work. Principals delegate the running of business to the directors or managers, who are the shareholder's agents (Clarke, 2004). In the agency theory, shareholders expect the agents to act and make decisions in the principal's interest. On the contrary, the agent may not necessarily make decisions in the best interests of the principals. Such a problem was first highlighted by Adam Smith in the 18th century and subsequently explored by Ross while the first detailed description of agency theory was presented by Jensen and Meckling in 1976 (Abdullah & Valentine, 2009). The agent may succumbed to "self-interest, opportunistic behavior and falling short of congruence between the aspirations of the principal and the agent's pursuits" (Abdullah et al., p.89). Given that the managers may not act to maximize the returns to shareholders, it follows therefore, that the appropriate governance structures need to be implemented to safeguard the interests of shareholders. The board of directors is therefore constituted to ameliorate the risk or cost of agency (Finegold et al. (2007). The appointment of outside directors is to ensure objectivity to other internal directors' decisions.

Stakeholder theory was embedded in the management discipline in 1970 and gradually developed by Freeman in 1984 incorporating corporate accountability to a broad range of stakeholders (Abdullah et al. 2009). Wheeler, Colbert, & Freeman (2003) argued that stakeholder theory derived from a combination of the sociological and organizational disciplines. Indeed, stakeholder theory is less of a formal unified theory and more of a broad research tradition, incorporating philosophy, ethics, political theory, economics, law and organizational science. Stakeholder theorists suggest that managers in organizations have a network of relationships to serve. This network includes the suppliers, employees, business partners, customers and the community and it is argued that this group of network is more important than the owner-manager-employee relationship in agency theory (Addullah et al 2009). Stakeholder theorists suggest that the firm is a system, where there are stakeholders and the purpose of the organization is to create wealth for its stakeholders.

The theory posits that the boards of directors for corporations should be constituted in such a manner that all the stakeholders are taken care of. In many countries therefore, especially in Europe and Asia, stakeholder models of governance, which emphasize the board's role in representing employee and community interests as well as those of owners, are common (Yoshimor, 2005).

Stewardship theory has its roots from psychology and sociology and was illustrated by Davis, Schoorman, & Donaldson (1997) thus: "...as a steward protects and maximizes shareholders wealth through firm performance, because by so doing, the steward's utility functions are maximized" (Abdullah et al., 2009. P. 90). The stewardship perspective suggests that stewards are satisfied and motivated when organizational success is attained. Stewardship theory recognizes the importance of structures that empower the steward and offers maximum autonomy built on trust. It stresses on the position of employees or executives to act more autonomously so that the shareholders' returns are maximized. In this sense, it is believed that the firm's performance can directly impact perceptions of their individual performance. Stewardship theory suggests unifying the role of the CEO and the chairman so as to reduce agency costs and to have greater role as stewards in the organization.

The stewardship theory suggests that managers will be self-motivated to act in the best interest of the shareholders and therefore, when appropriately empowered would give better returns to the shareholders without any need for monitoring or further incentives. To this end therefore, the theory posits that more inside directors would yield better returns to the shareholders. While the theory has acquired a lot of credence in light of the recent research findings, it fails, however, to provide solutions to the increasing corporate scandals across the world which seems to suggest a need for increased management monitoring.

Resource dependency theory concentrates on the role of board directors in providing access to resources needed by the firm (Hillman, et al. 2000). Resource dependency theory focuses on the role that directors play in providing or securing essential resources to an organization through their linkages to the external environment. Indeed, it has been argued that the provision of resources enhances organizational functioning, firm's performance and its survival (Daily et al., 2003). According to Hillman, et al. (2000), directors bring resources to the firm, such as information, skills, access to key constituents such as suppliers, buyers, public policy makers, social groups as well as legitimacy. Directors can, therefore, be classified into four categories of insiders, business experts, support specialists and community influential.

The resource dependency theory argues that a firm requires diverse board members with diverse skills and backgrounds to help maximize the shareholders' value. This is because, the diversity is expected to help the firm tap on resources affiliated with the board members. Such resources may include: expanded market constituency, business and legal expertise or political patronage.

The human capital theory dates back to the work of Becker in 1964 that addressed the role of a person's stock of education, experience, and skills that can be used to the benefit of an organization. Human capital theory is concerned with how an individual's investments in education, knowledge, skills and experiences enhance cognitive and productive capabilities for the benefit of the individual and the firm. Just as with financial capital, investments in human capital produce rents for the individual, often in the form of higher and sustained pay levels and promotion. The rents are cumulative, so that by the time an individual seeks a

boardroom appointment, he or she will usually have acquired substantial human capital over a number of years (Singh, et al., 2008). Hillman et al. (2000) for example, discussed taxonomy of director roles (insiders, business experts, support specialists and community influentials) as human capital resources. Human capital investment in education, especially advanced education, reputational capital and international experience are starting points for development of independent thinking, a key feature of role requirements for non-executive directors, as noted by Roberts et al. (2005). Hillman et al. (2002) argues that minority groups could gain public and objective credentials through education, particularly postgraduate qualifications, thereby leveling the playing field and compensating for the effects of any discrimination and subjective bias in selection and promotion. Educational qualifications are valued by the public and employers can then benefit from the expertise and credibility of the educational human capital of their staff and directors (Singh, et al. 2008).

Transaction cost theory was first initiated in 1963 by Cyert and March and later theoretically described and exposed by Williamson (1996). He argued that firms and markets are alternative modes of governance and the allocation of activity between firms and markets is not taken as given but is something to be derived (Williamson, 1996, p. 7). Accordingly, governance regimes consist of both formal and informal structures and rules. Corporate governance problem of transaction-cost economics is, therefore, not the protection of ownership rights of shareholders but rather the effective and efficient accomplishment of transactions by firms in their cultural and political environment (Williamson, 1996, pp. 322-324), and laws and contracts are considered governance structures. The theory focuses on debt and equity financing structures. The key elements of Williamson's Transactional Cost theory are four: bilateral dependency, a governance structure with a safeguard in the form of a board of directors, the institutional environment and opportunism (Saravia & Chen, 2008). These as discussed by Saravia, & Chen (2008) are summarized as; the bilateral dependency (i.e. lack of autonomy), opportunism, and institutional environment. The main concern of transaction cost theory is "to explain the carrying out of economic transactions by the efficiency of the chosen governance structures that have been tailored to carry out the transactions at hand" (Wieland, 2005). The gist of the transactional theory, therefore, as far as board composition is concerned is that the governance structure (board organization and management relationship) is a safeguard against opportunism of either the management or the shareholders and is meant to increase bilateral dependency and good firm-level corporate governance. It follows, therefore, that the board composition should be fairly representative of both parties giving credence to a good balance between the inside and outside directors. The theory gives a more realistic analysis of the agency conflict when it comes to the control of firm resources. It recognizes that the shareholders may also exercise opportunism and that a good corporate governance structure may also serve to protect the managers as well. It fails, however, to note that there may be other factors such as political considerations and the environment, other than financial resources that would be of interest to the shareholders.

Political theory brings the approach of developing voting support from shareholders, rather by purchasing voting power. The political model argues that the allocation of corporate power, profits and privileges are determined via the governments' favor. The political model of corporate governance can have an immense influence on governance developments. Political model focuses on contemporary issues such as: The tendency for market liquidity over institutional control, the trading off investor voice to investment exit, and institutional agents monitoring corporate agent, i.e. watching the watchers (Turnbull, 1979). All these issues are influenced by government laws and regulations and so subject of public policy debate for changes and reform. One major challenge arising from the above contemporary issues in Political theory in corporate governance is universal share ownership. A universal owner is an institution which effectively owns a small proportion of the entire economy. This raises the problem of the same owners participating in the governance of competing firms. It also raises the possibility that universal owners may seek to maximize profits in their corporations through transferring the costs of maintaining the environment, education and health care to the taxpayers whom they also represent.

Political model of corporate governance would promote more inside members (employees) as well as a number of well diversified team representing various stakeholders and constituencies. The model promotes more diversity and insider representation at the board to help take care of the universal ownership problem.

Ethics theory explains the situations in which firms may make goals achievement as their priority, foregoing or having a minimal focus on values, hence having a long term detrimental effect. (Abdullah et al., 2009). The ethics theories, seeks to promote fairness and morality in the business processes including the board composition. The theories seem to suggest a board that is well balanced in terms of gender, ethnicity or race, and other interest groups and that would in turn promote peaceful settlement of arising conflicts.

Rose (2005) undertook an empirical analysis to investigate among other issues the effect of larger supervisory boards on financial performance as measured by Tobin's Q on the semi-two-tier boards using a sample of Danish listed firms at the Copenhagen Stock Exchange between 1998 and 2001. The correlational and regression analyses showed that the supervisory board size of semi-two-tier corporate boards did not have any significant impact on performance in any of the estimated equations although the sign of the co-efficient was negative. Rose (2005) argued that the board tier structure only plays crucial role when a firm is in financial trouble or faces a major threat – not under normal circumstances.

Kiel & Nicholson (2003) sought to investigate among other corporate governance issues if firms with a separate chairman and CEO would be uncorrelated with firm performance in Australia. Data were collected on the top 500 companies (as measured by market capitalization) trading on the Australian Stock Exchange Limited (ASX) in 1996. The simple correlation results showed that the hypothesis that the presence of CEO duality would not be correlated with firm performance was not supported for the market-based measure only. However, it was supported when controlling for covariates using both market-based and accounting based measures of performance in the regression analysis (i.e. there was no significant correlation).

The many empirical studies that have examined the impact of the insider-outsider ratio on boards have found no consistent evidence to suggest that increasing the percentage of outsiders on the board will enhance performance. If anything, they suggest that pushing too far to remove inside and affiliated directors may harm firm performance by depriving boards of the valuable firm and industry-specific knowledge they provide (Finegold et al., 2007, Christensen, et al., 2010 and Kaymak & Bektas, 2008,) they conclude that having outside independent directors has a negative impact on ROA and Tobin's Q.

A few studies, however, identified a positive relationship between the percentage of outside directors and firm performance. Schellenger et.al. (1989) showed higher percentages of outside directors associated with increased financial performance. Daily and Dalton (1992), using a sample of 100 fast-growing entrepreneurial firms in the USA showed that the proportion of independent directors were associated with better performance.

Finegold et al. (2007) observed that a meta-analysis of 27 studies that featured a board size variable found out that having more directors was associated with higher levels of firm financial performance. This result held true for firms of all sizes, but the effect of board size on performance was greater for smaller firms.

Other studies, however, like (de Andres, Azofra, & Lopez, 2005) gave a negative relationship. The study analyzed the effect of the size of the board, its composition and internal functioning on firm value in a sample of 450 non-financial companies from ten countries in Western Europe and North America: Belgium, Canada, France, Germany, Holland, Italy, Spain, Switzerland, the UK and the USA. This is consistent with another study by Christensen, et al (2010) that analysed all Australian publicly and found that board size measured by the number of directors had significant positive effect on adjusted ROA, also a significant positive relationship was observed between board size and adjusted Tobin's Q while the relation between board size and adjusted average Tobin's Q was not significant.

Studying a large sample of firms in the relatively weak governance environment that existed in South Korea before the Asian financial crisis, Joh, (2003), found less concentrated board ownership was associated with lower profitability. Hovey et al. (2007) investigated the relationship between firm performance and corporate governance in China where Firm performance was measured by Tobin's Q, while corporate governance was determined based on ownership structure and concentration. The study found that ownership concentration had little explanatory power but ownership structure did matter. Legal person's shareholdings were positively related to firm valuation.

Fernandes (2008) examined the relationship between board compensation and firm performance with emphasis on the role of independent board members. The study reported the results of pooled time-series cross-sectional regressions of the level of compensation on stock market performance. The dependent variables were the annual total board compensation, the fixed salary of all board members, the variable component of compensation and the per-capita average compensation of board members. The elasticity of salary and bonus with respect to changes in firm value was about 0.06, and insignificantly different from 0. The coefficients on performance were always insignificant, whether the total, fixed or variable compensation, the results suggested that board compensation was not significantly related to firm performance.

Cheemmanur & Paeglis (2005) showed that higher quality management passes on the true value of the firm to investors and reduce information asymmetry. He used data based on the collection of information from U.S. IPO firms from 2000 to 2002 to establish the relationship between board characteristics one of which being board quality, and post-IPO financial performance. The regression results showed that the relationship between board quality and post-IPO performance was significantly positive ($t=4.298$, $p<0.01$). The results seemed to concur with that of Erickson *et al.* (2005), who found an association between financial directors and firm performance.

Directors' expertise was also found to have certain effects on firm value (Hillman, *et al.* 2000). They found that firms interlocking with financial institutions were positively related to financial performance. Erickson, Park, Reising and Shin (2005) found that bank directors with financial and accounting knowledge tended to monitor managers more effectively.

Haslam *et al.* (2010) used gender when they investigated the relationship between women's presence on company boards and objective and subjective measures of company performance based on an examination of annual records for all FTSE 100 companies between 2001 and 2005. Their results showed no relationship between the presence or the percentage of women on company boards and either ROA or ROE while Tobin's Q was observed to be marginally affected.

Erhardt *et al.* (2003) used gender and ethnicity in their study to examine the relationship between demographic diversity on boards of directors with firm financial performance. The results showed that ROI was positively correlated with board diversity while ROA was only marginally correlated with board diversity. Board Diversity was also correlated with industry, with service sector being more diverse than production. The hierarchical regression analysis also showed that both ROI and ROA had significant impact at time 2 when controlling at time 1. The results thus supported the hypothesis stating that executive board of director diversity was positively associated with both return on investment and return on assets, thus, diversity with boards of directors appeared to have an impact on overall organizational performance. The results also demonstrated that gender diversity played a role in organization's level of social performance.

PRESENTATION OF FINDINGS, ANALYSIS AND INTERPRETATION

THE BOARD CHARACTERISTICS

TABLE 4.1: BOARD CHARACTERISTICS (%)

	All sectors	Agricultural	Commercial	Financial	Industrial
Independence	74.37(16.67)	83.68(13.29)	73.56(12.49)	75.03(17.24)	71.13(19.18)
Quality	34.58(24.95)	14.67(20.22)	37.81(32.41)	42.80(24.61)	32.24(20.05)
Ethnic diversity	52.85(15.70)	40.70(12.59)	61.81(11.47)	49.38(17.57)	55.13(14.58)
Age diversity	44.82(30.28)	62.22(51.83)	54.70(38.24)	39.67(21.21)	38.21(22.31)
Gender diversity	9.49(10.03)	4.44(10.30)	3.3(4.91)	13.16(9.56)	11.29(10.90)

NB. () shows standard deviation.

BOARD INDEPENDENCE

The average level of independence for the years 2006 to 2010 for all the companies listed at the Nairobi Securities Exchange was found to be 74.37% meaning that generally, about three quarters of the directors were outsiders. On a sector by sector basis, however, the Agricultural sector was found to be the most independent at 83.68% while the industrial sector was found to be the least independent at 71.13%. The distribution was quite wide, ranging from 22.22% to 100% meaning that some companies had an average of only one fifth of their directors from outside while others had all their directors from outside. It follows therefore that not all companies listed at the Exchange had complied with the CMA guideline on board membership which required the boards to have at least one third of independent and non-executive directors (table 4.1).

BOARD QUALITY

The average level of Board quality for the years 2006 to 2010 was found to be 34.53% meaning that generally, just about a third of all the directors for companies listed at the NSE met the study's threshold of quality which was either an experience with a law or financial firm, or an MBA degree. On a sector by sector basis, however, the financial sector was found to be the one with the most qualified boards at 42.80% probably due to the fact that financial businesses are very analytical in nature, while the agricultural sector had the least qualified boards at 14.67%. The distribution was such that some companies especially in the financial sector had as high as 76.67% level of quality while others, in all the respective sectors had no single director with financial or law experience or an MBA degree (table 4.1).

BOARD DIVERSITY

The study examined three observable (demographic) aspects of diversity. These were ethnicity, age and gender. Diversity was calculated by first identifying the dominant group (whether ethnic, age or gender) then determining the number of directors not belonging to this group which was referred to as the non-dominant group. The percentage number of this non-dominant group was then calculated as the level of diversity.

ETHNIC BOARD DIVERSITY

For the years 2006 to 2010, the average level of Board ethnic diversity for all the NSE companies was found to be 52.85% meaning that generally, a few dominant ethnic groups occupied about half of the company boards. The commercial sector was the most ethnically diversified at 61.81% while the agricultural sector was the least. Even though the financial sector was fairly diversified at 49.38% it also had some of its companies as the least diversified with one ethnic group forming about 90% of the board membership (10.67% diversity).

AGE BOARD DIVERSITY

For the years 2006 to 2010, the average level of Board age diversity for all the NSE companies was found to be 44.82% meaning that the boards were fairly balanced between the old (above 40 years of age) and the young. The dominant group tended to be of those with over 40 years of age with Agricultural sector being the least diversified as some of its companies had all its directors aged 40 years and above (table 4.1).

GENDER BOARD DIVERSITY

For the years 2006 to 2010, the average level of Board gender diversity for all the NSE companies were found to be 9.49% with men being the dominant gender. This means that on average women formed less than 10% of all the board memberships and in many companies there was no woman on the board while the best ever scenario had women forming 42.68% of the membership. Commercial sector was the least gender balanced where the non-dominant gender constituted only 3.30% while the financial sector was the most balanced with non-dominant gender at 13.16% (table 4.1).

BOARD INDEPENDENCE AND FINANCIAL PERFORMANCE

The study examined bivariate correlations to determine if there were any relationships between board independence and either accountancy based (ROE, EPS and DPS) or stock based (Tobin's Q) measures using the Pearson correlation. Stepwise multiple linear regression models were fitted to determine the direction and magnitude of the association between board independence and the company performance measures and the model of best fit was chosen.

No significant relationship was observed between board independence and the stock-based performance measure (Tobin's Q). This was true for all sectors considered as well as for the full list of companies. However, Return on Equity (ROE) was found to be negatively correlated with board independence in the agricultural sector (Correlation coefficient= -0.93, p -value=0.022.) Regression analysis results showed that Board Independence had significant impact on ROE in the Agricultural sector (p -value=0.0154) (Table 4.2). This was consistent with the previous studies like Finegold *et al.* (2007) who observed that pushing too far to remove inside and affiliated directors may harm firm performance by depriving boards of the valuable firm and industry-specific knowledge they provide. A similar study in Australia (Christensen, *et al.*, 2010) also suggested that having outside independent directors had a negative impact on ROA and Tobin's Q. While this study noted board independence impact on ROE only, but not on stock based (Tobin's Q) measures of performance, it is apparent that board independence tend to have a negative impact on firm performance.

TABLE 4.2: REGRESSION RESULTS FOR Q AND ROE IN THE AGRICULTURAL SECTOR

Variables	Q(p-value)	ROE (p-value)
<i>Intercept</i>	3038.96(0.057)	1.43(0.0265)
$\beta_1(Fsize)$	-249.17(0.013)	0.02(0.1104)
$\beta_4(BI)$	-	-0.02(0.0154)
$\beta_5(BQ)$	24.58(0.1382)	-
$\beta_6(BD - Ethnicity)$	-	-
$\beta_7(BD - Gender)$	-	0.01(0.029)
$\beta_8(BD - Age)$	6.32(0.2066)	-
<i>P(Value)</i>	0.0145	0.022
<i>F(Value)</i>	2559.57	0.0094
<i>R2</i>	0.9999	0.9997
<i>Adjusted R2</i>	0.9995 ⁺	0.9989 ⁺

*The Q model explains almost 100% variation in Q but only Fsize is significant

+The ROE model explains almost 100% variation in ROE and only gender and BI are significant

Board independence, however, had a positive impact on DPS in the commercial sector but only when combined with gender (where 93% of DPS could be explained by BI and Gender together) meaning that whenever there were women in the board, the more they were from outside the higher the DPS would be for the commercial sector (Table 4.3.) This is probably because most outside directors would also be shareholders and therefore could be seeking for more personal income.

TABLE 4.3: REGRESSION RESULTS FOR Q, ROE, EPS AND DPS IN THE COMMERCIAL SECTOR

Variables	Q ₁ (P-value)	Q ₂ (P-value)	ROE(p-Value)	EPS(p-value)	DPS ₁ (p-Value)	DPS ₂ (p-value)
<i>Intercept</i>	1402.58 (0.28)	666.78(0.0278)	0.23(0.45)	-9.84(0.42)	-12.40(0.07)	-9.54(0.0013)
$\beta_2(Debt)$	-2647.07 (0.14)	-	-0.12 (0.74)	-	3.24(0.25)	-
$\beta_3(GR)$	-0.74 (0.79)	-	0.0006 (0.45)	0.023 (0.4556)	-	-
$\beta_4(BI)$	-	-	-	0.18(0.27)	0.17(0.044)	0.13(0.0009)
$\beta_6(BD - Ethnicity)$	11.27 (0.50)	-	-0.00115 (0.78)	-	-0.04(0.155)	-
$\beta_7(BD - Gender)$	100.57 (0.10)	139.84(0.014)	0.0095 (0.415)	0.49(0.245)	0.52(0.0359)	0.43(0.0003)
<i>P(Value)</i>	0.085	0.014	0.44	0.351	0.05	0.0005
<i>F(Value)</i>	11.06	11.74	1.47	1.62	196.21	50.7
<i>R2</i>	0.96	0.6617	0.75	0.62	0.999	0.953
<i>Adjusted R2</i>	0.87	0.6053	0.24	0.24	0.994 [*]	0.934 ⁺

⁺The Q₂ model is highly significant (p-value=0.014) and the Q variation is significantly explained by Gender only.

*The DPS₁ model explains 99.4% variation in DPS but only BI and Gender are significant

^{*}The DPS₂ model is highly significant (p-value=0.0005) and explains 93.4% variation in DPS. Only BI and Gender are significant

BOARD QUALITY AND FINANCIAL PERFORMANCE

No significant correlation was observed between board quality and both the stock-based performance measure (Tobin's Q) and the accountancy based measures of performance (ROE, EPS and DPS). This was true for all sectors considered as well as for the full list of companies. This is in contrast from some previous studies like Huseh-En (2010) who argued that the quality of a board of directors had a positive effect on firm performance similar to the effect of a higher quality of management and that of Erickson *et al.* (2005), who also found an association between financial directors and firm performance.

However, in a regression model for Tobin's Q for all sectors, Board quality was found to be marginally significant (p = 0.0406) when combined with Fsize and Debt ratio (Table 4.4). This means that Board quality would marginally increase in significance only whenever there was a substantial increase in the company size (in terms of assets) and in debt ratio. This is naturally expected as the bigger and more leveraged a company is; the more quality leadership is required.

TABLE 4.4: REGRESSION RESULTS ON TOBIN'S Q – ALL SECTORS

Variables	Q
<i>Intercept</i>	1753.10(0.2038)
$\beta_1(Fsize)$	-34.15(0.7095)
$\beta_2(Debt)$	-1225.75(0.0298)
$\beta_5(BQ)$	11.17(0.0406)
<i>P(Value)</i>	0.0466
<i>F(Value)</i>	2.92
<i>R2</i>	0.1916
<i>Adjusted R2</i>	0.1261 [*]

*The Q model explains 12.6% variation in Q but only BQ and Debt Ratio are significant

BOARD DIVERSITY AND FINANCIAL PERFORMANCE

Of all the diversity aspects considered, only gender was found to have some relationship with financial performance. Correlation analysis showed that gender had marginal positive correlation with DPS (Correlation coefficient= 0.704, p-value=0.05) and high positive correlation with Tobin's Q in the commercial sector (Correlation coefficient= 0.813, p-value=0.014). It also had significant correlation with EPS in the industrial sector (Correlation coefficient= 0.577, p-value=0.024). Regression results showed that gender had very high impact on Tobin's Q in the commercial sector where 60.5% of Tobin's Q could be explained by gender (Table 4.3). This was found to be in consistence with a previous study by Erhardt *et al.* (2003) who used gender and ethnicity when they undertook a study to examine the relationship between demographic diversity on boards of directors with firm financial performance and found out that executive board of director diversity was positively associated with both return on investment and return on assets. Another study of all FTSE 100 companies between 2001 and 2005 by Haslam *et al* (2010) also observed Tobin's Q to be marginally affected by the percentage of women on company boards. It follows, therefore, that gender diversity does have some effect on company financial performance.

CONCLUSIONS AND POLICY IMPLICATIONS

The study results showed that only Board independence (BI) and Gender diversity had an effect on firms' performances. Board independence had a negative correlation with Return on Equity (ROE) in the agricultural sector in line with some similar previous studies (Finegold et al., 2007; Christensen, et al., 2010; and Kaymak & Bektas, 2008) while gender balance had a positive correlation with Dividends per share (DPS) and Earnings per share (EPS) for companies in the commercial and industrial sectors respectively also in conformity to some previous studies (Erhardt et al., 2003). Board quality had no significant impact on any of the performance variables quite in contrast from the empirical literature review results. The study also made two other interesting observations when examining the interrelationships between the independent variables. The first one was that Gender was severally positively correlated with Board independence, especially in the agricultural and industrial sectors implying that if a board was gender balanced (i.e. had more women representations) it would most likely be independent as well. Another observation was that Age and board quality were negatively correlated mostly in the agricultural sector implying that a quality board would most of the time be less balanced in age as well.

The research findings seemed to be in contrast with the main CMA guideline on board composition that states that board should have at least one third of independent and non-executive directors with diverse skills and expertise. Independence according to CMA requires that the individuals have "no material relationship with the company" – that is, they are not recent employees, family members nor part of interlocking directorship. "Non-Executive Director" means a director who is not involved in the administrative or managerial operations of the Company.

POLICY IMPLICATIONS

In line with the new constitutional dispensation, it is important to strike a minimum one third gender requirement for boards as it not only increases board independence, but also a number of performance variables. The fact that quality did not show any correlation with performance could be explained by the finding that Age and board quality were negatively correlated. This could mean that the more elderly board members had risen to their positions through long years of experience and were therefore effective in their roles regardless of their relatively low levels of financial education and association as quality was envisaged in this study. It is important, therefore, to balance the boards' age composition so as to better harness quality for better performance. Other than their control functions, boards are increasingly performing a leadership role in organizations. It is therefore imperative that, they have both the requisite experience and also the relevant education background to cope with the changing paradigm shift for boards. The CMA and other regulatory agencies should ensure complete compliance with these requirements based on evidence such as the ones in this paper and many other studies carried out the world over.

REFERENCES

1. Abdullah, H., & Valentine, B. (2009). Fundamental and Ethics Theories of Corporate Governance. *Middle Eastern Finance and Economics*, 88-95.
2. Chemmanur, T. J., & Paeglis, I. (2005). Management quality, certification, and initial public offerings. *Journal of Financial Economics*, 331-368.
3. Christensen, J., Kent, P., & Stewart, J. (2010). Corporate Governance and company Performance in Australia. *Australia Accounting Review*, 372-386.
4. Clarke, T. (Ed.). (2004). *Theories of Corporate Governance: The Philosophical Foundations of Corporate Governance*. New York: Routledge.
5. Daily, C. M. and D. R. Dalton (1992). The relationship between governance structure and corporate performance in entrepreneurial firms, *Journal of Business Venturing*, 7, 375-386
6. Daily, C. M., Dalton, D. R., & Cannella Jr., A. A. (2003). Corporate Governance: Decades of Dialogue and Data. *The Academy of Management Review*, 371-382.
7. Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a Stewardship Theory of Management. *The Academy of Management Review*, 20-47.
8. de Andres, P., Azofra, V., & Lopez, F. (2005). Corporate Boards in OECD Countries: size, composition, functioning and effectiveness. *Corporate Governance: An International Review*, 197-210.
9. Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of Director Diversity and Firm Financial Performance. *Corporate Governance: An International Review*, 102-111.
10. Erickson, J., Park, Y., Reising, J., & Shin, H.-H. (2005). Board composition and firm value under concentrated ownership: the Canadian evidence. *Pacific-Basin Finance Journal*, 387-410.
11. Fernandes, N. (2008). Board compensation and firm performance: The role of "independent" board members. *Journal of Multinational Financial Management*, 30-44.
12. Finegold, D., Benson, G. S., & Hecht, D. (2007). Corporate Boards and Company Performance: review of research in light of recent reforms. *Corporate Governance: An International Review*, 865-878.
13. Haslam, S. A., Ryan, M. K., Kulich, C., Trojanowski, G., & Atkins, C. (2010). Investing with Prejudice: The Relationship Between Women's Presence on Company Boards and Objective and Subjective Measures of Company Performance. *British Journal of Management*, 484-497.
14. Hillman, A. J., Cannella, A. A., & Paetzold, R. L. (2000). The Resource Dependence Role of Corporate Directors: Strategic Adaptation of Board Composition in Response to Environmental Change. *Journal of Management Studies*, 235-256.
15. Hovey, M., Li, L., & Naughton, T. (2007). The Relationship Between Valuation and Ownership of Listed Firms in China. *Corporate Governance: An International Review*, 112-122.
16. Hsueh-En, H. (2010). The Relationship between Board Characteristics and Financial Performance: An Empirical Study of United States Initial Public Offerings. *International Journal of Management*, 332-340.
17. Joh, S. W. (2003). Corporate governance and firm profitability: evidence from Korea before the economic crisis. *Journal of Financial Economics*, 287-322.
18. Kaymak, T., & Bektas, E. (2008). East Meets West? Board Characteristics in an Emerging Market: Evidence from Turkish Banks. *Corporate Governance: An International Review*, 550-561.
19. Kenya Gazette. (2002). THE CAPITAL MARKETS ACT (Cap. 485A). Nairobi: Government Printer.
20. Kiel, G. C., & Nicholson, G. J. (2003). Board Composition and Corporate Governance: How the Australian Experience Informs Contrasting Theories of Corporate Governance. *Corporate Governance: An International Review*, 189-205.
21. *Management*, 15, 457-467
22. NASDAQ. (2009, April 13). Nasdaq Listing Rules 500 Series. Retrieved from Nasdaq: http://www.nasdaq.com/about/Listing_Rules_041309.pdf
23. Roberts, J., McNulty, T., & Stiles, P. (2005). Beyond Agency Conceptions of the Work of the Non-Executive Director: Creating Accountability in the Boardroom. *British Journal of Management*, 1467-8551.
24. Rose, C. (2005). The Composition of Semi-Tier Corporate Boards and Firm Performance. *Corporate Governance: An International Review*, 691-701.
25. Saravia, J., & Chen, J. J. (2008, July). The Theory of Corporate Governance: A Transaction Cost Economics - Firm Lifecycle Approach. Guildford, Surrey, GU2 7XH, UK.
26. Schellenger, M. H., Wood, D. and Tashakori, A. (1989). Board of Director Composition, Shareholder Wealth, and Dividend Policy, *Journal of*
27. Singh, V., Terjesen, S., & Vinnicombe, S. (2008, February). Newly appointed directors in the board room: How do women and men differ? *European management Journal*, Volume 26 (Issue 1), 48-58.
28. Turnbull, S. (1979). Corporate Governance: Its scope, concerns & theories. *Corporate Governance: An International Review*, 180-205.
29. Wheeler, D., Colbert, B., & Freeman, E. (2003). Focusing on Value: Reconciling Corporate Social Responsibility, Sustainability and a Stakeholder Approach in a Network World. *Journal of General Management*, 1-28.
30. Wieland, J. (2005). Corporate Governance, Values Management, and Standards: A European Perspective. *Business & Society*, 74-93.
31. Williamson, O. (1996). *The Mechanics of Governance*. New York: Oxford University Press.
32. Yoshimori, M. (2005). Does Corporate Governance Matter? Why the Corporate Performance of Toyota and Canon is Superior to GM and Xerox. *Corporate Governance: An International Review*, 447-457.

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