

THE RELATIONSHIP BETWEEN BOARD SIZE, BOARD COMPOSITION, CEO DUALITY AND FIRM PERFORMANCE: EXPERIENCE FROM GHANA

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Abstract

There is no gainsaying of the fact that corporate governance structure of a firm has critical impact on the responsive ability of a firm to external factors that impinge on its performance. Well governed firms have been noted to have higher firm performance. Though corporate governance is multi-dimensional, this study examined the impact of board size, board composition and CEO duality on performance measures namely ROA, Tobin's q and Growth in sales of non-financial listed firms on the Ghana Stock Exchange. Annual data, covering 1990 – 2001 was used and the analysis done within the framework of panel data methodology. Though, relatively inconclusive results on these performance measures were obtained, firms in Ghana are encouraged to maintain smaller board sizes and adopt the two-tier board structure for effective performance.

Keywords: *Corporate Governance, Firm-Performance, Tobin's Q, Ghana,*

JEL Classification: G30 F40 C33

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1.0 Introduction

Companies have long recognized that good governance generates positive returns to a firm and boost confidence. Thus, the nature of corporate governance structures of a firm has critical impact on the responsive ability of a firm to external factors that impinge on its performance.

One must point out that the concept of corporate governance has been a priority on the policy agenda in developed market economies for over a decade especially among very large firms. Further to that, the concept is gradually warming itself as a priority in the African continent. Indeed, it is believed that the Asian crisis and the relative poor performance of the corporate sector in Africa have made the issue of corporate governance a catchphrase in the development debate (Berglof and von Thadden, 1999). A number of recent studies show that good corporate governance increases valuations and boosts the bottom line. For example, a study by Gompers *et al* (2003) showed that companies with strong shareholder rights yielded annual returns that were 8.5 percent greater than those with weak rights. Related to that, it was also observed that the more democratic firms also enjoyed higher valuations, higher profits, higher sales growth, and lower capital expenditures.

Again, poorly governed firms are expected to be less profitably, have more bankruptcy risks, lower valuations and pay out less to their shareholders, while well-governed firms are expected to have higher profits, less bankruptcy risks, higher valuations and pay out more cash to their shareholders. Claessens (2003) also argues that better corporate frameworks benefit firms through greater access to financing, lower cost of capital, better performance and more favourable treatment of all stakeholders. The position has been stated that, weak corporate governance does not only lead to poor firm performance and risky financing patterns, but are also conducive to macroeconomic crises like the 1997 East Asia crisis. Other researchers contend that good corporate governance is important for increasing investor confidence and market liquidity (Donaldson, 2003).

1.1 Corporate governance in Ghana

In Ghana corporate governance has been gaining roots in response to initiatives by some stakeholders such as the Ghana Institute of Directors (IoD-Ghana), in collaboration with the Commonwealth Association of Corporate Governance, to address corporate governance in Ghana. Again, there have also been other initiatives designed to address corporate governance issues in the country. For instance, a study, conducted and launched by IoD-Ghana in 2001, pointed out that there is an increasing acceptance of good corporate governance practices by businesses in the country.

Notwithstanding the above developments, it must be indicated that more formal corporate governance structures and institutions are relatively not widespread though a number of laws provide for governance structures for companies in Ghana. These laws include:

- The Companies Code 1963 (Act 179), which provides for governance of all companies incorporated in Ghana;
- The Securities Industry Law, 1993 (PNDCL 333) as amended by the Securities Industry (Amendment) Act 2000, (Act 590), which provides among other things for governance of

all stock exchanges, investment advisors, securities dealers, and collective investment schemes licensed by the Securities & Exchange Commission (SEC).

In the Companies Code, there is a deliberate attempt to streamline corporate practices in the country. For instance, the code stipulates a minimum of two directors for a company with no ceiling on the maximum number, whilst the Ghana Stock Exchange (GSE) Listing Regulations are silent on board size. With regards to board composition, there is no requirement under the Companies Code for the appointment of independent directors neither is there a provision for the balance of executive and non-executive directors. However, there is allowance for the interests of different stakeholders to be represented on a board. This is however a requirement under The Securities and Exchange Commission's Code of Best Practices on Corporate Governance (SEC Code) for the GSE.

Developing countries such as Ghana are now increasingly embracing the concept of good corporate governance, knowing it leads to sustainable growth. In Ghana a study by Mensah et al (2003) on corporate governance and corruption it was revealed that poor corporate governance practices amongst a sample of surveyed firms resulted in corrupt practices and dealings with the government which firms were unwilling to disclose.

However, in the context of Sub-Saharan Africa, the issue has received very limited empirical attention. This present study provides empirical evidence on corporate governance and firm performance from the context of a developing economy. The paper specifically investigates the relationship between various variables of corporate governance and performance of companies listed on the GSE during the eleven year period (1990 – 2001).

The rest of the paper is organized as follows: section two looks at the review of literature; section three is devoted to methodology, data analysis and discussion while section four draws conclusions, policy implications and suggestion for a new research focus.

2.0 Review of literature

There is no gainsaying of that fact that the principal-agent theory is generally considered as the starting point for any debate on the issue of corporate governance. Indeed, the theoretical underpinnings for the extant research in corporate governance come from the classic thesis, "*The Modern Corporation and Private Property*" by Berle & Means (1932). The thesis describes a fundamental agency problem in modern firms where there is a separation of ownership and control. It has long been recognized that modern firms suffer from a separation of ownership and control. They are run by professional managers (agents), who are unaccountable to dispersed shareholders (principals). This view fits into the principal-agent paradigm. In this regard, the fundamental question is how to ensure that managers follow the interests of shareholders in order to reduce cost associated with principal-agent theory? The principals in this wise are confronted with two main problems. First, they face an adverse selection problem: selecting the most capable managers. They are also confronted with a moral hazard problem: giving the managers the right incentives to put forth the appropriate effort and make decisions aligned with shareholders interests (e.g., take the right amount of risk and do not engage in empire building).

Jensen & Meckling (1976) further define agency relationship and identify agency costs. Agency relationship is a contract under which “*one or more persons (principal) engage another person (agent) to perform some service on their behalf, which involves delegating some decision-making authority to the agent*”. Conflict of interests between managers or controlling shareholder, and outside or minority shareholders refer to the tendency that the former may extract “*perquisites*” (or perks) out of a firm’s resources and less interested to pursue new profitable ventures. Agency costs include monitoring expenditures by the principal such as auditing, budgeting, control and compensation systems, bonding expenditures by the agent and residual loss due to divergence of interests between the principal and the agent. The share price that shareholders (principal) pay reflects such agency costs. To increase firm value, one must therefore reduce agency costs. This is one way to view the linkage between corporate governance and corporate performance. Fama (1980) aptly comments that separation of ownership and control can be explained as a result of “*efficient form of economic organization*”.

One difference between countries corporate governance systems is the differences in the ownership control of firms that exist across countries. Systems of corporate governance therefore can be distinguished according to the degree of ownership and control and the identity of controlling shareholders. While some systems are characterized by wide dispersed ownership (outsider systems), others tend to exhibit concentrated ownership of control (Insider systems). In the Outside systems of corporate governance especially in USA and UK, there exist a basic conflict of interest between strong managers and widely dispersed weak shareholders. On the other hand, in Insider systems (notably Germany and Japan), the basic conflict is between controlling shareholders (or blockholders) and weak minority shareholders.

Again, the Companies Code makes provision for the appointment of executive directors by allowing directors to hold concurrently with the office of director, any other office or place of profit in the company, except the office of auditor. In the case of board structure based on duality or otherwise of the CEO, Companies Code does not prevent the appointment of the same person to the two offices. The SEC Code on the other hand advocates for but does not insist on the two-tier board structure where the CEO is different from the board chairman. On the whole corporate governance structure development in Ghana have been somewhat modest, there is need for more advancements in corporate governance issues given the effect these have on firm performance.

3.2 Defining Corporate Governance

The concept “corporate governance” has attracted various definitions. Metrick and Ishii (2002) define corporate governance from the perspective of the investor as “both the promise to repay a fair return on capital invested and the commitment to operate a firm, efficiently given investment”. The implication of this definition is that corporate governance has an impact on a firm’s ability to access the capital market. Metrick and Ishii argue that firm level governance may be more important in developing markets with weaker institutions as it helps to distinguish among firms. Cadbury Committee (1992) defines corporate governance as “the system by which companies are directed and controlled”. Zingales (1998) also defines a governance system as “the complex set of constraints that shape the ex-post bargaining over the quasi rent registered by the firm”.

According to Mayer (1997), corporate governance is concerned with ways of bringing the interests of (investors and managers) into line and ensuring that firms are run for the benefit of investors. Corporate governance is concerned with the relationship between the internal governance mechanisms of corporations and society's conception of the scope of corporate accountability (Deakin and Hughes, 1997). It has also been defined by Keasey *et al* (1997) to include 'the structures, processes, cultures and systems that engender the successful operation of organisations.' Corporate governance is also seen as the whole set of measures taken within the social entity that is an enterprise to favour the economic agents to take part in the productive process, in order to generate some organizational surplus, and to set up a fair distribution between the partners, taking into consideration what they have brought to the organization (Maati, 1999).

In the light of the foregoing analysis, it may be stated more generally that different systems of corporate governance will embody what are considered to be legitimate lines of accountability by defining the nature of the relationship between the company and key corporate constituencies. Thus, corporate governance systems may be thought of as mechanisms for establishing the nature of ownership and control of organisations within an economy. In this context, 'corporate governance mechanisms are economic and legal institutions that can be altered through the political process - sometimes for the better' (Shleifer and Vishny, 1997). Company law, along with other forms of regulation (including stock exchange listing rules, and accounting standards), both shape and is shaped by prevailing systems of corporate governance. The impact of regulation on corporate governance occurs through its effect on 'the way in which companies are owned, the form in which they are controlled and the process by which changes in ownership and control take place (Jenkinson and Mayer, 1992). Ownership is established by company law, which defines property rights and income streams of those with interests in or against the business enterprise (Deakin and Slinger, 1997). Corporate governance describes how companies ought to be run, directed and controlled (Cadbury Committee, 1992). It is about supervising and holding to account those who direct and control the management.

3.3 Corporate governance and Firm performance

Previous empirical studies have provided the nexus between corporate governance and firm performance (see Yermack (1996, Claessens *et al.*, 1999; Klapper and Love, 2002; Gompers *et al.*, 2003; Black *et al.*, 2003 and Sanda *et al* (2003) with inconclusive results. Others, Bebchuk & Cohen (2004), Bebchuk, Cohen & Ferrell (2004) have shown that well governed firms have higher firm performance. The main characteristic of corporate governance identified in these studies include board size, board composition, and whether the CEO is also the board chairman.

There is a view that larger boards are better for corporate performance because they have a range of expertise to help make better decisions, and are harder for a powerful CEO to dominate. However, recent thinking has leaned towards smaller boards. Jensen (1993) and Lipton & Lorsch (1992) argue that large boards are less effective and are easier for a CEO to control. When a board gets too big, it becomes difficult to co-ordinate and process problems. Smaller boards also reduce the possibility of free riding by individual directors, and increase their decision taking processes. Empirical research supports this. For example, Yermack (1996) documents that for large U.S. industrial corporations, the market values firms with smaller boards more highly. Eisenberg *et al.* (1998) also find negative correlation between board size and profitability when using sample of small and midsize Finnish firms. In Ghana, it has been identified that small

board sizes enhances the performance of MFIs, Kyereboah-Coleman and Biekpe, (2005). Mak and Yuanto (2003) echo the above findings in firms listed in Singapore and Malaysia when they found that firm valuation is highest when board has five directors, a number considered relatively small in those markets. In a Nigerian study, Sanda et al (2003) found that, firm performance is positively related with small, as opposed to large boards.

Though the issue of whether directors should be employees of or affiliated with the firm (inside directors) or outsiders has been well researched, yet no clear conclusion is reached. On the one hand, inside directors are more familiar with the firm's activities and they can act as monitors to top management if they perceive the opportunity to advance into positions held by incompetent executives. On the other hand, outside directors may act as "professional referees" to ensure that competition among insiders stimulates actions consistent with shareholder value maximization (Fama, 1980). John and Senbet (1998), argue that boards of directors are more independent as the proportion of their outside directors increases. Though its been argued (Fama & Jensen 1983, Baysinger and Butler 1985, Baysinger & Hoskinsson, 1990, Baums 1994) that the effectiveness of a board depends on the optimal mix of inside and outside directions, there is very little theory on the determinants of an optimal board composition (Hermalin & Weisbach 2002).

A number of empirical studies on outside directors support the beneficial monitoring and advisory functions to firm shareholders (see Brickley & James 1987; Weisbach 1988; Byrd & Hickman 1992; Brickley et al. 1994). Baysinger & Butler (1985) and Rosenstein & Wyatt (1990) showed that the market rewards firms for appointing outside directors. Brickley et al (1994) found a positive relation between proportion of outside directors and stock-market reactions to poison pill adoptions. Also Kyereboah-Coleman and Biekpe (2005) found a positive relationship between proportion of outside board members and performance of MFIs in Ghana. However, Forsberg (1989) found no relation between the proportion of outside directors and various performance measures. Hermalin & Weisbach (1991) and Bhagat & Black 2002 found no significant relationship between board composition and performance. Yermack (1996) also showed that, the percentage of outside directors does not significantly affect firm performance. This was also confirmed by Kyereboah-Coleman and Biekpe (2005) when studying non-traditional export firms in Ghana. Agrawal & Knoeber (1996) suggest that boards expanded for political reasons often result in too many outsiders on the board, which does not help performance.

Considerable attention has been given to the role of boards in monitoring managers and in removing non-performing CEOs. Jensen (1993) voices his concern that a lack of independent leadership makes it difficult for boards to respond to failure in top management team. Fama & Jensen (1983) also argue that concentration of decision management and decision control in one individual reduces board's effectiveness in monitoring top management. Thus, the literature reveals a board structure typology, the one-tier system and the two-tier system. In the one-tier system the Chief Executive Officer (CEO) is also chairman of the board, whilst the two-tier system has a different person as the board chairman and is separate from the CEO. It has been noted though that the one-tier board structure type leads to leadership facing conflict of interest and agency problems (Berg & Smith 1978, Bickley & Coles 1997) thus giving preference for the two-tier system.

Agency problems tend to be higher when the same person holds both positions. Yermack (1996) argue that, firms are more valuable when the CEO and board chair positions are separate.

Relating CEO duality more specifically to firm performance, researchers however find mixed evidence. Daily & Dalton (1992) find no relationship between CEO duality and performance in entrepreneurial firms. Brickley et al. (1997) show that CEO duality is not associated with inferior performance. Rechner & Dalton (1991), however, report that a sample of Fortune 500 companies with CEO duality have stronger financial performance relative to other companies. Goyal & Park (2002) examine a sample of U.S. companies and find that the sensitivity of CEO turnover to firm performance is lower for companies without CEO duality. Sanda et al (2003) found a positive relationship between firm performance and separating the functions of the CEO and Chairman. Kyereboah-Coleman and Biekpe (2005) realized that while CEO duality is positively important for MFIs, it is relatively inconclusive on several performance measures in the non-traditional export sector in Ghana.

Klapper and Love (2002) examine corporate governance and performance in a sample of firms in 14 countries, most of which are developing economies. They find that better corporate governance is associated with better performance in the form of Tobin's q and ROA and that good governance seems to matter more when the legal environment of a country provides investors with weaker protections.

Related to the above discussion, John and Senbet (1998) provide a comprehensive review of the Stakeholders theory of corporate governance. The main issue raised in the theory is the presence of many parties with competing interests in the operations of the firm. They also emphasized the role of non-market mechanisms such as the size of the board, committee structure as important to firm performance. Jensen (2001) critique the Stakeholders theory for assuming a single-valued objective. They, thus, propose an extension of the theory called an enlightened stakeholder theory. However, problems relating to empirical testing of the extension have limited its relevance (Sanda et al 2003).

Corporate governance generally refers to the set of mechanisms that influence decisions made by managers when there is a separation of ownership and control. As discussed above, some of the conventional variables used as measures of corporate governance are Board size, Board composition and CEO duality.

Though, corporate governance is considered to involve a set of complex indicators which face substantial measurement error due to the complex nature of the interaction between governance variables and performance indicators, the purpose of this paper is to examine the influence of selected corporate governance variables namely Board size (BDS), Board composition (BDC), and CEO duality (CEO) have on performance variables of Tobin's Q , Return on assets (ROA), and Return on equity (ROE), giving due recognition to some control variables such as the size of the firm (SZE), the asset structure (AST), the age of the firm (AGE), and the Debt structure (DBT). The variables are carefully chosen because of data availability and measurement.

4.0 Methodology, data analysis, and discussion

The study employs basically secondary data based on the financial statements of all the 16 listed non-financial firms on the Ghana Stock Exchange. The use of listed firms is due primarily to data availability and reliability because these are required by law to provide end of year financials. The banks and the other financial institutions are excluded because of their huge debt structure which is very much different from the other firms, consistent with studies by Faccio and Lasfer (2000).

Data for the study covers the eleven year period from 1990 to 2001. The governance data and variables were also obtained through the administration of questionnaire and personal interview. The methodological approach used in most previous work examining the impact of corporate governance on firm performance variables utilizes a multiple regression. Thus, the study employs a modified version of the econometric model of Miyajima et al (2003) which is given as follows:

$$Y_{it} = \beta_0 + \beta_1 G_{it} + \beta_2 C_{it} + e \dots\dots\dots 1$$

Where Y_{it} represents firm performance variables; Tobin's Q (TOB), Return on Assets (ROA), and Sales growth rate (SGR), for firm i in time t . G_{it} is a vector of corporate governance variables; Board Size (BDS), Board Composition (BDC=number of outside directors/total number of directors), and a dummy variable (CEO) to capture if the board chairman is the same as the CEO or otherwise and e , the error term. C_{it} is a vector of control variables; Size of the Firm (SZE), the ratio of Fixed assets to total assets (AST), and the Debt structure of these firms (DBT).

4.1 Variables and explanation

The variables for the study were chosen based on data availability and computational purposes.

4.1.a Firm performance variables

- TOB=Tobin's Q with measurement shown in the appendix.
- ROA=this is defined as return on assets and is computed by dividing profits before interest and tax payments by total assets;
- SGR=Sales growth rate is calculated by dividing the difference between current sales and previous year's sales volumes by previous year's sales volume.

4.1.b Governance variables

- BDS=this is the number of members serving on a firm's board;
- BDC=the board composition is the ratio of outside directors to the total number of directors (i.e. number of outside directors divided by total number of directors)
- CEO=this is a dummy variable which takes the value of 1, if the CEO combines as the board chairman and 0 if there are different people occupying the two positions of CEO and board chairman

4.1.c Control Variables

- SZE= this is the size of the firm measured by the value of its asset base. For the regression analysis, we take the log of the assets because the values are widely spread;
- AST=this is the ratio of fixed assets to total assets in trying to measure how much of the assets base represent fixed and for that matter structures and equipment;
- DTB=this the debt structure of a firm measured by the total of debts (both short and long term) divided by the total assets.

The essence of the control variables is to give recognition to the fact that the performance of a firm and for that matter listed firms may be influenced by several factors.

Both parametric and non-parametric methodology is employed. The regression is run in a panel manner; various options of panel data regression were run, fixed effects, random effects, OLS, GLS and a dynamic panel. The most robust of all was the GLS panel. Thus, we report results of the GLS panel regression in the subsequent tables.

4.2 Data analysis and discussion

Table 1: Descriptive statistics of dependent and independent variables

	Min	Mean	Median	Std. Dev.	Max.	Jarque-Bera	Kurtosis
BDS	5.0	8.22	8.0	1.79	13.0	35.72725	4.159571
BDC	0.091	0.239	0.231	0.1135	0.40	20.27343	1.571121
CEO	0.0	0.25	1.0	0.434	1.0	46.22222	2.333333
TOB	0.120	0.661	0.585	0.359	1.477	8.195276	2.410295
ROA	-0.70	0.201	0.197	0.195	0.69	23.66090	4.562505
SGR	-0.243	0.378	0.347	0.285	1.927	265.2342	8.077588
AST	0.015	0.268	0.514	24.575	0.867	285745.4	189.9821
SZE	10	13.33	12	4.12	32	1316.471	9.384385
DTB	0.096	1.134	0.772	5.048	70.187	268706.3	184.2857

Of the firms studied, the mean board size is about eight (8) suggesting that firms in Ghana have relatively moderate board sizes. With a maximum board size of thirteen (13) and deviation of 1.97, the implication is clear that firms in Ghana have relatively similar board sizes. This is essentially good for firm performance according to researchers such as Jensen (1993) and Lipton & Lorsch (1992) who argue that large board sizes are less effective for firm performance. On the contrary, however, for firm performance, boards of Ghanaian firms are less independent consistent with John and Senbet, (1998) due to relatively large proportion of such boards (about 80.9% maximum and 76% on the average) being appointed from within these firms. Again, of all the firms studied, 75% of them adopt the 2-tier board structure implying that about 25% of the firms have their CEOs and Board chairman positions combined in one personality. This suggests that avenue for agency problems emanating from conflict of interest are minimized.

On the average, most of the firms appear not to be doing well with regards to Tobin's q as a performance variable with a mean ratio of 0.67. By implication, most of the firms do not break – even on this front. While the maximum performance is about 148%, the minimum performance is 12%. With regards to return on assets (ROA), there is wide deviation between firms. Showing a mean performance of 20%, the minimum reported performance over the period is -70% with a relatively high deviation of 0.195 between firms. Sales growth rate (SGR) appears relatively stronger with a minimum operating performance of -24%. While the maximum sales growth rate is about 193%, the mean rate is about 38%.

Firms in Ghana have most of their assets in fixed assets shown by the descriptive statistics. The interesting issue however is that with a standard deviation of about 24.57, it suggests most of these firms are widely dispersed in terms of their proportion of fixed assets composition of total

assets. The situation is further buttressed by the minimum and maximum values of 0.015 and 0.867 respectively.

All the firms studied are relatively of similar sizes shown by the value of their asset base and that most of the firms are dependent on more debt in their capital structure in financing their assets with a mean value of 1.13.

While the board composition, CEO duality, and Tobin's q appear normally distributed shown by their Jarque-Bera and Kurtosis values, the rest of the variables are somewhat leptokurtic (peaked).

4.3 Regression results and discussion

Table 2 shows the regression results of the relationship between Tobin's q (TOB) and the governance variables. The results clearly indicate that there exist a mixed result between the governance variables and this performance variable.

Contrary to studies by Jensen (1993), Lipton & Lorsch (1992), Yermack (1996), the study show that the larger the size of the board, the better the Tobin's q. This confirms studies that support the view that larger boards are better for corporate performance because members have a range of expertise to help make better decisions, and are harder for a powerful CEO to dominate and that the larger the size of the board, the better the performance. The board size is highly significant in explaining Tobin's q for firms in Ghana.

Similar to the board size, the board composition has a negative relationship with Tobin's q implying that when there are more external board members, performance of the firm tends to be worse. This contradicts other empirical studies by Brickley & James (1987), Weisbach (1988), Byrd & Hickman (1992), and Brickley et al. (1994) on outside directors support the beneficial monitoring and advisory functions to firm shareholders. Also Baysinger & Butler (1985) and Rosenstein & Wyatt (1990) showed that the market rewards firms for appointing outside directors. However, this is consistent with findings by Agrawal & Knoeber (1996) who suggest that boards expanded for political reasons often result in too many outsiders on the board, which does not help performance. It must rather be indicated that this variable is not significant.

Relating to CEO duality, the results of the study suggests that the one-tier board typology is negatively related to Tobin's q and that when a CEO doubles as the board chairman Tobin's q decreases. This is consistent with studies which have found out that the one-tier board structure type leads to leadership facing conflict of interest and agency problems (Berg & Smith 1978, Bickley & Coles 1997) thus giving preference for the two-tier system. Again, it has been argued that problems tend to be higher when the same person holds both positions. Yermack (1996) equally argues that, firms are more valuable when the CEO and board chair positions are separate. In the context of developing country, Sanda et al (2003) in a Nigerian study found a positive relationship between firm performance and separating the functions of the CEO and Chairman. Other research such as Daily & Dalton (1992) find no relationship between CEO duality and performance in entrepreneurial firms, and Brickley et al. (1997) show that CEO duality is not associated with inferior performance.

Contrary to expectation, the study suggests that the size of the firm has a negative impact on Tobin's q though not significant. This could however be explained by the fact that the size of a

firm measured by its asset base does not necessarily enhance performance if this is not put to efficient use. The implication therefore is that most firms in Ghana are not utilizing their size to enhance their performance. However, the contrary results obtained from the asset structure suggest that most firms rather have more current assets on their portfolio. This is because; the study shows that, the more fixed assets there are, the better the performance of Tobin's q. Thus, the descriptive results indicating a relatively widely dispersed asset structure (with few having higher proportion of fixed assets) is being confirmed.

The study again shows that firms that mostly have huge proportions of debt in their asset portfolio perform better than otherwise. The significantly positive regression coefficient for total debt implies that, an increase in the debt position is associated with increase in performance. The results confirm findings by Hadlock & James (2002), Petersen and Rajan (1994) and Roden and Lewellen (1995), who posit that profitable firms use more debt. Again, this suggests that profitable firms depend more on debt as their main financing option. The results is presented in the following table.

Table 2:

Dependent Variable: TOB

White Heteroskedasticity-Consistent Standard Errors and Covariance.				
Variable	Coefficient	Std.Error	t-statistic	Prob.
BDS	0.099222	0.003828	25.91706	0.0000
BDC	-0.013756	0.110004	-0.125052	0.9006
CEO	-0.244850	0.044671	-5.481231	0.0000
LOG (SZE)	-0.003565	0.003337	-1.068437	0.2867
AST	0.000132	2.58E-05	5.112696	0.0000
DTB	0.008418	0.000745	11.29666	0.0000
C	0.064966	0.078067	0.832179	0.4064

Weighted Statistics.			
R-squared	0.864457	Mean dependent var	1.049009
Adjusted R-squared	0.860061	S.D dependent var	0.834732
S.E of regression	0.312260	Sum squared resid	18.03863
F-statistics	196.6475	Durbin-Watson stat	0.732216
Prob(F-statistic)	0.000000		

In table 3, with the exception of board size, all the other independent variables are not significant in affecting firms' profitability in terms of ROA.

Like the Tobin's q, the size of the board is again positively related to ROA suggesting on the contrary that firms should have larger board sizes. This contradicts findings made by researchers such as Jensen (1993), Lipton & Lorsch (1992), Eisenberg et al. (1998), and Sanda et al (2003).

In the light of the foregoing analysis, should boards thus be increased ad-indefinitum? The fundamental problem is really to have an optimal board size for effective performance of firms in Ghana. The issue of optimal board size has come up in other studies, but have not really been dealt with thoroughly and thus have left its determinants largely unidentified.

Like Tobin's q, board composition also has a negative impact on firms' profitability re-echoing the fact that the independence of a board is not really critical for the effective performance of any firm. Though, studies by Fama & Jensen (1983), Baysinger and Butler (1985), Baysinger & Hoskinsson (1990), Baums (1994) have asserted that the effectiveness of a board depends on the optimal mix of inside and outside directors, there is very little theory on the determinants of an optimal board composition, Hermalin & Weisbach (2002).

Once again, a situation where the CEO doubles as the board chairman leads to conflict of interest and increases agency cost as pointed out by Fama & Jensen (1983) who argue that concentration of decision management and decision control in one individual reduces board's effectiveness in monitoring top management thereby having a negative impact on profitability. Again, it has been noted that the one-tier board structure type leads to leadership facing conflict of interest and agency problems, Berg & Smith (1978), Bickley & Coles (1997), hence giving preference for the two-tier system. Thus, the result of the study buttresses the fact that there is the need to have a clear separation between the positions of board chairman and CEO.

Once again, contrary to expectation, the size of the firm rather has an insignificant negative impact on ROA likewise the debt structure. Though, the asset structure has a positive impact on profitability, all these variables are insignificant in explaining performance of firms in terms of profitability as presented in the table below.

Table 3:

Dependent Variable: ROA

White Heteroskedasticity-Consistent Standard Error & Covariance.

Variable	Coefficient	Std. Error	t-statistic	Prob.
BDS	0.040104	0.004672	8.584524	0.0000
BDC	-0.071255	0.105788	-0.673566	05014
CEO	-0.003780	0.022191	-0.170320	0.8649
LOG(SZE)	-0.000432	0.002836	-0.152452	0.8790
AST	9.020000	6.45000	1.399720	0.1633
DTB	-7.04000	0.000205	-0.3436810	0.7315
C	-0.109770	0.065710	-1.670518	0.0965

Weighted Statistics			
R-squared	0.178621	Mean dependent var	0.229453
Adjusted R-squared	0.151982	S.D dependent var	0.199785
S.E. of regression	0.183978	Sum squared resid	6.261852
F-statistic	6.705172	Durbin-Watson Stat	1.162737
Prob(F-static)	0.000002		

Table 4 is the regression results of the interaction between sales growth rate (SGR) and the governance variables. The board size on this occasion is negatively related to sales growth. Indeed, this is consistent with studies by others, for instance, Jensen (1993) and Lipton & Lorsch (1992) who argue that large boards are less effective and are easier for the CEO to control. When a board gets too big, it becomes difficult to co-ordinate and process problems. Further argument is that smaller boards also reduce the possibility of free riding by individual directors, and increase their decision taking processes. Other empirical research supports this. For example, Yermack (1996) documents that for large U.S. industrial corporations, the market values firms with smaller boards more highly. Again, in a Nigerian study, Sanda et al (2003) found that, firm performance is positively related to small, as opposed to large boards.

On board composition, the rate of growth in sales is negatively related to board composition. This result contradicts earlier studies that show that the more outsiders there are on a board, the more independent is the board and the better the performance of the firm confirming John and Senbet's (1998). The argument is that boards of directors are more independent as the proportion of outside directors increase. As already mentioned, Agrawal and Knoeber (1996) point out that boards expanded for political expediency often result in too many outsiders on the board, which does not help performance.

Regarding CEO duality, the results point to a positive relationship between the performance of firms in terms of SGR and the 1-tier board structure in which case the same person doubles as the CEO and chairman of the board. This is consistent with other empirical studies such as Fama

& Jensen (1983) arguing that the concentration of decision management and decision control in one individual reduces boards' effectiveness in monitoring top management. It tends to increase agency costs, Yermack (1996), because it depicts a clear case of conflict of interest and agency problems, Berg and Smith (1978), Bickley and Coles (1997).

Using sales growth rate (SGR) as a performance, variable, the regression results indicate that, SGR is negatively related to the board size of firms in Ghana. Thus boards are expected to be smaller to enhance performance. This is consistent with studies by Jensen (1993) and Lipton & Lorsch (1992). The point is that when a board gets too big, it becomes difficult to co-ordinate and process problems. Further argument is that smaller boards also reduce the possibility of free riding by individual directors, and increase their decision taking processes. Other empirical research supports this. For example, Yermack (1996) documents that for large U.S. industrial corporations, the market values firms with smaller boards more highly. Again, in a Nigerian study, Sanda et al (2003) found that, firm performance is positively related with small, as opposed to large boards.

The SGR regression once again shows that SGR is negatively related to the board composition of firms in Ghana implying that, the more outsiders there are on a board, the worse the performance. Surprisingly, the results further indicate when a CEO doubles as the board chairman, performance improves. Though unexpected, this is not incongruous with studies that suggest that in the one-tier board typology, the CEO is afforded the opportunity to carry through projects deemed beneficial to a firm without undue bureaucracy.

It must however be pointed out that all these governance variables are not statistically significant in explaining SGR, though the board size appears somewhat significant.

Expectedly, the asset structure, the size of the form and the debt structure are all positively related to SGR. By implication, the finding suggests that firms in Ghana that rely on debt, with a huge composition of fixed assets in their portfolio tend to perform better likewise firms that have more debts in their capital structure. These variables, unlike the governance variables, are significant in explaining SGR. Thus, firms in Ghana should lean towards having more debts, and increase in size to enjoy economies of scale. The results in presented in the table 4 below.

Table 4:

Dependent Variable: SGR

White Heteroskedasticity-Consistent Standard Errors & Covariance.				
Variable	Coefficient	Std. Error	t-statistic	Prob.
BDS	-0.014693	0.007743	-1.897544	0.0593
BDC	-0.143465	0.169234	-0.847734	0.3977
CEO	0.038780	0.031253	1.240864	0.2162
LOG(SIZE)	0.010347	0.004400	2.351302	0.0198
AST	0.001295	7.01000	18.47214	0.0000
DTB	0.009483	0.001021	9.286916	0.0000
C	0.331298	0.093626	3.538512	0.0005

Weighted Statistics			
R-squared	0.109657	Mean dependent var	0.420608
Adjusted R-squared	0.080781	S.D. dependent var	0.282991
S.E. of regression	0.280908	Sum squared resid	14.59820
F-statistic	3.797519	Durbin-Watson stat	1.752804
Prob(F-statistic)	0.001363		

5.0 Conclusion and new research agenda

The importance of corporate governance cannot be over-emphasized since it enhances the organizational climate for the internal structures and performance of a company. Indeed, corporate governance brings to bear through external independent directors, new dimension for effective running of a corporate entity thereby enhancing a firm's corporate entrepreneurship and competitiveness.

The study examined the relationship between some measures of corporate governance such as board size, board composition, and CEO duality and firm performance of listed non-financial institutions in Ghana. The banks and other financial institutions were excluded in tandem with other studies due to their huge debt structures. The mean board size for the sample was found to be eight and the maximum thirteen with a moderate deviation of 1.79. With regards to board composition, the mean ratio of about 24% implies the use of more inside directors on the boards in the overall sample. Further implication of this is that boards in Ghana are not deemed independent consistent with argument by John and Senbet (1998). It was evident from the sample that most firms in Ghana adopt the two-tier board structure where the positions of board chairman and CEO are occupied by different personalities thereby reducing agency cost. The firms were of similar sizes indicated by their asset base, fixed assets forms a major component of their total assets and that most of the firms depend largely on debt financing as compared to equity financing.

The regression results further show that board size is positively related to Tobin's q and ROA, but negatively related to sales growth rate as performance variables. This adds to the ongoing debate of how inconclusive the size of the board is on various performance measures. Though insignificant and surprisingly, the board composition conclusively have a negative impact on firms' performance in Ghana. Largely and like other studies, the findings of the study support the fact that a two-tier board structure enhances firm's performance, though it insignificantly has a positive impact on sales growth rate. The separation of board chairman and chief executive officer positions minimizes the tension between managers and board members thus influencing positively the performance of firms in Ghana.

The study also show significantly that the more fixed assets there are in a firm's asset portfolio, the better the performance whiles firms that largely resort to debt financing as against equity financing perform better. The size of a firm showed an inconclusive impact on the firms' performance.

It is obvious therefore that corporate governance structures have an impact on the performance of firms in Ghana. Indeed within the governance structures the two-tier board structure is seen to be more effective compared to the one-tier system.

In the light of the foregoing analysis, it is obvious that there is relatively mixed results regarding corporate governance and various performance measures among listed firms in Ghana. It must however be stated that this is consistent with other studies. However, for efficient performance of firms, the adoption of the two-tier board structure and maintaining smaller board sizes that hovers around eight members is critical.

Obviously the study buttresses the fact that corporate governance indeed embraces a broader set of variables such as economic and legal environment, progressive practices, existence of internal control measures, ownership and compensation structures within an institution, the nature and quality of information flow and the level of involvement of low level staff in the day to day decisions of a corporate entity. Thus, subsequent to this work, a look at the banking and financial services sector and the development of a corporate governance index for the firm performance in Ghana would be our focus.

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Appendix:

Tobin's Q is probably the most frequently used valuation measure in empirical corporate finance. Being named after the Nobel Price laureate James Tobin from Yale University, it is defined as the ratio of market value to replacement value of a firm's assets. As an approximation for measurement, the market value of assets is normally computed as market value of equity plus book value of assets, minus book value of equity. This is then divided by the book value of assets to obtain the Tobin's Q. this ratio is basically expected to be greater than unity as an indication that management has done well in its investment decisions.