

**INVESTIGATE THE RELATIONSHIP BETWEEN LEVEL OF CORPORATE  
GOVERNANCE AND LEVEL OF PERFORMANCE OF COMPANIES ON  
GHANAIAN LISTED STOCK EXCHANGE MARKET.**

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**Abstract**

*The purpose of this study is to investigate the relationship between level of corporate governance and level of performance of companies on Ghanaian listed stock exchange market. The target population comprised of Chief Executive Officers (CEO) and Directors of listed companies. 103 CEO and 97 Directors out of the 400 participants returned their questionnaires. The study adopted purposive sampling technique to select the listed companies while convenience sampling techniques were employed to select Chief Executive Officers and Directors. The dimensions of corporate governance and firm's performance were: Tobin's Q, return on assets (ROA) and return on equity (ROE) on independent variable such as Size of board, sales growth and CEO duality. With the aid of SPSS the following statistics were employed: descriptive statistics, correlation matrix, Values of Tolerance, Variance inflation Factor (VIF) and multiple regression analysis. The findings revealed that firms with good corporate governance perform well as compared to firms with no or less corporate governance. The research suggests that good corporate governance is not enough by having the right policies and procedures in place; it must be embedded into the culture of the organization from the very top down.*

*Key words: return on asset; return on equity; Tobins Q, CEO duality; Performance*

## **Introduction**

The study is to put to rest whether good corporate governance is a guarantee to firms performance. Many researchers in the past and now have different and controversial findings about this topic. The study sought to investigate the relationship between level of corporate governance and level of performance in companies on Ghanaian listed stock exchange market.

Corporate governance has been defined by different scholars in different ways. Corporate governance is not just corporate management; it is something much broader to include a fair, efficient and transparent administration to meet certain well-defined objectives. (Bairathi 2009) Magdi and Nadereh (2002) added that corporate governance is about ensuring that the business is run well and investors get a fair return. Zhang (2009) confirmed that investors have confidence in firms that practice good corporate governance and these firms are at added advantage in accessing capital as compared to firms that lack good corporate governance.

## **Literature review**

The numbers of studies have examined the relationship between corporate governance and firm's performance. Hermalin and Weisbach, (2003) concluded that good governance practices increases the economic value of firms, raise productivity and promote lower risk systematic risk

Adjaoud et al (2007) examined the relationship between firm performance and the governance scores through the use of 2002 rankings. They found no significant relationship between the scores and accounting-based measures of performance (such as ROI, ROE, EPS, and market-to-book. Drobetz et al. (2004) confirmed that governance practices led to high firm valuation for German public firms. Also Porta, et al (1999) argues that an investor's are willingness to increase their investment when the legal environment is stronger and they feel protected. They find strong positive association between corporate governance and firm's performance. Monteiro (2006) stated that ROE is one of the most important ratio investors consider. ROE represents the end result of structured financial ratio analysis and has

contributed towards its popularity among analysts, financial managers and shareholders alike. Black et al (2001) found that ROE is not consistent with the creation of shareholder value and ROE affects a company's gearing levels.

Dimensions of the corporate governance and firm's performance but limited to the following variables:

### **Dependant variables of the study**

#### **Tobin's Q (TQ)**

Tobin's Q (TQ), which is calculated as the total assets minus book value of equity plus market value of equity, all divided by total assets.

#### **Return on Assets (ROA)**

Return on Assets (ROA) shows how profitable a company is relative to its total assets. ROA indicates the efficient management of assets to generate earnings. Return on assets (ROA) ratio: Net profit after taxes/Total assets. This ratio is calculated as net profit after tax divided by the total assets. This ratio measure for the operating efficiency for the company based on the firm's generated profits from its total assets. ROA sometimes is referred to as "return on investment". This ratio measure for the operating efficiency for the company based on the firm's generated profits from its total assets.

#### **Return on Equity (ROE)**

The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. ROE is expressed as a percentage and calculated as: Return on Equity = Net Income/Shareholder's equity can also be used. Equity would consist of issued ordinary share capital, plus the share premium and reserves.

### **The independent variables of the study:**

#### **CEO duality**

Dalton, Hitt, Certo, and Dalton (2007) defined CEO duality as the practice of a single individual serving as both CEO and board chair. According to Finkelstein, Hambrick, and

Cannella (2009) CEO duality is a very contentious issue in public discussions of corporate governance. But underlying the contention surrounding joining or separating the CEO and chair positions is a question. Many renowned Scholars have argued for years that CEO duality is more complex than the double-edged sword metaphor suggests (Coles and Hesterly, 2000; Dalton and Dalton, 2010). In reference to a study conducted by Kang and Zardkoohi, (2005) CEO duality affects the dependent variable of primary importance in strategic management: firm performance.

### **Size of board**

Wintoki (2007) found no evidence that firm characteristics determine board size in contrast negative board size – performance relation is strongest for large firms, which have larger boards. According to (Lehn et al., 2004) larger board size and large number of non-executive directors is collective information possessed by the board which is valuable for the monitoring function. Bozec (2005) concluded that board size has a significantly negative effect on sales margin but not profitability for 25 large Canadian firms. Conyon and Peck (1998) examine 481 listed UK firms for 1992-1995 and find a significantly negative effect of board size on both markets to book. Mohamed Belkhir, (2009) suggested that the number of directors in banking firms does not undermine performance. In contrast, the evidence is in favor of a positive relationship between board size and performance, as measured by Tobin's Q and the return on assets.

### **Sales Growth**

Sexton et al (2000) found that firm profitability is correlated with sustainable growth, while Chandler and Jensen (1992) found that sales growth and profitability were not correlated. The use of growth as a measure of firm performance is generally based on the belief that growth is a precursor to the attainment of sustainable competitive advantages and profitability (Markman, 2002). Delmar et al (2003) also pointed out that firm growth is not static in nature and there may be considerable variation in firm growth over time. Cowling (2004), found evidence that growth has a positive impact on profitability, providing support for explanations that indicate a positive relationship on a sample of 2923 firms.

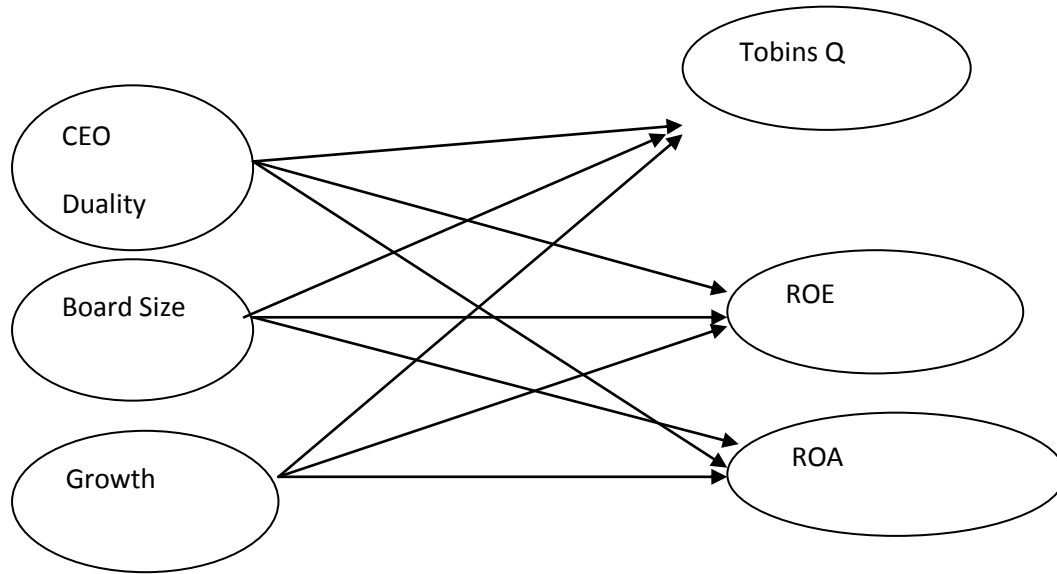
### **Relationships between corporate governance and firm's performance**

Cheema, Khaliq ,Rehman, and Muhammad Sadat Din (2013), examined the relationship between the corporate governance and firm financial performance in Cement industry of Pakistan. The study employed three variables: board Size, Family controlled firms, and CEO duality. Firm's performance variable were return on equity, return on assets, and earnings per share, debt to equity and current ratio. The study confirmed a positive relationship between corporate governance and firm performance. Also, Khatab, H Masood, M Zaman, K Saleem, S and Saeed .B (2010) investigated the relationship between corporate governance and firm's performance of twenty firms listed at Karachi Stock Exchange. The performance of corporate governance variables were; Tobin's Q, return on assets (ROA) and return on equity (ROE), from the annual reports for the year 2005-2009. With the aid of multiple regressions it was revealed that good corporate governance have no relationship with firms' performance. Besides, Mitton (2001) conducted an empirical study on the impact of good corporate governance and firm's performance on a sample of 398 firms in Korean, Malaysian, Indonesian, Philippines, and Thailand. The study found that corporate governance has strong impact on firm performance during East Asian Crisis in 1997 and 1998. The results suggest that performance is associated with corporate governance.

Wu. M et al (2010) studied the impact of corporate governance on firm performance. The variables, employed to measure firm performance, include return on assets, stock return and Tobin's Q. The empirical results indicate that firm performance is in negative and significant relation to board size, CEO duality, stock pledge ratio and deviation between voting right and cash flow right. On the other hand, firm performance is in positive and significant relation to board independence and insider ownership. Amba (2010) examined the impact of corporate governance variables on firms' financial performance. The target population were CEO, Chairman of Audit Committee, Non-executive and institutional Investors. The variables of performance were: Gearing Ratio and "Return on Assets" on the firms traded in Bahrain bourse. The research finds that corporate governance variables do influence firms' performance. Owizy.S (2012) investigates empirically the impact of corporate governance mechanism on firms' performance using Nigerian Breweries as a case study. Firm performance variable was Return on Nigerian Breweries from (2008 to 2011) financial

statement was analyzed using multiple regressions. The result indicated that there is a significance impact of corporate governance on performance of Nigerian firms.

### Research frame work



Relationships between corporate governance and firm's performance (source Author)

### Hypotheses of the study

H1: CEO duality contributes positively to Tobins Q, ROE and ROA

H2: Board Size contributes positively to Tobins Q, ROE and ROA

H3: Growth contributes positively to Tobins Q, ROE and ROA

### Objectives of the study

The objective of the study is to investigate the relationship between corporate governance and firm's performance on companies listed on Ghanaian Stock Exchange market through Tobin's Q, ROA and ROE with their explanatory construct: size, CEO duality and Growth.

The specific research objectives of the study are;

- To investigate the relationship between CEO duality and Tobins Q, ROE and ROA
- To assess the relationship between Board Size and Tobins Q, ROE and ROA
- To investigate the relationship between Growth and Tobins Q, ROE and ROA

### **Problem of the study**

There are many different views on corporate governance and firm's performance. Many researchers such as Black et al (2001) found no relationship between corporate governance and firm's performance. Adjaoud et al (2007) found a relationship but was not significant between the scores and accounting-based measures of performance (such as ROI, ROE, EPS, and market-to-book. Besides Mitton (2001) concluded that corporate governance has strong impact on firm performance during East Asian Crisis in 1997. All the above mentioned studies were conducted in Asia. This study is to put to rest the inconsistency in result. The paper addresses the gap in literature through the use of challenging econometric techniques and adequate data set.

### **Methodology**

Both primary and secondary data were used in the study. The study adopted purposive sampling technique to select companies listed on the stock exchange market in Ghana. Whereas convenience sampling techniques were employed to select respondents. This is due to the difficulty in determining the specific list of respondents.

### **Participants**

The target population comprised CEO and Director of the listed companies who had worked for not less than a year since they took office.

### **Data collection**

Data were collected through the use of a structured questionnaire. The questionnaire was divided into five sections. Section A elicited general and biographical information about respondents. Section B elicited information on ROE. Section C elicited information on ROE. Section D elicited information on Tobin Q and Section E sought information on CEO duality, Board Size and Sales Growth and . Likert scales anchored by strongly disagree (1) and strongly agree (5) were used in the questionnaire.

## Results and Discussion

The current section deals with the results of the study which include the descriptive statistics, econometric results for the model, and tests for robustness relevant for the study

As shown in Table 1 the CEOs response rate (52%) is higher than the Chairman of the board (48%) by 4%.whiles respondent from the pharmaceutical sector recording the highest score of 41% and IT solutions the lowest score of 8%.Respondents where recruited from among the listed companies; mining; 37 respondents (18.5%), banking; 19 respondent (9.5%), Agro processing; 46 respondent (23%) IT solution; 16 respondents (8%) and pharmaceutical; 82 respondents (41%)

**Table 1.Demographic information**

| Variable          | Frequency | Percentage |
|-------------------|-----------|------------|
| Mining            | 37        | 18.5%      |
| Banking           | 19        | 9.5%       |
| Agro processing   | 46        | 23%        |
| IT solution       | 16        | 8%         |
| Pharmaceutical    | 82        | 41%        |
| <b>Respondent</b> |           |            |
| CEO               | 103       | 52%        |
| Directors         | 97        | 48%        |

Source field work 2013

Calculated and analyzed mean and standard deviation of all the construct have been presented in Table 2. The result revealed the mean score: Tobin's Q is 1.534, ROE is 3.564 and ROA



is 2.765. The values are greater than 1, this shows that firms are healthy and create value for shareholders. Similarly, the mean values for Board size (5.62), CEO duality (6.321) and Sales Growth (7.546) indicate that the firms have concentrated shareholding and are indebted.

**Table 2 Descriptive Statistics**

| Construct    | Min | Max | Mean  | Standard D. |
|--------------|-----|-----|-------|-------------|
| Tobins Q     | 1   | 5   | 1.534 | 0.345       |
| ROE          | 1   | 5   | 3.564 | 0.145       |
| ROA          | 1   | 5   | 2.765 | 0.231       |
| Size         | 1   | 5   | 5.621 | 0.125       |
| CEO duality. | 1   | 5   | 6.321 | 1.453       |
| Growth       | 1   | 5   | 7.546 | 1.436       |

#### Inferential Statistics

In this section the results of the inferential statistical techniques used in the study are presented. Pearson correlation coefficient is calculated in Table 3. The result shows that Size, CEO duality and Growth have strong significant impact on Tobin's Q as coefficient values indicate  $r = 0.467$ ,  $r = 0.457$  and  $r = 0.379$

**Table 3: Correlation Matrix**

| Variable    | Tobin's Q           |                              |
|-------------|---------------------|------------------------------|
|             | Pearson correlation | significance 0.05 (2-tailed) |
| Size        | 0.467               | 0.965                        |
| CEO duality | 0.457               | 0.765                        |
| Growth      | 0.379               | 0.832                        |

The result of Table 4 reveals that Size and CEO duality have a negative relationship with ROE, confirming that size and CEO duality has insignificant in measuring the performance of the firm. While Growth has a positive effect on ROE.

**Table 4: Correlation Matrix**

| Variable    | ROE                 |                                    |
|-------------|---------------------|------------------------------------|
|             | Pearson correlation | significance<br>0.05<br>(2-tailed) |
| Size        | -0.212              | 0.734                              |
| CEO duality | -0.423              | 0.643                              |
| Growth      | 0.303               | 0.402                              |

In Table 5, Size has negative and insignificant relationship with ROA of the firm which shows that firms with greater size has less ROA. The relationship between CEO duality and Growth on ROA shows significant effect in measuring performance of the firm.

**Table 5: Correlation Matrix**

| Variable    | ROA                 |                                    |
|-------------|---------------------|------------------------------------|
|             | Pearson correlation | significance<br>0.05<br>(2-tailed) |
| Size        | -0.312              | 0.765                              |
| CEO duality | 0.312               | 0.343                              |
| Growth      | 0.303               | 0.302                              |

The value for the R-squared in Table 6 is 0.724 which indicates that 72.4% of the variation in the dependent variable is explained by the independent variables of the model. The 27.6% variation in the dependent variable remains unexplained by the independent variables of the study.

**Table 6: Goodness of Fit (Tobin's Q)**

| Model     | R     | R square | Adjusted R- Square |
|-----------|-------|----------|--------------------|
| Tobin's Q | 0.932 | 0.724    | 0.421              |

**Table 7: Pooled Ordinary Least Square Dependent Variable = Tobin's Q**

| Construct          | Coefficients |
|--------------------|--------------|
| constant           |              |
| Size               | -0.021       |
| CEO duality        | 0.268***     |
| Growth             | 0.289**      |
| Adjusted R-squared | 0.421        |
| F-statistics       | 0.491*       |

\*, \*\* and \*\*\* shows correlation is significant at the 0.01, 0.05 and 0.09 level.

The value for the F-statistic is 4.21 and is significant endorsing the validity and stability of the model relevant for the study. The other diagnostics suggest that the CEO duality and Growth both have significant positive relation with Tobin's Q. While, SIZE has a negative and insignificant effect on Tobin's Q. The test to detect multicollinearity (variance inflation factor) is also performed to support the validity of the regression results. In case of VIF, if the result is below 10 and Tolerance near to zero suggest no multicollinearity (Gujrati, 2003).

In Table 8 results of VIF and tolerance factor is reasonably good. The values of variance inflation factor for the variables in the model ranges from 1.201 to 4.873 for SIZE to GDP suggesting the absence of multicollinearity among the variables of the model.

**Table 8: Values of Tolerance and Variance Inflation Factor (VIF) For Tobin's Q**

| Construct   | Tolerance | Variance Inflation Factor |
|-------------|-----------|---------------------------|
| Size        | 0.678     | 1.492                     |
| CEO duality | 0.754     | 1.532                     |
| Growth      | 0.721     | 1.312                     |

The value for the R-squared in Table 9 shows that 81.6% and 75.4% of the variation in the dependent variable are explained by the independent variables of both the models, with ROE

and ROA respectively. The 25.5%, 18.4 and 25.5% variations in the dependent variable remain unexplained by the independent variables of the study.

**Table 9: Goodness of Fit**

| Model | R     | R Square | Adjusted R Square |
|-------|-------|----------|-------------------|
| ROE   | 0.934 | 0.816    | 0.763             |
| ROA   | 0.845 | 0.756    | 0.754             |

In Table 10, the value for the F-statistic is 12.876, 12.654 and 11.654 and all are significant at 99 percent level which endorses the validity and stability of the model relevant for the study. The other diagnostics suggest that the Size, CEO duality and growth have significant and positive relation with Tobin Q, ROE and ROA.

**Table 10: Pooled Ordinary Least Square dependent Variable =Tobin Q, ROA & ROE**

| Constructs         | Coefficients (ROE) | Coefficients (ROA) |
|--------------------|--------------------|--------------------|
| constant           | 0.876              | 0.945              |
| Size               | 0.031              | 0.023              |
| CEO duality        | 0.412**            | 0.422*             |
| Growth             | 0.313***           | 0.410*             |
| Adjusted R-squared | 0.763              | 0.754              |
| F-statistics       | 12.654*            | 11.654*            |

\*, \*\* and \*\*\* shows correlation is significant at the 0.01, 0.05 and 0 level.

**Robustness Tests:**

Endogeneity Test

Robustness test used in this study is the test for endogeneity. This test is performed to make the results of the study robust. Where such a relationship exists it raises the possibility of endogeneity in our model. The result is presented in Table 11.

**Table 11: Pooled least square endogeneity test dependent variable: Tobin's Q, ROA and ROE**

| Construct          | Tobins Q            | ROE                 | ROA                 |
|--------------------|---------------------|---------------------|---------------------|
| constant           | 0.021<br>(1.011)    | -0.021<br>(1.031)   | 1.421<br>(1.012)    |
| Size               | -0.100<br>(-0.621)  | -0.021<br>(0.872)   | 0.032<br>(0.812)    |
| Growth             | 0.206<br>(1.521)**  | 0.221**<br>(1.101)  | -0.200**<br>(1.231) |
| CEO duality        | 0.215***<br>(1.823) | 0.311***<br>(1.572) | 0.732*<br>(1.021)   |
| Residua            | 0.212<br>(0.781)    | 0.213<br>(0.421)    | 0.321<br>(0.213)    |
| R square           | 0.88                | 0.87                | 0.86                |
| Adjusted R squares | 0.81                | 0.83                | 0.88                |
| F statistics       | 152.8*              | 104.8*              | 91.4*               |

Notes: The values of the coefficients are in the first row. Below are the values for t-statistics in parenthesis. \*, \*\* and \*\*\* Represents the significance of available at 1, 5 and 10 % significance level.

The relationship of the construct namely Tobin's Q, ROA and ROE separately with all their independent variables (SIZE, CEO duality and GROWTH) is tested while residual value is calculated. After the relationship of the Tobin's Q, ROA and ROE separately with all the independent variables including the calculated residual is tested. It was found that there is no relationship of residual with the Tobin's Q, ROA and ROE which indicates that there is no endogeneity in all the three models.

### Conclusion

The study examines the relationship between corporate governance and firm's performance of twenty firms listed on the Ghanaian Stock Exchange market to find out whether ROA and ROE affect the performance of the firm? The result reveals that CEO duality and growth has positive and significant impact on Tobin's Q and ROA. However, growth has a negative and significant impact on ROE. Size of the firms is insignificant in all the three models.

### Recommendation

The findings revealed that firms with good corporate governance perform well as compared to firms with no or less corporate governance. The research suggests that good corporate governance is not enough by having the right policies and procedures in place; it must be embedded into the culture of the organization from the very top down.

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