



Corporate Governance and Firm Performance: A Comparative Study on Listed and Unlisted Companies in Ghana.

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ABSTRACT

Corporate governance and firm performance: a comparative study on listed and unlisted companies in Ghana. The study used the following objectives: to Measure the financial performance of selected listed and unlisted firms in Ghana; to Examine the effect of corporate governance mechanism (Gender diversity, proportion of women on the board, Board size) on the financial performance of listed and unlisted firms in Ghana.; to Conduct a comparative analysis between listed and unlisted firms in terms of the effect of corporate governance mechanism on financial performance. The study used quantitative data from thirty selected companies from 2006 to 2018. The study also applied the panel regression for its analysis. The following findings were revealed. Gender diversity measured by Blau/ dummy has shown a negative and insignificant impact on the profitability of Listed and unlisted companies in Ghana. The study established that the Proportion of women on the board has a negative and insignificant impact on the profitability of listed companies in Ghana. The study established that Board size has a negative and significant impact on the performance of selected unlisted and listed companies in Ghana. The study established a negative and statistically insignificant relationship between liquidity and profitability ratio implying there is no relationship between liquidity and profitability. The study recommended that there should be an aggressive policy to increase the asset base of the companies thereby increasing their profitability.

Introduction

Corporate governance has become a topical issue, which has caught the attention of professionals, regulatory bodies, corporate bodies and researchers, and it is frequently debated upon as a result of its immense contributions to corporate affairs and the need to prevent corporate failure and the collapse of shareholding companies (Frijns, *et.al*, 2008), Corporate governance is considered relevant in ensuring an efficient internal governance mechanism which includes the need for an independent board functions, managerial controls and directions, transparency and accountability and an efficient resource utilization in order to maximize the shares of part owners and other stakeholders (Claessens & Yurtoglu, 2013). Corporate governance is required to enable the fiducial duties and the stewardship roles to be efficiently handled by boards of directors and management in such a manner as it will mitigate the issues of conflicts of interest, information asymmetry and other agency cost within corporate bodies (Kiyilar and Belen, 2007). It considers the regulatory framework and the need for compliance of it as well as policy formulation which will have a potential effect on the control and management of corporate bodies in a fair, transparent and accountable manner and in building a good relationship with stakeholders of corporate bodies. The Global Financial Crisis of 2007 raised further concerns as to whether improved corporate governance mechanisms and practices are implemented to ensure better financial performance of corporate bodies. This requires the need for admitting and implementing the mechanism and practices of corporate governance among the corporate bodies especially those registered for public shareholding. A sound corporate governance system is defined as one that minimizes the danger of the authority to decide about the firm engaging in misconduct and contributes to the reduction of capital expenses, so positively affecting the economic operations of the organization. Numerous experts have postulated that corporate governance is an essential tool for controlling a firm's operations and achieving an efficient allocation of scarce capital to investment projects with the highest returns. (Fama, 1980; Fama & Jensen 1983). Furthermore, it is found important in addressing conflicts of interest, developing strategies to prevent corporate wrongdoing, and aligning the interests of stakeholders through incentive mechanisms (Shleifer and Vishny, 1997). Good corporate governance is a desired characteristic of a liberalized market since it facilitates the flow of both foreign and local capital necessary for economic development to accelerate. This is because it fosters investor confidence and goodwill, while also ensuring openness, equity, responsibility, and accountability. Gompers *et al.* (2003) retained that good corporate governance enhances a firm's valuation and profitability, corporate governance stands to benefit corporate bodies by increasing access to financing, lowering the cost of capital, improving performance, and treating all stakeholders more favourably. According to Donaldson (2003), sound company governance is critical for boosting investor trust and market liquidity.

RESEARCH METHODOLOGY

Research Design: The research design classified into conclusive research which can either be descriptive and casual research and exploratory research design. The study used a positivism research philosophy and applied descriptive research design using a panel data approach. The panel data approach enabled the researcher to simultaneously evaluate cross-sectional as well as time series. The OLS and multiple regression was as well used in measuring between both the independent and dependent variables.

Population of the Study.

The target population included listed and unlisted companies whose annual reports contained relevant information that would help the researcher attain the objectives. Most of these companies were part of the Ghana Club 100 Companies (GIPC) in 2017. This included both the multinational and indigenous companies. The choice of the period resulted from the delay and unavailability of data that arise from most companies, especially when it comes to publishing their annual reports.

Sampling Technique and Sample Size

The sample size included thirty (30) companies both from the listed and unlisted companies in Ghana to form a 395 data set. Data from these selected firms covered the period 2006-2018. Sampling includes probability sampling and non-probability sampling. Sampling techniques also include purposive sampling and snowball sampling.

Sources of Data

There are two main sources of data, which are the Primary, and Secondary data. Primary data makes use of new data derived through mediums including interviews, fieldwork and documents yet to be published (Kothari, 2004). Secondary data is the data that exists before a study (Mesly, 2015). The study made use of secondary data, which was obtained from the website of the Ghana Stock Exchange, (<https://www.annualreportsghana.com/resources/equity/gse/>). The individual websites of the target companies were equally visited to derive the data needed to meet the objectives. A quantitative approach was used in the measurement of corporate governance and the financial performance of both listed and unlisted companies based on literature.

Analysis of Data

Data for the current study was generated using the STATA software. This was done by first computing the secondary data which was derived from the annual reports of selected listed and unlisted companies in an Excel form after which it was exported into the STATA software. The descriptive analysis was then followed where there was a display of tables to show the Mean, Standard deviation, and Skewness among others. The data is derived from the annual results of some selected listed and unlisted companies in Ghana. The researcher used Stata version 12, software for the analysis of the study. The ROA was used to measure the financial performance of the selected firms. The Blau/ dummy, proportion of women on the board and board size were used as the main independent variables. The controlled variables included firm size and age.

Variables for the study

Dependent variables

The Return on Assets (ROA) was used as the main dependent variable which was measured based on the profit before interest and tax all over total assets. Return on Asset also indicates the competence of the executive to use the firm's resources economically to maximize the owner's wealth (Ujunwa *et al.*, 2012). It further assisted in drawing an assessment of management efficiency in utilizing the economic resources of the firms efficiently (Hillman & Cannella Jr. 2007).

Independent variables

The independent variables based on the objectives included CEO duality, Board size and board gender diversity which were also used as independent variables in prior studies.

Control variables

Firm size and firm age were used as the control variables. These were measured by taking the natural log of both of them. Age could be an influence; however, it is not a guarantee of the success of the firm. Firm age was computed in this study based on the natural log of age of the selected companies as also used in prior studies (Carter *et al.* (2007).

Panel data model: The basic panel data model is most often defined appropriately after determining whether there is an existence of correlation and heteroscedasticity. It can be analyzed using Pooled OLS, random and fixed effect models and generalized least square (GLS) model. The acceptable model to be used mostly depends upon the result from the Bruesch-Pegan test as well as the Hausman test.

Generally, the panel data model is stated below:

$$Y_{it} = \alpha + x_{it}\beta + \epsilon_{it} \dots\dots\dots (1)$$

α = constant

i = companies

t = dimension of time

β = explanatory variables

ϵ = error term.

The Pooled Regression Model : In this model, the observations in the study are all considered after which the regression is run by overlooking the time series and the cross-section. The main difficulty with the pooled regression is that it fails to distinguish between the different entities. It is mostly stated in the form below:

$$Y_{it} = \alpha + x_{it}\beta + \epsilon_{it} \dots\dots\dots (2)$$

α in the variable represents constant

i = companies

t = represents the dimension of time

β = the explanatory variable

ϵ = error term.

Model Estimation

Following the empirical studies by Bøhren and Strøm (2010); The researcher used a modified version of the econometric models based upon the empirical study conducted by Bøhren and Strøm (2010) as presented below:

$$\text{Firm Performance ROA}_{it} = \alpha + \beta_1 \text{GENDERdiversity}_{it} + \beta_2 \text{PWD}_{it} + \beta_3 \text{BOARDSIZE}_{it} + \beta_4 \text{FIRMSIZE}_{it} + \beta_5 \text{AGE}_{it} + \epsilon_{it}$$

Where:

ROA = firm financial performance (accounting-based: ROA)

α = Constant, i = entity, t = time,

β = coefficient of regression

ϵ = Within-entity error

Table 1: Measurement of Variables and A-Priori Expectation of Parameters

Variables	Description and Measurement	A-Priori Exp.
Return on Assets (ROA)	ROA was measured as the ratio of Earnings before Interest and Taxes over Total Assets (EBIT/TA)	N/A
Dummy variable	Dummy variable was coded as 1 if the board had at least one female or 0 otherwise	+/-
Blau Index	Used to measure the diversity using the formular $1 - \frac{\sum P_i^2}{n}$ $i=1$	+
Firm age	Natural logarithm of age of the firm	+
Firm size	Taking natural log of it.	+

Econometric Model Specifications and Estimation Issues

In this study, there are mainly three estimation techniques which were considered. These include the Fixed and Random effect, Ordinary Least Square and the Generalised Least Square. Study measure corporate governance mechanisms on performance of companies with the comparative analysis. The Random and Fixed effect are preferred when there are time or fixed effects but when there is none of this, the pooled OLS is preferred. The fixed effects permit for the intercept for the selected companies but the slope is restricted to be constant across the selected companies. The Random effect assumes the variation across the selected companies to be random and uncorrelated with explanatory The study uses the Hausman (1978) Specification test in choosing which estimation model, either fixed or the random effects best explain the estimation. Where the p-value of the Hausman test is significant

(i.e., $p < 0.05$), the study adopts the fixed effects model as the preferred model for discussion. However, where the Hausman test proves insignificant (i.e., $p > 0.05$), then the study adopts the random effects model for discussion. The Breusch-Pagan Lagrange Multiplier test (BPLM test) for the random effect model justifies the decision to pool or not to pool. The null hypothesis of the Breusch-Pagan LM test is an indication that variations across selected entities are zero. That is, no significant difference across units (Torres-Reyna, 2007). That is, an insignificant p-value implies no evidence of significant differences across observations and therefore, simple OLS can be run for analysis. The models are estimated using the panel data regression estimation techniques with the help of STATA 14.

Diagnostic Checks

Diagnostic checks are the popular measure of the true reliability of a multivariate econometric model. The current study has made use of some diagnostic tests to test for reliability. The check makes use of various tests such as the Breusch-Pagan test, Heteroskedasticity test, Hausman test and multicollinearity test using the correlation matrix and the Variance Inflating Factor (VIF) test. These tests were conducted to check for the correct specification of moment conditions and to check for autocorrelations in the model.

Results

Descriptive Statistics

The study used descriptive statistics such as the frequency distribution and tables. This was used in analyzing the Corporate Governance and Firm Performance of listed and unlisted companies in Ghana. The standard deviation, mean size, minimum and maximum as well as skewness and kurtosis were done using descriptive statistics.

The summary of the descriptive statistics is presented in the table 4.1 below:

Table 2: Descriptive Statistics

VARIABLE	OBS	MEAN	STD. DEV	MIN	MAX
ROA	395	.121497	.2164227	5.76e-06	2.954348
Blau/dummy	395	.1680184	.675061	-12.73469	.7777778
PWD	395	.1398875	.130719	0	.8
Board size	395	2.106523	.4071386	1.098612	2.890372
FS	395	14.23307	2.744291	9.008958	23.57368
Age	395	40.14177	23.62031	12	122

Source: Selected Listed and unlisted companies in Ghana.

As presented in Table 2 the average value of the performance ratio which was measured by ROA is .121497. This means that, the selected listed and selected unlisted companies earned a net income of about 12% on asset. The maximum value as shown in the table is 5.76e-06 and the minimum value according to the table is 2.954348. The result shows a standard deviation of .2164227 which is reflecting the presence of moderate variation among listed and selected unlisted companies in Ghana. Gender diversity was measured using Blau index/dummy. According to the result as presented in the table, it records .1680184 as its average ratio. The result explains that, the selected companies in the study are having an average Blau/ dummy of .1680184. With this, the maximum value is .7777778. The minimum value is also -12.73469. The result also shows the standard deviation (SD) of .675061. The average value is a reflection of the presence of moderate variation among the selected companies. The result in the table 2 also shows .1398875 as the average proportion of women present on boards. The maximum value to this is .8 whereas the minimum value is 0. The standard deviation (SD) to this effect is .130719 from the average value. This is the reflection of the presence of moderate variation. Board size according to the table records an average value of 2.106523. This is to mean that, the listed and unlisted companies selected for the study are having their average board size to be 2 persons. According to the result as presented, the maximum value is 2.890372 and the minimum value is also 1.098612. The result further shows SD of .4071386 which is a reflection of the presence of moderate among the listed and selected unlisted companies in Ghana. Firm size records an average value of 14.23307. This result is based upon the annual reports of the selected companies and it is to mean that they are having bigger size. This follows with the maximum value of the number of years selected to be 23.57368. The minimum value also shows 9.008958. There is also a SD of 2.744291 from the average firm size. This means that there is a moderate dispersion among the selected companies. Firm age according to the result as presented in the table shows an average of about 40 years. This is to mean that the selected companies have been operating for quite a long time. The maximum age according to the table is 122 and the minimum age is 12. The standard deviation to this result is 23.62031. This is reflecting the presence of moderate variation.

Correlation Matrix

The correlation coefficient provides the direction and magnitude of the relationship between variables. The coefficient sign gives an indication of the direction of how the variables are correlated. Correlation test is carried out in determining whether collinearity exist between variables. Multicollinearity

occurs when the explanatory variables are highly related. This makes it difficult to conclude on how they influence the dependent variable. The table 3 presents the correlation matrix for all variables used for the study.

Table 3: Correlation Matrix

	ROA	Blau/dummy	PWD	Board Size	FS	Age
ROA	1.0000					
Blau/dummy	0.0139	1.0000				
PWD	-0.0659	0.1887	1.0000			
Board Size	-0.1904	-0.0382	0.1513	1.0000		
FS	0.1115	0.0184	-0.0352	0.0707	1.0000	
Age	0.0479	-0.0598	0.1981	0.1612	0.1346	1.0000

SOURCE: Listed and selected unlisted companies in Ghana.

The correlation table shows how the independent variables are related. The correlation coefficient shows values below 0.8 which is an indication of a stronger relationship among the independent variables which is a representation of multicollinearity. From Table 3, Blau/ dummy shows a positive correlation with the proportion of women on board and firm size for a co-efficient of correlation 0.1887 and 0.0184 respectively. The proportion of women on the board is positively correlated with board size and age with a co-efficient of correlation 0.1513 and 0.1981 respectively. Board size is positively correlated with firm size and Age with a co-efficient of correlation 0.0707 and 0.1612 respectively. Firm size is positively correlated with age with co-efficient of correlation 0.1346. ROA is negatively correlated with the proportion of women on the board and board size with a coefficient of correlation -0.0659 and -0.1904 respectively. Blau/Dummy is negatively correlated with board size and age with a co-efficient of correlation -0.0382 and -0.0598. The proportion of women on the board is negatively correlated with firm size with a coefficient of correlation -0.0352.

Empirical Analysis

This section presents the result of the panel data regression analysis. The data is derived from the annual result of some selected listed and unlisted companies in Ghana. The study used Return on Assets (ROA) as the dependent variables for measuring the firm's performance. The main independent variable was identified Blau/ dummy, proportion of women on the board, board size. The controlled variables included firm size and age.

Specification Model

The researcher used Stata version 12, software for the analysis of the study. The ROA was used as to measure the financial performance of the selected firms. The Blau/ dummy, proportion of women on the board and board size were used as the main independent variables. The controlled variables included firm size and age.

Diagnostic Tests Result

This section provides tests for the linear regression model (CLRM) assumptions including the multicollinearity and normality tests. The linearity of the parameter is assumed. These tests helped in predicting how the variables are related (Brooks, 2008). The tests were conducted to avoid misspecification of data to enhance research quality.

Normality test

The standard normal distribution is 1 with a mean of less than 1 and a standard deviation of less than 1. As the number of observations made is large, it can be considered to be a normal distribution. Table 4 presents the normality test. The result from the table shows ROA to have Kurtosis and skewness values of 0.0000 and 0.0000 respectively. This is significant at 0.00. It implies that it has a normal distribution. Blau/ dummy also records 0.000 and 0.0000 respectively as its skewness and Kurtosis values. This is also significant at 0.00. This also means that they are distributed normally. The proportion of women further shows a value of 0.0000 and 0.0000 respectively. The values are also significant at 0.00. This implies it is distributed normally. Board size records skewness values of 0.0001 and Kurtosis value of 0.6810. The value is significant at 0.00. This also shows a normal distribution. The firm size records a skewness value of 0.0013. It also records a Kurtosis value of 0.0018. The results are significant at 0.00. The values imply that there is a normal distribution. Age has skewness and kurtosis values of 0.0000 and 0.0000 respectively and it is significant at 0.00, implying it is normally distributed.

Table 4: Skewness/ Kurtosis test for Normality

Variable	Obs	Pr(Skewness)	Pr (Kurtosis)	Adj chi2 (2)	Prob> chi2
ROA	395	0.0000	0.0000		0.0000
Blau/dummy	395	0.0000	0.0000		0.0000

PWD	395	0.0000	0.0000	69.58	0.0000
Board size	395	0.0001	0.6810	14.17	0.0008
FS	395	0.0013	0.0018	17.13	0.0002
Age	395	0.0000	0.0000		0.0000

Source: Listed and selected unlisted companies in Ghana.

Heteroscedasticity Test

The results generated from the OLS estimation given the presence of heteroskedasticity makes the outcomes unreliable and false. The study employs Breusch-Pagan/ Cook-Weisberg Test for Heteroskedasticity and the null hypothesis is that the error variances are all equal against the alternative hypothesis increase (decrease) as the predicted values of the dependent variable increase. The result in Table 5 below shows there is a presence of Heteroskedasticity in the case of the ROA variable; the test rejects the null hypothesis of no heteroskedasticity at a 0 per cent level of significance in each case.

Table 5: Breusch-Pagan/ Cook-Weisberg Test for Heteroskedasticity

chi2(1) = 15.41

Prob > chi2 = 0.00011

Source: Listed and selected unlisted companies in Ghana.

Multicollinearity Test

Multicollinearity makes significant variables by increasing p- p-values. Independent variables are highly related to one another. A correlation matrix test is conducted in which the result indicates either a positive or negative perfect relationship between the variables. 0 correlation coefficient means there is no linear relationship. There is no Multicollinearity problem between the variables since the coefficients are below 0.8.

Model Specification

Hausman Specification Test

The model was used to examine **Blau/ dummy**, Proportion of women on the board, Board size, firm size (FS) and Age on Return on Assets of listed and selected unlisted companies in Ghana was panel data regression, which is either fixed or random effect model. To enable the determination of appropriate models Specification Test is conducted. Fixed effect is not correlated with the independent variable whereas the random effect correlates with the variables. Random effect is more appropriate when null hypothesis is rejected whereas fixed effect is more appropriate when null hypothesis is not rejected. Random effects are consistent with both null hypothesis and alternative hypothesis. The decision rule, for Hausman Specification test is accepting the null hypothesis when the P- value is insignificant. The results in table 6 show the null hypothesis is accepted hence the data follows random effect model.

Table 6: Hausman Test for Fixed or Random Effects

	(b) Fe	(B) Re	(b-B) Difference	sqrt (diag(V_b-V_B)) S.E.
Blaudummy	.0057942	.0057942	0	0
PWD	-.0824357	-.0824357	0	0
Board size	-.1076465	-.1076465	0	0
fs	.0089517	.0089517	0	0
Age	.000698	.000698	0	0

Source: Listed and selected unlisted companies in Ghana

Presentation of Results

Table 7: Regression Results of Unlisted companies: ROA dependent variables

ROA	COEF.	STD. ERR	Z	P ^Z	[95% CONF.	INTERVAL
Blau/ dummy	-.2358552	.3986452	-0.59	0.554	-1.017185	.545475
Proportion	.2042528	.5912773	0.35	0.730	-.9546293	1.363135
Board size	-.0941325	.0343259	-2.74	0.006	-.1614099	-.026855

Fs	.0015874	.0075181	0.21	0.833	-.0131479	.0163226
Age	.0010429	.0008627	1.21	0.227	-.0006479	.0027337
_cons	.259028	.1234017	2.10	0.036	.017165	.5008909

SOURCE: Selected unlisted companies in Ghana.

The regression proves to be statistically significant at 0.05 for each performance ratio measured by Return on Assets (ROA). From the table 7 above, Blau/dummy of unlisted companies in Ghana is negatively and statistically insignificant at 0.554. The above shows the acceptance of the null hypothesis in favour of the alternative hypothesis. This implies that there is no relationship between blau/ dummy and profitability of selected unlisted companies in Ghana. This result is unusual because theoretically Blau/dummy is expected to have negative relationship with firm's profitability. This result is inconsistent with Jensen (1986) which revealed that if firms have lower Blau/dummy the more profitable firms become (ROA). Proportion of women on the board has a positive coefficient and it is statistically insignificant at 0.730. This implies that there is no relationship between the proportion of women on the board and profitability measured by ROA of unlisted companies. The above table shows that the null hypothesis can be accepted. This finding is contradictory to Choon *et al.* (2013) who established a positive relationship between profitability and the proportion of women on the board, implying the more profitable a firm becomes, the higher the proportion of women on the board. The board size of unquoted companies has a negative coefficient and it is statistically significant at 0.006. This implies that the smaller the board size, the more profitable selected unlisted companies in Ghana become which is consistent with the findings of Carter *et al.*, 2011). The above table shows that the null hypothesis cannot be rejected. At lower Board sizes, the selected unlisted companies as used for the study become more profitable. Firm Size has a positive coefficient and it is statistically insignificant at 0.833. This implies that there is no relationship between the profitability of selected unlisted companies in Ghana and the firm size. The above table shows acceptance of the null hypothesis for firm size and profitability measured by ROA. This finding contradicts Bonfim and Kim (2012) who established a negative relationship between firm size and profitability, implying that the smaller the size of the bank the more profitable companies in Ghana become. Age has a positive coefficient and it is statistically insignificant at 0.227. This implies that there is no relationship between the profitability of selected unlisted companies in Ghana and their ages. The above table shows acceptance of the null hypothesis for age and profitability measured by ROA. This finding contradicts Bonfim and Kim (2012) who established a negative relationship between age and profitability, implying that the higher a firm age the more profitable companies in Ghana become.

Table 8: Regression Results of listed companies: ROA dependent variables

ROA	COEF.	STD. ERR	Z	P [^] Z	[95% CONF.	INTERVAL
Blau dummy	.0868582	.0817155	1.06	0.288	-.0733013	.2470177
PWD	-.0631767	.1039029	-0.61	0.543	-.2668227	.1404693
Board size	-.2028364	.050659	-4.00	0.000	-.3021262	-.1035465
Fs	.0164166	.0044579	3.68	0.000	.0076793	.025154
Age	.00032	.000606	0.53	0.597	-.0008677	.0015077
_cons	.3286546	.1162325	2.83	0.005	.1008432	.5564661

SOURCE: Listed companies in Ghana.

The regression proves to be statistically significance at 0.05 for each performance ratio measured by Return on Assets (ROA). From the table 8 above, Blau/dummy is negatively and statistically insignificant at 0.288. The above shows the acceptance of the null hypothesis in favour of the alternative hypothesis. This implies that there is no relationship between blau/dummy and profitability. This result is unusual because theoretically Blau/dummy is expected to have negative relationship with the firm's profitability. This result is inconsistent with Jensen (1986) which revealed that if companies have lower Blau/dummy the more profitable firms become (ROA). From Table 8 above, Proportion of women on the board is negatively and statistically insignificant at 0.543. The above shows the acceptance of the null hypothesis in favour of the alternative hypothesis. This implies that there is no relationship between the proportion of women on the board and profitability. This result is unusual because theoretically Proportion of women on the board is expected to have either a positive or negative relationship with the firm's profitability. Board size has a negative coefficient and it is statistically significant at 0.00. This implies that there is an inverse relationship between profitability measured by ROA and the Board size of listed companies in Ghana. The above table shows that the null hypothesis can be rejected. At lower or Board sizes of listed companies in Ghana, firms can be very profitable. This finding is in with the Ghana Banking survey (2013). Firm Size has a positive coefficient and it is statistically significant at 0.00. This implies that the bigger the size of listed companies in Ghana, the more profitable listed companies become. The above table shows a rejection of the null hypothesis for firm size and profitability measured by ROA. The results show that listed companies in Ghana are more profitable since their sizes are bigger. This finding is in line with Bonfim and Kim (2012) who established a positive relationship between firm size and profitability, implying that the bigger the size of companies the more profitable they become. Age has a positive coefficient and it is statistically insignificant at 0.597. This implies that there is no relationship between age and profitability. The above table shows the acceptance of the null hypothesis for age and profitability measured by ROA.

This finding is contradictory to Bonfim and Kim (2012) who established a positive relationship between age and profitability. This implies that companies that have been operating for longer age tend to be more profitable.

Table 9 Comparison of Listed and Unlisted Companies

ROA	Unlisted companies	Unlisted companies	Listed companies	Listed companies
	COEF.	P [^] Z	COEF.	P [^] Z
Blau/ dummy	-.2358552	0.554	.0868582	0.288
PWD	.2042528	0.730	-.0631767	0.543
Board size	-.0941325	0.006	-.2028364	0.000
Firm Size	.0015874	0.833	.0164166	0.000
Age	.0010429	0.227	.00032	0.597

In comparing unlisted and listed companies in Ghana, it could be observed that Blau/dummy of unlisted companies was negatively and statistically insignificant at 0.554. The above shows the acceptance of the null hypothesis in favour of the alternative hypothesis. This implies that there is no relationship between blau/dummy and profitability. Blau/dummy of listed companies was positively and statistically insignificant at 0.288. The above shows the acceptance of the null hypothesis in favour of the alternative hypothesis. This implies that there is no relationship between blau/dummy and profitability. The results of both listed and selected unlisted companies show that there was no relationship between blau/dummy and profitability. In comparing unlisted and listed companies in Ghana, it could be observed that proportion of women on the board of unlisted companies was positively and statistically insignificant at 0.730. The above shows the acceptance of the null hypothesis in favour of the alternative hypothesis. This implies that there is no relationship between proportion of women on the board and profitability. Proportion of women on the board of listed companies was negatively and statistically insignificant at 0.543. The above shows the acceptance of the null hypothesis in favour of the alternative hypothesis. This implies that there is no relationship between proportion of women on the board and profitability. The results of both listed and selected unlisted companies show that there was no relationship between proportion of women on the board and profitability. In comparing unlisted and listed companies in Ghana, it could be observed that board size of unlisted companies was negatively and statistically significant at 0.00. The above shows the rejection of the null hypothesis in favour of the alternative hypothesis. This implies that there is an inverse relationship between board size and profitability. Board size of listed companies was negatively and statistically significant at 0.00. The above shows the rejection of the null hypothesis in favour of the alternative hypothesis. This implies that there is an inverse relationship between board size and profitability. From the results above, both unlisted companies showed inverse relationship between board size and profitability. In comparing unlisted and listed companies in Ghana, it could be observed that firm size of unlisted companies was positively and statistically insignificant at 0.833. The above shows the acceptance of the null hypothesis in favour of the alternative hypothesis. This implies that there is no relationship between firm size and profitability. Firm size of listed companies was positively and statistically significant at 0.00. The above shows the rejection of the null hypothesis in favour of the alternative hypothesis. This implies that there is a positive relationship between firm size and profitability. From the results above, while unlisted companies showed no relationship between board size and profitability, listed companies showed a positive and significant relationship between board size and profitability. In comparing unlisted and listed companies in Ghana, it could be observed that age of unlisted companies was positively and statistically insignificant at 0.227. The above shows the acceptance of the null hypothesis in favour of the alternative hypothesis. This implies that there is no relationship between age and profitability. Age of listed companies was positively and statistically insignificant at 0.597. The above shows the acceptance of the null hypothesis in favour of the alternative hypothesis. This implies that there is no relationship between age and profitability. The results of both listed and selected unlisted companies show that there was no relationship between age and profitability.

Discussion of Results

Blau/ dummy

As presented in Table 8, panel data results for the analysis method of random effect model results showed a negative and insignificant impact on the profitability of Listed and unlisted companies in Ghana with a regression coefficient of P- value of more than 0.05. This result can be interpreted as no relationship between Blau/ dummy and profitability. A negative relationship between Blau/ dummy and ROA (profitability), implies that the lower the Blau/ dummy the more profitable banks become.

The proportion of women on the board

As presented in Table 8, panel data results for the analysis method of random effects model results in the proportion of women on the board showed a positive and insignificant impact on the profitability of selected unlisted companies in Ghana. The proportion of women on the board showed a negative and insignificant impact on the profitability of listed companies in Ghana. This result can be interpreted as the higher the proportion of women on board, the higher the profitability of Listed and selected unlisted companies in Ghana. This result is however inconsistent with Choon et al. (2013) who revealed that the Proportion of women on the board influenced profitability.

Board size

As we have seen from analysis method this study confirms that Board size has negative significant impact on the performance of selected unlisted and listed companies in Ghana. The panel random effect estimation regression result shows negative and significant relationship between selected listed and unlisted companies in Ghana and performance ratio. It shows a coefficient and p – value of more than 0.05.

Firm Size

There is a positive and no relationship between firm size and profitability measured by ROA of selected unlisted companies in Ghana. With a regression coefficient of P-value of more than 0.05, implying there is no relationship between Firm Size and profitability. There is a positive and significant relationship between firm size and profitability measured by ROA of selected listed companies in Ghana. With a regression coefficient of P-value of more than 0.05, implying there is no relationship between Firm Size and profitability. The results showed that while there was a positive and no relationship between firm size and profitability measured by ROA of selected unlisted companies in Ghana.

Age

There is insignificant relationship between Age and profitability measured by ROA of Listed and selected unlisted companies in Ghana. With a regression coefficient of P-value of less than 0.05, implying the higher the Age the more profitable Listed and selected unlisted companies in Ghana become. The results showed that there was a positive and no relationship between age and profitability measured by ROA of selected unlisted companies in Ghana.

Conclusion

The main objective of this study was to examine Corporate Governance and Firm Performance for listed and unlisted companies in Ghana. This study applied the panel data regressions for thirty listed and unlisted companies from 2006 to 2018 financial years. The thirty listed and unlisted companies used for the study had their financial statements for the six years period. This study examined empirically the implication of theory of Corporate Governance and Firm Performance for listed and unlisted companies in Ghana. The results of regression analysis showed that Blau/dummy, Proportion of women on the board and Board size as independent variables while Return on Assets (ROA) was the dependent variable. The findings of the research were supported by theories on Corporate Governance and Firm Performance. The study shows that the actual relation for the model under the study on performance of Listed and selected unlisted companies in Ghana was measured by ROA in regression model result. Board size has negative and significant impact on the performance of selected unlisted and listed companies in Ghana. The panel random effect estimation regression result shows negative and significant relationship between selected unlisted companies in Ghana and performance ratio with coefficient of and p – value of more than 0.05. There is a positive and significant relationship between firm size and profitability measured by ROA of selected listed companies in Ghana. With a regression coefficient of P-value of more than 0.05, implying there is no relationship between Firm Size and profitability.

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