Effects of Country-Level Corporate Governance on Performance of Listed Banks in Ghana

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Abstract

Corporate scandals in distinct countries have served as a basis for formulation of new legislation to regulate corporate governance practices. The quality of directives and regulations serve an important purpose of improving the corporate governance framework. That notwithstanding banks are faced with problems such as poor accountability, weak transparency and some irresponsibility on the part of management. In view of this, this paper assessed the influence of corporate governance on performance of listed banks in Ghana from 2008 to 2018 using monthly data. Panel data analysis, specifically one-way fixed effect model was used and the results revealed significant negative relationship between corporate governance and financial performance of listed banks in Ghana. The study recommended that management and stock market regulators must be proactive so as to minimize the probability of experiencing a financial distress.

Keywords: Return on Assets; Corporate Governance Index; Global Competitiveness Report.

1.0 INTRODUCTION

During the past two decades, bankruptcy had collapsed firms such as Enron and WorldCom. The blame can be shoveled on the managers of these corporations who were fraudulent due to their lack of ethical values. Undoubtedly, Africa had experienced some failures in corporate governance issues. In order to build a resilient economy for Africa, good corporate governance is needed to create that enabling environment where stakeholders are convinced of fairness, accountability, transparency and responsibility. This can only be possible by practicing sound corporate governance in the African economies. Likewise, the history of bank failure in Ghana is mostly associated with the indigenous local banks. Ghana experienced its first bank failure in the year 2000. This is when the Bank of Housing and Construction collapsed. From that time, the Central Bank and other regulatory bodies had put in place directives to correct or mitigate the problem of bank failures (Bokpin & Issahaq, 2009). Not too long ago, Ghana had experienced the collapse and consolidation of some banks in between the period of August, 2017 and April, 2018. Bank of Ghana annual report (2017) observed some bad corporate governance practices that led to the bank failures. Due to lack of understanding, experience and self-seeking interest; corporate board did not properly manage the accounting and reporting systems. This was revealed in the actions taken by the management of these financial institutions.

They approved loans without adequate collateral facility. They did not bring to the notice of the shareholders matters of material nature. Thus, the management of these banks did not ensure the independence, confidentiality and integrity of their regulators. Security and Exchange Commission (SEC) is one of the numerous regulatory bodies in Ghana. SEC is a body mandated to provide guidelines on governance of stock exchanges, investment advisors, securities dealers and collective investment schemes licensed under the commission. The commission has continuously issued out guidelines to help managers and board of directors that they will apply in order to improve on their best practices. Furthermore, the Companies Code, 1963 (ACT 179) stipulates that the overall activities of the registered company should be manage and controlled by the board of directors. Thus, the importance with which the board of directors attaches to its oversight responsibilities is dependent on its ownership structure, board size and its expertise. Thus, the current study examined the relationship between corporate governance and financial performance. And it improves on the existing knowledge that restrict it to country-level corporate governance index.

2.0 LITERATURE REVIEW

Local and international studies support the assertion that there are relationships among corporate board and financial performance Past studies by Fama (1980) and Fama and Jensen (1983) point to the fact that management are more inclined to protect the interest of the stakeholder because of the need to preserve their reputation within the business environment. This assertion is in line with the stewardship theory. The stewardship theory has it that manager's serves in the best interest of their owners so as to minimize cost and maximize profits, otherwise they would lose their source of livelihood. This situation motivates managers in to achieving organizational success. Similarly, Weisbach (1988) also supported this claim that managers are more effective at monitoring because of their concern for their reputation. In Jordan, Al-Haddad, Alzurqan &Al-sufy (2011) examined the effects of corporate governance on financial performance. The study used descriptive method in analyzing the secondary data. The results showed that ownership structure has the highest effect on financial performance. The study suggests a positive relationship between corporate governance and performance. It is believed that the control mechanism and governance structure of a firm influences the firm's ability to react positively to both internal and external factors and have an inverse effect on performance.

On the contrary, Marashdeh (2014) had looked at effect of corporate governance and financial performance. His study established a negative relationship between ownership and non-executive director on performance which in most cases is contrary to empirical studies. In United States of America (USA) over the period of 2000 to 2012. Bermpei and Mamatzakis (2015) assessed the impact of corporate governance on 23 listed investment bank's performance. They observed that board size had a negative effect on performance especially with banks having more than 10 members. Surprisingly, when the board members were increased, it had a negative impact on performance. Bashir, Fatima, Sohail, Rasul and Mehboob (2018) was not that different from the study by Olick (2015). Their outcome was mixed; the first model which includes return on asset and financial performance prove to be insignificant whereas the second and third model which includes earning per share and return on equity respectively were significant. This implies that there was a poor implementation of corporate governance codes. Adeusi, Akeke, Aribaba and Adebisi (2013) did not support the above findings. The provided evidence that there is no positive relationship among corporate governance and financial performance of firms.

Contemporary studies in Ghana shows that there is a relationship between corporate governance and financial performance. In the study conducted by Otuo-Serebour and Castellini (2015) on corporate governance in an emergent economy. They examined how ownership controls and board controls affect various organizations in Ghana. The study used a qualitative approach which is a rare approach. The finding proved to be very resourceful when revealed that the corporate firms was characterized by large shareholders thereby curbing the agency problem. Also, Kyereboah-Coleman, Adjasi and Abor (2007) explained the reason for a well governed firm has a higher financial performance. The study revealed an optimal mean board size range which ranges from 8 to 11. This mean range prove to higher than the overall mean. It also revealed that majority of the firms which follows the two-tier structure performs well than the firms with one-tier. For the board composition the mean ration of 73% implies that the more the outside board directors the better the firm performance. Besides, the previous studies are still inconclusive and consequently the current study would use a quantitative approach in examining the relationship between corporate governance and financial performance. Thus, most of these empirical studies focused on descriptive to do the analysis and make inferences.

3.0 METHODOLOGY

The approach to a research study involves a methodological link between the research philosophy and subsequent choice of methods to collect and analyze data (Denzin, 2013). Research approach could be qualitative, quantitative or mixed. The current study employed a quantitative research approach. Quantitative approach is associated with positivism, especially when used with predetermined and highly structured data collection techniques. It can further be associated with a deductive approach, which focuses on the use of data to test theory. The data involved monthly series that spanned from January 2008 to December 2018. The period of 2008 fiscal year was of particular interest because it was described as the worst financial crisis since the great depression in the 1930s. The key variables which were

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measured by these data included corporate governance, liquidity and bank's performance. The study relied on some empirical evidences to determine the appropriate proxies for the measurement.

The study sample size was determined using the Kotrlik, Higgins and Bartllet, (2001) sample size determination table. According to Kotrlik, Higgins and Bartllet (2001) sample size determination table of a population 879 requires a sample size of 270 which represent the minimum sample size of the study. For the study to ensure statistical representativeness a significance level of 0.05% level should be attained. This study employed random sampling technique based on three major factors characteristics; individual banks within the population share homogeneous or similar features; the used of explanatory and descriptive research design; and the choice of estimation technique used to analysis the data collected for the study. The result for sample size to be used was 8 licensed banks but the study considered 10 out of 27 licensed banks so that proper inference can be made. Thus, these are Access Bank, Cal Bank, Ghana Commercial Bank, Eco-bank Ghana limited, Standard Chartered Bank, Agricultural Development Bank, Fidelity Bank, SG-SSB, Barclays Bank and Prudential Bank.

Table 1: Study Variables, Proxies and Sources.

Variables	Proxies/Measurement	Sources of data
Dependent Variable:		
Bank's Performance	Return on Asset (ROA)	GSE
Independent Variable:		
Corporate Governance	Index on Corporate Governance	GCR
Control variable:		
Non-performing loans	Monthly `non-performing loans rate	BoG

Source: Author's Construct, 2020.

3.1 Model specification and Estimation procedure

The study would be following Dielman (1989). The panel data application used is a simple regression with error components disturbances. The study would address the nature of data and time frame by running a panel data, taking into consideration the control variables concern. The model was analyzed in line with the specific objective. This is shown in the relationship existing among corporate governance and financial performance of listed banks in Ghana. The estimation model is specified as follows:

$$ROA_{it} = \beta_0 + \beta_1 CG_{it} + \beta_2 INT_{it} + \beta_3 NPL_{it} + D_i + C_t + e_{it}$$

Where; ROA_{it} represented the return on asset which measures financial performance of selected listed banks. Also, CG, INT, and NPL represented vector of observations on dependent variables. The independent coefficients in the model include β_1, β_2, and β_3. And D_i represented the unobserved individual specific effect and C_t, was the unobserved time specific effect. Also, CG, INT_{it}, and NPL_{it} represented corporate governance, interest rate and non-performing loans respectively; e_{it} was the disturbance handle or error term at time *(t)*. The estimation is runned on the particular individual units and over the specific time-periods observed. The estimation amounts to including individual binary and time binary to estimate these individual invariant and time invariant effects. This reduces the problem of multicollinearity among the regressor.

4.0 EMPIRICAL RESULTS AND DISCUSSION
4.1 Descriptive analysis

Table 2 reports the descriptive statistics of the study variables. The evidence from table 3, indicate that all the variable has positive mean values. The positive mean values signify a direct mean relationship exist among the study variables. The dependent variable, return on asset (ROA) had mean value of 0.029549 and mean value for corporate governance (CG-INDEX) was 0.461889. Interest rate (INT) and non-performing loans (NPL) are the control variables in the study. The mean values for the control variables are 18.80088 and 14.50215 respectively. The corresponding standard deviation for the reported mean values are 0.021095, 0.067256, 4.970606, and 0.143662 for return on assets, corporate governance, interest rate and non-performing loans respectively. Interest rate had the highest standard deviation of 4.970606

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and return on assets had the lowest dispersion of 0.021095. Also, return on assets and corporate governance (CG-index) reported relatively low dispersion which is less than one, when compare with that of interest rate (INT).

The median values for return on assets (financial performance), corporate governance and interest rate are closer to the mean values. This signifies that these variables had normal distribution. The skewness values for the variables are -0.557685, 0.243701, -0.138549, and 2.196406 for ROA, CG-INDEX, INT and NPL respectively. Clearly, return on assets (ROA) and INT which are skewed to the left whereas CG-Index and NPL are also skew to the right. In considering the absolute values for which a variable is assume to be normally distributed. The report showed that CG-Index and INT are normally distributed. But these variables: ROA and NPL are not normally distributed and this could be as a result of some outliers in the data. This is seen the results of Kurtosis for ROA and NPL which 3.470450 and 2.973969. Though, close or less to three respectively, the skewness values are also more than zero.

Table 2:

	ROA	CG_Index	INT	NPL
Mean	0.029549	0.461889	18.80088	14.50215
Median	0.030266	0.448680	18.67833	13.41167
Maximum	0.069610	0.573800	25.38167	20.81333
Minimum	-0.037005	0.363800	10.68417	3.641988
Std. Dev.	0.021095	0.067256	4.970606	0.143662
Skewness	-0.557685	0.243701	-0.138549	2.196406
Kurtosis	3.470450	1.832120	1.583074	2.973969
Jarque-Bera	6.594176	7.206772	9.380082	2.973869
Probability	0.036991	0.027231	0.009186	0.226053
Sum	3.191305	49.88400	2030.495	1421.211
Sum Sq. Dev.	0.047614	0.483998	2643.641	1286.616
Observations	108	108	108	108

Descriptive statistics of variables

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Note: Std. Dev. Represents Standard Deviation while Sum Sq. Dev. Represents Sum of Squared Deviation. Source: Extracted from E-Views 10.0 Version.

4.2 Correlation Analysis

Correlational analysis was conducted in this study to check for the existence of the problem of multi-collinearity among the independent variables. Table 3, indicates the result of the correlation analysis. The dependent variable (ROA) had weak positive relationships of 0.197846, and 0.108730 with corporate governance (CG-Index) and interest rate (INT) respectively. On the other hand, non-performing loans (NPL) exhibited an inverse relationship with the return on assets (ROA) and reported -0.095837 which prove to be low or weak correlational effect on return of assets (ROA). The results on interest rate reported a moderately high correlation coefficient of 0.600860 with corporate governance index. This shows that there is a moderately strong positive relationship between CG- Index and interest rate. Non-performing loans reported -0.522484 with interest rate which was a moderately inverse relationship. Furthermore, interest rate reported moderately high correlation coefficient of 0.600860 with corporate governance index. This shows that there is a moderately strong positive relationship between CG- Index and interest rate. Equally, all variables used in the study proved that there is no problem of multi-collinearity. This is because all their correlation coefficient is less than 0.9.

Table 3: *Correlation analysis of the variables*

	ROA	CG-Index	INT	NPL
ROA	1.000000			
CG-Index	0.197846	1.000000		
INT	0.108730	0.600860	1.000000	
NPL	-0.095837	0.066633	-0.522484	1.000000

Source: from E-version Extracted views 10.0

4.3 Unit root analysis

In testing for stationarity, the study used both Augmented Dickey Fuller (1979) and Philip-Perron (1988) unit root tests. The ADF and PP test are based on null hypothesis. The null hypothesis states that there is unit root against the alternative hypothesis which also states that there is no unit root. In the case of non-stationarity, the study employed first differencing to correct this problem. Table 4, shows that all the variables used in the study are stationary and integrated of order one, I (1). Thus, the alternative hypothesis is true that there is no unit root. The return on assets (ROA), corporate governance index (CG-Index), interest rate (INT) and non-performing loans (NPL) are all stationary at 5% for both Augmented Dickey Fuller and Philip-Perron.

Table 4: *Results of ADF and PP Unit Root Test on Variables*

Variables	ADF		PP		Order
	T-Statistics	P-Value	T-Statistics	P-Value	
ROA	45.0196	0.0011	69.6386	0.0000	I(1)
CG-Index	47.8357	0.0004	56.1618	0.0000	I(1)
INT	49.3795	0.0003	52.4401	0.0001	I(1)
NPL	52.6394	0.0001	26.5000	0.0099	I(1)

Source: Extracted from E-views 10.0 Version

4.4 Hausman test

This method is used to analyze which estimation technique to be used for analysis the model. In order to reject the null hypothesis, the fixed effect p-value should be statistically insignificant. The current study used binary variables in analyzing the data. The use of binary data makes the data already varying

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therefore it make the use of random effect inappropriate. Statistically, fixed effect becomes appropriate estimated to be used for the model. Hence, the study adopted the fixed effect estimation model.

4.5 Panel Regression Analysis

The study used panel regression analysis in estimating the relationships between each independent variable and the dependent variable. The panel data used consist of multiple observations on each sampling unit. The regression was estimated by pooling the time-series observation across the variety of cross-sectional units (selected banks). The reason for the use of panel regression analysis is first panel data sets combines two dimensions; cross-sectional data and time-series data. This combined data set produce a more data variation, more degree of freedom and very small collinearity. Secondly, panel regression analysis is better suited for studying dynamic changes in variables than typical ordinary least square regression (OLS). Thirdly, panel regression is appropriate because it enables the study to examine complex behavioural models such as corporate governance.

In view of this, the regression estimated met assumptions underlying panel data regression analysis. The first condition is that the intercept and slope coefficients are constant across time and firms and the error term captures the differences over time and over the firms. Secondly, the slope coefficients are constant but the intercept varies over the firms. Thirdly, all coefficients (both intercept and slope) vary over the firms. Lastly, the intercepts as well as the slope vary over the firms and time. The study adopted an approach called one-way fixed effect estimation model. This approach allows each bank to have its own intercept is to create a set of binary variables, one for each bank and included as a regressor.

The statistics from the panel regression estimation are reported in Table 5. The table 5 indicated R^2 which is the coefficient of determination measures the strength of the relation between the dependent variable (ROA) and independent variable (CG-index) as well as control variables (INT and NPL). The R^2 measures the proportion of variation on dependent variable (ROA) that is attributable to the other independent variables. From table 5, R^2 reported 0.6200 and adjusted R^2 had 0.5408. The R^2 statistic signifies a strong positive relationship between the dependent variable (ROA) and the explanatory variables. The remaining 38% of the variance is explained by other variables that were not captured in the model. Also, the independent variables or explanatory variables explained 62% of the total variation in the dependent variable (ROA). This is evidenced by the adjusted R^2 of 54% in the model estimated. It is worth noting that the estimation results revealed the absence of extreme values. Thus, the model estimated is far from a spurious regression as it produced relatively strong associations.

The constant term in table 5, reported a coefficient of 0.072916. At a constant term of 0.072916, explanatory variables (CG-index, INT and NPL) are assumed to be zero. The constant term indicates that holding the explanatory variable fixed, the dependent variable would increase by 0.072916. Furthermore, the study used standard error of regression (S.E.R) to determine the average distance that the observed values fall from the regression line. The rule of thumb states that the smaller the S.E.R value the closer the observations are to the regression line. The standard error regression (S.E.R) from table 5 was 0.014833, which implies that the average data points from the regression line or slope was about 0.01% body fat. Hence, the standard error regression had a small value so the study concluded that the regression model estimated was closer to the regression line.

Statistically, when two regressor exhibit perfect linear relationship, the situation called multi-collinearity. In table 4 (correlation matrix), study revealed that there is no multi-collinearity. Equally, serial correlation or autocorrelation happens when errors in the individual units and time-specific series are correlated. In other words, serial correlation is when the error terms in the model exhibit are a perfect linear association. From the table 5 the Durbin Watson statistic which is the measure for serial correlation (autocorrelation) reported 1.920795. As a rule of thumb the Durbin Watson test statistic should be near 2 and table 5 prove that, there is no serial correlation in the model estimated.

The corporate governance variable was measured by the corporate governance index which was derived from Global Competitiveness Report (GCR). The results for corporate governance index (CG-index) from table 5 presented a coefficient value of -0. 154727.The model revealed a negative and significant relationship at 1% significant level. Also, the study rejected the hypothesis and concluded that there is a negative relationship between corporate governance and financial performance (ROA) of banks.

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This implies that a unit increase in corporate governance would result in 15.47% decrease in financial performance (ROA), when all other factors are held constant.

The variable interest rate (INT) showed a coefficient of -0.001127, which was negative and significant at 5% significance level. This implies a unit increase in interest rate would result in 0.11% decrease in financial performance. Thus, there is an inverse relationship between interest rate and financial performance. Also, the model revealed that non-performing loans (NPL) had a coefficient of 0.000452 and the p-value revealed an insignificant relationship at 10% of significance level. The findings for non-performing loans showed a positive coefficient but the effect on financial performance is not significant. Interest rate relates negatively to financial performance.

Table 5: *Panel Least Square Regression*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.072916	0.019197	3.798332	0.0003
CG-Index (-1)	-0.154727	0.049707	-3.112767	0.0027***
INT (-2)	-0.001129	0.000498	-2.268509	0.0263**
NPL (-1)	0.000452	0.000717	0.630603	0.5303

R-squared	0.620036	F-statistic		7.832785
Adjusted R-squared	0.540877	Prob. (F-statistic)		0.000 000
Durbin-Watson Stat.	1.920795	S.E. of regression		0.014833

Source: Extracted from E-views 10.0 version. *** & ** represent significance level of 1% and 5% respectively.

5.0 CONCLUSION

As a consequence of the study, the following conclusions were drawn in addressing the highlighted hypotheses. The inverse relationship between corporate governance and financial performance practically implies that management of financial institutions only react to improve their corporate governance whenever those banks are faced with a financial distressing situation. The study concluded that management adopted passive management style which would serve as a prudent management tool especially for financial institutions. Also, as long as there are active and skillful managers in the corporate board, listed banks going to perform well financially, holding other factors constant. And concluded that corporate board would come up with good corporate mechanisms and follow them thoroughly. The corporate board would make sure that the intended purpose for those regulations have been achieved.

In the banking industry, anytime interest rates are increased it affects the earning of the banks. In that with an increase in the interest rate, investor reduce their saving or may choose to transfer their fund into either a other sectors of the economy or international fund managers which would fetch the investor more profits. It could also mean that whenever interest rate is reduced, it attracts more investors into the banking industry which in turn increase the financial performance. Findings on non-performing loans implies that managements in the banking industry are doing their very best to reduce or minimize that impact of non-performing loans. Managers are putting in place measures to recoup all non-performing loans before they become a bad debt. And also, debtors are doing their best to pay all their outstanding.

In relation to the findings, the study recommends proactive management system for listed banks. Stock market regulators should ensure that listed banks focus on controlling or managing their known risks well. Managers or corporate board must do their best to be proactive so as to reduce the chance of them experiencing a financial distress. Unlike, reactive management, who waits till the problem occur or gets out of hand before they act to save the situation.

The study recommends that the corporate board should consist of members who are well-versed in their job description. A high quality of management in a bank is very important tool for the success of the institution. In order to achieve this, regulators of the financial system need to provide more guidelines. These guidelines would determine whether a person is fit to hold management position or not. The fit and proper directives should be revised annually to include these suggestions.

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6. SUGGESTIONS FOR FUTURE RESEARCH

The present study investigated the influence of corporate governance, liquidity and financial performance of listed bank in Ghana. The recommends that the future research be replicated to examine the effect of corporate governance, capital structure and financial performance. And by extension, future research may consider replicating the effects of corporate governance, liquidity risk and financial performance of major international banks in Africa. Also, a comprehensive examination of how corporate governance and climate change are affecting World's largest corporations and they are positioning themselves in a carbon-constrained world.

6.0 Contribution to knowledge and limitations of the paper

The present study seeks to complement the existing empirical evidence on corporate governance. By computing a generalized index from factors that measured the country-level corporate governance. To find out the relationship that exist between country level index and financial performance of listed banks in Ghana

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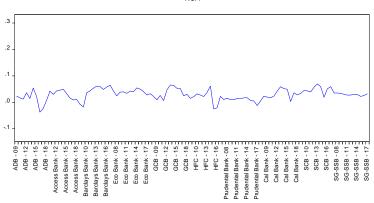
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