Abstract
The study looks at how bank governance affects market performance of banks in Nigeria. Specifically, it considers board composition, gender diversity, board size, bank age, and firm size effect on stock return of eight internationally authorized banks from year 2005-2021, making 136 observations. Data utilized were sourced from annual reports of the respective banks accompanied by Central Bank of Nigeria archive. Descriptive statistic, unit root, Hausman, and Pooled Ordinary Least Square tests were exploited at the 95% confidence interval. The result of the unit root test shows that all the variables were integrated at level; thus, requiring the Hausman test which confirmed the accession of the Pooled Ordinary Least Square test to determine the presence of short-run effect between the dependent and independent variables. The Pooled Ordinary Least Square showed that gender diversity, board size, and board composition were positive and significant to stock returns; however, bank age is positive and insignificantly related to stock returns of these banks. Consequently, the study concludes that bank governance significantly promotes stock returns of the internationally authorized banks in Nigeria. The study advocates for banks to continually adopt innovative products to remain competitive. In addition, an optimal mix of board size and composition alongside gender diversity should be vigorously pursued to promote market performance.

Keywords: Bank Governance, Stock Returns, CBN, Hausman Test, Pooled Ordinary Least Square.

1. Introduction
A healthy, vibrant, and efficient banking system is imperative for the proper functioning of any economy. This is because such a banking system can certainly contribute to the real sector by playing effective intermediators’ role of granting credit to private individuals, institutional investors, and the government. Odi and Olulu-Briggs (2016) maintains that bank credits help simplify economic activities such as Agriculture, Forestry and Fishery, Manufacturing, Mining and Quarrying, Real Estate and Construction, Domestic Trade, Imports and Exports; and most importantly provide capital for small and medium scale Enterprises. A well-functioning banking system is one that can use its resources effectively and efficiently in the pursuit of value creation for shareholders’ alongside satisfying the needs of their different stakeholders’, which can vigorously be achieved through economies of scale, product differentiation, cost reduction, market reach and technological edge. For managers to achieve value creation, research has proved that they must employ proper and sustainable corporate governance codes to arrive at a balance in their financial, social, economic, and environmental decisions (Keffas & Olulu-Briggs, 2011). Nevertheless, the attainment of these objectives may somehow contradict with the goals of the manager,
resulting in a conflict of interest, generally known as agency-principal dilemma. To resolve these divergences and their associated costs, shareholders use a variety of strategies such as activity monitoring, gifting of shares, or an agreement to purchase shares at a subsidized rate, using managers’ performance as a basis for such agreements (Agrawal & Cooper, 2017). Hooper et al. (2009) is of the view that lowering agency and transaction costs results to better-quality governance, and thus increases shareholder returns. On the other hand, Fahlenbrach et al. (2012) suggested that providing high incentives to managers reduces firm performance. For this reason, the issue of corporate governance arose as a means of resolving agency conflicts (Hart, 1995).

The Central Bank of Nigeria (2022) define governance as a set of rules, procedures, and laws that control and regulate banks’ employees and their financial activities. Bank governance involves accountability, transparency, risk management, sustainability, integrity, social responsibility, stakeholder theory and fairness. Without governance codes, the banking system will be crowded with uncertainties leading to an increase in transaction cost. Agrawal and Cooper (2017) mentioned that issues of poor governance may also lead to increase in tax revenue and loss of investors’ income (Awolowo et al. 2018). When managers without regards to internal governance mechanisms, act in their self-interest, it erodes the benefits of good governance practices (Mselmi & Regaieg, 2017). For example, is the failures of Enron, World.com, Xerox, Allied Irish Bank, Parmalat, and other African financial institutions which have resulted to loss of employees’ jobs and financial securities, not counting a drop in stock returns.

In recent times, fraud and corrupt practices carried out by bank officials have brought to question the issue of bank governance. According to the CBN (2018), there is no doubt that corruption in banks have led to a breakdown in the financial system. Moreover, board members lack independence and productivity along with fragile and ethical standards when conducting their businesses (Olulu-Briggs, 2020). Kehinde (2013) opine that corrupt acts perpetrated by bank officials makes it difficult for the banking institutions to contribute to real sector growth. Their findings named weak internal structures, incompetence of board members, poor risk management processes, and insider abuses among others.

A thorough look at the empirical literature in the case of Nigeria shows paucity of research as to how bank governance affects market performance. For instance, Erin et al. (2020) examines risk governance and performance of financial sector firms; Joshua et al. (2019) studied how bank governance influence financial performance, while that of Ifionu and Keremah (2016) researched into bank reforms and performance in Nigeria. Notwithstanding the numerous investigations on how bank governance has impacted on the performance of the banking sector in both developed and domestic societies, there still exist several conflicting arguments. Most of the previous research have either opposed submissions or similar findings which are still being contested. This may be because of the selected sample size,
geographical area, methodology employed and or the source of the data leading to uncertainties in the investigation process. More so, there may be variations in the measures of bank performance or governance principles. This study investigate how bank governance has impacted on the performance of banks from the period 2005-2021 based on available data. To avoid variations in data sampling, the banking sector index was used to proxy market returns; while firm size, gender diversity, bank age, board size and board composition are measures of bank governance. In addition, annual secondary series were gotten from the audited annual reports of eight (8) internationally recognized banks based on capacity, character, collateral, and capital (CBN, 2020). This is our point of departure from other studies. The study is divided into five sections; first is introduction, second is literature, third, fourth and fifth are methodology, results and discussion, and conclusions and recommendations respectively.

2. Literature Review
This investigation is based on the Agency and Stewardship theories. According to Jensen and Meckling's (1976) agency theory, managerial decisions in businesses with widely held equity tend to diverge from shareholder expectations to maximize their wealth. This breeds the issue of agency problems which means that when agent act in their own interest by not divulging information i.e. knowledge asymmetry, they end up harming the owners of the business. According to Eisenhardtit (1989), agency challenges develop when the interests of the principal and the agents clash, and it is difficult or quite expensive for the principal to ascertain the activities of the agents. The problem is that the principal cannot assure that the agent is acting ethically and in his best interests. However, to address issues of agency problems, researchers have made some valuable suggestions. Fama and Jensen (1983) and Eisenhardt (1989) proposed the establishment of monitoring and supervisory procedures to safeguard stakeholders from management conflicts of interest. In line, Jensen, and Meckling (1976) submitted that shareholders can exert accountability by incurring fees to stop agents from misappropriating cash.

As put forward by the stewardship theory, managers are largely driven by a desire for successes and responsibility, as such, they are outstanding company stewards who work tirelessly to produce higher corporate earnings (Donaldson & Davis, 1994). The stewardship hypothesis thus proposes that management should have a considerable number of internal executives to ensure more successful and effective general leadership.

A great deal of recent studies has been conducted on governance, bank governance and market performance in various climes, which have generated diverse discoveries too. Kakar et al (2021) studied 39 banks in Pakistan over the period 2010-2015, on the association between risk management, corporate
governance, ownership structure, and bank performance; and showed that corporate governance and risk management substantially promotes banks’ performance. Utilizing a sample of 20 commercial banks in Ghana from 2011-2017, and adopting the random Pooled ordinary least square technique, Afriyie et al. (2021) investigated corporate governance and its impact on the financial performance. The result upholds that board composition, net interest margin, and bank size affects profitability positively; bank age and cost-to-income ratio affects profitability negatively; but board size does not spur profitability. Erin et al. (2020) examined the impact of risk governance on performance of 50 listed financial sector firms in Nigeria from 2013-2017. Utilizing the Pooled OLS technique, the study shows strong support for positive and substantial relationship between risk governance and financial performance. Joshua et al. (2019) in their analysis of governance and performance of 10 listed deposit money banks in Nigeria covering 2007-2016, adopted the Pooled OLS method and revealed that audit committee, bank size and board composition substantially promote performance with only board size as positive but non-significant to return on assets of deposit money banks. Handa (2018) explored on how board structures affect performance of 70 banks in India from 2008-2015. The result supports that board committees, directors’ remunerations, female directors, and duality of chairman-CEO significantly affects bank performance. Sampling 11 banks in Tunisia from 2006-2013, Mselmi and Regaieg (2017) adopted the Pooled OLS technique to evaluate how governance influences stock market performance. The result shows that good governance promotes stock market performance. Hajer and Anis (2016) examine how governance affects performance of 8 quoted banks in Tunisia from 2000-2011. The authors uphold that there is no visible standard governance practice and as such each bank is free to adopt its own structure to drive its performance. In Bahrain, Ahmed and Hamdan (2015) employed the Panel OLS method to assess how governance influenced the performance of 42 quoted firms from 2007-2011. The findings indicate that governance spurs performance positively. Keffas and Olulu-Briggs (2011) researched into the financial performance of both CSR and Non-CSR banks in Japan, US and UK using the non-parametric frontier analysis. The outcome of the findings shows that when firms institute corporate governance principles, they have better capital adequacy, asset quality, and are more well-organized in the management of their asset portfolios. Utilizing 30 cross-country data of 296 financial sector firms, Erkens et al. (2010) argues that firms with higher institutional ownership and independence of boards are worse in terms of stock returns during financial crisis. This they acclaim attribute to higher risk exposure of the firms prior to the crisis.

3. Methodology
Purposive sampling technique was chosen for the 8 internationally authorized deposit money banks in Nigeria which includes: Access Bank, Fidelity Bank, First Bank, First City Monument Bank, Guaranty Trust Bank, Union Bank, United Bank of Africa, and Zenith Bank (CBN, 2022). Data was gotten from the audited annual reports of the banks from 2005-2021, making an aggregate observation of 136. The Pooled ordinary least square (POLS) technique was employed for the analysis. Following Afriyie et al. (2021); Joshua et al. (2019); and Mselmi and Regaieg (2017), firm size, bank age, board size and board composition were used as proxies for bank governance; and stock market return as proxy for market performance.

For stock market return, we apply the formula below on the banking sector index (BSE-Index):

\[
MRTS_{it} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}} \times 100
\]

Thereafter, we apply the descriptive, unit root, hausman, and pooled ordinary least square techniques.

Our study model becomes.

\[
MRTS = \beta_0 + \beta_1 BOS_t + \beta_2 BCOM_t + \beta_3 BA_t + \beta_4 FZ_t + \beta_5 GDY_t + \sigma_t
\]

Where, \(P_{i,t}\) and \(P_{i,t-1}\) = Opening and closing price for the market (BSE-Index).

MRTS = Market return; BOS = Board size; GDY = Gender diversity; BCOM = Board composition; BA = Bank age; FZ = Firm size (Natural logarithm of total assets); \(\beta_1, \beta_2, \beta_3, \beta_4\) and \(\beta_5\) = Constant parameters; \(\beta_0\) = Intercept; \(it\) = different firm I in year t; \(\sigma_t\) = Error term.

4. Results and Discussion

Table 4.1: Descriptive Outcome

<table>
<thead>
<tr>
<th></th>
<th>MRTS</th>
<th>BOS</th>
<th>BCOM</th>
<th>BA</th>
<th>FZ</th>
<th>GDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.004630</td>
<td>7.398438</td>
<td>2.285751</td>
<td>50.00000</td>
<td>8.225299</td>
<td>0.246844</td>
</tr>
<tr>
<td>Standard dev.</td>
<td>0.001383</td>
<td>1.186139</td>
<td>0.487393</td>
<td>36.34307</td>
<td>1.871126</td>
<td>0.115816</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.505961</td>
<td>-0.495830</td>
<td>1.227352</td>
<td>0.871901</td>
<td>-0.283612</td>
<td>0.126518</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.125250</td>
<td>2.743924</td>
<td>6.711861</td>
<td>2.183019</td>
<td>1.855741</td>
<td>2.564425</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>9.542272</td>
<td>5.594478</td>
<td>105.6186</td>
<td>19.77761</td>
<td>8.699048</td>
<td>1.437934</td>
</tr>
<tr>
<td>P-values</td>
<td>0.008471</td>
<td>0.060978</td>
<td>0.000000</td>
<td>0.00051</td>
<td>0.012913</td>
<td>0.487255</td>
</tr>
</tbody>
</table>

Source: E-views10

From table 4.1, the descriptive analysis of the variables shows that MRTS, BOS, BCOM, BA, FZ, and GDY have their annual mean values as 0.004630, 7.398438, 2.285751, 50, 8.225299, and 0.246844. The level of variability from mean values of MRTS, BOS, BCOM, BA, FZ, and GDY are 0.001383%, 1.186139%, 0.487393%, 36.34307%, 1.871126%, and 0.115816 singly. MRTS, BCOM, GDY, and BA are positively skewed while BOS, and FZ are skewed negatively. BCOM is leptokurtic; MRTS, BA and FZ are platykurtic; and BOS and GDY are mesokurtic. The Jarque-Bera p-values indicates that all the variables are not normally distributed except BOS and GDY.
4.2 Stationary Test

Table 4.2: Levin, Lin & Chu (LLC) test

<table>
<thead>
<tr>
<th>Variables</th>
<th>LLC Result</th>
<th>P-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRTS</td>
<td>-2.73435</td>
<td>0.0031</td>
<td>I(0)</td>
</tr>
<tr>
<td>BOS</td>
<td>-3.15796</td>
<td>0.0008</td>
<td>I(0)</td>
</tr>
<tr>
<td>BCOM</td>
<td>-7.29321</td>
<td>0.0000</td>
<td>I(0)</td>
</tr>
<tr>
<td>BA</td>
<td>-4.24162</td>
<td>0.0000</td>
<td>I(0)</td>
</tr>
<tr>
<td>GDY</td>
<td>8.66373</td>
<td>0.0000</td>
<td>I(0)</td>
</tr>
<tr>
<td>FZ</td>
<td>-6.99871</td>
<td>0.0000</td>
<td>I(0)</td>
</tr>
</tbody>
</table>

Source: E-views10

From table 4.2, all the variables are integrated at level I (0) at the 95% confidence interval. This outcome prompts the employment of the pooled ordinary least square with either the random or fixed effect model based on the Hausman test.

4.3 Hausman Test

Table 4.3: Hausman Test

<table>
<thead>
<tr>
<th>Correlated Random Effects – Hausman Test</th>
<th>Test cross-section random effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test summary</td>
<td>Chi-Sq. stat</td>
</tr>
<tr>
<td>Cross-section random</td>
<td>191.406295</td>
</tr>
</tbody>
</table>

Source: E-views10

From table 4.3, the Chi-Sq. Stat. of 191.406295 reveals that the individual effects are uncorrelated with the explanatory variables at 95% confidence interval. Thus, our outcome evokes the application of the fixed effect model.

Table 4.4 Pooled OLS Result

<table>
<thead>
<tr>
<th>Dependent variable: MRTS</th>
<th>Method: Panel Least Squares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>Coefficient</td>
</tr>
<tr>
<td>BOS</td>
<td>0.000711</td>
</tr>
<tr>
<td>BCOM</td>
<td>0.623438</td>
</tr>
<tr>
<td>BA</td>
<td>0.016023</td>
</tr>
<tr>
<td>GDY</td>
<td>0.026849</td>
</tr>
<tr>
<td>FZ</td>
<td>42.95459</td>
</tr>
<tr>
<td>C</td>
<td>0.005640</td>
</tr>
</tbody>
</table>

Effects specification
Cross-section fixed (dummy variables)

| R-squared | 0.759162 | F-statistic | 81.95649 |
| Adjusted R-squared | 0.749899 | Prob(F-statistic) | 0.000000 |
From table 4.4, the result affirms that BOS, BCOM, FZ, and GDY are positive (0.000711, 0.623438, 42.95459, and 0.026849) and significant (2.477217, 3.967795, 3.119867, 2.757344) to market returns (MRTS) respectively. This implies that 1% increase in BOS, BCOM, FZ, and GDY will lead to 0.000711%, 0.623438%, 42.95459%, and 0.026849% increase in MRTS individually. BA is positive (0.016023) but insignificant (0.983490) to MRTS. This indicates that 1% increase in BA will cause MRTS to reduce by 0.016023%. The Adjusted R-square of 0.749899 signifies that bank governance explains 74.99% variations in MRTS; while the other are captured by variables not included in this study. The D-W stat of 1.567651 indicates that the model is free from first order autocorrelation and the F-stat. of 81.95649 indicates that overall, the model significantly fits the data.

Table 4.5: Diagnostic Testing: Cross-Section Dependence (correlation) Test

<table>
<thead>
<tr>
<th>Test</th>
<th>Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan LM</td>
<td>-0.867735</td>
<td>0.3855</td>
</tr>
<tr>
<td>Pesaran scaled LM</td>
<td>1.475302</td>
<td>0.1401</td>
</tr>
<tr>
<td>Bias-corrected scaled LM</td>
<td>1.720649</td>
<td>0.0853</td>
</tr>
<tr>
<td>Pesaran CD</td>
<td>1.809009</td>
<td>0.0704</td>
</tr>
</tbody>
</table>

From table 4.5, the correlation tests indicates that their probability values are higher than 5% level of significance, meaning that there is no residual cross-sectional dependency (correlation) among the variables.

Figure 4.1: Diagnostic testing: Normality Test

From figure 4.1, the histogram is bell-shaped and the p-value of the Jarque-Bera statistic is above the 5% threshold (0.952036). As a result, the null hypothesis that the distribution is normally distributed holds.

5. Discussion of Findings
In determining market performance of banks, board composition is key to an increase in stock returns. A well-composed board is an optimal mix of both directors and non-executive directors which allows for efficient and effective decision making as regards their financing, investment, dividend, and liquidity decisions. This is supported by Carter et al. (2003) who advocated for board diversity as it improves the potential for information and thus maximize firm’s performance through the aggregation of human and social capital. Also, Lynall et al. (2003) opine that board directors are responsible for external dependency management, which helps to reduce uncertainties and transaction costs in accordance with quality governance; in line with Kakar et al (2021); Afriyie et al (2021); Erin et al (2020); Joshua et al (2019); Handa (2018); Mselmi and Regaieg (2017); and Ahmed and Hamdan (2015). However, it differs from the study by Hajer and Anis (2016); and Erkens et al (2010) that corporate governance does not promote the performance of firms.

Board size significantly promote stock returns as well. This means that as firms increase in size, it is expected that the number of persons in the board should increase to allow for more comprehensive and quality decision making, collaborative innovations that will affect stock returns positively (Carter et al, 2003; Lynall et al, 2003).

Bank age is positive but insignificant to stock returns. This entails that as banks age, it returns tends to fall gradually. This finding can be likened to the fact that most of the aged banks are already in their maturity phase of development and most of their staff have insufficient technical expertise about contemporary business novelties. This is in consensus with Erin et al (2020); Joshua et al (2019); Handa (2018); Ahmed and Hamdan (2015); and Mselmi and Regaieg (2017) that the size of a firm does not lead to more returns rather the strength of their broadened undertakings.

Firm size substantially promotes stock returns. This is due to the benefit banks enjoy in terms of economies of scale, strong competitive advantage, and wider coverage. This finding agrees with Hooper et al (2009) claim that lower agency and transaction costs are a result of better-quality governance, which is achieved through the size of their assets. On the contrary, most studies have shown that better governance does not always promote shareholder wealth, particularly during times of financial crisis (Beltratti & Stulz, 2012; Gupta et al., 2013).

Finally, gender diversity significantly stimulates stock returns. This means that increasing the ratio of female directors to that of their male counterpart, raises the bank's market price per share. This view is supported by Vitolla et al (2019) that increasing gender diversity helps in enhancing information disclosure which stimulates stock returns of banks.

Limitations
This study is restricted to only 8 DMBs that have international recognition by the Central Bank of Nigeria as of 2021. Inclusion of other DMBs with same criteria can influence the outcome of the study. Also, not all the dimensions of bank governance are captured in this study, for instance, CEO duality, board class, religion, and ethnicity. All of these can affect the outcome of the study. Lastly, the study is restricted to only one sector of the Nigerian economy which is the banking sector.

6. Conclusion and Recommendations
The study applied the agency and stewardship theories to investigate the influence of bank governance on market performance in Nigeria covering the period 2005-2021, giving an aggregate of 136 observations. The explanatory variables are board composition, size, gender diversity, bank age and bank size; and the explained variable is stock market return which is proxy of the sectorial index of banks in Nigeria. The study’s findings strongly affirm that board size, board composition, gender diversity, and firm size are core aspects of bank governance that exert positive and significant influence on market performance. However, banks’ age has no significant influence on performance. In line with the findings, this study strongly advocates for banks to continually innovate products to remain competitive. In addition, an optimal mix of board size and composition as well as gender diversity should be actively pursued to promote market performance.

References


