ABSTRACT

The aim of this study is to examine the association between dividend policy and earnings management of listed commercial banks in Nigeria. The study adopted ex-post-facto research design and stratified random sampling technique to select all commercial banks quoted on the Nigerian Exchange Group that span from 2013 to 2022 financial years. Secondary data were extracted from the annual reports of the commercial banks in Nigeria. The collected data were analyzed using descriptive statistics, correlation analysis, and multivariate regressions analysis. The results revealed that, earnings per share have a coefficient value of -0.03 and probability value of 0.006 indicating that Earnings per share has inverse significant effect on accrual earnings management at 1% level and a coefficient value of -0.007 and p- value of 0.025 indicating a corresponding inverse significant effect on real earnings management of the commercial banks in Nigeria. Again Price earnings ratio has coefficient value of-0.008 and p- value of 0.114 indicating an inverse significant effect on accrual earnings management but has coefficient value of 0.003 and p-value of 0.219 indicating a positive significant effect on real earnings management. Also dividend yield has coefficient value of 0.018 and p-value 0f 0.001 indicating that dividend yield has statistical significant effect on both accrual earnings and real earnings management of the commercial banks studied. The study recommends amongst others that commercial banks should engage the chief executive...
officers that are goal getters to enhance the operating profitability of the banks, which would play down on the quest to make up their deficiencies through earnings manipulations. Pertinently, the commercial banks are also encouraged to ensure regular payment of dividend to shareholders which will motivates other investors rather than opportunistic behaviors and manipulations through earnings management.

**Keywords:** Earnings Management, Dividend Policy, Commercial Banks, Nigeria.

### INTRODUCTION

Reliable and good quality financial reports prepared and issued by management are the prerequisites for profitable investments in the world and most desired for investment decisions by resource providers and other stakeholders globally (Okolie & Igaga 2021). The quest for true and fair view financial reports has motivated firms stakeholders and financial experts into series of financial statements analysis for effective investment decision making. If companies engage in strategies to smooth earnings, and if the amount of earnings achieved is the base for distribution of dividends and management yearly performance is appraised and firms management rewarded accordingly, then it is expected that earnings management actions might have an influence on the firm’s dividend policy. Firms’ dividend policy and earning management appears to be among most recently discussed topics in today’s modern business because of its vital roles in organization’s financial decision making. Earnings management is the application of accounting skills, principles, techniques and practices to influence or misrepresent reported earnings through the use of accounting methods, accelerating expense, under-accruing expense, untimely recognition (or deferment) of revenue transactions and other methods crafted to influence earnings. The practice of earnings management involves altering figures being reported through judgmental discretions as allowed by the Generally Accepted Accounting Principles (GAAP) to mislead the users into believing what is not valid in respect of the earnings’ figures and hence influences contractual outcomes which depend on the reported earnings (Okolie, 2014).

Earnings smoothing is a particular type of earnings management which defines a reasonable and legal management decision making and reporting intended to achieve stable and predictable financial result (Ekanayaka & wijesghe, 2021). Alia, Abdeljawad & Yaageh (2020). Asserts that earnings management as the process of taking deliberate steps within the constraints of Generally Accepted Accounting Principles (GAAP) to bring about the desired level of reported income. The term is understood to refer as systematic misrepresentation of the true income and assets of firms or an innovative ways of characterizing income, assets and liabilities (Mopho et-al (2022).

The international financial reporting standards (IFRS), General Accepted Accounting Principles (GAAP) and the financial reporting frameworks allows for management estimates and judgments provided that they are reasonable in the circumstances and in line with industry practices. Firm’s earnings management can be viewed either as a booster if legally and moderately applied or a destroyer of a firm’s earnings quality is illegally or fraudulently applied (Abbadi, Murad, Hanady &Abdulla, 2020). Earnings management happens in three ways: by the use of certain income structuring and/or transaction expense; by changes of accounting procedures; and by the use of accruals management (Nour, Rashwan, Atout & Melhem 2023 ). Fodio et-al (2020) groups earnings management into two categories: real-
based earnings management and accrual-based earnings management. Real-based earnings management has to do with manipulation of real activities and also known as real earnings management (Agbaje & Igbekoy 2021). While Accruals earnings management is simply defined as the difference between accounting earnings and the cash flow from operating activities. Accruals can be categorized into discretionary accruals and non-discretionary accruals (Peter & Ekokeme 2020). Discretionary accruals are alterations of reported income by managers, whereas non-discretionary accruals are accounting adjustments to a firm’s reported income as approved by the accounting standard-setting bodies (Olfa and Anis 2022). Out of these techniques of earnings management, accruals management is the most destructive to the accounting report’s value because the shareholders are not aware of the amount of accruals (Abbadi et-al 2020).

Omebere & Ebiaghan (2022). opined that dividend policy is the firm’s outlined program used to decide how much of its residual profits will be paid out to shareholders in dividends. The portion of the residual profits not paid as dividend is referred to as retained earnings. It is the schemes and rules followed by the management for rewarding the owners of the firm for financial resources invested in the company (Ammar &Minhas 2020). When business organizations pay dividends more investors are attracted to the companies’ shares, and the stock market value of the company automatically increases. Most of listed companies that operate in Nigerian exchange group pay dividend to their shareholders.

Statement of Problem
Firm’s stakeholders expect financial information that truly reflects the economic reality, transactions, as well as other conditions that exist over the reporting period. The firm’s profitability and its distribution methods is one of the fundamental variables of financial statements that stakeholders and regulators examine for decision making (Omebere & Ebiaghan 2022). However account manipulations related scandals such as the cases of Enron (2001) and WorldCom (2002) both in United States of America, Pamalat (2003) in Italy, Cadbury (2006) and Oceanic bank (2010) in Nigeria among others have made known to investors and other financial information users globally not to relied only on firm’s declared dividend and suggest a detailed financial statement analysis for effective decision making. Although the main focus of numerous business investors globally is profits making via dividend and business expansion while the need for effective and efficient portfolio management, investment and financial statements analysis are neglected (Mopho, et-al, 2022). The motivation behind this study therefore is to examine if the dividend policy of commercial banks in Nigeria influences the tendency of engaging in earnings management practices. In this regard, Ana and Andre (2022) pointed out that previous studies have mostly focused on AEM, whereas REM has remained a largely unexplored area.

Objectives of the Study
The main objective of the study is to examine the effects of dividend policy on Earning Management of the commercial banks in Nigeria from the year 2013 to 2022 periods and the specific objectives of the study are to:

(i). Investigate the effect of earnings per share on earnings management of the quoted commercial banks
in Nigeria,
(ii). Evaluate the effect of price earnings ratio on earnings management of the commercial banks in Nigeria,
(iii). Determine the effect of dividend yield on the earnings management of the commercial banks in Nigeria.
(iv). Examine the effect of return on equity, on the earnings management of the commercial banks in Nigeria.
(v). Evaluate the effect of firms size on earnings management of the quoted commercial banks in Nigeria.

Research Hypotheses
HO₁: There is no significant relationship between Earnings per share and earnings management practices of commercial banks in Nigeria.
HO₂: There is no significant relationship between Price earnings ratios and earnings management practices of commercial banks in Nigeria.
HO₃: There is no significant relationship between Dividend yield and earnings management practices of commercial banks in Nigeria.
HO₄: There is no significant relationship between Return on Equity and earnings management practices of commercial banks in Nigeria.
HO₅: There is no significant relationship between Firm size and earnings management practices of commercial banks in Nigeria.

REVIEW OF LITERATURE
Earnings Management Techniques
These are earning management methods adopted and use by the commercial banks with the views to improve firm’s earnings and meet up its management’s set targets and some of these techniques are listed and explain as
(a) Research and Development: these are process through which the commercial banks works to generate innovative technologies, product, services and systems that it will either use internally or sell and to improve its services, performance and profitability. The bank’s cost for research and development are budgeted and are controlled by the commercial banks top management and used same to manipulates its earnings through either implementation or suspension of research and development activities to archived set level of income.
(b) Marketing and promotion expenses: these are amounts of monies commercial banks spend on public relations, adverting, packaging, sales promotion of its brand, products and services. And these costs are budgeted, planned and spend in line with commercial banks strategic plans and these funds are controlled by commercial banks top management and firms under reviews manipulates it figures by controlling it spending of this budgeted founded to attain management earnings plan.
(c) Changing Accounting Policy through reducing capitalization limits: This is one of the techniques adopted by commercial bank’s management to improve accrual earnings management. In every firms and Nigeria commercial banks inclusive there are management set expenses limit or level which can be capitalized and any amount lower than the amount
capitalized is expensed immediately. For instance if the a commercial bank’s capitalization amount limit is fixed at One Million Naira (N1million) and during the bank’s management or board meeting the capitalization limit is reduced to five hundred thousand naira. This means that every firm’s expenses above five hundred thousand which supposed to be expensed immediately is now being capitalized and thereby reducing firms overall expenses and increasing earnings. As reported by Fodio et-al (2020), tighter accounting standards result in increasing REM and reducing AEM at the same time. Remarkable empirical evidence of this shift among managers was recorded by Andreas and lopes (2022), which illustrate the shift of earnings management practices from accruals to real activities under the pressure of the passage of the public companies accounting reforms and investor protection Act 2002.

(d) **Selling Fixed Assets:** the commercial banks selling of its fixed assets such as used vehicles, generators, computers, printers and others are one flexible technique used by management to enhance reported earnings when they realized that the firm’s earnings target may not be actualize. The empirical literature on earnings management has effectively revealed that managers might sell fixed assets and use the gains from such sales to avoid reporting losses or low earnings or to avoid debt covenant violations. In a research study by Herrmann et al. (2003), firms in Japan were found to have managed earnings through selling marketable securities or fixed assets and using the gains proceeds (or losses) to adjust the actual operating income to meet forecasts. Recently,

(e) **Stock Repurchases:** Stock repurchases are also considered as one of the REM techniques adopted by firm’s management to manipulate earnings. Prior studies have provided evidence that managers of commercial banks and other firms may engage in the stock repurchases to increase earnings per share. A study by Burnett et al. (2012) provided evidence that companies under the pressure of high audit quality may shift earnings management practices from accrual to REM by stock repurchases. This evidence indicates that stock repurchases can be used as a tool for managing earnings per share. Unlike the above mentioned techniques, this method of REM (stock repurchase) does not affect the reported earnings; rather, it is used to shore up the reported earnings per share.(Ferentinou & Anagnostopoulou, 2016)

(f) **Cutting down non-mandatory expenses.** Commercial bank’s management, in a bid to improve earnings and meet up predetermined shareholder and financial analyst targets most times under take cost reviewing methods and by this means cut-down business expenses which does not have any direct effect on immediate earnings improvement to the commercial banks such as research and development, advertising cost, administrative cost etc.

(g) **Changing depreciation method.** Commercial banks in a view to improve its earnings, sometimes adopt changing depreciation method which entails selecting from depreciation methods such as straight line method or sinking funds method, depending which ever presents the best suited or most needed earnings reports for the firm.

**Dividend Policy Variables Used in the Study**

(i) **Earnings Per Share:** Earnings Per Share (EPS) is an accounting ratio that measures the portion of an enterprise profit after tax and preference share dividends, that would be allocated to the number of ordinary share capital ranking for dividend. Lafmejani (2017) assert that EPS is an indication that of the ability of the enterprise to pay dividend. Be that as it may, commercial banks with intends to create a positive
impression to the investors could easily engage in earnings management to achieve a desired EPS. However, earnings per share are computed by dividing net income for a given period by the total number of shares outstanding during the same period. Additionally, Basey (2006) insists that weighted average of the outstanding shares could be preferred since the shares outstanding could change over the period under consideration.

(ii) **Price Earnings ratio**: Price Earnings (P/E) ratio represents the price paid to a share relative to the bank’s earnings. The commercial banks with low P/E ratio could be interpreted to be overvalued which means that the shares of the bank are worthless (cheaper) than the earnings the bank makes (Mohammad 2019). On the other hand, a high P/E ratio could be interpreted as the share of the bank being overvalued and by implication, could cause the shareholders to sell their equities since they might expect future price decline P/E ratio is a major determinant of whether to invest or not to invest decisions by the investors (Nour, et-al 2023). The management can control the expectation of the investors through the P/E ratio and would have the motivation to engage in requisite earnings management to achieve the desired P/E ratio.

(iii) **Dividend Yield**: Dividend Yield (DY) measures how much an enterprise is willing to pay out in dividend relative to their stock price. High dividend yield could be interpreted as the bank being exposed to high risk as the large outflow of money might be for the dividend paid, and this could lead to decrease in its stock price (Sinan, et al., 2020). The shareholders may however, wished that the earnings could be retained, for block invest in a profitable opportunity for greater returns (Kang et al., 2019). Prior studies have established that strong positive relationship exists between dividend yield and expected return (Lewellen, 2004). Meanwhile, dividend yield is computed as annual dividend per share divided by price per share.

(iv) **Dividend Payout Ratio**: This is the dividend ratio to the firm’s retained earnings.

(v) **Returns on assets (ROA) and Returns on Equity (ROE)** these are accounting-based performance measurements which are generally considered as an effective indicator of the company’s profitability and the business when compared to benchmark rate of return equal to the risk adjusted weighted average cost of capital (Fodio & Hassan, 2020). They are unique measurements of the profit before tax divided by total assets and profit after tax divided by equity respectively, and they can be easily obtained from the firm’s annual report. Tobin’s Q is a market-based measurement which is characterized by its forward-looking aspect and its reflection of the expectations of the shareholders concerning the firm’s future performance (Abbadi, et-al 2020). It well be out of place to discuss firm’s earnings and dividend without its overall performance. Therefore in this research return on equity is used to measure firm’s performance.

**Theoretical Underpinning**: this study is anchored on Agency theory and Dividend Relevance theory since its empirical findings revealed that earnings management as bank’s managers opportunistic behaviors towards firm’ resources for personal gains and regular dividend payment as an effective tool to control and reduce managers opportunistic behaviors.
Empirical Reviews
Several notable studies have been conducted in the past, on the effects of earning management on Dividend Policy; some of these studies are discussed below as follows.
Ammar H. and Minhas A. (2022) did a study on Dividend policy and Earnings management: does agency problem and financial matters? Econometric techniques were used for its analysis while Discretionary accruals, dividend yield and dividend payout ratio were proxy for earnings management and dividend policy respectively. And found out that Dividend payout ratios restrict managers’ involvement in earnings management and dampen manager’s opportunistic behavior towards earnings management.
Fodio, Hassan. & Suleiman (2020) in the same vain did a study on earnings management effects on dividend policy and Panel regression analysis techniques were used for the analysis Discretionary accruals was proxy for earnings management, dividend yield and dividend payout ratio was used as measures for dividend policy and its results findings reveals that Earnings management significantly and negatively affects dividend policy of quoted diversified conglomerate companies in Nigeria
Ibrahim, Hassaini,& Jamila. (2021) study on the Impacts of earnings management on dividend policy of non-financial companies in Nigeria. Using Regression analysis for its evaluation, Discretionary accruals, dividend pay-out ratios returns on equity, firm size were measured for earnings management and dividend policy respectively. The study reveals that earnings management has no significant impacts on dividend policy of the listed non-financial firms in Nigeria.
Ekanayaka & Wijesinghe (2021) also carry out a study on Earnings management and dividend policy: evidence from a frontier market. Dividend yield, dividend pay-out were used as proxy for dividend policy and total accruals for earnings management with Panel regression analysis used as its statistical tool. The research findings revealed that there are no significant impacts of earnings management on dividend policy.
Andreas & Leonidas (2022) researched on Dividend policy and earnings management: evidence from the US aerospace and defense industry. The variables used are Discretionary accruals, dividend pay-out ratio, return on equity and firms size. Using Liner regression for its analysis. The study revealed that earnings management has a strong negative impact on dividend payout ratio.

Appraisal of Reviews and Gap in Literature.
After a well detailed study of the prior empirical studies on earning management and dividend policy it is important to note that the world economic meltdown that result to financial resources and jobs lost emanated from poor records keeping, financial statement analysis and reporting, lack of adequate laws, rules, guidelines and effective code of corporate governance that will effectively address and control the excessive rights and wrong application of loopholes in the general accepted accounting principles (GAAP) and this practice is known as earnings management and as such previous research only focus on finding out if there is a possibility of management engaging in earnings management as a result of the dividend policy it applies.
Most of the prior studies in the areas in Nigeria only concentrated on quoted non-financial firms. As a result, their findings appeared too generic and not sector specific. More so, most of the studies conducted in this area used ordinary least square and Tobit regression.
techniques. These techniques fell short of reflecting time variant and other specific characteristics. Therefore, this study employs more robust regression technique (GLS multivariate regression technique) to take care of the deficiencies in the OLS and Tobit regression techniques of analysis and none of the past research evaluates earning management and dividend policy using both accrual earnings management (AEM) and real earnings management (REM) to effectively evaluate earnings management practice in commercial banks in Nigerian to best of my knowledge. Hence these researchers viewed it necessary to fill this important gap in literature.

**RESEARCH METHODOLOGY**

This study adopted a quantitative research design and time series approach, the strategy which involved panel regression. The research made use of secondary data of the commercial banks in Nigeria for the 10 years period, covering from the year 2013 to 2022. Which were effectively sorted and collected from annual financial reports of the commercial banks listed on the Nigerian exchange group as at 31st December 2022.

**Independent Variables:** these are variable which influence the dependent variables either in positive or negative ways and the independent variables for this research is Dividend policy, the variables used are Earnings per share, Price earnings ratio, Dividend yield, Firm size and Return on equity.

**Dependent Variables.** These are respondent or outcome variables or variables which values are affected by independent variables and earnings management selected as dependent variable and are further broken down into accrual earnings management and real earnings management for better understanding and effective decision making.

Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Denotation</th>
<th>Measurement of variable</th>
<th>Source</th>
<th>Ampr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real earnings management</td>
<td>REM,</td>
<td>Loan loss provision: ending allowance for bad, doubtful debt and</td>
<td>Ekanayaka &amp; Wijesinghe (2021)</td>
<td>+</td>
</tr>
<tr>
<td>Earnings per shares</td>
<td>EPS</td>
<td>Modified Jones model (1995)</td>
<td>Ibrahim, A et-al (2021)</td>
<td>-</td>
</tr>
<tr>
<td>Price earnings ratio</td>
<td>PE-R</td>
<td>Current market price per share / Earnings per share</td>
<td>Ammar H. &amp; Minhas A. (2022)</td>
<td>+</td>
</tr>
<tr>
<td>Dividend yield</td>
<td>DY</td>
<td>Dividend / Net profit</td>
<td>Abbadi, et-al (2020)</td>
<td>-</td>
</tr>
<tr>
<td>Firm size</td>
<td>FSIZE</td>
<td>Ratio of retained earnings to change in capital employed</td>
<td>Ahmad A. (2009).</td>
<td>_</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>ROE</td>
<td>Profit after tax/capital employed</td>
<td>Andreas &amp; Leonidas (2022)</td>
<td>_</td>
</tr>
</tbody>
</table>

Source: Researcher’s Compilation

**Model Specification**

The model for this research work is premised on the main objective of this research and anchored on the sub-objective.

AEM, REM, = (EPS, PE-R, DY,FSIZE, and ROE).…………………………………….Eqn.3.1

This can be mathematically express as follows:

\[ AEM_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 PE_{Rit} + \beta_3 DY_{it} + \beta_4 FSIZE_{it} + \beta_5 ROE_{it} + \epsilon_{it}, \]  ----.Eqn.3.2
REM<sub>it</sub> = β<sub>0</sub> + β<sub>1</sub>EPS<sub>it</sub> + β<sub>2</sub>PE<sub>_R</sub><sup>_i</sup> + β<sub>3</sub> DY<sub>it</sub> + β<sub>4</sub>FSIZE<sub>it</sub> + β<sub>5</sub>ROE<sub>it</sub> + ε<sub>it</sub> ----Eqn.3.3

Where:
AEM= Accrual earnings management, REM= Real earnings management, EPS= Earnings per share, PE<sub>_R</sub>= Price earnings ratio, DY= Dividend yield, FSIZE= Firm size and ROE= Return on equity

PRESENTATION OF RESULT AND DISCUSSION

The data was analyzed using the following statistical tools,

Descriptive Statistics

The descriptive statistics result provides evidence on the mean distribution, maximum, minimum, standard deviation, median and the count of the data collected which span from 2012 to 2021.

Table 2

<table>
<thead>
<tr>
<th>stats</th>
<th>AEM</th>
<th>REM</th>
<th>EPS</th>
<th>PE&lt;sub&gt;_R&lt;/sub&gt;</th>
<th>DY</th>
<th>FSIZE</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean</td>
<td>.858</td>
<td>-.187</td>
<td>1.959</td>
<td>5.469</td>
<td>5.632</td>
<td>9.239</td>
<td>9.183</td>
</tr>
<tr>
<td>P&lt;sup&gt;50&lt;/sup&gt;</td>
<td>.83</td>
<td>-.18</td>
<td>1.05</td>
<td>4.605</td>
<td>5.425</td>
<td>9.24</td>
<td>12.02</td>
</tr>
<tr>
<td>Min</td>
<td>.22</td>
<td>-.48</td>
<td>-1.28</td>
<td>-1.24</td>
<td>0</td>
<td>8.19</td>
<td>-394.32</td>
</tr>
<tr>
<td>Max</td>
<td>1.35</td>
<td>.17</td>
<td>7.79</td>
<td>27.03</td>
<td>19.05</td>
<td>10.07</td>
<td>32.08</td>
</tr>
<tr>
<td>Sd</td>
<td>.2206</td>
<td>.1237</td>
<td>2.11</td>
<td>3.936</td>
<td>4.507</td>
<td>.412</td>
<td>38.853</td>
</tr>
<tr>
<td>N</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
</tbody>
</table>

Source: Stata 14 output

From table 2 above, it is seen that Accrual Earnings Management (AEM) which was proxy by loan loss provision has average value of 0.85, maximum of 1.35, minimum value of 0.92 and standard deviation of 0.22, which shows that application of AEM is widely varied among the commercial banks in Nigeria according to the disposition of their managements. The table also shows that real earnings management (REM) has mean value of -0.18, maximum value of 0.17 and standard deviation value of 0.12 which also revealed high variability on the application of REM among the managers of the banks. The data distribution disclosed that highest EPS of the commercial banks is 7.79, lowest EPS is -1.28, but the standard deviation of 2.11 is greater than the EPS mean score of 1.9, which revealed that the EPS of the commercial banks is dispersed. The distribution of price earnings ratio and dividend yield did not vary much as shown by the standard deviation which are both lower than the average scores, the average ROE is 9.18, maximum value of ROE is 32, while minimum performance as measured by ROE is -394. The standard deviation score of 38.85 is an indication that the performance (ROE) of the commercial banks varied widely among themselves for the periods covered by this study.

Normality Tests

The study used skewness and kurtosis test and assess the normality distribution of the data generated.

Table 3

<table>
<thead>
<tr>
<th>Skewness and Kurtosis Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>AEM</td>
</tr>
<tr>
<td>REM</td>
</tr>
<tr>
<td>EPS</td>
</tr>
</tbody>
</table>
The normality result in table 3 above provides that AEM = 0.90, REM = 0.42, DY = 0.12 and FSIZE = 0.38 are moderately skewed since they have skewness values less than 1. While return on equity ROE= 0.00, EPS= 0.00, P/E= 0.00 are perfectly skewed since their skewness value is almost 0. More so, all the variables have kurtosis value less than 3. Therefore the data indicate that no outlier exists and no asymmetric problem is found on the data set generated.

The correlation table above revealed that a strong Negative relationship exist between real earning management and accrual earnings management (REM/AEM=-0.53), (EPS/AEM=-0.23), (PE-R/AEM=-0.13) and (FSIZE/AEM=-0.12) while positive relationship is reported in dividend yield and return on equity to accrual earnings management (DY/AEM= 0.20) and (ROE/AEM= 0.14) and positive relationship exist between all the variables to real earnings management. The table also indicates that return on equity has very low and positive association with real earnings management (ROE/REM= 0.09). It also shows positive and low relationship between ROE and Earnings per share (ROE/EPS= 0.27). More so, the table provides evidence that ROE is positively relating with price earnings ratio (ROE/PE_R=0.16) and dividend yield ratio (ROE/DY = 0.19). It is important to note that the ROE relates positively with all the driver variables. However, different directions of relationships are observed at different degrees among the independent variables. Though, the highest degree of relationship exists between earnings per share and firm size (EPS/FSIZE = 0.66), but still, does not connote strong relationship, as it is not up to 0.8 as demands the rule of thumb. Meanwhile, the study will further conduct the test for high correlation to be sure that the data are free from high collinearity problem.

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSIZE</td>
<td>2.62</td>
<td>0.381665</td>
</tr>
<tr>
<td>EPS</td>
<td>1.89</td>
<td>0.528112</td>
</tr>
<tr>
<td>REM</td>
<td>1.81</td>
<td>0.553077</td>
</tr>
</tbody>
</table>
From the table 5 above, it is shown that the mean VIF is 1.81. It is however, the rule of VIF to place a benchmark mean of 10 for acceptance level. Hence it is assumed that any result that produces mean VIF above 10 has a case of high correlation of the independent variables. Since our result is 1.81, which is far lesser than acceptable level of 10, we conclude that there is no presence of multicollinearity in our data.

Table 6

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DY</td>
<td>1.77</td>
<td>0.565858</td>
</tr>
<tr>
<td>AEM</td>
<td>1.61</td>
<td>0.622920</td>
</tr>
<tr>
<td>PE_R</td>
<td>1.16</td>
<td>0.863686</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.81</td>
<td></td>
</tr>
</tbody>
</table>

Source: Stata 14 Output

Heteroscedasticity test has a decision rule that there is no heteroscedasticity if the probability of F-value is greater than the critical value at 5% level. The result in table 6 above indicates that probability value of 0.00 is lesser than the critical value of 0.05. Therefore, we conclude that there is presence of heteroscedasticity.

Table 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS</td>
<td>-.031</td>
<td>(0.006)***</td>
</tr>
<tr>
<td>PE_R</td>
<td>-.008</td>
<td>(0.114)</td>
</tr>
<tr>
<td>DY</td>
<td>.018</td>
<td>(0.001)***</td>
</tr>
<tr>
<td>ROE</td>
<td>.001</td>
<td>(0.006)***</td>
</tr>
<tr>
<td>FSIZE</td>
<td>-.132</td>
<td>(0.048)**</td>
</tr>
<tr>
<td>Wilks' lambda- multivariate criterion</td>
<td>6.78</td>
<td>(0.0000)***</td>
</tr>
<tr>
<td>Pillai's trace- multivariate criterion</td>
<td>6.75</td>
<td>(0.0000)***</td>
</tr>
<tr>
<td>Lawley-Hotelling trace- multivariate criterion</td>
<td>6.80</td>
<td>(0.0000)***</td>
</tr>
<tr>
<td>Roy's largest root- multivariate criterion</td>
<td>9.13</td>
<td>(0.0000)***</td>
</tr>
<tr>
<td>F-statistics</td>
<td>6.93</td>
<td>(0.0000)***</td>
</tr>
<tr>
<td>(P-value)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.233</td>
<td>0.278</td>
</tr>
</tbody>
</table>

Source: Researchers’ Compilation (2023)

Remarks: (1). *, **, *** means – statistical significance at 10%, 5% and 1% level respectively.

(2). Brackets () – represents P-values.

The result on the table 7 provides reports of multivariate multiple regression estimation analysis. The table indicates that the overall model is statistically significant as shown by all
the four multivariate criteria used in conducting manova test, which have P-values less than 0.05, impliedly, the model is valid. This gives the study the opportunity to continue with multivariate regression without modification. Again, the table shows that each of the two univariate models (AEM and REM) are statistically significant as indicated by their F and P-values 6.93(0.0000) and 9.13(0.0000) respectively. The $R^2$ revealed that the predictor variables (earnings per share, price earnings ratio, dividend yield, return on equity and firm size) explain 23.3% and 27.8% of the variance in the outcome variables; AEM and REM respectively.

**Hypotheses Testing**

**Hypothesis One**

The result revealed that earnings per share (EPS) have a coefficient -0.03. This indicates that EPS has a negative effect on Accrual Earnings Management (AEM) of the sampled commercial banks. The result implies that a unit increase on the EPS will cause the mean of AEM to increase by .03 units, if every other variable are held constant. The probability value (P>|t|= 0.006) indicates that EPS is affected by AEM of the commercial banks significantly. Therefore, we accept alternate hypothesis and conclude that EPS has negative and statistical significant effected by AEM of commercial banks in Nigeria at 1% level. Pertinently, The table 7 on the model of REM shows that earnings per share (EPS) has coefficient of -0.007, which indicates that the increase in EPS of the commercial banks will amount to decrease in real Earnings Management (REM), and the lesser the use of REM on the accounting numbers the more the reported EPS of the commercial banks will be. Moreover, the P-value of 0.24 which is higher than the critical value of 0.05 indicates that, EPS has no significant effect on REM of the banks. Sequeal to these findings we accept null hypothesis and conclude that EPS has inverse and no significant effect on REM of commercial banks in Nigeria.

**Hypothesis Two**

This hypothesis which was formulated, to observe the efficacy price earnings ratio to earnings management through accruals and real earnings management. The results on table 7 shows that price earnings ratio (PE_R) has coefficient of -0.008, which indicates that decrease in the PE_R of the commercial banks will amount to increase in AEM. The result implies that an increase in PE_R by one unit would cause increased change on the AEM of the commercial banks by 0.008 units, if other predictor variables are held constant. Moreover, the P-value of 0.114 which is higher than the critical value of 0.05 indicates that, PE_R has no significant effect on AEM of the banks. Sequel to these findings we accept null hypothesis and conclude that PE_R has negative and no significant effect on AEM of commercial banks in Nigeria.

On the other hand; PE_R has coefficient of determination of 0.003 and P-value of (0.219), which indicates that PE_R has a positive and no significant effect on REM of the banks. The result implies that higher REM would cause an increased PE_R for the banks. Hence the study concludes that PE_R has positive and no significant effect on REM of Nigerian commercial banks.

**Hypothesis Three**

This hypothesis which was empirically formulated to test the efficacy dividend yield to earnings management through accruals and real earnings management. The table 7 above also shows that Dividend Yield (DY) has a coefficient 0.018. That implies that DY has positive
effect on AEM of commercial banks in Nigeria. DY would go in the same direction with AEM. The P-statistics (P<\alpha= 0.001) indicates that DY is affected by AEM significantly at 1% level. Therefore, we accept the alternate hypothesis which says that DY has a positive and statistical significant effect on AEM of commercial banks in Nigeria. Additionally, DY was indicated by the table 7 to have regression coefficient of -0.006 on REM model. This means that DY has inverse effect on REM of the commercial banks in Nigeria. The implication is that REM would increase by 0.006 units, should DY decrease by one unit, at the constancy of other predictor variables. Moreover, the P-value of 0.027 is lower than the critical value of 0.05. To this end, the study upholds that DY is negatively and statistically significantly effect on REM of Nigerian commercial banks at 1% level.

**Hypothesis Four**
This study hypothesis, which was formulated to examine the effect of returns on equity to earnings management through accruals and real earnings management. The result in table 7 under AEM further provides that return on equity (ROE) with a coefficient of 0.001 means that, ROE has positive effect on AEM of commercial banks sampled in this study. The P statistics that has the value of 0.006 indicates that ROE has statistical significant effect on AEM of Nigerian commercial banks at 1% level. Therefrom, we accept alternate hypothesis and conclude that ROE has positive and statistical significant effect on AEM of commercial banks in Nigeria.

On the other hand; the result on the same table 7 under REM further provides that return on equity (ROE) has a coefficient of -0.0002 means that, ROE has a negative effect on REM of commercial banks sampled in this study. The P statistics that has the value of 0.342 indicates that ROE has no significant effect on REM of Nigerian banks. Therefore, the study fails to reject null hypothesis and conclude that ROE has inverse and no significant effect on REM of commercial banks in Nigeria.

**Hypothesis Five**
This hypothesis which was formulated to evaluate the influence of firm’s size to earnings management through accruals and real earnings management and the results in table 7 shows that Firm size (FSIZE) has coefficient of determination of -0.132 and P-value of 0.048 are shown on table 7. The statistics is an indication that FSIZE has inverse effect on AEM of the commercial banks and also significant in determination of the variance in the AEM at 5% level. The result postulates that increase in the size of the firm will lead to reduction on the AEM reported. Implying that small firms, mostly engage in AEM to project a good image to the public. However, the study upholds null hypothesis that states that ROE has negative and statistical significant effect on AEM of the commercial banks in Nigeria.

The corresponding univariate model (REM) revealed that FSIZE has positive coefficient of 0.167, which implies that a unit change in firm size would cause 0.167 unit change in the variance of REM if all other variables are held constant. The P-value, 0.000 is less than 5% critical level, hence indicates that FSIZE is a strong determinant of REM. It could be said that when the firm is growing larger, the chances of its annual reports containing REM would be much. The study therefore accepts alternate hypothesis that states that FSIZE has a positive and statistical significant effect on REM of commercial banks in Nigeria.
Discussion of Results

There is empirical evidence that, earnings per share moves in opposite direction with both accrual earnings management (AEM) and real earnings management (REM) of the commercial banks in Nigeria. The commercial banks that have high EPS have tendency of having low reported earnings managements in their financial statements, so that shareholders capital would not be appropriated. Nevertheless, if a bank that have high EPS also included very high earnings management in its annual reports, it definitely going to affect the financial position as well as the statement of equity of the bank negatively, and might lead to liquidation on continued happening. The findings makes going concern concept practicable for sustainability of the commercial banks in Nigeria. Meanwhile, EPS is a strong determinant for only AEM since it is significant at 1% level. The result is in line with research work of Aurangzeb & Delawir (2012), Naveed & Fayaz (2019).

Price earnings ratio is not a determinant of earnings management both accrual and real. In which case, PE_R has revealed its capacity to raise the volume of accrual earnings management and reduce the volume of real earnings management when it (PE_R) value is increased. The period it takes the investors to recoup his investment does not determine when the commercial banks will manage their earnings. However the association between price earnings ratio and earnings management were proved to be porous as to lead to any meaning management decision. The findings of this study corroborates the result of Ali shah et al. (2010).

Dividend yield as an expression of how much a bank pays each year in relation to its stock price has proved to be a strong determinant of both accrual earnings management and real earnings management. By the empirical outcome, increase in the percentage of dividend yield would make the accrual earnings management contents in financial statements to rise, but cause the real earnings management included by the management in financial statement to rise. The association between earnings management is strong that changes in dividend yield cause some change in both real and accrual earnings management of commercial banks in Nigeria.

Pertinently, increased performance of the commercial banks as measured by return on equity (ROE), could cause accrual earnings manipulation by management to increase. The implication is that earnings manipulation is the supporting tissue to declaration of higher profits by commercial banks in Nigeria. Nonetheless, ROE is a strong determinant of accrual earnings management. This is send message to shareholders and investors to be weary of commercial banks that declare high ROE, noting that larger volume of accrual earnings management might be contained thereto in the financial reports. Contrarily, ROE does not significantly impact on real earnings management. Meanwhile, increase in ROE would cause a decline in real earnings management of the commercial banks.

Finally, firm size, (FSIZE) has proved to be a strong determinant of commercial banks engagement in earnings management both accrual and real. The empirical finding indicated that the more the rise in the Firm’s size of the banks, the higher the commercial banks engagement in real earnings manipulation. That could be because; assessing the financial records to sieve out real earnings manipulations may be quite difficult because of the large size of the bank and its transactions. More so, decrease in firm size has proved to stir an increase in accrual earnings management of the commercial banks in Nigeria. Commercial
banks are expected to report high profit in line with others in the industry. Hence the commercial banks that would have reported comparatively small profit because of its small size, would engage in accrual earnings manipulation to inflate its profit. However, size of the commercial banks is a strong determinant of real earnings management in Nigerian commercial banks.

**SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

**Summary of Findings**

The findings from the empirical analysis are summarized as follows,

(i) Earnings per share (EPS) has a negative statistical and significant effect on accrual earnings management (AEM) at 1% level but has negative and significant effect on real earnings management (REM) of commercial banks in Nigeria and this position is in line with research work of Fodio et-al 2020.

(ii) Price earnings ratio (PE_R) has inverse and significant effect on accrual earnings management (AEM) but has a positive and significant effect on Real earnings management (REM) of commercial banks in Nigeria.

(iii) Dividend yield (DY) has positive statistical and significant effect on accrual earnings management (AEM) of commercial banks in Nigeria at 1% level but has negative statistical significant effect on real earnings management (REM) of Nigeria commercial banks at 5% level.

(iv) Return on equity (ROE) has statistical significant effect on AEM of Nigerian commercial banks at 1% level of the commercial banks in Nigeria. And ROE has a negative and no significant effect on REM of Nigerian commercial banks.

(v) Firm size (FSIZE) has inverse and significant effect on AEM of the commercial banks in Nigeria.

**Conclusion**

The study has successfully completed the quest to ascertain the association between earnings management and dividend policy of the commercial banks in Nigeria for the periods covering 2012 to 2022. The study made a special consideration for accrual earnings management and real earnings management as measure of earnings management while price earnings ratios, earnings per share, dividend yield, Firm Size and return on equity were proxy for dividend policy. Multivariate multiple regression analysis was employed in analysis of the data generated. The findings of the study came out strong that the major determinant of earnings management is dividend yield and firm size of the commercial banks in Nigeria.

**Recommendations**

Sequel to the empirical findings made, the study therefore makes policy recommendations as follows;

(i) The commercial banks should engage CMD who are goal getters to increase the profitability of the commercial banks which would play down on the quest to make up their deficiencies through earnings manipulations.

(ii) The present and prospective investors in commercial banks should not place emphasis on price earnings ratio as it does little or no change to the course of earnings management of the Nigerian commercial banks.

(iii) The banks’ management should work to ensure that they pay dividend that is relatively large enough to cover market price of the share.
The investors and shareholder are encouraged to include the use of price earnings ratio, which stands out to be a strong determinant of financial performance of the commercial banks studied, as bases of making the right choice on the prospective entity to invest.

Investors are encouraged to shift their ground on the use of dividend yield for evaluation of firms ranking for investment. More importantly, such assessment as dividend yield should be used together with other tools to be able to decipher the real profitability prospects of the firm under consideration.

**(Contributions to Knowledge)**

This study, dividend policy and earnings management of listed commercial banks in Nigeria. Covering a periods of 2013 to 2022 has completed its core objective and contributes to knowledge empirically as follows

(i) Revealed that the firms under reviews are involved in earnings management practice in different degree either through accrual earnings or real earnings and empirically revealed how firm’s earnings per share and price earnings ratios can be used to control firm’s earnings management through policy formulation which hinders opportunistic behaviours.

(ii) The study also add to knowledge with innovative techniques through its findings that firms which pays dividends regularly such as earnings per share manage earnings lesser than firms which does not pay earnings regularly.

(iii) This study advised firm’s stakeholders and intending investors that dividend yield is the mostly targeted variable for earnings management by the firms under reviews to attract investors.

**(Suggestions for Further Studies)**

This current study is only researched in the listed commercial banks in Nigeria; all commercial banks listed in the Nigerian stock exchange group from the year 2013 to 2022 where used to fulfill this study objective. Thus we urge that future work on dividend policy and earnings management should explore in other sectors of the Nigerian economy and other emerging/developing markets in Africa.

**(References)**


